



Distributed by:



800-826-8302 nelsonjameson.com

Alfa Laval DIN fittings and tubes

Connect with us



This page is intentionally left blank

1. DIN Fittings and Tubes

Brand-new catalogue for DIN Fittings

Intro	1.1
DIN Fittings and Tubes	1.2
Marking and Surface	1.3
Technical information	1.4
DIN Standard, new surface	1.5
Fit To DIN Tubes	1.6

This page is intentionally left blank

Intro

DIN Fittings and Tubes

Intro

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"

"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.



DIN Standard, Overview

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

¹) Surface table is available later in the document

²) 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.

³) We do currently not offer this part of the DIN standard

1.2 DIN Fittings and Tubes

Tubes	1.2.6
Bends, Tees and Reducers	1.2.8
Connections	1.2.10

Tubes

Standard	Material	Symbol	Surface			Heat Treatment
			External surface and Welded area	Internal surface	Internal Welded area	
EN 10357-A /DIN 11850	1.4307 (304L)	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			
	1.4404 (316L)	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	2
DN65	70	66	
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".

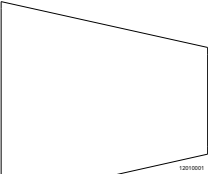
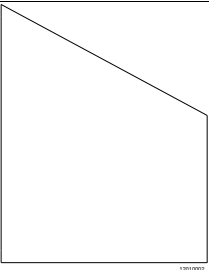
DIN 11850 Reihe 1, different measures up to DN50:

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 $d_1=d_2$	Standard Tee	
	RTS $d_1>d_2$ (d_2 pointing down)	Reduced Tee	
	TK $d_1=d_2$	Short Tee	
	RTK $d_1>d_2$ (d_2 pointing down)	Reduced Short Tee	

Reducers

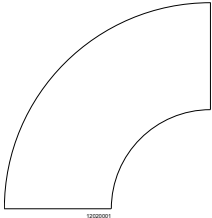
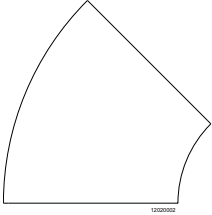
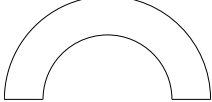
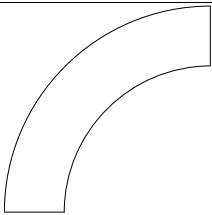
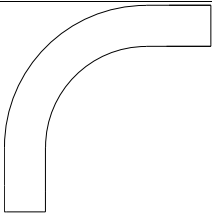
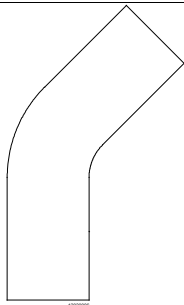
Type Name	Design Name	Comment	Picture
Reducers	RK	Concentric Reducer	
	RE	Eccentric Reducer	

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

TEE TK DN25 HSF3 1.4404 DIN 11852




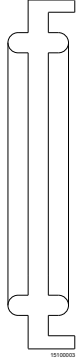
TEE	TK	DN25	HSF3	1.4404	DIN 11852
Type Name	Design Name	Nominal Size	Surface	Material	Standard

Bends

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

Connections

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	 13100001
DIN 11853	H3	1.4404 (316L)	FPM EPDM	1: Screw Connection 2: Flange Connection 3: Clamp Connection	 13100002
DIN 11864	H3	1.4404 (316L)	FPM EPDM	1: Screw Connection 2: Flange Connection 3: Clamp Connection	 13100002
DIN 32676	HSF0 H3	1.4307 (304L) 1.4404 (316L) 1.4404 (316L)	PTFE FPM	Clamp Connection	 13100003
					Gasket (D)

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	
Liner (Bundstutzen)	BS	
Blind Male (Blindgewindestutzen) (same item as in 11864-1)	BGS	V
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
Currently not part of offering		
Flange Groove (Nutflansch)	NF	
Currently not part of offering		
Flange Collar (Bundflansch)	BF	
Blind Flange Groove (Blindnutflansch) (same item as in 11864-2)	BNF	F
Blind Flange Collar (Blindbundflansch) same item as in 11864-2)	BBF	
Screw (Sechskantshraube, 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 overview

DIN 11853-3

Clamp Connection (Klemmverbindung)

Parts Type Name	Parts Design Name	Connection Name
Currently not part of offering		
Clamp Liner Groove (Nutmlemmstutzen)	NKS	
Currently not part of offering		
Clamp Liner Collar (Bundlemmstutzen)	BKS	
Blind Clamp Liner Groove (Blindnutklemmstutzen) (Same Item As In 11864-3)	BNKS	K
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

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	
Liner (Bundstutzen)	BS	
Blind Male (Blindgewindestutzen)	BGS	V
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	
Flange Collar (Bundflansch)	BF	
Blind Flange Groove (Blindnutflansch)	BNF	
Blind Flange Collar (Blindbundflansch)	BBF	F
Screw (Sechskantshraube, 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	
Clamp Liner Collar (Bundmstutzen)	BKS	
Blind Clamp Liner Groove (Blindnutmstutzen)	BNKS	K
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.

DIN 32676

Clamp Connection (Klemmverbindung)

Parts Type Name	Parts Design Name	Connection Name
Ferrule Short (Klemmstutzen Kurz)	KK	
Ferrule Long (Klemmstutzen Lang)	KL	
Blind (Blindklemmstutzen)	B	KK KL
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.

Length of assembled connections

Approx. length in mm of the assembled connections (Baulänge)

Nominal size	DIN 11851		DIN 11853			DIN 11864			DIN 32676	
	W and S	SK	1	2	3	1	2	3	KK	KL
DN10			32							
DN15	35	27	34			76		76	37,7	58,9
DN20	37		42		44		80			
DN25	45		48	48		77		77		
DN32	51	31	50		48	88		88	44,7	73,7
DN40	53		54				90			
DN50	57	33	62		49	89		89		
DN65	65		72		53	113	108	113		
DN80	75	35	86	52	57	117		117		97,7
DN100	89	41			60	120	116	120	57,7	
DN125	70	49								
DN150	76	56		56			120			133,7

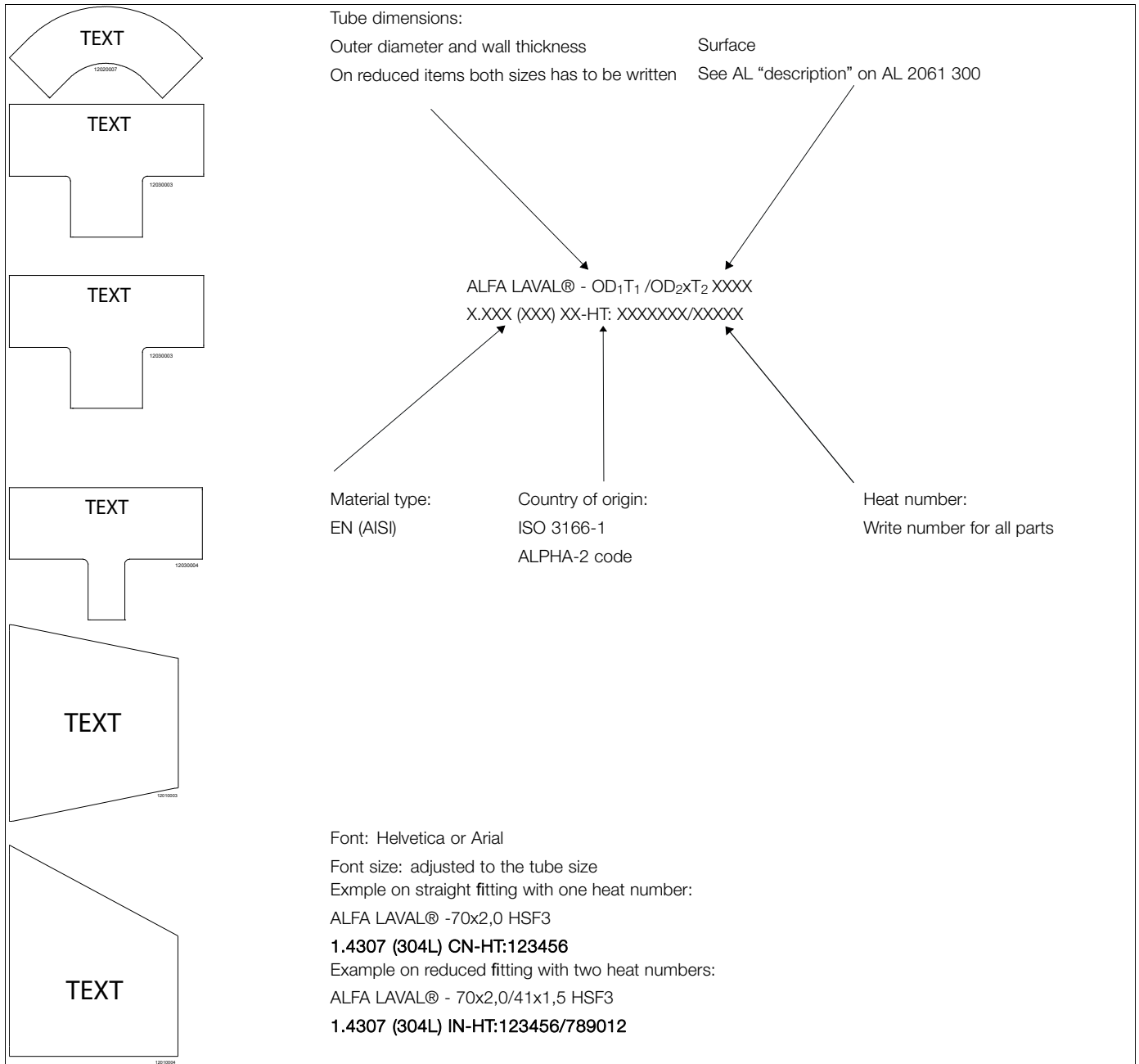
1.3 Marking and Surface

Marking and Surface 1.3.18

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



Machined

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			Dimensions: Outer diameter and wall thickness On nut and blanks the standard size is added. Eg.:for DIN: DIN:DN50,For ISO: 2
Ferrule			Surface: See "AL description" on AL 2062 301
Flange			ALFA LAVAL® -OD _x 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_a μm ($\mu\text{-inch}$)	
		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_a μm ($\mu\text{-inch}$)			
			Wetted		Not wetted	
			Surface	weld bead	Surface	weld bead
HSF2	DIN (Hygienic)	Polished/Shot blasted	<0.8 (32)	<0.8 (32)	<1.6 (64) ²	<1.6 (64) ²
HSF3 ¹	DIN (Hygienic)	Polished/Polished	< 0.8 (32)	< 0.8 (32)	< 0.8 (32)	< 0.8 (32)

¹For sizes larger than DN100, the "Not wetted" surface R_a can be upto 1.0 μm .

