



# Close at hand

Installation material for Hygienic Fluid Handling Equipment, January 2020



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# Everything at your fingertips

Alfa Laval's solutions for hygienic applications are the result of continuous innovation, and our dedicated efforts to meet the challenges faced by industries. With the Alfa Laval online catalogue, detail of our comprehensive product range can now be conveniently at your fingertips at all times.

Whatever you need, and wherever you are, Alfa Laval's components and expertise are always readily available through our network of over 1500 channel partners, supported by our own sales companies around the world.

Alfa Laval has a wide range of tools and resources to make life easier. Our online catalogue is easily accessible and updated regularly. We also offer the possibility to download 2D and 3D drawings. Go to [www.alfalaval.com/high](http://www.alfalaval.com/high).

At [www.alfalaval.com/biopharm](http://www.alfalaval.com/biopharm) you can download the comprehensive Q-doc documentation for our UltraPure portfolio.

Our channel partners also have access to a growing pool of resources at the Alfa Laval eBusiness portal, including full documentation, real-time stock availability and the opportunity to order and track shipments online. As well as being kept up to date on the latest developments through the InSight newsletter.

Discover a world of hygienic solutions at our dedicated portals:

**[www.alfalaval.com/biopharm](http://www.alfalaval.com/biopharm)**

**[www.alfalaval.com/food](http://www.alfalaval.com/food)**

## Pumps

### Centrifugal Pumps



LKH

LKH UltraPure

LKHex

LKH Evap

LKH PF

LKH I

## Valves and Automation

### Double Seat Valves



Aseptic Mixproof

Unique Mixproof

Unique Mixproof 3-body

Unique Mixproof High Alloy

Unique Mixproof UltraPure

Unique Mixproof Large Particle

Unique Mixproof Tank Outlet

Unique Mixproof Horizontal Tank

### Shutter Valve



MH Shutter

### Control/Check Valves



LKC-2 Non-Return



LKC UltraPure



LKUV-2 Air-Relief



LKBV Air-Blow

## Heat Transfer

### Gasketed Plate Heat Exchangers



FrontLine

BaseLine

Industrial line

TS-series

## Tank Equipment

### Dynamic Spray Heads



TJ 20G

TJ40G

SaniJet 25 UltraPure

SaniMidget Retractor

GJ A6

GJ 9

### Instrumentation



Flow Transmitter

Rotacheck

Temperature Transmitter

Conductivity Transmitter

Pressure Gauge

Electric Pressure Gauge

Electronic Pressure Transmitter

## Installation Hygienic Tubes and Fittings Material



Flanges, Clamps and Unions

Bends, Tees and Reducers

Tubes and Tube Support

UltraPure Tubes & Fittings



LKH Multistage



LKH Prime



LKH Prime UltraPure



SolidC



SolidC UltraPure



MR

Double Seal Valve



SMP-BC

Single Seat Valves



Unique SSV



Unique SSV Change-over



Unique SSV Aseptic



SSV Tangential



Unique SSV Tank Outlet



Unique SSV Manual



Unique SSV Small Single Seat



LKAP Air-Operated

Safety Valves



Safety Valve



SB Anti Vacuum House



SB Anti Vacuum Valve



SB Pressure Relief Valve

Sample Valves



Unique Sampling Valve



SB Membrane Sample Valve



SB Micro Sample Port

Fusion-Bonded Plate Heat Exchangers



AlfaCond / AlfaVap



AlfaNova

Brazed Plate Heat Exchangers



Brazed PHE

Welded Spiral Heat Exchangers



Spiral Heat Exchanger

Welded Plate and Block Heat Exchanger



Combabloc Free Flow

Static Spray Balls



SaniJet 20



SaniMidget



SaniMidget SB



LKRK Static Spray Ball

Agitators and Mixers



Hybrid Powder Mixer



Rotary Jet Mixer



Level Switch



Weighing Systems UltraPure



Flow Meter



Pressure Transmitter



Thermometer



Potentiometric Level Transmitter



Unique Flexbody

Filters and Strainers



Strainers



Membranes and Filters

Membranes



Spiral membranes



Plate and Frame module



Flat sheet membranes



Test Units

Rotary Lobe Pumps



SRU



SX



OptiLobe



Twin Screw



SCPP

Butterfly Valves



LKB



LKB-F



LKB UltraPure

Diaphragm Valves



Unique DV-ST  
UltraPure

Ball Valves



SBV Sanitary

Regulating Valves



Unique RV-ST



Unique RV-P



CPM-2

Control Unit and Indication



SB Micro Sample Port  
Type M



ThinkTop V70



ThinkTop V50



ThinkTop D30



ThinkTop Basic Intrinsically safe



IndiTop



Unique Control LKB

Scraped Surface Heat Exchangers



Contherm

Tubular Heat Exchangers



Pharma-Line



Pharma-X



ViscoLine



LeviMag®



LeviMag® UltraPure



ALS



ALB



ALTB

Tank Covers



LKDC-LP



Type R



LKD

Tank Accessories



Sight Glasses



Tank Feet

Auxiliary Membrane Equipment



Housing



ATD Couplers



Safety Filters

Service & Spare Parts



Service Kits

## Technical Information

### Stainless Steel and Rubber Materials

#### Stainless Steel

Our stainless steel material have the following demands to the contents of the most essential alloys:

Descriptions	Standard	Chrome Cr%	Nickel Ni%	Molybdenum	
				Mo%	Carbon C%
AISI 304	ASTM A270	18.0-20.0	8.0-10.5	0.0	≤ 0.08
AISI 304L	ASTM A270	18.0-20.0	8.0-12.0	0.0	≤ 0.03
AISI 316L	ASTM A270	16.0-18.0	10.0-14.0	2.0-3.0	≤ 0.03
1.4301 (304)	EN 10088-1 (X 5CrNi18-10)	17.0-19.5	8.0-10.5	0.0	≤ 0.07
1.4307 (304L)	EN 10088-1 (X 2CrNi18-9)	17.5-19.5	8.0-10.0	0.0	≤ 0.03
1.4401 (316)	EN 10088-1 (X 5CrNiMo17-12-2)	16.5-18.5	10.0-13.0	2.0-2.5	≤ 0.07
1.4404 (316L)	EN 10088-1 (X 2CrNiMo17-12-2)	16.5-18.5	10.0-13.0	2.0-2.5	≤ 0.03
1.4435 (316L)	EN 10088-1 (X 2CrNiMo18-14-3)	17.0-19.0	12.5-15.0	2.5-3.0	≤ 0.03
1.4571 (316TI)	EN 10088-1 (X6CrNiMoTi17-12-2)	16.5-18.5	10.5-13.5	2.0-2.5	≤ 0.08

#### Rubber Materials

In order to obtain the longest possible lifetime for rubber seals it is essential to choose the right quality for the actual duty. Consequently when choosing rubber quality, the characteristics of the different rubber types should be considered. All product wetted rubber material are in conformity of FDA.

#### EPDM Rubber (Ethylene Propylene)

EPDM rubber is widely used within the food industry as it is resistant to most products used in this sector. Another advantage is that it may be used to a recommend max. temperatures of 140°C (244°F). However, there is one essential limitation, EPDM is not resistant to organic and non-organic oils and fats. The resistance to ozone is excellent.

#### Acrylonitrile Butadiene Rubber, NBR

NBR is the rubber type most frequently used for technical purposes. It is quite resistant to most hydrocarbons, e.g oil, grease and fat. It is sufficiently resistant to diluted lye and nitric acid and may be used to a recommend max. 95°C (203°F). As NBR is attacked by ozone it may not be exposed to ultraviolet rays and should thus consequently be stored so that this is avoided.

#### Silicone Rubber, Q

The most significant quality of silicone rubber is that it can be applied from temperatures below -50°C (-58°F) to approx. + 180°C (356°F) and still keep its elasticity. The chemical resistance is satisfactory to most products. However, undiluted lye and acids as well as hot water and steam may destroy silicone rubber. The resistance to ozone is good.

#### Fluorine Rubber, FPM

FPM is often used when other rubber types are unsuited, especially at high temperatures up to approx. 180°C (356°F). The chemical resistance is good to most products, however hot water, steam, lye, acid and alcohol should be avoided. The resistance to ozone is good.

#### Hydrogenated acrylonitrileButadiene Rubber, HNBR

Mechanically strong and normally resistant to ozone and strong oxidizers, animal and vegetable fats, nonpolar solvents, oils and lubricants, water and aqueous solutions. The recommend max. temperature is 130°C (266°F).

#### Perfluoroalkoxy polymer, PFA

PFA is very similar to PTFE, but opposite to those PFA is thermo plastic and has minimal porosity. PFA has a very high mechanical strength which makes it a perfect choice when dealing with abrasive products. The PFA seal offers longer service intervals. The recommend max. temperature for the PFA seal is 90°C (194°F).

## Product and chemical resistance of flexible rubber materials

The information below is intended as an aid in selecting the best rubber quality for an actual application. It is not possible to state any general lifetime of rubber seals as many factors influence it: chemical attack, temperature, mechanical wear etc. Extreme temperatures, even within the generally accepted limits, may worsen other kinds of attack and thus reduce the lifetime.

### Ratings

1 = Unsuitable.

2 = Limited suitability.

3 = Normal suitability.

4 = High suitability.

- = Not recommended for other reasons.

The table contains data which have been compiled from the results of our own tests and the recommendations of our raw material suppliers. The data should be considered as recommendations only and will be brought up-to-date from time to time. They are based on constant contact with the specified product.

In case of doubt or lack of information it would be advisable to consult us directly, which will enable us to investigate specific applications.

Product or process	NBR <sup>1)</sup>	HNBR <sup>2)</sup>	EPDM <sup>3)</sup>	Q <sup>4)</sup>	FPM <sup>5)</sup>	PTFE <sup>6)</sup>
Dairy products (milk, cream)	3	3-4	3-4	3-4	-	3-4
Dairy products (sour milk products)	3	3-4	3-4	3-4	-	3-4
Brewery products (beer, hops etc.)	3	3-4	3-4	1-2	2-3	3-4
Wine and yeast	3	3-4	4	4	2-3	3-4
Animal and vegetable fats	100°C	3	4	1-2	3	4
Water and water solutions	< 70°C	3	4	4	3	2-4
Hot water and steam	< 130°C	1	4	4	2	-
Concentrated fruit juices and etheral oils	< 100°C	1	-	1	1	3
Non-oxydising acids	< 80°C	1-2	2	3	1-2	2
Oxydising acids	< 80°C	-	2	3	1	2
Weak concentrate of lye	< 100°C	2	3-4	4	2	2
Strong concentrate of lye	< 100°C	1	2-3	3	1	1
Mineral oils	< 110°C	3	4	-	-	4
Aliphatic carburetted hydrogen (hexane)		3	3	1	1	4
Aromatic carburetted hydrogen (benzole)		1	2	1	1	3
Alcohols		1-3	2-3	2-3	3-4	3-4
Ester and ketones		1-2	1-2	1-2	1-2	3-4
Ether		1	2	1	1-3	3-4
Methylene chloride		1	2	1	2-3	3-4
Ozyne and atmospheric conditions		1-2	3	4	4	3-4

International designation of flexible rubber materials according to ISO R 1629.

ISO = International standard.

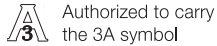
### Notes

	Designation of flexible rubber materials	Abbreviation symbol
1)	Nitrile rubber	N
2)	Hydrogenated actylonitrile rubber	H
3)	Ethylene propylene rubber	E
4)	Silicone rubber	Q
5)	Fluorinated rubber	F
6)	Polytetraflour ethylene	



We can provide documented and certified compliance with a broad spectrum of relevant international and local hygiene standards, worldwide. This helps you Significantly reduce the engineering costs of setting up and operating standards-compliant processing plants around the world.

For special requests please contact your local Alfa Laval organisation



The mission of 3-A SSI is to enhance product safety for consumers of food, beverages, and pharmaceutical products through the development and use of 3-A Sanitary Standards and 3-A Accepted Practices. The 3-A Symbol is a registered mark used to identify equipment that meets 3-A Sanitary Standards for design and fabrication.



ATEX is based on the requirement of the European Directive 94/9/EC (also known as ATEX 95 (100a)), the Equipment Directive. The name ATEX (ATmospheres EXplosible) is commonly given to the framework for controlling explosive atmospheres and the standards of equipment and protective systems used in them



The European Hygienic Engineering & Design Group (EHEDG) is a consortium of equipment manufacturers, food industries, research institutes as well as public health authorities and was founded in 1989 with the aim to promote hygiene during the processing and packing of food products.

EHEDG has authorised the use of the EHEDG Certification logo for Alfa Laval equipment complying with the EHEDG hygienic design criteria. The Certification include cleanability testing of equipment according to the methodology described in EHEDG guidelines.



Alfa Laval Q-doc includes:

- 3.1 certificate in accordance to EN 10204 (MTR)
- Elastomer compliance declarations
- Surface finish conformity declaration
- Compliance to the Regulation (EC) No. 1935/2004



CE marking is a mandatory conformity mark for products placed on the market in the European Economic Area (EEA). With the CE marking on a product the manufacturer ensures that the product conforms with the essential requirements of the applicable EC directives. The letters "CE" stand for "Conformité Européenne" ("European Conformity").



BPE-106

The ASME BPE Certification Program is unique in the world, having resulted from widespread industry requested for standardization. It is the leading standard on how to design and build equipment and systems used in the production of biopharmaceuticals. It incorporates current best-practices for enhancing product production efficiencies, lower development and manufacturing costs, and increase quality and safety, while complying with regulations. The Certification Mark with a BPE Designator indicates that components bearing the mark have been manufactured and certified by ASME BPE Certificate Holder.

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# 1. Installation Material

Alfa Laval constantly focuses on producing installation material with long durability, problem-free welding and assembly, and highest possible strength.



Product Presentation .....	1.0
Hygienic, ISO 2037 .....	1.1
DIN Fittings and Tubes .....	1.2
Hygienic, BS 4825, Part 1 .....	1.3
Tri-Clover® Hygienic Installation Material .....	1.4
Tri-Clover ® UltraPure, ASME BPE .....	1.5
Installation accessories .....	1.6

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## Sanitary fittings and tubes

The complete line



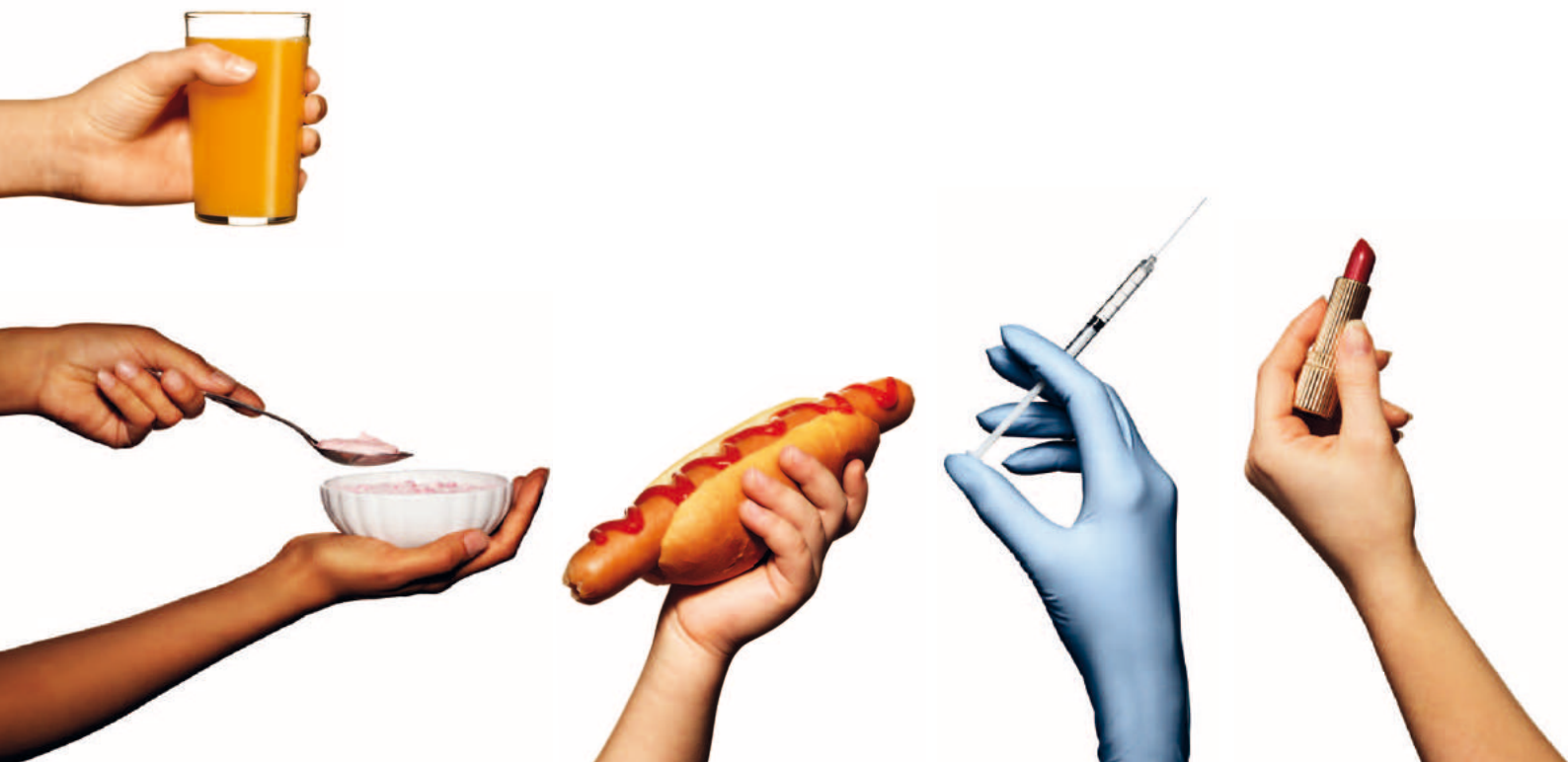
# Performance in good hands

Working with hygienic applications is a question of care, attention to detail and dedication to outstanding performance. Alfa Laval has a proven track record in delivering superior safety, gentle efficiency and uncompromising cleanliness.

In fact, Alfa Laval has the world's broadest portfolio of components and solutions for the food, dairy, beverage, biotech, pharmaceutical and personal care industries. We draw on decades of experience in coming up with innovative and hygienic solutions based on our key technologies of separation, heat transfer, fluid handling, as well as tank equipment and installation material.

We create real value throughout your processes by helping you to optimize your processes, providing reliability, uptime, fast access to replacement parts and service. All this is readily available through our local offices and more than 1,500 sales and working partners around the world.

Here you will find an overview of Alfa Laval tubes and fittings for hygienic applications. For complete technical details and product specification, contact your local Alfa Laval supplier or visit us at [www.alfalaval.com](http://www.alfalaval.com)



## Unions, clamp fittings and flanges

In order to sustain high quality, it is important that the products are uniform. Therefore tolerances and finishes are carefully controlled. Alfa Laval follows developments in the area of standards.

To enable you to select the best quality rubber seal for your process, Alfa Laval is able to offer various options in addition to its standard seal, including:

- NBR, Nitrile Rubber
- FPM, Fluorine Rubber
- EPDM, Ethylene Propylene
- Nitrile (Buna-N)
- White Nitrile (White Buna-N)
- Viton ®
- PTFE
- Silicone (Q)

Flanges and clamp fittings are suitable for flexible and easy maintenance. Flanges and clamp fittings with finger nuts are especially suited for processes where the load on seals is extra high, where easy control and replacement of seals is necessary and where optimal cleaning is required.



Unions are available in a number of standards, including SMS, ISO, BS, IDF, DS, DIN and clamps.

Alfa Laval's program of bends, tees and reducers are available in diameters from 1" to 4" and from DN10 to DN150.



## Bends, tees and reducers

Alfa Laval constantly focuses on producing installation material with long durability, problem-free welding and assembly, and highest possible strength. Key criteria in the manufacturing process include tight tolerances, a variety of finishes and uniform wall thickness.

### **Welding**

Alfa Laval is aware of the constantly increasing demands for the quality of welding. In accordance with these demands, all our weld end fittings meet the highest of standards.

The reducers have welding ends and are available for all tube combinations, ensuring you the right diameter and wall thickness for your process.

### **Tolerances**

Alfa Laval ensures that all the angles are exact and that all the tube, bend and tee connections are uniform. It is very important that you do not have to compensate for any welding irregularities.

### **Finishes**

In order to ensure that you are able to select a finish that exactly matches your process, Alfa Laval offers a wide range of finishes, including matt, raw, bright and polished.

## The right part for your application

Alfa Laval provides many different standards of tubes and fittings. This means you can always find the part most suitable for your specific application, with exactly the process quality you need.

### **Sanitary range tubes and fittings**

This product range provides a wide range of tubes and fittings with internal surface finishes that have a Roughness average (Ra) of  $<0.8\text{--}1.6\ \mu\text{m}$ . Tubes and fittings in the Sanitary range comply with DIN 11850, ISO 2037, BS 4825, JIS G 3447 and ASME dimension standards.



### **Tri-Clover BioPharm range tubes and fittings**

The Tri-Clover BioPharm product range includes a comprehensive selection of tubes and fittings with internal surface finishes with a Roughness average (Ra) of  $<0.4\text{--}0.8\ \mu\text{m}$ , either electropolished or mechanically polished.

Tubes and fittings in this range comply with DIN 11850, ISO 1127 and ASME BPE dimension standards.



## Tubing

Alfa Laval offers a variety of tubes for the sanitary application process in all worldwide standards.

A flexible pipe support system is also included in the Alfa Laval product program. The system can be used for floor, wall or ceiling installations, by means of a combination of connection pieces and anchor plates.

### Tri-Clover BioPharm tubes

The Alfa Laval tubes are the perfect choice for ultra-clean processes within the demanding pharmaceutical, biotech and light chemical industries.

The tubes are produced in compliance with the DIN 11866, ASME BPE, ISO 2037 and BS 4825, with extremely high demands on materials, hygiene and manufacturing accuracy.



Whatever your sanitary application, Alfa Laval is able to supply the right tube.

## Tri-Clover BioPharm packages

Alfa Laval is your complete source for specialized tubing and fittings required in biotech and pharmaceutical process applications. The quality and surface finish of the Tri-Clover BioPharm products match the exact requirements of the industry. So regardless of your installation material needs, we are able to supply you with the right product – making sure that your process quality is never compromised.

### Tri-Clover BioPharm tubes and fittings

Tubes and fittings in the BioPharm range are manufactured in accordance with extra-strict quality assurance procedures.

All cold-formed BioPharm tubular products feature consistent wall thicknesses as a result of the use of fabrication-grade tubing. Once cold forming has been completed, these tubular products are resized to ensure that their ovality always falls within the prescribed tolerances.

A machined square-cut method is used to provide properly finished end facings, ensuring the most accurate, consistent orbital welds. All fittings are inspected visually, while ovality and squareness tolerances are inspected with calibrated equipment. All surface finishes are inspected with a calibrated profilometer to measure the Roughness average (Ra).



Tri-Clover BioPharm.



The quality and surface finish of the Tri-Clover BioPharm products are determined to match the exact requirements of the industry.

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## Alfa Laval Installation Material

Alfa Laval is your complete source for specialized fittings and tubing required in food, dairy, beverage, personal care, biotechnology and pharmaceutical process applications. Smooth, crevice-free interiors and secure, self-aligning joints are characteristic for Alfa Laval Fittings. Each offers superior corrosion-resistance and unmatched service life. Alfa Laval fittings are designed and manufactured to ensure dimensional accuracy and structural integrity, making them easy to install. Tubing is manufactured to Alfa Laval's stringent specifications, making it a perfect match for the weld fittings. Choose from a wide range of tube sizes, surface finishes and connect options. All products are labelled with a bar code, product information and manufacturing date. This provides the optimum identification and ensures that the product arrives to the job site in a clean orbital weld condition.

The Alfa Laval tubes and fittings are divided into two product ranges, Hygienic and UltraPure, The Hygienic range is suitable for most standard duties and the UltraPure range is suitable for duties with extra high demands on hygiene and cleanability.

### Hygienic range tubes and fittings

The Hygienic product range offers a wide range of tubes and fittings with an internal surface finish from  $Ra < 0.8 \mu\text{m}$  to  $Ra < 1.6 \mu\text{m}$ . The Hygienic range has tubes and fittings according to EN10357-A (DIN 11850), ISO 2037, BS 4825 and ASME BPE dimension standards.

### UltraPure range tubes and fittings

The UltraPure product range offers a wide range of tubes and fittings with an internal surface finish from  $Ra < 0.4 \mu\text{m}$  to  $Ra < 0.8 \mu\text{m}$ , either electro polished or mechanically polished. The UltraPure range has tubes and fittings according to ASME BPE dimension standard. The UltraPure range is manufactured in compliance with the ASME BPE standard. All tubes and fittings are internally cleaned and individually capped and bagged. All product wetted stainless steel products in the UltraPure range are delivered with MTR (Mill Test Report) or with 3.1. certificate in accordance to EN 10204.

The UltraPure range is manufactured under extra strict and thorough quality control methods. Wall thickness integrity is maintained through the use of fabrication grade minimum wall tubing for all cold-formed tubular products. After cold forming, our tube product is resized to ensure that the ovality falls within the prescribed tolerances. End facing is provided with a machined square-cut method. This allows for the most accurate and consistent orbital weld result. All fittings are put through 100% visual inspection and ovality and squareness tolerances are inspected with calibrated equipment. Surface finish is inspected with a calibrated profilometer to ensure the Roughness average (Ra) maximum is not exceeded.



## Surface specification for Alfa Laval Hygienic range

## Hygienic tubes

Alfa Laval designation	Surface texture (Ra $\mu\text{m}$ )			Standard designation	According to	Treatment	Dimension ranges			Tri-Clover® Hygienic
	Internal Surface	Welded area	External				EN 10357-A	ISO 2037	BS 4825	
BC	< 0.8	< 1.6	pickled	BC	EN 10357-A	Annealed	X	X	X	
BD	< 0.8	< 1.6	< 1.0	BD	EN 10357-A	Annealed	X	X	X	
CC	< 0.8	< 1.6	pickled	CC	EN 10357-A	Not annealed	X			
CD	< 0.8	< 1.6	< 1.0	CD	EN 10357-A	Not annealed	X			
Tri-Clover® Hygienic	< 0.8	< 0.8	< 0.8	No. 4 <sup>1)</sup>	3A	Annealed				X

1) According to 3A 33-01 section D1

## Hygienic Fittings

Product	Surface designation		DIN	ISO	Dimension ranges		Tri-Clover® Hygienic
	Internal	External			BS		
Unions	Mat	Mat	X				
	Semi bright	Semi bright	X	X	X		
	Mirror	Mirror					
	3A	3A					X
Bends	Mat	Mat	X				
	Raw	Raw			X		
	Raw	Semi bright	X				
	Raw	Polished	X	X			
	Semi bright	Semi bright		X			
	Polished	Polished			X		
	Mirror	Mirror					
Tees	3A	3A					X
	Mat	Mat	X				
	Raw	Raw			X		
	Polished	Polished	X	X	X		
	Mirror	Mirror					
Reducers	3A	3A					X
	Mat	Mat	X				
	Raw	Semi bright	X				
	Raw	Polished		X	X		
	Semi bright	Semi bright		X			

## Explanation of surface designation for fittings

Alfa Laval designation	Surface texture (Ra $\mu\text{m}$ )		Method
	Internal	Bended area	
Mat	< 1.6	Not spec.	Shot Blasted
Raw	< 0.8 <sup>1)</sup>	Not spec.	As fabricated or tumbled
Semi bright	< 0.8	Not spec.	As fabricated or tumbled
Polished	< 0.8	Not spec.	Mechanically polished
Mirror	< 0.8	Not spec.	Mechanically polished and buffed for a shiny surface
3A	< 0.8	< 0.8	Mechanically polished or as fabricated

<sup>1)</sup> Not guaranteed in welds.

Surface specification for Alfa Laval Tri-Clover® UltraPure range  
UltraPure tubes and fittings

Alfa Laval designation	Surface texture (Ra $\mu\text{m}$ )			Standard designation		According to	Treatment	Tri-Clover® UltraPure ASME-BPE
	Internal	Welded / Bended area	External	Tubular	Machined			
PL	< 0.5	< 0.5	< 0.8	SF1	SF1	ASME BPE	Annealed	X
PM	< 0.4 EP <sup>3)</sup>	< 0.4 EP <sup>3)</sup>	< 0.8	SF4	SF4	ASME BPE	Annealed	X

<sup>3)</sup> Electro polished

\* SF-Surface Finish. SF4: Ra < 0.375 EP

Conversion table - Surface finish

Correlation between Grit and Ra values

Ra ( $\mu\text{m}$ )	Ra ( $\mu$ inch)	US Grit	UK Grit
3	125		120
2	85		180
1.65	70	80	
1.5	50		240
0.75	30		320
0.62	25	180	
0.45	18	240	
0.40	15		500
0.25	10	320	

Material specification for Alfa Laval Hygienic range

Wetted steel parts

Material	Dimension ranges			
	EN 10357-A	ISO 2037	BS 4825	Tri-Clover® Hygienic
1.4301* (304)	X	X		
1.4307* (304L)	X	X	X	
1.4401* (316)			1)	
1.4404* (316L)	X	X	X	
304**				X
316L**				X

1) Reducing tees are only available in 1.4401 (316)

\* According to DIN EN 10088-1

\*\* According to ASTM A 269 and A 270.

Seal ring material for clamp fittings

Material	Dimension ranges			
	EN 10357-A	ISO 2037	BS 4825	Tri-Clover® Hygienic
NBR	X	X	X	
Nitrile (Buna-N)				X
White Nitrile (White Buna-N)				X
EPDM	X	X	X	X
FPM	X	X	X	
Viton®				X
PTFE	X	X	X	X
Silicone (Q)	X	X		X

## Material specification for Alfa Laval Tri-Clover® UltraPure range

## Wetted steel parts

Material	Dimension ranges
	Tri-Clover® UltraPure
	ASME-BPE
316L*	X

\* According to ASTM A 269 and A 270 S2. All Tri-Clover® UltraPure ASME BPE weld ends are also according to ASME BPE sulphur content 0.005-0.017%

## Gasket material in fittings

Material	Dimension ranges
	Tri-Clover® UltraPure
	ASME-BPE
Nitrile (Buna-N)	X
White Nitrile (White Buna-N)	X
EPDM	X <sup>1)</sup>
FPM	
Viton®	X <sup>1)</sup>
White Viton®	X
PTFE	X
Silicone (Q)	X <sup>1)</sup>

<sup>1)</sup> EPDM, Viton and Silicone available with USP Class 6 certificate - please request by order.

## Chemical composition table

Material Grade		C	Si	Mn	Chemical composition in % by mass					
Material	Standard				P	S	N	Cr	Ni	Mo
1.4404	DIN-EN 10088-1	≤ 0.030	≤ 1.000	≤ 2.00	0.045	≤ 0.015	≤ 0.11	16.50 - 18.50	10.00 - 13.00	2.00 - 2.50
316L	ASTM A 269	≤ 0.035	≤ 0.750	≤ 2.00	0.040	≤ 0.030		16.00 - 18.00	10.00 - 15.00	2.00 - 3.00
316L*	ASTM BPE / ASTM A 270 S-2	≤ 0.035	≤ 0.075	≤ 2.00	0.040	0.005 - 0.017		16.00 - 18.00	10.00 - 10.00	2.00 - 3.00

\*According to ASTM A 269 and A 270 S2. All Tri-Clover® UltraPure ASME BPE weld ends are also according to ASME BPE sulphur content 0.005-0.017%

## Pressure ratings (bar) for Alfa Laval Hygienic range

Material	Dimension ranges			
	DIN	SMS / ISO 2037	BS 4825	Tri-Clover® Hygienic
Tubes (20°C)	39/355	39/355	56-467*	56-351*
Bends, Tees, Reducers (80/200°C)	40/16	40/16	25/15	25/15
Nut unions (80/200°C)	40/16	40/16	25/15	
Flange unions (80/200°C)	25/16	25/16	25/15	

\* Tube pressure ratings depending on size (larger diameter smaller pressure rating)

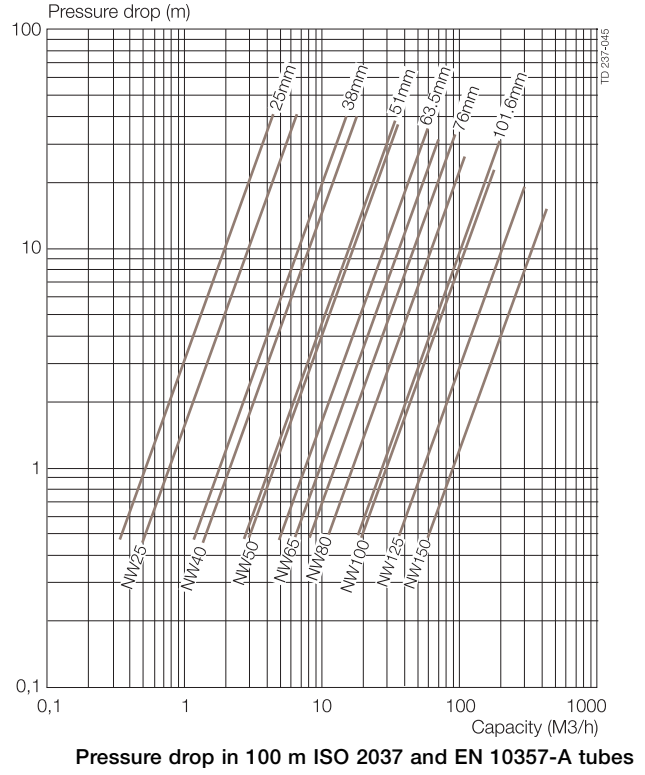
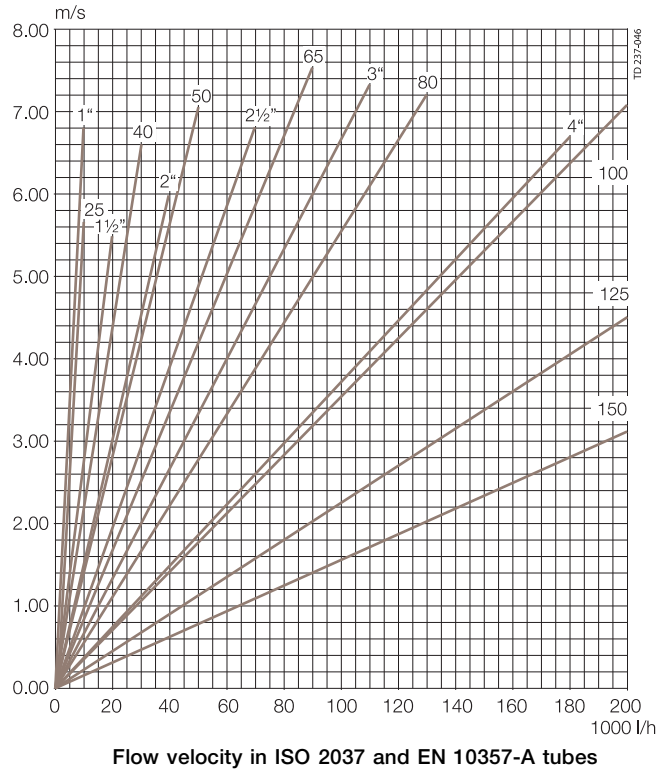
## Pressure ratings (bar) of Tri-Clamp® Connections

Size Tube OD	Service Ratings* (bar)						
	1/2 & 3/4 inch	1 & 1 1/2 inch	2 inch	2 1/2 inch	3 inch	4 inch	6 inch
<b>13MHLA</b> (Screw tightened to maximum)							
at at 20°C	--	10.3	10.3	10.3	10.3	10.3	--
at at 120°C	--	8.6	8.6	8.6	8.6	5.2	--
<b>13MHHM</b> (Wing nut tightened to 2.8 Nm of torque)							
at at 20°C	--	34.5	31.0	27.6	24.1	20.7	10.3
at at 120°C	--	20.7	20.7	13.8	13.4	10.3	5.2
<b>13MHHS</b> (Wing nut tightened to 2.8 Nm of torque)							
at at 20°C	151.7	41.4	37.9	31.0	24.1	20.7	--
at at 120°C	82.7	20.7	19.0	15.5	12.1	10.3	--
<b>13MHP</b> (Bolts tightened to 2.71 Nm of torque)							
at at 20°C	--	103	68.9	68.9	68.9	55.1	20.7
at at 120°C	--	82.7	55.2	55.2	55.2	41.4	13.8
<b>A13MO</b> (1-3" nuts tightened to 2.3 Nm, 4-6" 3.4 Nm of torque)							
at at 20°C	--	34.5	24.1	20.7	13.8	10.3	5.2
at at 120°C	--	17.2	13.8	10.3	10.3	10.3	3.4
<b>A13MHM</b> (Wing nut tightened to 2.8 Nm of torque)							
at at 20°C	--	34.5	31	27.6	24.1	20.7	10.3
at at 120°C	--	20.7	17.2	13.8	12.1	10.3	5.2

\* Service ratings are based on hydrostatic tests using standard-molded Buna-N material gaskets, with proper installation of ferrules, assembly of joints and absence of shock pressure.

All ratings shown are dependent upon related components within the systems and proper installation. For temperatures above at 120°C, we recommend using only 13MHP clamps.

Pressure drop and flow velocity curves





# 1.1 Hygienic, ISO 2037

The installation material in this section is manufactured to meet ISO 2037 tube dimensions.



<b>Price lists</b>	
Tubes .....	1.1.26
Reducers .....	1.1.27
Bends .....	1.1.29
Hose Liners .....	1.1.32
Tees .....	1.1.33
SMS Union Parts .....	1.1.34
Seal rings for SMS Union Parts .....	1.1.40
ISO Union Parts .....	1.1.41
DS Union Parts DS 720 tubes .....	1.1.43
DIN Union Parts .....	1.1.46
Clamp Union Parts .....	1.1.49
Clamp Rings for Clamp Union Parts .....	1.1.51
Flange connections .....	1.1.52

## Tubes

Hygienic, ISO 2037

Tubes of manufacturing lengths of approx 6 meters  
 Product code: 5102  
 According to standard: ISO 2037

Finish: BD and BC

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)	
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		<b>mm</b>	<b>OD/ID x t</b>	<b>BD finish Inch tubes ISO 2037</b>
9611819010	*	9611819210	*	25.00	25.00/22.60x1.20	
9611819020	*	9611819220	*	32.00	32.00/29.60x1.20	
9611819030	*	9611819230	*	38.00	38.00/35.60x1.20	
9611819060	*	9611819260	*	51.00	51.00/48.60x1.20	
9611819090	*	9611819280	*	63.50	63.50/60.30x1.60	
9611819101	*	9611819290	*	76.10	76.10/72.90x1.60	
9611819120	*	9611819310	*	101.60	101.60/97.60x2.00	
9611819008	*	9611819868	*	25.00	25.00/22.60x1.20	
9611819862	*	9611819869	*	32.00	32.00/29.60x1.20	
9611819863	*	9611819870	*	38.00	38.00/35.60x1.20	
9611819864	*	9611819871	*	51.00	51.00/48.60x1.20	
9611819865	*	9611819872	*	63.50	63.50/60.30x1.60	
9611819866	*	9611819873	*	76.10	76.10/72.90x1.60	
9611819867	*	9611819874	*	101.60	101.60/97.60x2.00	
9614042502	*	9614042509	*	25.00	25.00/22.60x1.20	
9614042503	*	9614042510	*	32.00	32.00/29.60x1.20	
9614042504	*	9614042511	*	38.00	38.00/35.60x1.20	
9614042505	*	9614042512	*	51.00	51.00/48.60x1.20	
9614042506	*	9614042513	*	63.50	63.50/60.30x1.60	
9614042507	*	9614042514	*	76.10	76.10/72.90x1.60	
9614042508	*	9614042515	*	101.60	101.60/97.60x2.00	
9614042501	*	9614042522	*	25.00	25.00/22.60x1.20	
9614042516	*	9614042523	*	32.00	32.00/29.60x1.20	
9614042517	*	9614042524	*	38.00	38.00/35.60x1.20	
9614042518	*	9614042525	*	51.00	51.00/48.60x1.20	
9614042519	*	9614042526	*	63.50	63.50/60.30x1.60	
9614042520	*	9614042527	*	76.10	76.10/72.90x1.60	
9614042521	*	9614042528	*	101.60	101.60/97.60x2.00	

\* PPL prices per meter are updated monthly

\*\* H3 execution = Inside surface texture (Ra μm) including welded area ≤ 0.8 (EHEDG certified)

Please contact your Alfa Laval contact person for further information.

Product code: 5064

Finish: OD: Semi bright  
ID: Semi bright

Material Item No.	PPL EUR	Size	Dimension (mm)			L	Concentric reducer
			OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>			
<b>1.4404 (316L)</b>		<b>mm</b>					
3131708951	<b>17.16</b>	38.00/25.00	38.00/35.60x1.20	25.00/22.60x1.20		44.00	
3131708952	<b>30.36</b>	51.00/25.00	51.00/48.60x1.20	25.00/22.60x1.20		86.00	
3131708953	<b>20.91</b>	51.00/38.00	51.00/48.60x1.20	38.00/35.60x1.20		42.00	
3131708954	<b>32.26</b>	63.50/38.00	63.50/61.10x1.20	38.00/35.60x1.20		82.00	
3131708955	<b>24.23</b>	63.50/51.00	63.50/61.10x1.20	51.00/48.60x1.20		40.00	
3131708956	<b>35.95</b>	76.10/51.00	76.10/72.90x1.60	51.00/47.80x1.60		79.00	
3131708957	<b>28.86</b>	76.10/63.50	76.10/72.90x1.60	63.50/60.30x1.60		39.00	
3131708958	<b>40.11</b>	101.60/76.10	101.60/97.60x2.00	76.10/72.10x2.00		81.00	
							<b>Eccentric reducer</b>
3131708961	<b>30.76</b>	38.00/25.00	38.00/35.60x1.20	25.00/22.60x1.20		44.00	
3131708962	<b>69.22</b>	51.00/25.00	51.00/48.60x1.20	25.00/22.60x1.20		86.00	
3131708963	<b>32.95</b>	51.00/38.00	51.00/48.60x1.20	38.00/35.60x1.20		42.00	
3131708964	<b>69.22</b>	63.50/38.00	63.50/61.10x1.20	38.00/35.60x1.20		82.00	
3131708965	<b>36.34</b>	63.50/51.00	63.50/61.10x1.20	51.00/48.60x1.20		40.00	
3131708966	<b>40.11</b>	76.10/51.00	76.10/72.90x1.60	51.00/47.80x1.60		79.00	
3131708967	<b>37.28</b>	76.10/63.50	76.10/72.90x1.60	63.50/60.30x1.60		39.00	
3131708968	<b>59.00</b>	101.60/76.10	101.60/97.60x2.00	76.10/72.10x2.00		81.00	

NOTE: For pressure and surface, please see product leaflet.

Product code: 5064

Finish: OD: Polished  
ID: Raw

Item No.	PPL EUR	Item No.	PPL EUR	Size	Dimension (mm)			
1.4307 (304L)		1.4404 (316L)		mm	OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L	Concentric reducer
9612928250	30.12	9612928259	33.11	38.10/25.40	38.10/34.90x1.60	25.40/22.20x1.60	40.00	
9612928251	43.59	9612928260	47.94	50.80/25.40	50.80/47.60x1.60	25.40/22.20x1.60	80.00	
9612928252	28.19	9612928261	31.01	50.80/38.10	50.80/47.60x1.60	38.10/34.90x1.60	41.00	
9612928253	44.17	9612928262	48.57	63.50/38.10	63.50/60.30x1.60	38.10/34.90x1.60	80.00	
9612928254	30.63	9612928263	33.70	63.50/50.80	63.50/60.30x1.60	50.80/47.60x1.60	38.00	
9612928255	55.21	9612928264	60.73	76.10/50.80	76.10/73.00x1.60	50.80/47.60x1.60	76.00	
9612928256	44.54	9612928265	49.00	76.10/63.50	76.10/73.00x1.60	63.50/60.30x1.60	36.00	
9612928257	70.47	9612928266	77.54	101.60/76.10	101.60/97.60x2.00	76.20/73.00x1.60	77.00	
9612928258	88.40	9612928267	97.23	101.60/63.50	101.60/97.60x2.00	63.50/60.30x1.60	108.00	
								Concentric reducer
		9612928274	27.32	38.10/25.40	38.10/34.90x1.60	25.40/22.20x1.60	97.00	
		9612928275	44.79	50.80/38.10	50.80/47.60x1.60	38.10/34.90x1.60	97.00	
		9612928276	59.26	50.80/25.40	50.80/47.60x1.60	25.40/22.20x1.60	115.00	
		9612928277	40.03	63.50/50.80	63.50/60.30x1.60	50.80/47.60x1.60	97.00	
		9612928278	70.89	63.50/38.10	63.50/60.30x1.60	38.10/34.90x1.60	120.00	
		9612928279	57.14	76.20/63.50	76.10/73.00x1.60	63.50/60.30x1.60	97.00	
		9612928280	73.34	76.20/50.80	76.10/73.00x1.60	50.80/47.60x1.60	115.00	
		9612928281	75.84	76.20/38.10	76.10/73.00x2.00	38.10/34.90x1.60	130.00	
		9612928282	89.77	101.60/76.20	101.60/97.60x2.00	76.20/73.00x1.6	120.00	
		9612928283	102.92	101.60/63.50	101.60/97.60x2.00	63.50/60.30x1.60	140.00	
		9612928284	117.31	101.60/50.80	101.60/97.60x2.00	50.80/47.60x1.60	150.00	
								Eccentric reducer
		9612928285	33.01	38.10/25.40	38.10/34.90x1.60	25.4/22.20x1.60	100.00	
		9612928286	49.73	50.80/38.10	50.80/47.60x1.60	38.10/34.90x1.60	100.00	
		9612928287	41.99	50.80/25.40	50.80/47.60x1.60	25.40/22.20x1.60	120.00	
		9612928288	57.59	63.50/50.80	63.50/60.30x1.60	50.80/47.60x1.60	105.00	
		9612928289	53.99	63.50/38.10	63.50/60.30x1.60	38.10/34.90x1.60	140.00	
		9612928290	69.25	76.20/63.50	76.10/73.00x1.60	63.50/60.30x1.60	105.00	
		9612928291	62.40	76.20/50.80	76.10/73.00x1.60	50.80/47.60x1.60	135.00	
		9612928292	82.79	101.60/76.20	101.60/97.60x2.00	76.20/73.00x1.60	135.00	
		9612928293	77.99	101.60/63.50	101.60/97.60x2.00	63.50/60.30x1.60	170.00	
		9612929372	101.99	104.00/76.10	104.00/100.00x2.00	76.20/73.00x1.60	135.00	
		9612929373	86.13	104.00/63.50	104.00/100.00x2.00	63.50/60.30x1.60	170.00	

NOTE: For pressure and surface, please see product leaflet.

Wall thickness is not according to ISO 2037.

Product code: 5004

Finish: OD: Semi bright  
ID: Semi bright

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)			Bend 90° - (R = 1 x D)
					OD/ID x t	L	L <sub>1</sub>	
1.4307 (304L)		1.4404 (316L)		mm				
190683	10.46	191507	13.08	25.00	25.00/22.60x1.20	55.00		25.00
3131902101	13.13	3131902111	16.61	38.00	38.00/35.60x1.20	70.00		38.00
3131902181	15.56	3131902191	19.28	51.00	51.00/48.60x1.20	82.00		51.00
3131902261	21.95	3131902271	27.39	63.50	63.50/60.30x1.60	105.00		64.00
3131902341	36.88	3131902351	45.64	76.10	76.00/72.00x2.00	110.00		76.00
								<b>Bend 90° - (R = 1 x D)</b>
		191699	92.99	25.00	25.00/22.60x1.20	55.00	255.00	25.00
		3131902671	95.78	38.00	38.00/35.60x1.20	70.00	270.00	38.00
		3131902751	127.84	51.00	51.00/48.60x1.20	82.00	282.00	51.00
		3131902831	177.39	63.50	63.50/60.30x1.60	105.00	305.00	64.00
		3131902911	242.26	76.10	76.10/72.10x2.00	110.00	310.00	76.00
<b>According to standard: ISO 2851</b>								<b>Bend 90° - (R = 1.5 x D)</b>
9611310010	11.51	9611310011	14.32	25.00	25.00/22.60x1.20	65.00		37.50
9611310020	14.79	9611310021	17.99	38.00	38.00/35.60x1.20	85.00		57.00
9611310030	16.98	9611310031	21.55	51.00	51.00/48.60x1.20	110.00		76.50
9611310040	23.83	9611310041	29.50	63.50	63.50/60.30x1.60	135.00		95.30
9611310050	39.33	9611310051	49.55	76.10	76.10/72.90x1.60	155.00		114.20
9611310060	72.37	9611310061	91.25	101.60	101.60/97.60x2.00	195.00		152.50
								<b>Bend 90° - (R = 1.5 x D)</b>
9611312661	10.46	9611312671	13.08	25.00	25.00/22.60x1.20	38.00		37.50
9611312662	13.13	9611312672	16.61	38.00	38.00/35.60x1.20	57.00		57.00
9611312663	15.56	9611312673	19.20	51.00	51.00/48.60x1.20	76.00		76.50
9611312664	21.95	9611312674	27.39	63.50	63.50/60.30x1.60	95.00		95.30
9611312665	36.88	9611312675	45.64	76.10	76.10/72.90x1.60	114.00		114.20
9611312666	70.80	9611312676	88.11	101.60	101.60/97.60x2.00	152.00		152.50

Product code: 5004

Finish: OD: Polished  
ID: Raw

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)			ID: Raw
1.4307 (304L)		1.4404 (316L)		mm	OD x t	L	R	Bend 90° - (R = 1 x D)
9612027715	11.51	9612027722	14.40	25.00	25.00x1.20	55.00	25.00	
9612027717	14.47	9612027724	18.25	38.00	38.00x1.20	70.00	38.00	
9612027718	17.16	9612027725	21.08	51.00	51.00x1.20	82.00	51.00	
9612027719	24.13	9612027726	30.14	63.50	63.50x1.60	105.00	64.00	
9612027720	40.89	9612027727	50.36	76.10	76.10x2.00	110.00	76.00	
								Bend 90° - (R = 1.5 x D)
9613404201	12.00	9613404207	14.40	25.00	25.00/22.60x1.20	38.00	37.50	
9613404202	14.47	9613404208	18.25	38.00	38.00/35.60x1.20	57.00	57.00	
9613404203	18.21	9613404209	26.34	51.00	51.00/48.60x1.20	76.00	76.50	
9613404204	24.13	9613404210	37.26	63.50	63.50/60.30x1.60	95.00	95.30	
9613404205	40.89	9613404211	50.36	76.10	76.10/72.90x1.60	114.00	114.20	
9613404206	80.26	9613404212	96.74	101.60	101.60/97.60x2.00	152.00	152.50	
								Bend 90° - (R = 3 x D)
		9612928268	14.40	25.40	25.40/22.90 X 1.25	115.00	75.00	
		9612928269	17.39	31.80	31.80/29.30 X 1.25	136.00	93.00	
		9612928270	21.87	38.10	38.10/35.60 X 1.25	140.00	115.00	
		9612928271	28.97	50.80	50.80/48.30 X 1.25	225.00	150.00	
		9612928272	49.08	63.50	63.50/60.50x1.50	240.00	185.00	
		9612928273	108.45	76.00	76.00/72.80x1.60	250.00	215.00	

Product code: 5004

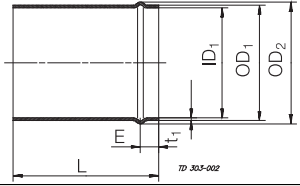
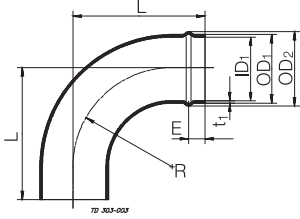
Finish: OD: Polished  
ID: Raw

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)			Finish: OD: Semi bright ID: Semi bright
					OD/ID x t	L <sub>1</sub>	L <sub>2</sub>	
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		<b>mm</b>				<b>Bend 45°, OD/ID: Semi bright</b>
9611300661	<b>13.61</b>	9611300809	<b>16.98</b>	25.00	25.00/22.60x1.20	70.00	47.00	
9611300662	<b>15.56</b>	9611300810	<b>19.20</b>	38.00	38.00/35.60x1.20	87.00	63.00	
9611300663	<b>17.87</b>	9611300811	<b>21.95</b>	51.00	51.00/48.60x1.20	119.50	86.50	
9611300664	<b>23.22</b>	9611300812	<b>29.34</b>	63.50	63.50/60.30x1.60	136.00	101.00	
9611300665	<b>42.48</b>	9611300813	<b>52.71</b>	76.10	76.10/72.10x2.00	157.00	119.00	
9611300778	<b>85.74</b>	9611300667	<b>105.41</b>	101.60	101.60/97.60x2.00	226.50	166.00	
								<b>Bend 45°, OD/ID: Polished</b>
9613404301	<b>14.94</b>	9613404307	<b>18.73</b>	25.00	25.00/22.60x1.20	70.00	47.00	
9613404302	<b>17.16</b>	9613404308	<b>21.08</b>	38.00	38.00/35.60x1.20	87.00	63.00	
9613404303	<b>19.67</b>	9613404309	<b>24.13</b>	51.00	51.00/48.60x1.20	119.50	86.50	
9613404304	<b>25.59</b>	9613404310	<b>32.26</b>	63.50	63.50/60.30x1.60	136.00	101.00	
9613404305	<b>46.41</b>	9613404311	<b>58.22</b>	76.10	76.10/72.10x2.00	157.00	119.00	
9613404306	<b>94.38</b>	9613404312	<b>115.63</b>	101.60	101.60/97.60x2.00	226.50	166.00	

NOTE: For pressure and surface, please see product leaflet.

Product code: 5086, 5018

Finish: OD: Semi bright  
ID: Semi bright

Material Item No.	PPL EUR	Size	Dimension (mm)					
			OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub>	E	L	R	
1.4404 (316L)		mm						Hose liner, straight
<b>Product code: 5086</b>								
191570	15.95	25.00	25.00/22.60x1.20	29.00	10.00	42.50		
191572	23.73	38.00	38.00/35.60x1.20	42.00	10.00	71.00		
191573	29.44	51.00	51.00/48.60x1.20	55.00	10.00	101.00		
191574	36.53	63.50	63.50/60.30x1.60	67.00	10.00	116.00		
191575	49.08	76.10	76.10/72.10x2.00	80.00	10.00	140.00		
3131708021	122.19	101.60	101.60/97.60x2.00	105.60	10.00	163.00		
<b>Product code: 5018</b>								
<b>Hose liner, bend</b>								
191596	21.17	25.00	25.00/22.60x1.20	29.00	10.00	55.00	25.00	
191598	25.96	38.00	38.00/35.60x1.20	42.00	10.00	70.00	38.00	
191599	36.48	51.00	51.00/48.60x1.20	55.00	10.00	82.00	51.00	
191600	75.09	63.50	63.5/60.30x1.60	67.00	10.00	105.00	63.50	
191601	115.84	76.10	76.10/72.10x2.00	80.00	10.00	110.00	76.00	
3131705681	287.47	101.60	101.60/97.60x2.00	105.60	10.00	150.00	150.00	

NOTE: For pressure and surface, please see product leaflet.



Product code: 5022

Finish: OD: Polished  
ID: Polished

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)				
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	Tee
190725	18.33	191652	23.13	25.00	25.00/22.60x1.20		55.00		
190727	25.11	191654	31.24	38.00	38.00/35.60x1.20		70.00		
190728	28.31	191655	35.47	51.00	51.00/48.60x1.20		82.00		
190729	41.69	191656	51.93	63.50	63.50/60.30x1.60		105.00		
190730	55.56	191657	65.29	76.10	76.10/72.10x2.00		110.00		
3131708511	157.39	3131708512	141.68	101.60	101.60/97.60x2.00		150.00		
<b>Tee, short outlet</b>									
9611302052	17.99	9611302155	22.26	25.00	25.00/22.60x1.20		55.00	27.00	
9611302053	20.36	9611302156	25.59	38.00	38.00/35.60x1.20		70.00	40.50	
9611302054	21.81	9611302157	26.76	51.00	51.00/48.60x1.20		82.00	54.50	
9611302055	31.08	9611302158	38.61	63.50	63.50/60.30x1.60		105.00	67.00	
9611302056	38.73	9611302159	48.78	76.10	76.10/72.10x2.00		110.00	81.00	
9611302057	91.78	9611302160	103.04	101.60	101.60/97.60x2.00		150.00	107.00	
<b>Tee, reduced</b>									
		1.4404 (316L)		mm	OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	
		3131708061	26.22	51.00/38.00	51.00/48.60x1.20	38.00/35.60x1.20	82.00	70.00	
		3131708071	40.79	63.50/38.00	63.50/60.3x1.60	38.00/35.60x1.20	105.00	70.00	
		3131708081	47.99	63.50/51.00	63.50/60.30x1.60	51.00/48.6x1.20	105.00	82.00	
		3131708091	58.79	76.10/38.00	76.10/72.10x2.00	38.10/34.90x1.60	110.00	80.00	
		3131708101	62.40	76.10/51.00	76.10/72.10x2.00	50.80/47.60x1.60	110.00	82.00	
<b>Tee, reduced, short outlet</b>									
		3180190391	27.07	38.00/25.00	38.00/35.60x1.20	25.00/22.60x1.20	70.00	40.70	
		3180190392	31.46	51.00/25.00	51.00/48.60x1.20	25.00/22.60x1.20	82.00	54.10	
		3180190393	32.17	51.00/38.00	51.00/48.60x1.20	38.00/35.60x1.20	82.00	54.10	
		3180190394	40.11	63.50/25.00	63.50/60.30x1.60	25.00/22.60x1.20	105.00	66.50	
		3180190395	40.11	63.50/38.00	63.50/60.30x1.60	38.00/35.60x1.20	105.00	67.60	
		3180190396	48.78	63.50/51.00	63.50/60.3x1.60	51.00/48.60x1.20	105.00	66.50	
		3180190397	72.37	76.10/25.00	76.10/72.10x2.00	25.00/21.80x1.60	110.00	79.30	
		3180190398	49.55	76.10/38.00	76.10/72.10x2.00	38.00/34.80x1.60	110.00	80.60	
		3180190399	60.57	76.10/51.00	76.10/72.10x2.00	51.00/47.80x1.60	110.00	80.60	
		3180190401	49.55	76.10/63.50	76.10/72.10x2.00	63.50/60.30x1.60	110.00	80.00	
		3180190402	114.87	101.60/25.00	101.60/97.60x2.00	25.00/21.80x1.60	150.00	105.00	
		3180190403	91.25	101.60/38.00	101.60/97.60x2.00	38.00/34.80x1.60	150.00	106.60	
		3180190404	99.89	101.60/51.00	101.60/97.60x2.00	51.00/47.80x1.60	150.00	106.60	
		3180190405	93.05	101.60/63.50	101.60/97.60x2.00	63.50/60.30x1.60	150.00	106.60	
		3180190406	132.14	101.60/76.10	101.60/97.60x2.00	76.10/72.90x1.60	150.00	106.60	
		9612927740	120.31	104.00/25.00	104.00/100.00x2.00	25.40/21.40x2.00	150.00	108.00	
		9612927741	120.31	104.00/38.00	104.00/100.00x2.00	38.10/34.10x2.00	150.00	110.00	
		9612927742	147.09	104.00/51.00	104.00/100.00x2.00	50.80/46.80x2.00	150.00	110.00	
		9612927743	120.31	104.00/63.50	104.00/100.00x2.00	63.50/59.50x2.00	150.00	112.00	
		9612927744	120.31	104.00/76.10	104.00/100.00x2.00	76.10/72.10x2.00	150.00	112.00	

NOTE: For pressure and surface, please see product leaflet.

Product code: 5043

Finish: OD: Semi bright  
Seals: Nitrile  
Thread: RdG according to DIN 405

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)				
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		<b>mm</b>	<b>OD/ID x t</b>		<b>A</b>	<b>B</b>	<b>Union</b>
9611300382	<b>36.96</b>	9611330382	<b>42.91</b>	25.00	25.00/22.60x1.20		51.00	23.50	
9611300383	<b>45.97</b>	9611330383	<b>53.18</b>	38.00	38.00/35.60x1.20		74.00	30.00	
9611300384	<b>51.91</b>	9611330384	<b>60.07</b>	51.00	51.00/48.60x1.20		84.00	30.00	
9611300385	<b>70.84</b>	9611330385	<b>81.95</b>	63.50	63.50/60.30x1.60		100.00	33.00	
9611300386	<b>87.67</b>	9611330386	<b>101.71</b>	76.10	76.10/72.90x1.60		114.00	35.00	
9611300387	<b>195.37</b>	9611330387	<b>222.33</b>	101.60	101.60/97.60x2.00		154.00	48.00	
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		<b>mm</b>	<b>OD/ID x t</b>		<b>B</b>	<b>C</b>	<b>Male part</b>
190711	<b>12.91</b>	191001	<b>16.71</b>	25.00	25.00/22.60x1.20		15.00	40.00x1/6	
190713	<b>16.37</b>	191003	<b>20.40</b>	38.00	38.00/35.60x1.20		20.00	60.00x1/6	
190714	<b>17.84</b>	191004	<b>22.56</b>	51.00	51.00/48.60x1.20		20.00	70.00x1/6	
190715	<b>24.83</b>	191005	<b>31.55</b>	63.50	63.50/60.30x1.60		24.00	85.00x1/6	
190716	<b>29.29</b>	191006	<b>37.30</b>	76.10	76.10/72.90x1.60		24.00	98.00x1/6	
3131708171	<b>64.61</b>	3131708173	<b>81.86</b>	101.60	101.60/97.60x2.00		35.00	132.00x1/6	
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		<b>mm</b>	<b>OD/ID x t</b>		<b>A</b>	<b>B</b>	<b>Liner</b>
190704	<b>8.63</b>	190994	<b>10.78</b>	25.00	25.00/22.60x1.20		35.50	7.50	
190706	<b>10.43</b>	190996	<b>13.61</b>	38.00	38.00/35.60x1.20		55.00	9.00	
190707	<b>12.25</b>	190997	<b>15.69</b>	51.00	51.00/48.60x1.20		65.00	9.00	
190708	<b>16.97</b>	190998	<b>21.37</b>	63.50	63.50/60.30x1.60		80.00	9.00	
190709	<b>21.03</b>	190999	<b>27.06</b>	76.10	76.10/72.90x1.60		93.00	10.00	
3131708851	<b>37.67</b>	3131708852	<b>44.88</b>	101.60	101.60/97.60x2.00		127.00	12.00	
<b>1.4301 (304)</b>				<b>mm</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>Nut</b>
190613	<b>13.81</b>			25.00	51.00	20.00	40.00x1/6	32.00	
190615	<b>17.06</b>			38.00	74.00	25.00	60.00x1/6	48.00	
190616	<b>19.72</b>			51.00	84.00	26.00	70.00x1/6	60.50	
190617	<b>26.86</b>			63.50	100.00	30.00	85.00x1/6	74.00	
190618	<b>34.72</b>			76.10	114.00	32.00	98.00x1/6	87.00	
3131708841	<b>87.82</b>			101.60	154.00	45.00	132.00x1/6	117.00	
9613496401	<b>47.99</b>			104.00	138.00	31.00	125.00x1/6	113.00	
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		<b>mm</b>	<b>OD/ID x t</b>		<b>A</b>	<b>B</b>	<b>Liner, long.</b>
		9611309611	<b>13.88</b>	25.00	25.00/22.60x1.20		35.50	17.00	

Product code: 5043

Finish: OD: Semi bright  
 Seals: Nitrile  
 Thread: RdG according to DIN 405  
 Connections: Expanding

Material Item No	PPL EUR	Size	Dimension (mm)				Union
			A	B	C	D	
<b>1.4301 (304)</b>		<b>mm</b>					
190655	<b>42.43</b>	25.00	51.00	38.00		25.20	
190657	<b>57.46</b>	38.00	74.00	44.00		38.20	
190658	<b>56.30</b>	51.00	84.00	46.00		51.20	
190659	<b>76.60</b>	63.50	100.00	56.00		63.80	
190660	<b>122.62</b>	76.10	114.00	66.00		76.30	
							<b>Male part</b>
190641	<b>15.02</b>	25.00		20.00	40.00x1/6	25.20	
190643	<b>23.29</b>	38.00		23.00	60.00x1/6	38.20	
190644	<b>18.87</b>	51.00		25.00	70.00x1/6	51.20	
190645	<b>27.41</b>	63.50		30.00	85.00x1/6	63.80	
190646	<b>55.70</b>	76.10		35.00	98.00x1/6	76.30	
							<b>Liner</b>
190627	<b>12.00</b>	25.00	35.50	17.00		25.20	
190629	<b>15.01</b>	38.00	55.00	20.00		38.20	
190630	<b>15.59</b>	51.00	65.00	20.00		51.20	
190631	<b>20.16</b>	63.50	80.00	25.00		63.80	
190632	<b>29.56</b>	76.10	93.00	30.00		76.30	
							<b>Nut</b>
190613	<b>13.81</b>	25.00	51.00	20.00	40.00x1/6	32.00	
190615	<b>17.06</b>	38.00	74.00	25.00	60.00x1/6	48.00	
190616	<b>19.72</b>	51.00	84.00	26.00	70.00x1/6	60.50	
190617	<b>26.86</b>	63.50	100.00	30.00	85.00x1/6	74.00	
190618	<b>34.72</b>	76.10	114.00	32.00	98.00x1/6	87.00	
3131708841	<b>87.82</b>	101.60	154.00	45.00	132.00x1/6	117.00	

NOTE: Seal rings - please see later this chapter.

NOTE: For pressure and surface, please see product leaflet.

Product code: 5043

Finish: OD: Semi bright  
 Seals: Nitrile  
 Thread: RdG according to DIN 405  
 Connections: Expanding/welding

Material Item No	PPL EUR	Size	Dimension (mm)					
			A	B	D			
<b>1.4404 (316L)</b>						<b>Expanding Reducing liner</b>		
191669	<b>30.51</b>	38.00/25.00	55.00	17.00	25.20			
191670	<b>49.92</b>	51.00/25.00	65.00	17.00	25.20			
191675	<b>55.67</b>	51.00/38.00	65.00	20.00	38.20			
191676	<b>90.97</b>	63.50/38.00	80.00	20.00	38.20			
191678	<b>95.99</b>	63.50/51.00	80.00	20.00	51.20			
191677	<b>111.65</b>	76.10/38.00	93.00	20.00	38.20			
191679	<b>119.92</b>	76.10/51.00	93.00	20.00	51.20			
191680	<b>131.98</b>	76.10/63.50	93.00	25.00	63.80			
<b>1.4404 (316L)</b>		<b>mm</b>	<b>OD/ID x t</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>Reducing male part</b>	
3131707372	<b>73.92</b>	38.00/25.00	25.00/22.60x1.20	35.60	20.00	60.00x1/6		
3131708911	<b>101.91</b>	51.00/25.00	25.00/22.60x1.20	48.60	20.00	70.00x1/6		
3131706571	<b>77.27</b>	51.00/38.00	38.00/35.60x1.20	48.60	20.00	70.00x1/6		
3131708921	<b>129.92</b>	63.50/38.00	38.00/35.60x1.20	60.30	24.00	85.00x1/6		
3131706591	<b>107.97</b>	63.50/51.00	51.00/48.60x1.20	60.30	24.00	85.00x1/6		
3131708221	<b>171.35</b>	76.10/51.00	51.00/48.60x1.20	72.90	24.00	98.00x1/6		
3131705121	<b>157.93</b>	76.10/63.50	63.50/60.30x1.60	72.90	24.00	98.00x1/6		
<b>1.4404 (316L)</b>		<b>mm</b>	<b>OD/ID x t</b>	<b>A</b>	<b>B</b>		<b>Reducing liner</b>	
3131707652	<b>29.74</b>	38.00/25.00	25.00/22.60x1.20	55.00	9.00			
3131707642	<b>39.07</b>	51.00/25.00	25.00/22.60x1.20	65.00	9.00			
3131706611	<b>31.96</b>	51.00/38.00	38.00/35.60x1.20	65.00	9.00			
3131707941	<b>83.63</b>	63.50/38.00	38.00/35.60x1.20	80.00	9.00			
3131706631	<b>48.26</b>	63.50/51.00	51.00/48.60x1.20	80.00	9.00			
3131707931	<b>67.21</b>	76.10/51.00	51.00/48.60x1.20	93.00	10.00			
3131708881	<b>67.21</b>	76.10/63.50	63.50/60.30x1.60	93.00	10.00			
3131708891	<b>155.97</b>	101.60/63.50	63.50/60.30x1.60	127.00	15.00			
3131708901	<b>179.97</b>	101.60/76.10	76.10/72.90x1.60	127.00	15.00			
<b>1.4301 (304)</b>		<b>mm</b>		<b>A</b>	<b>B</b>		<b>C</b>	<b>D</b>
190613	<b>13.81</b>	25.00		51.00	20.00	40.00x1/6	32.00	
190615	<b>17.06</b>	38.00		74.00	25.00	60.00x1/6	48.00	
190616	<b>19.72</b>	51.00		84.00	26.00	70.00x1/6	60.50	
190617	<b>26.86</b>	63.50		100.00	30.00	85.00x1/6	74.00	
190618	<b>34.72</b>	76.10		114.00	32.00	98.00x1/6	87.00	
3131708841	<b>87.82</b>	101.60		154.00	45.00	132.00x1/6	117.00	

NOTE: Seal rings - please see later this chapter.

NOTE: For pressure and surface, please see product leaflet.

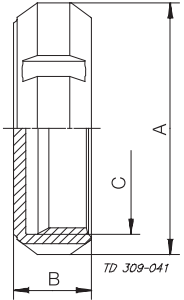
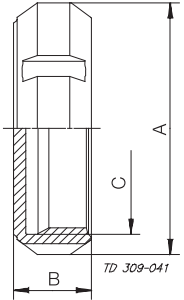
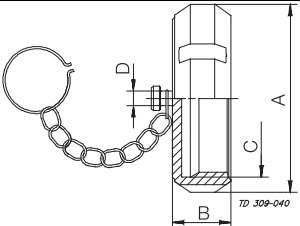
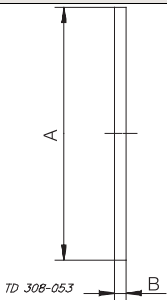
Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)					
					OD/ID x t	B	C			
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		mm					<b>Male part</b>	
9613409501	<b>14.75</b>	9613409507	<b>16.71</b>	25.00	25.00/22.50 x 1.25	19.00	40.00x1/6			
9613409502	<b>20.93</b>	9613409508	<b>20.40</b>	38.00	38.00/35.50 x 1.25	23.00	60.00x1/6			
9613409503	<b>22.11</b>	9613409509	<b>22.56</b>	51.00	51.00/48.50 x 1.25	23.00	70.00x1/6			
9613409504	<b>30.67</b>	9613409510	<b>31.55</b>	63.50	63.50/60.40x1.55	27.00	85.00x1/6			
9613409505	<b>35.27</b>	9613409511	<b>37.30</b>	76.10	76.10/72.70x1.70	27.00	98.00x1/6			
9613409506	<b>64.61</b>	9613409512	<b>81.86</b>	104.00	104.00/99.90 x 2.05	30.00	125 x 1/4			
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		mm	A	B	C	D	<b>Liner</b>	
9613409401	<b>7.26</b>	9613409407	<b>8.05</b>	25.00	22.50	25.00	15.60	35.50		
9613409402	<b>9.56</b>	9613409408	<b>10.61</b>	38.00	35.50	38.00	16.00	55.00		
9613409403	<b>11.59</b>	9613409409	<b>12.86</b>	51.00	48.50	51.00	17.00	65.00		
9613409404	<b>14.80</b>	9613409410	<b>16.44</b>	63.50	60.40	63.50	17.00	80.00		
9613409405	<b>19.35</b>	9613409411	<b>21.51</b>	76.10	72.70	76.10	19.00	93.00		
9613409406	<b>25.16</b>	9613409412	<b>27.95</b>	104.00	99.90	104.00	19.00	118.00		
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		mm	OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>		B	OD <sub>2</sub>	E	<b>Hose liner</b>
		191577	<b>42.00</b>	25.00	25.00/22.60x1.20		50.00	29.00	10.00	
		191579	<b>179.97</b>	38.00	38.00/35.60x1.20		80.00	42.00	10.00	
		191580	<b>63.81</b>	51.00	51.00/48.60x1.20		110.00	55.00	10.00	
		191581	<b>299.96</b>	63.50	63.50/60.30x1.60		125.00	67.00	10.00	
		191582	<b>419.93</b>	76.10	76.10/72.10x2.00		150.00	80.00	10.00	
<b>1.4301 (304)</b>				mm	A	B	C	D	<b>Nut</b>	
190613	<b>13.81</b>			25.00	51.00	20.00	40.00x1/6	32.00		
190615	<b>17.06</b>			38.00	74.00	25.00	60.00x1/6	48.00		
190616	<b>19.72</b>			51.00	84.00	26.00	70.00x1/6	60.50		
190617	<b>26.86</b>			63.50	100.00	30.00	85.00x1/6	74.00		
190618	<b>34.72</b>			76.10	114.00	32.00	98.00x1/6	87.00		
3131708841	<b>87.82</b>			101.60	154.00	45.00	132.00x1/6	117.00		

NOTE: Seal rings - please see later this chapter.

NOTE: For pressure and surface, please see product leaflet.

Product code: 5043

Finish: Machined  
Thread: Round type

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)				End cap
					A	B	C	D	
<b>1.4301 (304)</b>		<b>1.4404 (316L)</b>		mm					
9612143001	<b>39.56</b>	9612143008	<b>43.51</b>	25.00	51.00	20.00	40.00x1/6		
9612143002	<b>42.35</b>	9612143009	<b>46.61</b>	38.00	74.00	25.00	60.00x1/6		
9612143003	<b>46.87</b>	9612143010	<b>51.54</b>	51.00	84.00	26.00	70.00x1/6		
9612143004	<b>73.34</b>	9612143011	<b>80.67</b>	63.50	100.00	31.00	85.00x1/6		
9612143005	<b>89.97</b>	9612143012	<b>98.97</b>	76.10	114.00	32.00	98.00x1/6		
9612143006	<b>149.58</b>	9612143013	<b>164.52</b>	101.60	154.00	45.00	132.00x1/6		
<b>End cap with chain</b>									
9612145101	<b>53.12</b>	9612145108	<b>58.42</b>	25.00	51.00	20.00	40.00x1/6	6.50	
9612145102	<b>59.69</b>	9612145109	<b>65.66</b>	38.00	74.00	25.00	60.00x1/6	6.50	
9612145103	<b>61.74</b>	9612145110	<b>67.91</b>	51.00	84.00	26.00	70.00x1/6	6.50	
9612145104	<b>70.84</b>	9612145111	<b>77.93</b>	63.50	100.00	31.00	85.00x1/6	6.50	
9612145105	<b>101.88</b>	9612145112	<b>112.06</b>	76.10	114.00	32.00	98.00x1/6	6.50	
9612145106	<b>155.97</b>	9612145113	<b>171.58</b>	101.60	154.00	45.00	132.00x1/6	6.50	
<b>Blank</b>									
		190084	<b>10.43</b>	25.00	35.50	3.00			
		190086	<b>15.86</b>	38.00	55.00	4.00			
		190087	<b>19.07</b>	51.00	65.00	4.00			
		190088	<b>24.10</b>	63.50	80.00	4.00			
		190089	<b>29.29</b>	76.10	93.00	5.00			
		3131703341	<b>56.33</b>	101.60	127.00	6.00			

NOTE: Seal rings - please see later this chapter.

NOTE: For pressure and surface, please see product leaflet.

Product code: 5043  
 Product code: 5004, 5018

Finish: Machined

Material Item No.	PPL EUR	Size	Dimension (mm)					
1.4307 (304L)		mm	A	B	C	D	E	Adapter, male to BSP male
<b>Product code: 5043</b>								
190502	26.36	25.00	40.00x1/6	30.00	1"	22.50	15.00	
190506	44.13	38.00	60.00x1/6	42.00	1 1/2"	35.50	23.00	
190508	60.04	51.00	70.00x1/6	47.00	2"	48.50	28.00	
190510	239.96	63.50	85.00x1/6	55.00	2 1/2"	60.50	32.00	
<b>Adapter, male to BSP female</b>								
190514	30.32	25.00	40.00x1/6	15.00	1"	22.50	23.00	
190518	46.53	38.00	60.00x1/6	22.00	1 1/2"	35.50	32.00	
190520	53.44	51.00	70.00x1/6	27.00	2"	48.50	38.00	
190522	239.96	63.50	85.00x1/6	31.00	2 1/2"	60.50	42.00	

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)				Thread: RdG according to DIN 405	
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	A	B		Short bend, nut/liner and male	
<b>Product code: 5004</b>										
190760	149.97	191029	172.47	25.00	25.00/22.60x1.20	55.00	55.00			
190762	171.58	191031	197.30	38.00	38.00/35.60x1.20	70.00	70.00			
190763	199.93	191032	229.93	51.00	51.00/48.60x1.20	82.00	82.00			
190765	241.16	191034	277.33	76.10	76.10/72.10x2.00	110.00	110.00			
<b>Product code: 5018</b>										
		191603	61.07	25.00	25.00/22.60x1.20	62.00	55.00	29.00	10.00	
		191605	97.13	38.00	38.00/35.60x1.20	79.00	70.00	42.00	10.00	
		191606	81.10	51.00	51.00/48.60x1.20	91.00	82.00	55.00	10.00	
		191607	176.20	63.50	63.50/60.30x1.60	114.00	105.00	67.00	10.00	

NOTE: Seal rings - please see later this chapter.

NOTE: For pressure and surface, please see product leaflet.

Product code: 5043

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)			Seal ring
						mm	A	B	D	
<b>NBR</b>		<b>EPDM</b>		<b>FPM</b>						
190601	1.61	3131703753	1.70	3131703752	8.63	25.00	32.00	5.50	24.80	
190603	2.11	3131703772	1.95	191661	25.67	38.00	48.00	5.50	37.80	
190604	2.11	3131703785	2.10	3131703782	23.27	51.00	61.00	5.50	50.80	
190605	2.16	3131703793	2.65	3131703792	27.50	63.50	73.50	5.50	63.20	
190606	2.64	3131703803	2.97	3131703801	40.29	76.10	86.00	5.50	75.50	
3131708861	5.27	3131708862	7.13	3131708863	73.23	101.60	114.00	5.50	101.00	
9611994547	5.27	9611994546	8.57	9611994548	73.23	104.00	116.00	5.50	104.00	
<b>PTFE</b>										
3131705511	6.06					25.00	32.00	4.00	25.00	
3131705513	11.53					38.00	48.00	4.00	38.00	
3131705514	11.53					51.00	61.00	4.00	51.00	
3131705515	15.16					63.50	73.50	4.00	63.50	
3131705516	14.85					76.10	86.00	4.00	76.10	
3131705517	22.34					101.60	114.00	4.00	101.60	
<b>NBR</b>										
190608	23.36					25.00	32.00	5.00	22.50	
71066	29.87					38.00	48.00	5.00	35.50	
71068	29.99					51.00	61.00	5.00	48.50	
190610	30.14					63.50	73.50	5.00	60.50	
190611	41.74					76.10	86.00	5.00	72.00	
<b>PTFE</b>										
190987	51.68					25.00	32.00	4.00	22.50	
190989	16.80					38.00	48.00	4.00	35.50	
190990	59.40					51.00	61.00	4.00	48.50	
190991	59.40					63.50	73.50	4.00	60.50	
190992	48.12					76.10	86.00	4.00	72.00	
3131705171	31.66					101.60	114.00	4.00	97.60	



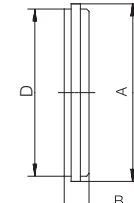
Product code: 5041  
IDF

Finish: Machined  
Seals: Nitrile  
Thread: Trapezoidal type

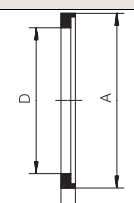
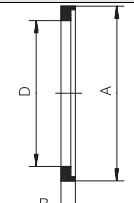
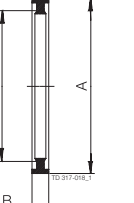
Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)				
		<b>1.4404 (316L)</b>		mm	OD/ID x t		A	B	Union
		9611330955	<b>45.60</b>	25.00	25.60/22.50x1.55		48.00	35.50	
		9611330956	<b>68.00</b>	38.00	38.60/35.50x1.55		64.00	35.50	
		9611330957	<b>71.03</b>	51.00	51.60/48.50x1.55		77.00	35.50	
		9611330958	<b>87.98</b>	63.50	64.10/60.50x1.80		91.00	35.50	
		9611330959	<b>111.37</b>	76.10	76.60/72.00x2.30		106.00	35.50	
		9611330960	<b>175.75</b>	101.60	102.50/97.60x2.45		135.00	45.00	
<b>1.4301 (304)</b>				mm	A	B	C	D	Nut
3131900011	<b>17.74</b>			25.00	48.00	30.00	38.30 x 1/8	30.50	
3131900021	<b>24.07</b>			38.00	64.00	30.00	51.80 x 1/8	43.50	
3131900031	<b>26.47</b>			51.00	77.00	30.00	65.30 x 1/8	57.00	
3131900041	<b>32.76</b>			63.50	91.00	30.00	78.80 x 1/8	70.70	
3131900051	<b>37.23</b>			76.10	106.00	30.00	92.30 x 1/8	83.30	
9611300149	<b>66.33</b>			101.60	135.00	30.00	119.40 x 1/8	110.00	
		<b>1.4404 (316L)</b>		mm	OD/ID x t		B	C	Male part
		3131900621	<b>13.80</b>	25.00	25.60/22.50x1.55		21.50	37.10 x 1/8	
		3131900631	<b>21.95</b>	38.00	38.60/35.50x1.55		21.50	50.60 x 1/8	
		3131900153	<b>20.20</b>	51.00	51.60/48.50x1.55		21.50	64.10 x 1/8	
		3131900163	<b>25.85</b>	63.50	64.10/60.50x1.80		21.50	77.60 x 1/8	
		3131900173	<b>43.24</b>	76.10	76.60/72.00x2.30		21.50	91.10 x 1/8	
		9611300899	<b>55.15</b>	101.60	102.50/97.60x2.45		21.50	118.40 x 1/8	
		<b>1.4404 (316L)</b>		mm	OD/ID x t		A	B	Liner
		3131900681	<b>10.59</b>	25.00	25.60/22.50x1.55		33.80	12.00	
		3131900691	<b>18.26</b>	38.00	38.60/35.50x1.55		47.00	12.00	
		3131900273	<b>20.39</b>	51.00	51.60/48.50x1.55		60.50	12.00	
		3131900711	<b>25.15</b>	63.50	64.10/60.50x1.80		74.00	12.00	
		3131900721	<b>26.40</b>	76.10	76.60/72.00x2.30		87.50	12.00	
		9611300898	<b>41.99</b>	101.60	102.50/97.60x2.45		114.10	21.50	

NOTE: Seal rings - please see later this chapter.

NOTE: For pressure and surface, please see PD-sheet.

Material Item No.	PPL EUR	Size	Dimension (mm)			Blank
1.4404 (316L)		mm	A	B	D	
9611308290	18.62	25.00	33.80	10.50	29.00	
9611308291	20.39	38.00	47.00	10.50	42.50	
9611308292	21.60	51.00	60.50	10.50	56.00	
9611308293	25.61	63.50	74.00	10.50	69.70	
9611308294	33.00	76.10	87.50	10.50	82.30	
9611308295	56.46	101.60	114.10	10.50	108.40	

NOTE: For pressure and surface, please see product leaflet.

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)			Seal ring
NBR		EPDM				mm	A	B	D	
9611990953	2.80	9611991390	4.50			25.00	32.50	6.00	23.60	
9611990954	5.88	9611991392	4.67			38.00	46.00	6.00	36.60	
9611990955	6.73	9611991393	4.73			51.00	59.50	6.00	49.60	
9611990956	8.52	9611991394	4.78			63.50	73.20	6.00	61.30	
9611990957	9.01	9611991395	5.57			76.10	86.50	6.00	73.90	
PTFE						mm	A	B	D	Seal ring
9611991424	9.12					25.00	32.50	6.00	22.80	
9611991426	9.32					38.00	46.00	6.00	35.90	
9611991427	9.63					51.00	59.9	6.00	48.90	
9611991428	15.97					63.50	73.00	6.00	60.90	
9611991429	18.38					76.10	86.50	6.00	73.30	
9611991431	34.92					101.60	113.00	6.00	98.00	
NBR		EPDM		FPM		mm	A	B	D	Seal ring
3131900311	3.48	3131900314	8.38	3131900313	11.80	25.00	32.50	7.00	25.50	
3131900321	3.72	3131900324	3.30	3131900323	17.10	38.00	46.00	7.00	38.00	
3131900331	3.97	3131900334	19.75	3131900333	19.85	51.00	59.50	7.00	51.00	
3131900341	4.21	3131900344	4.30	3131900343	21.35	63.50	73.00	7.00	63.00	
3131900351	4.50	3131900354	5.42	3131900353	21.72	76.10	86.50	7.00	75.50	

\* On request

Product code: 5042

Finish: Machined  
Seals: Nitrile  
Thread: Round type

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)				
		<b>1.4404 (316L)</b>		mm	OD/ID x t		A	B	Union
		9611330264	<b>50.27</b>	25.00	25.40/22.50x1.45		57.00	30.00	
		9611330265	<b>60.41</b>	38.00	38.40/35.50x1.45		71.00	31.50	
		9611330266	<b>73.85</b>	51.00	51.04/48.50x1.45		86.00	31.50	
		9611330267	<b>99.09</b>	63.50	63.90/60.50x1.70		103.00	36.50	
		9611330268	<b>119.44</b>	76.10	76.40/72.00x2.20		115.00	36.50	
		9611330269	<b>271.04</b>	101.60	102.00/97.60x2.20		150.00	36.50	
<b>1.4301 (304)</b>				mm	A	B	C	D	Nut
9611300197	<b>14.85</b>			25.00	57.00	20.00	44.00x1/6	35.00	
9611300198	<b>15.17</b>			38.00	71.00	20.00	58.00x1/6	48.50	
9611300199	<b>19.56</b>			51.00	86.00	22.00	72.00x1/6	62.50	
9611300200	<b>26.41</b>			63.50	103.00	24.00	88.00x1/6	76.50	
9611300201	<b>30.06</b>			76.10	115.00	25.00	100.00x1/6	88.50	
9611300263	<b>102.53</b>			101.60	150.00	28.00	130.00x1/6	117.00	
		<b>1.4404 (316L)</b>		mm	OD/ID x t		B	C	Male part
		9611330684	<b>19.72</b>	25.00	25.40/22.50x1.45		18.50	44.00x1/6	
		9611330685	<b>23.68</b>	38.00	38.40/35.50x1.45		20.00	58.00x1/6	
		9611330686	<b>28.61</b>	51.00	51.40/48.50x1.45		20.00	72 x 1/6	
		9611330687	<b>42.58</b>	63.50	63.90/60.50x1.70		24.00	88 x 1/6	
		9611330688	<b>49.99</b>	76.10	76.40/72.00x2.20		24.00	100 x 1/6	
		9611330690	<b>105.12</b>	101.60	102.00/97.60x2.20		24.00	130 x 1/6	
		<b>1.4404 (316L)</b>		mm	OD/ID x t		A	B	Liner
		9611330691	<b>14.31</b>	25.00	25.40/22.50x1.45		40.00	11.00	
		9611330692	<b>19.99</b>	38.00	38.40/35.50x1.45		54.00	11.00	
		9611330693	<b>23.68</b>	51.00	51.40/48.50x1.45		68.00	11.00	
		9611330694	<b>27.30</b>	63.50	63.90/60.50x1.70		84.00	12.00	
		9611330695	<b>35.84</b>	76.10	76.40/72.00x2.20		96.00	12.00	
		9611330697	<b>57.72</b>	101.60	102.00/97.60x2.20		124.00	12.00	

NOTE: For pressure and surface, please see product leaflet.

Product code: 5042

Finish: Machined  
Thread: Round type  
Connections: Expanding ends

Material Item No.	PPL EUR	Size	Dimension (mm)				
1.4301 (304)		mm	A	B	C	D	Male part
9611300203	17.09	25.00		20.00	44.00x1/6	25.00	
9611300204	23.74	38.00		22.00	58.00x1/6	38.00	
9611300205	24.04	51.00		24.00	72.00x1/6	51.00	
9611300206	47.64	63.50		26.00	88.00x1/6	63.50	
9611300207	71.99	76.10		28.00	100.00x1/6	76.00	
							Liner
9611300209	10.80	25.00	40.00	16.00		25.00	
9611300210	13.19	38.00	54.00	18.00		38.00	
9611300211	15.11	51.00	68.00	20.00		51.00	
9611300212	24.01	63.50	84.00	22.00		63.50	
9611300213	29.99	76.10	96.00	24.00		76.00	

Material Item No.	PPL EUR	Size	Dimension (mm)				
1.4301 (304)		mm	A	B			End cap for chain
9611303520	94.87	25.00	57.00	20.00			
9611303530	95.97	38.00	71.00	20.00			
9611303540	115.73	51.00	86.00	22.00			
9611303550	138.71	63.50	103.00	24.00			
9611303560	166.27	76.10	115.00	25.00			

NOTE: Seal rings - please see later this chapter.

NOTE: For pressure and surface, please see product leaflet.

Product code: 5042

Finish: Machined  
Thread: Round type  
Connections: Expanding ends

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size mm	Dimension (mm)		
		<b>1.4404 (316L)</b>			A	B	
		9611300253	<b>16.80</b>	25.00	40.00	3.00	
		9611300254	<b>17.99</b>	38.00	54.00	3.00	
		9611300255	<b>19.20</b>	51.00	68.00	3.00	
		9611300256	<b>22.79</b>	63.50	84.00	4.00	
		9611300257	<b>29.99</b>	76.10	96.00	4.00	
		9611300259	<b>45.59</b>	101.60	124.00	4.00	

NOTE: For pressure and surface, please see product leaflet.

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size mm	Dimension (mm)			
					A	B	D	
				<b>NBR</b>				<b>Seal ring</b>
		<b>EPDM</b>						
9611990120	<b>1.38</b>	9611992814	<b>5.42</b>	25.00	32.00	4.50	25.00	
9611990121	<b>1.57</b>	9611992816	<b>5.17</b>	38.00	47.00	4.50	38.00	
9611990122	<b>1.99</b>	9611992817	<b>5.17</b>	51.00	59.00	4.50	51.00	
9611990123	<b>2.80</b>	9611992818	<b>8.95</b>	63.50	74.50	4.50	63.50	
9611990124	<b>3.55</b>	9611992819	<b>12.48</b>	76.10	88.00	4.50	76.10	
9611990558	<b>5.69</b>	9611992820	<b>16.97</b>	101.60	112.50	4.50	101.60	
				<b>PTFE</b>				<b>Seal ring</b>
		<b>FPM</b>						
9611991167	<b>7.44</b>	9611992833	<b>65.49</b>	25.00	32.00	4.50	25.00	
9611991168	<b>9.74</b>	9611992835	<b>65.49</b>	38.00	47.00	4.50	38.00	
9611991170	<b>10.93</b>	9611992836	<b>65.49</b>	51.00	59.00	4.50	51.00	
9611991171	<b>18.36</b>	9611992837	<b>65.49</b>	63.50	74.50	4.50	63.50	
9611991172	<b>18.69</b>	9611992838	<b>65.49</b>	76.10	88.00	4.50	76.10	
9611991173	<b>39.64</b>	9611992839	<b>119.97</b>	101.60	112.50	4.50	101.60	

Product code: 5044

Finish: Machined  
Thread: Round type

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)				Nut
					A	B	C	D	
<b>1.4301 (304)</b>				mm					
3131800141	13.39			25.00	63.00	21.00	52.00x1/6	36.00	
3131800142	14.58			32.00	70.00	21.00	58.00x1/6	42.00	
3131800143	15.97			40.00	78.00	21.00	65.00x1/6	49.00	
3131800144	17.67			50.00	92.00	22.00	78.00x1/6	62.00	
3131800145	26.68			65.00	112.00	25.00	95.00x1/6	80.00	
9611306440	50.17			75.00	120.00	26.00	104.00x1/6	87.00	
3131800146	35.67			80.00	127.00	30.00	110.00x1/4	94.00	
3131800148	54.31			100.00	148.00	31.00	130.00x1/4	115.00	
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		mm	OD/ID x t	B	C	Male part	
9612157901	26.43	9612157917	31.11	25.00	25.40/22.90 x 1.25	29.00	52.00x1/6		
9612157903	39.18	9612157919	38.60	40.00	38.10/35.10x1.50	33.00	65.00x1/6		
9612157904	40.83	9612157920	48.56	50.00	50.80/47.80x1.50	35.00	78.00x1/6		
9612157905	44.92	9612157921	56.31	65.00	63.50/60.50x1.50	40.00	95.00x1/6		
9612157906	57.22	9612157922	116.21	75.00	76.10/73.10x1.50	40.00	104 x 1/6		
9612157907	93.83	9612157923	159.98	80.00	76.10/72.10x2.00	45.00	110.00x1/4		
9612157908	134.83	9612157924	167.17	100.00	101.60/97.60x2.00	54.00	130.00x1/4		
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		mm	OD/ID x t	A	B		Liner
9612158001	21.66	9612158017	32.52	25.00	25.40/22.90 x 1.25	44.00	22.00		
9612158003	23.23	9612158019	34.84	40.00	38.10/35.10x1.50	56.00	26.00		
9612158004	27.72	9612158020	41.57	50.00	50.80/47.80x1.50	68.50	28.00		
9612158005	30.92	9612158021	46.37	65.00	63.50/60.50x1.50	86.00	32.00		
9612158006	41.20	9612158022	61.77	75.00	76.10/73.10x1.50	93.70	32.00		
9612158007	68.42	9612158023	283.89	80.00	76.10/72.10x2.00	100.00	37.00		
9612158008	71.80	9612158024	107.71	100.00	101.60/97.60x2.00	121.00	44.00		

NOTE: Seal rings - please see later this chapter.

NOTE: For pressure and surface, please see product leaflet.

Product code: 5044

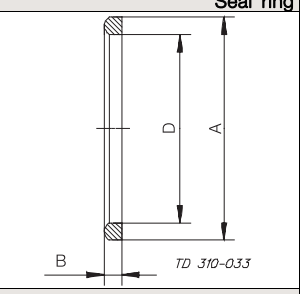
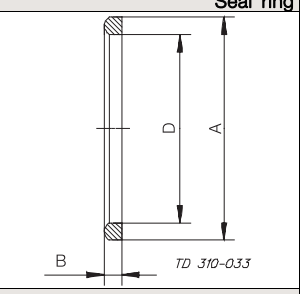
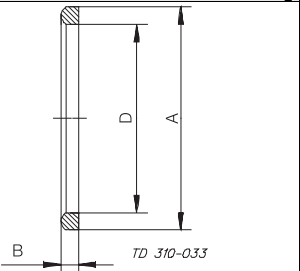
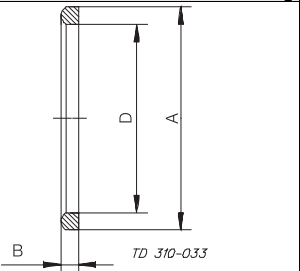
Finish: Machined  
Thread: Round type

Material Item No.	PPL EUR	Size	Dimension (mm)				Male part
			A	B	C	D	
<b>1.4301 (304)</b>		mm					
9611300977	28.77	25.00		29.00	52.00x1/6	25.20	
9611300978	34.14	40.00		33.00	65.00x1/6	38.20	
9611300979	35.97	50.00		35.00	78.00x1/6	51.20	
9611300980	53.92	65.00		40.00	95.00x1/6	63.80	
9611306330	104.55	75.00		40.00	104.00x1/6	76.30	
							<b>Liner</b>
9611300984	14.38	25.00	44.00	22.00		25.20	
9611300985	22.77	40.00	56.00	26.00		38.20	
9611300986	33.89	50.00	68.00	28.00		51.20	
9611300987	58.02	65.00	86.00	32.00		63.80	
9611306390	61.57	75.00	95.00	32.00		76.30	
9611300990	*	100.00	121.00	44.00		101.90	

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)			Male part
					OD/ID x t	B	C	
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		mm				
3131800072	21.71	3131800071	28.22	25.00	25.00/22.60x1.20	22.00	52.00x1/6	
3131800092	27.63	3131800091	35.94	40.00	38.00/35.60x1.20	22.00	65.00x1/6	
3131800102	31.59	3131800101	41.05	50.00	51.00/48.60x1.20	22.00	78.00x1/6	
3131800112	43.02	3131800111	55.94	65.00	63.50/60.30x1.60	25.00	95.00x1/6	
9611306020	52.51	9611306021	68.27	75.00	76.10/73.10x1.50	30.00	104 x 1/6	
3131800122	57.25	3131800121	74.41	80.00	76.10/72.90x1.60	30.00	110.00x1/4	
3131800342	88.83	3131800341	115.48	100.00	101.60/97.60x2.00	30.00	130.00x1/4	
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		mm	OD/ID x t	A	B	
3131800182	18.86	3131800181	24.50	25.00	25.00/22.60x1.20	44.00	18.00	
9611300721	320.38			32.00	33.70/31.30x1.20	50.00	15.00	
3131800192	22.93	3131800191	29.80	40.00	38.00/35.60x1.20	56.00	18.00	
3131800202	25.65	3131800201	33.33	50.00	51.00/48.60x1.20	68.00	20.00	
3131800212	37.85	3131800211	49.21	65.00	63.50/60.30x1.60	86.00	20.00	
9611306070	73.17	9611306071	104.55	75.00	76.10/73.10x1.50	95.00	20.00	
3131800222	52.28	3131800221	67.96	80.00	76.10/72.90x1.60	100.00	20.00	
3131800232	73.02	3131800231	94.91	100.00	101.60/97.60x2.00	121.00	23.00	

NOTE: Seal rings - please see later this chapter.

NOTE: For pressure and surface, please see product leaflet.

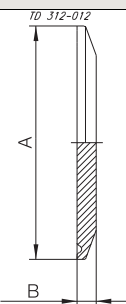
Material Item No.	PPL EUR	Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)			Seal ring 
NBR		EPDM		FPM		mm	A	B	D	
52734604	1.60	9611991269	2.30	9611991864	4.62	25.00	40.00	5.00	30.00	
52734605	1.67	9611991270	2.32			32.00	46.00	5.00	36.00	
52734606	1.77	9611991271	2.35	9611991866	5.52	40.00	52.00	5.00	42.00	
52734607	1.85	9611991272	2.37	9611991867	5.82	50.00	64.00	5.00	54.00	
52734608	1.94	9611991273	2.77	9611991868	10.86	65.00	81.00	5.00	71.00	
9611991264	4.18	9611991274	2.86	9611991869	34.79	75.00	88.00	5.00	78.00	
52734609	2.04	9611991275	3.75	9611991128	10.38	80.00	95.00	5.00	85.00	
52734611	2.15	9611991276	4.79	9611991870	17.23	100.00	114.00	6.00	104.00	
Silicone (Q)		PTFE				mm	A	B	D	Seal ring 
9611991920	1.43	9611991876	5.17			25.00	40.00	5.00	30.00	
9611991922	1.77	9611991878	6.25			40.00	52.00	5.00	42.00	
9611991923	2.53	9611991879	6.82			50.00	64.00	5.00	54.00	
9611991924	2.93	9611991880	12.17			65.00	81.00	5.00	71.00	
9611991925	4.54	9611991881	27.73			75.00	88.00	5.00	78.00	
9611991926	4.77	9611991882	29.30			80.00	95.00	5.00	85.00	
9611991927	4.97	9611991883	31.32			10.00	114.00	6.00	104.00	

NOTE: For pressure and surface, please see product leaflet.

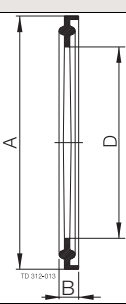
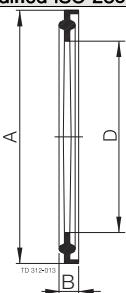


Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)			
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		<b>mm</b>	<b>OD/ID x t</b>	<b>A</b>	<b>B</b>	<b>Clamp ferrule ISO 2852</b>
9611310191	13.34	9611310190	15.17	25.00	25.60/22.60x1.50	50.50	21.50	
9611310201	13.61	9611310200	15.69	38.00	38.60/35.60x1.50	50.50	21.50	
9611310211	15.17	9611310210	17.84	51.00	51.60/48.60x1.50	64.00	21.50	
9611310221	18.79	9611310220	21.72	63.50	64.10/60.30 x 1.90	77.50	21.50	
9611310231	23.62	9611310230	27.06	76.10	76.70/72.90 x 1.90	91.00	21.50	
9611310241	45.67	9611310240	53.44	101.60	102.50/97.60x2.45	119.00	21.50	
9611310311	210.16	9611310310	191.96	114.30	115.60/110.30 x 2.65	130.00	28.00	
		9611310320	215.96	139.70	141.20/135.70 x 2.75	155.00	28.00	
9611310331	502.85	9611310330	239.96	168.30	170.00/163.10 x 3.45	183.00	28.00	
								<b>Clamp ferrule</b>
		9612990107	15.17	25.00	25.00/22.60x1.20	50.50	21.50	
		9612990108	15.69	38.00	38.00/35.60x1.20	50.50	21.50	
		9612990109	17.84	51.00	51.00/48.60x1.20	64.00	21.50	
		9612990110	21.72	63.50	63.50/60.30x1.60	77.50	21.50	
		9612990111	27.06	76.10	76.10/72.90x1.60	91.00	21.50	
		9612990112	53.44	101.60	101.60/97.60x2.00	119.00	21.50	
<b>1.4301 (304)</b>				<b>mm</b>	<b>A</b>	<b>B</b>	<b>D</b>	<b>Clamp ferrule</b>
9611310660	21.60			25.00	50.50	20.00	25.00	
9611310670	24.01			38.00	50.50	20.00	38.00	
9611310680	35.99			51.00	64.00	25.00	51.00	
9611310700	71.99			76.10	91.00	30.00	76.10	
		<b>1.4404 (316L)</b>		<b>mm</b>	<b>OD/ID x t</b>	<b>A</b>	<b>B</b>	<b>Clamp reducing ferrule</b>
		9611310500	41.99	38.00 - 25.00	25.60/22.60x1.50	50.50	12.00	
		9611310510	53.99	38.00 - 32.00	32.60/29.60x1.50	50.50	12.00	
		9611310530	95.99	51.00 - 38.00	38.60/35.60x1.50	64.00	12.00	
		9611310550	107.97	63.50 - 51.00	51.60/48.60x1.50	77.50	12.00	
		9611310570	155.97	76.10 - 63.50	64.10/60.30 x 1.90	91.00	12.00	

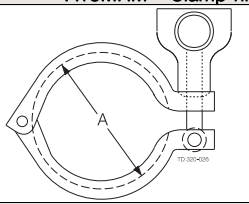
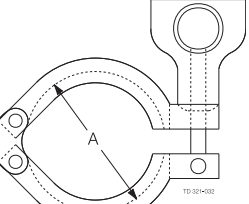
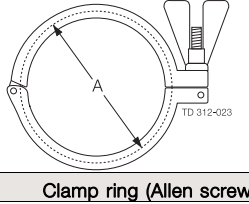
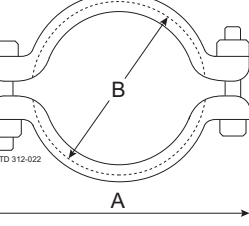
NOTE: For pressure and surface, please see product leaflet.

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)		Blank
1.4307 (304L)		1.4404 (316L)		mm	A	B	
9611340590	14.57	9611340600	16.18	25.00-	50.40	6.40	
9611340591	18.54	9611340601	20.61	38.00	63.90	6.40	
9611340592	21.24	9611340602	23.62	51.00	77.40	6.40	
9611340593	28.30	9611340603	31.45	63.50	90.90	6.40	
210506	59.93	9611340604	50.84	76.10	118.90	6.40	
**		9612464001	569.57	101.60	183.00	11.00	

\*\* Not available

Item No.	PPL EUR	Item No.	PPL EUR	Item No.	PPL EUR	Size	Dimension (mm)			Seal ring
NBR		EPDM		FPM		mm	A	B	D	
9611990765	2.56	9611991358	3.25	9611991890	35.84	25.00	52.70	5.50	22.80	
9611990766	2.56	9611991359	3.25	9611991891	35.84	38.00	52.70	5.50	35.80	
9611990767	3.11	9611991360	3.79	9611991892	41.45	51.00	66.20	5.50	48.80	
9611990768	3.25	9611991361	4.13	9611991893	59.44	63.50	79.70	5.50	60.50	
9611990769	5.29	9611991362	4.64	9611991894	71.51	76.10	93.20	5.50	73.10	
9611990770	6.89	9611991363	8.42	9611991895	87.88	101.60	121.20	5.50	97.80	
9611991354	8.39	9611991364	8.64	9611991896	95.99	114.30	132.20	5.50	110.50	
9611991355	9.60	9611991365	9.01	9611991897	107.97	139.70	157.20	5.50	135.90	
9611991356	10.80	9611991366	9.55	9611991898	119.97	168.30	185.20	5.50	163.30	
9611991357	12.00	9611991367	14.40	9611991899	131.98	219.10	235.70	5.50	214.10	
PTFE						mm	A	B	D	
9611991403	17.79					25.00	52.70	5.10	22.60	
9611991404	19.32					38.00	52.70	5.10	35.60	
9611991405	21.20					51.00	66.20	5.10	48.60	
9611991406	22.33					63.50	79.70	5.10	60.30	
9611991407	35.51					76.10	93.20	5.10	72.90	
9611991408	35.91					101.60	121.20	5.10	97.60	

Product code: 5049

Material Item No.	PPL EUR	Size	Dimension (mm)		
			A	B	
<b>1.4301 (304)</b>		<b>mm</b>			<b>A13MHM - Clamp ring</b>
211053	<b>30.02</b>	25.00/38.00	54.00		
211054	<b>36.59</b>	51.00	67.10		
211055	<b>42.35</b>	63.50	81.00		
211056	<b>46.07</b>	76.10	94.50		
211057	<b>55.92</b>	101.60	122.20		
<b>13MHHM Clamp ring</b>					
212195	<b>41.13</b>	25.00/38.00	54.00		
212196	<b>46.48</b>	51.00	67.50		
212197	<b>56.76</b>	63.50	81.00		
212198	<b>61.69</b>	76.10	94.50		
212199	<b>74.84</b>	101.60	122.60		
<b>Clamp ring, wingnut</b>					
9611994453	<b>34.71</b>	25.00/38.00	54.00		
9611994454	<b>42.28</b>	51.00	67.50		
9611994455	<b>57.60</b>	63.50	81.00		
9611994456	<b>65.63</b>	76.10	94.50		
9611994457	<b>74.39</b>	101.60	122.60		
<b>Clamp ring (Allen screws)</b>					
9611311051	<b>13.47</b>	25.00-38.00	85.50	54.50	
9611311052	<b>13.47</b>	51.00	99.00	68.00	
9611311053	<b>13.89</b>	63.50	112.50	81.50	
9611311054	<b>18.06</b>	76.10	126.00	95.00	
9611311055	<b>18.32</b>	101.60	154.00	123.00	
9611311056	<b>47.48</b>	114.30	165.00	134.00	
9611311057	<b>47.99</b>	139.70	198.00	159.00	
9611311058	<b>49.28</b>	168.30	226.00	187.00	
9611311059	<b>57.59</b>	219.10	280.50	237.50	

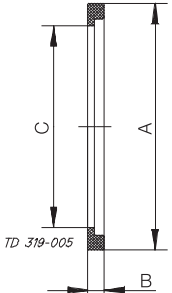
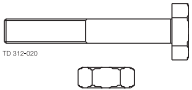
NOTE: For pressure and surface, please see product leaflet.

Material Item No.	PPL EUR	Size	Pressure class	Dimension (mm)				
				OD/ID x t	A	B		C
<b>1.4404 (316L)</b>		mm	PN (bar)				<b>Complete flange</b>	
9612498710	<b>86.89</b>	25.00	16	25.00/22.60x1.20	79.00	50.00	4 x M8	
9612498711	<b>107.20</b>	38.00	16	38.00/35.60x1.20	79.00	50.00	4 x M8	
9612498712	<b>119.43</b>	51.00	16	51.00/48.60x1.20	99.00	50.00	4 x M8	
9612498713	<b>152.39</b>	63.50	10	63.50/60.30x1.60	117.00	50.00	4 x M8	
9612498714	<b>182.53</b>	76.10	10	76.10/72.90x1.60	132.00	50.00	4 x M8	
9612498715	<b>218.11</b>	101.60	10	101.60/97.60x2.00	160.00	50.00	8 x M8	
<b>1.4404 (316L)</b>		mm		OD/ID x t	B	E	F	<b>Flange with O-ring groove</b>
9612493010	<b>34.22</b>	25.00		25.00/22.60x1.20	25.00	10.00	64.00	
9612493011	<b>49.09</b>	38.00		38.00/35.60x1.20	25.00	10.00	64.00	
9612493012	<b>55.15</b>	51.00		51.00/48.60x1.20	25.00	10.00	84.00	
9612493013	<b>71.51</b>	63.50		63.50/60.30x1.60	25.00	10.00	102.00	
9612493014	<b>85.28</b>	76.10		76.10/72.90x1.60	25.00	10.00	117.00	
9612493015	<b>100.80</b>	101.60		101.60/97.60x2.00	25.00	10.00	143.00	
								<b>Flange without O-ring groove</b>
9612492910	<b>43.95</b>	25.00		25.00/22.60x1.20	25.00	10.00	64.00	
9612492911	<b>49.09</b>	38.00		38.00/35.60x1.20	25.00	10.00	64.00	
9612492912	<b>55.15</b>	51.00		51.00/48.60x1.20	25.00	10.00	84.00	
9612492913	<b>71.51</b>	63.50		63.50/60.30x1.60	25.00	10.00	102.00	
9612492914	<b>85.28</b>	76.10		76.10/72.90x1.60	25.00	10.00	117.00	
9612492915	<b>100.80</b>	101.60		101.60/97.60x2.00	25.00	10.00	143.00	

NOTE: Seal rings - please see later this chapter.

NOTE: For pressure and surface, please see product leaflet.

Product code: 5058

Item No.	PPL EUR	Item No.	PPL EUR	Item No.	PPL EUR	Size	Dimension (mm)			Flange seal 
Silicone (Q)		EPDM		FPM		mm	A	B	C	
9612402641	3.67	9612402631	3.45	9612402651	5.18	25.00	33.70	4.10	23.90	
9612402642	6.51	9612402632	3.74	9612402652	6.11	38.00	46.70	4.10	36.90	
9612402643	6.72	9612402633	3.85	9612402653	6.64	51.00	59.70	4.10	49.90	
9612402644	7.86	9612402634	4.08	9612402654	7.58	63.50	71.70	4.10	61.90	
9612402645	10.64	9612402635	6.66	9612402655	9.08	76.10	83.20	4.10	73.40	
9612402646	14.03	9612402636	8.49	9612402656	13.21	101.60	108.80	4.10	99.00	
				Flange size		Screws		Nuts		Screws and nut set
		9612499301	5.28	25.00-76.10		4xM8 x 30.00		4 x M8		
		9612499302	8.03	101.60		8xM8 x 30.00		8 x M8		
		9612499303	10.90	125.00-150.00		8xM10 x 40.00		8 x M10		

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# 1.2 DIN Fittings and Tubes



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## Intro

### DIN Fittings and Tubes

#### Introduction

Dear Reader,

You are sitting with our brand-new catalogue for DIN Fittings, but why, a new catalogue?

After years of intensive work with the portfolio we have achieved a unique surface appearance across the different DIN Fittings of which we are very proud. We have uniformed our marking, to support our high-quality Fittings and the result is fantastic. We call this range for "DIN Standard, new surface", to highlight it, and give it a special space in the new catalogue, because it truly is unique. With focus on simplicity we have reduced the surface appearances to two on machined and one on tubular Fittings and we have concentrated on "Hygienic Fittings" with an exception of DIN 11864. We have invested heavily in availability of "DIN Standard, new surface" portfolio and supported by the new automatic warehouse in Kolding and our online ordering tool "Anytime", this will provide a superior customer experience. Moreover, we have divided the catalogue into the different DIN standards, to show the differences and make it easy to choose the right product.

The old portfolio is, where possible and convenient, upgraded to our "DIN Standard, new surface", the rest we have kept "as is". In the price files we have made the following split:

"DIN Standard, new surface"

"DIN Standard, old surface"

"Fit to DIN Tubes"

The complete DIN Fittings range we supply fits with the tube dimensions of EN 10357-A and DIN 11866- Reihe A (except from DIN 11851 W, which is according to the standard). The products in the chapter "Fit to DIN Tubes", have deviations from the DIN standards, but will still fit to EN 10357-A tubes.

Thank You for reading this and we hope You enjoy!

#### Product presentation

Alfa Laval's range of DIN Tubes & Fittings are used in food, dairy, beverage, personal care, biotechnology and pharmaceutical process applications. Smooth, crevice-free interiors and secure, self-aligning joints are characteristic for Alfa Laval fittings. Each offers superior corrosion-resistance and unmatched service life. Alfa Laval fittings are designed and manufactured to ensure dimensional accuracy and structural integrity, making them easy to install. Tubing is manufactured to Alfa Laval's stringent specifications, making it a perfect match for the fittings. All products are labelled with a bar code, product information and manufacturing date. This provides the optimum identification and ensures that the product arrives to the job site in a clean orbital weld condition. On the product we have laser marked all the needed information such as heat number, dimension, surface, material and country of origin.



Product	DIN Standard	Surface <sup>1</sup>	Material <sup>2</sup>	Application	Part
Tubes	EN 10357-	BC, BD, CC	1.4307 (304L)	Hygienic	
	A/DIN 11850	and CD	1.4404 (316L)	Aseptic	
	DIN 11866-A <sup>3</sup>	H3	1.4404 (316L)		
Bends, Tees and Reducers	DIN 11852	HSF3 HSF2	1.4307 (304L) 1.4404 (316L)	Hygienic	
	DIN 11865 <sup>3</sup>	H3	1.4404 (316L)	Aseptic	For Welding. Ends are ready for Orbital Welding
Connections	DIN 11851	HSF0	1.4307 (304L) 1.4404 (316L)	Hygienic	(Screw connections) W: Expanding S: Welding
	DIN 11853	H3	1.4404 (316L)	Hygienic	1: Screw connection 2: Flange connection 3: Clamp connection
	DIN 11864	H3	1.4404 (316L)	Aseptic	1: Screw connection 2: Flange Connection 3: Clamp connection
	DIN 32676	HSF0	1.4307 (304L)	Hygienic	Clamp connection
			1.4404 (316L)		
		H3	1.4404 (316L)		

<sup>1</sup>) Surface table is available later in the document

<sup>2</sup>) Material is according to EN 10088-1. Regarding complete Connections, Nut is always in 1.4301. A Nut in 1.4404 is available as a single item. We hold the right to deliver better material than stated in our brochures and order confirmation. Meaning, if stated 1.4301, it is allowed for us to deliver 1.4307 or 1.4404, at same price of course.

<sup>3</sup>) We do currently not offer this part of the DIN standard

Standard	Material	Symbol	Surface			Heat Treatment
			External surface and Welded area	Internal surface	Internal Welded area	
EN 10357-A /DIN 11850	1.4307 (304L) 1.4404 (316L)	CC	Pickled and passivated	Ra < 0.8 µm Pickled and passivated	Ra < 1.6 µm Pickled and passivated	No
		CD	Polished Ra < 1.0 µm			
		BC	Pickled and passivated or Bright annealed	Ra < 0.8 µm Pickled and passivated or Bright annealed	Ra < 1.6 µm Pickled and passivated or Bright annealed	
		BD	Polished Ra < 1.0 µm			
DIN 11866-A	1.4404 (316L)	H3	Pickled or Bright annealed without Ra requirement, or Polished to Ra < 1.0 µm	Ra < 0.8 µm	Ra < 0.8 µm	Yes

### Sizes

We supply EN10357-A which has the same dimensions as former DIN 11850 Reihe 2, and DIN 11866-A.

Please also notice "Nominal size" is not always equal to inner diameter (see DN15, DN25, DN40, DN65 and DN 80). The EN 10357-A standard is only referring to outer diameter. All dimensions in this catalogue are in millimeter.

Nominal size (only DIN 11866)	OD (outer diameter)	ID (inner diameter)	t (wall thickness)
DN10	13	10	1,5
DN15	19	16	
DN20	23	20	
DN25	29	26	
DN32	35	32	
DN40	41	38	
DN50	53	50	
DN65	70	66	2
DN80	85	81	
DN100	104	100	
DN125	129	125	
DN150	154	150	
DN200	204	200	

### Tolerances

Outer diameter tolerances in DIN 11866 are lower from DN100 to DN200.

### Outer diameter tolerances

Nominal size:	DN10	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
OD:	13	19	23	29	35	41	53	70	85	104	129	154	204
EN 10357-A	±0,10	±0,10	±0,12	±0,15	±0,18	±0,21	±0,27	±0,35	±0,43	±0,78	±0,97	±1,16	±1,53
DIN 11866	±0,10	±0,10	±0,12	±0,15	±0,18	±0,21	±0,27	±0,35	±0,43	±0,52	±0,65	±0,77	±1,02

Wall thickness tolerances in DIN 11866 are lower from DN65 to DN200.

#### Wall thickness tolerances

Nominal size:	DN10	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
OD:	13	19	23	29	35	41	53	70	85	104	129	154	204
EN 10357-A	±0,15	±0,15	±0,15	±0,15	±0,15	±0,15	±0,15	±0,20	±0,20	±0,20	±0,20	±0,20	±0,20
DIN 11866	±0,15	±0,15	±0,15	±0,15	±0,15	±0,15	±0,15	±0,15	±0,15	±0,15	±0,15	±0,15	±0,15

#### EN 10357-A/DIN 11850

The stainless-steel tubes in this standard are for the food, chemical and pharmaceutical industry.

Typically used with DIN 11852, DIN 11851, DIN 11853 and DIN 32676.

BC and BD tubes are annealed, whereas CC and CD tubes are pickled and passivated internal and external

All materials according to EN 10217-7.

#### DIN 11866

The stainless-steel tubes in this standard are for aseptic, chemical and pharmaceutical industry.

Typically used with DIN 11864 and DIN 11865.

All tubes are annealed, pickled and passivated in accordance with DIN EN 10217-7 W2Ab.

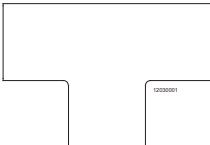



#### Comment to DIN 11851 W

Regarding Connections DIN 11851 W (Expanding), this is the only product in this catalogue which does not match tube EN 10357-A from sizes up to DN50, above DN50 they fit. This standard is meant for the old "DIN 11850, Reihe 1".

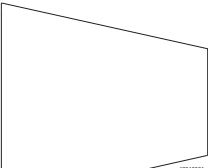
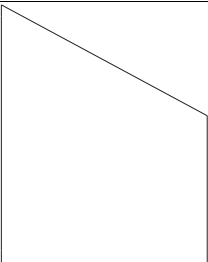
#### DIN 11850 Reihe 1, different measures up to DN50:

Dimensions	DN10	DN15	DN20	DN25	DN32	DN40	DN50
OD	12	18	22	28	34	40	52
ID	10	16	20	26	32	38	50
Thickness	1						

Tees

Type Name	Design Name	Comment	Picture
Tees	TS d <sub>1</sub> =d <sub>2</sub>	Standard Tee	
	RTS d <sub>1</sub> >d <sub>2</sub> (d <sub>2</sub> pointing down)	Reduced Tee	
	TK d <sub>1</sub> =d <sub>2</sub>	Short Tee	
	RTK d <sub>1</sub> >d <sub>2</sub> (d <sub>2</sub> pointing down)	Reduced Short Tee	

Reducers

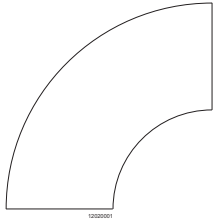
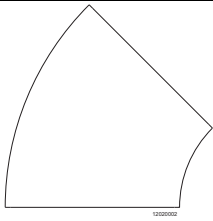
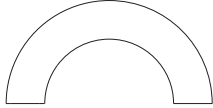
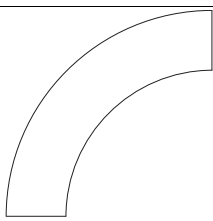
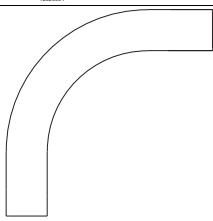
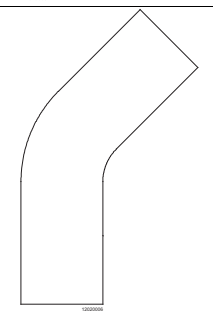
Type Name	Design Name	Comment	Picture
Reducers	RK	Concentric Reducer	
	RE	Eccentric Reducer	

Example of the Alfa Laval name for a short tee according to DIN 11852:



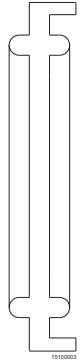
TEE TK DN25 HSF3 1.4404 DIN 11852

TEE	TK	DN25	HSF3	1.4404	DIN 11852
Type Name	Design Name	Nominal Size	Surface	Material	Standard

Bends

Type Name	Design Name	Comment	Picture
Bends	BS-90	Standard Bend 90 Degrees	
	BS-45	Standard Bend 45 Degrees	
	BS-180	Standard Bend 180 Degrees	
	BA5-90 <sup>3</sup>	Radius and $l_0$ are the same in mm	
	BL-90	Long Bend 90	
	BL-45	Long Bend 45	

Overview

DIN Standard	Surface	Material (Steel parts)	Material (Rubber parts)	Part	Seal Type
DIN 11851	HSF0	1.4307 (304L) 1.4404 (316L)	EPDM FPM NBR PTFE Q	Screw Connection W: Expanding (only 11851, Liner and Male end are expanded to the tube) S: Welding	 Gasket (G)
DIN 11853	H3	1.4404 (316L)	FPM EPDM	1: Screw Connection 2: Flange Connection 3: Clamp Connection	 O-Ring (R)
DIN 11864	H3	1.4404 (316L)	FPM EPDM	1: Screw Connection 2: Flange Connection 3: Clamp Connection	
DIN 32676	HSF0	1.4307 (304L) 1.4404 (316L)	PTFE FPM	Clamp Connection	 Gasket (D)
	H3	1.4404 (316L)			

DIN 11851 overview

All Connections in DIN 11851 are screw connections

Parts Type Name	Parts Design Name	Connection Name	Comment
Male (Gewindestutzen)	C	W	Connection to tube by expanding, DN10-DN100
Liner (Kegelstutzen)	D		
Male (Gewindestutzen)	SC	S	Connection to tube by welding, DN10-DN150
Liner (Kegelstutzen)	SD		
Male (Gewindestutzen)	SKC	SK (Short)	
Liner (Kegelstutzen)	SKD		
Blind Male (Blind-Gewindestutzen)	BC		Alfa Laval does currently not offer this (real design name is "C")
Blind Liner (Blind-Kegelstutzen)	BD		The real design name is "D" but Alfa Laval has chosen to call it "BD". The blind is not expanded or welded to the tube, therefore it can be used for all connection versions in DIN 11851
Nut (Nutüberwurfmutter)	F		Used for all connection versions in DIN 11851
Gasket (Dichtring)	G		Used for all connection versions in DIN 11851

A Complete connection is Male + Liner + Gasket + Nut. It is possible to blind from Liner side. Please do not mix connection W with connection S.

The "Connection Name" equal to W, is from the German word, Walzen, which in English is translated to Expanding.

The "Connection Name" equal to S, is from the German word, Schweissen, which in English is translated to Welding.