²Tolerances according to DIN 11852

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 R_a <0.8 and outside it is shot blasted to a surface R_a <1.6

1.4 Technical information

Basics	1.4.22
Rubber material and application	1.4.23
Elastomer review	1.4.24
Pressure ratings	1.4.25
Steelgrades	1.4.28
Treatment of stainless steel	1.4.29

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 ¹⁾	EPDM ²⁾	Q ³⁾	FPM ⁴⁾	PTFE ⁵⁾
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 etheral 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	1	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
Resistance			
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	25	16	
DN100							
DN125	16		10			10	
DN150							

Pressure ratings

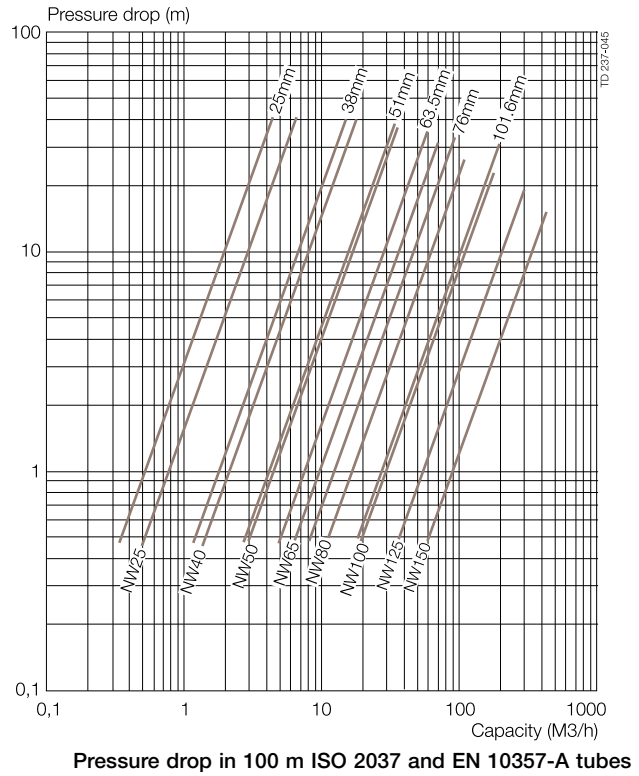
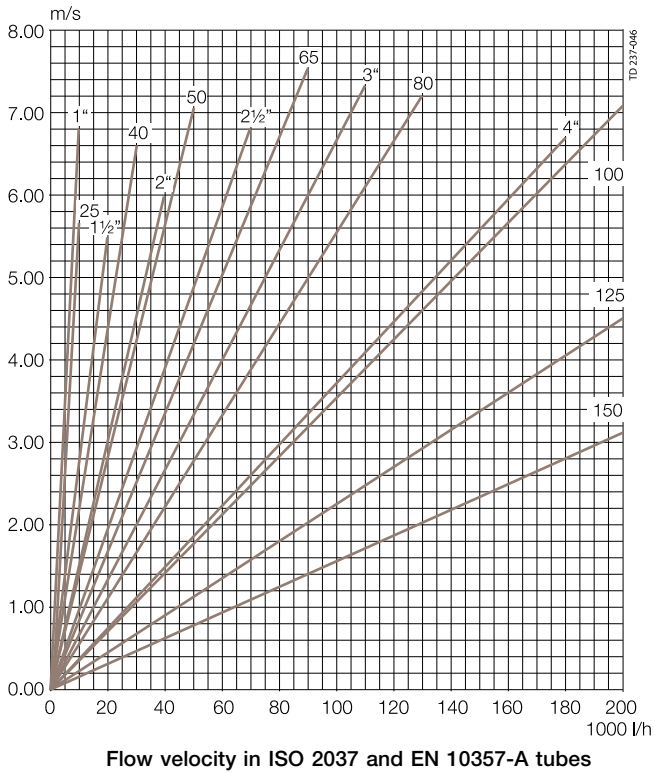
Maximum pressure for the Tubular Fittings [bar]

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



Steelgrades

Most common steelgrades

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

Name	Material	Chemical composition							Cr	Mo	Ni
		C	Si	Mn	Pmax.	S	N				
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.

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.

This page is intentionally left blank

1.5 DIN Standard, new surface

Price lists

Hygienic Tubes EN 10357-A (DIN 11850)	1.5.32
Hygienic Bends DIN 11852	1.5.34
Hygienic Tees DIN 11852	1.5.37
Hygienic Reducers DIN 11852	1.5.43
Hygienic Screw Connections DIN 11851 W (Expanding)	1.5.49
Hygienic Screw Connections DIN 11851 S (Welding)	1.5.52
Hygienic Screw Connections DIN 11853-1	1.5.58
Hygienic Flange Connections DIN 11853-2	1.5.62
Hygienic Clamp Connections DIN 11853-3	1.5.66
Aseptic Screw Connections DIN 11864-1	1.5.67
Aseptic Flange Connections DIN 11864-2	1.5.71
Aseptic Clamp Connections DIN 11864-3	1.5.75
Hygienic Clamp Connections DIN 32676	1.5.78
Clamp Rings for DIN Clamp Connections	1.5.81

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

1.5

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm) OD/ID x t	
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	BD EHEDG 0.8/0.8
8010007788		8010007790		10	16.00/13.00 x 1.50	
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	
						BC EHEDG 0.8/0.8
8010007789		8010007791		10	16.00/13.00 x 1.50	
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	
1.4301 (304)		1.4404 (316L)		mm	OD/ID x t	CC finish
9611819683		9611819528		15	19.00/16.00 x 1.50	
		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	
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

1.5

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			
1.4307 (304)		1.4404 (316L)		mm	OD/IDxt	L	R	BEND 45 BS, HSF3 (ID=0.8/OD=0.8) DIN 11852
9615227331		9615227343		10	13.00/10.00 x 1.50	18.38	26.00	
9615227332		9615227344		15	19.00/16.00 x 1.50	24.75	35.00	
9615227333		9615227345		20	23.00/20.00 x 1.50	28.28	40.00	
9612154642		9612154611		25	29.00/26.00 x 1.50	35.36	50.00	
9612154643		9612154612		32	35.00/32.00 x 1.50	38.89	55.00	
9612154644		9612154613		40	41.00/38.00 x 1.50	42.43	60.00	
9612154645		9612154614		50	53.00/50.00 x 1.50	49.5	70.00	
9611293861		9611293862		65	70.00/66.00 x 2.00	56.57	80.00	
9611293871		9611293872		80	85.00/81.00 x 2.00	63.64	90.00	
9611293881		9611293882		100	104.00/100.00 x 2.00	70.71	100.00	
9611293891		9611293892		125	129.00/125.00 x 2.00	132.58	187.50	
9611293901		9611293902		150	154.00/150.00 x 2.00	159.1	225.00	
9615227359		9615227360		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)			
1.4307 (304)		1.4404 (316L)		mm	OD/IDxt	L	R	BEND 45 BS, HSF2 (ID=0.8/OD=1.6) DIN 11852
9615227307		9615227319		10	13.00/10.00 x 1.50	18.38	26.00	
9615227308		9615227320		15	19.00/16.00 x 1.50	24.75	35.00	
9615227309		9615227321		20	23.00/20.00 x 1.50	28.28	40.00	
9615227310		9615227322		25	29.00/26.00 x 1.50	35.36	50.00	
9615227311		9615227323		32	35.00/32.00 x 1.50	38.89	55.00	
9615227312		9615227324		40	41.00/38.00 x 1.50	42.43	60.00	
9615227313		9615227325		50	53.00/50.00 x 1.50	49.5	70.00	
9615227314		9615227326		65	70.00/66.00 x 2.00	56.57	80.00	
9615227315		9615227327		80	85.00/81.00 x 2.00	63.64	90.00	
9615227316		9615227328		100	104.00/100.00 x 2.00	70.71	100.00	
9615227317		9615227329		125	129.00/125.00 x 2.00	132.58	187.50	
9615227318		9615227330		150	154.00/150.00 x 2.00	159.1	225.00	
9615227357		9615227358		200	204.00/200.00 x 2.00	212.13	300.00	

Product code: 5007

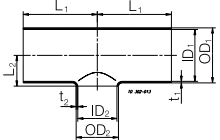
Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				
BEND 90 BS HSF3 (ID=0.8/OD=0.8) DIN 11852									
9612150558		9612150508		10	13.00/10.00 x 1.50	26.00	26.00		
9612150559		9612150509		15	19.00/16.00 x 1.50	35.00	35.00		
9612150560		9612150510		20	23.00/20.00 x 1.50	40.00	40.00		
9612150561		9612150511		25	29.00/26.00 x 1.50	50.00	50.00		
9612150562		9612150512		32	35.00/32.00 x 1.50	55.00	55.00		
9612150563		9612150513		40	41.00/38.00 x 1.50	60.00	60.00		
9612150564		9612150514		50	53.00/50.00 x 1.50	70.00	70.00		
9611301066		9611309171		65	70.00/66.00 x 2.00	80.00	80.00		
9611301067		9611309181		80	85.00/81.00 x 2.00	90.00	90.00		
9611301068		9611309191		100	104.00/100.00 x 2.00	100.00	100.00		
9611309200		9611309201		125	129.00/125.00 x 2.00	187.50	187.50		
9611309210		9611309211		150	154.00/150.00 x 2.00	225.00	225.00		
9615220233		9615220234		200	204.00/200.00 x 2.00	300.00	300.00		
BEND 90 BS HSF2 (ID=0.8/OD=1.6) DIN 11852									
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	L	R		L2
9615220205		9615220217		10	13.00/10.00 x 1.50	26.00	26.00		
9615220206		9615220218		15	19.00/16.00 x 1.50	35.00	35.00		
9615220207		9615220219		20	23.00/20.00 x 1.50	40.00	40.00		
9615220208		9615220220		25	29.00/26.00 x 1.50	50.00	50.00		
9615220209		9615220221		32	35.00/32.00 x 1.50	55.00	55.00		
9615220210		9615220222		40	41.00/38.00 x 1.50	60.00	60.00		
9615220211		9615220223		50	53.00/50.00 x 1.50	70.00	70.00		
9615220212		9615220224		65	70.00/66.00 x 2.00	80.00	80.00		
9615220213		9615220225		80	85.00/81.00 x 2.00	90.00	90.00		
9615220214		9615220226		100	104.00/100.00 x 2.00	100.00	100.00		
9615220215		9615220227		125	129.00/125.00 x 2.00	187.50	187.50		
9615220216		9615220228		150	154.00/150.00 x 2.00	225.00	225.00		
9615220231		9615220232		200	204.00/200.00 x 2.00	300.00	300.00		