The "Connection Name" equal to SK, is from the German word, Schweissen, Kurz, which in English is translated to Welding, Short.

Examples of DIN 11851 products:

**SKC:**

S	K	C
Welding	Short	Male

**SKD:**

S	K	D
Welding	Short	Liner

Example of the Alfa Laval name for a complete Connection, DIN 11851:

**CONNECTION S DN50 HSF0 1.4307 DIN 11851 EPDM**

CONNECTION	S	DN50	HSF0	1.4307	DIN 11851	EPDM
Type Name	Design Name (S=Welding)	Nominal Size	Surface	Material	Standard	Seal Type

Example of the Alfa Laval name for a Male, DIN 11851:

**MALE SC DN50 HSF0 1.4307 DIN 11851**

MALE	SC	DN50	HSF0	1.4307	DIN 11851
Type Name	Design Name	Nominal Size	Surface	Material	Standard



## DIN 11853 overview

We state this product group is for hygienic application, but please be aware it is using the same O-ring as 11864 which is for aseptic applications, the only difference between the two standards is the "build in length". "Build in length" of DIN 11864 is longer than DIN 11853, which makes it easier to perform orbital welding.

## DIN 11853-1

## Screw Connection (Verschraubungen)

Parts Type Name	Parts Design Name	Connection Name
Male (Gewindestutzen)	GS	V
Liner (Bundstutzen)	BS	
Blind Male (Blindgewindestutzen) (same item as in 11864-1)	BGS	
Blind Liner (Blindbundstutzen) (same item as in 11864-1)	BBS	
Nut (Nutüberwurfmutter)	F (DIN 11851)	
O-Ring	R	

A complete connection (V) is: Male (GS) + Liner (BS) + O-Ring (R) + Nut (F).

It is possible to blind from both Liner and Male side, you will have to replace normal Male or Liner. The Nut for DIN 11853 is the same as in DIN 11851.

## DIN 11853-2

## Flange Connection (Flanschverbindung)

Parts Type Name	Parts Design Name	Connection Name
<b>Currently not part of offering</b> Flange Groove (Nutflansch)	NF	F
<b>Currently not part of offering</b> Flange Collar (Bundflansch)	BF	
Blind Flange Groove (Blindnutflansch) (same item as in 11864-2)	BNF	
Blind Flange Collar (Blindbundflansch) (same item as in 11864-2)	BBF	
Screw (Sechskantshcraube, DIN EN ISO 4017)		
Nut (Sechskantmutter, DIN ISO 4032)		
O-Ring	R	

For NF and BF please use 11864-2 NF and BF

A complete connection (F) is Flange Groove (NF) + Flange Collar (BF) + O-Ring (R) + Screw and Nut set.

It is possible to blind from both Groove and Collar side, you will have to replace normal Groove or Collar.

## DIN 11853-3

## Clamp Connection (Klemmverbindung)

Parts Type Name	Parts Design Name	Connection Name
<b>Currently not part of offering</b> Clamp Liner Groove (Nutmlemmstutzen)	NKS	K
<b>Currently not part of offering</b> Clamp Liner Collar (Bundklemmstutzen)	BKS	
Blind Clamp Liner Groove (Blindnutklemmstutzen) (Same Item As In 11864-3)	BNKS	
Blind Clamp Liner Collar (Blindbundklemmstutzen) (Same Item As In 11864-3)	BBKS	
Clamp Ring (Klammer)		
O-Ring	R	

For NKS and BKS please use from 11864-3.

A complete connection (K) is: Clamp Liner Groove (NKS) + Clamp Liner Collar (BKS) + O-Ring (R) + Clamp Ring.

It is possible to blind from both Groove and Collar side, you will have to replace normal Groove or Collar.

**DIN 11864-1**

Same structure as DIN 11853-1. Only "build in length" is different on Male and Liner (GS and BS), both are longer in the DIN 11864-1 version.

**Screw Connection (Verschraubungen)**

Parts Type Name	Parts Design Name	Connection Name
Male (Gewindestutzen)	GS	V
Liner (Bundstutzen)	BS	
Blind Male (Blindgewindestutzen)	BGS	
Blind Liner (Blindbundstutzen)	BBS	
Nut (Nutüberwurfmutter)	F (DIN 11851)	
O-Ring	R	

A complete connection (V) is: Male (GS) + Liner (BS) + O-Ring (R) + Nut (F).

It is possible to blind from both Liner and Male side. Both "Blind Male" and "Blind Liner" are equal to the ones in DIN 11853-1. The Nut for DIN 11864 is the same as in DIN 11851.

**DIN 11864-2**

Same structure as DIN 11853-2. Only "build in length" is different on Flange Groove and Flange Collar (NF and BF), both are longer in the DIN 11864-2 version.

**Flange Connection (Flanschverbindung)**

Parts Type Name	Parts Design Name	Connection Name
Flange Groove (Nutflansch)	NF	F
Flange Collar (Bundflansch)	BF	
Blind Flange Groove (Blindnutflansch)	BNF	
Blind Flange Collar (Blindbundflansch)	BBF	
Screw (Sechskantshcraube, Din En Iso 4017)		
Nut (Sechskantmutter, Din En Iso 4032)		
O-Ring	R	

It is possible to blind from both Groove and Collar side, BNF and BBF in DIN 11853-2 and DIN 11864-2 are identical.

A complete connection (F) is: Flange Groove (NF) + Flange Collar (BF) + O-Ring (R) + Screw and Nut set.

## DIN 11864

**DIN 11864-3**

Same structure as DIN 11853-3. Only "build in length" is different on "Clamp Liner Groove" and Clamp Liner Collar (NKS and BKS), both are longer in the DIN 11864-3 version.

**Clamp Connection (Klemmverbindung)**

Parts Type Name	Parts Design Name	Connection Name
Clamp Liner Groove (Nutmstutzen)	NKS	K
Clamp Liner Collar (Bundmstutzen)	BKS	
Blind Clamp Liner Groove (Blindnutmstutzen)	BNKS	
Blind Clamp Liner Collar (Blindbundmstutzen)	BBKS	
Clamp Ring (Klammer)		
O-Ring	R	

A complete connection (K) is: Clamp Liner Groove (NKS) + Clamp Liner Collar (BKS) + O-Ring (R) + Clamp Ring.

It is possible to blind from both Groove and Collar side, BNKS and BBKS in DIN 11853-3 and DIN 11864-3 are identical.

**Clamp Connection (Klemmverbindung)**

Parts Type Name	Parts Design Name	Connection Name
Ferrule Short (Klemmstutzen Kurz)	KK	
Ferrule Long (Klemmstutzen Lang)	KL	
Blind (Blindklemmstutzen)	B	
Gasket (Dichtring)	D	
Clamp Ring (Klammer)		

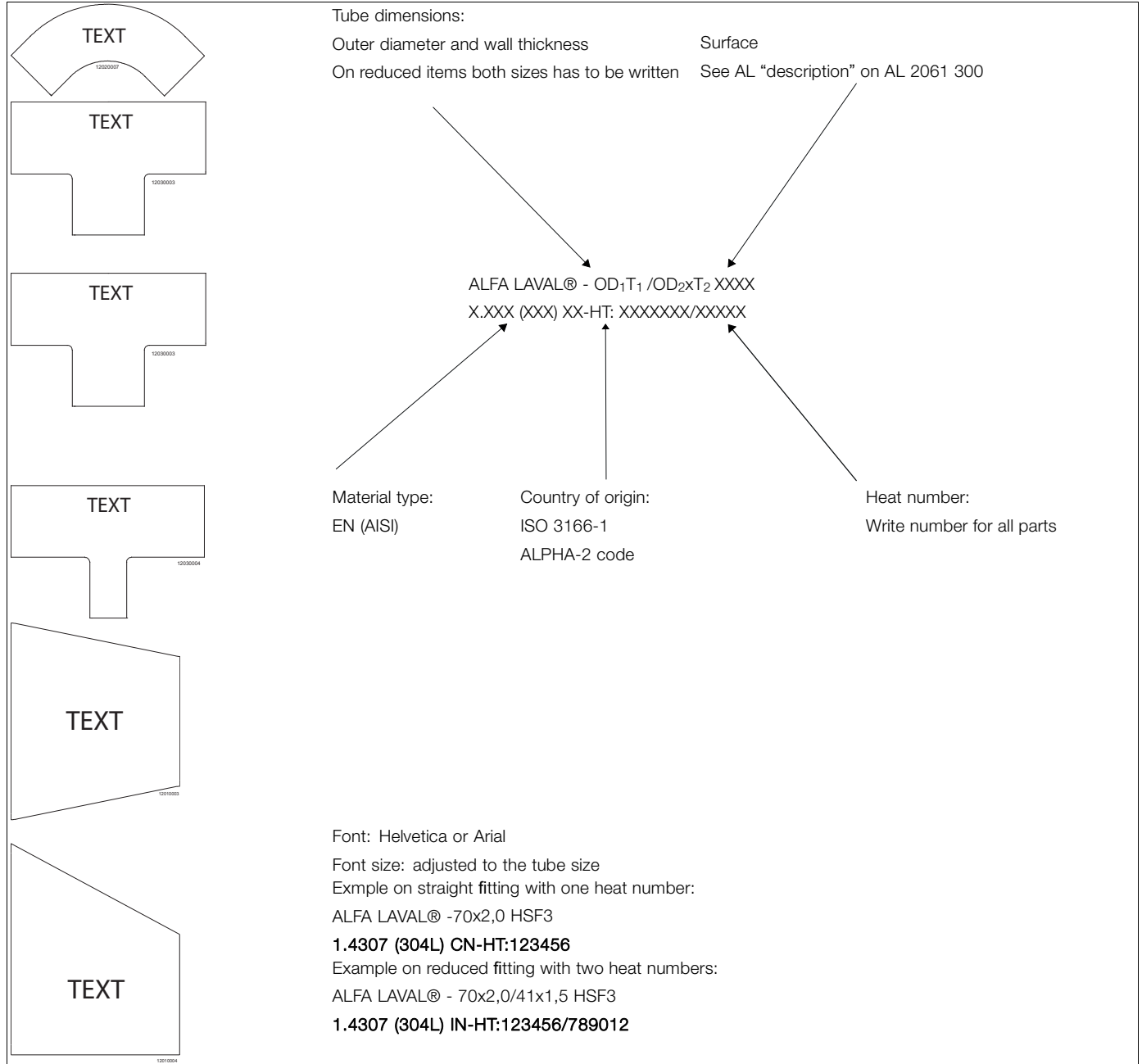
A complete connection is: Ferrule x 2 + Gasket (D) + Clamp Ring.

It is possible to blind from both sides by changing one of the Ferrules with a Blind.

Marking

In Alfa Laval we have chosen to mark our product as shown in this chapter. The marking provides all the needed information and is placed logical on the products.

Tubular



Some of our machined products are very small and marking on the optimal place is impossible therefore we use "Secondary Option" instead of "Primary Option".

	Primary option	Secondary option	
Nut			End cap union and ferrule Blind
Male Part			End cap flange Blind
Liner			
Ferrule			
Flange			

Dimensions:  
Outer diameter and wall thickness  
On nut and blanks the standard size is added.  
Eg.:for DIN: DIN:DN50,For ISO: 2

Surface:  
See "AL description" on AL 2062 301

ALFA LAVAL® -OD<sub>x</sub>T XXXX  
X.XXX (XXX) ZZ-HT: XXXXXXXX

Material type: EN (AISI)      Country of origin: ISO 3166-1 ALPHA-2 code      Heat number: Nut do not have a heat number All other fittings need a heat number

Font: Helvetica or Arial  
Font size: adjusted to the tube size

**Example on male part, liner, ferrule, and flange**  
ALFA LAVAL® - 70x2.0 HSF0  
1.4301 (304) CN-HT : 123456

**Example on nut and blanks**  
ALFA LAVAL® - 70x2.0 HSF0  
1.4301 (304) IN-HT : 123456

**Example on secondary option, on nut, male part, liner and ferrule**  
ALFA LAVAL® - 70x2.0 HSF0 1.4301 (304) DK-HT : 123456

Surface descriptions

We have chosen to provide a limited choice, most used, of all the surface possibilities. We have given them an Alfa Laval name. The names and descriptions are like in the below table.

Our surface philosophy has been to create a uniform surface finish which meets the standard or better and at the same time fits with the outer surface appearance of the DIN tubes across all DIN Fittings. The range "DIN Standard, new surface" will provide this benefit and will be visible in plants using Alfa Laval DIN Fittings only.

The new uniform appearance of all Alfa Laval DIN Fittings is also the reason for new surface descriptions. This is a unique product and therefore it deserves a unique surface description.

The surface on tubular fittings exceeds the requirement in DIN 11852. We are meeting the requirements to surface roughness in EHEDG and 3A. Our customers are therefore buying a product with a better surface roughness than most of the market supplies.

Machined Fittings

AL description	Standard	Surface texture R <sub>a</sub> μm (μ-inch)	
		Wetted	Not wetted
HSF0	DIN (Hygienic)	< 0.8 (32)	< 1.6 (64)
H3	DIN UltraPure	< 0.8 (32)	< 1.0 (40)

Tubular Fittings

AL description	Standard	Surface structure ID/OD	Surface texture R <sub>a</sub> μm (μ-inch)			
			Wetted		Not wetted	
			Surface	weld bead	Surface	weld bead
HSF2	DIN (Hygienic)	Polished/Shot blasted	<0.8 (32)	<0.8 (32)	<1.6 (64)	<1.6 (64)
HSF3 <sup>1</sup>	DIN (Hygienic)	Polished/Polished	< 0.8 (32)	< 0.8 (32)	< 0.8 (32)	< 0.8 (32)

<sup>1</sup>For sizes larger than DN100, the "Not wetted" surface Ra can be upto 1.0 μm.

Our products are mechanical polished. Mechanical polishing is achieved by using a progressive series of abrasives, from low to high grit. This allows a consistent internal finish and both optimal and economical cleaning.

HSF2 is our tubular "MAT" version. Inside it is polished to Ra <0.8 and outside it is shot blasted to a surface Ra<1.6



**Test procedure**

Our manufacturing facilities operate under an approved ISO 9001 quality standard. Wall thickness integrity is maintained using fabrication grade minimum wall tubing for all cold-formed tubular products.

Our fittings are put through visual inspection and ovality and squareness tolerances are inspected with calibrated equipment. Surface finish is inspected with calibrated profilometer to ensure the Roughness average (Ra) maximum is not exceeded.

**Certificates**

All product wetted stainless-steel products are delivered with a 3.1 certificate in accordance to EN 10204. You can find the certificates here: <https://heatbase.alfalaval.com/Certificates>

**Packing**

We protect our products by packing them into high quality cardboard boxes. This ensure they keep the high quality during storing and transportation.

Packing sizes as below:

DN10-DN80 = 10 pcs per cardboard box

DN100 = 5 pcs per cardboard box

> DN100 = 1 pcs per cardboard box

**Rubber****Rubber Materials**

In order to obtain the longest possible lifetime for rubber seals it is essential to choose the right quality for the actual duty. Consequently when choosing rubber quality, the characteristics of the different rubber types should be considered. All product wetted rubber material are in conformity of FDA.

**EPDM Rubber (Ethylene Propylene)**

EPDM rubber is widely used within the food industry as it is resistant to most products used in this sector. Another advantage is that it may be used to a recommend max. temperatures of 140°C (244°F). However, there is one essential limitation, EPDM is not resistant to organic and non-organic oils and fats. The resistance to ozone is excellent.

**Actylonitrile Butadiene Rubber, NBR**

NBR is the rubber type most frequently used for technical purposes. It is quite resistant to most hydrocarbons, e.g oil, grease and fat. It is sufficiently resistant to diluted lye and nitric acid and may be used to a recommend max. 95°C (203°F). As NBR is attacked by ozone it may not be exposed to ultraviolet rays and should thus consequently be stored so that this is avoided.

**Silicone Rubber, Q**

The most significant quality of silicone rubber is that it can be applied from temperatures below -50°C (-58°F) to approx. + 180°C (356°F) and still keep its elasticity. The chemical resistance is satisfactory to most products. However, undiluted lye and acids as well as hot water and steam may destroy silicone rubber. The resistance to ozone is good.

**Fluorine Rubber, FPM**

FPM is often used when other rubber types are unsuited, especially at high temperatures up to approx. 180°C (356°F). The chemical resistance is good to most products, however hot water, steam, lye, acid and alcohol should be avoided. The resistance to ozone is good.

**Hydrogenated actylonitrileButadiene Rubber, HNBR**

Mechanically strong and normally resistant to ozone and strong oxidizers, animal and vegetable fats, nonpolar solvents, oils and lubricants, water and aqueous solutions. The recommend max. temperature is 130°C (266°F).

**Perfluoroalkoxy polymer, PFA**

PFA is very similar to PTFE, but opposite to those PFA is thermo plastic and has minimal porosity. PFA has a very high mechanical strength which makes it a perfect choice when dealing with abrasive products. The PFA seal offers longer service intervals. The recommend max. temperature for the PFA seal is 90°C (194°F).

Product and chemical resistance of flexible rubber materials

The information below is intended as an aid in selecting the best rubber quality for an actual application. It is not possible to state any general lifetime of rubber seals as many factors influence it: chemical attack, temperature, mechanical wear etc. Extreme temperatures, even within the generally accepted limits, may worsen other kinds of attack and thus reduce the lifetime.

**Ratings**

- 1 = Unsuitable.
- 2 = Limited suitability.
- 3 = Normal suitability.
- 4 = High suitability.
- = Not recommended for other reasons.

The table contains data which have been compiled from the results of our own tests and the recommendations of our raw material suppliers. The data should be considered as recommendations only and will be brought up-to-date from time to time. They are based on constant contact with the specified product.

In case of doubt or lack of information it would be advisable to consult us directly, which will enable us to investigate specific applications.

Product or process	NBR <sup>1)</sup>	EPDM <sup>2)</sup>	Q <sup>3)</sup>	FPM <sup>4)</sup>	PTFE <sup>5)</sup>
Dairy products (milk, cream)	3	3-4	3-4	-	3-4
Dairy products (sour milk products)	3	3-4	3-4	-	3-4
Brewery products (beer, hops etc.)	3	3-4	1-2	2-3	3-4
Wine and yeast	3	4	4	2-3	3-4
Animal and vegetable fats	100°C	3	1-2	3	4
Water and water solutions	< 70°C	3	4	3	2-4
Hot water and steam	< 130°C	1	4	2	-
Concentrated fruit juices and ethereal oils	< 100°C	1	1	1	3
Non-oxydising acids	< 80°C	1-2	3	1-2	2
Oxydising acids	< 80°C	-	3	1	2
Weak concentrate of lye	< 100°C	2	4	2	2
Strong concentrate of lye	< 100°C	1	3	1	1
Mineral oils	< 110°C	3	-	-	4
Aliphatic carburetted hydrogen (hexane)	3	1	1	4	3-4
Aromatic carburetted hydrogen (benzole)	1	1	1	3	3-4
Alcohols	1-3	2-3	3-4	3-4	3-4
Ester and ketones	1-2	1-2	1-2	3-4	3-4
Ether	1	1	1-3	3-4	3-4
Methylene chloride	1	1	2-3	3-4	3-4
Ozyne and atmospheric conditions	1-2	4	4	3-4	3-4

International designation of flexible rubber materials according to ISO R 1629.

ISO = International standard.

**Notes**

	Designation of flexible rubber materials	Abbreviation symbol
1)	Nitrile rubber	N
2)	Ethylene propylene rubber	E
3)	Silicone rubber	Q
4)	Fluorinated rubber	F
5)	Polytetraflour ethylene	

## Elastomers

Seal rings are available in EPDM, FPM and PTFE

## Elastomer properties

	EPDM	FPM	PTFE
FDA (CFR 21: 177.2600)	Yes	Yes	Yes
USP Class VI certified	No	No	No
Recommended operating temperature. °C	-10°C to +140°C	-10°C to +180°C	-10°C to +220°C
<b>Resistance</b>			
Steam resistance	Yes	No	Yes
Alkali resistance	Yes	No	Yes
Resistance to fats/oils	No	Yes	Yes
Ozone resistance	Yes	Yes	Yes

Pressure ratings

EN 10357-A Tubes

Permissible max. Operating Pressures at a temperature of 20°C

Nominal diameters													
DN	10	15	20	25	32	40	50	65	80	100	125	150	200
Permissible operating pressures in bar for tubes													
	355	242	200	159	131	112	87	87	72	59	47	39	30

The permissible operating pressures have been calculated for welded pipes with the calculation value for material number 1.4301 acc. to DIN EN 10088-2 product shape C (cold strip) taking into consideration calculation voltage of 100% in the welded seam.

Permissible max. Operating Pressures at a temperature of 150°C

Nominal diameters													
DN	10	15	20	25	32	40	50	65	80	100	125	150	200
Permissible operating pressures in bar for tubes													
	219	150	124	98	81	69	53	54	44	36	29	24	18

Maximum pressure for the DIN Connections [bar]

The pressures are usable up to maximum 140°C

Size	Standard						
	11851	11853-1	11853-2	11853-3	11864-1	11864-2	11864-3
DN10	40	40	25	40	40	25	40
DN15							
DN20							
DN25							
DN32							
DN40	25	25	16	25	16	25	
DN50							
DN65							
DN80	16		10	16	10		
DN100							
DN125							
DN150							

## Pressure ratings

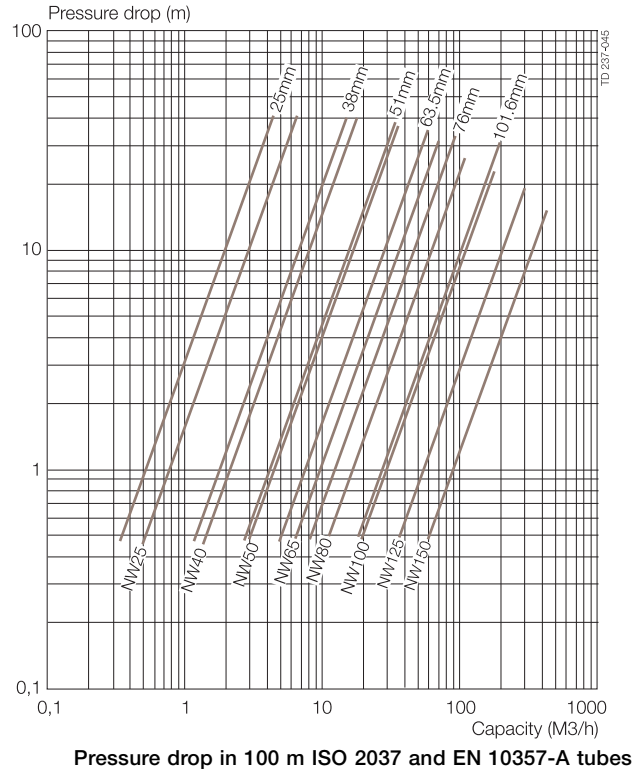
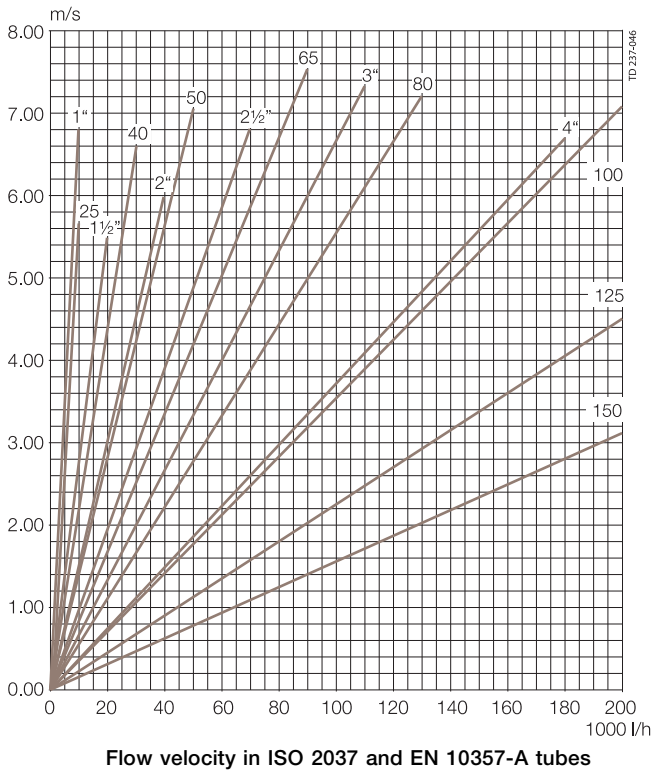
**Maximum pressure for the Tubular Fittings [bar]**

The pressures are usable up to maximum 150°C

Size	DIN 11852		
	TEES	BENDS	REDUCERS
DN10	25	25	25
DN15			
DN20			
DN25			
DN32			
DN40			
DN50	16	16	16
DN65			
DN80			
DN100	12.5	10	10
DN125	10		
DN150	8		
DN200	5		

For reduced Tees and Reducers the DN size refers to the largest diameter.

Pressure drop and flow velocity curves



**Most common steelgrades**

In the table below, we have shown the chemical composition of the materials.

Name	Material	Chemical composition								
		C	Si	Mn	Pmax.	S	N	Cr	Mo	Ni
X5CrNi18-10	1.4301 (304)	≤ 0.070	≤ 1.00	≤ 2.00	0.045	≤ 0.015	≤ 0.011	17.5 to 19.5		8.0 to 10.5
X2CrNi18-9	1.4307 (304L)	≤ 0.030	≤ 1.00	≤ 2.00	0.045	≤ 0.015	≤ 0.011	17.5 to 19.5		8.0 to 10.5
X5CrNiMo17-12-2	1.4401 (316)	≤ 0.070	≤ 1.00	≤ 2.00	0.045	≤ 0.015	≤ 0.011	16.5 to 18.5	2.0 to 2.5	10.0 to 13.0
X2CrNiMo17-12-2	1.4404 (316L)	≤ 0.030	≤ 1.00	≤ 2.00	0.045	≤ 0.015	≤ 0.011	16.5 to 18.5	2.0 to 2.5	10.0 to 13.0
X2CrNiMo18-14-3	1.4435 (316L)	≤ 0.030	≤ 1.00	≤ 2.00	0.045	≤ 0.015	≤ 0.011	17.0 to 19.0	2.5 to 3.0	12.5 to 15.0

(According to EN 10088-1)

(The material names 304, 304L, 316 and 316L according to AISI/SAE)

We do not offer 1.4435, we have chosen 1.4404 instead. Both materials are designed for highly corrosive environments. Material 1.4435 has due to the higher content of Chromium and Nickel a better corrosion resistance and formability than 1.4404, it also has a significantly higher price. Our many years in the Installation Material Business has proven 1.4404 as the best match for our customers processes.

**Treatment of stainless steel**

We will shortly touch two of the most important areas:

- 1.Heat treatment
- 2.Chemical surface treatment

**Heat treatment**

Processes where you are heating the metal to a certain temperature, which will make the atoms migrate in the in the crystal lattice.

We will focus on the most important.

**Annealing**

A process where the metal is heated to a temperature around 1050° - 1150°C, kept there for a specific time and then cooled at a very slow and controlled rate. The process is used to:

- °Reduce hardness
- °Increase ductility
- °Release mechanical stresses

After annealing the metal is more workable.

**Chemical surface treatment**

To understand why we do surface treatments, it is important to understand the role of the passive layer

The passive layer is a thin invisible oxide film (most important are the chromium- and iron oxides), which protects the steel from its surroundings, and therefore from corrosion. If the layer is locally broken, for example by a scratch, it will, under normal conditions (clean surface and enough oxygen), naturally self-passivate, and thereby restore the ability to avoid corrosion. Stainless steels ability to have this in-built self-repairing corrosion protection system, is what we benefit from.

In some cases, typically after reworking the steel, we need to help the steel to restore the oxide film, here the surface treatment is important. The good thing is, stainless steel treated in the right way and not exposed above its "chemical strength", will last very long. On the other side, if the "rules" working with stainless steel are not followed or the stainless steel is placed in an environment above its "chemical strength", the oxide layer will "break" and corrosion will start, once the corrosion has started it will proceed very fast.

The two most common mentioned chemical surface treatments are "Pickling" and "Passivation"

**Pickling**

A process where the metal is put into an acid bath (typically 15% Nitric acid and 3% Hydrofluoric acid). Time and temperature of the bath is depending by the case. Pickling is used to remove weld heat tinted layers from the surface. A thin layer of metal is removed by the process and cleaning the steel, after the process the steel has totally lost its oxide film, but after flushing with water it will automatically be reestablished. It will take up to 24 hours before the layer is as robust as before the welding process.

**Passivation**

When the surface is clean the passivation (reestablishing the oxide film), is happening automatically, but as discussed above it will take some time before the layer has the natural strength. This can be forced to happen very fast by a chemical passivation. The passivation bath is one type of acid (normally 20% Nitric acid). No metal is removed from the surface and the surface roughness is not changed, only the passive layer is strengthened.



Tubes of manufacturing lengths of approx 6 meters  
 Product code: 5108

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm) OD/ID x t	
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		<b>mm</b>	<b>OD/ID x t</b>	<b>BD finish</b>
9611819440	*	9611819592	*	15	19.00/16.00 x 1.50	
9611819442	*	9611819594	*	20	23.00/20.00 x 1.50	
9611819133	*	9611819596	*	25	29.00/26.00 x 1.50	
9611819443	*	9611819598	*	32	35.00/32.00 x 1.50	
9611819444	*	9611819544	*	40	41.00/38.00 x 1.50	
9611819445	*	9611819554	*	50	53.00/50.00 x 1.50	
9611819170	*	9611819365	*	65	70.00/66.00 x 2.00	
9611819175	*	9611819375	*	80	85.00/81.00 x 2.00	
9611819184	*	9611819388	*	100	104.00/100.00 x 2.00	
9611819798	*	9611819647	*	15	19.00/16.00 x 1.50	
9611819800	*	9611819648	*	20	23.00/20.00 x 1.50	
9611819802	*	9611819649	*	25	29.00/26.00 x 1.50	
9611819804	*	9611819650	*	32	35.00/32.00 x 1.50	
9611819806	*	9611819651	*	40	41.00/38.00 x 1.50	
9611819808	*	9611819652	*	50	53.00/50.00 x 1.50	
9611819171	*	9611819363	*	65	70.00/66.00 x 2.00	
9611819176	*	9611819656	*	80	85.00/81.00 x 2.00	
9611819186	*	9611819657	*	100	104.00/100.00 x 2.00	

\* PPL prices per meter are updated monthly

Please contact your Alfa Laval contact person for further information.

Tubes of manufacturing lengths of approx 6 meters  
 Product code: 5108

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm) OD/ID x t	CC finish
1.4301 (304)		1.4404 (316L)		mm	OD/ID x t	CC finish
9611819683	*	9611819528	*	15	19.00/16.00 x 1.50	
9611819684	*	9611819529	*	20	23.00/20.00 x 1.50	
9611819519	*	9611819627	*	25	29.00/26.00 x 1.50	
9611819520	*	9611819628	*	32	35.00/32.00 x 1.50	
9611819521	*	9611819629	*	40	41.00/38.00 x 1.50	
9611819522	*	9611819630	*	50	53.00/50.00 x 1.50	
9611819689	*	9611819631	*	65	70.00/66.00 x 2.00	
9611819690	*	9611819632	*	80	85.00/81.00 x 2.00	
9611819691	*	9611819633	*	100	104.00/100.00 x 2.00	
9611819692	*	9611819634	*	125	129.00/125.00 x 2.00	
9611819693	*	9611819534	*	150	154.00/150.00 x 2.00	
<b>CD finish</b>						
9611819660	*	9611819413	*	15	19.00/16.00 x 1.50	
9611819661	*	9611819414	*	20	23.00/20.00 x 1.50	
9611819674	*	9611819435	*	25	29.00/26.00 x 1.50	
9611819675	*	9611819436	*	32	35.00/32.00 x 1.50	
9611819676	*	9611819437	*	40	41.00/38.00 x 1.50	
9611819677	*	9611819438	*	50	53.00/50.00 x 1.50	
9611819425	*	9611819450	*	65	70.00/66.00 x 2.00	
9611819426	*	9611819451	*	80	85.00/81.00 x 2.00	
9611819427	*	9611819935	*	100	104.00/100.00 x 2.00	
9611819428	*	9611819936	*	125	129.00/125.00 x 2.00	
9611819429	*	9611819449	*	150	154.00/150.00 x 2.00	

\* PPL prices per meter are updated monthly

Please contact your Alfa Laval contact person for further information.

Product code: 5007

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			BEND 45 BS, HSF3 DIN 11852
1.4307 (304)		1.4404 (316L)		mm	OD/IDxt	L	R	
9615227331	18.94	9615227343	24.62	10	13.00/10.00 x 1.50	18.38	26.00	
9615227332	20.05	9615227344	26.07	15	19.00/16.00 x 1.50	24.75	35.00	
9615227333	21.17	9615227345	27.52	20	23.00/20.00 x 1.50	28.28	40.00	
9612154642	23.06	9612154611	29.97	25	29.00/26.00 x 1.50	35.36	50.00	
9612154643	25.20	9612154612	32.77	32	35.00/32.00 x 1.50	38.89	55.00	
9612154644	27.67	9612154613	35.97	40	41.00/38.00 x 1.50	42.43	60.00	
9612154645	30.75	9612154614	39.96	50	53.00/50.00 x 1.50	49.5	70.00	
9611293861	42.48	9611293862	55.21	65	70.00/66.00 x 2.00	56.57	80.00	
9611293871	68.40	9611293872	88.92	80	85.00/81.00 x 2.00	63.64	90.00	
9611293881	106.83	9611293882	138.89	100	104.00/100.00 x 2.00	70.71	100.00	
9611293891	187.36	9611293892	243.54	125	129.00/125.00 x 2.00	132.58	187.50	
9611293901	288.21	9611293902	374.68	150	154.00/150.00 x 2.00	159.1	225.00	
9615227359	410.81	9615227360	534.04	200	204.00/200.00 x 2.00	212.13	300.00	

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			BEND 45 BS, HSF2 DIN 11852
1.4307 (304)		1.4404 (316L)		mm	OD/IDxt	L	R	
9615227307	18.94	9615227319	24.62	10	13.00/10.00 x 1.50	18.38	26.00	
9615227308	20.05	9615227320	26.07	15	19.00/16.00 x 1.50	24.75	35.00	
9615227309	21.17	9615227321	27.52	20	23.00/20.00 x 1.50	28.28	40.00	
9615227310	23.06	9615227322	29.97	25	29.00/26.00 x 1.50	35.36	50.00	
9615227311	25.20	9615227323	32.77	32	35.00/32.00 x 1.50	38.89	55.00	
9615227312	27.67	9615227324	35.97	40	41.00/38.00 x 1.50	42.43	60.00	
9615227313	30.75	9615227325	39.96	50	53.00/50.00 x 1.50	49.5	70.00	
9615227314	42.48	9615227326	55.21	65	70.00/66.00 x 2.00	56.57	80.00	
9615227315	68.40	9615227327	88.92	80	85.00/81.00 x 2.00	63.64	90.00	
9615227316	106.83	9615227328	138.89	100	104.00/100.00 x 2.00	70.71	100.00	
9615227317	187.36	9615227329	243.54	125	129.00/125.00 x 2.00	132.58	187.50	
9615227318	288.21	9615227330	374.68	150	154.00/150.00 x 2.00	159.1	225.00	
9615227357	410.81	9615227358	534.04	200	204.00/200.00 x 2.00	212.13	300.00	

Product code: 5007

1.2

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			L2	
					OD/ID x t	L	R		
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		mm					<b>BEND 90 BS HSF2 DIN 11852</b>
9615220205	<b>10.96</b>	9615220217	<b>12.94</b>	10	13.00/10.00 x 1.50	26.00	26.00		
9615220206	<b>11.87</b>	9615220218	<b>14.03</b>	15	19.00/16.00 x 1.50	35.00	35.00		
9615220207	<b>12.78</b>	9615220219	<b>15.10</b>	20	23.00/20.00 x 1.50	40.00	40.00		
9615220208	<b>13.69</b>	9615220220	<b>16.18</b>	25	29.00/26.00 x 1.50	50.00	50.00		
9615220209	<b>14.09</b>	9615220221	<b>18.32</b>	32	35.00/32.00 x 1.50	55.00	55.00		
9615220210	<b>16.43</b>	9615220222	<b>19.43</b>	40	41.00/38.00 x 1.50	60.00	60.00		
9615220211	<b>18.26</b>	9615220223	<b>21.59</b>	50	53.00/50.00 x 1.50	70.00	70.00		
9615220212	<b>25.21</b>	9615220224	<b>29.81</b>	65	70.00/66.00 x 2.00	80.00	80.00		
9615220213	<b>40.64</b>	9615220225	<b>48.01</b>	80	85.00/81.00 x 2.00	90.00	90.00		
9615220214	<b>65.17</b>	9615220226	<b>77.02</b>	100	104.00/100.00 x 2.00	100.00	100.00		
9615220215	<b>118.89</b>	9615220227	<b>154.58</b>	125	129.00/125.00 x 2.00	187.50	187.50		
9615220216	<b>196.70</b>	9615220228	<b>255.74</b>	150	154.00/150.00 x 2.00	225.00	225.00		
9615220231	<b>285.47</b>	9615220232	<b>371.12</b>	200	204.00/200.00 x 2.00	300.00	300.00		
9612150558	<b>10.96</b>	9612150508	<b>12.94</b>	10	13.00/10.00 x 1.50	26.00	26.00		
9612150559	<b>11.87</b>	9612150509	<b>14.03</b>	15	19.00/16.00 x 1.50	35.00	35.00		
9612150560	<b>12.78</b>	9612150510	<b>15.10</b>	20	23.00/20.00 x 1.50	40.00	40.00		
9612150561	<b>13.69</b>	9612150511	<b>16.18</b>	25	29.00/26.00 x 1.50	50.00	50.00		
9612150562	<b>14.09</b>	9612150512	<b>18.32</b>	32	35.00/32.00 x 1.50	55.00	55.00		
9612150563	<b>16.43</b>	9612150513	<b>19.43</b>	40	41.00/38.00 x 1.50	60.00	60.00		
9612150564	<b>18.26</b>	9612150514	<b>21.59</b>	50	53.00/50.00 x 1.50	70.00	70.00		
9611301066	<b>25.21</b>	9611309171	<b>29.81</b>	65	70.00/66.00 x 2.00	80.00	80.00		
9611301067	<b>40.64</b>	9611309181	<b>48.01</b>	80	85.00/81.00 x 2.00	90.00	90.00		
9611301068	<b>65.17</b>	9611309191	<b>77.02</b>	100	104.00/100.00 x 2.00	100.00	100.00		
9611309200	<b>118.89</b>	9611309201	<b>154.58</b>	125	129.00/125.00 x 2.00	187.50	187.50		
9611309210	<b>196.70</b>	9611309211	<b>255.74</b>	150	154.00/150.00 x 2.00	225.00	225.00		
9615220233	<b>285.47</b>	9615220234	<b>371.12</b>	200	204.00/200.00 x 2.00	300.00	300.00		

Product code: 5007

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			L2		
					OD/ID x t	L	R			
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		<b>mm</b>					<b>BEND 90 BL HSF2 DIN 11852</b>	
9615220125	20.52	9615220137	26.68	10	13.00/10.00 x 1.50	51.00	26.00	25.00		
9615220126	21.93	9615220138	28.50	15	19.00/16.00 x 1.50	60.00	35.00	25.00		
9615220127	23.34	9615220139	30.34	20	23.00/20.00 x 1.50	65.00	40.00	25.00		
9615220128	15.91	9615220140	20.69	25	29.00/26.00 x 1.50	90.00	50.00	40.00		
9615220129	17.90	9615220141	23.27	32	35.00/32.00 x 1.50	95.00	55.00	40.00		
9615220130	20.16	9615220142	26.21	40	41.00/38.00 x 1.50	100.00	60.00	40.00		
9615220131	22.99	9615220143	29.89	50	53.00/50.00 x 1.50	110.00	70.00	40.00		
9615220132	39.09	9615220144	50.81	65	70.00/66.00 x 2.00	120.00	80.00	40.00		
9615220133	62.96	9615220145	81.85	80	85.00/81.00 x 2.00	145.00	90.00	55.00		
9615220134	98.33	9615220146	127.82	100	104.00/100.00 x 2.00	155.00	100.00	55.00		
9615220135	150.99	9615220147	196.29	125	129.00/125.00 x 2.00	245.00	187.50	57.50		
9615220136	249.81	9615220148	324.75	150	154.00/150.00 x 2.00	285.00	225.00	57.50		
9615220175	362.56	9615220176	471.32	200	204.00/200.00 x 2.00	340.00	300.00	57.50		
										<b>BEND 90 BL HSF3 DIN 11852</b>
9615220149	20.52	9615220161	26.68	10	13.00/10.00 x 1.50	51.00	26.00	25.00		
9615220150	21.93	9615220162	28.50	15	19.00/16.00 x 1.50	60.00	35.00	25.00		
9615220151	23.34	9615220163	30.34	20	23.00/20.00 x 1.50	65.00	40.00	25.00		
9615220152	15.91	9615220164	20.69	25	29.00/26.00 x 1.50	90.00	50.00	40.00		
9615220153	17.90	9615220165	23.27	32	35.00/32.00 x 1.50	95.00	55.00	40.00		
9615220154	20.16	9615220166	26.21	40	41.00/38.00 x 1.50	100.00	60.00	40.00		
9615220155	22.99	9615220167	29.89	50	53.00/50.00 x 1.50	110.00	70.00	40.00		
9615220156	39.09	9615220168	50.81	65	70.00/66.00 x 2.00	120.00	80.00	40.00		
9615220157	62.96	9615220169	81.85	80	85.00/81.00 x 2.00	145.00	90.00	55.00		
9615220158	98.33	9615220170	127.82	100	104.00/100.00 x 2.00	155.00	100.00	55.00		
9615220159	150.99	9615220171	196.29	125	129.00/125.00 x 2.00	245.00	187.50	57.50		
9615220160	249.81	9615220172	324.75	150	154.00/150.00 x 2.00	285.00	225.00	57.50		
9615220177	362.56	9615220178	471.32	200	204.00/200.00 x 2.00	340.00	300.00	57.50		

Product code: 5026

1.2

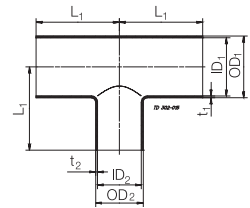
Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				TEE RTK HSF3 DIN 11852
					OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		mm					
9615247201	<b>23.73</b>	9615247231	<b>32.74</b>	32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	55.00	19.00	
9615247202	<b>28.23</b>	9615247232	<b>38.98</b>	40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	60.00	22.00	
9615247203	<b>27.90</b>	9615247233	<b>38.51</b>	40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	60.00	22.50	
9615247204	<b>29.56</b>	9615247234	<b>40.80</b>	50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	70.00	28.00	
9615247205	<b>29.15</b>	9615247235	<b>40.22</b>	50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	70.00	28.50	
9615247206	<b>28.66</b>	9615247236	<b>39.56</b>	50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	70.00	29.00	
9615247207	<b>50.11</b>	9615247237	<b>69.15</b>	65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	80.00	37.00	
9615247208	<b>49.56</b>	9615247238	<b>68.40</b>	65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	80.00	37.00	
9615247209	<b>48.95</b>	9615247239	<b>67.54</b>	65/40	70.00/66.00 x 2.00	41.00/38.00 x 1.50	80.00	37.50	
9615247210	<b>48.15</b>	9615247240	<b>66.46</b>	65/50	70.00/66.00 x 2.00	53.00/50.00 x 1.50	80.00	38.50	
9615247211	<b>66.87</b>	9615247241	<b>92.28</b>	80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	90.00	45.00	
9615247212	<b>66.19</b>	9615247242	<b>91.34</b>	80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	90.00	45.00	
9615247213	<b>65.42</b>	9615247243	<b>90.27</b>	80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	90.00	45.00	
9615247214	<b>64.45</b>	9615247244	<b>88.94</b>	80/50	85.00/81.00 x 2.00	53.00/50.00 x 1.50	90.00	46.00	
9615247215	<b>62.99</b>	9615247245	<b>86.94</b>	80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	90.00	47.50	
9615247261	<b>94.14</b>	9615247267	<b>129.90</b>	100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	100.00	55.50	
9615247216	<b>93.29</b>	9615247246	<b>128.75</b>	100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	100.00	55.50	
9615247217	<b>92.33</b>	9615247247	<b>127.41</b>	100/40	104.00/100.00 x 2.00	41.00/38.00 x 1.50	100.00	55.50	
9615247218	<b>91.11</b>	9615247248	<b>125.75</b>	100/50	104.00/100.00 x 2.00	53.00/50.00 x 1.50	100.00	55.50	
9615247219	<b>89.30</b>	9615247249	<b>123.25</b>	100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	100.00	57.00	
9615247220	<b>87.50</b>	9615247250	<b>120.75</b>	100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	100.00	57.00	
9615247221	<b>123.25</b>	9615247251	<b>170.08</b>	125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	187.50	69.50	
9615247222	<b>121.75</b>	9615247252	<b>168.00</b>	125/50	129.00/125.00 x 2.00	53.00/50.00 x 1.50	187.50	69.50	
9615247223	<b>119.48</b>	9615247253	<b>164.89</b>	125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	187.50	69.50	
9615247224	<b>117.22</b>	9615247254	<b>161.76</b>	125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	187.50	69.50	
9615247225	<b>114.20</b>	9615247255	<b>157.59</b>	125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	187.50	70.50	
9615247226	<b>228.10</b>	9615247256	<b>314.78</b>	150/50	154.00/150.00 x 2.00	53.00/50.00 x 1.50	225.00	82.00	
9615247227	<b>225.39</b>	9615247257	<b>311.03</b>	150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	225.00	82.00	
9615247228	<b>222.67</b>	9615247258	<b>307.28</b>	150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	225.00	82.00	
9615247229	<b>219.05</b>	9615247259	<b>302.29</b>	150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	225.00	83.00	
9615247230	<b>214.53</b>	9615247260	<b>296.04</b>	150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	225.00	86.50	
9615247262	<b>324.05</b>	9615247268	<b>447.18</b>	200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	300.00	108.00	
9615247263	<b>320.43</b>	9615247269	<b>442.19</b>	200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	300.00	108.00	
9615247264	<b>315.59</b>	9615247270	<b>435.53</b>	200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	300.00	108.00	
9615247265	<b>309.57</b>	9615247271	<b>427.20</b>	200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	300.00	111.50	
9615247266	<b>303.53</b>	9615247272	<b>418.87</b>	200/150	204.00/200.00 x 2.00	154.00/150.00 x 2.00	300.00	115.00	

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				TEE RTK HSF2 DIN 11852
					OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	
<b>1.4307</b> <b>(304L)</b>		<b>1.4404</b> <b>(316L)</b>		<b>mm</b>					
9615227901	<b>23.73</b>	9615227931	<b>32.74</b>	32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	55.00	19.00	
9615227902	<b>28.23</b>	9615227932	<b>38.98</b>	40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	60.00	22.00	
9615227903	<b>27.90</b>	9615227933	<b>38.51</b>	40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	60.00	22.50	
9615227904	<b>29.56</b>	9615227934	<b>40.80</b>	50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	70.00	28.00	
9615227905	<b>29.15</b>	9615227935	<b>40.22</b>	50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	70.00	28.50	
9615227906	<b>28.66</b>	9615227936	<b>39.56</b>	50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	70.00	29.00	
9615227907	<b>50.11</b>	9615227937	<b>69.15</b>	65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	80.00	37.00	
9615227908	<b>49.56</b>	9615227938	<b>68.40</b>	65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	80.00	37.00	
9615227909	<b>48.95</b>	9615227939	<b>67.54</b>	65/40	70.00/66.00 x 2.00	41.00/38.00 x 1.50	80.00	37.50	
9615227910	<b>48.15</b>	9615227940	<b>66.46</b>	65/50	70.00/66.00 x 2.00	53.00/50.00 x 1.50	80.00	38.50	
9615227911	<b>66.87</b>	9615227941	<b>92.28</b>	80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	90.00	45.00	
9615227912	<b>66.19</b>	9615227942	<b>91.34</b>	80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	90.00	45.00	
9615227913	<b>65.42</b>	9615227943	<b>90.27</b>	80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	90.00	45.00	
9615227914	<b>64.45</b>	9615227944	<b>88.94</b>	80/50	85.00/81.00 x 2.00	53.00/50.00 x 1.50	90.00	46.00	
9615227915	<b>62.99</b>	9615227945	<b>86.94</b>	80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	90.00	47.50	
9615227961	<b>94.14</b>	9615227967	<b>129.90</b>	100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	100.00	55.50	
9615227916	<b>93.29</b>	9615227946	<b>128.75</b>	100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	100.00	55.50	
9615227917	<b>92.33</b>	9615227947	<b>127.41</b>	100/40	104.00/100.00 x 2.00	41.00/38.00 x 1.50	100.00	55.50	
9615227918	<b>91.11</b>	9615227948	<b>125.75</b>	100/50	104.00/100.00 x 2.00	53.00/50.00 x 1.50	100.00	55.50	
9615227919	<b>89.30</b>	9615227949	<b>123.25</b>	100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	100.00	57.00	
9615227920	<b>87.50</b>	9615227950	<b>120.75</b>	100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	100.00	57.00	
9615227921	<b>123.25</b>	9615227951	<b>170.08</b>	125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	187.50	69.50	
9615227922	<b>121.75</b>	9615227952	<b>168.00</b>	125/50	129.00/125.00 x 2.00	53.00/50.00 x 1.50	187.50	69.50	
9615227923	<b>119.48</b>	9615227953	<b>164.89</b>	125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	187.50	69.50	
9615227924	<b>117.22</b>	9615227954	<b>161.76</b>	125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	187.50	69.50	
9615227925	<b>114.20</b>	9615227955	<b>157.59</b>	125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	187.50	70.50	
9615227926	<b>228.10</b>	9615227956	<b>314.78</b>	150/50	154.00/150.00 x 2.00	53.00/50.00 x 1.50	225.00	82.00	
9615227927	<b>225.39</b>	9615227957	<b>311.03</b>	150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	225.00	82.00	
9615227928	<b>222.67</b>	9615227958	<b>307.28</b>	150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	225.00	82.00	
9615227929	<b>219.05</b>	9615227959	<b>302.29</b>	150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	225.00	83.00	
9615227930	<b>214.53</b>	9615227960	<b>296.04</b>	150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	225.00	86.50	
9615227962	<b>324.05</b>	9615227968	<b>447.18</b>	200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	300.00	108.00	
9615227963	<b>320.43</b>	9615227969	<b>442.19</b>	200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	300.00	108.00	
9615227964	<b>315.59</b>	9615227970	<b>435.53</b>	200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	300.00	108.00	
9615227965	<b>309.57</b>	9615227971	<b>427.20</b>	200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	300.00	111.50	
9615227966	<b>303.53</b>	9615227972	<b>418.87</b>	200/150	204.00/200.00 x 2.00	154.00/150.00 x 2.00	300.00	115.00	

Product code: 5026

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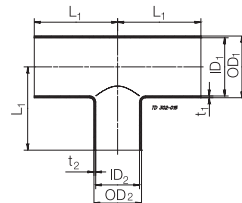
Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				TEE RTS HSF3 DIN 11852
					OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	
<b>1.4307</b> <b>(304L)</b>		<b>1.4404</b> <b>(316L)</b>		<b>mm</b>					
9615247101	<b>25.55</b>	9615247131	<b>35.28</b>	32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	55.00	53.00	
9615247102	<b>30.42</b>	9615247132	<b>41.97</b>	40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	60.00	53.00	
9615247103	<b>30.05</b>	9615247133	<b>41.47</b>	40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	60.00	58.00	
9615247104	<b>31.85</b>	9615247134	<b>43.94</b>	50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	70.00	62.00	
9615247105	<b>31.38</b>	9615247135	<b>43.32</b>	50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	70.00	64.00	
9615247106	<b>30.87</b>	9615247136	<b>42.60</b>	50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	70.00	66.00	
9615247107	<b>53.97</b>	9615247137	<b>74.48</b>	65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	80.00	70.50	
9615247108	<b>53.37</b>	9615247138	<b>73.67</b>	65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	80.00	72.50	
9615247109	<b>52.71</b>	9615247139	<b>72.74</b>	65/40	70.00/66.00 x 2.00	41.00/38.00 x 1.50	80.00	74.50	
9615247110	<b>51.86</b>	9615247140	<b>71.56</b>	65/50	70.00/66.00 x 2.00	53.00/50.00 x 1.50	80.00	78.50	
9615247111	<b>72.01</b>	9615247141	<b>99.36</b>	80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	90.00	78.00	
9615247112	<b>71.28</b>	9615247142	<b>98.35</b>	80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	90.00	80.00	
9615247113	<b>70.44</b>	9615247143	<b>97.21</b>	80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	90.00	82.00	
9615247114	<b>69.40</b>	9615247144	<b>95.78</b>	80/50	85.00/81.00 x 2.00	53.00/50.00 x 1.50	90.00	86.00	
9615247115	<b>67.85</b>	9615247145	<b>93.63</b>	80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	90.00	87.50	
9615247161	<b>101.38</b>	9615247167	<b>139.89</b>	100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	100.00	92.50	
9615247116	<b>100.47</b>	9615247146	<b>138.65</b>	100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	100.00	92.50	
9615247117	<b>99.43</b>	9615247147	<b>137.21</b>	100/40	104.00/100.00 x 2.00	41.00/38.00 x 1.50	100.00	94.00	
9615247118	<b>98.13</b>	9615247148	<b>135.42</b>	100/50	104.00/100.00 x 2.00	53.00/50.00 x 1.50	100.00	95.50	
9615247119	<b>96.18</b>	9615247149	<b>132.74</b>	100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	100.00	97.00	
9615247120	<b>94.23</b>	9615247150	<b>130.04</b>	100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	100.00	99.50	
9615247121	<b>132.74</b>	9615247151	<b>183.18</b>	125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	187.50	104.50	
9615247122	<b>131.12</b>	9615247152	<b>180.94</b>	125/50	129.00/125.00 x 2.00	53.00/50.00 x 1.50	187.50	107.00	
9615247123	<b>128.67</b>	9615247153	<b>177.57</b>	125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	187.50	109.50	
9615247124	<b>126.24</b>	9615247154	<b>174.21</b>	125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	187.50	112.00	
9615247125	<b>122.98</b>	9615247155	<b>169.72</b>	125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	187.50	112.50	
9615247126	<b>245.64</b>	9615247156	<b>338.99</b>	150/50	154.00/150.00 x 2.00	53.00/50.00 x 1.50	225.00	123.50	
9615247127	<b>242.72</b>	9615247157	<b>334.96</b>	150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	225.00	124.00	
9615247128	<b>239.79</b>	9615247158	<b>330.93</b>	150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	225.00	124.50	
9615247129	<b>235.90</b>	9615247159	<b>325.54</b>	150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	225.00	125.00	
9615247130	<b>231.03</b>	9615247160	<b>318.81</b>	150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	225.00	200.00	
9615247162	<b>348.97</b>	9615247168	<b>481.59</b>	200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	300.00	115.00	
9615247163	<b>345.08</b>	9615247169	<b>476.20</b>	200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	300.00	130.00	
9615247164	<b>339.88</b>	9615247170	<b>469.03</b>	200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	300.00	150.00	
9615247165	<b>333.38</b>	9615247171	<b>460.06</b>	200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	300.00	225.00	
9615247166	<b>326.88</b>	9615247172	<b>451.09</b>	200/150	204.00/200.00 x 2.00	154.00/150.00 x 2.00	300.00	250.00	





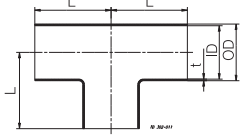
Product code: 5026

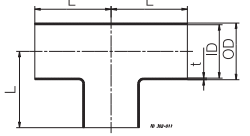
Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				TEE RTS HSF2 DIN 11852
					OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	
<b>1.4307</b> <b>(304L)</b>		<b>1.4404</b> <b>(316L)</b>		mm					
9615227701	<b>25.55</b>	9615227731	<b>35.28</b>	32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	55.00	53.00	
9615227702	<b>30.42</b>	9615227732	<b>41.97</b>	40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	60.00	53.00	
9615227703	<b>30.05</b>	9615227733	<b>41.47</b>	40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	60.00	58.00	
9615227704	<b>31.85</b>	9615227734	<b>43.94</b>	50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	70.00	62.00	
9615227705	<b>31.38</b>	9615227735	<b>43.32</b>	50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	70.00	64.00	
9615227706	<b>30.87</b>	9615227736	<b>42.60</b>	50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	70.00	66.00	
9615227707	<b>53.97</b>	9615227737	<b>74.48</b>	65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	80.00	70.50	
9615227708	<b>53.37</b>	9615227738	<b>73.67</b>	65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	80.00	72.50	
9615227709	<b>52.71</b>	9615227739	<b>72.74</b>	65/40	70.00/66.00 x 2.00	41.00/38.00 x 1.50	80.00	74.50	
9615227710	<b>51.86</b>	9615227740	<b>71.56</b>	65/50	70.00/66.00 x 2.00	53.00/50.00 x 1.50	80.00	78.50	
9615227711	<b>72.01</b>	9615227741	<b>99.36</b>	80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	90.00	78.00	
9615227712	<b>71.28</b>	9615227742	<b>98.35</b>	80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	90.00	80.00	
9615227713	<b>70.44</b>	9615227743	<b>97.21</b>	80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	90.00	82.00	
9615227714	<b>69.40</b>	9615227744	<b>95.78</b>	80/50	85.00/81.00 x 2.00	53.00/50.00 x 1.50	90.00	86.00	
9615227715	<b>67.85</b>	9615227745	<b>93.63</b>	80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	90.00	87.50	
9615227761	<b>101.38</b>	9615227767	<b>139.89</b>	100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	100.00	92.50	
9615227716	<b>100.47</b>	9615227746	<b>138.65</b>	100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	100.00	92.50	
9615227717	<b>99.43</b>	9615227747	<b>137.21</b>	100/40	104.00/100.00 x 2.00	41.00/38.00 x 1.50	100.00	94.00	
9615227718	<b>98.13</b>	9615227748	<b>135.42</b>	100/50	104.00/100.00 x 2.00	53.00/50.00 x 1.50	100.00	95.50	
9615227719	<b>96.18</b>	9615227749	<b>132.74</b>	100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	100.00	97.00	
9615227720	<b>94.23</b>	9615227750	<b>130.04</b>	100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	100.00	99.50	
9615227721	<b>132.74</b>	9615227751	<b>183.18</b>	125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	187.50	104.50	
9615227722	<b>131.12</b>	9615227752	<b>180.94</b>	125/50	129.00/125.00 x 2.00	53.00/50.00 x 1.50	187.50	107.00	
9615227723	<b>128.67</b>	9615227753	<b>177.57</b>	125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	187.50	109.50	
9615227724	<b>126.24</b>	9615227754	<b>174.21</b>	125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	187.50	112.00	
9615227725	<b>122.98</b>	9615227755	<b>169.72</b>	125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	187.50	112.50	
9615227726	<b>245.64</b>	9615227756	<b>338.99</b>	150/50	154.00/150.00 x 2.00	53.00/50.00 x 1.50	225.00	123.50	
9615227727	<b>242.72</b>	9615227757	<b>334.96</b>	150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	225.00	124.00	
9615227728	<b>239.79</b>	9615227758	<b>330.93</b>	150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	225.00	124.50	
9615227729	<b>235.90</b>	9615227759	<b>325.54</b>	150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	225.00	125.00	
9615227730	<b>231.03</b>	9615227760	<b>318.81</b>	150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	225.00	200.00	
9615227762	<b>348.97</b>	9615227768	<b>481.59</b>	200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	300.00	115.00	
9615227763	<b>345.08</b>	9615227769	<b>476.20</b>	200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	300.00	130.00	
9615227764	<b>339.88</b>	9615227770	<b>469.03</b>	200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	300.00	150.00	
9615227765	<b>333.38</b>	9615227771	<b>460.06</b>	200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	300.00	225.00	
9615227766	<b>326.88</b>	9615227772	<b>451.09</b>	200/150	204.00/200.00 x 2.00	154.00/150.00 x 2.00	300.00	250.00	



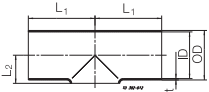
Product code: 5026

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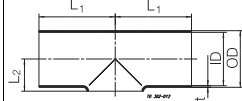
Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)		TEE TS HSF3 DIN 11852
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	L	
9612155558	18.84	9612155508	24.49	10	13.00/10.00 x 1.50	26.00	
9612155559	20.40	9612155509	26.53	15	19.00/16.00 x 1.50	35.00	
9612155560	21.98	9612155510	28.58	20	23.00/20.00 x 1.50	40.00	
9612155561	23.56	9612155511	30.62	25	29.00/26.00 x 1.50	50.00	
9612155562	25.75	9612155512	33.48	32	35.00/32.00 x 1.50	55.00	
9612155563	28.26	9612155513	36.74	40	41.00/38.00 x 1.50	60.00	
9612155564	31.40	9612155514	40.82	50	53.00/50.00 x 1.50	70.00	
9611309290	38.48	9611309291	50.02	65	70.00/66.00 x 2.00	80.00	
9611309300	58.09	9611309301	75.52	80	85.00/81.00 x 2.00	90.00	
9611309310	92.64	9611309311	120.30	100	104.00/100.00 x 2.00	100.00	
9611309320	295.65	9611309321	384.34	125	129.00/125.00 x 2.00	187.50	
9611309330	538.76	9611309331	700.39	150	154.00/150.00 x 2.00	225.00	
9615227429	1024.97	9615227430	1332.47	200	204.00/200.00 x 2.00	300.00	

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)		TEE TS HSF2 DIN 11852
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	L	
9615227401	18.84	9615227413	24.49	10	13.00/10.00 x 1.50	26.00	
9615227402	20.40	9615227414	26.53	15	19.00/16.00 x 1.50	35.00	
9615227403	21.98	9615227415	28.58	20	23.00/20.00 x 1.50	40.00	
9615227404	23.56	9615227416	30.62	25	29.00/26.00 x 1.50	50.00	
9615227405	25.75	9615227417	33.48	32	35.00/32.00 x 1.50	55.00	
9615227406	28.26	9615227418	36.74	40	41.00/38.00 x 1.50	60.00	
9615227407	31.40	9615227419	40.82	50	53.00/50.00 x 1.50	70.00	
9615227408	38.48	9615227420	50.02	65	70.00/66.00 x 2.00	80.00	
9615227409	58.09	9615227421	75.52	80	85.00/81.00 x 2.00	90.00	
9615227410	92.64	9615227422	120.30	100	104.00/100.00 x 2.00	100.00	
9615227411	295.65	9615227423	384.34	125	129.00/125.00 x 2.00	187.50	
9615227412	538.76	9615227424	700.39	150	154.00/150.00 x 2.00	225.00	
9615227427	1024.97	9615227428	1332.47	200	204.00/200.00 x 2.00	300.00	

Product code: 5026

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			TEE TK HSF3 DIN 11852
					OD/ID x t	L <sub>1</sub>	L <sub>2</sub>	
1.4307 (304L)		1.4404 (316L)		mm				
9612928701	15.71	9612928711	20.40	15	19.00/16.00 x 1.50	35.00	11.00	
9612928702	16.91	9612928712	21.98	20	23.00/20.00 x 1.50	40.00	13.00	
9612928703	18.12	9612928713	23.56	25	29.00/26.00 x 1.50	50.00	16.00	
9612928704	19.81	9612928714	25.75	32	35.00/32.00 x 1.50	55.00	19.50	
9612928705	21.74	9612928715	28.26	40	41.00/38.00 x 1.50	60.00	23.00	
9612928706	24.15	9612928716	31.40	50	53.00/50.00 x 1.50	70.00	30.00	
9611304580	29.58	9611304582	38.48	65	70.00/66.00 x 2.00	80.00	40.00	
9611304600	44.69	9611304602	58.09	80	85.00/81.00 x 2.00	90.00	47.50	
9611304620	71.26	9611304622	92.64	100	104.00/100.00 x 2.00	100.00	58.00	
9611304640	227.38	9611304642	295.60	125	129.00/125.00 x 2.00	187.50	74.00	
9612150053	414.36	9612150040	538.67	150	154.00/150.00 x 2.00	225.00	90.00	
9615227533	788.31	9615227534	1024.80	200	204.00/200.00 x 2.00	300.00	115.00	

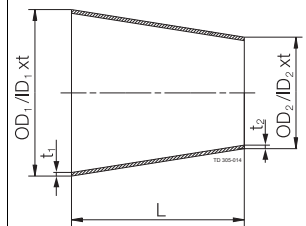
\* On request

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			TEE TK HSF2 DIN 11852
					OD/ID x t	L <sub>1</sub>	L <sub>2</sub>	
1.4307 (304L)		1.4404 (316L)		mm				
9615227504	15.71	9615227516	20.40	15	19.00/16.00 x 1.50	35.00	11.00	
9615227505	16.91	9615227517	21.98	20	23.00/20.00 x 1.50	40.00	13.00	
9615227506	18.12	9615227518	23.56	25	29.00/26.00 x 1.50	50.00	16.00	
9615227507	19.81	9615227519	25.75	32	35.00/32.00 x 1.50	55.00	19.50	
9615227508	21.74	9615227520	28.26	40	41.00/38.00 x 1.50	60.00	23.00	
9615227509	24.15	9615227521	31.40	50	53.00/50.00 x 1.50	70.00	30.00	
9615227510	29.58	9615227522	38.48	65	70.00/66.00 x 2.00	80.00	40.00	
9615227511	44.69	9615227523	58.09	80	85.00/81.00 x 2.00	90.00	47.50	
9615227512	71.26	9615227524	92.64	100	104.00/100.00 x 2.00	100.00	58.00	
9615227513	227.38	9615227525	295.60	125	129.00/125.00 x 2.00	187.50	74.00	
9615227514	414.36	9615227526	538.67	150	154.00/150.00 x 2.00	225.00	90.00	
9615227531	788.31	9615227532	1024.80	200	204.00/200.00 x 2.00	300.00	115.00	

\* On request

Product code: 5068

Item No	PPL Eur	item No	PPL Eur	Size DN	Dimension (mm)			RED RK
1.4307 (304L)		1.4404 (316L)		mm	OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L	HSF3 DIN 11852
9615227001	14.43	9615317201	16.30	15/10	19.00/16.00 x 1.50	13.00/10.00 x 1.50	11.00	
9615227002	20.14	9615317202	22.76	20/10	23.00/20.00 x 1.50	13.00/10.00 x 1.50	18.00	
9615227003	13.43	9615317203	15.18	20/15	23.00/20.00 x 1.50	19.00/16.00 x 1.50	7.00	
9615227004	26.30	9615317204	29.73	25/10	29.00/26.00 x 1.50	13.00/10.00 x 1.50	29.00	
9615227005	17.53	9615317205	19.82	25/15	29.00/26.00 x 1.50	19.00/16.00 x 1.50	18.00	
9615227006	13.14	9615317206	14.87	25/20	29.00/26.00 x 1.50	23.00/20.00 x 1.50	11.00	
9615227007	23.78	9615317207	26.88	32/15	35.00/32.00 x 1.50	19.00/16.00 x 1.50	29.00	
9615227008	17.85	9615317208	20.17	32/20	35.00/32.00 x 1.50	23.00/20.00 x 1.50	22.00	
9615227009	14.28	9615317209	16.13	32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	11.00	
9615227010	31.65	9615317210	35.78	40/15	41.00/38.00 x 1.50	19.00/16.00 x 1.50	40.00	
9615227011	23.74	9615317211	26.83	40/20	41.00/38.00 x 1.50	23.00/20.00 x 1.50	33.00	
9615227012	18.99	9615317212	21.47	40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	22.00	
9615227013	14.83	9615317213	16.78	40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	11.00	
9615227014	25.53	9615317214	28.88	50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	44.00	
9615227015	19.96	9615317215	22.56	50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	33.00	
9615227016	15.97	9615317216	18.05	50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	22.00	
9615227017	43.75	9615317217	49.47	65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	73.00	
9615227018	34.19	9615317218	38.64	65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	62.00	
9615227019	27.35	9615317219	30.91	65/40	70.00/66.00 x 2.00	42.00/38.00 x 2.00	51.00	
9615227020	21.89	9615317220	24.72	65/50	70.00/66.00 x 2.00	54.00/50.00 x 2.00	29.00	
9615227021	61.41	9615317221	69.41	80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	100.00	
9615227022	55.97	9615317222	63.27	80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	89.00	
9615227023	44.77	9615317223	50.61	80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	78.00	
9615227024	35.83	9615317224	40.49	80/50	85.00/81.00 x 2.00	54.00/50.00 x 2.00	56.00	
9615227025	27.56	9615317225	31.15	80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	27.00	
9615227026	77.28	9615317226	87.35	100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	134.00	
9615227027	90.56	9615317227	102.36	100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	123.00	
9615227028	84.52	9615317228	95.55	100/40	104.00/100.00 x 2.00	42.00/38.00 x 2.00	112.00	
9615227029	67.61	9615317229	76.44	100/50	104.00/100.00 x 2.00	54.00/50.00 x 2.00	90.00	
9615227030	52.00	9615317230	58.80	100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	61.00	
9615227031	42.26	9615317231	47.77	100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	34.00	
9615227032	85.87	9615317232	97.06	125/25	129.00/125.00 x 2.00	29.00/26.00 x 1.50	179.00	
9615227033	138.93	9615317233	75.83	125/32	129.00/125.00 x 2.00	35.00/32.00 x 1.50	168.00	
9615227034	80.49	9615317234	91.00	125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	157.00	
9615227035	75.14	9615317235	84.92	125/50	129.00/125.00 x 2.00	54.00/50.00 x 2.00	135.00	
9615227036	57.79	9615317236	65.33	125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	106.00	
9615227037	46.96	9615317237	53.08	125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	79.00	
9615227038	37.56	9615317238	42.48	125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	45.00	

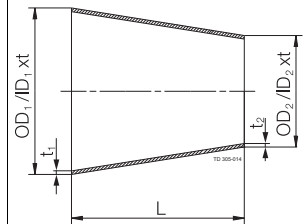


Product code: 5068

Item No	PPL Eur	item No	PPL Eur	Size DN	Dimension (mm)			RED RK HSF3 DIN 11852
1.4307 (304L)		1.4404 (316L)		mm	OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L	
9615227039	<b>190.70</b>	9615317239	<b>215.59</b>	150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	151.00	
9615227040	<b>154.96</b>	9615317240	<b>175.16</b>	150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	124.00	
9615227041	<b>123.96</b>	9615317241	<b>140.13</b>	150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	90.00	
9615227042	<b>99.17</b>	9615317242	<b>112.11</b>	150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	45.00	
9615227043	<b>220.03</b>	9615317243	<b>286.03</b>	200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	250.00	
9615227044	<b>217.24</b>	9615317244	<b>282.42</b>	200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	222.00	
9615227045	<b>213.52</b>	9615317245	<b>277.58</b>	200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	186.00	
9615227046	<b>208.88</b>	9615317246	<b>271.55</b>	200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	140.00	
9615227047	<b>204.25</b>	9615317247	<b>265.51</b>	200/150	204.00/200.00 x 2.00	154.00/150.00 x 2.00	93.00	

Product code: 5068

Item No	PPL Eur	item No	PPL Eur	Size DN	Dimension (mm)			RED RK
1.4307 (304L)		1.4404 (316L)		mm	OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L	HSF2 DIN 11852
9615226901	14.43	9615332601	16.30	15/10	19.00/16.00 x 1.50	13.00/10.00 x 1.50	11.00	
9615226902	20.14	9615332602	22.76	20/10	23.00/20.00 x 1.50	13.00/10.00 x 1.50	18.00	
9615226903	13.43	9615332603	15.18	20/15	23.00/20.00 x 1.50	19.00/16.00 x 1.50	7.00	
9615226904	26.30	9615332604	29.73	25/10	29.00/26.00 x 1.50	13.00/10.00 x 1.50	29.00	
9615226905	17.53	9615332605	19.82	25/15	29.00/26.00 x 1.50	19.00/16.00 x 1.50	18.00	
9615226906	13.14	9615332606	14.87	25/20	29.00/26.00 x 1.50	23.00/20.00 x 1.50	11.00	
9615226907	23.78	9615332607	26.88	32/15	35.00/32.00 x 1.50	19.00/16.00 x 1.50	29.00	
9615226908	17.85	9615332608	20.17	32/20	35.00/32.00 x 1.50	23.00/20.00 x 1.50	22.00	
9615226909	14.28	9615332609	16.13	32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	11.00	
9615226910	31.65	9615332610	35.78	40/15	41.00/38.00 x 1.50	19.00/16.00 x 1.50	40.00	
9615226911	23.74	9615332611	26.83	40/20	41.00/38.00 x 1.50	23.00/20.00 x 1.50	33.00	
9615226912	18.99	9615332612	21.47	40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	22.00	
9615226913	14.83	9615332613	16.78	40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	11.00	
9615226914	25.53	9615332614	28.88	50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	44.00	
9615226915	19.96	9615332615	22.56	50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	33.00	
9615226916	15.97	9615332616	18.05	50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	22.00	
9615226917	43.75	9615332617	49.47	65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	73.00	
9615226918	34.19	9615332618	38.64	65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	62.00	
9615226919	27.35	9615332619	30.91	65/40	70.00/66.00 x 2.00	42.00/38.00 x 2.00	51.00	
9615226920	21.89	9615332620	24.72	65/50	70.00/66.00 x 2.00	54.00/50.00 x 2.00	29.00	
9615226921	61.41	9615332621	69.41	80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	100.00	
9615226922	55.97	9615332622	63.27	80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	89.00	
9615226923	44.77	9615332623	50.61	80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	78.00	
9615226924	35.83	9615332624	40.49	80/50	85.00/81.00 x 2.00	54.00/50.00 x 2.00	56.00	
9615226925	27.56	9615332625	31.15	80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	27.00	
9615226926	77.28	9615332626	87.35	100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	134.00	
9615226927	90.56	9615332627	102.36	100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	123.00	
9615226928	84.52	9615332628	95.55	100/40	104.00/100.00 x 2.00	42.00/38.00 x 2.00	112.00	
9615226929	67.61	9615332629	76.44	100/50	104.00/100.00 x 2.00	54.00/50.00 x 2.00	90.00	
9615226930	52.00	9615332630	58.80	100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	61.00	
9615226931	42.26	9615332631	47.77	100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	34.00	
9615226932	85.87	9615332632	97.06	125/25	129.00/125.00 x 2.00	29.00/26.00 x 1.50	179.00	
9615226933	138.93	9615332633	75.83	125/32	129.00/125.00 x 2.00	35.00/32.00 x 1.50	168.00	
9615226934	80.49	9615332634	91.00	125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	157.00	
9615226935	75.14	9615332635	84.92	125/50	129.00/125.00 x 2.00	54.00/50.00 x 2.00	135.00	
9615226936	57.79	9615332636	65.33	125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	106.00	
9615226937	46.96	9615332637	53.08	125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	79.00	
9615226938	37.56	9615332638	42.48	125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	45.00	



Product code: 5068

Item No	PPL Eur	item No	PPL Eur	Size DN	Dimension (mm)			RED RK HSF2 DIN 11852
1.4307 (304L)		1.4404 (316L)		mm	OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L	
9615226939	<b>190.70</b>	9615332639	<b>215.59</b>	150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	151.00	
9615226940	<b>154.96</b>	9615332640	<b>175.16</b>	150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	124.00	
9615226941	<b>123.96</b>	9615332641	<b>140.13</b>	150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	90.00	
9615226942	<b>99.17</b>	9615332642	<b>112.11</b>	150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	45.00	
9615226943	<b>220.03</b>	9615332643	<b>286.03</b>	200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	250.00	
9615226944	<b>217.24</b>	9615332644	<b>282.42</b>	200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	222.00	
9615226945	<b>213.52</b>	9615332645	<b>277.58</b>	200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	186.00	
9615226946	<b>208.88</b>	9615332646	<b>271.55</b>	200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	140.00	
9615226947	<b>204.25</b>	9615332647	<b>265.51</b>	200/150	204.00/200.00 x 2.00	154.00/150.00 x 2.00	93.00	

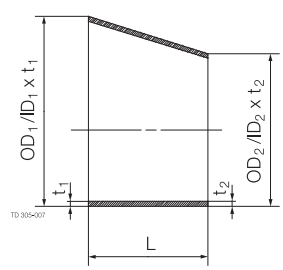
Product code: 5068

1.2

Item No	PPL Eur	item No	PPL Eur	Size DN	Dimension (mm)			RED RE HSF3 DIN 11852
					OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L	
1.4307 (304L)		1.4404 (316L)		mm				
9615234401	24.72	9615317501	27.19	15/10	19.00/16.00 x 1.50	13.00/10.00 x 1.50	16.50	
9615234402	25.67	9615317502	28.23	20/10	23.00/20.00 x 1.50	13.00/10.00 x 1.50	27.50	
9615234403	25.59	9615317503	28.13	20/15	23.00/20.00 x 1.50	19.00/16.00 x 1.50	11.00	
9615234404	26.68	9615317504	29.33	25/10	29.00/26.00 x 1.50	13.00/10.00 x 1.50	44.00	
9615234405	26.55	9615317505	29.21	25/15	29.00/26.00 x 1.50	19.00/16.00 x 1.50	27.50	
9615234406	26.44	9615317506	29.09	25/20	29.00/26.00 x 1.50	23.00/20.00 x 1.50	16.50	
9615234407	28.00	9615317507	30.80	32/15	35.00/32.00 x 1.50	19.00/16.00 x 1.50	44.00	
9615234408	27.84	9615317508	30.62	32/20	35.00/32.00 x 1.50	23.00/20.00 x 1.50	33.00	
9615234409	27.70	9615317509	30.47	32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	16.50	
9615234410	29.76	9615317510	32.72	40/15	41.00/38.00 x 1.50	19.00/16.00 x 1.50	60.40	
9615234411	29.56	9615317511	32.52	40/20	41.00/38.00 x 1.50	23.00/20.00 x 1.50	49.50	
9615234412	29.39	9615317512	32.32	40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	33.00	
9615234413	29.13	9615317513	32.04	40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	16.50	
9615234414	31.65	9615317514	34.82	50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	65.90	
9615234415	31.33	9615317515	34.47	50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	49.50	
9615234416	30.96	9615317516	34.05	50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	33.00	
9615234417	35.41	9615317517	38.95	65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	109.90	
9615234418	35.00	9615317518	38.50	65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	93.40	
9615234419	34.52	9615317519	37.97	65/40	70.00/66.00 x 2.00	42.00/38.00 x 2.00	76.90	
9615234420	33.92	9615317520	37.30	65/50	70.00/66.00 x 2.00	54.00/50.00 x 2.00	44.00	
9615234421	45.58	9615317521	50.14	80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	151.10	
9615234422	45.06	9615317522	49.56	80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	134.60	
9615234423	44.47	9615317523	48.91	80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	118.10	
9615234424	43.72	9615317524	48.10	80/50	85.00/81.00 x 2.00	54.00/50.00 x 2.00	85.20	
9615234425	42.61	9615317525	46.88	80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	41.20	
9615234426	69.63	9615317526	76.59	100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	203.30	
9615234427	68.98	9615317527	75.87	100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	186.80	
9615234428	68.24	9615317528	75.06	100/40	104.00/100.00 x 2.00	42.00/38.00 x 2.00	170.30	
9615234429	67.30	9615317529	74.04	100/50	104.00/100.00 x 2.00	54.00/50.00 x 2.00	137.40	
9615234430	65.91	9615317530	72.51	100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	93.40	
9615234431	64.52	9615317531	70.98	100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	52.20	
9615234432	100.72	9615317532	110.81	125/25	129.00/125.00 x 2.00	29.00/26.00 x 1.50	272.00	
9615234433	99.92	9615317533	109.90	125/32	129.00/125.00 x 2.00	35.00/32.00 x 1.50	255.50	
9615234434	98.99	9615317534	108.89	125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	239.00	
9615234435	97.83	9615317535	107.61	125/50	129.00/125.00 x 2.00	54.00/50.00 x 2.00	206.10	
9615234436	96.09	9615317536	105.70	125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	162.10	
9615234437	94.35	9615317537	103.78	125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	120.90	
9615234438	92.03	9615317538	101.23	125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	68.70	
9615234439	127.42	9615317539	140.16	150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	230.80	
9615234440	125.33	9615317540	137.87	150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	189.60	
9615234441	122.55	9615317541	134.80	150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	137.40	
9615234442	119.07	9615317542	130.97	150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	68.70	
9615234443	193.57	9615317543	212.92	200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	368.00	
9615234444	190.78	9615317544	209.86	200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	327.00	
9615234445	187.07	9615317545	205.77	200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	275.00	
9615234446	182.42	9615317546	200.66	200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	206.00	
9615234447	177.79	9615317547	195.56	200/150	204.00/200.00 x 2.00	154.00/150.00 x 2.00	137.00	



Item No	PPL Eur	item No	PPL Eur	Size DN	Dimension (mm)			RED RE
1.4307 (304L)		1.4404 (316L)		mm	OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L	HSF2 DIN 11852
9615227201	24.72	9615332801	27.19	15/10	19.00/16.00 x 1.50	13.00/10.00 x 1.50	16.50	
9615227202	25.67	9615332802	28.23	20/10	23.00/20.00 x 1.50	13.00/10.00 x 1.50	27.50	
9615227203	25.59	9615332803	28.13	20/15	23.00/20.00 x 1.50	19.00/16.00 x 1.50	11.00	
9615227204	26.68	9615332804	29.33	25/10	29.00/26.00 x 1.50	13.00/10.00 x 1.50	44.00	
9615227205	26.55	9615332805	29.21	25/15	29.00/26.00 x 1.50	19.00/16.00 x 1.50	27.50	
9615227206	26.44	9615332806	29.09	25/20	29.00/26.00 x 1.50	23.00/20.00 x 1.50	16.50	
9615227207	28.00	9615332807	30.80	32/15	35.00/32.00 x 1.50	19.00/16.00 x 1.50	44.00	
9615227208	27.84	9615332808	30.62	32/20	35.00/32.00 x 1.50	23.00/20.00 x 1.50	33.00	
9615227209	27.70	9615332809	30.47	32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	16.50	
9615227210	29.76	9615332810	32.72	40/15	41.00/38.00 x 1.50	19.00/16.00 x 1.50	60.40	
9615227211	29.56	9615332811	32.52	40/20	41.00/38.00 x 1.50	23.00/20.00 x 1.50	49.50	
9615227212	29.39	9615332812	32.32	40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	33.00	
9615227213	29.13	9615332813	32.04	40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	16.50	
9615227214	31.65	9615332814	34.82	50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	65.90	
9615227215	31.33	9615332815	34.47	50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	49.50	
9615227216	30.96	9615332816	34.05	50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	33.00	
9615227217	35.41	9615332817	38.95	65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	109.90	
9615227218	35.00	9615332818	38.50	65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	93.40	
9615227219	34.52	9615332819	37.97	65/40	70.00/66.00 x 2.00	42.00/38.00 x 2.00	76.90	
9615227220	33.92	9615332820	37.30	65/50	70.00/66.00 x 2.00	54.00/50.00 x 2.00	44.00	
9615227221	45.58	9615332821	50.14	80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	151.10	
9615227222	45.06	9615332822	49.56	80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	134.60	
9615227223	44.47	9615332823	48.91	80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	118.10	
9615227224	43.72	9615332824	48.10	80/50	85.00/81.00 x 2.00	54.00/50.00 x 2.00	85.20	
9615227225	42.61	9615332825	46.88	80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	41.20	
9615227226	69.63	9615332826	76.59	100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	203.30	
9615227227	68.98	9615332827	75.87	100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	186.80	
9615227228	68.24	9615332828	75.06	100/40	104.00/100.00 x 2.00	42.00/38.00 x 2.00	170.30	
9615227229	67.30	9615332829	74.04	100/50	104.00/100.00 x 2.00	54.00/50.00 x 2.00	137.40	
9615227230	65.91	9615332830	72.51	100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	93.40	
9615227231	64.52	9615332831	70.98	100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	52.20	
9615227232	100.72	9615332832	110.81	125/25	129.00/125.00 x 2.00	29.00/26.00 x 1.50	272.00	
9615227233	99.92	9615332833	109.90	125/32	129.00/125.00 x 2.00	35.00/32.00 x 1.50	255.50	
9615227234	98.99	9615332834	108.89	125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	239.00	
9615227235	97.83	9615332835	107.61	125/50	129.00/125.00 x 2.00	54.00/50.00 x 2.00	206.10	
9615227236	96.09	9615332836	105.70	125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	162.10	
9615227237	94.35	9615332837	103.78	125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	120.90	
9615227238	92.03	9615332838	101.23	125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	68.70	
9615227239	127.42	9615332839	140.16	150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	230.80	
9615227240	125.33	9615332840	137.87	150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	189.60	
9615227241	122.55	9615332841	134.80	150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	137.40	
9615227242	119.07	9615332842	130.97	150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	68.70	
9615227243	193.57	9615332843	212.92	200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	368.00	
9615227244	190.78	9615332844	209.86	200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	327.00	
9615227245	187.07	9615332845	205.77	200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	275.00	
9615227246	182.42	9615332846	200.66	200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	206.00	
9615227247	177.79	9615332847	195.56	200/150	204.00/200.00 x 2.00	154.00/150.00 x 2.00	137.00	



Product code: 5044

1.2

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				
					A	B	C	D	
<b>1.4301 (304)</b>		<b>1.4404 (316L)</b>		mm					<b>MALE C HSFO DIN 11851</b>
3131800391	<b>12.37</b>	9611306602	<b>16.09</b>	25		29.00	52 x 1/6	28.20	
3131800392	<b>13.95</b>	9611306612	<b>18.13</b>	32		32.00	58 x 1/6	34.20	
3131800393	<b>15.75</b>	9611306622	<b>20.47</b>	40		33.00	65 x 1/6	40.20	
3131800394	<b>17.99</b>	9611306632	<b>23.39</b>	50		35.00	78 x 1/6	52.20	
3131800395	<b>24.52</b>	9611306642	<b>31.88</b>	65		40.00	95 x 1/6	70.30	
3131800396	<b>32.62</b>	9611306652	<b>42.41</b>	80		45.00	110 x 1/4	85.30	
3131800398	<b>50.61</b>	9611306662	<b>65.80</b>	100		54.00	130 x 1/4	104.30	
3131800151	<b>10.74</b>	9611306672	<b>13.97</b>	25	44.00	22.00		28.20	
3131800152	<b>11.82</b>	9611306682	<b>15.37</b>	32	50.00	25.00		34.20	
3131800153	<b>13.06</b>	9611306692	<b>16.98</b>	40	56.00	26.00		40.20	
3131800154	<b>14.61</b>	9611306702	<b>18.99</b>	50	68.00	28.00		52.20	
3131800155	<b>21.57</b>	9611306712	<b>28.04</b>	65	86.00	32.00		70.30	
3131800156	<b>29.79</b>	9611306722	<b>38.73</b>	80	100.00	37.00		85.30	
3131800158	<b>41.60</b>	9611306732	<b>54.09</b>	100	121.00	44.00		104.30	

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	B	C	MALE SC HSF0 DIN 11851	
9611306100	7.39	9611306101	9.60	10	13.00/10.00 x 1.50	21.00	28 x 1/8		
9611306110	8.30	9611306111	10.79	15	19.00/16.00 x 1.50	21.00	34 x 1/8		
9611290081	9.22	9611290082	11.99	20	23.00/20.00 x 1.50	24.00	44 x 1/6		
9611301103	10.15	9611331103	13.18	25	29.00/26.00 x 1.50	29.00	52 x 1/6		
9611301104	11.44	9611331104	14.87	32	35.00/32.00 x 1.50	32.00	58 x 1/6		
9611301105	12.91	9611331105	16.79	40	41.00/38.00 x 1.50	33.00	65 x 1/6		
9611301106	14.76	9611331106	19.19	50	53.00/50.00 x 1.50	35.00	78 x 1/6		
9611301107	20.11	9611331107	26.15	65	70.00/66.00 x 2.00	40.00	95 x 1/6		
9611301108	26.75	9611331108	34.77	80	85.00/81.00 x 2.00	45.00	110 x 1/4		
9611301110	41.51	9611331110	53.95	100	104.00/100.00 x 2.00	54.00	130 x 1/4		
9611306130	69.17	9611306131	89.93	125	129.00/125.00 x 2.00	46.00	160 x 1/4		
9611306140	101.46	9611306141	131.88	150	154.00/150.00 x 2.00	50.00	190 x 1/4		
									LINER SD HSF0 DIN 11851
9611306150	6.91	9611306151	8.98	10	13.00/10.00 x 1.50	22.00	17.00		
9611306160	7.54	9611306161	9.81	15	19.00/16.00 x 1.50	28.00	17.00		
9611290091	8.18	9611290092	10.63	20	23.00/20.00 x 1.50	36.00	18.00		
9611301111	8.81	9611331111	11.45	25	29.00/26.00 x 1.50	44.00	22.00		
9611301112	9.69	9611331112	12.61	32	35.00/32.00 x 1.50	50.00	25.00		
9611301113	10.70	9611331113	13.93	40	41.00/38.00 x 1.50	56.00	26.00		
9611301114	11.98	9611331114	15.56	50	53.00/50.00 x 1.50	68.00	28.00		
9611301115	17.69	9611331115	22.99	65	70.00/66.00 x 2.00	86.00	32.00		
9611301116	24.43	9611331116	31.75	80	85.00/81.00 x 2.00	100.00	37.00		
9611301118	34.11	9611331118	44.35	100	104.00/100.00 x 2.00	121.00	44.00		
9611306180	85.99	9611306181	111.80	125	129.00/125.00 x 2.00	150.00	34.00		
9611306190	137.88	9611306191	179.23	150	154.00/150.00 x 2.00	176.00	37.00		

Product code: 5044

1.2

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	A	B	CONNECTION SK HSFO DIN 11851 NBR
9611305790	39.06	9611305791	45.19	10	13.00/10.00 x 1.50	38.00	25.00	
9611305800	42.68	9611305801	49.46	15	19.00/16.00 x 1.50	44.00	25.00	
9611290011	46.36	9611290012	53.80	20	23.00/20.00 x 1.50	54.00	25.00	
9611301119	50.00	9611331119	58.11	25	29.00/26.00 x 1.50	63.00	31.00	
9611301120	55.06	9611331120	64.10	32	35.00/32.00 x 1.50	70.00	31.00	
9611301121	60.86	9611331121	70.97	40	41.00/38.00 x 1.50	78.00	31.00	
9611301122	68.06	9611331122	79.52	50	53.00/50.00 x 1.50	92.00	33.00	
9611301123	97.79	9611331123	113.96	65	70.00/66.00 x 2.00	112.00	35.00	
9611301124	130.84	9611331124	152.76	80	85.00/81.00 x 2.00	127.00	35.00	
9611301126	194.53	9611331126	226.90	100	104.00/100.00 x 2.00	148.00	41.00	
						B	C	MALE SKG HSFO DIN 11851
9611305900	7.02	9611305901	9.14	10	13.00/10.00 x 1.50	17.00	28 x 1/8	
9611305910	7.91	9611305911	10.27	15	19.00/16.00 x 1.50	17.00	34 x 1/8	
9611290031	8.79	9611290032	11.42	20	23.00/20.00 x 1.50	19.00	44 x 1/6	
9611301087	9.66	9611331087	12.57	25	29.00/26.00 x 1.50	22.00	52 x 1/6	
9611301088	10.90	9611331088	14.16	32	35.00/32.00 x 1.50	22.00	58 x 1/6	
9611301089	12.30	9611331089	15.99	40	41.00/38.00 x 1.50	22.00	65 x 1/6	
9611301090	14.05	9611331090	18.27	50	53.00/50.00 x 1.50	23.00	78 x 1/6	
9611301091	19.16	9611331091	24.90	65	70.00/66.00 x 2.00	25.00	95 x 1/6	
9611301092	25.47	9611331092	33.11	80	85.00/81.00 x 2.00	25.00	110 x 1/4	
9611301094	39.53	9611331094	51.39	100	104.00/100.00 x 2.00	30.00	130 x 1/4	
9611305930	65.88	9611305931	85.64	125	129.00/125.00 x 2.00	35.50	160 x 1/4	
9611305940	96.62	9611305941	125.61	150	154.00/150.00 x 2.00	40.00	190 x 1/4	
						A	B	LINER SKD HSFO DIN 11851
9611305950	6.58	9611305951	8.55	10	13.00/10.00 x 1.50	22.00	13.00	
9611305960	7.18	9611305961	9.33	15	19.00/16.00 x 1.50	28.00	13.00	
9611290041	7.79	9611290042	10.12	20	23.00/20.00 x 1.50	36.00	13.00	
9611301095	8.38	9611331095	10.91	25	29.00/26.00 x 1.50	44.00	15.00	
9611301096	9.23	9611331096	12.00	32	35.00/32.00 x 1.50	50.00	15.00	
9611301097	10.20	9611331097	13.27	40	41.00/38.00 x 1.50	56.00	15.00	
9611301098	11.41	9611331098	14.83	50	53.00/50.00 x 1.50	68.00	16.00	
9611301099	16.84	9611331099	21.90	65	70.00/66.00 x 2.00	86.00	17.00	
9611301100	23.27	9611331100	30.25	80	85.00/81.00 x 2.00	100.00	17.00	
9611301102	32.49	9611331102	42.24	100	104.00/100.00 x 2.00	121.00	20.00	
9611305970	81.90	9611305971	106.47	125	129.00/125.00 x 2.00	150.00	23.50	
9611305980	131.30	9611305981	170.70	150	154.00/150.00 x 2.00	176.00	27.00	

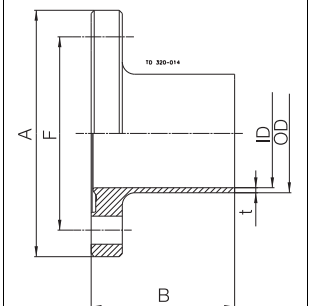
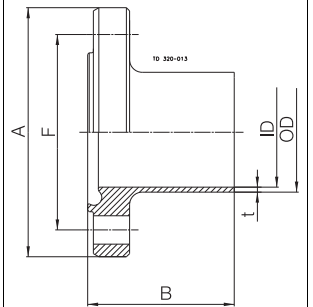
Product code: 5057

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)			
					OD/ID x t	B	C	
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		mm				<b>MALE GS H3 DIN 11853-1</b>
8010000569	<b>13.48</b>	9615362901	<b>16.44</b>	10	13.00/10.00 x 1.50	19.00	28 x 1/8	
8010000571	<b>15.16</b>	9615362902	<b>18.49</b>	15	19.00/16.00 x 1.50	19.00	34 x 1/8	
8010000572	<b>16.85</b>	9615362903	<b>20.55</b>	20	23.00/20.00 x 1.50	21.00	44 x 1/6	
8010000573	<b>18.53</b>	9612928834	<b>22.60</b>	25	29.00/26.00 x 1.50	26.00	52 x 1/6	
8010000574	<b>20.90</b>	9612928835	<b>25.48</b>	32	35.00/32.00 x 1.50	30.00	58 x 1/6	
8010000575	<b>23.60</b>	9612928836	<b>28.78</b>	40	41.00/38.00 x 1.50	31.00	65 x 1/6	
8010000576	<b>26.97</b>	9612928837	<b>32.89</b>	50	53.00/50.00 x 1.50	31.00	78 x 1/6	
8010000577	<b>36.74</b>	9612928838	<b>44.81</b>	65	70.00/66.00 x 2.00	36.00	95 x 1/6	
8010000578	<b>48.88</b>	9612928839	<b>59.62</b>	80	85.00/81.00 x 2.00	42.00	110 x 1/4	
8010000579	<b>75.85</b>	9612928840	<b>92.49</b>	100	104.00/100.00 x 2.00	50.00	130 x 1/4	
						<b>A</b>	<b>B</b>	<b>LINER BS H3 DIN 11853-1</b>
8010000580	<b>11.78</b>	9615363101	<b>14.37</b>	10	13.00/10.00 x 1.50	21.90	17.00	
8010000581	<b>12.86</b>	9615363102	<b>15.69</b>	15	19.00/16.00 x 1.50	27.90	17.00	
8010000582	<b>13.95</b>	9615363103	<b>17.01</b>	20	23.00/20.00 x 1.50	35.90	18.00	
8010000583	<b>15.03</b>	9612928844	<b>18.32</b>	25	29.00/26.00 x 1.50	42.90	22.00	
8010000585	<b>16.54</b>	9612928845	<b>20.17</b>	32	35.00/32.00 x 1.50	48.90	25.00	
8010000586	<b>18.27</b>	9612928846	<b>22.28</b>	40	41.00/38.00 x 1.50	54.90	26.00	
8010000587	<b>20.44</b>	9612928847	<b>24.92</b>	50	53.00/50.00 x 1.50	66.90	30.00	
8010000589	<b>30.16</b>	9612928848	<b>36.78</b>	65	70.00/66.00 x 2.00	84.90	34.00	
8010000590	<b>41.67</b>	9612928849	<b>50.82</b>	80	85.00/81.00 x 2.00	98.90	38.00	
8010000591	<b>58.18</b>	9612928850	<b>70.96</b>	100	104.00/100.00 x 2.00	118.90	46.00	

Product code: 5057

1.2

Item No	PPL EUR	Item No	PPL EUR	Size DN	Dimension (mm)			FLANGE GROOVE NF H3 DIN 11853-2
					OD/ID x t	A	B	
1.4307 (304L)		1.4404 (316L)		mm				
8010000383	28.88	8010000506	36.11	10	13.00/10.00 x 1.50	54.00	25.50	37.00
8010000384	33.61	8010000507	40.99	15	19.00/16.00 x 1.50	59.00	25.50	42.00
8010000385	37.61	8010000508	45.87	20	23.00/20.00 x 1.50	64.00	25.50	47.00
8010000386	41.61	8010000509	50.75	25	29.00/26.00 x 1.50	70.00	25.50	53.00
8010000388	47.22	8010000510	57.58	32	35.00/32.00 x 1.50	76.00	25.50	59.00
8010000390	53.62	8010000511	65.39	40	41.00/38.00 x 1.50	82.00	25.50	65.00
8010000391	61.62	8010000512	75.15	50	53.00/50.00 x 1.50	94.00	25.50	77.00
8010000392	75.63	8010000513	92.24	65	70.00/66.00 x 2.00	113.00	25.50	95.00
8010000394	93.64	8010000514	114.20	80	85.00/81.00 x 2.00	133.00	27.50	112.00
8010000395	180.06	8010000515	219.59	100	104.00/100.00 x 2.00	159.00	27.50	137.00
8010000396	228.08	8010000516	278.15	125	129.00/125.00 x 2.00	183.00	29.50	161.00
8010000397	324.12	8010000517	395.26	150	154.00/150.00 x 2.00	213.00	29.50	188.00
								FLANGE GROOVE NF H3 DIN 11853-2
								FLANGE COLLAR BF H3 DIN 11853-2
8010000398	29.61	8010000518	36.11	10	13.00/10.00 x 1.50	54.00	24.00	37.00
8010000399	33.61	8010000519	40.99	15	19.00/16.00 x 1.50	59.00	24.00	42.00
8010000400	37.61	8010000520	45.87	20	23.00/20.00 x 1.50	64.00	24.00	47.00
8010000401	41.61	8010000521	50.75	25	29.00/26.00 x 1.50	70.00	24.00	53.00
8010000402	47.22	8010000522	57.58	32	35.00/32.00 x 1.50	76.00	24.00	59.00
8010000403	53.62	8010000523	65.39	40	41.00/38.00 x 1.50	82.00	24.00	65.00
8010000404	61.62	8010000524	75.15	50	53.00/50.00 x 1.50	94.00	24.00	77.00
8010000405	75.63	8010000525	92.24	65	70.00/66.00 x 2.00	113.00	24.00	95.00
8010000406	93.64	8010000526	114.20	80	85.00/81.00 x 2.00	133.00	26.00	112.00
8010000408	180.06	8010000527	219.59	100	104.00/100.00 x 2.00	159.00	26.00	137.00
8010000409	228.08	8010000528	278.15	125	129.00/125.00 x 2.00	183.00	28.00	161.00
8010000410	324.12	8010000529	395.26	150	154.00/150.00 x 2.00	213.00	28.00	188.00



11853-3 NKS and BKS in 1.4404 and H3, not available, please use 11864-3

Product code: 5060

1.2

Material Item No.	PPL EUR	Size DN	Dimension (mm)			
1.4404 (316L)		mm	OD/ID x t	A	B	MALE GS H3 DIN 11864-1
9613403901	19.55	10	13.00/10.00 x 1.50	28 x 1/8	41.00	
9613403902	21.99	15	19.00/16.00 x 1.50	34 x 1/8	41.00	
9613403903	24.44	20	23.00/20.00 x 1.50	44 x 1/6	43.00	
9613403904	26.88	25	29.00/26.00 x 1.50	52 x 1/6	43.00	
9613403905	30.30	32	35.00/32.00 x 1.50	58 x 1/6	48.00	
9613403906	34.22	40	41.00/38.00 x 1.50	65 x 1/6	48.00	
9613403907	39.10	50	53.00/50.00 x 1.50	78 x 1/6	48.00	
9613403908	53.28	65	70.00/66.00 x 2.00	95 x 1/6	60.00	
9613403909	70.87	80	85.00/81.00 x 2.00	110 x 1/4	64.00	
9613403910	109.97	100	104.00/100.00 x 2.00	130 x 1/4	64.00	
						LINER BS H3 DIN 11864-1
9613403911	15.40	10	13.00/10.00 x 1.50		39.00	
9613403912	16.81	15	19.00/16.00 x 1.50		39.00	
9613403913	18.23	20	23.00/20.00 x 1.50		38.00	
9613403914	19.64	25	29.00/26.00 x 1.50		40.00	
9613403915	21.62	32	35.00/32.00 x 1.50		47.00	
9613403916	23.89	40	41.00/38.00 x 1.50		47.00	
9613403917	26.71	50	53.00/50.00 x 1.50		48.00	
9613403918	39.44	65	70.00/66.00 x 2.00		61.00	
9613403919	54.47	80	85.00/81.00 x 2.00		61.00	
9613403920	76.07	100	104.00/100.00 x 2.00		66.00	



Item No	PPL EUR	Size DN	Dimension (mm)				FLANGE GROOVE NF H3 DIN 11864-2	
			OD/ID x t	A	B	F		
<b>1.4404 (316L)</b>		<b>mm</b>						
9613403921	<b>38.01</b>	10	13.00/10.00 x 1.50	54.00	41.50	37.00		
9613403922	<b>43.15</b>	15	19.00/16.00 x 1.50	59.00	41.50	42.00		
9613403923	<b>48.28</b>	20	23.00/20.00 x 1.50	64.00	41.50	47.00		
9613403924	<b>53.42</b>	25	29.00/26.00 x 1.50	70.00	41.50	53.00		
9613403925	<b>60.61</b>	32	35.00/32.00 x 1.50	76.00	46.50	59.00		
9613403926	<b>68.83</b>	40	41.00/38.00 x 1.50	82.00	46.50	65.00		
9613403927	<b>79.10</b>	50	53.00/50.00 x 1.50	94.00	46.50	77.00		
9613403928	<b>97.09</b>	65	70.00/66.00 x 2.00	113.00	55.50	95.00		
9613403929	<b>120.20</b>	80	85.00/81.00 x 2.00	133.00	59.50	112.00		
9613403930	<b>231.14</b>	100	104.00/100.00 x 2.00	159.00	59.50	137.00		
9615331113	<b>292.79</b>	125	129.00/125.00 x 2.00	183.00	61.50	161.00		
9615331114	<b>416.07</b>	150	154.00/150.00 x 2.00	213.00	61.50	188.00		
								<b>FLANGE COLLAR BF H3 DIN 11864-2</b>
9613403931	<b>38.01</b>	10	13.00/10.00 x 1.50	54.00	40.00	37.00		
9613403932	<b>43.15</b>	15	19.00/16.00 x 1.50	59.00	40.00	42.00		
9613403933	<b>48.28</b>	20	23.00/20.00 x 1.50	64.00	40.00	47.00		
9613403934	<b>53.42</b>	25	29.00/26.00 x 1.50	70.00	40.00	53.00		
9613403935	<b>60.61</b>	32	35.00/32.00 x 1.50	76.00	45.00	59.00		
9613403936	<b>68.83</b>	40	41.00/38.00 x 1.50	82.00	45.00	65.00		
9613403937	<b>79.10</b>	50	53.00/50.00 x 1.50	94.00	45.00	77.00		
9613403938	<b>97.09</b>	65	70.00/66.00 x 2.00	113.00	54.00	95.00		
9613403939	<b>120.20</b>	80	85.00/81.00 x 2.00	133.00	58.00	112.00		
9613403940	<b>231.14</b>	100	104.00/100.00 x 2.00	159.00	58.00	137.00		
9615331013	<b>292.79</b>	125	129.00/125.00 x 2.00	183.00	60.00	161.00		
9615331014	<b>416.07</b>	150	154.00/150.00 x 2.00	213.00	60.00	188.00		

Product code: 5060

Item No.	PPL EUR	Size DN	Dimension (mm)			CLAMP LINER GROOVE NKS H3 DIN 11864-3
			OD/ID x t	A	B	
<b>1.4404 (316L)</b>		<b>mm</b>				
9613403941	<b>50.39</b>	10	13.00/10.00 x 1.50	34.00	39.50	
9613403942	<b>51.57</b>	15	19.00/16.00 x 1.50	34.00	39.50	
9613403943	<b>52.76</b>	20	23.00/20.00 x 1.50	50.50	39.50	
9613403944	<b>53.93</b>	25	29.00/26.00 x 1.50	50.50	40.00	
9613403945	<b>55.59</b>	32	35.00/32.00 x 1.50	50.50	45.50	
9613403946	<b>57.48</b>	40	41.00/38.00 x 1.50	64.00	45.50	
9613403947	<b>59.84</b>	50	53.00/50.00 x 1.50	77.50	46.00	
9613403948	<b>91.11</b>	65	70.00/66.00 x 2.00	91.00	58.00	
9613403949	<b>133.22</b>	80	85.00/81.00 x 2.00	106.00	60.00	
9613403950	<b>195.29</b>	100	104.00/100.00 x 2.00	130.00	61.50	
						<b>CLAMP LINER COLLAR BKS H3 DIN 11864-3</b>
9613403951	<b>50.39</b>	10	13.00/10.00 x 1.50	34.00	38.00	
9613403952	<b>51.57</b>	15	19.00/16.00 x 1.50	34.00	38.00	
9613403953	<b>52.76</b>	20	23.00/20.00 x 1.50	50.50	38.00	
9613403954	<b>53.93</b>	25	29.00/26.00 x 1.50	50.50	38.50	
9613403955	<b>55.59</b>	32	35.00/32.00 x 1.50	50.50	44.00	
9613403956	<b>57.48</b>	40	41.00/38.00 x 1.50	64.00	44.00	
9613403957	<b>59.84</b>	50	53.00/50.00 x 1.50	77.50	44.50	
9613403958	<b>91.11</b>	65	70.00/66.00 x 2.00	91.00	56.50	
9613403959	<b>133.22</b>	80	85.00/81.00 x 2.00	106.00	58.50	
9613403960	<b>195.29</b>	100	104.00/100.00 x 2.00	130.00	60.00	

Recommended clamp ring for DIN 11864-3 LINER

LINER DN	Item no. Clamp ring
10	9611993113
15	9611993113
20	211053
25	211053
32	211053
40	211054
50	211055
65	211056
80	9611993114
100	9611994192

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			FERRULE KK HSF0 DIN 32676
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	A	B	
9612156101	12.91	9612156121	16.79	10	13.00/10.00 x 1.50	34.00	18.00	
9612156102	13.21	9612156122	17.18	15	19.00/16.00 x 1.50	34.00	18.00	
9612156103	13.53	9612156123	17.58	20	23.00/20.00 x 1.50	34.00	18.00	
9612156104	13.82	9612156124	17.97	25	29.00/26.00 x 1.50	50.50	21.50	
9612156105	14.24	9612156125	18.52	32	35.00/32.00 x 1.50	50.50	21.50	
9612156106	14.74	9612156126	19.17	40	41.00/38.00 x 1.50	50.50	21.50	
9612156107	15.34	9612156127	19.93	50	53.00/50.00 x 1.50	64.00	21.50	
9612156108	23.35	9612156128	30.35	65	70.00/66.00 x 2.00	91.00	28.00	
9612156109	34.17	9612156129	44.40	80	85.00/81.00 x 2.00	106.00	28.00	
9612156110	50.07	9612156130	65.08	100	104.00/100.00 x 2.00	119.00	28.00	
9612156141	142.05	9612156145	184.67	125	129.00/125.00 x 2.00	155.00	28.00	
9612156142	161.00	9612156146	209.30	150	154.00/150.00 x 2.00	183.00	28.00	

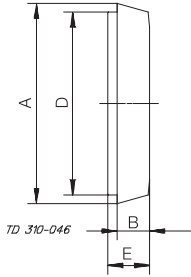
Item No.	PPL EUR	Size DN	Dimension (mm)				FERRULE KL HSF0 DIN 32676
1.4404 (316L)		mm	OD/ID x t	A	B	L	
9613444001	21.37	10	13.00/10.00 x 1.50	34.00	28.60	23.00	
9613444002	21.87	15	19.00/16.00 x 1.50	34.00	28.60	24.00	
9613444003	22.37	20	23.00/20.00 x 1.50	34.00	28.60	25.00	
9613444004	22.88	25	29.00/26.00 x 1.50	50.50	36.00	30.00	
9613444005	23.58	32	35.00/32.00 x 1.50	50.50	36.00	32.00	
9613444006	24.38	40	41.00/38.00 x 1.50	50.50	36.00	33.00	
9613444007	25.38	50	53.00/50.00 x 1.50	64.00	36.00	33.00	
9613444008	38.64	65	70.00/66.00 x 2.00	91.00	48.00	42.00	
9613444009	56.50	80	85.00/81.00 x 2.00	106.00	48.00	42.00	
9613444010	82.82	100	104.00/100.00 x 2.00	119.00	48.00	44.00	

Recommended clamp ring for DIN 32676 FERRULE

FERRULE DN	Item no. Clamp ring
10	9611993113
15	9611993113
20	9611993113
25	211053
32	211053
40	211053
50	211054
65	211056
80	9611993114
100	211057
125	9611993203
150	9611993204

Product code: 5044

1.2

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				
1.4307 (304L)		1.4404 (316L)		mm	A	B	D	E	BLIND BD HSFO DIN 11851
9611306470	<b>12.40</b>	9612152413	<b>18.89</b>	10	22.50	6.00	18.00	9.00	
9611306480	<b>13.05</b>	9612152414	<b>19.85</b>	15	28.50	6.00	24.00	9.00	
9611291111	<b>13.68</b>	9612152415	<b>20.82</b>	20	36.50	8.00	30.00	11.00	
3131800351	<b>14.32</b>	9612152416	<b>21.79</b>	25	44.00	10.00	35.00	13.00	
3131800352	<b>15.21</b>	9612152417	<b>23.14</b>	32	50.00	10.00	41.00	13.00	
3131800353	<b>16.23</b>	9612152418	<b>24.69</b>	40	56.00	10.00	48.00	13.00	
3131800354	<b>17.50</b>	9612152419	<b>26.64</b>	50	68.50	11.00	61.00	14.00	
3131800355	<b>21.96</b>	9612152420	<b>33.41</b>	65	86.00	12.00	79.00	16.00	
3131800356	<b>31.93</b>	9612152422	<b>48.59</b>	80	100.00	12.00	93.00	16.00	
3131800358	<b>52.51</b>	9612152423	<b>79.90</b>	100	121.00	15.00	114.00	20.00	
9611306500	<b>163.87</b>	9612152424	<b>249.04</b>	125	150.00	17.00	137.00	22.00	
9611306510	<b>321.06</b>	9612152425	<b>487.93</b>	150	176.00	18.00	163.00	24.00	

Material Item No.	PPL EUR	Size DN	Dimension (mm)							
			A	B	C	D	E	F		
<b>1.4404 (316L)</b>		mm								<b>BLIND BGS</b> H3 DIN 11864-1/11853-1
9615330601	<b>31.44</b>	10	22.00	12.00	28 x 1/8	4.00	24.00	13.00		
9615330602	<b>33.04</b>	15	28.00	12.00	34 x 1/8	4.00	24.00	19.00		
9615330603	<b>34.66</b>	20	36.00	14.00	44 x 1/6	5.00	24.00	23.00		
9615330604	<b>36.27</b>	25	43.00	14.00	52 x 1/6	6.00	24.00	29.00		
9615330605	<b>38.52</b>	32	49.00	14.00	58 x 1/6	7.00	24.00	35.00		
9615330606	<b>41.11</b>	40	55.00	14.00	65 x 1/6	7.00	24.00	41.00		
9615330607	<b>44.33</b>	50	67.00	14.00	78 x 1/6	7.00	24.00	53.00		
9615330608	<b>55.61</b>	65	85.00	16.00	95 x 1/6	8.00	28.00	70.00		
9615330609	<b>80.87</b>	80	99.00	20.00	110 x 1/4	8.00	28.00	85.00		
9615330610	<b>132.98</b>	100	119.00	20.00	130 x 1/4	10.00	30.00	104.00		
									<b>BLIND BBS</b> H3 DIN 11864-1/11853-1	
9615330701	<b>20.74</b>	10	21.90	18.00	9.00	3.00				
9615330702	<b>21.81</b>	15	27.90	24.00	9.00	3.00				
9615330703	<b>22.88</b>	20	35.90	30.00	10.00	3.00				
9615330704	<b>23.94</b>	25	42.90	35.00	12.00	3.00				
9615330705	<b>25.43</b>	32	48.90	41.00	13.00	3.00				
9615330706	<b>27.13</b>	40	54.90	48.00	13.00	3.00				
9615330707	<b>29.25</b>	50	66.90	61.00	14.00	3.00				
9615330708	<b>36.70</b>	65	84.90	79.00	16.00	4.00				
9615330709	<b>53.37</b>	80	98.90	93.00	16.00	4.00				
9615330710	<b>87.77</b>	100	118.90	114.00	20.00	5.00				

Product code: 5060

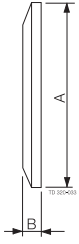
1.2

Material Item No.	PPL EUR	Size DN	Dimen- sion (mm)								
1.4404 (316L)		mm	A	B	C	D	E	BLIND BBF H3 DIN 11864-2/11853-2			
9615331203	32.90	10	54.00	37.00	22.40	10.00	4.00 x 9.00				
9615331204	34.59	15	59.00	42.00	28.40	10.00	4.00 x 9.00				
9615331205	36.28	20	64.00	47.00	32.40	10.00	4.00 x 9.00				
9615331206	37.97	25	70.00	53.00	38.40	10.00	4.00 x 9.00				
9615331207	40.32	32	76.00	59.00	47.70	10.00	4.00 x 9.00				
9615331208	43.02	40	82.00	65.00	53.70	10.00	4.00 x 9.00				
9615331209	46.40	50	94.00	77.00	65.70	10.00	4.00 x 9.00				
9615331210	58.21	65	113.00	95.00	81.70	10.00	8.00 x 9.00				
9615331211	84.64	80	133.00	112.00	97.70	12.00	8.00 x 11.00				
9615331212	139.19	100	159.00	137.00	116.70	14.00	8.00 x 11.00				
9615331213	434.44	125	183.00	161.00	141.70	14.00	8.00 x 11.00				
9615331214	851.17	150	213.00	188.00	167.70	16.00	8.00 x 14.00				
										BLIND BNF H3 DIN 11864-2/11853-2	
9615331303	35.63	10	54.00	37.00	22.30	11.50	4.00 x 9.00				
9615331304	37.45	15	59.00	42.00	28.30	11.50	4.00 x 9.00				
9615331305	39.27	20	64.00	47.00	32.30	11.50	4.00 x 9.00				
9615331306	41.11	25	70.00	53.00	38.30	11.50	4.00 x 9.00				
9615331307	43.66	32	76.00	59.00	47.60	11.50	4.00 x 9.00				
9615331308	46.59	40	82.00	65.00	53.60	11.50	4.00 x 9.00				
9615331309	50.24	50	94.00	77.00	65.60	11.50	4.00 x 9.00				
9615331310	63.03	65	113.00	95.00	81.60	11.50	8.00 x 9.00				
9615331311	91.65	80	133.00	112.00	97.60	13.50	8.00 x 11.00				
9615331312	150.72	100	159.00	137.00	116.60	15.50	8.00 x 11.00				
9615331313	470.42	125	183.00	161.00	141.60	15.50	8.00 x 11.00				
9615331314	921.65	150	213.00	188.00	167.60	17.50	8.00 x 14.00				

Material Item No.	PPL EUR	Size DN	Dimension (mm)				
1.4404 (316L)		mm	A	B	C	D	BLIND BBKS H3 DIN 11864-3/11853-3
9615331601	25.14	10	34.00	22.40	11.50	25.00	
9615331602	26.44	15	34.00	28.40	11.50	25.00	
9615331603	27.73	20	50.50	32.40	11.50	42.00	
9615331604	29.02	25	50.50	38.40	11.50	42.00	
9615331605	30.82	32	50.50	47.70	11.50	42.00	
9615331606	32.89	40	64.00	53.70	11.50	54.00	
9615331607	35.46	50	77.50	65.70	13.50	62.00	
9615331608	44.49	65	91.00	81.70	13.50	78.00	
9615331609	64.69	80	106.00	97.70	13.50	93.00	
9615331610	106.39	100	130.00	116.70	13.50	115.00	
							BLIND BNKS H3 DIN 11864-3/11853-3
9615331701	25.14	10	34.00	22.40	13.00	25.00	
9615331702	26.44	15	34.00	28.40	13.00	25.00	
9615331703	27.73	20	50.50	32.40	13.00	42.00	
9615331704	29.02	25	50.50	38.40	13.00	42.00	
9615331705	30.82	32	50.50	47.70	13.00	42.00	
9615331706	32.89	40	64.00	53.70	13.00	54.00	
9615331707	35.46	50	77.50	65.70	15.00	62.00	
9615331708	44.49	65	91.00	81.70	15.00	78.00	
9615331709	64.69	80	106.00	97.70	15.00	93.00	
9615331710	106.39	100	130.00	116.70	15.00	115.00	

Product code: 5054

1.2

Material Item No.	PPL EUR	Size DN	Dimension (mm)		BLIND B H3 DIN 32676
			A	B	
1.4404 (316L)		mm			
9612935302	19.06	10-20	34.00	6.00	
9612935303	21.98	25-40	50.50	6.00	
9612935304	26.86	50	64.00	6.00	
9612935305	33.70	65	91.00	7.00	
9612935306	49.01	80	106.00	8.00	
9612935307	80.60	100	119.00	8.00	
9612935308	251.56	125	155.00	12.00	
9612935301	492.87	150	183.00	12.00	



Product code: 5044

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)				NUT F HSFO DIN 11851
					A	B	C	D	
<b>1.4301 (304)</b>		<b>1.4404 (316L)</b>		mm					
9611306420	<b>10.82</b>	9612150701	<b>21.08</b>	10	38.00	18.00	28 x 1/8	19.00	
9611306430	<b>11.68</b>	9612150702	<b>22.74</b>	15	44.00	18.00	34 x 1/8	25.00	
9611290021	<b>12.54</b>	9612150703	<b>24.41</b>	20	54.00	20.00	44 x 1/6	31.00	
3131800141	<b>13.39</b>	9612150704	<b>26.08</b>	25	63.00	21.00	52 x 1/6	36.00	
3131800142	<b>14.58</b>	9612150705	<b>28.41</b>	32	70.00	21.00	58 x 1/6	42.00	
3131800143	<b>15.97</b>	9612150706	<b>31.08</b>	40	78.00	21.00	65 x 1/6	49.00	
3131800144	<b>17.67</b>	9612150707	<b>34.42</b>	50	92.00	22.00	78 x 1/6	62.00	
3131800145	<b>26.68</b>	9612150708	<b>51.94</b>	65	112.00	25.00	95 x 1/6	80.00	
3131800146	<b>35.67</b>	9612150710	<b>69.47</b>	80	127.00	29.00	110 x 1/4	94.00	
3131800148	<b>54.31</b>	9612150711	<b>105.78</b>	100	148.00	31.00	130 x 1/4	115.00	
9611306450	<b>102.52</b>	9612150712	<b>199.67</b>	125	178.00	34.00	160 x 1/4	138.00	
9611306460	<b>150.72</b>	9612150713	<b>293.55</b>	150	210.00	40.00	190 x 1/4	164.00	

Product code: 5063

1.2

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)				
NBR		FPM		mm	A	B	D	GASKET G DIN 11851	
52734601	1.38	9611991861	4.13	10	20.00	4.50	12.00		
52734602	1.44	9611991862	4.40	15	26.00	4.50	18.00		
52734603	1.52	9611991863	4.50	20	33.00	4.50	23.00		
52734604	1.60	9611991864	4.62	25	40.00	5.00	30.00		
52734605	1.67	9611991865	4.77	32	46.00	5.00	36.00		
52734606	1.77	9611991866	5.52	40	52.00	5.00	42.00		
52734607	1.85	9611991867	5.82	50	64.00	5.00	54.00		
52734608	1.94	9611991868	10.86	65	81.00	5.00	71.00		
9611991264	4.18	9611991869	34.79	75	88.00	5.00	78.00		
52734609	2.04	9611991128	10.38	80	95.00	5.00	85.00		
52734611	2.15	9611991870	17.23	100	114.00	6.00	104.00		
9611991265	4.92	9611991871	29.99	125	142.00	7.00	130.00		
9611991266	6.46	9611991872	34.79	150	167.00	7.00	155.00		
EPDM		Silicone (Q)							GASKET G DIN 11851
9611991267	2.16	9611991917	1.14	10	20.00	4.50	12.00		
9611991268	2.19	9611991918	1.30	15	26.00	4.50	18.00		
9611991323	2.24	9611991919	1.35	20	33.00	4.50	23.00		
9611991269	2.30	9611991920	1.43	25	40.00	5.00	30.00		
9611991270	2.32	9611991921	1.59	32	46.00	5.00	36.00		
9611991271	2.35	9611991922	1.77	40	52.00	5.00	42.00		
9611991272	2.37	9611991923	2.53	50	64.00	5.00	54.00		
9611991273	2.77	9611991924	2.93	65	81.00	5.00	71.00		
9611991274	2.86	9611991925	4.54	75	88.00	5.00	78.00		
9611991275	3.75	9611991926	4.77	80	95.00	5.00	85.00		
9611991276	4.79	9611991927	4.97	100	114.00	6.00	104.00		
9611991277	9.47	9611991928	14.84	125	142.00	7.00	130.00		
9611991278	9.59	9611991929	18.72	150	167.00	7.00	155.00		
PTFE								GASKET G DIN 11851	
9611991873	3.49			10	20.00	4.50	12.00		
9611991874	3.65			15	26.00	4.50	18.00		
9611991875	4.77			20	33.00	4.50	23.00		
9611991876	5.17			25	40.00	5.00	30.00		
9611991877	5.41			32	46.00	5.00	36.00		
9611991878	6.25			40	52.00	5.00	42.00		
9611991879	6.82			50	64.00	5.00	54.00		
9611991880	12.17			65	81.00	5.00	71.00		
9611991881	27.73			75	88.00	5.00	78.00		
9611991882	29.30			80	95.00	5.00	85.00		
9611991883	31.32			100	114.00	6.00	104.00		
9611991884	33.73			125	142.00	7.00	130.00		
9611991885	29.99			150	167.00	7.00	155.00		