Product code: 5007

1.5

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			L2		
					OD/ID x t	L	R			
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	L	R	L2	BEND 90 BL HSF3 (ID=0.8/OD=0.8) DIN 11852	
9615220149		9615220161		10	13.00/10.00 x 1.50	51.00	26.00	25.00		
9615220150		9615220162		15	19.00/16.00 x 1.50	60.00	35.00	25.00		
9615220151		9615220163		20	23.00/20.00 x 1.50	65.00	40.00	25.00		
9615220152		9615220164		25	29.00/26.00 x 1.50	90.00	50.00	40.00		
9615220153		9615220165		32	35.00/32.00 x 1.50	95.00	55.00	40.00		
9615220154		9615220166		40	41.00/38.00 x 1.50	100.00	60.00	40.00		
9615220155		9615220167		50	53.00/50.00 x 1.50	110.00	70.00	40.00		
9615220156		9615220168		65	70.00/66.00 x 2.00	120.00	80.00	40.00		
9615220157		9615220169		80	85.00/81.00 x 2.00	145.00	90.00	55.00		
9615220158		9615220170		100	104.00/100.00 x 2.00	155.00	100.00	55.00		
9615220159		9615220171		125	129.00/125.00 x 2.00	245.00	187.50	57.50		
9615220160		9615220172		150	154.00/150.00 x 2.00	285.00	225.00	60.00		
9615220177		9615220178		200	204.00/200.00 x 2.00	340.00	300.00	40.00		
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	L	R	L2		BEND 90 BL HSF2 (ID=0.8/OD=1.6) DIN 11852
9615220125		9615220137		10	13.00/10.00 x 1.50	51.00	26.00	25.00		
9615220126		9615220138		15	19.00/16.00 x 1.50	60.00	35.00	25.00		
9615220127		9615220139		20	23.00/20.00 x 1.50	65.00	40.00	25.00		
9615220128		9615220140		25	29.00/26.00 x 1.50	90.00	50.00	40.00		
9615220129		9615220141		32	35.00/32.00 x 1.50	95.00	55.00	40.00		
9615220130		9615220142		40	41.00/38.00 x 1.50	100.00	60.00	40.00		
9615220131		9615220143		50	53.00/50.00 x 1.50	110.00	70.00	40.00		
9615220132		9615220144		65	70.00/66.00 x 2.00	120.00	80.00	40.00		
9615220133		9615220145		80	85.00/81.00 x 2.00	145.00	90.00	55.00		
9615220134		9615220146		100	104.00/100.00 x 2.00	155.00	100.00	55.00		
9615220135		9615220147		125	129.00/125.00 x 2.00	245.00	187.50	57.50		
9615220136		9615220148		150	154.00/150.00 x 2.00	285.00	225.00	60.00		
9615220175		9615220176		200	204.00/200.00 x 2.00	340.00	300.00	40.00		

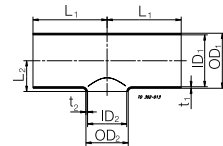
Product code: 5026

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN mm	Dimension (mm)				TEE RTK HSF3 (ID=0.8/OD=0.8) DIN 11852
					OD ₁ /ID ₁ x t ₁	OD ₂ /ID ₂ x t ₂	L ₁	L ₂	
9615247201		9615247231		32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	55.00	19.00	
9615247202		9615247232		40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	60.00	22.00	
9615247203		9615247233		40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	60.00	22.50	
9615247204		9615247234		50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	70.00	28.00	
9615247205		9615247235		50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	70.00	28.50	
9615247206		9615247236		50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	70.00	29.00	
9615247207		9615247237		65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	80.00	37.00	
9615247208		9615247238		65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	80.00	37.00	
9615247209		9615247239		65/40	70.00/66.00 x 2.00	41.00/38.00 x 1.50	80.00	37.50	
9615247210		9615247240		65/50	70.00/66.00 x 2.00	53.00/50.00 x 1.50	80.00	38.50	
9615247211		9615247241		80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	90.00	45.00	
9615247212		9615247242		80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	90.00	45.00	
9615247213		9615247243		80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	90.00	45.00	
9615247214		9615247244		80/50	85.00/81.00 x 2.00	53.00/50.00 x 1.50	90.00	46.00	
9615247215		9615247245		80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	90.00	47.50	
9615247261		9615247267		100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	100.00	55.50	
9615247216		9615247246		100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	100.00	55.50	
9615247217		9615247247		100/40	104.00/100.00 x 2.00	41.00/38.00 x 1.50	100.00	55.50	
9615247218		9615247248		100/50	104.00/100.00 x 2.00	53.00/50.00 x 1.50	100.00	55.50	
9615247219		9615247249		100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	100.00	57.00	
9615247220		9615247250		100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	100.00	57.00	
9615247221		9615247251		125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	187.50	69.50	
9615247222		9615247252		125/50	129.00/125.00 x 2.00	53.00/50.00 x 1.50	187.50	69.50	
9615247223		9615247253		125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	187.50	69.50	
9615247224		9615247254		125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	187.50	69.50	
9615247225		9615247255		125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	187.50	70.50	
9615247226		9615247256		150/50	154.00/150.00 x 2.00	53.00/50.00 x 1.50	225.00	82.00	
9615247227		9615247257		150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	225.00	82.00	
9615247228		9615247258		150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	225.00	82.00	
9615247229		9615247259		150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	225.00	83.00	
9615247230		9615247260		150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	225.00	86.50	
9615247262		9615247268		200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	300.00	108.00	
9615247263		9615247269		200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	300.00	108.00	
9615247264		9615247270		200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	300.00	108.00	
9615247265		9615247271		200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	300.00	111.50	
9615247266		9615247272		200/150	204.00/200.00 x 2.00	154.00/150.00 x 2.00	300.00	115.00	

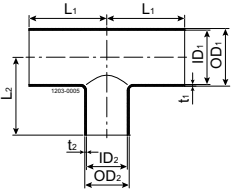
Product code: 5026

1.5

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				TEE RTK HSF2 (ID=0.8/OD=1.6) DIN 11852
					OD ₁ /ID ₁ x t ₁	OD ₂ /ID ₂ x t ₂	L ₁	L ₂	
1.4307 (304L)		1.4404 (316L)		mm					
9615227901		9615227931		32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	55.00	19.00	
9615227902		9615227932		40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	60.00	22.00	
9615227903		9615227933		40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	60.00	22.50	
9615227904		9615227934		50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	70.00	28.00	
9615227905		9615227935		50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	70.00	28.50	
9615227906		9615227936		50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	70.00	29.00	
9615227907		9615227937		65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	80.00	37.00	
9615227908		9615227938		65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	80.00	37.00	
9615227909		9615227939		65/40	70.00/66.00 x 2.00	41.00/38.00 x 1.50	80.00	37.50	
9615227910		9615227940		65/50	70.00/66.00 x 2.00	53.00/50.00 x 1.50	80.00	38.50	
9615227911		9615227941		80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	90.00	45.00	
9615227912		9615227942		80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	90.00	45.00	
9615227913		9615227943		80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	90.00	45.00	
9615227914		9615227944		80/50	85.00/81.00 x 2.00	53.00/50.00 x 1.50	90.00	46.00	
9615227915		9615227945		80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	90.00	47.50	
9615227961		9615227967		100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	100.00	55.50	
9615227916		9615227946		100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	100.00	55.50	
9615227917		9615227947		100/40	104.00/100.00 x 2.00	41.00/38.00 x 1.50	100.00	55.50	
9615227918		9615227948		100/50	104.00/100.00 x 2.00	53.00/50.00 x 1.50	100.00	55.50	
9615227919		9615227949		100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	100.00	57.00	
9615227920		9615227950		100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	100.00	57.00	
9615227921		9615227951		125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	187.50	69.50	
9615227922		9615227952		125/50	129.00/125.00 x 2.00	53.00/50.00 x 1.50	187.50	69.50	
9615227923		9615227953		125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	187.50	69.50	
9615227924		9615227954		125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	187.50	69.50	
9615227925		9615227955		125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	187.50	70.50	
9615227926		9615227956		150/50	154.00/150.00 x 2.00	53.00/50.00 x 1.50	225.00	82.00	
9615227927		9615227957		150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	225.00	82.00	
9615227928		9615227958		150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	225.00	82.00	
9615227929		9615227959		150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	225.00	83.00	
9615227930		9615227960		150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	225.00	86.50	
9615227962		9615227968		200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	300.00	108.00	
9615227963		9615227969		200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	300.00	108.00	
9615227964		9615227970		200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	300.00	108.00	
9615227965		9615227971		200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	300.00	111.50	
9615227966		9615227972		200/150	204.00/200.00 x 2.00	154.00/150.00 x 2.00	300.00	115.00	