Product code: 5035

Item No.	PPL EUR	Item No.	PPL EUR			Size DN	Dimension (mm)		
EPDM		FPM				mm	B	D	O-RING R DIN 11864/11853
9612906201	19.69	9612906211	21.59			10	3.50	12.00	
9612906202	20.56	9612906212	21.72			15	3.50	18.00	
9612906203	22.11	9612906213	38.39			20	3.50	22.00	
9612906204	18.23	9612906214	26.81			25	3.50	28.00	
9612906205	16.76	9612906215	31.06			32	5.00	34.00	
9612906206	16.93	9612906216	31.25			40	5.00	40.00	
9612906207	17.48	9612906217	32.55			50	5.00	52.00	
9612906208	19.30	9612906218	34.53			65	5.00	68.00	
9612906209	27.15	9612906219	41.60			80	5.00	83.00	
9612906210	31.77	9612906220	53.11			100	5.00	102.00	
9612906221	83.89	9612906223	216.85			125	5.00	127.00	
9612906222	104.90	9612906224	318.94			150	5.00	152.00	

Product code: 5035

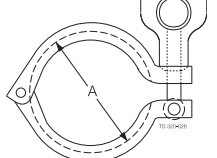
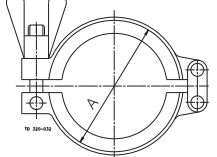
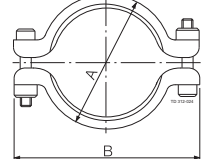
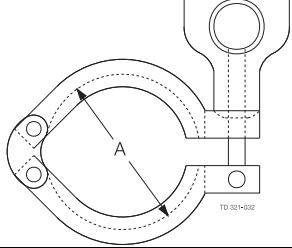
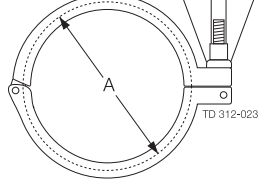
1.2

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)			GASKET D DIN 32676
EPDM		PTFE		mm	A	B	D	
9613470001	9.72	9612991586	38.39	10	36.20	5.50	10.20	
9613470002	9.74	9612991587	49.97	15	36.20	5.50	16.20	
9613470003	13.36	9612991588	51.59	20	36.20	5.50	20.20	
9613470004	9.81	9612991589	51.86	25	52.70	5.50	26.20	
9613470005	5.40	9612991590	72.81	32	52.70	5.50	32.20	
9613470006	9.83	9612991591	54.95	40	52.70	5.50	38.20	
9613470007	9.93	9612991592	54.95	50	66.20	5.50	50.20	
9613470008	9.01	9612991593	96.66	65	93.20	5.50	66.20	
9613470009	10.20	9612991594	107.97	80	108.20	5.50	81.20	
9613470010	26.07	9612991595	107.18	100	121.20	5.50	100.20	

Item No.	PPL EUR	Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)			GASKET D DIN 32676
EPDM		NBR		FPM		mm	A	B	D	
9611992009	8.95	9611991999	9.58	9611994182	35.99	10	36.20	5.50	10.20	
9611992010	7.42	9611992000	9.58	9611994183	27.03	15	36.20	5.50	16.20	
9611992011	7.75	9611992001	5.07	9611994184	39.59	20	36.20	5.50	20.20	
9611992012	4.52	9611992002	5.17	9611994185	29.16	25	52.70	5.50	26.20	
9611992013	4.78	9611992003	8.64	9611994186	31.25	32	52.70	5.50	32.20	
9611992014	4.91	9611992004	6.13	9611994187	37.32	40	52.70	5.50	38.20	
9611992015	5.08	9611992005	6.44	9611994188	54.31	50	66.20	5.50	50.20	
9611992016	7.31	9611992006	8.47	9611994189	50.41	65	93.20	5.50	66.20	
9611992017	7.59	9611992007	11.66	9611994190	58.52	80	108.20	5.50	81.20	
9611992018	7.75	9611992008	16.80	9611994191	61.86	100	121.20	5.50	100.20	
9611993205	11.76	*		9611995100	277.01	125	157.20	5.50	125.20	
9611993206	20.39	*		9611993210	225.93	150	185.20	5.50	150.20	

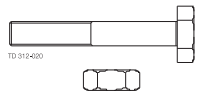
\* On request

Product code: 5049

Item No.	PPL EUR	Size DN mm	Dimension (mm)			
			A	B	C	
<b>1.4301 (304)</b>						<b>A13MHM Clamp ring</b>
211053	<b>30.02</b>	25-40	54.00			
211054	<b>36.59</b>	50	67.10			
211056	<b>46.07</b>	65	94.50			
211057	<b>55.92</b>	100	122.20			
<b>Clamp ring</b>						
9611993113	<b>34.69</b>	10-15-20	37.00			
9611993114	<b>61.07</b>	80	109.00			
9611994192	<b>72.92</b>	100	134.00			
9611993203	<b>352.05</b>	125	159.00			
9611993204	<b>429.86</b>	150	187.00			
<b>Clamp ring (Allen Screws)</b>						
9611311051	<b>13.47</b>	25-40	58.50	85.50		
9611311052	<b>13.47</b>	50	72.00	99.00		
9611311054	<b>18.06</b>	65	99.00	126.00		
9611311055	<b>18.32</b>	100	127.00	154.00		
<b>13MHM</b>						
212195	<b>41.13</b>	25-40	54.00			
212196	<b>46.48</b>	50	67.50			
212198	<b>61.69</b>	65	94.50			
212199	<b>74.84</b>	100	122.60			
<b>Clamp ring, wingnut</b>						
9611994458	<b>34.69</b>	10-20	37.50			
9611994453	<b>34.71</b>	25-40	54.00			
9611994454	<b>42.28</b>	50	67.50			
9611994456	<b>65.63</b>	65	94.50			
9611994459	<b>61.07</b>	80	109.50			
9611994457	<b>74.39</b>	100	122.60			

Product code: 5060

1.2

Item No.	PPL EUR	Flange size DIN/DN mm	Nuts	Screws	Screws and nut set
9612905161	<b>17.99</b>	10-50	4 x M8 x 30	4 x M8	
9612905162	<b>20.39</b>	65	8 x M8 x 30	8 x M8	
9612905164	<b>21.60</b>	80	8 x M10 x 35	8 x M10	
9612905165	<b>29.99</b>	100-125	8 x M10 x 40	8 x M10	
9612905166	<b>30.77</b>	150	8 x M12 x 50	8 x M12	

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				
					OD/ID x t	A	B		
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		<b>mm</b>				<b>Union, Acc. to DIN 11851, 2nd series</b>	
9611305792	<b>39.06</b>	9611305793	*	10	13.00/10.00 x 1.50	38.00	25.00		
9611305802	<b>42.68</b>	9611305803	*	15	19.00/16.00 x 1.50	44.00	25.00		
9611290013	*	9611290014	<b>53.80</b>	20	23.00/20.00 x 1.50	54.00	25.00		
9611306742	<b>50.00</b>	9611306743	<b>58.11</b>	25	29.00/26.00 x 1.50	63.00	31.00		
9611306752	<b>55.06</b>	9611306753	<b>64.10</b>	32	35.00/32.00 x 1.50	70.00	31.00		
9611306762	<b>60.86</b>	9611306763	<b>70.97</b>	40	41.00/38.00 x 1.50	78.00	31.00		
9611306772	<b>68.06</b>	9611306773	<b>79.52</b>	50	53.00/50.00 x 1.50	92.00	33.00		
9611306782	<b>97.79</b>	9611306783	<b>113.96</b>	65	70.00/66.00 x 2.00	112.00	35.00		
9611306792	<b>130.84</b>	9611306793	<b>152.76</b>	80	85.00/81.00 x 2.00	127.00	35.00		
9611306802	<b>194.53</b>	9611306803	<b>226.90</b>	100	104.00/100.00 x 2.00	148.00	41.00		
					<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>Nut, acc. to DIN 11851</b>
9611306421	<b>16.60</b>	9612150714	*	10	38.00	18.00	28 x 1/8	19.00	
9611306431	<b>17.93</b>	9612150715	<b>23.30</b>	15	44.00	18.00	34 x 1/8	25.00	
9611290022	<b>19.24</b>	9612150716	<b>25.02</b>	20	54.00	20.00	44 x 1/6	31.00	
9611307091	<b>20.56</b>	9612150717	<b>26.74</b>	25	63.00	21.00	52 x 1/6	36.00	
9611307101	<b>22.40</b>	9612150718	<b>29.14</b>	32	70.00	21.00	58 x 1/6	42.00	
9611307111	<b>24.50</b>	9612150719	<b>31.85</b>	40	78.00	21.00	65 x 1/6	49.00	
9611307121	<b>27.14</b>	9612150720	<b>35.29</b>	50	92.00	22.00	78 x 1/6	62.00	
9611307131	<b>40.95</b>	9612150721	<b>53.25</b>	65	112.00	25.00	95 x 1/6	80.00	
9611307141	<b>54.79</b>	9612150723	<b>71.20</b>	80	127.00	29.00	110 x 1/4	94.00	
9611307151	<b>83.41</b>	9612150724	<b>108.42</b>	100	148.00	31.00	130 x 1/4	115.00	
					<b>OD/ID x t</b>	<b>B</b>	<b>C</b>		<b>Male part, Acc. to DIN 11851, 2nd series</b>
9611305902	<b>10.53</b>	9611305903	*	10	13.00/10.00 x 1.50	17.00	28 x 1/8		
9611305912	<b>11.86</b>	9611305913	<b>24.07</b>	15	19.00/16.00 x 1.50	17.00	34 x 1/8		
9611290033	*	9611290034	<b>17.11</b>	20	23.00/20.00 x 1.50	19.00	44 x 1/6		
9611306812	<b>14.47</b>	9611306813	<b>18.83</b>	25	29.00/26.00 x 1.50	22.00	52 x 1/6		
9611306822	<b>16.33</b>	9611306823	<b>21.22</b>	32	35.00/32.00 x 1.50	22.00	58 x 1/6		
9611306832	<b>18.43</b>	9611306833	<b>23.95</b>	40	41.00/38.00 x 1.50	22.00	65 x 1/6		
9611306842	<b>21.05</b>	9611306843	<b>27.38</b>	50	53.00/50.00 x 1.50	23.00	78 x 1/6		
9611306852	<b>28.71</b>	9611306853	<b>37.30</b>	65	70.00/66.00 x 2.00	25.00	95 x 1/6		
9611306862	<b>38.16</b>	9611306863	<b>49.62</b>	80	85.00/81.00 x 2.00	25.00	110 x 1/4		
9611306872	<b>59.23</b>	9611306873	<b>76.98</b>	100	104.00/100.00 x 2.00	30.00	130 x 1/4		
						<b>A</b>	<b>B</b>	<b>Liner Acc. to DIN 11851, 2nd series</b>	
9611305952	<b>9.86</b>	9611305953	*	10	13.00/10.00 x 1.50	22.00	13.00		
9611305962	<b>10.75</b>	9611305963	*	15	19.00/16.00 x 1.50	28.00	13.00		
9611290043	*	9611290044	<b>15.17</b>	20	23.00/20.00 x 1.50	36.00	13.00		
9611306882	<b>12.57</b>	9611306883	<b>16.35</b>	25	29.00/26.00 x 1.50	44.00	15.00		
9611306892	<b>13.82</b>	9611306893	<b>17.97</b>	32	35.00/32.00 x 1.50	50.00	15.00		
9611306902	<b>15.27</b>	9611306903	<b>19.88</b>	40	41.00/38.00 x 1.50	56.00	15.00		
9611306912	<b>17.10</b>	9611306913	<b>22.22</b>	50	53.00/50.00 x 1.50	68.00	16.00		
9611306922	<b>25.24</b>	9611306923	<b>32.81</b>	65	70.00/66.00 x 2.00	86.00	17.00		
9611306932	<b>34.86</b>	9611306933	<b>45.32</b>	80	85.00/81.00 x 2.00	100.00	17.00		
9611306942	<b>48.67</b>	9611306943	<b>63.28</b>	100	104.00/100.00 x 2.00	121.00	20.00		

\*On request

Material	PPL	Size	Dimension (mm)			Union, long. Acc. to DIN 11851, 2nd series
Item No.	EUR	DN	OD/ID x t	A	B	
1.4307 (304L) - NBR		mm				
9612151313	40.09	10	13.00/10.00 x 1.50	38.00	34.00	
9612151314	43.83	15	19.00/16.00 x 1.50	44.00	34.00	
9612151315	47.59	20	23.00/20.00 x 1.50	54.00	36.00	
9612151316	51.34	25	29.00/26.00 x 1.50	63.00	45.00	
9612151317	56.57	32	35.00/32.00 x 1.50	70.00	51.00	
9612151318	62.53	40	41.00/38.00 x 1.50	78.00	53.00	
9612151319	69.97	50	53.00/50.00 x 1.50	92.00	57.00	
9612151320	100.48	65	70.00/66.00 x 2.00	112.00	65.00	
9612151321	134.50	80	85.00/81.00 x 2.00	127.00	75.00	
9612151322	199.92	100	104.00/100.00 x 2.00	148.00	89.00	
9612151323	455.56	125	129.00/125.00 x 2.00	178.00	70.00	
9612151324	707.25	150	154.00/150.00 x 2.00	210.00	76.00	
<b>EPDM</b>						
9612151325	41.26	10	13.00/10.00 x 1.50	38.00	34.00	
9612151326	44.95	15	19.00/16.00 x 1.50	44.00	34.00	
9612151327	48.66	20	23.00/20.00 x 1.50	54.00	36.00	
9612151328	52.39	25	29.00/26.00 x 1.50	63.00	45.00	
9612151329	57.53	32	35.00/32.00 x 1.50	70.00	51.00	
9612151330	63.40	40	41.00/38.00 x 1.50	78.00	53.00	
9612151331	70.74	50	53.00/50.00 x 1.50	92.00	57.00	
9612151332	101.74	65	70.00/66.00 x 2.00	112.00	65.00	
9612151333	137.07	80	85.00/81.00 x 2.00	127.00	75.00	
9612151334	203.88	100	104.00/100.00 x 2.00	148.00	89.00	
9612151335	549.62	125	129.00/125.00 x 2.00	178.00	70.00	
9612151336	604.36	150	154.00/150.00 x 2.00	210.00	76.00	



Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				
					A	B	C	D	
<b>1.4301 (304)</b>		<b>1.4404 (316L)</b>		mm					<b>Nut, acc. to DIN 11851</b>
9611306421	<b>16.60</b>	9612150714	*	10	38.00	18.00	28 x 1/8	19.00	
9611306431	<b>17.93</b>	9612150715	<b>23.30</b>	15	44.00	18.00	34 x 1/8	25.00	
9611290022	<b>19.24</b>	9612150716	<b>25.02</b>	20	54.00	20.00	44 x 1/6	31.00	
9611307091	<b>20.56</b>	9612150717	<b>26.74</b>	25	63.00	21.00	52 x 1/6	36.00	
9611307101	<b>22.40</b>	9612150718	<b>29.14</b>	32	70.00	21.00	58 x 1/6	42.00	
9611307111	<b>24.50</b>	9612150719	<b>31.85</b>	40	78.00	21.00	65 x 1/6	49.00	
9611307121	<b>27.14</b>	9612150720	<b>35.29</b>	50	92.00	22.00	78 x 1/6	62.00	
9611307131	<b>40.95</b>	9612150721	<b>53.25</b>	65	112.00	25.00	95 x 1/6	80.00	
9611307141	<b>54.79</b>	9612150723	<b>71.20</b>	80	127.00	29.00	110 x 1/4	94.00	
9611307151	<b>83.41</b>	9612150724	<b>108.42</b>	100	148.00	31.00	130 x 1/4	115.00	
9611306451	<b>157.41</b>	*		125	178.00	34.00	160 x 1/4	138.00	
9611306461	<b>231.45</b>	*		150	210.00	40.00	190 x 1/4	164.00	
<b>1.4307 (304L)</b>					<b>OD/ID x t</b>	<b>B</b>	<b>C</b>	<b>Male part, long. Acc. to DIN 11851, 2nd series</b>	
9611306102	<b>11.06</b>	9611306103	<b>14.38</b>	10	13.00/10.00 x 1.50	21.00	28 x 1/8		
9611306112	<b>12.44</b>	9611306113	<b>16.17</b>	15	19.00/16.00 x 1.50	21.00	34 x 1/8		
9611290083	<b>13.81</b>	9611290084	<b>17.96</b>	20	23.00/20.00 x 1.50	24.00	44 x 1/6		
9611306952	<b>15.20</b>	9611306953	<b>19.76</b>	25	29.00/26.00 x 1.50	29.00	52 x 1/6		
9611306962	<b>17.14</b>	9611306963	<b>22.28</b>	32	35.00/32.00 x 1.50	32.00	58 x 1/6		
9611306972	<b>19.33</b>	9611306973	<b>25.15</b>	40	41.00/38.00 x 1.50	33.00	65 x 1/6		
9611306982	<b>22.11</b>	9611306983	<b>28.75</b>	50	53.00/50.00 x 1.50	35.00	78 x 1/6		
9611306992	<b>30.12</b>	9611306993	<b>39.18</b>	65	70.00/66.00 x 2.00	40.00	95 x 1/6		
9611307002	<b>40.08</b>	9611307003	<b>52.10</b>	80	85.00/81.00 x 2.00	45.00	110 x 1/4		
9611307012	<b>62.19</b>	9611307013	<b>80.82</b>	100	104.00/100.00 x 2.00	54.00	130 x 1/4		
9611306132	<b>161.94</b>	9611306133	<b>210.51</b>	125	129.00/125.00 x 2.00	46.00	160 x 1/4		
9611306142	<b>152.00</b>	9611306143	<b>197.58</b>	150	154.00/150.00 x 2.00	50.00	190 x 1/4		
						<b>A</b>	<b>B</b>		<b>Liner, long. Acc. to DIN 11851, 2nd series</b>
9611306152	<b>10.35</b>	9611306153	<b>13.45</b>	10	13.00/10.00 x 1.50	22.00	17.00		
9611306162	<b>11.30</b>	9611306163	<b>14.69</b>	15	19.00/16.00 x 1.50	28.00	17.00		
9611290093	<b>12.26</b>	9611290094	<b>15.92</b>	20	23.00/20.00 x 1.50	36.00	18.00		
9611307022	<b>13.19</b>	9611307023	<b>17.16</b>	25	29.00/26.00 x 1.50	44.00	22.00		
9611307032	<b>14.52</b>	9611307033	<b>18.89</b>	32	35.00/32.00 x 1.50	50.00	25.00		
9611307042	<b>16.04</b>	9611307043	<b>20.87</b>	40	41.00/38.00 x 1.50	56.00	26.00		
9611307052	<b>17.94</b>	9611307053	<b>23.32</b>	50	53.00/50.00 x 1.50	68.00	28.00		
9611307062	<b>26.49</b>	9611307063	<b>34.44</b>	65	70.00/66.00 x 2.00	86.00	32.00		
9611307072	<b>36.61</b>	9611307073	<b>47.58</b>	80	85.00/81.00 x 2.00	100.00	37.00		
9611307082	<b>51.11</b>	9611307083	<b>66.45</b>	100	104.00/100.00 x 2.00	121.00	44.00		
9611306182	<b>128.83</b>	9611306183	<b>167.49</b>	125	129.00/125.00 x 2.00	150.00	34.00		
9611306192	<b>206.57</b>	9611306193	<b>268.52</b>	150	154.00/150.00 x 2.00	176.00	37.00		

\* On request

Product code: 5012

1.2

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			
					OD/ID x t	L	R	
<b>1.4307 (304)</b>		<b>1.4404 (316L)</b>		mm				<b>BEND 45 HSF3</b>
9611293821	<b>23.72</b>	9611293822	<b>30.83</b>	25	28.00/25.00 x 1.50	34.00	50.00	
9611293831	<b>25.94</b>	9611293832	<b>33.71</b>	32	34.00/31.00 x 1.50	37.00	55.00	
9611293841	<b>28.46</b>	9611293842	<b>37.00</b>	40	40.00/37.00 x 1.50	41.00	60.00	
9611293851	<b>31.62</b>	9611293852	<b>41.12</b>	50	52.00/49.00 x 1.50	48.00	70.00	
<b>BEND 45 MAT</b>								
9611293823	<b>22.40</b>	9611293824	<b>29.12</b>	25	28.00/25.00 x 1.50	34.00	50.00	
9611293843	<b>26.87</b>	9611293834	<b>34.94</b>	32	34.00/31.00 x 1.50	37.00	55.00	
9611293853	<b>29.87</b>	9611293844	<b>38.82</b>	40	40.00/37.00 x 1.50	41.00	60.00	
		9611293854	<b>38.82</b>	50	52.00/49.00 x 1.50	48.00	70.00	

\*On request

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	L	R	BEND 90 HSF3
9612154558	12.17	9612154508	14.39	10	13.00/10.00 x 1.50	38.00	26.00	
9612154559	13.18	9612154509	15.59	15	19.00/16.00 x 1.50	47.00	35.00	
9612154560	14.20	9612154510	16.79	20	23.00/20.00 x 1.50	52.00	40.00	
9612154561	15.22	9612154511	17.98	25	29.00/26.00 x 1.50	70.00	50.00	
9612154562	16.85	9612154512	20.33	32	35.00/32.00 x 1.50	78.00	55.00	
9612154563	18.26	9612154513	21.59	40	41.00/38.00 x 1.50	85.00	60.00	
9612154564	20.29	9612154514	23.99	50	53.00/50.00 x 1.50	97.00	70.00	
9611304060	28.04	9611304062	33.12	65	70.00/66.00 x 2.00	110.00	80.00	
9611304080	45.16	9611304082	53.34	80	85.00/81.00 x 2.00	118.00	90.00	
9611304090	72.41	9611304092	85.58	100	104.00/100.00 x 2.00	140.00	100.00	
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	L	R	BEND 90 HSF2
9615220009	12.17	9615220021	14.39	10	13.00/10.00 x 1.50	38.00	26.00	
9615220010	13.18	9615220022	15.59	15	19.00/16.00 x 1.50	47.00	35.00	
9615220011	14.20	9615220023	16.79	20	23.00/20.00 x 1.50	52.00	40.00	
9615220012	15.22	9615220024	17.98	25	29.00/26.00 x 1.50	70.00	50.00	
9615220013	16.85	9615220025	20.33	32	35.00/32.00 x 1.50	78.00	55.00	
9615220014	18.26	9615220026	21.59	40	41.00/38.00 x 1.50	85.00	60.00	
9615220015	20.29	9615220027	23.99	50	53.00/50.00 x 1.50	97.00	70.00	
9615220016	28.04	9615220028	33.12	65	70.00/66.00 x 2.00	110.00	80.00	
9615220017	45.16	9615220029	53.34	80	85.00/81.00 x 2.00	118.00	90.00	
9615220018	72.41	9615220030	85.58	100	104.00/100.00 x 2.00	140.00	100.00	
BEND 90 HSF3 SHORT								
9611309100	12.52	9611309101	14.80	10	12.00/9.00 x 1.50	26.00	26.00	
9611301060	13.58	9611309111	16.04	15	18.00/15.00 x 1.50	35.00	35.00	
9611301061	14.62	9611309131	17.25	20	22.00/19.00 x 1.50	40.00	40.00	
9611301062	15.66	9611309121	18.50	25	28.00/25.00 x 1.50	50.00	50.00	
9611301063	16.07	9611309141	20.89	32	34.00/31.00 x 1.50	55.20	55.00	
9611301064	18.79	9611309151	22.21	40	40.00/37.00 x 1.50	60.00	60.00	
9611301065	20.88	9611309161	24.66	50	52.00/49.00 x 1.50	70.00	70.00	
BEND 90 HSF3								
9611304120	13.92	9611304122	16.44	10	12.00/9.00 x 1.50	38.00	26.00	
9611304130	15.07	9611304132	17.82	15	18.00/15.00 x 1.50	47.00	35.00	
9611293921	16.23	9611293922	19.19	20	22.00/19.00 x 1.50	52.00	40.00	
9611304140	17.40	9611304142	20.56	25	28.00/25.00 x 1.50	70.00	50.00	
9611304150	17.90	9611304152	23.27	32	34.00/31.00 x 1.50	78.00	55.00	
9611304160	20.88	9611304162	24.66	40	40.00/37.00 x 1.50	85.00	60.00	
9611304170	23.20	9611304172	27.40	50	52.00/49.00 x 1.50	97.00	70.00	

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			Bend 90, 2nd series	
					OD/ID x t	L	R		
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		mm					
9612154565	<b>10.43</b>	9612154527	<b>12.33</b>	10	13.00/10.00 x 1.50	38.00	26.00		
9612154566	<b>11.31</b>	9612154528	<b>13.36</b>	15	19.00/16.00 x 1.50	47.00	35.00		
9612154567	<b>12.17</b>	9612154529	<b>14.39</b>	20	23.00/20.00 x 1.50	52.00	40.00		
9612154568	<b>13.05</b>	9612154530	<b>15.42</b>	25	29.00/26.00 x 1.50	70.00	50.00		
9612154569	<b>14.26</b>	9612154531	<b>16.85</b>	32	35.00/32.00 x 1.50	78.00	55.00		
9612154570	<b>15.66</b>	9612154532	<b>18.50</b>	40	41.00/38.00 x 1.50	85.00	60.00		
9612154571	<b>17.40</b>	9612154533	<b>20.56</b>	50	53.00/50.00 x 1.50	97.00	70.00		
9611304061	<b>24.03</b>	9611304063	<b>28.40</b>	65	70.00/66.00 x 2.00	110.00	80.00		
9611304081	<b>38.69</b>	9611304083	<b>45.73</b>	80	85.00/81.00 x 2.00	118.00	90.00		
9611304091	<b>62.07</b>	9611304093	<b>73.36</b>	100	104.00/100.00 x 2.00	140.00	100.00		
*		*		125					
*		*		150					
<b>Not according to standard</b>									
*		9611304123	<b>19.73</b>	10	12.00/9.00 x 1.50	38.00	26.00		
9611304131	<b>18.09</b>	9611304133	<b>21.38</b>	15	18.00/15.00 x 1.50	47.00	35.00		
9611293923	<b>19.48</b>	9611293924	<b>23.02</b>	20	22.00/19.00 x 1.50	52.00	40.00		
9611304141	<b>20.88</b>	9611304143	<b>24.66</b>	25	28.00/25.00 x 1.50	70.00	50.00		
9611304151	<b>22.81</b>	9611304153	<b>26.97</b>	32	34.00/31.00 x 1.50	78.00	55.00		
9611304161	<b>25.05</b>	9611304163	<b>29.60</b>	40	40.00/37.00 x 1.50	85.00	60.00		
9611304171	<b>27.82</b>	9611304173	<b>32.89</b>	50	52.00/49.00 x 1.50	97.00	70.00		
<b>Not according to standard</b>									
9611309102	<b>15.03</b>	9611309103	<b>17.75</b>	10	132.00/9.00 x 1.50	26.00	26.00		
9611309112	<b>16.28</b>	9611309113	<b>19.24</b>	15	18.00/15.00 x 1.50	35.00	35.00		
9611309132	<b>17.53</b>	9611309133	<b>20.71</b>	20	22.00/19.00 x 1.50	40.00	40.00		
9611309122	<b>18.79</b>	9611309123	<b>22.21</b>	25	28.00/25.00 x 1.50	50.00	50.00		
9611309142	<b>20.54</b>	9611309143	<b>24.27</b>	32	34.00/31.00 x 1.50	55.00	55.00		
9611309152	<b>22.54</b>	9611309153	<b>26.64</b>	40	40.00/37.00 x 1.50	60.00	60.00		
9611309162	<b>25.05</b>	9611309163	<b>29.60</b>	50	52.00/49.00 x 1.50	70.00	70.00		

\* On request

Product code: 5012

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				
1.4301 (304)		1.4404 (316L)		mm	OD/ID x t	A	B	C	Bend 180°, OD: Semi bright, ID: Raw, non standard
9612156801	*	9612156825	57.09	10	12.00/9.00 x 1.50	52.00			
9612156802	59.29	9612156826	77.09	15	18.00/15.00 x 1.50	68.00			
9612156803	74.66	9612156827	97.06	20	22.00/19.00 x 1.50	76.00			
9612156804	90.03	9612156828	117.05	25	28.00/25.00 x 1.50	100.00			
9612156805	*	9612156829	145.02	32	34.00/31.00 x 1.50	110.00			
9612156806	136.15	9612156830	177.00	40	40.00/37.00 x 1.50	120.00			
9612156807	185.56	9612156831	241.23	50	52.00/49.00 x 1.50	140.00			
9612156808	259.67	9612156832	337.58	65	70.00/66.00 x 2.00	160.00			
9612156809	333.78	9612156833	433.92	80	85.00/81.00 x 2.00	180.00			
9612156810	432.60	9612156834	562.39	100	104.00/100.00 x 2.00	200.00			
<b>Bend 180°, OD/ID: Mat, non standard</b>									
9612156813	*	9612156837	*	10	12.00/9.00 x 1.50	52.00			
9612156814	59.29	9612156838	*	15	18.00/15.00 x 1.50	68.00			
9612156815	*	9612156839	97.06	20	22.00/19.00 x 1.50	76.00			
9612156816	90.03	9612156840	117.05	25	28.00/25.00 x 1.50	100.00			
9612156817	111.56	9612156841	*	32	34.00/31.00 x 1.50	110.00			
9612156818	136.15	9612156842	177.00	40	40.00/37.00 x 1.50	120.00			
9612156819	185.56	9612156843	241.23	50	52.00/49.00 x 1.50	140.00			
9612156820	259.67	9612156844	*	65	70.00/66.00 x 2.00	160.00			
9612156821	333.78	9612156845	*	80	85.00/81.00 x 2.00	180.00			
9612156822	432.60	9612156846	562.39	100	104.00/100.00 x 2.00	200.00			
<b>T-double bend - OD: Semi bright, ID: Raw</b>									
9612154201	103.75	9612154215	134.89	25		49.00	50.00	25.00	
9612154202	*	9612154216	*	32		54.00	55.00	31.00	
9612154203	124.52	9612154217	161.86	40		59.00	60.00	37.00	
9612154204	138.35	9612154218	179.86	50		69.00	70.00	49.00	
9612154205	179.86	9612154219	233.80	65		79.00	80.00	66.00	
9612154206	249.02	9612154220	323.73	80		89.00	90.00	81.00	
9612154207	401.21	9612154221	521.57	100		99.00	100.00	100.00	
<b>T-double bend - OD/ID: Mat</b>									
9612154208	103.75	9612154222	*	25		49.00	50.00	25.00	
9612154209	113.44	9612154223	*	32		54.00	55.00	31.00	
9612154210	124.52	9612154224	*	40		59.00	60.00	37.00	
9612154211	138.35	9612154225	*	50		69.00	70.00	49.00	
9612154212	179.86	9612154226	233.80	65		79.00	80.00	66.00	
9612154213	249.02	9612154227	*	80		89.00	90.00	81.00	
9612154214	401.21	9612154228	521.57	100		99.00	100.00	100.00	

\*On request

Product code: 5038

1.2

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				Finish: OD/ID: Mat	
					OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>		
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		<b>mm</b>					<b>Reduced tee, short*</b>	
9612155609	<b>25.90</b>	9612155628	<b>36.26</b>	32/25	34.00/31.00 x 1.50	28.00/25.00 x 1.50	55.00	20.50		
9612155610	<b>28.83</b>	9612155629	<b>40.36</b>	40/25	40.00/37.00 x 1.50	28.00/25.00 x 1.50	60.00	23.50		
9612155611	<b>28.65</b>	9612155630	<b>40.12</b>	40/32	40.00/37.00 x 1.50	34.00/31.00 x 1.50	60.00	23.00		
9612155612	<b>28.92</b>	9612155631	<b>40.49</b>	50/32	52.00/49.00 x 1.50	34.00/31.00 x 1.50	70.00	29.00		
9612155613	<b>28.65</b>	9612155632	<b>40.12</b>	50/40	52.00/49.00 x 1.50	40.00/37.00 x 1.50	70.00	29.00		
9611304571	<b>47.07</b>	9611304573	<b>65.89</b>	65/50	70.00/66.00 x 2.00	52.00/49.00 x 1.50	80.00	39.00		
9612155614	<b>63.41</b>	9612155634	<b>88.77</b>	80/50	85.00/81.00 x 2.00	52.00/49.00 x 1.50	90.00	47.00		
9611304591	<b>63.30</b>	9611304593	<b>88.63</b>	80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	90.00	47.00		
9612155615	<b>85.64</b>	9612155636	<b>119.90</b>	100/50	104.00/100.00 x 2.00	52.00/49.00 x 1.50	100.00	58.00		
9612155616	<b>86.62</b>	9612155637	<b>121.28</b>	100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	100.00	58.00		
9611304611	<b>92.04</b>	9611304613	<b>128.83</b>	100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	100.00	59.00		
<b>Reduced tee*</b>										
9612157412	<b>28.49</b>	9612157423	<b>39.88</b>	32/25	34.00/31.00 x 1.50	28.00/25.00 x 1.50	54.00			
9612157413	<b>31.70</b>	9612157424	<b>44.39</b>	40/25	40.00/37.00 x 1.50	28.00/25.00 x 1.50	58.00			
9612157414	<b>31.53</b>	9612157425	*	40/32	40.00/37.00 x 1.50	34.00/31.00 x 1.50	59.00			
9612157415	*	9612157426	<b>44.53</b>	50/32	52.00/49.00 x 1.50	34.00/31.00 x 1.50	65.50			
9612157416	<b>31.53</b>	9612157427	<b>44.13</b>	50/40	52.00/49.00 x 1.50	40.00/37.00 x 1.50	67.00			
9612157417	<b>51.77</b>	9612157428	<b>72.48</b>	65/50	70.00/66.00 x 2.00	52.00/49.00 x 1.50	78.50			
9612157418	<b>69.75</b>	9612157429	<b>97.65</b>	80/50	85.00/81.00 x 2.00	52.00/49.00 x 1.50	88.00			
9612157419	<b>69.64</b>	9612157430	<b>97.49</b>	80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	87.50			
9612157420	<b>94.21</b>	9612157431	<b>131.88</b>	100/50	104.00/100.00 x 2.00	52.00/49.00 x 1.50	99.00			
9612157421	<b>95.30</b>	9612157432	<b>133.42</b>	100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	98.50			
9612157422	<b>94.92</b>	9612157433	<b>132.90</b>	100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	99.50			

\*On request

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)		
					OD/ID x t	L	
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		<b>mm</b>			
9611309220	<b>21.74</b>	9611309221	<b>28.26</b>	10	12.00/9.00 x 1.50	26.00	
9611309230	<b>23.56</b>	9611309231	<b>30.62</b>	15	18.00/15.00 x 1.50	35.00	
9611309240	<b>25.37</b>	9611309241	<b>32.97</b>	20	22.00/19.00 x 1.50	40.00	
9611309250	<b>27.17</b>	9611309251	<b>35.33</b>	25	28.00/25.00 x 1.50	50.00	
9611309260	<b>29.69</b>	9611309261	<b>38.60</b>	32	34.00/31.00 x 1.50	55.00	
9611309270	<b>32.61</b>	9611309271	<b>42.39</b>	40	40.00/37.00 x 1.50	60.00	
9611309280	<b>36.24</b>	9611309281	<b>47.10</b>	50	52.00/49.00 x 1.50	70.00	
<b>1.4301 (304)</b>						<b>L<sub>1</sub></b>	<b>L<sub>2</sub></b>
9612150004	<b>18.12</b>	9612150032	<b>23.56</b>	25	28.00/25.00 x 1.50	50.00	15.50
9612150005	<b>19.81</b>	9612150033	<b>25.75</b>	32	34.00/31.00 x 1.50	55.00	18.50
9612150006	<b>21.74</b>	9612150034	<b>28.26</b>	40	40.00/37.00 x 1.50	60.00	21.50
9612150007	<b>24.15</b>	9612150035	<b>31.40</b>	50	52.00/49.00 x 1.50	70.00	29.50

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			
					OD/ID x t	L <sub>1</sub>	L <sub>2</sub>	
<b>1.4301 (304)</b>		<b>1.4404 (316L)</b>		mm				<b>Tee, short, non standard</b>
9612150009	<b>12.34</b>	9612150042	<b>16.04</b>	15	18.00/15.00 x 1.50	35.00	10.00	
9612150010	<b>13.29</b>	9612150043	<b>17.27</b>	20	22.00/19.00 x 1.50	40.00	12.00	
9612150011	<b>14.23</b>	9612150044	<b>18.51</b>	25	28.00/25.00 x 1.50	50.00	15.50	
9612150012	<b>15.56</b>	9612150045	<b>20.24</b>	32	34.00/31.00 x 1.50	55.00	18.50	
9612150013	<b>17.09</b>	9612150046	<b>22.21</b>	40	40.00/37.00 x 1.50	60.00	21.50	
9612150014	<b>18.98</b>	9612150047	<b>24.68</b>	50	52.00/49.00 x 1.50	70.00	29.50	
<b>1.4307 (304L)</b>						<b>L</b>		<b>Tee, form TS, non standard</b>
9611309222	<b>17.13</b>	9611309223	<b>22.27</b>	10	12.00/9.00 x 1.50	26.00		
9611309232	<b>18.55</b>	9611309233	<b>24.12</b>	15	18.00/15.00 x 1.50	35.00		
9611309242	<b>19.99</b>	9611309243	<b>25.98</b>	20	22.00/19.00 x 1.50	40.00		
9611309252	<b>21.41</b>	9611309253	<b>27.83</b>	25	28.00/25.00 x 1.50	50.00		
9611309262	<b>23.36</b>	9611309263	<b>30.37</b>	32	34.00/31.00 x 1.50	55.00		
9611309272	<b>25.70</b>	9611309273	<b>33.40</b>	40	40.00/37.00 x 1.50	60.00		
9611309282	<b>28.55</b>	9611309283	<b>37.12</b>	50	52.00/49.00 x 1.50	70.00		



Material Item No.	PPL EUR	Size DN	Pressure class PN (bar)	Dimension (mm)			Complete flange	
				OD/ID x t	A	B		C
9612498701	123.17	25	16	29.00/26.00 x 1.50	79.00	50.00	4 x M8	
9612498702	141.32	32	16	35.00/32.00 x 1.50	79.00	50.00	4 x M8	
9612498703	158.54	40	16	41.00/38.00 x 1.50	87.00	50.00	4 x M8	
9612498704	180.02	50	16	53.00/50.00 x 1.50	106.00	50.00	4 x M8	
9612498705	217.63	65	10	70.00/66.00 x 2.00	125.00	50.00	4 x M8	
9612498706	271.49	80	10	85.00/81.00 x 2.00	140.00	50.00	8 x M8	
9612498707	502.82	100	10	104.00/100.00 x 2.00	160.00	50.00	8 x M8	
9612498708	898.25	125	10	129.00/125.00 x 2.00	190.00	60.00	8 x M10	
9612498709	1681.06	150	10	154.00/150.00 x 2.00	215.00	60.00	8 x M10	
								Flange with O-ring groove
9612493001	37.12	25	16	29.00/26.00 x 1.50	25.00	10.00	64.00	
9612493002	42.11	32	16	35.00/32.00 x 1.50	25.00	10.00	64.00	
9612493003	47.82	40	16	41.00/38.00 x 1.50	25.00	10.00	72.00	
9612493004	54.95	50	16	53.00/50.00 x 1.50	25.00	10.00	91.00	
9612493005	67.45	65	10	70.00/66.00 x 2.00	25.00	10.00	110.00	
9612493006	83.50	80	10	85.00/81.00 x 2.00	25.00	10.00	125.00	
9612493007	160.59	100	10	104.00/100.00 x 2.00	25.00	10.00	143.00	
9612493008	203.32	125	10	129.00/125.00 x 2.00	30.00	15.00	171.00	
9612493009	288.94	150	10	154.00/150.00 x 2.00	30.00	15.00	196.00	
								Flange without O-ring groove
9612492901	37.12	25	16	29.00/26.00 x 1.50	25.00	10.00	64.00	
9612492902	42.11	32	16	35.00/32.00 x 1.50	25.00	10.00	64.00	
9612492903	47.82	40	16	41.00/38.00 x 1.50	25.00	10.00	72.00	
9612492904	54.95	50	16	53.00/50.00 x 1.50	25.00	10.00	91.00	
9612492905	67.45	65	10	70.00/66.00 x 2.00	25.00	10.00	110.00	
9612492906	83.50	80	10	85.00/81.00 x 2.00	25.00	10.00	125.00	
9612492907	160.59	100	10	104.00/100.00 x 2.00	25.00	10.00	143.00	
9612492908	203.32	125	10	129.00/125.00 x 2.00	30.00	15.00	171.00	
9612492909	288.94	150	10	154.00/150.00 x 2.00	30.00	15.00	196.00	

Item No.	PPL EUR	Flange size	Screws	Nut	Screws and nut set for pressure flanges, Fit to EN 10357-A tubes
9612499301	5.28	DN 25-65	4xM8x30	4xM8	
9612499302	8.03	DN 80 -100	8xM8x30	8xM8	
9612499302	8.03	DN 125-150	8xM10x40	8xM10	

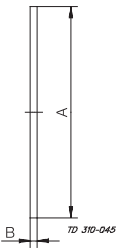
Product code: 5063

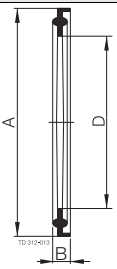
1.2

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)			Seal ring
NBR		EPDM		mm	A	B	C	
		9611900253	1.57	10	10.50	20.00	5.00	
		9611900254	1.87	15	16.50	26.00	5.00	
		9611900255	1.92	20	20.50	33.00	5.00	
		9611900256	2.00	25	26.50	40.00	6.00	
		9611900257	2.15	32	32.50	46.00	6.00	
		9611900258	2.30	40	38.50	52.00	6.00	
		9611900259	2.46	50	50.50	64.00	6.00	
		9611900260	2.63	65	66.50	81.00	6.00	
		9611900261	2.79	80	81.50	88.00	6.00	
		9611900263	3.82	100	100.50	104.00	6.00	
		9611900264	11.40	125	125.00	142.00	7.00	
		9611900265	12.00	150	150.00	167.00	7.00	
								Seal ring, 8 mm
9611991838	3.02	9611991851	4.71	25		8.00		
9611991839	4.26	9611991852	4.92	32		8.00		
9611991840	2.75	9611991853	5.19	40		8.00		
9611991841	3.59	9611991854	5.47	50		8.00		
9611991842	4.80	9611991855	5.60	65		8.00		
9611991843	15.54	9611991856	11.46	75		8.00		
9611991844	3.19	9611991857	5.87	80		8.00		
9611991845	3.34	9611991858	5.97	100		8.00		

Item No.	PPL EUR	Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)			Flange seal
EPDM		Silicone (Q)		FPM		mm	A	B	C	
9612402601	2.70	9612402611	5.56	9612402621	6.93	25	37.20	4.10	27.40	
9612402602	4.83	9612402612	4.21	9612402622	15.85	32	43.20	4.10	33.40	
9612402603	4.90	9612402613	5.74	9612402623	10.20	40	49.20	4.10	39.40	
9612402604	4.97	9612402614	5.90	9612402624	16.64	50	61.20	4.10	51.40	
9612402605	5.08	9612402615	8.51	9612402625	17.47	65	77.20	4.10	67.40	
9612402606	6.17	9612402616	12.12	9612402626	18.35	80	92.20	4.10	82.40	
9612402607	6.42	9612402617	16.95	9612402627	19.27	100	111.20	4.10	101.40	
9612402608	10.14	9612402618	14.40	9612402628	20.24	125	136.20	4.10	126.40	
9612402609	16.67	9612402619	39.56	9612402629	38.32	150	161.20	4.10	151.40	

Product code: 5063

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)		Seal disc
NBR		EPDM		mm	A	B	
9611291131	1.44			10	28.00	3.00	
9611291141	2.07			15	34.00	3.00	
9611291151	2.18			20	44.00	3.00	
9611291161	2.29			25	52.00	3.00	
9611291171	2.39			32	58.00	3.00	
9611291181	2.53			40	65.00	3.00	
9611291191	2.65			50	78.00	3.00	
9611291201	2.77			65	95.00	3.00	
9611291221	4.87			80	110.00	3.00	
9611291241	11.24			100	130.00	3.00	
9611291251	29.25			125	160.00	3.00	
9611291261	16.80			150	190.00	3.00	

Item No.	PPL EUR	Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)			Seal ring
PTFE		NBR		FPM		mm	A	B	D	
9611992019	78.76					10	36.20	5.10	10.00	
9611992020	62.40					15	36.20	5.10	16.00	
9611992021	64.80					20	36.20	5.10	20.00	
9611992022	67.19					25	52.70	5.10	26.00	
9611992023	71.47					32	52.70	5.10	32.00	
9611992024	74.39					40	52.70	5.10	38.00	
9611992025	76.80					50	66.20	5.10	50.00	
9611992026	90.84					65	93.20	5.10	66.00	
9611992027	109.43					80	108.20	5.10	81.00	
9611992028	133.54					100	121.20	5.10	100.00	

Product code: 5044

Finish: Semi bright  
Thread: Round type

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)					
1.4301 (304)		1.4404 (316L)		mm	A	B	C	D	End cap with chain and NBR seal disc	
9611291411	17.46	9612152301	20.36	10	38.00	18.00	28.00 x 1/8	8.00		
9611291421	18.58	9612152302	21.69	15	44.00	18.00	34.00 x 1/8	8.00		
9611291431	19.73	9612152303	23.02	20	54.00	21.00	44.00 x 1/6	8.00		
9611291441	20.88	9612152304	24.35	25	63.00	21.00	52.00 x 1/6	8.00		
9611291451	22.46	9612152305	26.21	32	70.00	22.00	58.00 x 1/6	8.00		
9611291461	24.29	9612152306	28.34	40	78.00	21.00	65.00 x 1/6	8.00		
9611291471	51.23	9612152307	59.76	50	92.00	22.00	78.00 x 1/6	8.00		
9611291481	65.46	9612152308	76.36	65	112.00	25.00	95.00 x 1/6	8.00		
9611291491	146.48	9612152309	170.89	80	127.00	29.00	110.00 x 1/4	8.00		
9611291511	197.32	9612152310	230.21	100	148.00	31.00	130.00 x 1/4	8.00		
9611291521	260.88	9612152311	304.37	125	178.00	34.00	160.00 x 1/4	8.00		
9611291531	341.52	9612152312	398.43	150	210.00	40.00	190.00 x 1/4	8.00		
										End cap
9611291271	17.21	9612152201	20.09	10	38.00	19.00	28.00 x 1/8			
9611291281	18.33	9612152202	21.39	15	44.00	19.00	34.00 x 1/8			
9611291291	19.46	9612152203	22.71	20	54.00	21.00	44.00 x 1/6			
9611291301	20.58	9612152204	24.02	25	63.00	22.00	52.00 x 1/6			
9611291311	22.16	9612152205	25.85	32	70.00	22.00	58.00 x 1/6			
9611291321	23.95	9612152206	27.94	40	78.00	22.00	65.00 x 1/6			
9611291331	50.52	9612152207	58.94	50	92.00	23.00	78.00 x 1/6			
9611291341	64.55	9612152208	75.30	65	112.00	26.00	95.00 x 1/6			
9611291351	144.44	9612152209	168.51	80	127.00	30.00	110.00 x 1/4			
9611291371	194.59	9612152210	227.01	100	148.00	33.00	130.00 x 1/4			
9611291381	257.26	9612152211	300.13	125	178.00	36.00	160.00 x 1/4			
9611291391	336.78	9612152212	392.90	150	210.00	41.00	190.00 x 1/4			

Material Item No.	PPL EUR	Size DN	Dimension (mm)					n x K	Hose liner
			ØD4	ØD5	ØD7	L			
1.4404 (316L)		mm							
9615386501	47.99	15	28.30	12.00	19.00	40.00	3 x 6		
9615386502	72.69	20	36.30	16.00	23.00	40.00	3 x 6		
9615386503	83.99	25	43.80	23.00	29.00	53.00	3 x 8		
9615386504	89.99	32	49.80	29.50	35.00	53.00	3 x 8		
9615386505	95.99	40	55.80	35.00	41.00	63.00	3 x 9		
9615386506	107.97	50	68.30	46.00	53.00	68.00	3 x 10		
9615386507	113.70	65	85.60	65.00	70.00	77.00	3 x 10		
9615386508	119.97	80	99.40	80.00	85.00	87.00	3 x 12		
9615386509	155.97	100	120.40	98.00	104.00	110.00	4 x 15		

Material Item No.	PPL EUR	Size DN	Dimension (mm)				Hose liner, beer
			A	B	C	D	
1.4301 (304)		mm					
9612157704	99.49	25	80.00	63.00	24.00	27.00	
9612157705	*	32	90.00	70.00	31.00	34.00	
9612157706	115.58	40	105.00	84.00	32.00	43.00	
9612157707	140.32	50	120.00	97.00	45.00	53.00	
9612157708	152.80	65	140.00	113.00	60.00	68.00	
9612157709	287.60	80	160.00	132.00	74.00	83.00	
9612157710	359.50	100	180.00	141.00	93.00	103.00	

\*On request

Sockets and male parts  
Product code: 5044

Material Item No.	PPL EUR	Size DN	Dimension (mm)		
			D	L	
<b>1.4404 (316L)</b>					<b>Half socket</b>
9611295663	*	1/8	14.00	7.50	
9611295673	<b>10.78</b>	1/4	18.00	11.00	
9611295683	<b>14.38</b>	3/8	21.30	11.50	
9611295693	<b>16.19</b>	1/2	26.40	15.00	
9611295703	<b>19.77</b>	3/4	31.80	16.50	
9611295713	<b>22.36</b>	1	39.50	19.00	
9611295723	<b>25.17</b>	1 1/4	48.30	21.50	
9611295733	<b>28.77</b>	1 1/2	54.50	21.50	
9611295743	<b>39.55</b>	2	66.30	26.00	
9611295753	<b>71.89</b>	2 1/2	82.00	30.00	
9611295763	<b>80.82</b>	3	95.00	33.00	
					<b>Socket</b>
9611295443	<b>8.98</b>	1/8	14.00	17.00	
9611295453	<b>12.58</b>	1/4	18.00	25.00	
9611295463	<b>15.27</b>	3/8	21.30	26.00	
9611295473	<b>16.19</b>	1/2	26.40	34.00	
9611295483	<b>17.97</b>	3/4	31.80	36.00	
9611295493	<b>21.57</b>	1	39.50	43.00	
9611295503	<b>25.17</b>	1 1/4	48.30	48.00	
9611295513	<b>32.36</b>	1 1/2	54.50	48.00	
9611295523	<b>53.92</b>	2	66.30	56.00	
9611295533	*	2 1/2	82.00	65.00	
9611295543	<b>143.81</b>	3	95.00	71.00	
<b>1.4571 (316Ti)</b>					<b>Welding male part</b>
9611295884	<b>8.98</b>	1/8		30.00	
9611295894	<b>10.78</b>	1/4		30.00	
9611295904	<b>14.38</b>	3/8		30.00	
9611295914	<b>17.97</b>	1/2		35.00	
9611295924	<b>21.57</b>	3/4		40.00	
9611295934	<b>25.17</b>	1		40.00	
9611295944	<b>28.77</b>	1 1/4		50.00	
9611295954	<b>32.36</b>	1 1/2		50.00	
9611295964	<b>39.55</b>	2		55.00	
9611295974	<b>53.92</b>	2 1/2		60.00	
9611295984	<b>71.89</b>	3		65.00	

\*On request

# 1.3 Hygienic, BS 4825, Part 1

The installation material in this section is manufactured to meet BS 4825, Part 1 tube dimensions.



## Price lists

Tubes BS 4825, Part 1 .....	1.3.136
Reducers, Part 1 .....	1.3.137
Bends, Part 1 .....	1.3.138
Tees, Part 1 .....	1.3.139
IDF Union parts, Part 1 .....	1.3.141
RJT Union Parts, Part 1 .....	1.3.143
SMS Union Parts, Part 1 .....	1.3.145
Clamp Union Parts, Part 1 .....	1.3.146

Tubes of manufacturing lengths of approx 6 meters  
 Product code: 5104

Finish: BD and BC

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)	
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	<b>BD finish SWG (BS 4825 part 1) tubes</b>
9611819932	*	9611819607	*	19.00	19.05/15.75x1.60	
9611819013	*	9611819213	*	25.00	25.40/22.10x1.60	
9611819033	*	9611819233	*	38.00	38.10/34.80x1.60	
9611819063	*	9611819263	*	51.00	50.80/47.50x1.60	
9611819604	*	9611819608	*	63.50	63.50/60.20x1.60	
9611819605	*	9611819609	*	76.10	76.20/72.90x1.60	
9611819606	*	9611819610	*	101.60	101.60/97.40x2.00	
<b>BC finish SWG (BS 4825 part 1) tubes</b>						
9611819875	*	9611819882	*	19.00	19.05/15.75x1.60	
9611819876	*	9611819883	*	25.00	25.40/22.10x1.60	
9611819877	*	9611819884	*	38.00	38.10/34.80x1.60	
9611819878	*	9611819885	*	51.00	50.80/47.50x1.60	
9611819879	*	9611819886	*	63.50	63.50/60.20x1.60	
9611819880	*	9611819887	*	76.10	76.20/72.90x1.60	
9611819881	*	9611819888	*	101.60	101.60/97.40x2.00	

\* PPL prices per meter are updated monthly

BS4825 tubes are non-stock items and available on request. Minimum order quantity requirements.

Please contact your Alfa Laval contact person for further information.



Material Item No.	PPL EUR	Size	Dimension (mm)			
			OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L	
1.4404 (316L)		mm				Concentric reducer
9612927601	<b>24.83</b>	25.40x12.70	25.40/22.20x1.60	12.70/9.50x1.60	21.00	
9612927602	<b>15.51</b>	25.40x19.00	25.40/22.20x1.60	19.00/15.80x1.60	22.00	
9612927603	<b>8.80</b>	38.10x25.40	38.10/34.90x1.60	25.40/22.20x1.60	30.00	
9612927604	<b>17.83</b>	50.80x25.40	50.80/47.60x1.60	25.40/22.20x1.60	55.00	
9612927605	<b>13.29</b>	50.80x38.10	50.80/47.60x1.60	38.10/34.90x1.60	40.00	
9612927606	<b>40.41</b>	63.50x25.40	63.50/60.30x1.60	25.40/22.20x1.60	80.00	
9612927607	<b>20.81</b>	63.50x38.10	63.50/60.30x1.60	38.10/34.90x1.60	75.00	
9612927608	<b>13.69</b>	63.50x50.80	63.50/60.30x1.60	50.80/47.60x1.60	40.00	
9612927609	<b>56.84</b>	76.10x25.40	76.10/73.00x1.60	25.40/22.20x1.60	108.00	
9612927610	<b>33.95</b>	76.10x38.10	76.10/73.00x1.60	38.10/34.90x1.60	82.00	
9612927611	<b>19.60</b>	76.10x50.80	76.10/73.00x1.60	50.80/47.60x1.60	52.00	
9612927612	<b>17.23</b>	76.10x63.50	76.10/73.00x1.60	63.50/60.30x1.60	40.00	
9612927613	<b>91.54</b>	101.60x25.40	101.60/97.60x2.00	25.40/22.20x1.60	160.00	
9612927614	<b>126.87</b>	101.60x38.10	101.60/97.60x2.00	38.10/34.90x1.60	136.00	
9612927615	<b>43.15</b>	101.60x50.80	101.60/97.60x2.00	50.80/47.60x1.60	103.00	
9612927616	<b>48.19</b>	101.60x63.50	101.60/97.60x2.00	63.50/60.30x1.60	79.00	
9612927617	<b>21.48</b>	101.60x72.20	101.60/97.60x2.00	76.10/73.00x1.60	54.00	
						Eccentric reducer
9612927618	<b>29.30</b>	38.10x25.40	38.10/34.90x1.60	25.40/22.20x1.60	34.00	
9612927619	<b>36.98</b>	50.80x25.40	50.80/47.60x1.60	25.40/22.20x1.60	54.00	
9612927620	<b>21.00</b>	50.80x38.10	50.80/47.60x1.60	38.10/34.90x1.60	34.00	
9612927621	<b>65.78</b>	63.50x25.40	63.50/60.30x1.60	25.40/22.20x1.60	76.00	
9612927622	<b>42.97</b>	63.50x38.10	63.50/60.30x1.60	38.10/34.90x1.60	75.00	
9612927623	<b>20.66</b>	63.50x50.80	63.50/60.30x1.60	50.80/47.60x1.60	42.00	
9612927624	<b>66.69</b>	76.10x25.40	76.10/73.00x1.60	25.40/22.20x1.60	101.00	
9612927625	<b>53.60</b>	76.10x38.10	76.10/73.00x1.60	38.10/34.90x1.60	80.00	
9612927626	<b>38.71</b>	76.10x50.80	76.10/73.00x1.60	50.80/47.60x1.60	67.00	
9612927627	<b>29.90</b>	76.10x63.50	76.10/73.00x1.60	63.50/60.30x1.60	34.00	
9612927628	<b>117.28</b>	101.60x25.40	101.60/97.60x2.00	25.40/22.20x1.60	149.00	
9612927629	<b>79.39</b>	101.60x38.10	101.60/97.60x2.00	38.10/34.90x1.60	115.00	
9612927630	<b>81.75</b>	101.60x50.80	101.60/97.60x2.00	50.80/47.60x1.60	91.00	
9612927631	<b>82.15</b>	101.60x63.50	101.60/97.60x2.00	63.50/60.30x1.60	69.00	
9612927632	<b>50.95</b>	101.60x72.20	101.60/97.60x2.00	76.10/73.00x1.60	78.00	

NOTE: For pressure and surface, please see product leaflet.

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size mm	Dimension (mm)			
					OD/ID x t	L	R	
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>						<b>Bend 90°, Finish: OD/ID: Polished</b>
9612636501	<b>9.60</b>	9612636507	<b>10.23</b>	25.00	25.40/22.20x1.60	65.00	37.50	
9612636502	<b>11.57</b>	9612636508	<b>13.13</b>	38.00	38.10/34.90x1.60	85.00	57.00	
9612636503	<b>18.10</b>	9612636509	<b>19.34</b>	51.00	50.80/47.60x1.60	110.00	76.50	
9612636504	<b>28.56</b>	9612636510	<b>30.76</b>	63.50	63.50/60.30x1.60	135.00	95.30	
9612636505	<b>37.35</b>	9612636511	<b>40.11</b>	76.10	76.20/73.00x1.60	155.00	114.20	
9612636506	<b>71.57</b>	9612636512	<b>71.57</b>	101.60	101.60/97.60x2.00	195.00	152.50	
								<b>Bend 90°, OD/ID: Raw</b>
9611311568	<b>12.00</b>	9611311569	<b>14.40</b>	25.00	25.40/22.20x1.60	65.00	37.50	
9611311578	<b>14.40</b>	9611311579	<b>17.26</b>	38.00	38.10/34.90x1.60	85.00	57.00	
9611311588	<b>19.20</b>	9611311589	<b>23.03</b>	51.00	50.80/47.60x1.60	110.00	76.50	
9611311598	<b>26.40</b>	9611311599	<b>31.67</b>	63.50	63.50/60.30x1.60	135.00	95.30	
9611311608	<b>35.99</b>	9611311609	<b>43.19</b>	76.10	76.20/73.00x1.60	155.00	114.20	
9611311618	<b>65.98</b>	9611311619	<b>71.99</b>	101.60	101.60/97.60x2.00	195.00	152.50	
Material Item No.	PPL EUR	Size mm	Dimension (mm)					
<b>1.4404 (316L)</b>			OD/ID x t	L <sub>1</sub>	L <sub>2</sub>			
9612636607	<b>10.23</b>	25.00	25.40/22.20x1.60	108.10	62.70			
9612636608	<b>14.40</b>	38.00	38.10/34.90x1.60	127.20	79.60			
9612636609	<b>19.34</b>	51.00	50.80/47.60x1.60	146.30	96.00			
9612636610	<b>28.80</b>	63.50	63.50/60.30x1.60	165.80	113.60			
9612636611	<b>41.41</b>	76.10	76.20/73.00x1.60	185.00	130.50			
9612636612	<b>77.99</b>	101.60	101.60/97.60x2.00	223.10	164.30			

NOTE: For pressure and surface, please see product leaflet.

Material Item No.	PPL EUR	Size	Dimension (mm)			Diagram
			OD/ID x t	L		
<b>1.4404 (316L)</b>		<b>mm</b>	<b>OD/ID x t</b>	<b>L</b>		<b>Tee, OD/ID: Polished</b>
9612636707	12.58	25.00	25.40/22.20x1.60	44.00		
9612636708	17.86	38.00	38.10/34.90x1.60	64.00		
9612636709	23.82	51.00	50.80/47.60x1.60	89.00		
9612636710	33.32	63.50	63.50/60.30x1.60	114.00		
9612636711	66.29	76.10	76.20/73.00x1.60	134.00		
9612636712	121.97	101.60	101.60/97.60x2.00	195.00		
						<b>Tee, OD/ID: Raw</b>
9611311699	21.10	38.00	38.10/34.90x1.60	64.00		
9611311729	58.94	76.10	76.20/73.00x1.60	134.00		
<b>1.4404 (316L)</b>		<b>mm</b>	<b>OD/ID x t</b>	<b>L<sub>1</sub></b>	<b>L<sub>2</sub></b>	<b>Tee, short. OD/ID: Polished</b>
9612158243	13.71	25.00	25.40/22.20x1.60	44.00	27.00	
9612158244	18.90	38.00	38.10/34.90x1.60	64.00	40.60	
9612158245	24.08	51.00	50.80/47.60x1.60	89.00	54.30	
9612158246	53.59	63.50	63.50/60.30x1.60	114.00	67.00	
9612158247	47.06	76.10	76.20/73.00x1.60	134.00	81.20	
9612158248	103.07	101.60	101.60/97.60x2.00	195.00	107.00	

NOTE: For pressure and surface, please see product leaflet.

Material Item No.	PPL EUR	Size	Dimension (mm)				Reducing tee
			OD <sub>1</sub> /ID <sub>1</sub> x t <sub>1</sub>	OD <sub>2</sub> /ID <sub>2</sub> x t <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	
<b>1.4401 (316)</b>		mm					
9612927692	<b>34.53</b>	38.10/25.40	38.10/34.90x1.60	25.40/22.20x1.60	75.00	40.60	<p>The diagram shows a side view of a reducing tee. It has two horizontal branches of length L<sub>1</sub> and one vertical branch of length L<sub>2</sub>. The outer diameter of the horizontal branches is labeled as OD, and the outer diameter of the vertical branch is labeled as OD. A small detail of a chamfered edge is shown at the bottom right with a dimension of 0.352-0.08.</p>
9612927694	<b>65.23</b>	50.80/25.40	50.80/47.60x1.60	25.40/22.20x1.60	89.00	54.30	
9612927695	<b>74.59</b>	50.80/38.10	50.80/47.60x1.60	38.10/34.90x1.60	89.00	54.30	
9612927697	<b>61.36</b>	63.50/25.40	63.50/60.30x1.60	25.40/22.20x1.60	95.00	67.00	
9612927698	<b>61.36</b>	63.50/38.10	63.50/60.30x1.60	38.10/34.90x1.60	95.00	67.00	
9612927699	<b>77.94</b>	63.50/50.80	63.50/60.30x1.60	50.80/47.60x1.60	95.00	67.00	
9612927702	<b>115.83</b>	76.10/25.40	76.10/73.00x1.60	25.40/22.20x1.60	95.00	81.20	
9612927703	<b>65.29</b>	76.10/38.10	76.10/73.00x1.60	38.10/34.90x1.60	95.00	81.20	
9612927704	<b>65.29</b>	76.10/50.80	76.10/73.00x1.60	50.80/47.60x1.60	95.00	81.20	
9612927705	<b>130.22</b>	76.10/63.50	76.10/73.00x1.60	63.50/60.30x1.60	95.00	81.20	
9612927707	<b>186.51</b>	101.60/25.40	101.60/97.60x2.00	25.40/22.20x1.60	127.00	107.00	
9612927708	<b>91.25</b>	101.60/38.10	101.60/97.60x2.00	38.10/34.90x1.60	127.00	107.00	
9612927709	<b>91.25</b>	101.60/50.80	101.60/97.60x2.00	50.80/47.60x1.60	127.00	107.00	
9612927710	<b>91.25</b>	101.60/63.50	101.60/97.60x2.00	63.50/60.30x1.60	127.00	107.00	
9612927711	<b>91.25</b>	101.60/76.10	101.60/97.60x2.00	76.10/73.00x1.60	127.00	107.00	
9612927712	<b>180.14</b>	152.40/50.80	152.4/148.4x2.00	50.80/47.60x1.60	154.00	156.00	
9612927713	<b>532.55</b>	152.40/63.50	152.4/148.4x2.00	63.50/60.30x1.60	154.00	156.00	
9612927714	<b>266.34</b>	152.40/76.10	152.4/148.4x2.00	76.10/73.00x1.60	154.00	156.00	
9612927715	<b>254.79</b>	152.40/101.60	152.4/148.4x2.00	101.60/97.60x2.00	154.00	156.00	

Material Item No.	PPL EUR	Size	Dimension (mm)					
			OD/ID x t	A	B	C		D
<b>1.4301 (304)</b>		<b>mm</b>						<b>Nut (hexagon)</b>
9611300053	<b>16.40</b>	25.00		46.00	30.00	38.30x1/8	30.50	
9611300054	<b>23.42</b>	38.00		61.00	30.00	51.80x1/8	43.50	
9611300055	<b>22.98</b>	51.00		76.00	30.00	65.30x1/8	57.00	
9611300056	<b>48.59</b>	63.50		91.00	30.00	78.80x1/8	70.00	
9611300057	<b>70.32</b>	76.10		106.50	30.00	92.30x1/8	83.00	
9611303970	<b>104.16</b>	101.60		133.40	35.00	126.80x1/6	112.00	
<b>1.4404 (316L)</b>		<b>mm</b>						<b>Male part</b>
9611303810	<b>14.57</b>	25.00	25.80/22.20x1.80		21.50	37.10x1/8		
9611303811	<b>15.59</b>	38.00	38.50/34.90x1.80		21.50	50.60x1/8		
9611303812	<b>17.61</b>	51.00	51.20/47.60x1.80		21.50	64.10x1/8		
9611303813	<b>22.39</b>	63.50	63.90/60.30x1.80		21.50	77.60x1/8		
9611303814	<b>48.48</b>	76.10	76.60/73.00x1.80		21.50	91.10x1/8		
9611303815	<b>53.99</b>	101.60	102.10/97.30x2.40		30.00	125.90x1/6		
								<b>Liner</b>
9611309520	<b>10.41</b>	25.00	25.80/22.20x1.80	33.80	21.50			
9611309521	<b>12.00</b>	38.00	38.50/34.90x1.80	47.00	21.50			
9611309522	<b>14.40</b>	51.00	51.20/47.60x1.80	60.50	21.50			
9611309523	<b>24.23</b>	63.50	63.90/60.30x1.80	74.00	21.50			
9611309524	<b>30.05</b>	76.10	76.60/73.00x1.80	87.50	21.50			
9611303835	<b>38.85</b>	101.60	102.10/97.30x2.40	120.70	30.00			
<b>1.4404 (316L)</b>		<b>mm</b>						<b>Blank</b>
9611308290	<b>18.62</b>	25.00		33.80	10.50	29.00		
9611308291	<b>20.39</b>	38.00		47.00	10.50	42.50		
9611308292	<b>21.60</b>	51.00		60.50	10.50	56.00		
9611308293	<b>25.61</b>	63.50		74.00	10.50	69.70		
9611308294	<b>33.00</b>	76.10		87.50	10.50	82.30		

NOTE: Seal rings - please see later this chapter.

NOTE: For pressure and surface, please see product leaflet.

Product code: 5041

1.3

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)			Seal ring
						mm	A	B	D	
<b>NBR</b>						<b>EPDM</b>				
9611990953	2.80	9611991390	4.50			25.00	32.50	6.00	23.60	
9611990954	5.88	9611991392	4.67			38.00	46.00	6.00	36.60	
9611990955	6.73	9611991393	4.73			51.00	59.50	6.00	49.60	
9611990956	8.52	9611991394	4.78			63.50	73.20	6.00	61.30	
9611990957	9.01	9611991395	5.57			76.10	86.50	6.00	73.90	
9611990959	12.29	9611991397	13.59			101.60	112.50	6.00	98.60	
<b>PTFE</b>										
9611991424	9.12					25.00	32.50	6.00	22.80	
9611991426	9.32					38.00	46.00	6.00	35.90	
9611991427	9.63					51.00	59.90	6.00	48.90	
9611991428	15.97					63.50	73.00	6.00	60.90	
9611991429	18.38					76.10	86.50	6.00	73.30	
9611993254	29.99					101.60	119.70	6.20	97.70	
<b>NBR</b>						<b>EPDM</b>		<b>FPM</b>		
3131900311	3.48	3131900314	8.38	3131900313	11.80	25.00	25.50	7.00	32.50	
3131900321	3.72	3131900324	3.30	3131900323	17.10	38.00	38.00	7.00	46.00	
3131900331	3.97	3131900334	19.75	3131900333	19.85	51.00	51.00	7.00	59.50	
3131900341	4.21	3131900344	4.30	3131900343	21.35	63.50	63.00	7.00	73.00	
3131900351	4.50	3131900354	5.42	3131900353	21.72	76.10	75.50	7.00	86.50	
9611991477	5.40	9611993692	32.67	**		101.60	110.00	9.50	119.00	

\*\*Not available

Product code: 5047

Finish: Machined  
Thread: Triangular type

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)				
1.4301 (304)				mm	A	B	C	D	Nut
9611300575	12.00			25.00	51.00	22.00	46.30x1/8	33.30	
9611300576	16.73			38.00	65.00	22.00	59.00x1/8	46.00	
9611300577	22.20			51.00	79.00	22.00	73.30x1/6	58.70	
9611300578	33.84			63.50	92.00	22.00	86.00x1/6	71.40	
9611300579	39.56			76.10	105.00	22.00	98.70x1/6	84.10	
9611300521	50.71			101.60	130.00	22.00	124.40x1/6	110.00	
1.4301 (304)		1.4404 (316L)		mm	OD/ID x t		C	B	Male part
9611303880	14.40	9611303890	17.26	25.00	25.80/22.20x1.80		45.70x1/8	27.00	
9611303881	16.80	9611303891	20.15	38.00	38.50/34.90x1.80		58.40x1/8	27.00	
9611303882	21.60	9611303892	25.93	51.00	51.20/47.60x1.80		72.70x1/6	27.00	
9611303883	29.99	9611303893	35.99	63.50	63.90/60.60x1.80		85.40x1/6	27.00	
9611303884	33.60	9611303894	40.32	76.10	76.60/73.00x1.80		98.10x1/6	27.00	
9611303885	45.59	9611303895	54.71	101.60	102.00/97.60x2.20		123.80x1/6	31.80	
		1.4404 (316L)		mm	OD/ID x t		A	B	Liner
		9611303991	9.69	25.00	25.80/22.20x1.80		41.30	12.70	
		9611303992	10.80	38.00	38.50/34.90x1.80		54.00	12.70	
		9611303993	12.00	51.00	51.20/47.60x1.80		66.70	12.70	
		9611303994	15.59	63.50	63.90/60.60x1.80		79.40	12.70	
		9611303995	21.85	76.10	76.60/73.00x1.80		92.10	12.70	
		9611303996	26.68	101.60	102.00/97.60x2.20		117.80	12.70	

NOTE: Seal rings - please see later this chapter.

NOTE: For pressure and surface, please see product leaflet.

Material Item No.	PPL EUR	Size mm	Dimension (mm)			Blank
			OD/ID x t	A	B	
1.4404 (316L)		mm				
9611330629	7.37	25.00		41.30	8.70	
9611330630	8.68	38.00		54.00	8.70	
9611330631	9.60	51.00		66.70	8.70	
9611330632	14.97	63.50		79.40	8.70	
9611330633	14.78	76.10		92.10	8.70	
9611330634	23.01	101.60		117.80	8.70	

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size mm	Dimension (mm)		Seal ring
NBR		EPDM		FPM			A	B	
9611990145	2.86	9611992821	3.74	9611992827	7.89	25.00	33.30	6.60	
9611990146	3.32	9611992822	3.82	9611992828	10.00	38.00	46.00	6.60	
9611990147	3.38	9611992823	4.52	9611992829	10.27	51.00	58.70	6.60	
9611990148	3.53	9611992824	5.54	9611992830	10.43	63.50	71.40	6.60	
9611990149	3.58	9611992825	5.74	9611992831	11.30	76.10	84.10	6.60	
9611990550	8.72	9611992826	10.79	9611992832	20.98	101.60	109.50	6.60	

NOTE: For pressure and surface, please see product leaflet.



Material Item No.	PPL EUR	Size	Dimension (mm)			Male part
			OD/ID x t	A	B	
<b>1.4404 (316L)</b>		<b>mm</b>				
9612512905	<b>16.71</b>	25.40	25.40/22.20x1.60	40.00x1/6	15.00	
9612512906	<b>23.54</b>	38.00	38.00/34.80x1.60	60.00x1/6	20.00	
9612512907	<b>22.56</b>	51.00	51.00/47.80x1.60	70.00x1/6	20.00	
9612512908	<b>37.30</b>	76.10	76.10/72.10x2.00	98.00x1/6	24.00	
<b>1.4404 (316L)</b>		<b>mm</b>				<b>Liner</b>
9612513005	<b>10.78</b>	25.40	25.40/22.20x1.60	35.50	7.50	
9612513006	<b>13.61</b>	38.00	38.00/34.80x1.60	55.00	9.00	
9612513007	<b>16.63</b>	51.00	51.00/47.80x1.60	65.00	9.00	
9612513008	<b>27.06</b>	76.10	76.10/72.10x2.00	93.00	10.00	
						<b>Liner, long.</b>
9612513305	<b>16.71</b>	25.40	25.40/22.20x1.60	35.50	17.00	
9612513306	<b>20.59</b>	38.00	38.00/34.80x1.60	55.00	20.00	
9612513307	<b>22.79</b>	51.00	51.00/47.80x1.60	65.00	20.00	
9612513308	<b>35.42</b>	76.10	76.10/72.10x2.00	93.00	30.00	

NOTE: For nuts and seal rings, please see under SMS fittings.

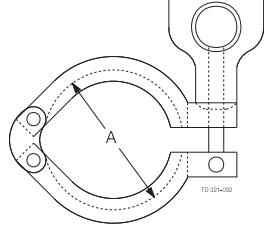
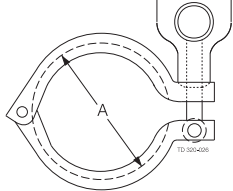
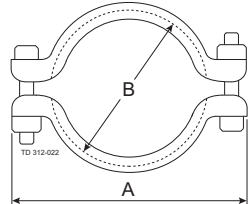
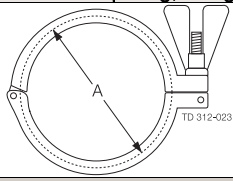
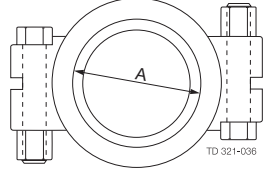
NOTE: For pressure and surface, please see product leaflet.

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)			
<b>1.4307 (304L)</b>		<b>1.4404 (316L)</b>		mm	OD/ID x t		A B	<b>Clamp ferrule</b>
9611340170	10.17	9611340180	12.00	25.00	25.70/22.20x1.75		50.40 12.70	
9611340171	14.22	9611340181	15.59	38.00	38.40/34.90x1.75		50.40 12.70	
9611340172	15.01	9611340182	17.99	51.00	51.10/47.50x1.80		63.90 12.70	
9611340173	18.59	9611340183	31.19	63.50	63.80/60.20x1.80		77.40 12.70	
9611340174	24.01	9611340184	33.60	76.10	76.50/72.90x1.80		90.90 12.70	
9611340175	44.39	9611340185	53.99	101.60	101.90/97.40x2.25		118.90 15.90	
660016	287.96	9634049938	335.93	154.00	152.70/146.90x 2.90		166.70 38.10	
		<b>1.4404 (316L)</b>		mm	A	B	C D	<b>Clamp ferrule</b>
		610205	16.89	12.70	9.40	12.70	25.40 12.70	
		610238	16.89	19.00	15.80	19.00	25.40 12.70	
		9613417203	13.81	25.40	22.20	25.40	50.50 21.50	
		9613417204	13.81	38.10	34.90	38.10	50.50 21.50	
		9613417205	17.16	51.00	47.60	50.80	64.00 21.50	
		9613417206	24.01	63.50	60.30	63.50	77.50 21.50	
		9613417207	29.90	76.10	73.00	76.20	91.00 21.50	
		9613417208	41.99	101.60	97.60	101.60	119.00 21.50	
								<b>Blank</b>
9611340590	14.57	9611340600	16.18	25.00	50.40	6.40		
9611340590	14.57	9611340600	16.18	38.00	50.40	6.40		
9611340591	18.54	9611340601	20.61	51.00	63.90	6.40		
9611340592	21.24	9611340602	23.62	63.50	77.40	6.40		
9611340593	28.30	9611340603	31.45	76.10	90.90	6.40		
210506	59.93	9611340604	50.84	101.60	118.90	6.40		
261220	332.36	260237	415.47	154.00	166.80	11.10		

NOTE: Seal rings - please see later this chapter.

NOTE: For pressure and surface, please see product leaflet.

Product code: 5049

Material Item No.	PPL EUR	Size	Dimension (mm)			
1.4301 (304)		mm	A	B		
212195	41.13	25.00/38.00	54.00			
212196	46.48	51.00	67.50			
212197	56.76	63.50	81.00			
212198	61.69	76.10	94.50			
212199	74.84	101.60	122.60			
210129	193.86	152.40	169.90			
<b>A13MHHM Clamp ring (Finger nut)</b>						
211053	30.02	25.00/38.00	54.00			
211054	36.59	51.00	67.10			
211055	42.35	63.50	81.00			
211056	46.07	76.10	94.50			
211057	55.92	101.60	122.20			
211058	135.72	152.40	169.90			
<b>Clamp ring (Allen Screws)</b>						
9611311051	13.47	25.00	85.50	54.50		
9611311051	13.47	38.00	85.50	54.50		
9611311052	13.47	51.00	99.00	68.00		
9611311053	13.89	63.50	112.50	81.50		
9611311054	18.06	76.10	126.00	95.00		
9611311055	18.32	101.60	154.00	123.00		
<b>Clamp ring, wingnut</b>						
9611994453	34.71	25.00/38.00	54.00			
9611994454	42.28	51.00	67.50			
9611994455	57.60	63.50	81.00			
9611994456	65.63	76.10	94.50			
9611994457	74.39	101.60	122.60			
Material Item number	PPL EUR	Size DN/OD	Dimension A			
304		Inch	mm	Inch	mm	
9615265201	24.45	1/2 - 3/4	12.70- 19.00	1.04	26.40	
9615265301	63.35	1 - 1 1/2	25.40 - 38.10	2.05	52.00	
9615265401	78.96	2	50.80	2.58	65.50	
9615265501	87.19	2 1/2	63.50	3.11	79.00	
9615265601	106.91	3	76.20	3.64	92.50	
9615265701	119.69	4	101.60	4.73	120.30	
9634048982	239.12	6	152.40	6.63	168.40	

NOTE: Seal rings - please see later this chapter.

NOTE: For pressure and surface, please see product leaflet.

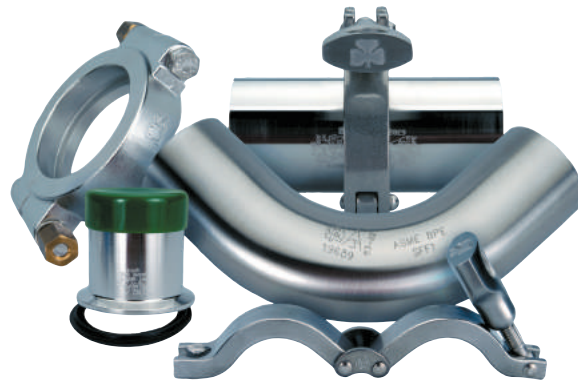
Product code: 5045

1.3

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	Dimension (mm)			
EPDM		NBR		FPM		mm	A	B	D	Seal ring ISO 2852
9611991358	3.25	9611990765	2.56	9611991890	35.84	25.00	52.70	5.50	22.80	
9611991359	3.25	9611990766	2.56	9611991891	35.84	38.00	52.70	5.50	35.80	
9611991360	3.79	9611990767	3.11	9611991892	41.45	51.00	66.20	5.50	48.80	
9611991361	4.13	9611990768	3.25	9611991893	59.44	63.50	79.70	5.50	60.50	
9611991362	4.64	9611990769	5.29	9611991894	71.51	76.10	93.20	5.50	73.10	
9611991363	8.42	9611990770	6.89	9611991895	87.88	101.60	121.20	5.50	97.80	
290131	21.78					154.00	169.00	5.00	147.00	
PTFE						mm	A	B	D	Seal ring, (Modified ISO 2852, type A)
9611991403	17.79					25.00	52.70	5.10	22.60	
9611991404	19.32					38.00	52.70	5.10	35.60	
9611991405	21.20					51.00	66.20	5.10	48.60	
9611991406	22.33					63.50	79.70	5.10	60.30	
9611991407	35.51					76.10	93.20	5.10	72.90	
9611991408	35.91					101.60	121.20	5.10	97.60	

# 1.4 Tri-Clover® Hygienic Installation Material

The Tri-Clover® Hygienic installation material in this section is with dimensions according to ASME BPE.



## Price lists

Tri-Clover® Hygienic Tubes	1.4.150
Tri-Clover® Hygienic Bends	1.4.151
Tri-Clover® Hygienic Tees	1.4.155
Tri-Clover® Hygienic Reducing Tees	1.4.156
Tri-Clover® Hygienic Crosses	1.4.157
Tri-Clover® Hygienic Reducers	1.4.158
Tri-Clover® Hygienic Clamp Ferrule	1.4.159
Tri-Clover® Hygienic Clamp Ferrules and End Caps	1.4.160
Tri-Clover® Hygienic Thermometer Caps	1.4.161
Clamp Rings for Clamp Union Parts	1.4.162
Tri-Clover® Hygienic Gaskets	1.4.164
Tri-Clover® Hygienic Adapters	1.4.167

1.4

Please see Tri-Clover® UltraPure tubes

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN/OD		Dimension A		Diagram
				Inch	mm	Inch	mm	
								<b>B2S</b>
<b>304</b>		<b>316L</b>						
9634000308	<b>31.82</b>	9634000322	<b>47.30</b>	1	25.40	3.00	76.20	
9634000309	<b>32.47</b>	9634000323	<b>47.30</b>	1 1/2	38.10	3.75	95.30	
9634000310	<b>37.53</b>	9634000324	<b>60.17</b>	2	50.80	4.75	120.70	
9634000311	<b>53.37</b>	9634000325	<b>95.99</b>	2 1/2	63.50	5.50	139.70	
9634000312	<b>72.37</b>	9634000326	<b>125.80</b>	3	76.20	6.25	158.80	
9634000313	<b>150.03</b>	9634000327	<b>170.60</b>	4	101.60	8.00	203.20	
**		9634048644	<b>1145.74</b>	6	152.40	11.50	292.10	
								<b>L2S</b>
240403	<b>38.47</b>	245904	<b>36.74</b>	1	25.40	2.06	52.40	
241403	<b>36.51</b>	240015	<b>38.82</b>	1 1/2	38.10	2.94	74.60	
242403	<b>41.47</b>	240034	<b>51.26</b>	2	50.80	4.06	103.20	
243403	<b>59.24</b>	245966	<b>76.90</b>	2 1/2	63.50	5.19	131.80	
244403	<b>86.87</b>	240012	<b>117.86</b>	3	76.20	6.31	160.30	
								<b>2WCL</b>
060487	<b>23.66</b>	060589	<b>28.45</b>	1	25.40	1.50	38.10	
060084	<b>22.02</b>	060590	<b>30.45</b>	1 1/2	38.10	2.25	57.20	
060033	<b>29.38</b>	060421	<b>39.21</b>	2	50.80	3.00	76.20	
060185	<b>47.97</b>	060025	<b>64.80</b>	2 1/2	63.50	3.75	95.30	
060488	<b>59.72</b>	060281	<b>83.32</b>	3	76.20	4.50	114.30	
060275	<b>124.82</b>	060591	<b>152.34</b>	4	101.60	6.00	152.40	
060293	<b>599.89</b>	060268	<b>719.88</b>	6	152.40	9.00	228.60	

\*\* Not available

NOTE: For pressure and surface, please see product leaflet.



1.4

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN/OD		Dimension A		
				Inch	mm	Inch	mm	
								<b>B2KS</b>
<b>304</b>		<b>316L</b>						
9634000508	<b>30.81</b>	9634000522	<b>48.50</b>	1	25.40	2.25	57.20	
9634000509	<b>27.03</b>	9634000523	<b>48.50</b>	1½	38.10	2.50	63.50	
9634000510	<b>32.19</b>	9634000524	<b>57.03</b>	2	50.80	3.00	76.20	
9634000511	<b>41.09</b>	9634000525	<b>66.92</b>	2½	63.50	3.38	85.70	
9634000512	<b>68.75</b>	9634000526	<b>79.60</b>	3	76.20	3.63	92.10	
9634000513	<b>112.17</b>	9634000527	<b>138.43</b>	4	101.60	4.50	114.30	
**		9634048643	<b>1256.37</b>	6	152.40	6.25	158.80	
								<b>2WK</b>
		060728	<b>47.99</b>	1	25.40	0.63	15.90	
		060729	<b>47.99</b>	1½	38.10	0.94	23.80	
		060730	<b>49.98</b>	2	50.80	1.25	31.80	
		060731	<b>57.35</b>	2½	63.50	1.56	39.70	
		060283	<b>66.92</b>	3	76.20	1.88	47.60	
		060732	<b>137.97</b>	4	101.60	2.50	63.50	
		9634050000	<b>599.89</b>	6	152.40	3.75	95.30	

\*\* Not available

NOTE: For pressure and surface, please see product leaflet.





Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size		Dimension				
				DN/OD		A		B		
304		316L		Inch	mm	Inch	mm	Inch	mm	L2CM - #7 (3A)
<b>Product code: 5009</b>										
240226	42.44	246076	69.80	1	25.40	2.06	52.40	2.56	65.10	
241229	37.38	246038	69.80	1 1/2	38.10	2.94	74.60	3.44	87.30	
242227	47.51	245920	88.60	2	50.80	4.06	103.20	4.56	115.90	
243229	81.18	246100	179.97	2 1/2	63.50	5.19	131.80	5.69	144.50	
244229	94.96	246096	191.96	3	76.20	6.31	160.30	6.81	173.00	
245210	172.79	242068	287.96	4	101.60	8.31	211.10	8.94	227.00	
<b>Product code: 5010</b>										
9634002915	40.71	9634002936	69.43	1	25.40	2.00	50.80			
9634002916	35.77	9634002937	69.43	1 1/2	38.10	2.75	69.90			
9634002917	47.06	9634002938	87.05	2	50.80	3.50	88.90			
9634002918	76.50	9634002939	140.38	2 1/2	63.50	4.25	108.00			
9634002919	88.23	9634002940	161.98	3	76.20	5.00	127.00			
9634002920	195.38	9634002941	313.14	4	101.60	6.63	168.30			
**		9634050009	1475.35	6	152.40	10.50	266.70			
304				Inch	mm	Inch	mm	Inch	mm	2CMP-31MP - #7 (3A)
211088	103.21			2 x 1	50.80x25.40	2.00	50.80	2.00	50.80	
210007	89.39			2 x 1 1/2	50.80x38.10	2.75	69.90	2.75	69.90	
210008	72.90			2 1/2 x 2	63.50x50.80	3.50	88.90	3.50	88.90	
210033	91.20			3 x 2	76.20x50.80	3.50	88.9	3.50	88.90	
210058	115.33			3 x 2 1/2	76.20x63.50	4.25	108.00	4.25	108.00	
210061	214.57			4 x 3	101.60x76.20	5.00	127.00	5.13	130.20	

\*\* Not available

NOTE: For pressure and surface, please see product leaflet.



1.4

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size		Dimension				
				DN/OD		A		B		
304		316L		Inch	mm	Inch	mm	Inch	mm	B2KMW (3A)
<b>Product code: 5009</b>										
		*		1	25.40	2.25	57.20	1.13	28.60	
		*		1½	38.10	2.50	63.50	1.44	36.50	
		*		2	50.80	3.00	76.20	1.75	44.50	
		*		2½	63.50	3.38	85.70	2.06	52.40	
		*		3	76.20	3.63	92.10	2.38	60.30	
		*		4	101.60	4.50	114.30	3.13	79.40	
<b>Product code: 5010</b>										
										B2KMP - #7 (3A)
9634003115	60.00	9634003136	104.59	1	25.40	1.13	28.60			
9634003116	45.77	9634003137	81.59	1½	38.10	1.44	36.50			
9634003117	57.58	9634003138	93.58	2	50.80	1.75	44.50			
9634003118	89.99	9634003139	117.58	2½	63.50	2.06	52.40			
9634003119	106.78	9634003140	177.56	3	76.20	2.38	60.30			
9634003120	261.06	9634003141	317.94	4	101.60	3.13	79.40			
**		9634003142	737.69	6	152.40	5.25	133.40			

\* On request

\*\* Not available

NOTE: For pressure and surface, please see product leaflet.



Material	PPL	Material	PPL	Size		Dimension		Dimension		
Item No.	EUR	Item No.	EUR	DN/OD		A		B		
304		316L		Inch	mm	Inch	mm	Inch	mm	B7WWW (3A)
<b>Product code: 5029</b>										
9634000708	40.72	9634000722	68.09	1	25.40	2.13	54.00			
9634000709	37.38	9634000723	68.09	1 1/2	38.10	2.38	60.30			
9634000710	43.74	9634000724	79.61	2	50.80	2.88	73.00			
9634000711	57.35	9634000725	98.07	2 1/2	63.50	3.13	79.40			
9634000712	73.84	9634000726	136.15	3	76.20	3.38	85.70			
9634000713	110.76	9634000727	199.58	4	101.60	4.13	104.80			
**		9634000728	1976.01	6	152.40	5.63	142.90			
<b>304L</b>										
9613466607	31.37	9613466619	52.25	1	25.40	1.13	28.60			
9613466608	48.69	9613466620	51.77	1 1/2	38.10	1.66	42.10			
9613466609	50.45	9613466621	59.15	2	50.80	2.06	52.40			
9613466610	62.77	9613466622	71.31	2 1/2	63.50	2.34	59.50			
9613466611	87.07	9613466623	104.49	3	76.20	2.59	65.90			
9613466612	117.67	9613466624	170.47	4	101.60	3.44	87.30			
<b>304</b>										
<b>B7WWW (3A)</b>										
9634002715	64.21	9634002736	31.63	1	25.40	2.13	54.00	2.63	66.70	
9634002716	67.51	9634002737	95.99	1 1/2	38.10	2.38	60.30	2.88	73.00	
9634002717	159.39	9634002738	105.58	2	50.80	2.88	73.00	3.38	85.70	
9634002718	81.49	9634002739	93.51	2 1/2	63.50	3.13	79.40	3.63	92.10	
9634002719	195.57	9634002740	116.76	3	76.20	3.38	85.70	3.88	98.40	
9634002720	271.28			4	101.60	4.13	104.80	4.75	120.70	
<b>Product code: 5030</b>										
<b>B7MP</b>										
9634003315	81.59	9634003336	116.28	1	25.40	2.63	66.70			
9634003316	67.19	9634003337	92.32	1 1/2	38.10	2.88	73.00			
9634003317	76.80	9634003338	110.37	2	50.80	3.38	85.70			
9634003318	107.97	9634003339	155.97	2 1/2	63.50	3.63	92.10			
9634003319	215.96	9634003340	275.95	3	76.20	3.88	98.40			
9634003320	383.93	9634003341	491.92	4	101.60	7.13	181.00			
**		9634003342	1256.84	6	152.40	7.13	181.00			

\* On request

\*\* Not available

NOTE: For pressure and surface, please see product leaflet.



Material	PPL	Material	PPL	Size		Dimension		Dimension		
Item No.	EUR	Item No.	EUR	DN/OD		A		B		
304		316L		Inch	mm	Inch	mm	Inch	mm	B7RWWW
<b>Product code: 5029</b>										
9634001217	70.04	9634001249	115.30	1 1/2 x 1	38.10x25.40	2.38	60.30	2.38	60.30	
9634001218	81.94	9634001250	153.31	2 x 1	50.80x25.40	2.88	73.00	2.63	66.70	
9634001219	81.92	9634001251	160.95	2 x 1 1/2	50.80x38.10	2.88	73.00	2.63	66.70	
9634001220	124.12	9634001252	180.62	2 1/2 x 1	63.50x25.40	3.13	79.40	2.88	73.00	
9634001221	120.01	9634001253	174.68	2 1/2 x 1 1/2	63.50x38.10	3.13	79.40	2.88	73.00	
9634001222	124.12	9634001254	174.68	2 1/2 x 2	63.50x50.80	3.13	79.40	2.88	73.00	
9634001223	151.14	9634001255	254.37	3 x 1	76.20x25.40	3.38	85.70	2.88	79.40	
9634001224	146.17	9634001256	245.99	3 x 1 1/2	76.20x38.10	3.38	85.70	3.13	79.40	
9634001225	141.90	9634001257	245.95	3 x 2	76.20x50.80	3.38	85.70	3.13	79.40	
9634001226	151.14	9634001258	245.99	3 x 2 1/2	76.20x63.50	3.38	85.70	3.13	79.40	
9634001227	157.28	9634001259	299.44	4 x 1	101.60x25.40	4.13	104.80	3.13	92.10	
9634001228	152.12	9634001260	324.86	4 x 1 1/2	101.60x38.10	4.13	104.80	3.63	92.10	
9634001229	157.28	9634001261	360.04	4 x 2	101.60x50.80	4.13	104.80	3.88	98.40	
9634001230	153.60	9634001262	360.04	4 x 2 1/2	101.60x63.50	4.13	104.80	3.88	98.40	
9634001231	153.60	9634001263	372.32	4 x 3	101.60x76.20	4.13	104.80	3.88	98.40	
**				6 x 1/2	152.40x12.70	5.63	142.90	5.13	130.20	
**		*		6 x 3/4	152.40x19.00	5.63	142.90	5.13	130.20	
**		*		6 x 1	152.40x25.40	5.63	142.90	5.13	130.20	
**		*		6 x 1 1/2	152.40x38.10	5.63	142.90	5.13	130.20	
**		9634048305	1028.62	6 x 2	152.40x50.80	5.63	142.90	5.13	130.20	
**		*		6 x 2 1/2	152.40x63.50	5.63	142.90	5.13	130.20	
**		9634048307	1300.02	6 x 3	152.40x76.20	5.63	142.90	5.13	130.20	
**		9634001264	1213.03	6 x 4	152.40x101.60	5.63	142.90	5.13	130.20	
<b>Product code: 5030</b>										
										<b>B7RMP - #7 (3A)</b>
9634003834	129.77	9634003882	221.97	2 x 1	50.80x25.40	3.38	85.70	3.13	79.40	
9634003835	158.49	9634003883	286.28	2 x 1 1/2	50.80x38.10	3.38	85.70	3.13	79.40	
9634003838	174.48	9634003886	93.45	2 1/2 x 2	63.50x50.80	3.63	92.10	3.38	85.70	
9634003841	361.25	9634003889	513.64	3 x 2	76.20x50.80	3.88	98.40	3.88	98.40	
9634003842	138.75	9634003890	594.99	3 x 2 1/2	76.20x63.50	3.88	98.40	3.88	98.40	
9634003844	371.79			4 x 1 1/2	101.60x38.10	4.75	120.70	4.13	104.80	
9634003845	500.14	9634003893	618.79	4 x 2	101.60x50.80	4.75	120.70	4.38	111.10	
9634003847	175.57			4 x 3	101.60x76.20	4.75	120.70	4.38	111.10	

\* On request

\*\* Not available

NOTE: For pressure and surface, please see product leaflet.



Material	PPL	Material	PPL	Size		Dimension		
Item No.	EUR	Item No.	EUR	DN/OD		A		
304		316L		Inch	mm	Inch	mm	
<b>Product code: 5029</b>								
9634000908	<b>113.99</b>	9634000922	<b>170.42</b>	1	25.40	2.13	54.00	
9634000909	<b>155.97</b>	9634000923	<b>195.91</b>	1 1/2	38.10	2.38	60.30	
9634000910	<b>145.19</b>	9634000924	<b>202.22</b>	2	50.80	2.88	73.00	
9634000911	<b>113.99</b>	9634000925	<b>235.00</b>	2 1/2	63.50	3.13	79.40	
9634000912	<b>209.97</b>	9634000926	<b>328.14</b>	3	76.20	3.38	85.70	
9634000913	<b>293.95</b>	9634000927	<b>418.50</b>	4	101.60	4.13	104.80	
<b>Product code: 5030</b>								
<b>B9MP</b>								
9634003515	<b>113.06</b>	9634003536	<b>172.19</b>	1	25.40	2.63	66.70	
9634003516	<b>146.29</b>	9634003537	<b>244.21</b>	1 1/2	38.10	2.88	73.00	
9634003517	<b>241.03</b>	9634003538	<b>293.84</b>	2	50.80	3.38	85.70	
		9634003539	<b>267.17</b>	2 1/2	63.50	3.63	92.10	
9634003519	<b>110.43</b>	9634003540	<b>478.27</b>	3	76.20	3.88	98.40	
9634003520	<b>187.49</b>			4	101.60	4.75	120.70	

NOTE: For pressure and surface, please see product leaflet.



Material Item No.	PPL EUR	Size DN/OD		Dimension A			
		Inch	mm	Inch	mm		
<b>316L</b>						<b>L31</b>	
<b>Product code: 5069</b>							
246214	44.96	1 1/2 x 1	38.10x25.40	2.00	50.80		
9634047934	58.27	2 x 1	50.80x25.40	4.00	101.60		
240030	39.94	2 x 1 1/2	50.80x38.10	2.00	50.80		
240962	62.65	2 1/2 x 1 1/2	63.50x38.10	4.00	101.60		
246005	54.95	2 1/2 x 2	63.50x50.80	2.00	50.80		
246129	241.86	3 x 1 1/2	76.20x38.10	6.00	152.40		
240029	79.92	3 x 2	76.20x50.80	4.00	101.60		
246036	89.92	3 x 2 1/2	76.20x63.50	2.00	50.80		
240963	277.32	4 x 2	101.60x50.80	8.00	203.20		
240964	158.37	4 x 2 1/2	101.60x63.50	6.00	152.40		
246067	121.17	4 x 3	101.60x76.20	4.00	101.60		
9634049355	599.89	6 x 3	152.40x76.20	5.50	139.70		
9634049356	575.89	6 x 4	152.40x101.60	5.50	139.70		
							<b>L32</b>
240976	59.93	1 1/2 x 1	38.10x25.40	2.00	50.80		
240977	78.02	2 x 1	50.80x25.40	4.00	101.60		
240978	64.92	2 x 1 1/2	50.80x38.10	2.00	50.80		
240979	77.31	2 1/2 x 1 1/2	63.50x38.10	4.00	101.60		
240980	69.90	2 1/2 x 2	63.50x50.80	2.00	50.80		
240982	79.92	3 x 2	76.20x50.80	4.00	101.60		
240983	104.88	3 x 2 1/2	76.20x63.50	2.00	50.80		
240984	204.35	4 x 2	101.60x50.80	8.00	203.20		
240985	181.29	4 x 2 1/2	101.60x63.50	6.00	152.40		
240986	154.83	4 x 3	101.60x76.20	4.00	101.60		
9634050002	608.72	6 x 3	152.40x76.20	5.50	139.70		
9634049354	608.72	6 x 4	152.40x101.60	5.50	139.70		
<b>Product code: 5070</b>							<b>B31 - 14MP</b>
9634039716	98.38	1 1/2 x 1	38.10x25.40	3.00	76.20		
9634039717	115.18	2 x 1	50.80x25.40	5.00	127.00		
9634039718	86.39	2 x 1 1/2	50.80x38.10	3.00	76.20		
9634039720	110.37	2 1/2 x 1 1/2	63.50x38.10	5.00	127.00		
9634039721	116.39	2 1/2 x 2	63.50x50.80	3.00	76.20		
9634039724	136.37	3 x 2	76.20x50.80	5.00	127.00		
9634039725	203.96	3 x 2 1/2	76.20x63.50	3.00	76.20		
9634039730	232.83	4 x 3	101.60x76.20	5.13	130.20		
9634050022	682.24	6 x 3	152.40x76.20	7.63	193.70		
9634050025	742.03	6 x 4	152.40x101.60	7.63	193.70		
						<b>B32 - 14MP</b>	
9634039816	119.97	1 1/2 x 1	38.10x25.40	3.00	76.20		
9634039817	167.97	2 x 1	50.80x25.40	5.00	127.00		
9634039818	119.97	2 x 1 1/2	50.80x38.10	3.00	76.20		
9634039820	167.97	2 1/2 x 1 1/2	63.50x38.10	5.00	127.00		
9634039821	173.88	2 1/2 x 2	63.50x50.80	3.00	76.20		
9634039824	179.97	3 x 2	76.20x50.80	5.00	127.00		
9634039825	191.96	3 x 2 1/2	76.20x63.50	3.00	76.20		
9634039830	333.03	4 x 3	101.60x76.20	5.13	130.20		
*		6 x 3	152.40x76.20	7.63	193.70		
9634050021	1979.66	6 x 4	152.40x101.60	7.63	193.70		

\* On request

NOTE: For pressure and surface, please see product leaflet.



Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN/OD		Dimension				
				Inch	mm	A		B		
304		316L				Inch	mm	Inch	mm	L14AM (3A)
240606	13.61	240644	20.96	1	25.40	1.13	28.60	1.98	50.40	
241605	13.17	240028	20.96	1½	38.10	1.13	28.60	1.98	50.40	
242605	15.85	240027	24.75	2	50.80	1.13	28.60	2.52	63.90	
243605	21.81	246226	34.33	2½	63.50	1.13	28.60	3.05	77.40	
244606	33.94	246124	49.92	3	76.20	1.13	28.60	3.58	90.90	
245596	59.65	246200	107.81	4	101.60	1.13	28.60	4.69	119.10	
<b>14WMPS (3A)</b>										
**		610205	16.89	½	12.70	0.50	12.70	0.98	24.90	
**		610238	16.89	¾	19.00	0.50	12.70	0.98	24.90	
610854	7.21	610365	13.61	1	25.40	0.50	12.70	1.98	50.40	
610855	9.06	610367	13.94	1½	38.10	0.50	12.70	1.98	50.40	
610856	10.06	610368	14.20	2	50.80	0.50	12.70	2.52	63.90	
610857	14.40	610369	21.81	2½	63.50	0.50	12.70	3.05	77.40	
610858	19.94	610370	26.33	3	76.20	0.50	12.70	3.58	90.90	
610859	32.31	610373	41.93	4	101.60	0.63	15.90	4.69	119.10	
660016	287.96	9634049938	335.93	6	152.40	1.50	38.10	6.58	167.10	
<b>14WLMP/14WLMO - #7 (3A)</b>										
210908	32.92	210348	50.40	1	25.40	3.00	76.20	1.98	50.40	
210491	30.71	210374	50.40	1½	38.10	3.00	76.20	1.98	50.40	
212101	40.72	210375	66.73	2	50.80	3.00	76.20	2.52	63.90	
212108	56.15	210376	95.65	2½	63.50	3.00	76.20	3.05	77.40	
211209	73.90	210377	127.17	3	76.20	4.00	101.60	3.58	90.90	
210492	114.12	210378	193.88	4	101.60	4.00	101.60	4.69	119.10	
261218	627.62	260235	721.12	6	152.40	6.00	152.40	6.58	167.10	

\*\* Not available

NOTE: For pressure and surface, please see product leaflet.



1.4

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size		Dimension																													
				DN/OD		A		B		C																									
				Inch	mm	Inch	mm	Inch	mm	Inch	mm																								
<b>304</b>												<b>316L</b>												<b>14RMP - #7 (3A)</b>											
210447	11.54	213447	15.81	1	25.40	0.75	19.10	1.00	25.40																										
210449	15.59	213449	17.99	1 1/2	38.10	1.13	28.60	1.50	38.10																										
210450	11.67	213450	21.60	2	50.80	1.31	33.30	2.00	50.80																										
210451	25.19	213451	28.80	2 1/2	63.50	1.38	34.90	2.50	63.50																										
210452	34.25	213452	53.99	3	76.20	1.44	36.50	3.00	76.20																										
210454	86.39	213454	131.98	4	101.60	1.50	38.10	4.00	101.60																										
<b>210519</b>												<b>210525</b>												<b>14MPW - #7 (3A)</b>											
210465	19.64	210526	34.00	1 1/2	38.10	1.63	41.30	1.38	34.90	1.16	29.40																								
210466	24.70	210527	44.39	2	50.80	1.75	44.50	1.88	47.60	2.19	55.60																								
210467	45.59	210528	79.31	2 1/2	63.50	1.75	44.50	2.38	60.30	2.70	68.70																								
210468	49.20	210529	83.99	3	76.20	1.81	46.00	2.88	73.00	3.22	81.80																								
210469	107.97	210530	173.97	4	101.60	2.13	54.00	3.83	97.20	4.25	108.00																								
<b>**</b>												<b>16AMP</b>																							
210501	8.16	210518	9.68	3/4	19.00	0.19	4.80	0.98	24.90																										
210502	10.98	210854	10.66	1 1/2	38.10	0.25	6.40	1.98	50.40																										
210503	14.98	210855	15.17	2	50.80	0.25	6.40	2.52	63.90																										
210504	24.70	210856	21.40	2 1/2	63.50	0.25	6.40	3.05	77.40																										
210506	59.93	210857	33.01	3	76.20	0.25	6.40	3.58	90.00																										
261220	332.36	210858	86.81	4	101.60	0.25	6.40	4.69	119.10																										
		260237	415.47	6	152.40	0.44	6.58	6.58	167.10																										

\*\* Not available

NOTE: For pressure and surface, please see product leaflet.





Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size		Dimension				
				DN/OD		A		B		
				Inch	mm	Inch	mm	Inch	mm	<b>23BMP - Solid - #7</b>
615959	<b>56.39</b>	615966	<b>131.98</b>	1 + 1/2	38.10	1.98	50.40	0.63	15.90	
615958	<b>75.59</b>	615967	<b>167.97</b>	2	50.80	2.52	63.90	0.63	15.90	
615960	<b>89.99</b>	**		2 1/2	63.50	3.05	77.40	0.63	15.90	
615961	<b>40.13</b>	615969	<b>81.50</b>	3	76.20	3.58	90.90	0.63	15.90	
*		615971	<b>414.20</b>	4	101.60	4.69	119.10	0.63	15.90	
<b>23BMP - Tapped with NPT threads - #7</b>										
210623	<b>89.54</b>	214206	<b>156.27</b>	1 x 1/2	25.40x12.70	1.98	50.30	0.63	15.90	
210596	<b>63.40</b>	211677	<b>144.12</b>	1 1/2 x 3/4	38.10x19.00	1.98	50.30	0.63	15.90	
210626	<b>95.99</b>	213599	<b>199.12</b>	2 x 3/4	50.80x19.00	2.52	64.00	0.63	15.90	
211448	<b>73.96</b>	610723	<b>40.05</b>	2 1/2 x 3/4	63.50x19.00	3.05	77.50	0.63	15.90	
211555	<b>44.75</b>	610724	<b>68.25</b>	3 x 3/4	76.20x19.00	3.58	90.90	0.63	15.90	
211439	<b>192.63</b>	610726	<b>169.96</b>	4 x 3/4	101.60x19.00	4.69	119.10	0.63	15.90	

\* On request.

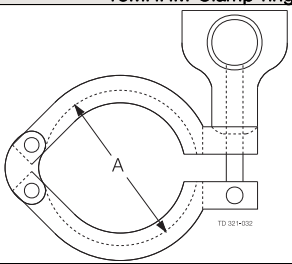
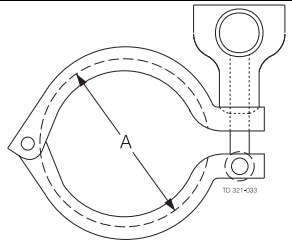
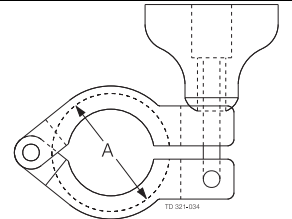
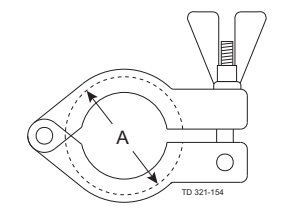
\*\* Not available

NOTE: For pressure and surface, please see product leaflet.



Product code: 5049

1.4

Material Item No.	PPL EUR	Size DN/OD		Dimension A		
		Inch	mm	Inch	mm	
<b>13MHM Clamp ring</b>						
212195	41.13	1-1 <sup>1</sup> / <sub>2</sub>	25.40-38.10	2.13	54.00	
212196	46.48	2	50.80	2.66	67.50	
212197	56.76	2 <sup>1</sup> / <sub>2</sub>	63.50	3.19	81.00	
212198	61.69	3	76.20	3.72	94.50	
212199	74.84	4	101.60	4.83	122.60	
210129	193.86	6	152.40	6.69	169.90	
<b>A13MHM Clamp ring</b>						
211053	30.02	1-1 <sup>1</sup> / <sub>2</sub>	25.40-38.10	2.13	54.00	
211054	36.59	2	50.80	2.64	67.10	
211055	42.35	2 <sup>1</sup> / <sub>2</sub>	63.50	3.19	81.00	
211056	46.07	3	76.20	3.72	94.50	
211057	55.92	4	101.60	4.83	122.20	
211058	135.72	6	152.40	6.69	169.90	
<b>13MHHS Clamp ring</b>						
211290	23.88	1 <sup>1</sup> / <sub>2</sub> - <sup>3</sup> / <sub>4</sub>	12.70- 19.00	1.13	28.60	
<b>13MHHS Clamp ring, Wingnut</b>						
9611994452	34.54	1 <sup>1</sup> / <sub>2</sub> - <sup>3</sup> / <sub>4</sub>	12.70- 19.00	1.13	28.60	

NOTE: For pressure and surface, please see product leaflet.



Product code: 5049





Material Item No.	PPL EUR	Size DN/OD		Dimension A																																																											
		Inch	mm	Inch	mm																																																										
<b>13MHHS Clamp ring</b>																																																															
211283	56.32	1 1/2	38.10	2.13	54.00																																																										
211284	63.75	2	50.80	2.66	67.50																																																										
211286	75.66	2 1/2	63.50	3.19	81.00																																																										
211287	88.85	3	76.20	3.72	94.50																																																										
211289	107.76	4	101.60	4.83	122.60																																																										
<b>A12MPS Clamp ring</b>																																																															
210135	248.52	1 1/2	38.10	1.98	50.40																																																										
210136	253.12	2	50.80	2.52	63.90																																																										
210137	287.96	2 1/2	63.50	3.05	77.40																																																										
210138	316.97	3	76.20	3.58	90.90																																																										
210140	687.57	4	101.60	4.69	119.10																																																										
<b>A13MHP Clamp ring</b>																																																															
<table border="1"> <thead> <tr> <th>Material Item number</th> <th>PPL EUR</th> <th colspan="2">Size DN/OD</th> <th colspan="2">Dimension A</th> <th></th> </tr> <tr> <th>304</th> <th></th> <th>Inch</th> <th>mm</th> <th>Inch</th> <th>mm</th> <th></th> </tr> </thead> <tbody> <tr> <td>9615265201</td> <td>24.45</td> <td>1/2 - 3/4</td> <td>12.70- 19.00</td> <td>1.04</td> <td>26.40</td> <td rowspan="7"> </td> </tr> <tr> <td>9615265301</td> <td>63.35</td> <td>1 - 1 1/2</td> <td>25.40 - 38.10</td> <td>2.05</td> <td>52.00</td> </tr> <tr> <td>9615265401</td> <td>78.96</td> <td>2</td> <td>50.80</td> <td>2.58</td> <td>65.50</td> </tr> <tr> <td>9615265501</td> <td>87.19</td> <td>2 1/2</td> <td>63.50</td> <td>3.11</td> <td>79.00</td> </tr> <tr> <td>9615265601</td> <td>106.91</td> <td>3</td> <td>76.20</td> <td>3.64</td> <td>92.50</td> </tr> <tr> <td>9615265701</td> <td>119.69</td> <td>4</td> <td>101.60</td> <td>4.73</td> <td>120.30</td> </tr> <tr> <td>9634048982</td> <td>239.12</td> <td>6</td> <td>152.40</td> <td>6.63</td> <td>168.40</td> </tr> </tbody> </table>							Material Item number	PPL EUR	Size DN/OD		Dimension A			304		Inch	mm	Inch	mm		9615265201	24.45	1/2 - 3/4	12.70- 19.00	1.04	26.40		9615265301	63.35	1 - 1 1/2	25.40 - 38.10	2.05	52.00	9615265401	78.96	2	50.80	2.58	65.50	9615265501	87.19	2 1/2	63.50	3.11	79.00	9615265601	106.91	3	76.20	3.64	92.50	9615265701	119.69	4	101.60	4.73	120.30	9634048982	239.12	6	152.40	6.63	168.40
Material Item number	PPL EUR	Size DN/OD		Dimension A																																																											
304		Inch	mm	Inch	mm																																																										
9615265201	24.45	1/2 - 3/4	12.70- 19.00	1.04	26.40																																																										
9615265301	63.35	1 - 1 1/2	25.40 - 38.10	2.05	52.00																																																										
9615265401	78.96	2	50.80	2.58	65.50																																																										
9615265501	87.19	2 1/2	63.50	3.11	79.00																																																										
9615265601	106.91	3	76.20	3.64	92.50																																																										
9615265701	119.69	4	101.60	4.73	120.30																																																										
9634048982	239.12	6	152.40	6.63	168.40																																																										

NOTE: For pressure and surface, please see product leaflet.



Product code: 5046

1.4

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	
<b>42MP-E</b>				<b>42MP-U</b>		<b>42MP-SFY</b>		Inch	<b>42MP</b>
290273	2.11			290272	1.72	290274	4.83	1/2	
290265	2.34			290264	2.11	290266	5.51	3/4	
						9614006403	5.97	1	
<b>42MP-G</b>		<b>42MP-X</b>						Inch	<b>42MP</b>
290270	2.73	290090	4.78					1/2	
290271	2.11	290099	4.73					3/4	
9614006404	34.23							1	
<b>40MP-E</b>				<b>40MP-U</b>		<b>40MP-SFY</b>		Inch	<b>40MP/40MO</b>
290141	1.65			298451	0.92	290009	5.39	1	
290044	1.65			298452	0.57	290022	4.05	1 1/2	
290043	1.72			298453	0.55	290030	4.57	2	
290048	1.84			298454	1.17	290040	6.82	2 1/2	
290036	2.11			298455	1.31	290049	9.58	3	
290018	2.34			298456	2.11	290053	12.05	4	
290234	20.38			290112	14.48	290220	55.28	6	
<b>40MP-G</b>		<b>40MP-X</b>		<b>40MP-UW</b>				Inch	<b>40MP/40MO</b>
298224	2.65	298512	2.49	298501	0.92			1	
298227	2.56	298507	2.11	298495	1.02			1 1/2	
298228	2.73	298508	2.49	298496	1.13			2	
298223	3.97	298509	3.13	298499	1.81			2 1/2	
298225	4.32	298510	3.58	298497	2.04			3	
298226	5.88	298511	3.91	298498	2.39			4	
298235	25.95	**		290195	11.42			6	



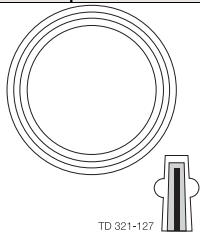
\*\* Not available

Material Descriptions

Code Letter	Material	Code Letter	Material
E	EPDM	SFY	Steam Resistant Fluoroelastomer
G	PTFE	X	Silicone (Q)
		UW	White Buna N
		U	Buna N



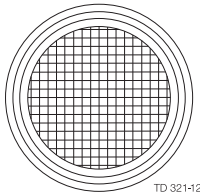
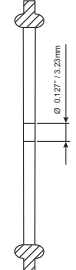
Product code: 5046

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	
<b>40MPF-E</b>		<b>40MPF-U</b>		<b>40MPF-SFY</b>		<b>Inch</b>	<b>40MPF/40MOF</b>
290031	2.76	298346	1.92	290097	6.90	1	
290038	2.76	298347	2.29	290115	6.95	1 1/2	
290017	2.76	298376	3.01	290117	11.02	2	
290035	3.77	298348	3.12	290118	11.53	2 1/2	
290138	4.41	298375	3.17	290119	16.80	3	
290025	5.61	298349	3.42	290172	18.80	4	
290131	21.78	298220	12.32	290182	58.67	6	
<b>40MPF-X</b>		<b>40MPF-UW</b>					
298411	2.73	298308	1.43			1	
298412	2.73	298431	1.57			1 1/2	
298413	2.88	298417	1.81			2	
298414	4.22	290069	1.92			2 1/2	
298415	4.32	298432	2.04			3	
298416	5.51	298433	2.75			4	
298605	23.66	290236	17.75			6	
<b>A40MP-GR</b>							
290072	5.04					1	
290073	5.79					1 1/2	
290074	6.99					2	
290075	7.91					2 1/2	
290076	8.18					3	
290077	16.33					4	
290085	52.10					6	



Product code: 5046

1.4

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size		
<b>40MPS-U</b>						Inch	mm	<b>40MPS, 10 - Mesh Screen Gasket*</b>
298488	40.65					1 1/2	38.10	
298434	53.99					2	50.80	
298436	58.79					2 1/2	63.50	
290034	67.66					3	76.20	
298438	145.04					4	101.60	
<b>A80MP-E</b>		<b>A80MP-SFY</b>		<b>A80MP-U</b>		Inch	mm	<b>A80MP, Orifice Plate - 316L</b>
290248	58.89	290207	78.05	290216	33.60	1 1/2	38.10	
290255	82.60	290001	86.23	290221	35.99	2	50.80	
290314	110.36	290002	116.17	290222	55.78	2 1/2	63.50	
290275	133.39	290180	136.34	290223	71.98	3	76.20	

Material Descriptions

Code Letter	Material	Code Letter	Material
E	EPDM	SFY	Steam Resistant Fluoroelastomer
		U	Buna N

\* Wire diameter = 0.64 mm

Holes = 1.9 mm square

Open area = 56.3%



Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size		Dimension							
				DN/OD		A							
<b>304</b>		<b>316L</b>		Inch	mm	Inch	mm						
211469	54.48	213384	78.67	1 x 1	25.40x25.40	1.69	42.90						
211393	50.10	213382	83.28	1 1/2 x 1 1/2	38.10x38.10	1.69	42.90						
211387	60.78	213383	170.09	2 x 2	50.80x50.80	2.31	58.70						
211480	83.28	210722	183.93	2 1/2 x 2 1/2	63.50x63.50	2.00	50.80						
211481	118.97	211534	265.50	3 x 3	76.20x76.20	3.11	79.00						
211482	232.34	211535	146.34	4 x 4	101.60x101.60	3.41	86.50						
Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size		Dimension							
				DN/OD		A		B		C			
<b>304</b>		<b>316L</b>		Inch	mm	Inch	mm	Inch	mm	Inch	mm		
211399	34.57	211526	54.48	1	25.40	4.50	114.30	0.88	22.20	1.00	25.40		
211396	31.40	211527	54.48	1 1/2	38.10	4.50	114.30	1.38	34.90	1.50	38.10		
211398	38.83	211793	71.41	2	50.80	4.50	114.30	1.88	47.60	2.00	50.80		
211394	58.35	212039	104.43	2 1/2	63.50	4.50	114.30	2.38	60.30	2.50	63.50		
211392	70.39	213468	142.43	3	76.20	4.50	114.30	2.88	73.00	3.00	76.20		
211402	117.55	213493	204.92	4	101.60	4.63	117.50	3.83	97.20	4.00	101.60		

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size		Dimension					
				DN/OD		A		B			
<b>304</b>		<b>316L</b>		Inch	mm	Inch	mm	Inch	mm		
211378	185.30	210984	421.20	1 x 3/4	25.40x19.00	1.63	41.30				
211331	134.86	213625	198.32	1 x 1	25.40x25.40	1.63	41.30				
211334	170.09	213913	247.21	1 1/2 x 1 1/4	38.10 x 31.8	2.25	57.20				
211335	124.28	213733	207.42	1 1/2 x 1 1/2	38.10x38.10	2.25	57.20				
211434	170.09	213821	278.92	1 1/2 x 3/4	38.10x19.00	1.63	41.30				
211336	170.09	211736	273.64	1 1/2 x 1	38.10x25.40	1.63	41.30				
211362	156.27	213914	98.88	2 x 1 1/2	50.80x38.10	2.34	59.50				
211337	147.95	213623	237.84	2 x 2	50.80x50.80	1.69	42.90				
211539	142.41	210249	401.01	2 1/2 x 2	63.50x50.80	1.41	35.70				
211332	398.28	210318	143.38	2 1/2 x 2 1/2	63.50x63.50	2.09	53.20				
211340	237.84	213649	387.20	3 x 3	76.20x76.20	2.19	55.60				
211339	300.08	210737	176.51	4 x 4	101.60x101.60	2.66	67.50				
<b>21MP (N.P.T. Pipe Thread - Non 3A)</b>											
211371	133.57	213650	199.71	1 x 3/4	25.40x19.00	0.98	25.00	2.19	55.60		
211299	110.22	213598	158.22	1 x 1	25.40x25.40	0.69	17.50	2.25	57.20		
211363	121.91	213741	201.03	1 1/2 x 1 1/4	38.10 x 31.8	0.70	17.90	2.44	61.90		
211300	107.03	213626	166.86	1 1/2 x 1 1/2	38.10x38.10	0.72	18.30	2.44	61.90		
211421	127.48	212034	207.46	1 1/2 x 3/4	38.10x19.00	0.55	13.90	2.19	55.60		
211306	127.48	213740	206.18	1 1/2 x 1	38.10x25.40	0.72	18.30	2.31	58.70		
211305	127.48	210821	210.26	1 1/2 x 2	38.10x50.80	0.72	18.30	2.63	66.70		
211354	127.48	214198	230.61	2 x 1 1/2	50.80x38.10	0.75	19.10	2.47	62.70		
211301	113.33	213624	191.29	2 x 2	50.80x50.80	0.75	19.10	2.66	67.50		
211369	185.84	214009	236.93	2 1/2 x 2	63.50x50.80	1.14	29.00	3.13	79.40		
211302	185.84	213918	224.54	2 1/2 x 2 1/2	63.50x63.50	1.38	34.90	3.28	83.30		
211303	233.31	213597	379.82	3 x 3	76.20x76.20	1.20	30.60	3.50	88.90		
211304	358.10	213596	215.57	4 x 4	101.60x101.60	1.30	32.90	3.81	96.80		

NOTE: For pressure and surface, please see product leaflet.

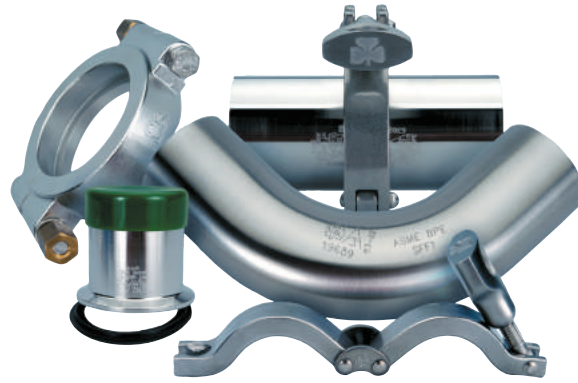


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# 1.5 Tri-Clover ® UltraPure, ASME BPE

The installation material in this section is manufactured to meet Tri-Clover ® UltraPure, ASME BPE tube dimensions.