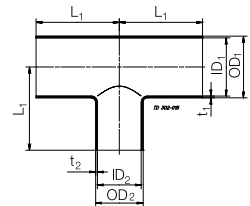
Product code: 5026

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				TEE RTS HSF3 (ID=0.8/OD=0.8) DIN 11852
1.4307 (304L)		1.4404 (316L)		mm	OD ₁ /ID ₁ x t ₁	OD ₂ /ID ₂ x t ₂	L ₁	L ₂	
9615247101		9615247131		32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	55.00	53.00	
9615247102		9615247132		40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	60.00	53.00	
9615247103		9615247133		40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	60.00	58.00	
9615247104		9615247134		50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	70.00	62.00	
9615247105		9615247135		50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	70.00	64.00	
9615247106		9615247136		50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	70.00	66.00	
9615247107		9615247137		65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	80.00	70.50	
9615247108		9615247138		65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	80.00	72.50	
9615247109		9615247139		65/40	70.00/66.00 x 2.00	41.00/38.00 x 1.50	80.00	74.50	
9615247110		9615247140		65/50	70.00/66.00 x 2.00	53.00/50.00 x 1.50	80.00	78.50	
9615247111		9615247141		80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	90.00	78.00	
9615247112		9615247142		80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	90.00	80.00	
9615247113		9615247143		80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	90.00	82.00	
9615247114		9615247144		80/50	85.00/81.00 x 2.00	53.00/50.00 x 1.50	90.00	86.00	
9615247115		9615247145		80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	90.00	87.50	
9615247161		9615247167		100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	100.00	92.50	
9615247116		9615247146		100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	100.00	92.50	
9615247117		9615247147		100/40	104.00/100.00 x 2.00	41.00/38.00 x 1.50	100.00	94.00	
9615247118		9615247148		100/50	104.00/100.00 x 2.00	53.00/50.00 x 1.50	100.00	95.50	
9615247119		9615247149		100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	100.00	97.00	
9615247120		9615247150		100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	100.00	99.50	
9615247121		9615247151		125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	187.50	104.50	
9615247122		9615247152		125/50	129.00/125.00 x 2.00	53.00/50.00 x 1.50	187.50	107.00	
9615247123		9615247153		125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	187.50	109.50	
9615247124		9615247154		125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	187.50	112.00	
9615247125		9615247155		125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	187.50	112.50	
9615247126		9615247156		150/50	154.00/150.00 x 2.00	53.00/50.00 x 1.50	225.00	123.50	
9615247127		9615247157		150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	225.00	124.00	
9615247128		9615247158		150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	225.00	124.50	
9615247129		9615247159		150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	225.00	125.00	
9615247130		9615247160		150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	225.00	200.00	
9615247162		9615247168		200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	300.00	115.00	
9615247163		9615247169		200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	300.00	130.00	
9615247164		9615247170		200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	300.00	150.00	
9615247165		9615247171		200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	300.00	225.00	
9615247166		9615247172		200/150	204.00/200.00 x 2.00	154.00/150.00 x 2.00	300.00	250.00	

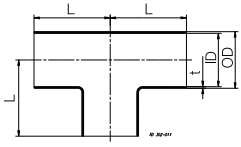
Product code: 5026

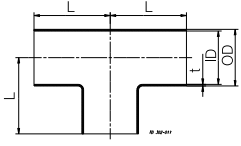
1.5

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				TEE RTS HSF2 (ID=0.8/OD=1.6) DIN 11852
					OD ₁ /ID ₁ x t ₁	OD ₂ /ID ₂ x t ₂	L ₁	L ₂	
1.4307 (304L)		1.4404 (316L)		mm					
9615227701		9615227731		32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	55.00	53.00	
9615227702		9615227732		40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	60.00	53.00	
9615227703		9615227733		40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	60.00	58.00	
9615227704		9615227734		50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	70.00	62.00	
9615227705		9615227735		50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	70.00	64.00	
9615227706		9615227736		50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	70.00	66.00	
9615227707		9615227737		65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	80.00	70.50	
9615227708		9615227738		65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	80.00	72.50	
9615227709		9615227739		65/40	70.00/66.00 x 2.00	41.00/38.00 x 1.50	80.00	74.50	
9615227710		9615227740		65/50	70.00/66.00 x 2.00	53.00/50.00 x 1.50	80.00	78.50	
9615227711		9615227741		80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	90.00	78.00	
9615227712		9615227742		80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	90.00	80.00	
9615227713		9615227743		80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	90.00	82.00	
9615227714		9615227744		80/50	85.00/81.00 x 2.00	53.00/50.00 x 1.50	90.00	86.00	
9615227715		9615227745		80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	90.00	87.50	
9615227761		9615227767		100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	100.00	92.50	
9615227716		9615227746		100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	100.00	92.50	
9615227717		9615227747		100/40	104.00/100.00 x 2.00	41.00/38.00 x 1.50	100.00	94.00	
9615227718		9615227748		100/50	104.00/100.00 x 2.00	53.00/50.00 x 1.50	100.00	95.50	
9615227719		9615227749		100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	100.00	97.00	
9615227720		9615227750		100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	100.00	99.50	
9615227721		9615227751		125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	187.50	104.50	
9615227722		9615227752		125/50	129.00/125.00 x 2.00	53.00/50.00 x 1.50	187.50	107.00	
9615227723		9615227753		125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	187.50	109.50	
9615227724		9615227754		125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	187.50	112.00	
9615227725		9615227755		125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	187.50	112.50	
9615227726		9615227756		150/50	154.00/150.00 x 2.00	53.00/50.00 x 1.50	225.00	123.50	
9615227727		9615227757		150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	225.00	124.00	
9615227728		9615227758		150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	225.00	124.50	
9615227729		9615227759		150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	225.00	125.00	
9615227730		9615227760		150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	225.00	200.00	
9615227762		9615227768		200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	300.00	115.00	
9615227763		9615227769		200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	300.00	130.00	
9615227764		9615227770		200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	300.00	150.00	
9615227765		9615227771		200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	300.00	225.00	
9615227766		9615227772		200/150	204.00/200.00 x 2.00	154.00/150.00 x 2.00	300.00	250.00	



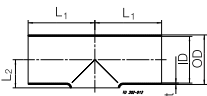
Product code: 5026

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)		
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	L	TEE TS HSF3 (ID=0.8/OD=0.8) DIN 11852
9612155558		9612155508		10	13.00/10.00 x 1.50	26.00	
9612155559		9612155509		15	19.00/16.00 x 1.50	35.00	
9612155560		9612155510		20	23.00/20.00 x 1.50	40.00	
9612155561		9612155511		25	29.00/26.00 x 1.50	50.00	
9612155562		9612155512		32	35.00/32.00 x 1.50	55.00	
9612155563		9612155513		40	41.00/38.00 x 1.50	60.00	
9612155564		9612155514		50	53.00/50.00 x 1.50	70.00	
9611309290		9611309291		65	70.00/66.00 x 2.00	80.00	
9611309300		9611309301		80	85.00/81.00 x 2.00	90.00	
9611309310		9611309311		100	104.00/100.00 x 2.00	100.00	
9611309320		9611309321		125	129.00/125.00 x 2.00	187.50	
9611309330		9611309331		150	154.00/150.00 x 2.00	225.00	
9615227429		9615227430		200	204.00/200.00 x 2.00	300.00	

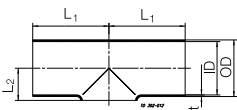
Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)		
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	L	TEE TS HSF2 (ID=0.8/OD=1.6) DIN 11852
9615227401		9615227413		10	13.00/10.00 x 1.50	26.00	
9615227402		9615227414		15	19.00/16.00 x 1.50	35.00	
9615227403		9615227415		20	23.00/20.00 x 1.50	40.00	
9615227404		9615227416		25	29.00/26.00 x 1.50	50.00	
9615227405		9615227417		32	35.00/32.00 x 1.50	55.00	
9615227406		9615227418		40	41.00/38.00 x 1.50	60.00	
9615227407		9615227419		50	53.00/50.00 x 1.50	70.00	
9615227408		9615227420		65	70.00/66.00 x 2.00	80.00	
9615227409		9615227421		80	85.00/81.00 x 2.00	90.00	
9615227410		9615227422		100	104.00/100.00 x 2.00	100.00	
9615227411		9615227423		125	129.00/125.00 x 2.00	187.50	
9615227412		9615227424		150	154.00/150.00 x 2.00	225.00	
9615227427		9615227428		200	204.00/200.00 x 2.00	300.00	

Product code: 5026

1.5

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 ₁	L ₂	TEE TK HSF3 (ID=0.8/OD=0.8) DIN 11852
9612928701		9612928711		15	19.00/16.00 x 1.50	35.00	11.00	
9612928702		9612928712		20	23.00/20.00 x 1.50	40.00	13.00	
9612928703		9612928713		25	29.00/26.00 x 1.50	50.00	16.00	
9612928704		9612928714		32	35.00/32.00 x 1.50	55.00	19.50	
9612928705		9612928715		40	41.00/38.00 x 1.50	60.00	23.00	
9612928706		9612928716		50	53.00/50.00 x 1.50	70.00	30.00	
9611304580		9611304582		65	70.00/66.00 x 2.00	80.00	40.00	
9611304600		9611304602		80	85.00/81.00 x 2.00	90.00	47.50	
9611304620		9611304622		100	104.00/100.00 x 2.00	100.00	58.00	
9611304640		9611304642		125	129.00/125.00 x 2.00	187.50	74.00	
9612150053		9612150040		150	154.00/150.00 x 2.00	225.00	90.00	
9615227533		9615227534		200	204.00/200.00 x 2.00	300.00	115.00	

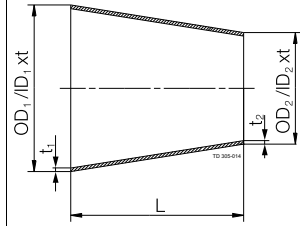
* On request

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	L ₁	L ₂	TEE TK HSF2 (ID=0.8/OD=1.6) DIN 11852
9615227504		9615227516		15	19.00/16.00 x 1.50	35.00	11.00	
9615227505		9615227517		20	23.00/20.00 x 1.50	40.00	13.00	
9615227506		9615227518		25	29.00/26.00 x 1.50	50.00	16.00	
9615227507		9615227519		32	35.00/32.00 x 1.50	55.00	19.50	
9615227508		9615227520		40	41.00/38.00 x 1.50	60.00	23.00	
9615227509		9615227521		50	53.00/50.00 x 1.50	70.00	30.00	
9615227510		9615227522		65	70.00/66.00 x 2.00	80.00	40.00	
9615227511		9615227523		80	85.00/81.00 x 2.00	90.00	47.50	
9615227512		9615227524		100	104.00/100.00 x 2.00	100.00	58.00	
9615227513		9615227525		125	129.00/125.00 x 2.00	187.50	74.00	
9615227514		9615227526		150	154.00/150.00 x 2.00	225.00	90.00	
9615227531		9615227532		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 HSF3 (ID=0.8/OD=0.8) DIN 11852
1.4307 (304L)		1.4404 (316L)		mm	OD ₁ /ID ₁ x t ₁	OD ₂ /ID ₂ x t ₂	L	
9615227001		9615317201		15/10	19.00/16.00 x 1.50	13.00/10.00 x 1.50	11.00	
9615227002		9615317202		20/10	23.00/20.00 x 1.50	13.00/10.00 x 1.50	18.00	
9615227003		9615317203		20/15	23.00/20.00 x 1.50	19.00/16.00 x 1.50	7.00	
9615227004		9615317204		25/10	29.00/26.00 x 1.50	13.00/10.00 x 1.50	29.00	
9615227005		9615317205		25/15	29.00/26.00 x 1.50	19.00/16.00 x 1.50	18.00	
9615227006		9615317206		25/20	29.00/26.00 x 1.50	23.00/20.00 x 1.50	11.00	
9615227007		9615317207		32/15	35.00/32.00 x 1.50	19.00/16.00 x 1.50	29.00	
9615227008		9615317208		32/20	35.00/32.00 x 1.50	23.00/20.00 x 1.50	22.00	
9615227009		9615317209		32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	11.00	
9615227010		9615317210		40/15	41.00/38.00 x 1.50	19.00/16.00 x 1.50	40.00	
9615227011		9615317211		40/20	41.00/38.00 x 1.50	23.00/20.00 x 1.50	33.00	
9615227012		9615317212		40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	22.00	
9615227013		9615317213		40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	11.00	
9615227014		9615317214		50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	44.00	
9615227015		9615317215		50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	33.00	
9615227016		9615317216		50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	22.00	
9615227017		9615317217		65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	73.00	
9615227018		9615317218		65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	62.00	
9615227019		9615317219		65/40	70.00/66.00 x 2.00	42.00/38.00 x 2.00	51.00	
9615227020		9615317220		65/50	70.00/66.00 x 2.00	54.00/50.00 x 2.00	29.00	
9615227021		9615317221		80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	100.00	
9615227022		9615317222		80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	89.00	
9615227023		9615317223		80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	78.00	
9615227024		9615317224		80/50	85.00/81.00 x 2.00	54.00/50.00 x 2.00	56.00	
9615227025		9615317225		80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	27.00	
9615227026		9615317226		100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	134.00	
9615227027		9615317227		100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	123.00	
9615227028		9615317228		100/40	104.00/100.00 x 2.00	42.00/38.00 x 2.00	112.00	
9615227029		9615317229		100/50	104.00/100.00 x 2.00	54.00/50.00 x 2.00	90.00	
9615227030		9615317230		100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	61.00	
9615227031		9615317231		100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	34.00	
9615227032		9615317232		125/25	129.00/125.00 x 2.00	29.00/26.00 x 1.50	179.00	
9615227033		9615317233		125/32	129.00/125.00 x 2.00	35.00/32.00 x 1.50	168.00	
9615227034		9615317234		125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	157.00	
9615227035		9615317235		125/50	129.00/125.00 x 2.00	54.00/50.00 x 2.00	135.00	
9615227036		9615317236		125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	106.00	
9615227037		9615317237		125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	79.00	
9615227038		9615317238		125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	45.00	



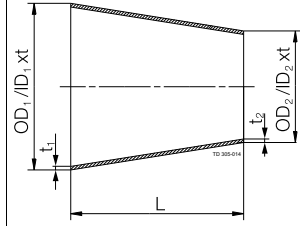
Product code: 5068

1.5

Item No	PPL Eur	item No	PPL Eur	Size DN	Dimension (mm)			RED RK HSF3 (ID=0.8/OD=0.8) DIN 11852
1.4307 (304L)		1.4404 (316L)		mm	OD ₁ /ID ₁ x t ₁	OD ₂ /ID ₂ x t ₂	L	
9615227039		9615317239		150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	151.00	
9615227040		9615317240		150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	124.00	
9615227041		9615317241		150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	90.00	
9615227042		9615317242		150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	45.00	
9615227043		9615317243		200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	250.00	
9615227044		9615317244		200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	222.00	
9615227045		9615317245		200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	186.00	
9615227046		9615317246		200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	140.00	
9615227047		9615317247		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 HSF2 (ID=0.8/OD=1.6) DIN 11852
1.4307 (304L)		1.4404 (316L)		mm	OD ₁ /ID ₁ x t ₁	OD ₂ /ID ₂ x t ₂	L	
9615226901		9615332601		15/10	19.00/16.00 x 1.50	13.00/10.00 x 1.50	11.00	
9615226902		9615332602		20/10	23.00/20.00 x 1.50	13.00/10.00 x 1.50	18.00	
9615226903		9615332603		20/15	23.00/20.00 x 1.50	19.00/16.00 x 1.50	7.00	
9615226904		9615332604		25/10	29.00/26.00 x 1.50	13.00/10.00 x 1.50	29.00	
9615226905		9615332605		25/15	29.00/26.00 x 1.50	19.00/16.00 x 1.50	18.00	
9615226906		9615332606		25/20	29.00/26.00 x 1.50	23.00/20.00 x 1.50	11.00	
9615226907		9615332607		32/15	35.00/32.00 x 1.50	19.00/16.00 x 1.50	29.00	
9615226908		9615332608		32/20	35.00/32.00 x 1.50	23.00/20.00 x 1.50	22.00	
9615226909		9615332609		32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	11.00	
9615226910		9615332610		40/15	41.00/38.00 x 1.50	19.00/16.00 x 1.50	40.00	
9615226911		9615332611		40/20	41.00/38.00 x 1.50	23.00/20.00 x 1.50	33.00	
9615226912		9615332612		40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	22.00	
9615226913		9615332613		40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	11.00	
9615226914		9615332614		50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	44.00	
9615226915		9615332615		50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	33.00	
9615226916		9615332616		50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	22.00	
9615226917		9615332617		65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	73.00	
9615226918		9615332618		65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	62.00	
9615226919		9615332619		65/40	70.00/66.00 x 2.00	42.00/38.00 x 2.00	51.00	
9615226920		9615332620		65/50	70.00/66.00 x 2.00	54.00/50.00 x 2.00	29.00	
9615226921		9615332621		80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	100.00	
9615226922		9615332622		80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	89.00	
9615226923		9615332623		80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	78.00	
9615226924		9615332624		80/50	85.00/81.00 x 2.00	54.00/50.00 x 2.00	56.00	
9615226925		9615332625		80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	27.00	
9615226926		9615332626		100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	134.00	
9615226927		9615332627		100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	123.00	
9615226928		9615332628		100/40	104.00/100.00 x 2.00	42.00/38.00 x 2.00	112.00	
9615226929		9615332629		100/50	104.00/100.00 x 2.00	54.00/50.00 x 2.00	90.00	
9615226930		9615332630		100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	61.00	
9615226931		9615332631		100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	34.00	
9615226932		9615332632		125/25	129.00/125.00 x 2.00	29.00/26.00 x 1.50	179.00	
9615226933		9615332633		125/32	129.00/125.00 x 2.00	35.00/32.00 x 1.50	168.00	
9615226934		9615332634		125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	157.00	
9615226935		9615332635		125/50	129.00/125.00 x 2.00	54.00/50.00 x 2.00	135.00	
9615226936		9615332636		125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	106.00	
9615226937		9615332637		125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	79.00	
9615226938		9615332638		125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	45.00	



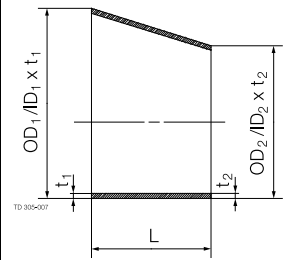
Product code: 5068

1.5

Item No	PPL Eur	item No	PPL Eur	Size DN	Dimension (mm)			RED RK HSF2 (ID=0.8/OD=1.6) DIN 11852
1.4307 (304L)		1.4404 (316L)		mm	OD ₁ /ID ₁ x t ₁	OD ₂ /ID ₂ x t ₂	L	
9615226939		9615332639		150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	151.00	
9615226940		9615332640		150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	124.00	
9615226941		9615332641		150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	90.00	
9615226942		9615332642		150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	45.00	
9615226943		9615332643		200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	250.00	
9615226944		9615332644		200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	222.00	
9615226945		9615332645		200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	186.00	
9615226946		9615332646		200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	140.00	
9615226947		9615332647		200/150	204.00/200.00 x 2.00	154.00/150.00 x 2.00	93.00	

Product code: 5068

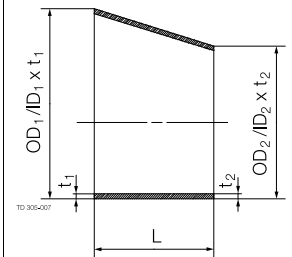
Item No	PPL Eur	item No	PPL Eur	Size DN	Dimension (mm)			RED RE
1.4307 (304L)		1.4404 (316L)		mm	OD ₁ /ID ₁ x t ₁	OD ₂ /ID ₂ x t ₂	L	HSF3 (ID=0.8/OD=0.8)
								DIN 11852
9615234401		9615317501		15/10	19.00/16.00 x 1.50	13.00/10.00 x 1.50	16.50	
9615234402		9615317502		20/10	23.00/20.00 x 1.50	13.00/10.00 x 1.50	27.50	
9615234403		9615317503		20/15	23.00/20.00 x 1.50	19.00/16.00 x 1.50	11.00	
9615234404		9615317504		25/10	29.00/26.00 x 1.50	13.00/10.00 x 1.50	44.00	
9615234405		9615317505		25/15	29.00/26.00 x 1.50	19.00/16.00 x 1.50	27.50	
9615234406		9615317506		25/20	29.00/26.00 x 1.50	23.00/20.00 x 1.50	16.50	
9615234407		9615317507		32/15	35.00/32.00 x 1.50	19.00/16.00 x 1.50	44.00	
9615234408		9615317508		32/20	35.00/32.00 x 1.50	23.00/20.00 x 1.50	33.00	
9615234409		9615317509		32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	16.50	
9615234410		9615317510		40/15	41.00/38.00 x 1.50	19.00/16.00 x 1.50	60.40	
9615234411		9615317511		40/20	41.00/38.00 x 1.50	23.00/20.00 x 1.50	49.50	
9615234412		9615317512		40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	33.00	
9615234413		9615317513		40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	16.50	
9615234414		9615317514		50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	65.90	
9615234415		9615317515		50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	49.50	
9615234416		9615317516		50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	33.00	
9615234417		9615317517		65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	109.90	
9615234418		9615317518		65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	93.40	
9615234419		9615317519		65/40	70.00/66.00 x 2.00	42.00/38.00 x 2.00	76.90	
9615234420		9615317520		65/50	70.00/66.00 x 2.00	54.00/50.00 x 2.00	44.00	
9615234421		9615317521		80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	151.10	
9615234422		9615317522		80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	134.60	
9615234423		9615317523		80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	118.10	
9615234424		9615317524		80/50	85.00/81.00 x 2.00	54.00/50.00 x 2.00	85.20	
9615234425		9615317525		80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	41.20	
9615234426		9615317526		100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	203.30	
9615234427		9615317527		100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	186.80	
9615234428		9615317528		100/40	104.00/100.00 x 2.00	42.00/38.00 x 2.00	170.30	
9615234429		9615317529		100/50	104.00/100.00 x 2.00	54.00/50.00 x 2.00	137.40	
9615234430		9615317530		100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	93.40	
9615234431		9615317531		100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	52.20	
9615234432		9615317532		125/25	129.00/125.00 x 2.00	29.00/26.00 x 1.50	272.00	
9615234433		9615317533		125/32	129.00/125.00 x 2.00	35.00/32.00 x 1.50	255.50	
9615234434		9615317534		125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	239.00	
9615234435		9615317535		125/50	129.00/125.00 x 2.00	54.00/50.00 x 2.00	206.10	
9615234436		9615317536		125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	162.10	
9615234437		9615317537		125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	120.90	
9615234438		9615317538		125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	68.70	
9615234439		9615317539		150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	230.80	
9615234440		9615317540		150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	189.60	
9615234441		9615317541		150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	137.40	
9615234442		9615317542		150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	68.70	
9615234443		9615317543		200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	368.00	
9615234444		9615317544		200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	327.00	
9615234445		9615317545		200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	275.00	
9615234446		9615317546		200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	206.00	
9615234447		9615317547		200/150	204.00/200.00 x 2.00	154.00/150.00 x 2.00	137.00	