## Price lists

Tri-Clover® UltraPure Tubes	1.5.170
Tri-Clover® UltraPure Bends	1.5.171
Tri-Clover® UltraPure Tees	1.5.174
Tri-Clover® UltraPure Reducing Tees	1.5.176
Tri-Clover® UltraPure Instrument Tees	1.5.181
Tri-Clover® UltraPure Crosses/ Reducing Crosses	1.5.182
Tri-Clover® UltraPure Reducers	1.5.183
Tri-Clover® UltraPure Reducer ASME BPE	1.5.186
Tri-Clover® UltraPure Ferrules and End Caps	1.5.189
Tri-Clover® UltraPure Clamp Rings	1.5.190
Tri-Clover® UltraPure Seal rings	1.5.192
Tri-Clover® UltraPure Adaptors	1.5.194
Tri-Clover® UltraPure Adaptors Use-Point Fittings	1.5.196

Product code: 5116  
According to DT-4-1

Material: 316L

1.5

Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension (mm)	ASME BPE
PL (SF1)		PM (SF4)		Inch	mm	OD/ID x t	
9613407101	*	9613407111	*	1/2	12.70	12.70/9.40x1.65	
9613407102	*	9613407112	*	3/4	19.05	19.00/15.75x1.65	
9613407103	*	9613407113	*	1	25.40	25.40/22.10x1.65	
9613407104	*	9613407114	*	1 1/2	38.10	38.10/34.80x1.65	
9613407105	*	9613407115	*	2	50.80	50.80/47.50x1.65	
9613407106	*	9613407116	*	2 1/2	63.50	63.50/60.2x1.65	
9613407107	*	9613407117	*	3	76.20	76.20/72.90x1.65	
9613407108	*	9613407118	*	4	101.60	101.60/97.38x2.11	

\* PPL prices per meter are updated monthly

Please contact your Alfa Laval contact person for further information.

NOTE: All tubes are delivered in lengths of 6.10 meters.



Product code: 5016, 5017  
According to DT-7, DT-12, DT-16

Material: 316L

Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension A		B2S Bend 90°
				Inch	mm	Inch	mm	
PL (SF1)		PM (SF4)						
<b>Product code: 5016</b>								
9634000219	56.69	9634000228	67.82	1/2	12.70	3.00	76.20	
9634000220	56.69	9634000229	67.82	3/4	19.00	3.00	76.20	
9634000221	50.49	9634000230	61.75	1	25.40	3.00	76.20	
9634000222	50.49	9634000231	63.77	1 1/2	38.10	3.75	95.30	
9634000223	61.75	9634000232	74.90	2	50.80	4.75	120.70	
9634000224	93.11	9634000233	111.31	2 1/2	63.50	5.50	139.70	
9634000225	128.52	9634000234	149.79	3	76.20	6.25	158.80	
9634000226	222.64	9634000235	384.84	4	101.60	8.00	203.20	
9634000227	1863.00	9634000236	1679.71	6	152.40	11.50	292.10	

NOTE: For pressure and surface, please see product leaflet.

OD/ID and t (wall thickness) please see page 1.5.170

Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension				B2CMW Bend 90°
				Inch	mm	A		B		
PL (SF1)		PM (SF4)				Inch	mm	Inch	mm	
<b>Product code: 5016</b>										
9634001919	80.58	9634001928	94.78	1/2	12.70	3.00	76.20	1.63	41.30	
9634001920	80.58	9634001929	97.18	3/4	19.00	3.00	76.20	1.63	41.30	
9634001921	73.60	9634001930	98.38	1	25.40	3.00	76.20	2.00	50.80	
9634001922	73.60	9634001931	99.58	1 1/2	38.10	3.75	95.30	2.75	69.90	
9634001923	93.11	9634001932	110.53	2	50.80	4.75	120.70	3.50	88.90	
9634001924	144.22	9634001933	166.27	2 1/2	63.50	5.50	139.70	4.25	108.00	
9634001925	185.21	9634001934	210.48	3	76.20	6.25	158.80	5.00	127.00	
9634001926	460.83	9634001935	336.00	4	101.60	8.00	203.20	6.63	168.20	
<b>Product code: 5017</b>										
9634002819	76.90	9634002828	95.99	1/2	12.70	1.63	41.30			
9634002820	76.90	9634002829	98.38	3/4	19.00	1.63	41.30			
9634002821	67.82	9634002830	99.58	1	25.40	2.00	50.80			
9634002822	67.82	9634002831	100.78	1 1/2	38.10	2.75	69.90			
9634002823	91.09	9634002832	107.28	2	50.80	3.50	88.90			
9634002824	150.78	9634002833	169.01	2 1/2	63.50	4.25	108.00			
9634002825	169.00	9634002834	239.96	3	76.20	5.00	127.00			
9634002826	640.38	9634002835	479.92	4	101.60	6.63	168.30			
9634002827	1091.68	9634002836	1005.27	6	152.40	10.50	266.70			

NOTE: For pressure and surface, please see product leaflet.

OD/ID and t (wall thickness) please see page 1.5.170



Product code: 5016, 5017  
According to DT-8, DT-13, DT-17

Material: 316L

1.5

Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension A		B2KS (3A) Bend 45°
				Inch	mm	Inch	mm	
<b>Product code: 5016</b>								
9634000419	59.70	9634000428	74.13	1/2	12.70	2.25	57.20	
9634000420	59.70	9634000429	74.39	3/4	19.00	2.25	57.20	
9634000421	51.85	9634000430	74.63	1	25.40	2.25	57.20	
9634000422	51.85	9634000431	74.87	1 1/2	38.10	2.50	63.50	
9634000423	60.74	9634000432	77.99	2	50.80	3.00	76.20	
9634000424	71.99	9634000433	101.99	2 1/2	63.50	3.38	85.70	
9634000425	86.39	9634000434	131.98	3	76.20	3.63	92.10	
9634000426	179.97	9634000435	166.99	4	101.60	4.50	114.30	
9634000427	1319.64	9634000436	1791.31	6	152.40	6.25	158.80	

OD/ID and t (wall thickness) please see page 1.5.170

Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension				B2KMW (3A) Bend 45°
				Inch	mm	A		B		
PL (SF1)		PM (SF4)		Inch	mm	Inch	mm	Inch	mm	
<b>Product code: 5016</b>										
9634002119	88.80	9634002128	144.59	1/2	12.70	2.25	57.20	1.00	25.40	
9634002120	91.20	9634002129	146.37	3/4	19.00	2.25	57.20	1.00	25.40	
9634002121	95.99	9634002130	148.78	1	25.40	2.25	57.20	1.10	28.60	
9634002122	98.38	9634002131	151.16	1 1/2	38.10	2.50	63.50	1.40	36.50	
9634002123	101.99	9634002132	155.97	2	50.80	3.00	76.20	1.80	44.50	
9634002124	50.04	9634002133	167.97	2 1/2	63.50	3.38	85.70	2.10	52.40	
9634002125	159.23	9634002134	191.96	3	76.20	3.63	92.10	2.30	60.30	
9634002126	215.96	9634002135	112.14	4	101.60	4.50	114.30	3.10	79.40	
<b>Product code: 5017</b>										
9634003019	113.99	9634003028	113.99	1/2	12.70	1.00	25.40			
9634003020	119.97	9634003029	118.78	3/4	19.00	1.00	25.40			
9634003021	131.98	9634003030	119.97	1	25.40	1.13	28.60			
9634003022	137.97	9634003031	121.17	1 1/2	38.10	1.44	36.50			
9634003023	143.98	9634003032	143.98	2	50.80	1.75	44.50			
9634003024	155.97	9634003033	84.79	2 1/2	63.50	2.06	52.40			
9634003025	279.44	9634003034	215.96	3	76.20	2.38	60.30			
9634003026	407.93	9634003035	239.39	4	101.60	3.13	79.40			

NOTE: For pressure and surface, please see product leaflet.

OD/ID and t (wall thickness) please see page 1.5.170



Item number PL (SF1)	PPL EUR	Item number PM (SF4)	PPL EUR	Size	Dimensions				
					A (H)		B (L)		
					in	mm	in	mm	
<b>B2CMP - 88</b>									
9634080392	<b>230.74</b>	9634080393	<b>270.20</b>	1/2	1.657	42.10	1.602	40.70	
9634080394	<b>278.35</b>	9634080395	<b>270.20</b>	3/4	1.654	42.00	1.598	40.60	
9634080396	<b>119.97</b>	9634080397	<b>239.85</b>	1	2.035	51.70	1.965	49.90	
9634080398	<b>215.96</b>	9634080399	<b>336.09</b>	1 1/2	2.791	70.90	2.697	68.50	
9634080400	<b>275.95</b>	9634080401	<b>418.06</b>	2	3.551	90.20	3.429	87.10	
9634080402	<b>455.91</b>	9634080403	<b>507.02</b>	2 1/2	4.311	109.50	4.161	105.70	
9634080404	<b>539.91</b>	9634080405	<b>647.26</b>	3	5.067	128.70	4.894	124.30	
9634080406	<b>1041.36</b>	9634080407	<b>1138.50</b>	4	6.717	170.60	6.484	164.70	
<b>B2CMP - 92</b>									
9634080408	<b>230.74</b>	9634080409	<b>270.20</b>	1/2	1.583	40.20	1.642	41.70	
9634080410	<b>230.74</b>	9634080411	<b>270.20</b>	3/4	1.583	40.20	1.638	41.60	
9634080412	<b>203.43</b>	9634080413	<b>239.85</b>	1	1.949	49.50	2.016	51.20	
9634080414	<b>203.43</b>	9634080415	<b>245.91</b>	1 1/2	2.681	68.10	2.776	70.50	
9634080416	<b>273.24</b>	9634080417	<b>321.82</b>	2	3.413	86.70	3.531	89.70	
9634080418	<b>452.37</b>	9634080419	<b>507.02</b>	2 1/2	4.146	105.30	4.291	109.00	
9634080420	<b>507.02</b>	9634080421	<b>579.88</b>	3	4.878	123.90	5.051	128.30	
9634080422	<b>1041.36</b>	9634080423	<b>1138.50</b>	4	6.465	164.20	6.693	170.00	
<b>B2S - 88</b>									
9634080424	<b>184.44</b>	9634080425	<b>203.43</b>	1/2	3.079	78.20	2.976	75.60	
9634080426	<b>188.53</b>	9634080427	<b>233.62</b>	3/4	3.079	78.20	2.972	75.50	
9634080428	<b>191.96</b>	9634080429	<b>239.96</b>	1	3.071	78.00	2.965	75.30	
9634080430	<b>203.96</b>	9634080431	<b>257.10</b>	1 1/2	3.827	97.20	3.697	93.90	
9634080432	<b>239.96</b>	9634080433	<b>299.96</b>	2	4.846	123.10	4.681	118.90	
9634080434	<b>299.96</b>	9634080435	<b>371.94</b>	2 1/2	5.602	142.30	5.409	137.40	
9634080436	<b>419.93</b>	9634080437	<b>491.92</b>	3	6.362	161.60	6.146	156.10	
9634080438	<b>683.88</b>	9634080439	<b>755.88</b>	4	8.138	206.70	7.858	199.60	
<b>B2S - 92</b>									
9634080440	<b>170.02</b>	9634080441	<b>203.43</b>	1/2	2.913	74.00	3.016	76.60	
9634080442	<b>170.02</b>	9634080443	<b>203.43</b>	3/4	2.874	73.00	3.012	76.50	
9634080444	<b>179.97</b>	9634080445	<b>185.21</b>	1	2.913	74.00	3.016	76.60	
9634080446	<b>191.96</b>	9634080447	<b>215.96</b>	1 1/2	3.646	92.60	3.776	95.90	
9634080448	<b>227.96</b>	9634080449	<b>251.96</b>	2	4.618	117.30	4.783	121.50	
9634080450	<b>279.33</b>	9634080451	<b>333.96</b>	2 1/2	5.350	135.90	5.543	140.80	
9634080452	<b>439.65</b>	9634080453	<b>503.92</b>	3	6.083	154.50	6.299	160.00	
9634080454	<b>667.91</b>	9634080455	<b>758.22</b>	4	7.791	197.90	8.067	204.90	



Product code: 5036, 5037  
According to DT-9, DT-18

Material: 316L

1.5

Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension				
						A		B		
PL (SF1)		PM (SF4)		Inch	mm	Inch	mm	Inch	mm	B7WWW Tee
<b>Product code: 5036</b>										
9634000619	81.56	9634000628	104.39	1/2	12.70	1.88	47.60			
9634000620	81.56	9634000629	104.39	3/4	19.00	2.00	50.80			
9634000621	71.01	9634000630	107.97	1	25.40	2.13	54.00			
9634000622	71.01	9634000631	107.97	1 1/2	38.10	2.38	60.30			
9634000623	82.06	9634000632	113.99	2	50.80	2.88	73.00			
9634000624	143.98	9634000633	124.26	2 1/2	63.50	3.13	79.40			
9634000625	161.98	9634000634	215.96	3	76.20	3.38	85.70			
9634000626	223.01	9634000635	275.95	4	101.60	4.13	104.80			
9634000627	1829.42	9634000636	1751.69	6	152.40	5.63	142.90			
<b>Product code: 5036</b>										
9634039519	46.54	9634039528	131.98	1/2	12.70	1.88	47.60	2.38	60.30	
9634039520	107.97	9634039529	131.98	3/4	19.00	2.00	50.80	2.50	63.50	
9634039521	110.37	9634039530	117.58	1	25.40	2.13	54.00	2.63	66.70	
9634039522	112.77	9634039531	122.38	1 1/2	38.10	2.38	60.30	2.88	73.00	
9634039523	119.97	9634039532	185.96	2	50.80	2.88	73.00	3.38	85.70	
9634039524	62.78	9634039533	191.96	2 1/2	63.50	3.13	79.40	3.63	92.10	
9634039525	203.96	9634039534	251.96	3	76.20	3.38	85.70	3.88	98.40	
9634039526	215.96	9634039535	503.92	4	101.60	4.13	104.80	4.75	120.70	
<b>Product code: 5037</b>										
9634003219	135.35	9634003228	165.56	1/2	12.70	2.25	57.20			
9634003220	135.35	9634003229	167.97	3/4	19.00	2.38	60.30			
9634003221	136.77	9634003230	170.37	1	25.40	2.63	66.70			
9634003222	141.58	9634003231	175.17	1 1/2	38.10	2.88	73.00			
9634003223	149.97	9634003232	182.37	2	50.80	3.38	85.70			
9634003224	191.96	9634003233	431.92	2 1/2	63.50	3.63	92.10			
9634003225	455.91	9634003234	437.93	3	76.20	3.88	98.40			
9634003226	758.27	9634003235	803.85	4	101.60	4.75	120.70			
9634003227	1528.67			6	152.40	7.13	181.00			

\* on request

NOTE: For pressure and surface, please see product leaflet.

OD/ID and t (wall thickness) please see page 1.5.170



Product code: 5036, 5037  
According to DT-15, DT-27, DT-27

Material: 316L

Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension				B7WWS (3A) Short outlet tee
						A		B		
PL (SF1)		PM (SF4)		Inch	mm	Inch	mm	Inch	mm	
<b>Product code: 5036</b>										
9634002619	<b>106.78</b>	9634002628	<b>121.17</b>	1/2	12.70	1.88	47.60	1.00	25.40	
9634002620	<b>109.19</b>	9634002629	<b>122.38</b>	3/4	19.00	2.00	50.80	1.13	28.60	
9634002621	<b>110.37</b>	9634002630	<b>123.57</b>	1	25.40	2.13	54.00	1.13	28.60	
9634002622	<b>111.58</b>	9634002631	<b>124.77</b>	1 1/2	38.10	2.38	60.30	1.38	34.90	
9634002623	<b>113.14</b>	9634002632	<b>137.97</b>	2	50.80	2.88	73.00	1.63	41.30	
9634002624	<b>155.97</b>	9634002633	<b>175.25</b>	2 1/2	63.50	3.13	79.40	1.88	47.60	
9634002625	<b>197.29</b>	9634002634	<b>200.79</b>	3	76.20	3.38	85.70	2.13	54.00	
9634002626	<b>479.92</b>	9634002635	<b>221.52</b>	4	101.60	4.13	104.80	2.75	69.90	
9634002627	<b>2111.63</b>	9634002636	<b>1040.35</b>	6	152.40	5.63	142.90	3.75	95.30	
<b>B7WWSW (3A) Tee</b>										
9634037719	<b>110.37</b>	9634037728	<b>125.37</b>	1/2	12.70	0.88	22.40	1.88	47.60	
9634037720	<b>118.84</b>	9634037729	<b>131.98</b>	3/4	19.00	1.00	25.40	2.00	50.80	
9634037721	<b>122.38</b>	9634037730	<b>133.17</b>	1	25.40	1.13	28.50	2.13	54.00	
9634037722	<b>123.57</b>	9634037731	<b>134.37</b>	1 1/2	38.10	1.38	35.10	2.38	60.30	
9634037723	<b>129.58</b>	9634037732	<b>137.97</b>	2	50.80	1.63	41.20	2.88	73.00	
9634037724	<b>152.37</b>	9634037733	<b>145.18</b>	2 1/2	63.50	1.88	47.80	3.13	79.40	
9634037725	<b>209.97</b>	9634037734	<b>104.41</b>	3	76.20	2.13	53.90	3.38	85.70	
9634037726	<b>447.52</b>	9634037735	<b>196.35</b>	4	101.60	2.75	69.90	4.13	104.80	
<b>Product code: 5037</b>										
<b>B7MPS Tee</b>										
9634043017	<b>134.37</b>	9634043025	<b>153.57</b>	1/2	12.70	2.25	57.20	1.00	25.40	
9634043018	<b>135.58</b>	9634043026	<b>155.97</b>	3/4	19.00	2.38	60.30	1.13	28.60	
9634043019	<b>136.77</b>	9634043027	<b>158.37</b>	1	25.40	2.63	66.70	1.13	26.90	
9634043020	<b>137.97</b>	9634043028	<b>160.76</b>	1 1/2	38.10	2.88	73.00	1.38	34.90	
9634043021	<b>141.58</b>	9634043029	<b>167.97</b>	2	50.80	3.38	85.70	1.63	41.30	
9634043022	<b>75.51</b>	9634043030	<b>86.84</b>	2 1/2	63.50	3.63	92.10	1.88	47.60	
9634043023	<b>381.54</b>	9634043031	<b>403.96</b>	3	76.20	3.88	98.40	2.13	54.00	
9634043024	<b>310.57</b>	9634043032	<b>329.91</b>	4	101.60	4.75	120.70	2.75	69.80	

NOTE: For pressure and surface, please see product leaflet.  
OD/ID and t (wall thickness) please see page 1.5.170

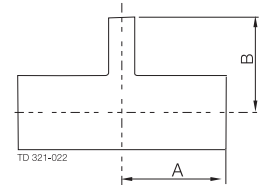


Product code: 5036  
According to DT-10

Material: 316L

1.5

Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension				B7RWWW (3A) Reducing tee
						A		B		
				PL (SF1)	PM (SF4)	Inch	mm	Inch	mm	
9634001043	180.25	9634001064	276.53	3/4 x 1/2	19.00x12.70	2.00	50.80	2.00	50.80	
9634001044	115.39	9634001065	137.56	1 x 1/2	25.40x12.70	2.13	54.00	2.13	54.00	
9634001045	115.39	9634001066	137.56	1 x 3/4	25.40x19.00	2.13	54.00	2.13	54.00	
9634001046	122.03	9634001067	147.54	1 1/2 x 1/2	38.10x12.70	2.38	60.30	2.38	60.30	
9634001047	128.16	9634001068	199.10	1 1/2 x 3/4	38.10x19.00	2.38	60.30	2.38	60.30	
9634001048	122.03	9634001069	147.54	1 1/2 x 1	38.10x25.40	2.38	60.30	2.38	60.30	
9634001049	139.78	9634001070	185.27	2 x 1/2	50.80x12.70	2.88	73.00	2.63	66.70	
9634001050	139.78	9634001071	319.09	2 x 3/4	50.80x19.00	2.88	73.00	2.63	66.70	
9634001051	139.78	9634001072	319.09	2 x 1	50.80x25.40	2.88	73.00	2.63	66.70	
9634001052	139.78	9634001073	185.27	2 x 1 1/2	50.80x38.10	2.88	73.00	2.63	66.70	
9634001053	340.36	9634001074	244.61	2 1/2 x 1/2	63.50x12.70	3.13	79.40	2.88	73.00	
9634001054	361.60	9634001075	232.98	2 1/2 x 3/4	63.50x19.00	3.13	79.40	2.88	73.00	
9634001055	186.37	9634001076	232.98	2 1/2 x 1	63.50x25.40	3.13	79.40	2.88	73.00	
9634001056	348.89	9634001077	232.97	2 1/2 x 1 1/2	63.50x38.10	3.13	79.40	2.88	73.00	
9634001057	382.92	9634001078	232.97	2 1/2 x 2	63.50x50.80	3.13	79.40	2.88	73.00	
9634001058	382.92	9634001079	372.73	3 x 1/2	76.20x12.70	3.38	85.70	3.13	79.40	
9634001059	305.08	9634001080	372.73	3 x 3/4	76.20x19.00	3.38	85.70	3.13	79.40	
9634001060	404.17	9634001081	372.74	3 x 1	76.20x25.40	3.38	85.70	3.13	79.40	
9634001061	305.08	9634001082	372.73	3 x 1 1/2	76.20x38.10	3.38	85.70	3.13	79.40	
9634001062	433.96	9634001083	372.74	3 x 2	76.20x50.80	3.38	85.70	3.13	79.40	
9634001063	305.08	9634001084	372.74	3 x 2 1/2	76.20x63.50	3.38	85.70	3.13	79.40	
9634001117	455.91	9634001125	490.32	4 x 1/2	101.60x12.70	4.13	104.80	3.63	92.10	
9634001118	455.91	9634001126	254.97	4 x 3/4	101.60x19.00	4.13	104.80	3.63	92.10	
9634001119	455.91	9634001127	490.32	4 x 1	101.60x25.40	4.13	104.80	3.63	92.10	
9634001120	478.72	9634001128	490.30	4 x 1 1/2	101.60x38.10	4.13	104.80	3.63	92.10	
9634001121	595.62	9634001129	254.97	4 x 2	101.60x50.80	4.13	104.80	3.88	98.40	
9634001122	455.87	9634001130	254.97	4 x 2 1/2	101.60x63.50	4.13	104.80	3.88	98.40	
9634001123	538.21	9634001131	768.23	4 x 3	101.60x76.20	4.13	104.80	3.88	98.40	
9613600781	1389.14	9634048315	2679.09	6 x 1/2	152.40x12.70	5.63	142.90	5.13	130.20	
9613600782	1389.14	9634048316	*	6 x 3/4	152.40x19.00	5.63	142.90	5.13	130.20	
		9634048317	1847.62	6 x 1	152.40x25.40	5.63	142.90	5.13	130.20	
9613600784	1389.14	9634048318	766.03	6 x 1 1/2	152.40x38.10	5.63	142.90	5.13	130.20	
9634048312	1345.44	9634048319	766.03	6 x 2	152.40x50.80	5.63	142.90	5.13	130.20	
		9634048320	766.03	6 x 2 1/2	152.40x63.50	5.63	142.90	5.13	130.20	
		9634048321	1573.03	6 x 3	152.40x76.20	5.63	142.90	5.13	130.20	
9634001124	1500.03	9634001132	851.42	6 x 4	152.40x101.60	5.63	142.90	5.13	130.20	



\* On request

NOTE: For pressure and surface, please see product leaflet.

OD/ID and t (wall thickness) please see page 1.5.170





Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension				B7RWWM (3A) Reducing tee
						A		B		
				PL (SF1)		PM (SF4)		Inch	mm	
9634039943	<b>135.35</b>	9634039964	<b>72.76</b>	<sup>3</sup> / <sub>4</sub> x 1/2	19.00x12.70	2.00	50.80	2.50	63.50	
9634039944	<b>140.88</b>	9634039965	<b>77.00</b>	1 x 1/2	25.40x12.70	2.13	54.00	2.63	66.70	
9634039945	<b>73.26</b>	9634039966	<b>160.87</b>	1 x <sup>3</sup> / <sub>4</sub>	25.40x19.00	2.13	54.00	2.63	66.70	
9634039946	<b>142.01</b>	9634039967	<b>164.19</b>	1 1/2 x 1/2	38.10x12.70	2.38	60.30	2.88	73.00	
9634039947	<b>142.01</b>	9634039968	<b>78.42</b>	1 1/2 x <sup>3</sup> / <sub>4</sub>	38.10x19.00	2.38	60.30	2.88	73.00	
9634039948	<b>142.01</b>	9634039969	<b>78.42</b>	1 1/2 x 1	38.10x25.40	2.38	60.30	2.88	73.00	
9634039949	<b>155.32</b>	9634039970	<b>191.51</b>	2 x 1/2	50.80x12.70	2.88	73.00	3.13	79.40	
9634039950	<b>155.32</b>	9634039971	<b>170.07</b>	2 x <sup>3</sup> / <sub>4</sub>	50.80x19.00	2.88	73.00	3.13	79.40	
9634039951	<b>297.82</b>	9634039972	<b>200.78</b>	2 x 1	50.80x25.40	2.88	73.00	3.13	79.40	
9634039952	<b>177.50</b>	9634039973	<b>117.82</b>	2 x 1 1/2	50.80x38.10	2.88	73.00	3.13	79.40	
9634039955	<b>225.19</b>	9634039976	<b>130.93</b>	2 1/2 x 1	63.50x25.40	3.13	79.40	3.38	85.70	
9634039956	<b>225.19</b>	9634039977	<b>251.80</b>	2 1/2 x 1 1/2	63.50x38.10	3.13	79.40	3.38	85.7	
9634039957	<b>225.19</b>	9634039978	<b>130.93</b>	2 1/2 x 2	63.50x50.80	3.13	79.40	3.38	85.7	
9634039960	<b>165.17</b>	9634039981	<b>186.33</b>	3 x 1	76.20x25.40	3.38	85.70	3.63	92.10	
9634039961	<b>489.27</b>	9634039982	<b>186.33</b>	3 x 1 1/2	76.20x38.10	3.38	85.70	3.63	92.10	
9634039962	<b>531.80</b>	9634039983	<b>376.24</b>	3 x 2	76.20x50.80	3.38	85.70	3.63	92.10	
9634039963	<b>317.65</b>	9634039984	<b>186.33</b>	3 x 2 1/2	76.20x63.50	3.38	85.70	3.63	92.10	
9634040019	<b>474.61</b>			4 x 1	101.60x25.40	4.13	104.80	4.13	104.8	
9634040020	<b>452.01</b>			4 x 1 1/2	101.60x38.10	4.13	104.80	4.13	104.8	
9634040021	<b>474.61</b>	9634040029	<b>268.81</b>	4 x 2	101.60x50.80	4.13	104.80	4.38	111.10	
9634040022	<b>235.04</b>			4 x 2 1/2	101.60x63.50	4.13	104.80	4.38	111.10	
9634040023	<b>268.81</b>	9634040031	<b>651.63</b>	4 x 3	101.60x76.20	4.13	104.80	4.38	111.10	

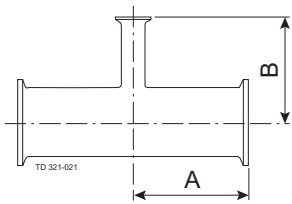
NOTE: For pressure and surface, please see product leaflet.  
 OD/ID and t (wall thickness) please see page 1.5.170



Product code: 5037  
According to DT-19

Material: 316L

1.5

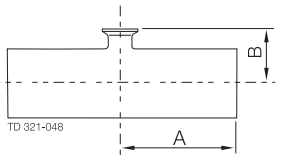
Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension				B7RMP Reducing tee
						A		B		
				PL (SF1)	PM (SF4)	Inch	mm	Inch	mm	
9634003643	178.21	9634003664	99.80	3/4 x 1/2	19.00x12.70	2.50	63.50	2.50	63.50	
9634003644	187.85	9634003665	218.56	1 x 1/2	25.40x12.70	2.63	66.70	2.63	66.70	
9634003645	187.85	9634003666	228.04	1 x 3/4	25.40x19.00	2.63	66.70	2.63	66.70	
9634003646	293.54	9634003667	408.07	1 1/2 x 1/2	38.10x12.70	2.88	73.00	2.88	73.00	
9634003647	187.85	9634003668	113.64	1 1/2 x 3/4	38.10x19.00	2.88	73.00	2.88	73.00	
9634003648	272.28	9634003669	220.76	1 1/2 x 1	38.10x25.40	2.88	73.00	2.88	73.00	
9634003649	465.92	9634003670	490.32	2 x 1/2	50.80x12.70	3.38	85.70	3.13	79.40	
9634003650	465.92	9634003671	254.97	2 x 3/4	50.80x19.00	3.38	85.70	3.13	79.40	
9634003651	213.47	9634003672	117.11	2 x 1	50.80x25.40	3.38	85.70	3.13	79.40	
9634003652	213.47	9634003673	203.29	2 x 1 1/2	50.80x38.10	3.38	85.70	3.13	79.40	
9634003653	245.42			2 1/2 x 1/2	63.50x12.70	3.63	92.10	3.38	85.70	
9634003654	245.42	9634003675	354.12	2 1/2 x 3/4	63.50x19.00	3.63	92.10	3.38	85.70	
9634003655	126.96			2 1/2 x 1	63.50x25.40	3.63	92.10	3.38	85.70	
9634003656	256.37	9634003677	155.20	2 1/2 x 1 1/2	63.50x38.10	3.63	92.10	3.38	85.70	
9634003657	256.37	9634003678	155.18	2 1/2 x 2	63.50x50.80	3.63	92.10	3.38	85.70	
9634003658	341.24	9634003679	358.22	3 x 1/2	76.20x12.70	3.88	98.40	3.63	92.10	
9634003659	341.24			3 x 3/4	76.20x19.00	3.88	98.40	3.63	92.10	
9634003660	291.19	9634003681	307.72	3 x 1	76.20x25.40	3.88	98.40	3.63	92.10	
9634003661	271.85	9634003682	555.49	3 x 1 1/2	76.20x38.10	3.88	98.40	3.63	92.10	
9634003662	522.80	9634003683	288.85	3 x 2	76.20x50.80	3.88	98.40	3.88	98.40	
9634003663	271.85	9634003684	288.85	3 x 2 1/2	76.20x63.50	3.88	98.40	3.88	98.40	
9634003717	431.36			4 x 1/2	101.60x12.70	4.75	120.70	4.13	104.80	
9634003719	422.40			4 x 1	101.60x25.40	4.75	120.70	4.13	104.80	
9634003720	812.26			4 x 1 1/2	101.60x38.10	4.75	120.70	4.13	104.80	
9634003721	812.31	9634003729	443.17	4 x 2	101.60x50.80	4.75	120.70	4.38	111.10	
9634003722	389.39			4 x 2 1/2	101.60x63.50	4.75	120.70	4.38	111.10	
9634003723	389.39	9634003731	408.25	4 x 3	101.60x76.20	4.75	120.70	4.38	111.10	

NOTE: For pressure and surface, please see product leaflet.



Product code: 5036  
According to DT-14

Material: 316L

Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size		Dimension				B7RWWMS (3A) Short outlet reducing tee
						A		B		
PL (SF1)		PM (SF4)		Inch	mm	Inch	mm	Inch	mm	
9634002343	212.73	9634002364	187.98	3/4 x 1/2	19.00x12.70	2.00	50.80	1.00	25.40	
9634002344	140.88	9634002365	197.97	1 x 1/2	25.40x12.70	2.13	54.00	1.13	28.60	
9634002345	140.88	9634002366	215.96	1 x 3/4	25.40x19.00	2.13	54.00	1.13	28.60	
9634002346	142.01	9634002367	164.19	1 1/2 x 1/2	38.10x12.70	2.38	60.30	1.38	34.90	
9634002347	234.02	9634002368	221.05	1 1/2 x 3/4	38.10x19.00	2.38	60.30	1.38	34.90	
9634002348	142.01	9634002369	217.47	1 1/2 x 1	38.10x25.40	2.38	60.30	1.38	34.90	
9634002349	161.97	9634002370	404.17	2 x 1/2	50.80x12.70	2.88	73.00	1.63	41.30	
9634002350	161.97	9634002371	404.17	2 x 3/4	50.80x19.00	2.88	73.00	1.63	41.30	
9634002351	177.50	9634002372	404.17	2 x 1	50.80x25.40	2.88	73.00	1.63	41.30	
9634002352	177.50	9634002373	200.78	2 x 1 1/2	50.80x38.10	2.88	73.00	1.63	41.30	
9634002353	225.19	9634002374	251.80	2 1/2 x 1/2	63.50x12.70	3.13	79.40	1.88	47.60	
9634002354	225.21	9634002375	206.05	2 1/2 x 3/4	63.50x19.00	3.13	79.40	1.88	47.60	
9634002355	319.09	9634002376	251.80	2 1/2 x 1	63.50x25.40	3.13	79.40	1.88	47.60	
9634002356	319.09	9634002377	251.80	2 1/2 x 1 1/2	63.50x38.10	3.13	79.40	1.88	47.60	
9634002357	225.19	9634002378	251.81	2 1/2 x 2	63.50x50.80	3.13	79.40	1.88	47.60	
9634002358	358.33	9634002379	250.85	3 x 1/2	76.20x12.70	3.38	85.70	2.13	54.00	
9634002359	358.33	9634002380	482.40	3 x 3/4	76.20x19.00	3.38	85.70	2.13	54.00	
9634002360	358.33	9634002381	250.85	3 x 1	76.20x25.40	3.38	85.70	2.13	54.00	
9634002361	358.33	9634002382	482.40	3 x 1 1/2	76.20x38.10	3.38	85.70	2.13	54.00	
9634002362	358.33	9634002383	506.53	3 x 2	76.20x50.80	3.38	85.70	2.13	54.00	
9634002363	358.33	9634002384	250.85	3 x 2 1/2	76.20x63.50	3.38	85.70	2.13	54.00	
9634002417	659.43	9634002425	552.46	4 x 1/2	101.60x12.70	4.13	104.80	2.63	66.70	
9634002418	422.94	9634002426	287.28	4 x 3/4	101.6x19.00	4.13	104.80	2.63	66.70	
9634002419	680.71	9634002427	287.28	4 x 1	101.60x25.40	4.13	104.80	2.63	66.70	
9634002420	516.95	9634002428	552.46	4 x 1 1/2	101.60x38.10	4.13	104.80	2.63	66.70	
9634002421	516.95	9634002429	552.46	4 x 2	101.60x50.80	4.13	104.80	2.63	66.70	
9634002422	268.81	9634002430	268.81	4 x 2 1/2	101.60x63.50	4.13	104.80	2.63	66.70	
9634002423	680.71	9634002431	554.09	4 x 3	101.60x76.20	4.13	104.80	2.63	66.70	

NOTE: For pressure and surface, please see product leaflet.

OD/ID and t (wall thickness) please see page 1.5.170

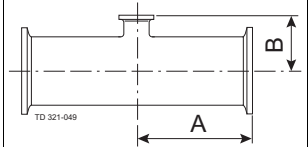


Product code: 5037  
According to DT-20

Material: 316L

1.5

Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension				B7RMPS Short Outlet Reducing Tee - #7 (3A)
						A		B		
PL (SF1)		PM (SF4)		Inch	mm	Inch	mm	Inch	mm	
9634003943	201.51	9634003964	237.98	3/4 x 1/2	19.00x12.70	2.50	63.5	1.00	25.40	
9634003944	344.60	9634003965	229.48	1 x 1/2	25.40x12.70	2.63	66.7	1.13	28.60	
9634003945	210.80	9634003966	382.92	1 x 3/4	25.40x19.00	2.63	66.7	1.13	28.60	
9634003946	297.82	9634003967	412.68	1 1/2 x 1/2	38.10x12.70	2.88	73.00	1.38	34.90	
9634003947	200.79	9634003968	218.56	1 1/2 x 3/4	38.10x19.00	2.88	73.00	1.38	34.90	
9634003948	297.82	9634003969	218.56	1 1/2 x 1	38.10x25.40	2.88	73.00	1.38	34.90	
9634003949	465.92	9634003970	490.32	2 x 1/2	50.80x12.70	3.38	85.7	1.63	41.30	
9634003950	465.92	9634003971	490.30	2 x 3/4	50.80x19.00	3.38	85.7	1.63	41.30	
9634003951	459.47	9634003972	489.32	2 x 1	50.80x25.40	3.38	85.7	1.63	41.30	
9634003952	425.45	9634003973	425.45	2 x 1 1/2	50.80x38.10	3.38	85.7	1.63	41.30	
9634003953	525.10	9634003974	299.97	2 1/2 x 1/2	63.50x12.70	3.63	92.10	1.88	47.60	
9634003954	505.52	9634003975	299.97	2 1/2 x 3/4	63.50x19.00	3.63	92.10	1.88	47.60	
9634003955	281.15	9634003976	155.18	2 1/2 x 1	63.50x25.40	3.63	92.10	1.88	47.60	
9634003956	320.21	9634003977	155.18	2 1/2 x 1 1/2	63.50x38.10	3.63	92.10	1.88	47.60	
9634003957	568.99	9634003978	155.18	2 1/2 x 2	63.50x50.80	3.63	92.10	1.88	47.60	
9634003958	437.81	9634003979	972.50	3 x 1/2	76.20x12.70	3.88	98.40	2.13	54.00	
9634003959	341.24			3 x 3/4	76.20x19.00	3.88	98.40	2.13	54.00	
9634003960	172.07	9634003981	591.76	3 x 1	76.20x25.40	3.88	98.40	2.13	54.00	
9634003961	638.97	9634003982	678.90	3 x 1 1/2	76.20x38.10	3.88	98.40	2.13	54.00	
9634003962	711.20	9634003983	353.02	3 x 2	76.20x50.80	3.88	98.40	2.13	54.00	
9634003963	332.27			3 x 2 1/2	76.20x63.50	3.88	98.40	2.13	54.00	
9634004017	479.30			4 x 1/2	101.60x12.70	4.75	120.70	2.63	66.70	
9634004018	505.52	9634004026	631.72	4 x 3/4	101.6x19.00	4.75	120.70	2.63	66.70	
9634004019	443.17	9634004027	469.35	4 x 1	101.60x25.40	4.75	120.70	2.63	66.70	
9634004020	852.26	9634004028	516.28	4 x 1 1/2	101.60x38.10	4.75	120.70	2.63	66.70	
9634004021	852.26	9634004029	516.29	4 x 2	101.60x50.80	4.75	120.70	2.63	66.70	
9634004022	389.39			4 x 2 1/2	101.60x63.50	4.75	120.70	2.63	66.70	
9634004023	389.39			4 x 3	101.60x76.20	4.75	120.70	2.63	66.70	
9634050035	791.65			6 x 1/2	152.40x12.70	7.13	181.00	3.75	95.30	
9634050038	1119.36			6 x 3/4	152.40x19.00	7.13	181.00	3.75	95.30	
9634050041	1086.44			6 x 1	152.40x25.40	7.13	181.00	3.75	95.30	
9634050044	1119.36			6 x 1 1/2	152.40x38.10	7.13	181.00	3.75	95.30	
9634050047	1119.36			6 x 2	152.40x50.80	7.13	181.00	3.75	95.30	
9634050050	1119.36			6 x 2 1/2	152.40x63.50	7.13	181.00	3.75	95.30	
9634050053	1119.36			6 x 3	152.40x76.20	7.13	181.00	3.75	95.30	
9634004024	1119.36			6 x 4	152.40x101.60	7.13	181.00	3.75	95.30	



NOTE: For pressure and surface, please see product leaflet.



Product code: 5036, 5037  
According to DT-29, DT-28

Material: 316L

Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension				B7IMPS Instrument tee
						A		B		
PL (SF1)		PM (SF4)		Inch	mm	Inch	mm	Inch	mm	
<b>Product code: 5037</b>										
211171	763.22	211169	863.06	1/2 x 1 1/2	12.70x38.10	3.00	76.20	0.88	22.20	
211543	396.87	211544	863.05	1/2 x 2	12.70x50.80	3.25	82.50	1.00	25.40	
211170	773.18	211377	811.82	3/4 x 1 1/2	19.00x38.10	3.00	76.20	1.00	25.40	
211545	402.05	211546	422.14	3/4 x 2	19.00x50.80	3.25	82.50	1.13	28.60	
211173	797.59	211158	896.31	1 x 1 1/2	25.40x38.10	3.00	76.20	1.13	28.60	
211547	414.75	211616	896.31	1 x 2	25.40x50.80	3.25	82.50	1.25	31.70	
211172	708.48	211187	896.31	1 1/2 x 2	38.10x50.80	3.25	82.50	1.50	38.10	
<b>Product code: 5036</b>										
241737	665.60	241751	752.13	1/2 x 1 1/2	12.70x38.10	2.50	63.50	0.88	22.20	
241738	346.10	242082	789.73	1/2 x 2	12.70x50.80	2.75	69.80	1.00	25.40	
241739	672.23	241870	758.77	3/4 x 1 1/2	19.00x38.10	2.50	63.50	1.00	25.40	
241740	672.24	242083	796.69	3/4 x 2	19.00x50.80	2.75	69.80	1.13	28.60	
241741	694.43	241753	783.17	1 x 1 1/2	25.40x38.10	2.50	63.50	1.13	28.60	
241742	694.41	241898	822.33	1 x 2	25.40x50.80	2.75	69.80	1.25	31.70	
241743	694.41	241869	822.33	1 1/2 x 2	38.10x50.80	2.75	69.80	1.50	38.10	

NOTE: For pressure and surface, please see product leaflet.

OD/ID and t (wall thickness) please see page 1.5.170



Product code: 5036, 5037  
According to DT-9, DT-18

Material: 316L

1.5

Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension				B9WWWW (3A) Cross
						A		B		
PL (SF1)		PM (SF4)		Inch	mm	Inch	mm	Inch	mm	
<b>Product code: 5036</b>										
9634000819	225.56	9634000828	238.52	1/2	12.70	1.88	47.60			
9634000820	233.97	9634000829	238.52	3/4	19.00	2.00	50.80			
9634000821	263.96	9634000830	217.43	1	25.40	2.13	54.00			
9634000822	268.25	9634000831	217.44	1 1/2	38.10	2.38	60.30			
9634000823	299.96	9634000832	235.19	2	50.80	2.88	73.00			
9634000824	323.95	9634000833	266.35	2 1/2	63.50	3.13	79.40			
9634000825	358.33	9634000834	210.49	3	76.20	3.38	85.70			
9634000826	425.06	9634000835	239.39	4	101.60	4.13	104.80			
<b>Product code: 5037</b>										
<b>B9MP - #7 (3A)</b>										
9634003419	251.96	9634003428	145.94	1/2	12.70	2.25	57.20			
9634003420	281.95	9634003429	294.68	3/4	19.00	2.38	60.30			
9634003421	285.54	9634003430	510.53	1	25.40	2.63	66.70			
9634003422	323.95	9634003431	553.09	1 1/2	38.10	2.88	73.00			
9634003423	335.93	9634003432	144.80	2	50.80	3.38	85.70			
9634003424	151.97			2 1/2	63.50	3.63	92.10			
9634003425	515.93			3	76.20	3.88	98.40			
9634003426	435.93	9634003435	921.92	4	101.60	4.75	120.70			
<b>Product code: 5036</b>										
<b>B9WWWW (3A) Reducing cross</b>										
9634040144	153.86	9634040164	348.33	3/4 x 1/2	19.00x12.70	2.00	50.80	2.00	50.80	
9634040145	161.56	9634040165	383.83	1 x 1/2	25.40x12.70	2.13	54.00	2.13	54.00	
9634040146	153.86	9634040166	533.75	1 x 3/4	25.40x19.00	2.13	54.00	2.13	54.00	
9634040147	153.86	9634040167	200.84	1 1/2 x 1/2	38.10x12.70	2.38	60.30	2.38	60.30	
9634040148	153.86	9634040168	200.84	1 1/2 x 3/4	38.10x19.00	2.38	60.30	2.38	60.30	
9634040148	600.33	9634040169	722.16	1 1/2 x 1	38.10x25.40	2.38	60.30	2.38	60.30	
9634040149	311.97			2 x 1/2	50.80x12.70	2.88	73.00	2.63	66.70	
9634040150	311.97	9634040171	835.33	2 x 3/4	50.80x19.00	2.88	73.00	2.63	66.70	
9634040151	838.12	9634040172	329.95	2 x 1	50.80x25.40	2.88	73.00	2.63	66.70	
9634040152	662.10	9634040173	329.95	2 x 1 1/2	50.80x38.10	2.88	73.00	2.63	66.70	
9634040155	328.95	9634040176	421.23	2 1/2 x 1	63.50x25.40	3.13	79.40	2.88	73.00	
9634040156	632.58	9634040177	421.23	2 1/2 x 1 1/2	63.50x38.10	3.13	79.40	2.88	73.00	
9634040157	328.95			2 1/2 x 2	63.50x50.80	3.13	79.40	2.88	73.00	
9634040160	668.00			3 x 1	76.20x25.40	3.38	85.70	3.13	79.40	
9634040161	839.85	9634040182	526.96	3 x 1 1/2	76.20x38.10	3.38	85.70	3.13	79.40	
9634040162	347.37			3 x 2	76.20x50.80	3.38	85.70	3.13	79.40	
9634040163	347.37			3 x 2 1/2	76.20x63.50	3.38	85.70	3.13	79.40	
9634040219	622.49			4 x 1	101.60x25.40	4.13	104.80	3.63	92.10	
9634040220	622.49			4 x 1 1/2	101.60x38.10	4.13	104.80	3.63	92.10	
9634040221	1256.99			4 x 2	101.60x50.80	4.13	104.80	3.88	98.40	
9634040222	622.49			4 x 2 1/2	101.60x63.50	4.13	104.80	3.88	98.40	
9634040223	622.49			4 x 3	101.60x76.20	4.13	104.80	3.88	98.40	

\* on request

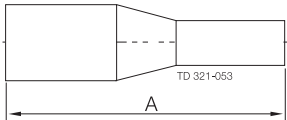
NOTE: For pressure and surface, please see product leaflet.

OD/ID and t (wall thickness) please see page 1.5.170



Product code: 5076  
According to DT-11, DT-26

Material: 316L

Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension A		B31 Concentric reducer
				Inch	mm	Inch	mm	
9634001701	<b>89.38</b>	9634001726	<b>102.93</b>	$\frac{3}{4} \times \frac{1}{2}$	19.00x12.70	4.00	101.60	
9634001702	<b>114.25</b>	9634001727	<b>162.99</b>	1 x $\frac{1}{2}$	25.40x12.70	4.50	114.30	
9634001703	<b>89.38</b>	9634001728	<b>193.86</b>	1 x $\frac{3}{4}$	25.40x19.00	4.00	101.60	
9634001704	<b>229.60</b>	9634001729	<b>246.56</b>	$1\frac{1}{2} \times \frac{1}{2}$	38.10x12.70	5.50	139.70	
9634001705	<b>229.60</b>	9634001730	<b>246.56</b>	$1\frac{1}{2} \times \frac{3}{4}$	38.10x19.00	5.00	127.00	
9634001706	<b>113.11</b>	9634001731	<b>126.68</b>	$1\frac{1}{2} \times 1$	38.10x25.40	5.00	127.00	
9634001708	<b>300.88</b>	9634001733	<b>321.22</b>	2 x $\frac{3}{4}$	50.80x19.00	7.25	184.20	
9634001709	<b>133.98</b>	9634001734	<b>203.55</b>	2 x 1	50.80x25.40	7.25	184.20	
9634001710	<b>113.11</b>	9634001735	<b>103.33</b>	2 x $1\frac{1}{2}$	50.80x38.10	5.25	133.40	
9634001714	<b>335.67</b>	9634001739	<b>182.89</b>	$2\frac{1}{2} \times 1\frac{1}{2}$	63.50x38.10	7.50	184.20	
9634001715	<b>281.94</b>	9634001740	<b>161.75</b>	$2\frac{1}{2} \times 2$	63.50x50.80	5.50	139.70	
9634001717	<b>438.11</b>	9634001742	<b>270.41</b>	3 x $1\frac{1}{2}$	76.20x38.10	9.25	235.00	
9634001718	<b>173.06</b>	9634001743	<b>498.86</b>	3 x 2	76.20x50.80	7.50	190.50	
9634001719	<b>269.39</b>	9634001744	<b>483.30</b>	3 x $2\frac{1}{2}$	76.20x63.50	5.50	139.70	
9634001722	<b>638.14</b>	9634001747	<b>355.16</b>	4 x 2	101.60x50.80	11.75	298.40	
9634001723	<b>527.03</b>	9634001748	<b>333.68</b>	4 x $2\frac{1}{2}$	101.60x63.50	9.75	247.70	
9634001724	<b>477.19</b>	9634001749	<b>309.91</b>	4 x 3	101.60x76.20	7.75	196.90	
9634050058	<b>1534.85</b>	9634050059	<b>1695.47</b>	6 x 3	152.40x76.20	10.00	254.00	
9634001725	<b>1659.26</b>	9634001750	<b>1832.33</b>	6 x 4	152.40x101.60	10.00	254.00	
<b>B31M Concentric reducer (3A)</b>								
9634038701	<b>141.36</b>	9634038726	<b>154.42</b>	$\frac{3}{4} \times \frac{1}{2}$	19.00x12.70	3.00	76.20	
9634038702	<b>230.19</b>	9634038727	<b>150.45</b>	1 x $\frac{1}{2}$	25.40x12.70	3.50	88.90	
9634038703	<b>182.01</b>	9634038728	<b>147.05</b>	1 x $\frac{3}{4}$	25.40x19.00	3.00	76.20	
9634038704	<b>268.07</b>	9634038729	<b>289.56</b>	$1\frac{1}{2} \times \frac{1}{2}$	38.10x12.70	4.50	114.30	
9634038705	<b>268.07</b>	9634038730	<b>361.34</b>	$1\frac{1}{2} \times \frac{3}{4}$	38.10x19.00	4.00	101.60	
9634038706	<b>142.53</b>	9634038731	<b>325.35</b>	$1\frac{1}{2} \times 1$	38.10x25.40	4.00	101.60	
9634038709	<b>168.54</b>	9634038734	<b>182.12</b>	2 x 1	50.80x25.40	6.00	152.40	
9634038710	<b>206.22</b>	9634038735	<b>179.32</b>	2 x $1\frac{1}{2}$	50.80x38.10	4.00	101.60	
9634038714	<b>185.08</b>		<b>92.30</b>	$2\frac{1}{2} \times 1\frac{1}{2}$	63.50x38.10	6.00	152.40	
9634038715	<b>177.84</b>	9634038740	<b>178.25</b>	$2\frac{1}{2} \times 2$	63.50x50.80	4.25	108.00	
9634038717	<b>318.96</b>	9634038742	<b>295.19</b>	3 x $1\frac{1}{2}$	76.20x38.10	8.00	203.20	
9634038718	<b>264.67</b>	9634038743	<b>277.12</b>	3 x 2	76.20x50.80	6.25	158.80	
9634038719	<b>252.23</b>	9634038744	<b>277.12</b>	3 x $2\frac{1}{2}$	76.20x63.50	4.25	108.00	
9634038722	<b>480.02</b>	9634038747	<b>265.92</b>	4 x 2	101.60x50.80	10.38	263.50	
9634038723	<b>204.35</b>	9634038748	<b>216.92</b>	4 x $2\frac{1}{2}$	101.60x63.50	8.38	212.70	
9634038724	<b>465.99</b>	9634038749	<b>498.83</b>	4 x 3	101.60x76.20	6.38	161.90	

NOTE: For pressure and surface, please see product leaflet

Product code: 5076  
According to DT-11, DT-26

Material: 316L

1.5

Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size		Dimension		B32 Reducing cross	
				DN/OD		A			
PL (SF1)		PM (SF4)		Inch	mm	Inch	mm		
9634039401	167.73	9634039426	197.86	3/4 x 1/2	19.00x12.70	4.00	101.60		
9634039402	240.59	9634039427	286.87	1 x 1/2	25.40x12.70	4.50	114.30		
9634039403	143.65	9634039428	165.14	1 x 3/4	25.40x19.00	4.00	101.60		
9634039404	398.91	9634039429	484.57	1 1/2 x 1/2	38.10x12.70	5.50	139.70		
9634039405	297.49	9634039430	315.58	1 1/2 x 3/4	38.10x19.00	5.00	127.00		
9634039406	137.99	9634039431	156.09	1 1/2 x 1	38.10x25.40	5.00	127.00		
9634039409	329.68	9634039434	342.70	2 x 1	50.80x25.40	7.25	184.20		
9634039410	137.99	9634039435	158.36	2 x 1 1/2	50.80x38.10	5.25	133.40		
9634039414	477.19	9634039439	199.08	2 1/2 x 1 1/2	63.50x38.10	7.25	184.20		
9634039415	316.63	9634039440	355.72	2 1/2 x 2	63.50x50.80	5.50	139.70		
9634039417	395.93	9634039442	340.45	3 x 1 1/2	76.20x38.10	9.25	235.00		
9634039418	412.09	9634039443	477.19	3 x 2	76.20x50.80	7.50	190.50		
9634039419	425.14	9634039444	477.19	3 x 2 1/2	76.20x63.50	5.50	139.70		
9634039422	478.47	9634039447	516.92	4 x 2	101.60x50.80	11.75	298.40		
9634039423	628.99	9634039448	391.36	4 x 2 1/2	101.60x63.50	9.75	247.70		
9634039424	511.89	9634039449	372.12	4 x 3	101.60x76.20	7.75	196.90		
On request		9634039452	2005.38	6 x 3	152.40x76.20	10.00	254.00		
9634039425	2283.43	9634039450	2486.06	6 x 4	152.40x101.60	10.00	254.00		
<b>B32M Reducing cross (3A)</b>									
9634039001	170.78	9634039026	191.20	3/4 x 1/2	19.00x12.70	3.00	76.20		
9634039002	187.65	9634039027	195.99	1 x 1/2	25.40x12.70	3.50	88.90		
9634039003	170.80	9634039028	227.96	1 x 3/4	25.40x19.00	3.00	76.20		
9634039004	334.78	9634039029	397.19	1 1/2 x 1/2	38.10x12.70	4.50	114.30		
9634039005	131.94	9634039030	147.71	1 1/2 x 3/4	38.10x19.00	4.00	101.60		
9634039006	185.27	9634039031	112.22	1 1/2 x 1	38.10x25.40	4.00	101.60		
9634039009	209.91	9634039034	114.23	2 x 1	50.80x25.40	6.00	152.40		
9634039010	246.02	9634039035	239.96	2 x 1 1/2	50.80x38.10	4.00	101.60		
9634039014	233.94	9634039039	119.42	2 1/2 x 1 1/2	63.50x38.10	6.00	152.40		
9634039015	85.90	9634039040	245.83	2 1/2 x 2	63.50x50.80	4.25	108.00		
9634039017	164.72	9634039042	347.96	3 x 1 1/2	76.20x38.10	8.00	203.20		
9634039018	297.05	9634039043	360.73	3 x 2	76.20x50.80	6.25	158.80		
9634039019	274.01	9634039044	148.84	3 x 2 1/2	76.20x63.50	4.25	108.00		
9634039022	581.15	9634039047	311.97	4 x 2	101.60x50.80	10.38	263.50		
9634039023	541.22	9634039048	301.70	4 x 2 1/2	101.60x63.50	8.38	212.70		
9634039024	467.35	9634039049	274.00	4 x 3	101.60x76.20	6.38	161.90		

NOTE: For pressure and surface, please see product leaflet.



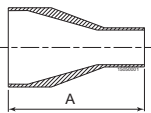
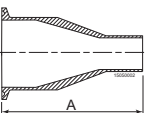
Product code: 5077  
According to DT-21

Material: 316L

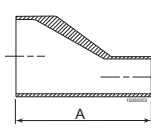
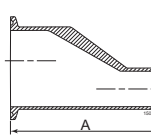
Finish	PPL	Finish	PPL	Size		Dimension		B31-14MP Concentric reducer (3A)
Item No.	EUR	Item No.	EUR	DN/OD		A		
PL (SF1)		PM (SF4)		Inch	mm	Inch	mm	
9634004301	193.41	9634004326	208.11	3/4 x 1/2	19.00x12.70	2.00	50.80	
9634004302	233.01	9634004327	251.10	1 x 1/2	25.40x12.70	2.50	63.50	
9634004303	193.41	9634004328	208.11	1 x 3/4	25.40x19.00	2.00	50.80	
9634004304	324.63	9634004329	349.51	1 1/2 x 1/2	38.10x12.70	3.50	88.90	
9634004305	324.63	9634004330	349.51	1 1/2 x 3/4	38.10x19.00	3.00	76.20	
9634004306	233.01	9634004331	253.37	1 1/2 x 1	38.10x25.40	3.00	76.20	
9634004308	472.79	9634004333	496.54	2 x 3/4	50.80x19.00	5.00	127.00	
9634004309	287.28	9634004334	304.26	2 x 1	50.80x25.40	5.00	127.00	
9634004310	200.22	9634004335	217.17	2 x 1 1/2	50.80x38.10	3.00	76.20	
9634004314	312.19	9634004339	351.78	2 1/2 x 1 1/2	63.50x38.10	5.00	127.00	
9634004315	247.70	9634004340	303.66	2 1/2 x 2	63.50x50.80	3.00	76.20	
9634004317	433.78	9634004342	498.86	3 x 1 1/2	76.20x38.10	7.00	177.80	
9634004318	435.49	9634004343	520.54	3 x 2	76.20x50.80	5.00	127.00	
9634004319	412.10	9634004344	527.91	3 x 2 1/2	76.20x63.50	3.00	76.20	
9634004322	528.23	9634004347	564.41	4 x 2	101.60x50.80	9.13	231.80	
9634004323	531.61	9634004348	574.21	4 x 2 1/2	101.60x63.50	9.13	231.80	
9634004324	650.70	9634004349	562.31	4 x 3	101.60x76.20	5.13	130.20	
9634004325	1658.31	9634004350	1079.85	6 x 4	152.40x101.60	7.63	193.70	
<b>B32 - 14MP Reducing cross (3A)</b>								
9634039201	161.49	9634039226	338.33	3/4 x 1/2	19.00x12.70	2.00	50.80	
9634039202	299.96	9634039227	311.94	1 x 1/2	25.40x12.70	2.50	63.50	
9634039203	311.94	9634039228	335.93	1 x 3/4	25.40x19.00	2.00	50.80	
9634039204	391.36	9634039229	524.43	1 1/2 x 1/2	38.10x12.70	3.50	88.90	
9634039205	391.36	9634039230	427.35	1 1/2 x 3/4	38.10x19.00	3.00	76.20	
9634039206	286.19	9634039231	311.06	1 1/2 x 1	38.10x25.40	3.00	76.20	
9634039209	365.34	9634039234	387.96	2 x 1	50.80x25.40	5.00	127.00	
9634039210	248.84	9634039235	270.32	2 x 1 1/2	50.80x38.10	3.00	76.20	
9634039214	395.87	9634039239	721.87	2 1/2 x 1 1/2	63.50x38.10	5.00	127.00	
9634039215	323.50	9634039240	352.93	2 1/2 x 2	63.50x50.80	3.00	76.20	
9634039217	557.76	9634039242	312.64	3 x 1 1/2	76.20x38.10	7.00	177.80	
9634039218	359.67	9634039243	391.36	3 x 2	76.20x50.80	5.00	127.00	
9634039219	362.96	9634039244	323.00	3 x 2 1/2	76.20x63.50	3.00	76.20	
9634039222	563.57	9634039247	314.39	4 x 2	101.60x50.80	9.13	231.80	
9634039223	265.25	9634039248	674.10	4 x 2 1/2	101.60x63.50	7.13	181.00	
9634039224	737.45	9634039249	685.40	4 x 3	101.60x76.20	5.13	130.20	

NOTE: For pressure and surface, please see product leaflet.