Product code: 5068

1.5

Item No	PPL Eur	item No	PPL Eur	Size DN	Dimension (mm)			RED RE
1.4307 (304L)		1.4404 (316L)		mm	OD ₁ /ID ₁ x t ₁	OD ₂ /ID ₂ x t ₂	L	HSF2 (ID=0.8/OD=1.6)
								DIN 11852
9615227201		9615332801		15/10	19.00/16.00 x 1.50	13.00/10.00 x 1.50	16.50	
9615227202		9615332802		20/10	23.00/20.00 x 1.50	13.00/10.00 x 1.50	27.50	
9615227203		9615332803		20/15	23.00/20.00 x 1.50	19.00/16.00 x 1.50	11.00	
9615227204		9615332804		25/10	29.00/26.00 x 1.50	13.00/10.00 x 1.50	44.00	
9615227205		9615332805		25/15	29.00/26.00 x 1.50	19.00/16.00 x 1.50	27.50	
9615227206		9615332806		25/20	29.00/26.00 x 1.50	23.00/20.00 x 1.50	16.50	
9615227207		9615332807		32/15	35.00/32.00 x 1.50	19.00/16.00 x 1.50	44.00	
9615227208		9615332808		32/20	35.00/32.00 x 1.50	23.00/20.00 x 1.50	33.00	
9615227209		9615332809		32/25	35.00/32.00 x 1.50	29.00/26.00 x 1.50	16.50	
9615227210		9615332810		40/15	41.00/38.00 x 1.50	19.00/16.00 x 1.50	60.40	
9615227211		9615332811		40/20	41.00/38.00 x 1.50	23.00/20.00 x 1.50	49.50	
9615227212		9615332812		40/25	41.00/38.00 x 1.50	29.00/26.00 x 1.50	33.00	
9615227213		9615332813		40/32	41.00/38.00 x 1.50	35.00/32.00 x 1.50	16.50	
9615227214		9615332814		50/25	53.00/50.00 x 1.50	29.00/26.00 x 1.50	65.90	
9615227215		9615332815		50/32	53.00/50.00 x 1.50	35.00/32.00 x 1.50	49.50	
9615227216		9615332816		50/40	53.00/50.00 x 1.50	41.00/38.00 x 1.50	33.00	
9615227217		9615332817		65/25	70.00/66.00 x 2.00	29.00/26.00 x 1.50	109.90	
9615227218		9615332818		65/32	70.00/66.00 x 2.00	35.00/32.00 x 1.50	93.40	
9615227219		9615332819		65/40	70.00/66.00 x 2.00	42.00/38.00 x 2.00	76.90	
9615227220		9615332820		65/50	70.00/66.00 x 2.00	54.00/50.00 x 2.00	44.00	
9615227221		9615332821		80/25	85.00/81.00 x 2.00	29.00/26.00 x 1.50	151.10	
9615227222		9615332822		80/32	85.00/81.00 x 2.00	35.00/32.00 x 1.50	134.60	
9615227223		9615332823		80/40	85.00/81.00 x 2.00	41.00/38.00 x 1.50	118.10	
9615227224		9615332824		80/50	85.00/81.00 x 2.00	54.00/50.00 x 2.00	85.20	
9615227225		9615332825		80/65	85.00/81.00 x 2.00	70.00/66.00 x 2.00	41.20	
9615227226		9615332826		100/25	104.00/100.00 x 2.00	29.00/26.00 x 1.50	203.30	
9615227227		9615332827		100/32	104.00/100.00 x 2.00	35.00/32.00 x 1.50	186.80	
9615227228		9615332828		100/40	104.00/100.00 x 2.00	42.00/38.00 x 2.00	170.30	
9615227229		9615332829		100/50	104.00/100.00 x 2.00	54.00/50.00 x 2.00	137.40	
9615227230		9615332830		100/65	104.00/100.00 x 2.00	70.00/66.00 x 2.00	93.40	
9615227231		9615332831		100/80	104.00/100.00 x 2.00	85.00/81.00 x 2.00	52.20	
9615227232		9615332832		125/25	129.00/125.00 x 2.00	29.00/26.00 x 1.50	272.00	
9615227233		9615332833		125/32	129.00/125.00 x 2.00	35.00/32.00 x 1.50	255.50	
9615227234		9615332834		125/40	129.00/125.00 x 2.00	41.00/38.00 x 1.50	239.00	
9615227235		9615332835		125/50	129.00/125.00 x 2.00	54.00/50.00 x 2.00	206.10	
9615227236		9615332836		125/65	129.00/125.00 x 2.00	70.00/66.00 x 2.00	162.10	
9615227237		9615332837		125/80	129.00/125.00 x 2.00	85.00/81.00 x 2.00	120.90	
9615227238		9615332838		125/100	129.00/125.00 x 2.00	104.00/100.00 x 2.00	68.70	
9615227239		9615332839		150/65	154.00/150.00 x 2.00	70.00/66.00 x 2.00	230.80	
9615227240		9615332840		150/80	154.00/150.00 x 2.00	85.00/81.00 x 2.00	189.60	
9615227241		9615332841		150/100	154.00/150.00 x 2.00	104.00/100.00 x 2.00	137.40	
9615227242		9615332842		150/125	154.00/150.00 x 2.00	129.00/125.00 x 2.00	68.70	
9615227243		9615332843		200/65	204.00/200.00 x 2.00	70.00/66.00 x 2.00	368.00	
9615227244		9615332844		200/80	204.00/200.00 x 2.00	85.00/81.00 x 2.00	327.00	
9615227245		9615332845		200/100	204.00/200.00 x 2.00	104.00/100.00 x 2.00	275.00	
9615227246		9615332846		200/125	204.00/200.00 x 2.00	129.00/125.00 x 2.00	206.00	
9615227247		9615332847		200/150	204.00/200.00 x 2.00	154.00/150.00 x 2.00	137.00	



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	<p>MALE C HSF0 (ID=0.8/OD=1.6) DIN 11851</p>
3131800391		9611306602		25		29.00	52 x 1/6	28.20	
3131800392		9611306612		32		32.00	58 x 1/6	34.20	
3131800393		9611306622		40		33.00	65 x 1/6	40.20	
3131800394		9611306632		50		35.00	78 x 1/6	52.20	
3131800395		9611306642		65		40.00	95 x 1/6	70.30	
3131800396		9611306652		80		45.00	110 x 1/4	85.30	
3131800398		9611306662		100		54.00	130 x 1/4	104.30	
<p>LINER D HSF0 (ID=0.8/OD=1.6) DIN 11851</p>									
3131800151		9611306672		25	44.00	22.00		28.20	
3131800152		9611306682		32	50.00	25.00		34.20	
3131800153		9611306692		40	56.00	26.00		40.20	
3131800154		9611306702		50	68.00	28.00		52.20	
3131800155		9611306712		65	86.00	32.00		70.30	
3131800156		9611306722		80	100.00	37.00		85.30	
3131800158		9611306732		100	121.00	44.00		104.30	

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)				
1.4301 (304)		1.4404 (316L)		mm	A	B	C	D	<p>NUT F HSF0 (ID=0.8/OD=1.6) DIN 11851</p>
9611306420		9612150701		10	38.00	18.00	28 x 1/8	19.00	
9611306430		9612150702		15	44.00	18.00	34 x 1/8	25.00	
9611290021		9612150703		20	54.00	20.00	44 x 1/6	31.00	
3131800141		9612150704		25	63.00	21.00	52 x 1/6	36.00	
3131800142		9612150705		32	70.00	21.00	58 x 1/6	42.00	
3131800143		9612150706		40	78.00	21.00	65 x 1/6	49.00	
3131800144		9612150707		50	92.00	22.00	78 x 1/6	62.00	
3131800145		9612150708		65	112.00	25.00	95 x 1/6	80.00	
3131800146		9612150710		80	127.00	29.00	110 x 1/4	94.00	
3131800148		9612150711		100	148.00	31.00	130 x 1/4	115.00	
9611306450		9612150712		125	178.00	34.00	160 x 1/4	138.00	
9611306460		9612150713		150	210.00	40.00	190 x 1/4	164.00	

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)				BLIND BD HSF0 (ID=0.8/OD=1.6) DIN 11851
					A	B	D	E	
1.4307 (304L)		1.4404 (316L)		mm					
9611306470		9612152413		10	22.50	6.00	18.00	9.00	
9611306480		9612152414		15	28.50	6.00	24.00	9.00	
9611291111		9612152415		20	36.50	8.00	30.00	11.00	
3131800351		9612152416		25	44.00	10.00	35.00	13.00	
3131800352		9612152417		32	50.00	10.00	41.00	13.00	
3131800353		9612152418		40	56.00	10.00	48.00	13.00	
3131800354		9612152419		50	68.50	11.00	61.00	14.00	
3131800355		9612152420		65	86.00	12.00	79.00	16.00	
3131800356		9612152422		80	100.00	12.00	93.00	16.00	
3131800358		9612152423		100	121.00	15.00	114.00	20.00	
9611306500		9612152424		125	150.00	17.00	137.00	22.00	
9611306510		9612152425		150	176.00	18.00	163.00	24.00	

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)			GASKET G DIN 11851
NBR		FPM		mm	A	B	D	
Product code 5063								
52734601		9611991861		10	20.00	4.50	12.00	
52734602		9611991862		15	26.00	4.50	18.00	
52734603		9611991863		20	33.00	4.50	23.00	
52734604		9611991864		25	40.00	5.00	30.00	
52734605		9611991865		32	46.00	5.00	36.00	
52734606		9611991866		40	52.00	5.00	42.00	
52734607		9611991867		50	64.00	5.00	54.00	
52734608		9611991868		65	81.00	5.00	71.00	
9611991264		9611991869		75	88.00	5.00	78.00	
52734609		9611991128		80	95.00	5.00	85.00	
52734611		9611991870		100	114.00	6.00	104.00	
9611991265		9611991871		125	142.00	7.00	130.00	
9611991266		9611991872		150	167.00	7.00	155.00	
EPDM								
Silicone (Q)								
9611991267		9611991917		10	20.00	4.50	12.00	
9611991268		9611991918		15	26.00	4.50	18.00	
9611991323		9611991919		20	33.00	4.50	23.00	
9611991269		9611991920		25	40.00	5.00	30.00	
9611991270		9611991921		32	46.00	5.00	36.00	
9611991271		9611991922		40	52.00	5.00	42.00	
9611991272		9611991923		50	64.00	5.00	54.00	
9611991273		9611991924		65	81.00	5.00	71.00	
9611991274		9611991925		75	88.00	5.00	78.00	
9611991275		9611991926		80	95.00	5.00	85.00	
9611991276		9611991927		100	114.00	6.00	104.00	
9611991277		9611991928		125	142.00	7.00	130.00	
9611991278		9611991929		150	167.00	7.00	155.00	
PTFE								
9611991873				10	20.00	4.50	12.00	
9611991874				15	26.00	4.50	18.00	
9611991875				20	33.00	4.50	23.00	
9611991876				25	40.00	5.00	30.00	
9611991877				32	46.00	5.00	36.00	
9611991878				40	52.00	5.00	42.00	
9611991879				50	64.00	5.00	54.00	
9611991880				65	81.00	5.00	71.00	
9611991881				75	88.00	5.00	78.00	
9611991882				80	95.00	5.00	85.00	
9611991883				100	114.00	6.00	104.00	
9611991884				125	142.00	7.00	130.00	
9611991885				150	167.00	7.00	155.00	

Product code: 5044

1.5

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 HSFO (ID=0.8/OD=1.6) DIN 11851	
9611306100		9611306101		10	13.00/10.00 x 1.50	21.00	28 x 1/8		
9611306110		9611306111		15	19.00/16.00 x 1.50	21.00	34 x 1/8		
9611290081		9611290082		20	23.00/20.00 x 1.50	24.00	44 x 1/6		
9611301103		9611331103		25	29.00/26.00 x 1.50	29.00	52 x 1/6		
9611301104		9611331104		32	35.00/32.00 x 1.50	32.00	58 x 1/6		
9611301105		9611331105		40	41.00/38.00 x 1.50	33.00	65 x 1/6		
9611301106		9611331106		50	53.00/50.00 x 1.50	35.00	78 x 1/6		
9611301107		9611331107		65	70.00/66.00 x 2.00	40.00	95 x 1/6		
9611301108		9611331108		80	85.00/81.00 x 2.00	45.00	110 x 1/4		
9611301110		9611331110		100	104.00/100.00 x 2.00	54.00	130 x 1/4		
9611306130		9611306131		125	129.00/125.00 x 2.00	46.00	160 x 1/4		
9611306140		9611306141		150	154.00/150.00 x 2.00	50.00	190 x 1/4		
						A	B		LINER SD HSFO (ID=0.8/OD=1.6) DIN 11851
9611306150		9611306151		10	13.00/10.00 x 1.50	22.50	17.00		
9611306160		9611306161		15	19.00/16.00 x 1.50	28.50	17.00		
9611290091		9611290092		20	23.00/20.00 x 1.50	36.50	18.00		
9611301111		9611331111		25	29.00/26.00 x 1.50	44.00	22.00		
9611301112		9611331112		32	35.00/32.00 x 1.50	50.00	25.00		
9611301113		9611331113		40	41.00/38.00 x 1.50	56.00	26.00		
9611301114		9611331114		50	53.00/50.00 x 1.50	68.50	28.00		
9611301115		9611331115		65	70.00/66.00 x 2.00	86.00	32.00		
9611301116		9611331116		80	85.00/81.00 x 2.00	100.00	37.00		
9611301118		9611331118		100	104.00/100.00 x 2.00	121.00	44.00		
9611306180		9611306181		125	129.00/125.00 x 2.00	150.00	34.00		
9611306190		9611306191		150	154.00/150.00 x 2.00	176.00	37.00		

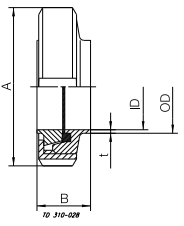
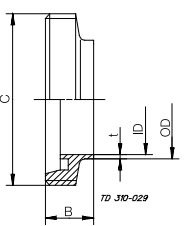
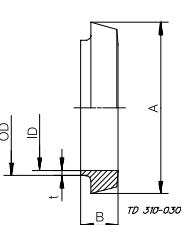
Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)				
1.4301 (304)		1.4404 (316L)		mm	A	B	C	D	NUT F HSF0 (ID=0.8/OD=1.6) DIN 11851
9611306420		9612150701		10	38.00	18.00	28 x 1/8	19.00	
9611306430		9612150702		15	44.00	18.00	34 x 1/8	25.00	
9611290021		9612150703		20	54.00	20.00	44 x 1/6	31.00	
3131800141		9612150704		25	63.00	21.00	52 x 1/6	36.00	
3131800142		9612150705		32	70.00	21.00	58 x 1/6	42.00	
3131800143		9612150706		40	78.00	21.00	65 x 1/6	49.00	
3131800144		9612150707		50	92.00	22.00	78 x 1/6	62.00	
3131800145		9612150708		65	112.00	25.00	95 x 1/6	80.00	
3131800146		9612150710		80	127.00	29.00	110 x 1/4	94.00	
3131800148		9612150711		100	148.00	31.00	130 x 1/4	115.00	
9611306450		9612150712		125	178.00	34.00	160 x 1/4	138.00	
9611306460		9612150713		150	210.00	40.00	190 x 1/4	164.00	

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 HSF0 (ID=0.8/OD=1.6) DIN 11851
9611306470		9612152413		10	22.50	6.00	18.00	9.00	
9611306480		9612152414		15	28.50	6.00	24.00	9.00	
9611291111		9612152415		20	36.50	8.00	30.00	11.00	
3131800351		9612152416		25	44.00	10.00	35.00	13.00	
3131800352		9612152417		32	50.00	10.00	41.00	13.00	
3131800353		9612152418		40	56.00	10.00	48.00	13.00	
3131800354		9612152419		50	68.50	11.00	61.00	14.00	
3131800355		9612152420		65	86.00	12.00	79.00	16.00	
3131800356		9612152422		80	100.00	12.00	93.00	16.00	
3131800358		9612152423		100	121.00	15.00	114.00	20.00	
9611306500		9612152424		125	150.00	17.00	137.00	22.00	
9611306510		9612152425		150	176.00	18.00	163.00	24.00	

Product code: 5063

1.5

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)				
NBR		FPM		mm	A	B	D	GASKET G DIN 11851	
52734601		9611991861		10	20.00	4.50	12.00		
52734602		9611991862		15	26.00	4.50	18.00		
52734603		9611991863		20	33.00	4.50	23.00		
52734604		9611991864		25	40.00	5.00	30.00		
52734605		9611991865		32	46.00	5.00	36.00		
52734606		9611991866		40	52.00	5.00	42.00		
52734607		9611991867		50	64.00	5.00	54.00		
52734608		9611991868		65	81.00	5.00	71.00		
9611991264		9611991869		75	88.00	5.00	78.00		
52734609		9611991128		80	95.00	5.00	85.00		
52734611		9611991870		100	114.00	6.00	104.00		
9611991265		9611991871		125	142.00	7.00	130.00		
9611991266		9611991872		150	167.00	7.00	155.00		
EPDM		Silicone (Q)							GASKET G DIN 11851
9611991267		9611991917		10	20.00	4.50	12.00		
9611991268		9611991918		15	26.00	4.50	18.00		
9611991323		9611991919		20	33.00	4.50	23.00		
9611991269		9611991920		25	40.00	5.00	30.00		
9611991270		9611991921		32	46.00	5.00	36.00		
9611991271		9611991922		40	52.00	5.00	42.00		
9611991272		9611991923		50	64.00	5.00	54.00		
9611991273		9611991924		65	81.00	5.00	71.00		
9611991274		9611991925		75	88.00	5.00	78.00		
9611991275		9611991926		80	95.00	5.00	85.00		
9611991276		9611991927		100	114.00	6.00	104.00		
9611991277		9611991928		125	142.00	7.00	130.00		
9611991278		9611991929		150	167.00	7.00	155.00		
PTFE								GASKET G DIN 11851	
9611991873				10	20.00	4.50	12.00		
9611991874				15	26.00	4.50	18.00		
9611991875				20	33.00	4.50	23.00		
9611991876				25	40.00	5.00	30.00		
9611991877				32	46.00	5.00	36.00		
9611991878				40	52.00	5.00	42.00		
9611991879				50	64.00	5.00	54.00		
9611991880				65	81.00	5.00	71.00		
9611991881				75	88.00	5.00	78.00		
9611991882				80	95.00	5.00	85.00		
9611991883				100	114.00	6.00	104.00		
9611991884				125	142.00	7.00	130.00		
9611991885				150	167.00	7.00	155.00		