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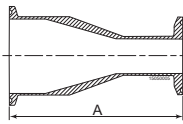
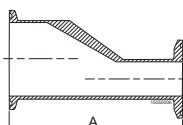
Finish Item No. PL (SF1)	PPL EUR	Finish Item No. PM (SF4)	PPL EUR	Size		Dimension A		
				Inch	mm	Inch	mm	
<b>B31S Concentric reducer, Edition 2014</b>								
9614206101	*	9614206122	<b>91.80</b>	3/8 x 1/4	9.53/6.35	1.626	41.30	
9614206102	<b>299.30</b>	9614206123	<b>329.39</b>	1/2 x 1/4	12.70/6.35	1.875	46.50	
9614206103	*	9614206124	*	1/2 x 3/8	12.70/9.53	1.875	46.50	
9614206104	*	9614206125	<b>118.88</b>	3/4 x 3/8	19.05/9.53	2.000	50.80	
9614206105	<b>96.94</b>	9614206126	<b>126.03</b>	3/4 x 1/2	19.05/12.70	2.125	54.00	
9614206106	<b>102.77</b>	9614206127	<b>133.58</b>	1 x 1/2	25.40/12.70	2.500	63.50	
9614206107	<b>108.93</b>	9614206128	<b>141.60</b>	1 x 3/4	25.40/19.05	2.125	54.00	
9614206108	<b>115.45</b>	9614206129	<b>150.09</b>	1 1/2 x 3/4	38.10/19.05	3.000	76.20	
9614206109	<b>122.39</b>	9614206130	<b>159.10</b>	1 1/2 x 1	38.10/25.40	2.500	63.50	
9614206110	<b>129.72</b>	9614206131	<b>168.64</b>	2 x 1	50.80/25.40	3.375	85.80	
9614206111	<b>137.51</b>	9614206132	<b>178.77</b>	2 x 1 1/2	50.80/38.10	2.500	63.50	
9614206112	<b>145.76</b>	9614206133	<b>189.50</b>	2 1/2 x 1 1/2	63.50/38.10	3.375	85.80	
9614206113	<b>154.51</b>	9614206134	<b>200.85</b>	2 1/2 x 2	63.50/50.80	2.500	63.50	
9614206114	<b>174.90</b>	9614206135	<b>227.40</b>	3 x 1 1/2	76.20/38.10	4.250	108.00	
9614206115	<b>185.42</b>	9614206136	<b>241.04</b>	3 x 2	76.20/50.80	3.375	85.80	
9614206116	<b>196.52</b>	9614206137	<b>255.50</b>	3 x 2 1/2	76.20/63.50	2.625	66.70	
9614206117	<b>222.49</b>	9614206138	<b>289.24</b>	4 x 2	101.60/50.80	5.125	130.20	
9614206118	<b>235.85</b>	9614206139	<b>306.60</b>	4 x 2 1/2	101.60/63.50	7.087	180.00	
9614206119	<b>249.98</b>	9614206140	<b>325.00</b>	4 x 3	101.60/76.20	3.875	98.40	
9614206120	<b>1499.97</b>	9614206141	<b>1949.97</b>	6 x 3	152.40/76.20	7.250	184.20	
9614206121	<b>1589.97</b>	9614206142	<b>2066.94</b>	6 x 4	152.40/101.60	5.625	142.90	
<b>B31MS Concentric reducer, Edition 2014</b>								
9614206301	<b>128.45</b>	9614206317	<b>166.99</b>	1 x 1/2	25.40/12.70	3.000	76.20	
9614206302	<b>136.15</b>	9614206318	<b>177.02</b>	1 x 3/4	25.40/19.05	2.626	66.70	
9614206303	<b>144.33</b>	9614206319	<b>187.62</b>	1 1/2 x 3/4	38.10/19.05	3.500	88.90	
9614206304	<b>152.99</b>	9614206320	<b>198.88</b>	1 1/2 x 1	38.10/25.40	3.000	76.20	
9614206305	<b>162.16</b>	9614206321	<b>210.81</b>	2 x 1	50.80/25.40	3.874	98.40	
9614206306	<b>171.90</b>	9614206322	<b>223.47</b>	2 x 1 1/2	50.80/38.10	3.000	76.20	
9614206307	<b>182.20</b>	9614206323	<b>236.85</b>	2 1/2 x 1 1/2	63.50/38.10	3.874	98.40	
9614206308	<b>193.14</b>	9614206324	<b>251.09</b>	2 1/2 x 2	63.50/50.80	3.000	76.20	
9614206309	<b>218.65</b>	9614206325	<b>284.24</b>	3 x 1 1/2	76.20/38.10	4.752	120.70	
9614206310	<b>231.77</b>	9614206326	<b>301.29</b>	3 x 2	76.20/50.80	3.878	98.50	
9614206311	<b>245.67</b>	9614206327	<b>319.38</b>	3 x 2 1/2	76.20/63.50	3.126	79.40	
9614206312	<b>278.12</b>	9614206328	<b>361.55</b>	4 x 2	101.60/50.80	5.752	146.10	
9614206313	<b>294.80</b>	9614206329	<b>383.25</b>	4 x 2 1/2	101.60/63.50	4.878	123.90	
9614206314	<b>312.50</b>	9614206330	<b>406.24</b>	4 x 3	101.60/76.20	4.500	114.30	
9614206315	<b>1874.96</b>	9614206331	<b>2437.46</b>	6 x 3	152.40/76.20	8.000	203.20	
9614206316	<b>1987.46</b>	9614206332	<b>2583.69</b>	6 x 4	152.40/101.60	6.374	161.90	



Finish Item No. PL (SF1)	PPL EUR	Finish Item No. PM (SF4)	PPL EUR	Size		Dimension A		
				Inch	mm	Inch	mm	
<b>B32S Eccentric reducer, Edition 2014</b>								
9614207601	*	9614207622	*	3/8 x 1/4	9.53/6.35	1.626	41.30	
9614207602	<b>329.75</b>	9614207623	*	1/2 x 1/4	12.70/6.35	1.831	46.50	
9614207603	*	9614207624	*	1/2 x 3/8	12.70/9.53	1.831	46.50	
9614207604	<b>109.32</b>	9614207625	*	3/4 x 3/8	19.05/9.53	2.000	50.80	
9614207605	<b>126.03</b>	9614207626	<b>163.84</b>	3/4 x 1/2	19.05/12.70	2.126	54.00	
9614207606	<b>133.58</b>	9614207627	<b>173.65</b>	1 x 1/2	25.40/12.70	2.500	63.50	
9614207607	<b>141.60</b>	9614207628	<b>184.07</b>	1 x 3/4	25.40/19.05	2.126	54.00	
9614207608	<b>150.09</b>	9614207629	<b>195.13</b>	1 1/2 x 3/4	38.10/19.05	3.000	76.20	
9614207609	<b>159.10</b>	9614207630	<b>206.83</b>	1 1/2 x 1	38.10/25.40	2.500	63.50	
9614207610	<b>168.64</b>	9614207631	<b>219.25</b>	2 x 1	50.80/25.40	3.378	85.80	
9614207611	<b>178.77</b>	9614207632	<b>232.41</b>	2 x 1 1/2	50.80/38.10	2.500	63.50	
9614207612	<b>189.50</b>	9614207633	<b>246.33</b>	2 1/2 x 1 1/2	63.50/38.10	3.378	85.80	
9614207613	<b>200.85</b>	9614207634	<b>261.14</b>	2 1/2 x 2	63.50/50.80	2.500	63.50	
9614207614	<b>227.40</b>	9614207635	<b>295.60</b>	3 x 1 1/2	76.20/38.10	4.252	108.00	
9614207615	<b>241.04</b>	9614207636	<b>313.35</b>	3 x 2	76.20/50.80	3.378	85.80	
9614207616	<b>255.50</b>	9614207637	<b>332.14</b>	3 x 2 1/2	76.20/63.50	2.626	66.70	
9614207617	<b>289.24</b>	9614207638	<b>376.00</b>	4 x 2	101.60/50.80	5.126	130.20	
9614207618	<b>306.60</b>	9614207639	<b>398.58</b>	4 x 2 1/2	101.60/63.50	7.087	180.00	
9614207619	<b>325.00</b>	9614207640	<b>422.50</b>	4 x 3	101.60/76.20	3.874	98.40	
9614207620	<b>1949.97</b>	9614207641	<b>2534.94</b>	6 x 3	152.40/76.20	7.252	184.20	
				6 x 4	152.40/101.60	5.626	142.90	
<b>B32MS Eccentric reducer, Edition 2014</b>								
9614207705	<b>157.54</b>	9614207712	<b>204.78</b>	3/4 x 1/2	19.05/12.70	2.626	66.70	
9614207801	<b>166.99</b>	9614207817	<b>217.08</b>	1 x 1/2	25.40/12.70	3.000	76.20	
9614207802	<b>177.02</b>	9614207818	<b>230.09</b>	1 x 3/4	25.40/19.05	2.626	66.70	
9614207803	<b>187.62</b>	9614207819	<b>243.90</b>	1 1/2 x 3/4	38.10/19.05	3.500	88.90	
9614207804	<b>198.88</b>	9614207820	<b>258.54</b>	1 1/2 x 1	38.10/25.40	3.000	76.20	
9614207805	<b>210.81</b>	9614207821	<b>274.05</b>	2 x 1	50.80/25.40	3.874	98.40	
9614207806	<b>223.47</b>	9614207822	<b>290.49</b>	2 x 1 1/2	50.80/38.10	3.000	76.20	
9614207807	<b>236.85</b>	9614207823	<b>307.93</b>	2 1/2 x 1 1/2	63.50/38.10	3.874	98.40	
9614207808	<b>251.09</b>	9614207824	<b>326.41</b>	2 1/2 x 2	63.50/50.80	3.000	76.20	
9614207809	<b>284.24</b>	9614207825	<b>369.51</b>	3 x 1 1/2	76.20/38.10	4.752	120.70	
9614207810	<b>301.29</b>	9614207826	<b>391.69</b>	3 x 2	76.20/50.80	3.878	98.50	
9614207811	<b>319.38</b>	9614207827	<b>415.17</b>	3 x 2 1/2	76.20/63.50	3.126	79.40	
9614207812	<b>361.55</b>	9614207828	<b>470.02</b>	4 x 2	101.60/50.80	5.752	146.10	
9614207813	<b>383.25</b>	9614207829	<b>498.22</b>	4 x 2 1/2	101.60/63.50	4.878	123.90	
9614207814	<b>406.24</b>	9614207830	<b>528.11</b>	4 x 3	101.60/76.20	4.500	114.30	
9614207815	<b>2437.46</b>	9614207831	<b>3168.69</b>	6 x 3	152.40/76.20	8.000	203.20	
9614207816	<b>2583.69</b>	9614207832	<b>3358.80</b>	6 x 4	152.40/101.60	6.374	161.90	



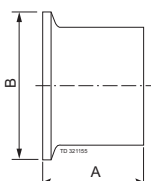
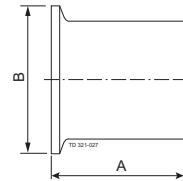
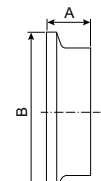
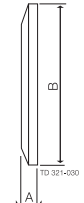
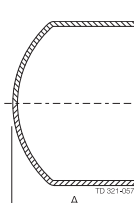
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Finish Item No. PL (SF1)	PPL EUR	Finish Item No. PM (SF4)	PPL EUR	Size		Dimension A		
				Inch	mm	Inch	mm	
								<b>B31S-14MP Concentric reducer, Edition 2014</b>
9614207305	<b>169.64</b>	9614207312	<b>220.54</b>	¾ x ½	19.05/12.70	3.126	79.40	
9614207401	<b>190.62</b>	9614207406	<b>247.80</b>	1 x ½	25.40/12.70	3.500	88.90	
9614207402	<b>190.62</b>	9614207407	<b>247.80</b>	1 x ¾	25.40/19.05	3.126	79.40	
9614207403	<b>202.04</b>	9614207408	<b>262.68</b>	1½ x ¾	38.10/19.05	4.000	101.60	
9614207501	<b>214.19</b>	9614207514	<b>278.43</b>	1½ x 1	38.10/25.40	3.500	88.90	
9614207502	<b>227.03</b>	9614207515	<b>295.14</b>	2 x 1	50.80/25.40	4.374	111.10	
9614207503	<b>240.65</b>	9614207516	<b>312.84</b>	2 x 1½	50.80/38.10	3.500	88.90	
9614207504	<b>255.10</b>	9614207517	<b>331.61</b>	2½ x 1½	63.50/38.10	4.374	111.10	
9614207505	<b>270.40</b>	9614207518	<b>351.51</b>	2½ x 2	63.50/50.80	3.500	88.90	
9614207506	<b>306.10</b>	9614207519	<b>397.94</b>	3 x 1½	76.20/38.10	5.250	133.35	
9614207507	<b>324.48</b>	9614207520	<b>421.81</b>	3 x 2	76.20/50.80	4.374	111.10	
9614207508	<b>343.94</b>	9614207521	<b>447.13</b>	3 x 2½	76.20/63.50	3.626	92.10	
9614207509	<b>389.38</b>	9614207522	<b>506.19</b>	4 x 2	101.60/50.80	6.250	158.75	
9614207510	<b>412.73</b>	9614207523	<b>536.56</b>	4 x 2½	101.60/63.50	5.374	136.50	
9614207511	<b>437.50</b>	9614207524	<b>568.75</b>	4 x 3	101.60/76.20	5.000	127.00	
9614207512	<b>2624.93</b>	9614207525	<b>3412.43</b>	6 x 3	152.40/76.20	8.500	215.90	
9614207513	<b>2782.43</b>	9614207526	<b>3617.16</b>	6 x 4	152.40/101.60	7.000	177.80	
								<b>B32S-14MP Eccentric reducer, Edition 2014</b>
9614207905	<b>395.26</b>	9614207912	<b>278.35</b>	¾ x ½	19.05/12.70	3.126	79.40	
9614208001	<b>247.80</b>	9614208006	<b>322.16</b>	1 x ½	25.40/12.70	3.500	88.90	
9614208002	<b>247.80</b>	9614208007	<b>322.16</b>	1 x ¾	25.40/19.05	3.126	79.40	
9614208003	<b>262.68</b>	9614208008	<b>341.48</b>	1½ x ¾	38.10/19.05	4.000	101.60	
9614208101	<b>278.43</b>			1½ x 1	38.10/25.40	3.500	88.90	
9614208102	<b>295.14</b>	9614208115	<b>383.68</b>	2 x 1	50.80/25.40	4.374	111.10	
9614208103	<b>312.84</b>	9614208116	<b>406.70</b>	2 x 1½	50.80/38.10	3.500	88.90	
9614208104	<b>331.61</b>	9614208117	<b>431.11</b>	2½ x 1½	63.50/38.10	4.374	111.10	
9614208105	<b>351.51</b>	9614208118	<b>456.96</b>	2½ x 2	63.50/50.80	3.500	88.90	
9614208106	<b>397.94</b>	9614208119	<b>517.32</b>	3 x 1½	76.20/38.10	5.250	133.35	
9614208107	<b>421.81</b>	9614208120	<b>548.36</b>	3 x 2	76.20/50.80	4.374	111.10	
9614208108	<b>447.13</b>	9614208121	<b>581.24</b>	3 x 2½	76.20/63.50	3.626	92.10	
9614208109	<b>506.19</b>	9614208122	<b>658.03</b>	4 x 2	101.60/50.80	6.250	158.75	
9614208110	<b>536.56</b>	9614208123	<b>697.51</b>	4 x 2½	101.60/63.50	5.374	136.50	
9614208111	<b>568.75</b>	9614208124	<b>739.35</b>	4 x 3	101.60/76.20	5.000	127.00	
9614208112	<b>3412.43</b>	9614208125	*	6 x 3	152.40/76.20	8.500	215.90	
9614208113	<b>3617.16</b>	9614208126	*	6 x 4	152.40/101.60	7.000	177.80	



Product code: 5056  
According to DT-22, DT-30

Material: 316L

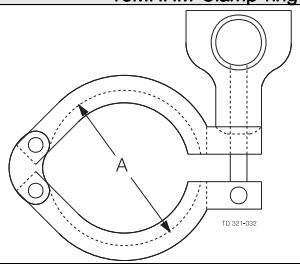
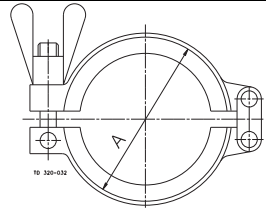
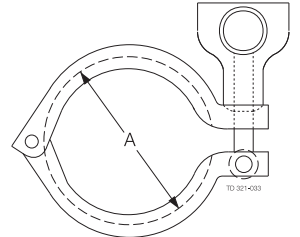
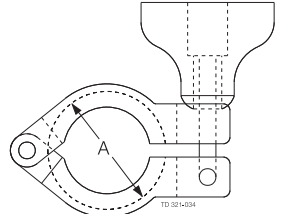
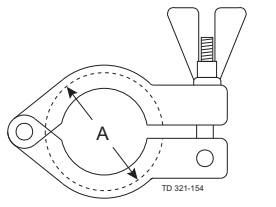
Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension					
						A		B			
PL (SF1)		PM (SF4)		Inch	mm	Inch	mm	Inch	mm		
<b>L14AM Ferrule (3A)</b>											
9615323102	<b>27.46</b>	9615323104	<b>38.44</b>	½	12.70	1.13	28.70	0.98	25.00	Type A	
9615323101	<b>29.65</b>	9615323103	<b>41.51</b>	¾	19.00	1.13	28.70	0.98	25.00		
9614000602	<b>30.43</b>	9614000605	<b>38.88</b>	1	25.40	1.13	28.70	1.34	34.00		
9615266801	<b>31.01</b>	9615266808	<b>43.41</b>	1	25.40	1.13	28.70	1.98	50.40	Type B	
9615266802	<b>31.01</b>	9615266809	<b>46.11</b>	1½	38.10	1.13	28.70	1.98	50.40		
9615266803	<b>36.64</b>	9615266810	<b>51.30</b>	2	50.80	1.13	28.70	2.52	63.90		
9615266804	<b>50.82</b>	9615266811	<b>71.14</b>	2½	63.50	1.13	28.70	3.05	77.40		
9615266805	<b>73.89</b>	9615266812	<b>78.25</b>	3	76.20	1.13	28.70	3.58	90.90		
9615266806	<b>159.56</b>	9615266813	<b>93.91</b>	4	101.60	1.13	28.70	4.68	118.90		
9615266807	<b>468.20</b>	9615266814	<b>169.02</b>	6	152.40	1.5	38.10	6.57	166.90		
<b>BS14AM Ferrule (3A)</b>											
9614286803	*	9614286806	*	¾	9.53	1.75	44.50	0.98	25.00	Type A	
9634004801	<b>23.82</b>	9634004810	<b>33.00</b>	½	12.70	1.75	44.50	0.98	25.00		
9634004802	<b>23.82</b>	9634004811	<b>33.00</b>	¾	19.00	1.75	44.50	0.98	25.00		
9614000603	<b>42.57</b>	9614000606	<b>53.85</b>	1	25.40	1.75	44.50	1.34	34.00	Type B	
9634004803	<b>21.74</b>	9634004812	<b>31.61</b>	1	25.40	1.75	44.50	1.98	50.40		
9634004804	<b>21.74</b>	9634004813	<b>33.00</b>	1½	38.10	1.75	44.50	1.98	50.40		
9634004805	<b>25.12</b>	9634004814	<b>36.95</b>	2	50.80	2.25	57.20	2.52	63.90		
9634004806	<b>35.81</b>	9634004815	<b>55.19</b>	2½	63.50	2.25	57.20	3.05	77.40		
9634004807	<b>52.75</b>	9634004816	<b>70.91</b>	3	76.20	2.25	57.20	3.58	90.90		
9634004808	<b>122.03</b>	9634004817	<b>146.37</b>	4	101.60	2.25	57.20	4.68	118.90		
9634004809	<b>280.07</b>	9634004818	<b>335.93</b>	6	152.40	3.00	76.20	6.57	166.90		
<b>14WMPS Short ferrule (3A)</b>											
9614286801	<b>41.02</b>	9614286804	<b>55.19</b>	¾	9.53	0.50	12.70	0.98	24.90	Type A	
610264	<b>41.02</b>	610265	<b>55.19</b>	½	12.70	0.50	12.70	0.98	24.90		
610269	<b>33.00</b>	610270	<b>60.00</b>	¾	19.00	0.50	12.70	0.98	24.90		
9614000601	<b>60.79</b>	9614000604	<b>71.99</b>	1	25.40	0.50	12.70	1.34	34.00		
610274	<b>31.61</b>	610275	<b>48.93</b>	1	25.40	0.50	12.70	1.98	50.40	Type B	
610276	<b>31.61</b>	610812	<b>51.59</b>	1½	38.10	0.50	12.70	1.98	50.40		
610790	<b>35.81</b>	610277	<b>55.54</b>	2	50.80	0.50	12.70	2.52	63.90		
610278	<b>51.48</b>	610279	<b>84.28</b>	2½	63.50	0.50	12.70	3.05	77.40		
610280	<b>77.89</b>	610281	<b>93.58</b>	3	76.20	0.50	12.70	3.58	90.90		
610282	<b>174.95</b>	610283	<b>185.96</b>	4	101.60	0.63	15.90	4.69	119.10		
660028	<b>787.92</b>	*		6	152.40	1.50	38.10	6.58	167.10		
<b>16AMP - #7 (3A) End cap</b>											
219123	<b>13.48</b>	210009	<b>25.12</b>	½ - ¾	19.00	0.19	4.80	0.98	24.90	Type A	
9614003601	<b>23.59</b>	9614003602	<b>29.99</b>	1	25.40	0.25	6.35	1.34	34.00		
210273	<b>12.33</b>	210162	<b>23.82</b>	1-1½	38.10	0.25	6.40	1.98	50.40	Type B	
210831	<b>16.52</b>	210891	<b>30.47</b>	2	50.80	0.25	6.40	2.52	63.90		
219124	<b>25.75</b>	210349	<b>57.59</b>	2½	63.50	0.25	6.40	3.05	77.40		
210770	<b>36.95</b>	210894	<b>65.98</b>	3	76.20	0.25	6.40	3.58	90.90		
210783	<b>98.38</b>	210121	<b>125.97</b>	4	101.60	0.25	6.40	4.69	119.10		
260214	<b>713.88</b>	260213	<b>743.88</b>	6	152.40	0.44	11.10	6.58	167.10		
<b>B16W End cap</b>											
247018	*	247020	<b>71.99</b>	½	12.70	1.81	46.00				
247022	*	247024	<b>95.99</b>	¾	19.00	1.81	46.00				
241546	<b>50.40</b>	242099	<b>101.99</b>	1	25.40	1.88	47.60				
241678	<b>83.99</b>	242100	<b>107.97</b>	1½	38.10	2.06	52.40				
241681	<b>95.99</b>	242101	<b>81.34</b>	2	50.80	2.75	69.90				
242104	<b>115.22</b>	242102	<b>132.86</b>	2½	63.50	3.00	76.20				
241683	<b>137.97</b>	242105	<b>145.26</b>	3	76.20	3.25	82.60				
241221	<b>191.96</b>	242103	<b>194.08</b>	4	101.60	4.00	101.60				
9635000195	<b>688.41</b>	*		6	152.40	4.25	108.00				

\* On request

NOTE: For pressure and surface, please see product leaflet. OD/ID and t (wall thickness) please see page 1.5.170

Product code: 5049

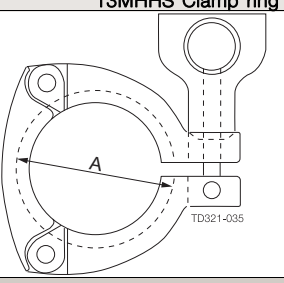
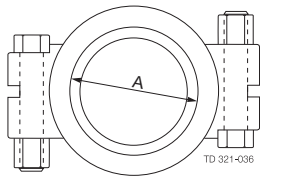
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Material Item No.	PPL EUR	Size DN/OD		Dimension A		
		Inch	mm	Inch	mm	
<b>1.4301 (304)</b>						<b>13MHM Clamp ring</b>
9613408801	<b>49.97</b>	1/2-3/4	12.7019.00	1.13	28.00	
212195	<b>41.13</b>	1-1 1/2	25.40-38.10	2.13	54.00	
212196	<b>46.48</b>	2	50.80	2.66	67.50	
212197	<b>56.76</b>	2 1/2	63.50	3.19	81.00	
212198	<b>61.69</b>	3	76.20	3.72	94.50	
212199	<b>74.84</b>	4	101.60	4.83	122.60	
210129	<b>193.86</b>	6	152.40	6.69	169.90	
<b>Clamp ring</b>						
9611993113	<b>34.69</b>	1	25.40	1.45	37.00	
<b>A13MHM Clamp ring</b>						
211053	<b>30.02</b>	1 - 1 1/2	25.40-38.10	2.13	54.00	
211054	<b>36.59</b>	2	50.80	2.66	67.10	
211055	<b>42.35</b>	2 1/2	63.50	3.19	81.00	
211056	<b>46.07</b>	3	76.20	3.72	94.50	
211057	<b>55.92</b>	4	101.60	4.83	122.20	
211058	<b>135.72</b>	6	152.40	6.69	169.90	
<b>13MHHS Clamp ring</b>						
211290	<b>23.88</b>	1/2-3/4	12.7019.00	1.13	28.60	
<b>13MHHS Clamp ring</b>						
9611994452	<b>34.54</b>	1/2-3/4	12.7-19.00	1.13	28.60	

NOTE: For pressure and surface, please see product leaflet.



Product code: 5049

Material Item No.	PPL EUR	Size DN/OD		Dimension A		13MHHS Clamp ring
		Inch	mm	Inch	mm	
1.4301 (304)						
211283	56.32	1-1 <sup>1</sup> / <sub>2</sub>	25.40-38.10	2.13	54.00	
211284	63.75	2	50.80	2.66	67.50	
211286	75.66	2 <sup>1</sup> / <sub>2</sub>	63.50	3.19	81.00	
211287	88.85	3	76.20	3.72	94.50	
211289	107.76	4	101.60	4.83	122.60	
Material Item number	PPL EUR	Size DN/OD		Dimension A		A13MHP Clamp ring
304		Inch	mm	Inch	mm	
9615265201	24.45	1/2 - 3/4	12.70- 19.00	1.04	26.40	
9615265301	63.35	1 - 1 1/2	25.40 - 38.10	2.05	52.00	
9615265401	78.96	2	50.80	2.58	65.50	
9615265501	87.19	2 1/2	63.50	3.11	79.00	
9615265601	106.91	3	76.20	3.64	92.50	
9615265701	119.69	4	101.60	4.73	120.30	
9634048982	239.12	6	152.40	6.63	168.40	



NOTE: For pressure and surface, please see product leaflet.





Product code: 5046

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Seal rings for type A

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	
<b>42MP-E</b>				<b>42MP-U</b>		<b>42MP-SFY</b>		Inch	<b>42MP Seal ring</b>
290273	2.11			290272	1.72	290274	4.83	1/2	
290265	2.34			290264	2.11	290266	5.51	3/4	
						9614006403	5.97	1	
<b>42MP-G</b>		<b>42MP-X</b>						Inch	<b>42MP Seal ring</b>
290270	2.73	290090	4.78					1/2	
290271	2.11	290099	4.73					3/4	
9614006404	34.23							1	

Seal rings for type B

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	
<b>40MP-E</b>				<b>40MP-U</b>		<b>40MP-SFY</b>		Inch	<b>40MP/MO Seal ring</b>
290141	1.65			298451	0.92	290009	5.39	1	
290044	1.65			298452	0.57	290022	4.05	1 1/2	
290043	1.72			298453	0.55	290030	4.57	2	
290048	1.84			298454	1.17	290040	6.82	2 1/2	
290036	2.11			298455	1.31	290049	9.58	3	
290018	2.34			298456	2.11	290053	12.05	4	
290234	20.38			290112	14.48	290220	55.28	6	
<b>40MP-G</b>		<b>40MP-X</b>		<b>40MP-UW</b>		<b>40MP-SFYW</b>		Inch	
298224	2.65	298512	2.49	298501	0.92	290071	5.99	1	
298227	2.56	298507	2.11	298495	1.02	290070	7.20	1 1/2	
298228	2.73	298508	2.49	298496	1.13	290062	8.39	2	
298223	3.97	298509	3.13	298499	1.81	290057	9.16	2 1/2	
298225	4.32	298510	3.58	298497	2.04	290055	13.81	3	
298226	5.88	298511	3.91	298498	2.39	290086	16.80	4	
298235	25.95	**		290195	11.42	Not available		6	

\*\* Not available

Material Descriptions

Code Letter	Material	Code Letter	Material
E	EPDM	U	Buna N
G	PTFE	UW	White Buna N
SFY	Steam Resistant Fluoroelastomer	SFY-W	White Viton
		X	Silicone (Q)





Product code: 5046

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size	
<b>40MPF-E</b>		<b>40MPF-U</b>		<b>40MPF-SFY</b>		<b>Inch</b>	<b>40MPF/MOF Seal ring</b>
290031	2.76	298346	1.92	290097	6.90	1	
290038	2.76	298347	2.29	290115	6.95	1 1/2	
290017	2.76	298376	3.01	290117	11.02	2	
290035	3.77	298348	3.12	290118	11.53	2 1/2	
290138	4.41	298375	3.17	290119	16.80	3	
290025	5.61	298349	3.42	290172	18.80	4	
290131	21.78	298220	12.32	290182	58.67	6	
<b>40MPF-X</b>		<b>40MPF-UW</b>				<b>Inch</b>	<b>40MPF/MOF Seal ring</b>
298411	2.73	298308	1.43			1	
298412	2.73	298431	1.57			1 1/2	
298413	2.88	298417	1.81			2	
298414	4.22	290069	1.92			2 1/2	
298415	4.32	298432	2.04			3	
298416	5.51	298433	2.75			4	
298605	23.66	290236	17.75			6	
<b>A40MP-GR</b>						<b>Inch</b>	<b>A40MP/A40MO. PTFE Envelope Gasket with SFY Seal ring</b>
290072	5.04					1	
290073	5.79					1 1/2	
290074	6.99					2	
290075	7.91					2 1/2	
290076	8.18					3	
290077	16.33					4	
290085	52.10					6	



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Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension					
						A		B			
PL (SF1)		PM (SF4)		Inch	mm	Inch	mm	Inch	mm	14MPHR Hose adapter	
210493	148.78	210954	179.97	1/2 x 1/4	12.70x6.40	1.50	38.10				
210494	148.77	210667	174.33	1/2 x 3/8	12.70x9.70	1.50	38.10				
210495	77.89	210321	95.99	1/2 x 1/2	12.70x12.70	1.50	38.10				
210603	154.55	**		3/4 x 1/4	19.00x6.40	1.50	38.10				
210604	154.55	**		3/4 x 3/8	19.00x9.70	1.50	38.10				
210541	97.62	**		3/4 x 1/2	19.00x12.70	1.50	38.10				
210539	79.06	210019	107.97	3/4 x 3/4	19.00x19.00	1.50	38.10				
210924	140.38	210365	119.97	1 x 1	25.40x25.40	1.69	42.90				
210369	108.82	210370	143.98	1 1/2 x 1 1/2	38.10x38.10	1.69	42.90				
210373	236.09	210382	77.96	2 x 2	50.80x50.80	2.31	58.70				
210386	185.73	210387	103.33	2 1/2 x 2 1/2	63.50x63.50	2.00	50.80				
210390	311.44	210391	*	3 x 3	76.20x76.20	3.11	79.00				
211618	459.03	210416	*	4 x 4	101.60x101.60	3.41	86.50				
<b>21MP Male NPT adapter</b>											
210577	108.10	210579	119.69	1/2 x 1/8	12.70x3.20	2.00	50.80	0.40	10.20		
210545	109.25	210581	123.18	1/2 x 1/4	12.70x6.40	2.00	50.80	0.59	15.00		
210582	111.58	210584	52.42	1/2 x 3/8	12.70x9.50	2.00	50.80	0.60	15.20		
210537	112.73	210586	160.34	1/2 x 1/2	12.70x12.70	2.00	50.80	0.78	19.80		
210551	123.21	210588	60.44	1/2 x 3/4	12.70x19.00	2.00	50.80	0.79	20.10		
**		211551	96.03	3/4 x 1/8	19.00x3.20	2.00	50.80	0.40	10.20		
210592	114.68	210993	56.80	3/4 x 1/4	19.00x6.40	2.00	50.80	0.59	15.00		
210548	99.50	210738	56.80	3/4 x 3/8	19.00x9.50	2.00	50.80	0.60	15.20		
210538	109.25	210593	109.27	3/4 x 1/2	19.00x12.70	2.00	50.80	0.78	19.80		
210542	108.82	210601	127.03	3/4 x 3/4	19.00x19.00	2.00	50.80	0.79	20.10		
219125	176.66	210840	185.93	1 x 1	25.40x25.40	2.25	57.20	0.69	17.50		
219126	176.66	210841	185.93	1 1/2 x 1 1/2	38.10x38.10	2.44	61.90	0.72	18.30		
219131	198.72	211552	213.85	2 x 2	50.80x50.80	2.66	67.50	0.75	19.10		
211549	129.04	211553	137.95	2 1/2 x 2 1/2	63.50x63.50	3.28	83.30	1.38	34.90		
210591	312.83	211554	330.90	3 x 3	76.20x76.20	3.50	88.90	1.20	30.60		
211550	249.21			4 x 4	101.60x101.60	3.81	96.80	1.30	32.90		

\* On request

\*\* Not available



Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension A		22MP Female NPT adapter
				Inch	mm	Inch	mm	
210686	177.82	211559	185.94	1/2 x 1/8	12.70x3.20	1.25	31.80	
210367	177.82	210878	185.94	1/2 x 1/4	12.70x6.40	1.50	38.10	
210420	192.63	211562	202.19	1/2 x 3/8	12.70x9.70	1.50	38.10	
210550	178.95	210055	257.53	1/2 x 1/2	12.70x12.70	1.50	38.10	
210543	75.66	211145	79.11	1/2 x 3/4	12.70x19.00	1.62	41.10	
210554	145.48	211564	79.11	3/4 x 1/8	19.00x3.20	1.25	31.80	
210557	159.76	211566	92.46	3/4 x 1/4	19.00x6.40	1.50	38.10	
210560	75.64			3/4 x 3/8	19.00x9.50	1.50	38.10	
210563	154.06	211144	93.07	3/4 x 1/2	19.00x12.70	1.50	38.10	
210536	181.29	210567	190.60	3/4 x 3/4	19.00x19.00	1.62	41.10	
219129	181.62	211570	109.39	1 x 1	25.40x25.40	1.63	41.30	
210460	210.37	210897	221.98	1 1/2 x 1 1/2	38.10x38.10	2.25	57.20	
210459	240.56	210769	257.98	2 x 2	50.80x50.80	2.34	59.20	
211558	162.67	211571	171.58	2 1/2 x 2 1/2	63.50x63.50	2.09	53.20	
210915	205.69	211572	214.58	3 x 3	76.20x76.20	2.19	55.60	
211560	274.42			4 x 4	101.60x101.60	2.66	67.50	

NOTE: For pressure and surface, please see product leaflet.

OD/ID and t (wall thickness) please see page 1.5.170



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Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN/OD		Dimension						B2UMPBOA (3A)
						A		B		C		
						Inch	mm	Inch	mm	Inch	mm	
9634037401	<b>483.81</b>	9634037428	<b>558.24</b>	1 x 1/2	25.40x12.70	3.00	76.20	3.00	76.20	4.13	104.80	
9634037402	<b>488.78</b>	9634037429	<b>563.98</b>	1 x 3/4	25.40x19.00	3.00	76.20	3.00	76.20	4.13	104.80	
9634037403	<b>507.06</b>	9634037430	<b>585.08</b>	1 1/2 x 1/2	38.10x12.70	4.50	114.30	4.50	114.30	5.88	149.20	
9634037404	<b>512.28</b>	9634037431	<b>591.09</b>	1 1/2 x 3/4	38.10x19.00	4.50	114.30	4.50	114.30	5.88	149.20	
9634037405	<b>517.58</b>	9634037432	<b>597.20</b>	1 1/2 x 1	38.10x25.40	4.50	114.30	4.50	114.30	5.88	149.20	
9634037406	<b>595.92</b>	9634037433	<b>687.61</b>	2 x 1/2	50.80x12.70	5.00	127.00	6.00	152.40	6.63	168.30	
9634037407	<b>602.05</b>	9634037434	<b>694.67</b>	2 x 3/4	50.80x19.00	5.00	127.00	6.00	152.40	6.63	168.30	
9634037408	<b>608.27</b>	9634037435	<b>701.85</b>	2 x 1	50.80x25.40	5.00	127.00	6.00	152.40	6.63	168.30	
9634037409	<b>620.62</b>	9634037436	<b>716.11</b>	2 x 1 1/2	50.80x38.10	5.00	127.00	6.00	152.40	6.63	168.30	
9634037410	<b>793.66</b>	9634037437	<b>915.76</b>	2 1/2 x 1/2	63.50x12.70	5.75	146.10	7.50	190.50	7.63	193.70	
9634037411	<b>801.81</b>	9634037438	<b>925.18</b>	2 1/2 x 3/4	63.50x19.00	5.75	146.10	7.50	190.50	7.63	193.70	
9634037412	<b>810.11</b>	9634037439	<b>934.74</b>	2 1/2 x 1	63.50x25.40	5.75	146.10	7.50	190.50	7.63	193.70	
9634037413	<b>826.55</b>	9634037440	<b>953.72</b>	2 1/2 x 1 1/2	63.50x38.10	5.75	146.10	7.50	190.50	7.63	193.70	
9634037414	<b>843.01</b>	9634037441	<b>972.70</b>	2 1/2 x 2	63.50x50.80	5.75	146.10	7.50	190.50	7.63	193.70	
9634037415	<b>1293.46</b>	9634037442	<b>1492.46</b>	3 x 1/2	76.20x12.70	6.50	165.10	9.00	228.60	8.63	219.10	
9634037416	<b>1306.77</b>	9634037443	<b>1507.80</b>	3 x 3/4	76.20x19.00	6.50	165.10	9.00	228.60	8.63	219.10	
9634037417	<b>1320.27</b>	9634037444	<b>1523.40</b>	3 x 1	76.20x25.40	6.50	165.10	9.00	228.60	8.63	219.10	
9634037418	<b>1347.09</b>	9634037445	<b>1554.33</b>	3 x 1 1/2	76.20x38.10	6.50	165.10	9.00	228.60	8.63	219.10	
9634037419	<b>1373.90</b>	9634037446	<b>1585.26</b>	3 x 2	76.20x50.80	6.50	165.10	9.00	228.60	8.63	219.10	
9634037420	<b>1400.70</b>			3 x 2 1/2	76.20x63.50	6.50	165.10	9.00	228.60	8.63	219.10	
9634037423	<b>1856.77</b>			4 x 1	101.60x25.40	8.50	215.90	12.00	304.80	11.13	282.60	
9634037424	<b>1894.48</b>			4 x 1 1/2	101.60x38.10	8.50	215.90	12.00	304.80	11.13	282.60	
9634037425	<b>1932.19</b>			4 x 2	101.60x50.80	8.50	215.90	12.00	304.80	11.13	282.60	

OD/ID and t (wall thickness) please see page 1.5.170



## 1.6 Installation accessories

Tube support systems and tools make our installation material package complete.



### Price lists

Tube Holders ISO 2037 tubes	1.6.198
Tube Holders DIN 11850 tubes	1.6.201
Tube Support System	1.6.203
Tools for Unions	1.6.208
Tools for Tubing	1.6.209
End Caps & Mounting Plates ISO 2037 tubes	1.6.210

1.6

Material Item No.	PPL EUR	Size DN	Dimension (mm)				Tube holder with welding attachment
			A	B	C (BSP)	D	
<b>1.4301 (304)</b>		<b>mm</b>					
9611850250	<b>17.93</b>	25.00	49.00	34.90			
9611850251	<b>18.52</b>	38.00	62.00	41.40			
9611850252	<b>18.79</b>	51.00	75.00	47.90			
9611850253	<b>19.72</b>	63.50	87.60	54.20			
9611850254	<b>19.82</b>	76.10	100.00	60.50			
9611850255	<b>20.51</b>	101.60	125.60	73.40			
<b>Tube holder without welding attachment</b>							
9612483201	<b>11.21</b>	25.00	49.00	14.90			
9612483202	<b>11.46</b>	38.00	62.00	21.40			
9612483203	<b>11.99</b>	51.00	75.00	27.90			
9612483204	<b>12.48</b>	63.50	87.60	34.20			
9612483205	<b>13.97</b>	76.10	100.00	40.50			
9612483206	<b>18.04</b>	101.60	125.60	53.40			

Material Item No.	PPL EUR	Size DN	Dimension (mm)				Tube holder, open
			A	B	C	D	
<b>1.4301 (304)</b>		<b>mm</b>					
9612928318	<b>9.60</b>	25.00	51.50	25.00			
9612928319	<b>10.80</b>	38.00	51.50	38.00			
9612928320	<b>13.19</b>	51.00	51.50	51.00			
9612928321	<b>14.40</b>	63.50	51.50	63.50			
9612928322	<b>16.80</b>	76.10	51.50	76.10			
9612928323	<b>19.20</b>	101.60	70.00	101.60			

Product code: 5082

Tube: ISO  
Material: 1.4301 (304)

1.6

Item No.	PPL EUR	Size DN	Dimension (mm)				
			A	B	C	E	
<b>Loose</b>							<b>Tube holder with short shaft</b>
9612411107	12.83	25.00	80.00	27.00	90.00	21.30	
9612411108	13.61	38.00	93.00	40.00	90.00	21.30	
9612411109	14.39	51.00	106.00	53.00	90.00	21.30	
9612411110	15.17	63.50	118.00	65.50	90.00	21.30	
9612411111	16.44	76.00	132.00	78.00	90.00	21.30	
9612411112	17.93	101.60	157.00	104.00	90.00	21.30	
<b>Tight</b>							<b>Tube holder with short shaft</b>
9612411101	12.83	25.00	78.00	24.00	90.00	21.30	
9612411102	13.61	38.00	91.00	38.10	90.00	21.30	
9612411103	14.39	51.00	104.00	51.00	90.00	21.30	
9612411104	15.08	63.50	116.00	63.50	90.00	21.30	
9612411105	16.37	76.00	129.00	76.20	90.00	21.30	
9612411106	17.93	101.60	155.00	101.60	90.00	21.30	
<b>Loose</b>							<b>Tube holder with long shaft</b>
9612411119	19.20	25.00	80.00	27.00	150.00	21.30	
9612411120	20.39	38.00	93.00	40.00	150.00	21.30	
9612411121	21.60	51.00	106.00	53.00	150.00	21.30	
9612411122	22.79	63.50	118.00	65.50	150.00	21.30	
9612411123	24.01	76.00	132.00	78.00	150.00	21.30	
9612411124	25.19	101.60	157.00	104.00	150.00	21.30	
<b>Tight</b>							<b>Tube holder with long shaft</b>
9612411113	16.37	25.00	78.00	25.40	150.00	21.30	
9612411114	16.97	38.00	91.00	38.10	150.00	21.30	
9612411115	18.18	51.00	104.00	51.00	150.00	21.30	
9612411116	15.86	63.50	116.00	63.50	150.00	21.30	
9612411117	20.51	76.00	129.00	76.20	150.00	21.30	
9612411118	24.21	101.60	155.00	101.60	150.00	21.30	
<b>Tight</b>							<b>Tube holder - with short shaft</b>
9612991005	17.99		101.00	48.30	90.00	21.30	
9612991006	20.39		113.00	60.30	90.00	21.30	
9612991007	24.88		143.00	88.90	90.00	21.30	
9612991008	26.40		167.00	114.00	95.00	21.30	

Hinged Hex pipe holders  
 Product code: 5082

Tube: ISO  
 Material: 1.4301 (304)

1.6

Material Item No.	PPL EUR	Size DN mm	Dimension (mm)				HXO, 2 piece saddle HEX - No Attachment
			A	B	C	D	
9612928225	6.24	25.00	25.00	15.00			
9612928226	7.20	38.00	38.00	21.50			
9612928227	8.04	51.00	51.00	28.00			
9612928228	8.39	63.50	63.50	34.50			
9612928229	9.60	76.00	76.00	40.50			
9612928230	10.80	104.00	104.00	54.50			
<b>HKO, hinged HEX - No Attachment</b>							
9612928213	7.80	25.00	25.00	15.00			
9612928214	9.60	38.00	38.00	21.50			
9612928215	11.76	51.00	51.00	28.00			
9612928216	13.19	63.50	63.50	34.50			
9612928217	14.66	76.00	76.00	40.50			
9612928218	15.59	104.00	104.00	54.50			
<b>HKB, hinged HEX</b>							
9612928219	8.39	25.00	25.00		100.00	10.00	
9612928220	9.01	38.00	38.00		100.00	10.00	
9612928221	9.60	51.00	51.00		100.00	12.00	
9612928222	10.80	63.50	63.50		100.00	12.00	
9612928223	12.00	76.00	76.00		100.00	12.00	
9612928224	14.40	104.00	104.00		100.00	14.00	



Product code: 5082

Tube: DIN  
Material: 1.4301 (304)

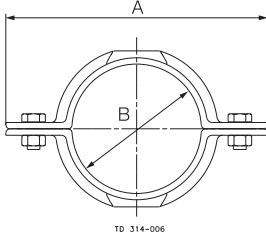
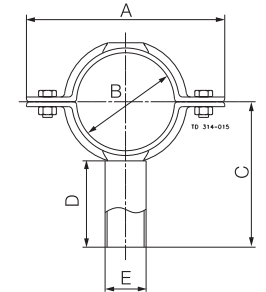
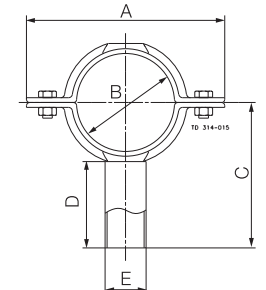
1.6

Finish Item No.	PPL EUR	Finish Item No.	PPL EUR	Size DN mm	Dimension (mm)							
					B	C	D					
<b>Semi bright</b>		<b>Mat</b>										<b>Tube holder with shaft</b>
9611980700	<b>11.68</b>	9611980701	<b>11.68</b>	10.00		62.50	12.00	8.00				
9611980710	<b>12.01</b>	9611980711	<b>12.01</b>	15.00		65.50	18.00	8.00				
9611981132	<b>12.35</b>	9611981131	<b>12.35</b>	20.00		68.50	22.00	8.00				
9611980720	<b>12.69</b>	9611980721	<b>12.35</b>	25.00		71.50	28.00	10.00				
9611980740	<b>13.72</b>	9611980741	<b>13.72</b>	40.00		77.50	40.00	10.00				
9611980750	<b>14.42</b>	9611980751	<b>14.42</b>	50.00		83.50	52.00	12.00				
9611980760	<b>15.44</b>	9611980761	<b>15.44</b>	65.00		92.50	70.00	12.00				
9611980780	<b>16.48</b>	9611980781	<b>16.48</b>	80.00		100.00	85.00	12.00				
9611980790	<b>17.85</b>	9611980791	<b>17.85</b>	100.00		109.50	104.00	12.00				
9611980800	<b>35.01</b>	9611980801	<b>35.01</b>	125.00		140.50	129.00	16.00				
9611980810	<b>52.16</b>	9611980811	<b>52.16</b>	150.00		179.50	154.00	16.00				
					A	B	C	H	S	Bolt		<b>Tube holder without shaft</b>
9611981152	<b>7.94</b>	9611981151	<b>7.94</b>	10.00	51	12	16	36	2	M6x20		
9611981162	<b>8.18</b>	9611981161	<b>8.18</b>	15.00	57	18	22	42	2	M6x20		
9611981172	<b>8.39</b>	9611981171	<b>8.39</b>	20.00	61	22	28	46	3	M6x20		
9611981182	<b>8.63</b>	9611981181	<b>8.63</b>	25.00	67	28	34	52	3	M6x20		
9611981202	<b>9.33</b>	9611981201	<b>9.33</b>	40.00	79	40	46	64	3	M6x20		
9611981212	<b>9.81</b>	9611981211	<b>9.81</b>	50.00	91	52	58	76	3	M6x20		
9611981222	<b>10.50</b>	9611981221	<b>10.50</b>	65.00	109	70	76	94	3	M6x20		
9611981232	<b>11.21</b>	9611981231	<b>11.21</b>	80.00	124	85	91	109	3	M6x20		
9611981242	<b>12.13</b>	9611981241	<b>12.13</b>	100.00	143	104	110	128	3	M6x20		
9611981252	<b>23.80</b>	9611981251	<b>23.80</b>	125.00	168	129	135	153	3	M6x20		
9611981262	<b>35.46</b>	9611981261	<b>35.46</b>	150.00	193	154	160	178	3	M6x20		

Product code: 5082

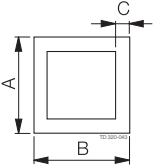
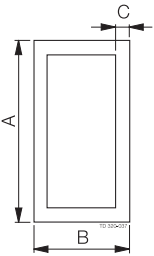
Tube: DIN  
Material: 1.4301 (304)

1.6

Item No.	PPL EUR	Size DN mm	Dimension (mm)					
			A	B	C	D	E	
<b>Tight</b>								<b>Tube holder without shaft</b>
9612411055	*	50.00	107.00	53.00				
<b>Loose</b>								<b>Tube holder with short shaft</b>
9612411019	14.42	50.00	109.00	54.00	90.00		21.30	
9612411020	15.44	65.00	125.00	72.00	90.00		21.30	
9612411021	16.48	80.00	139.00	87.00	90.00		21.30	
9612411022	17.85	100.00	159.00	106.00		50.00	21.30	
9612411023	35.01	125.00	184.00	131.00		50.00	21.30	
9612411024	52.16	150.00	209.00	156.00		50.00	21.30	
<b>Tight</b>								<b>Tube holder with short shaft</b>
9612411003	12.35	20.00	72.00	23.00	90.00		21.30	
9612411004	12.69	25.00	80.00	29.00	90.00		21.30	
9612411007	14.42	50.00	107.00	53.00	90.00		21.30	
9612411008	15.44	65.00	123.00	70.00	90.00		21.30	
9612411009	16.48	80.00	137.00	85.00	90.00		21.30	
9612411010	17.85	100.00	157.00	104.00		50.00	21.30	
9612411011	35.01	125.00	182.00	129.00		50.00	21.30	
9612411012	52.16	150.00	207.00	154.00		50.00	21.30	

Supports system  
Product code: 5118, 5084

1.6

Material	PPL			Size	Dimension (mm)			
Item No.	EUR			DN	A	B	C	
<b>1.4301 (304)</b>				<b>mm</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>Square tube</b>
<b>Product code: 5118</b>								
9611831486	*				15.00	15.00	1.50	
9611831488	*				20.00	20.00	2.00	
9611831493	*				25.00	25.00	2.00	
9611831490	*				30.00	30.00	2.00	
9611831496	*				35.00	35.00	2.00	
9611831501	*				40.00	40.00	1.50	
9611831504	*				40.00	40.00	2.00	
9611831507	*				45.00	45.00	2.00	
9611831513	*				50.00	50.00	2.00	
9611831381	*				50.00	50.00	3.00	
9611831382	*				60.00	60.00	2.00	
9611831383	*				60.00	60.00	3.00	
9611831384	*				80.00	80.00	2.00	
9611831573	*				80.00	80.00	3.00	
9611831386	*				100.00	100.00	2.00	
9611831387	*				100.00	100.00	3.00	
9611831388	*				100.00	100.00	4.00	
9611831441	*				120.00	120.00	3.00	
9611831442	*				120.00	120.00	4.00	
<b>1.4301 (304)</b>					<b>A</b>	<b>B</b>	<b>C</b>	
<b>Product code: 5118</b>								
9611831389	*				30.00	20.00	2.00	
9611831390	*				40.00	20.00	2.00	
9611831391	*				50.00	30.00	2.00	
9611831527	*				60.00	40.00	2.00	
9611831393	*				80.00	40.00	2.00	
9611831565	*				80.00	40.00	3.00	
9611831570	*				80.00	60.00	3.00	
9611831455	*				100.00	40.00	3.00	
9611831396	*				100.00	50.00	2.00	
9611831397	*				100.00	50.00	3.00	
9611831398	*				100.00	60.00	2.00	
9611831460	*				120.00	40.00	3.00	
9611831461	*				120.00	60.00	3.00	

\* PPL prices are updated monthly  
All tubes are in lengths of 6 meters .

Supports system  
Product code: 5118, 5084

1.6

Material	PPL			Size	Dimension (mm)		
Item No.	EUR			DN	A	B	
<b>1.4301 (304)</b>							<b>Flat steel</b>
<b>Product code: 5118</b>							
9611831401	*				20.00	3.00	
9611831402	*				20.00	5.00	
9611831403	*				25.00	3.00	
9611831404	*				25.00	5.00	
9611831405	*				25.00	6.00	
9611831406	*				30.00	3.00	
9611831407	*				30.00	5.00	
9611831408	*				30.00	6.00	
9611831409	*				30.00	8.00	
9611831410	*				30.00	10.00	
9611831411	*				35.00	5.00	
9611831412	*				35.00	6.00	
9611831413	*				35.00	10.00	
9611831414	*				40.00	4.00	
9611831415	*				40.00	5.00	
9611831416	*				40.00	6.00	
9611831417	*				40.00	8.00	
9611831418	*				50.00	5.00	
9611831419	*				50.00	6.00	
9611831420	*				50.00	8.00	
9611831421	*				60.00	5.00	
9611831422	*				60.00	6.00	
9611831423	*				60.00	8.00	
9611831424	*				80.00	5.00	
9611831425	*				80.00	6.00	
9611831426	*				80.00	8.00	
9611831427	*				80.00	10.00	
9611831428	*				100.00	6.00	
9611831429	*				100.00	8.00	
9611831430	*				100.00	10.00	
<b>1.4301 (304)</b>					<b>A</b>	<b>B</b>	<b>Angle steel</b>
<b>Product code: 5118</b>							
9611831431	*				20.00	3.00	
9611831432	*				25.00	3.00	
9611831433	*				30.00	3.00	
9611831434	*				35.00	4.00	
9611831435	*				40.00	4.00	
9611831436	*				50.00	5.00	
9611831437	*				60.00	6.00	
9611831438	*				70.00	7.00	
9611831439	*				80.00	8.00	
<b>Product code: 5084</b>							
9611850720	26.67				110.00	M12	

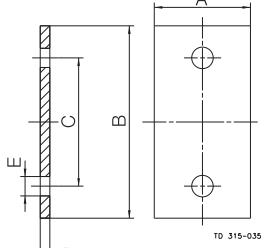
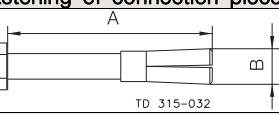
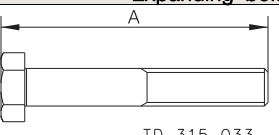
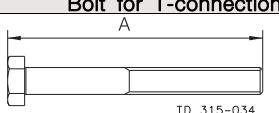
\* PPL prices are updated monthly  
All tubes are in lengths of 6 meters .

Supports system  
Product code: 5084

Material Item No.	PPL EUR	Dimension (mm)		
		A	B	
<b>1.4301 (304)</b> 9611850660	<b>39.88</b>	150.00	40.00	<p><b>Floor plate</b></p>
<b>Wall plate, ceiling plate</b>				
9611850730	<b>35.97</b>	150.00	40.00	
<b>Wall plate, ceiling plate</b>				
9611850740	<b>21.61</b>	150.00	9.00	
<b>Wall plate, ceiling plate</b>				
9612515801	<b>114.18</b>	150.00	154.00	

Supports system  
Product code: 5084

1.6

Material Item No.	PPL EUR	Dimension (mm)					Wall plate
		A	B	C	D	E	
9611880370	31.19	60.00	120.00	80.00	6.00	13.50	 <p>TD 315-035</p>
							<b>Fastening of connection piece</b>
9611991157	5.17	80.00	M12				 <p>TD 315-032</p>
							<b>Expanding bolt</b>
9611990585	2.51	55.00	M12 x 55				 <p>TD 315-033</p>
							<b>Bolt for T-connection</b>
9611990586	13.64	80.00	M12 x 80				 <p>TD 315-034</p>
							<b>Nut and washer</b>
9611990588	1.16		M12				

Supports system  
 Product code: 5084, 5086

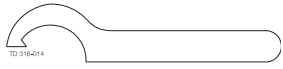
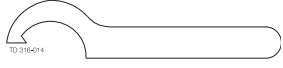
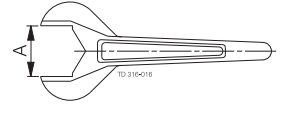

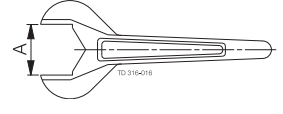
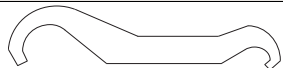
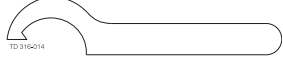

1.6

Material	PPL	Size	
Item No.	EUR	DN	
1.4301 (304)		mm	Strap
<b>Product code: 5084</b>			
9611990589	7.73	25.00	
9611990590	9.60	38.00	
9611990591	10.20	51.00	
9611990592	10.80	63.50	
9611990593	11.40	76.10	
9611990594	12.00	101.60	

Material	PPL	Size	Dimension (mm)			
Item No.	EUR	DN	A	B	C	
<b>Product code: 5084</b>						
9611850530	8.15	25.00	40.50	25.00	12.70	
9611850531	8.15	38.00	40.50	35.00	19.30	
9611850532	8.78	51.00	40.50	35.00	25.60	
9611850533	9.38	63.50	40.50	35.00	32.00	
9611850534	9.49	76.10	40.50	35.00	38.40	
9611850535	10.35	101.60	40.50	35.00	51.20	

Union spanners  
Product code: 5086

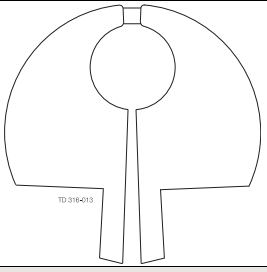
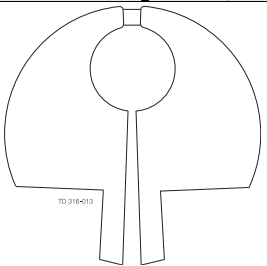
1.6

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			
					For nut diam.			
Zink plated steel		Light alloy		mm	A	from	to	Spanners for SMS and DS round nuts
9611980118	16.80			25.00		58.00	62.00	
9611980119	18.89			38.00		68.00	75.00	
9611980120	29.99			51.00		80.00	90.00	
9611980123	32.87			63.50		95.00	100.00	
9611980121	55.66			76.10		110.00	115.00	
9611980125	73.35			101.60		155.00	165.00	
<b>Spanners for IDF round nuts</b>								
9611980117	29.99			25.00		45.00	50.00	
9611980118	16.80			38.00		58.00	62.00	
9611980119	18.89			51.00		68.00	75.00	
9611980120	29.99			63.50		80.00	90.00	
9611980121	55.66			76.10		110.00	115.00	
9611980126	58.79			101.60		135.00	145.00	
<b>Spanner, hexagon nuts - IDF/ISO</b>								
		9611980111	48.77	25.00	47.00			
		9611980112	50.40	38.00	62.00			
		9611980113	52.79	51.00	77.00			
		9611980114	57.01	63.50	92.00			
		9611980115	60.00	76.10	108.00			
		9611980127	93.20	101.60	135.50			
<b>Universal spanners for round nuts</b>								
3131709351	28.80			25.00-76.10				
<b>Spanners for RJT (BS) hexagon nuts</b>								
		9611980140	45.28	25.00	52.00			
		9611980141	47.99	38.00	66.00			
		9611980142	53.99	51.00	80.00			
		9611980114	57.01	63.50	92.00			
		9611981121	57.93	76.10	106.00			
<b>Universal spanner for ISO/DIN</b>								
1.4301 (304)				mm		from	to	
69696	70.49			25.00-76.00 DIN 2025.00-76.00				
<b>Spanners for DIN</b>								
9611980118	16.80			25.00		58.00	62.00	
9611980119	18.89			40.00		68.00	75.00	
9611980120	29.99			50.00		80.00	90.00	
9611980121	55.66			65.00		110.00	115.00	
9611980124	81.59			80.00		120.00	125.00	
9611980126	58.79			100.00		135.00	145.00	
<b>"C" spanners for DIN</b>								
9611901027	15.04			10.00-20.00		35.00	60.00	
9611901028	32.84			25.00-40.00		60.00	90.00	
9611901029	48.18			50.00-100.00		90.00	155.00	
9611901030	100.36			125.00-150.00		155.00	230.00	



Product code: 5086

1.6

Item No.	PPL EUR	Size		Dimension (mm)	Cutting device, ISO
		DN mm	DN mm		
<b>Steel</b>				<b>Max. thickness of saw blades</b>	
9611981070	<b>215.96</b>	25.00		1.40	
9611981071	<b>239.96</b>	38.00		1.50	
9611981072	<b>270.90</b>	51.00		1.60	
9611981073	<b>359.94</b>	63.50		1.70	
9611981074	<b>419.93</b>	76.10		1.70	
9611981075	<b>698.94</b>	101.60		1.90	
<b>Cutting device, DIN</b>					
9611981080	<b>277.58</b>		15.00		
9611981081	<b>277.58</b>		20.00		
9611981082	<b>284.33</b>		25.00		
9611981084	<b>294.44</b>		40.00		
9611981085	<b>311.28</b>		50.00		
9611981086	<b>462.97</b>		65.00		
9611981087	<b>614.62</b>		80.00		
9611981089	<b>732.61</b>		100.00		

Product code: 5086

Tube: ISO  
Semi bright

1.6

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				End cap, ISO
					A	B	C	D	
1.4301 (304)		1.4404 (316L)		mm					
		9612446401	<b>62.40</b>	25.00	25.00	21.80	9.00		
		9612446402	<b>64.80</b>	38.00	38.00	34.80	10.00		
		9612446403	<b>71.99</b>	51.00	51.00	47.80	12.00		
		9612446404	<b>77.99</b>	63.50	63.50	60.30	14.00		
		9612446405	<b>84.67</b>	76.00	76.00	72.00	17.00		
		9612446406	<b>95.99</b>	101.60	101.60	97.60	26.00		

1.6

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			
					A	B	C	
<b>1.4301 (304)</b>		<b>1.4404 (316L)</b>		<b>mm</b>				<b>End cap (Polished)</b>
9611901011	3.66	9611907350	4.06	25.00	28.00	25.00	11.00	
9611901013	4.25	9611907352	4.73	40.00	40.00	37.00	14.00	
9611901014	8.95	9611907353	9.96	50.00	52.00	49.00	17.00	
9611901015	11.45	9611907354	12.73	65.00	70.00	66.00	22.00	
9611901016	25.64	9611907355	28.48	80.00	85.00	81.00	24.00	
9611901017	34.54	9611907356	38.36	100.00	104.00	100.00	28.00	
9611901018	45.65	9611907357	50.73	125.00	129.00	125.00	33.00	
9611901019	59.76	9611907358	66.40	150.00	154.00	150.00	38.00	
9611901020	132.81	9611907359	147.57	200.00	204.00	200.00	47.00	
9611901021	205.87	9611907360	228.73	250.00	254.00	250.00	50.00	
								<b>End cap (Mat)</b>
9611901000	3.48			25.00	28.00	25.00	11.00	
9611901002	4.05			40.00	40.00	37.00	14.00	
9611901003	8.54			50.00	52.00	49.00	17.00	
9611901004	10.92			65.00	70.00	66.00	22.00	
9611901005	24.41			80.00	85.00	81.00	24.00	
9611901006	32.89			100.00	104.00	100.00	28.00	
9611901007	43.48			125.00	129.00	125.00	33.00	
9611901008	56.93			150.00	154.00	150.00	38.00	
9611901009	126.48			200.00	204.00	200.00	47.00	
9611901010	196.05			250.00	254.00	250.00	50.00	
								<b>Mounting plate,</b>
3180153911	47.67				120.00	5.00		
3180153912	69.78				160.00	8.00		

## Alfa Laval in brief

Alfa Laval is a leading global provider of specialized products and engineered solutions.

Our equipment, systems and services are dedicated to helping customers to optimize the performance of their processes. Time and time again.

We help our customers to heat, cool, separate and transport products such as oil, water, chemicals, beverages, foodstuffs, starch and pharmaceuticals.

Our worldwide organization works closely with customers in almost 100 countries to help them stay ahead.

## How to contact Alfa Laval

Contact details for all countries are continually updated on our website. Please visit [www.alfalaval.com](http://www.alfalaval.com) to access the information.