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 (ID=0.8/OD=1.6) DIN 11851 NBR	
9611305790		9611305791		10	13.00/10.00 x 1.50	38.00	25.00		
9611305800		9611305801		15	19.00/16.00 x 1.50	44.00	25.00		
9611290011		9611290012		20	23.00/20.00 x 1.50	54.00	25.00		
9611301119		9611331119		25	29.00/26.00 x 1.50	63.00	31.00		
9611301120		9611331120		32	35.00/32.00 x 1.50	70.00	31.00		
9611301121		9611331121		40	41.00/38.00 x 1.50	78.00	31.00		
9611301122		9611331122		50	53.00/50.00 x 1.50	92.00	33.00		
9611301123		9611331123		65	70.00/66.00 x 2.00	112.00	35.00		
9611301124		9611331124		80	85.00/81.00 x 2.00	127.00	35.00		
9611301126		9611331126		100	104.00/100.00 x 2.00	148.00	41.00		
						B	C		MALE SKC HSFO (ID=0.8/OD=1.6) DIN 11851
9611305900		9611305901		10	13.00/10.00 x 1.50	17.00	28 x 1/8		
9611305910		9611305911		15	19.00/16.00 x 1.50	17.00	34 x 1/8		
9611290031		9611290032		20	23.00/20.00 x 1.50	19.00	44 x 1/6		
9611301087		9611331087		25	29.00/26.00 x 1.50	22.00	52 x 1/6		
9611301088		9611331088		32	35.00/32.00 x 1.50	22.00	58 x 1/6		
9611301089		9611331089		40	41.00/38.00 x 1.50	22.00	65 x 1/6		
9611301090		9611331090		50	53.00/50.00 x 1.50	23.00	78 x 1/6		
9611301091		9611331091		65	70.00/66.00 x 2.00	25.00	95 x 1/6		
9611301092		9611331092		80	85.00/81.00 x 2.00	25.00	110 x 1/4		
9611301094		9611331094		100	104.00/100.00 x 2.00	30.00	130 x 1/4		
9611305930		9611305931		125	129.00/125.00 x 2.00	35.50	160 x 1/4		
9611305940		9611305941		150	154.00/150.00 x 2.00	40.00	190 x 1/4		
						A	B	LINER SKD HSFO (ID=0.8/OD=1.6) DIN 11851	
9611305950		9611305951		10	13.00/10.00 x 1.50	22.00	13.00		
9611305960		9611305961		15	19.00/16.00 x 1.50	28.00	13.00		
9611290041		9611290042		20	23.00/20.00 x 1.50	36.00	13.00		
9611301095		9611331095		25	29.00/26.00 x 1.50	44.00	15.00		
9611301096		9611331096		32	35.00/32.00 x 1.50	50.00	15.00		
9611301097		9611331097		40	41.00/38.00 x 1.50	56.00	15.00		
9611301098		9611331098		50	53.00/50.00 x 1.50	68.00	16.00		
9611301099		9611331099		65	70.00/66.00 x 2.00	86.00	17.00		
9611301100		9611331100		80	85.00/81.00 x 2.00	100.00	17.00		
9611301102		9611331102		100	104.00/100.00 x 2.00	121.00	20.00		
9611305970		9611305971		125	129.00/125.00 x 2.00	150.00	23.50		
9611305980		9611305981		150	154.00/150.00 x 2.00	176.00	27.00		

Product code: 5044

1.5

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)				
1.4301 (304)		1.4404 (316L)		mm	A	B	C	D	NUT F HSF0 (ID=0.8/OD=1.6) DIN 11851
9611306420		9612150701		10	38.00	18.00	28 x 1/8	19.00	
9611306430		9612150702		15	44.00	18.00	34 x 1/8	25.00	
9611290021		9612150703		20	54.00	20.00	44 x 1/6	31.00	
3131800141		9612150704		25	63.00	21.00	52 x 1/6	36.00	
3131800142		9612150705		32	70.00	21.00	58 x 1/6	42.00	
3131800143		9612150706		40	78.00	21.00	65 x 1/6	49.00	
3131800144		9612150707		50	92.00	22.00	78 x 1/6	62.00	
3131800145		9612150708		65	112.00	25.00	95 x 1/6	80.00	
3131800146		9612150710		80	127.00	29.00	110 x 1/4	94.00	
3131800148		9612150711		100	148.00	31.00	130 x 1/4	115.00	
9611306450		9612150712		125	178.00	34.00	160 x 1/4	138.00	
9611306460		9612150713		150	210.00	40.00	190 x 1/4	164.00	

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 HSF0 (ID=0.8/OD=1.6) DIN 11851
9611306470		9612152413		10	22.50	6.00	18.00	9.00	
9611306480		9612152414		15	28.50	6.00	24.00	9.00	
9611291111		9612152415		20	36.50	8.00	30.00	11.00	
3131800351		9612152416		25	44.00	10.00	35.00	13.00	
3131800352		9612152417		32	50.00	10.00	41.00	13.00	
3131800353		9612152418		40	56.00	10.00	48.00	13.00	
3131800354		9612152419		50	68.50	11.00	61.00	14.00	
3131800355		9612152420		65	86.00	12.00	79.00	16.00	
3131800356		9612152422		80	100.00	12.00	93.00	16.00	
3131800358		9612152423		100	121.00	15.00	114.00	20.00	
9611306500		9612152424		125	150.00	17.00	137.00	22.00	
9611306510		9612152425		150	176.00	18.00	163.00	24.00	

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)			
NBR		FPM		mm	A	B	D	GASKET G DIN 11851
52734601		9611991861		10	20.00	4.50	12.00	
52734602		9611991862		15	26.00	4.50	18.00	
52734603		9611991863		20	33.00	4.50	23.00	
52734604		9611991864		25	40.00	5.00	30.00	
52734605		9611991865		32	46.00	5.00	36.00	
52734606		9611991866		40	52.00	5.00	42.00	
52734607		9611991867		50	64.00	5.00	54.00	
52734608		9611991868		65	81.00	5.00	71.00	
9611991264		9611991869		75	88.00	5.00	78.00	
52734609		9611991128		80	95.00	5.00	85.00	
52734611		9611991870		100	114.00	6.00	104.00	
9611991265		9611991871		125	142.00	7.00	130.00	
9611991266		9611991872		150	167.00	7.00	155.00	
EPDM		Silicone (Q)						
9611991267		9611991917		10	20.00	4.50	12.00	
9611991268		9611991918		15	26.00	4.50	18.00	
9611991323		9611991919		20	33.00	4.50	23.00	
9611991269		9611991920		25	40.00	5.00	30.00	
9611991270		9611991921		32	46.00	5.00	36.00	
9611991271		9611991922		40	52.00	5.00	42.00	
9611991272		9611991923		50	64.00	5.00	54.00	
9611991273		9611991924		65	81.00	5.00	71.00	
9611991274		9611991925		75	88.00	5.00	78.00	
9611991275		9611991926		80	95.00	5.00	85.00	
9611991276		9611991927		100	114.00	6.00	104.00	
9611991277		9611991928		125	142.00	7.00	130.00	
9611991278		9611991929		150	167.00	7.00	155.00	
PTFE								
9611991873				10	20.00	4.50	12.00	
9611991874				15	26.00	4.50	18.00	
9611991875				20	33.00	4.50	23.00	
9611991876				25	40.00	5.00	30.00	
9611991877				32	46.00	5.00	36.00	
9611991878				40	52.00	5.00	42.00	
9611991879				50	64.00	5.00	54.00	
9611991880				65	81.00	5.00	71.00	
9611991881				75	88.00	5.00	78.00	
9611991882				80	95.00	5.00	85.00	
9611991883				100	114.00	6.00	104.00	
9611991884				125	142.00	7.00	130.00	
9611991885				150	167.00	7.00	155.00	

Product code: 5057

1.5

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)			
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	B	C	MALE GS H3 (ID=0.8/OD=1.0) DIN 11853-1
8010000569		9615362901		10	13.00/10.00 x 1.50	19.00	28 x 1/8	
8010000571		9615362902		15	19.00/16.00 x 1.50	19.00	34 x 1/8	
8010000572		9615362903		20	23.00/20.00 x 1.50	21.00	44 x 1/6	
8010000573		9612928834		25	29.00/26.00 x 1.50	26.00	52 x 1/6	
8010000574		9612928835		32	35.00/32.00 x 1.50	30.00	58 x 1/6	
8010000575		9612928836		40	41.00/38.00 x 1.50	31.00	65 x 1/6	
8010000576		9612928837		50	53.00/50.00 x 1.50	31.00	78 x 1/6	
8010000577		9612928838		65	70.00/66.00 x 2.00	36.00	95 x 1/6	
8010000578		9612928839		80	85.00/81.00 x 2.00	42.00	110 x 1/4	
8010000579		9612928840		100	104.00/100.00 x 2.00	50.00	130 x 1/4	
						A	B	
8010000580		9615363101		10	13.00/10.00 x 1.50	21.90	17.00	
8010000581		9615363102		15	19.00/16.00 x 1.50	27.90	17.00	
8010000582		9615363103		20	23.00/20.00 x 1.50	35.90	18.00	
8010000583		9612928844		25	29.00/26.00 x 1.50	42.90	22.00	
8010000585		9612928845		32	35.00/32.00 x 1.50	48.90	25.00	
8010000586		9612928846		40	41.00/38.00 x 1.50	54.90	26.00	
8010000587		9612928847		50	53.00/50.00 x 1.50	66.90	30.00	
8010000589		9612928848		65	70.00/66.00 x 2.00	84.90	34.00	
8010000590		9612928849		80	85.00/81.00 x 2.00	98.90	38.00	
8010000591		9612928850		100	104.00/100.00 x 2.00	118.90	46.00	

Product code: 5044

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)				NUT F HSFO (ID=0.8/OD=1.6) DIN 11851
					A	B	C	D	
1.4301 (304)		1.4404 (316L)		mm					
9611306420		9612150701		10	38.00	18.00	28 x 1/8	19.00	
9611306430		9612150702		15	44.00	18.00	34 x 1/8	25.00	
9611290021		9612150703		20	54.00	20.00	44 x 1/6	31.00	
3131800141		9612150704		25	63.00	21.00	52 x 1/6	36.00	
3131800142		9612150705		32	70.00	21.00	58 x 1/6	42.00	
3131800143		9612150706		40	78.00	21.00	65 x 1/6	49.00	
3131800144		9612150707		50	92.00	22.00	78 x 1/6	62.00	
3131800145		9612150708		65	112.00	25.00	95 x 1/6	80.00	
3131800146		9612150710		80	127.00	29.00	110 x 1/4	94.00	
3131800148		9612150711		100	148.00	31.00	130 x 1/4	115.00	
9611306450		9612150712		125	178.00	34.00	160 x 1/4	138.00	
9611306460		9612150713		150	210.00	40.00	190 x 1/4	164.00	

Product code: 5060

1.5

Material Item No.	PPL EUR	Size DN	Dimension (mm)						
1.4404 (316L)		mm	A	B	C	D	E	F	BLIND BGS H3 (ID=0.8/OD=1.0) DIN 11864-1/11853-1
9615330601		10	22.00	12.00	28 x 1/8	4.00	24.00	13.00	
9615330602		15	28.00	12.00	34 x 1/8	4.00	24.00	19.00	
9615330603		20	36.00	14.00	44 x 1/6	5.00	24.00	23.00	
9615330604		25	43.00	14.00	52 x 1/6	6.00	24.00	29.00	
9615330605		32	49.00	14.00	58 x 1/6	7.00	24.00	35.00	
9615330606		40	55.00	14.00	65 x 1/6	7.00	24.00	41.00	
9615330607		50	67.00	14.00	78 x 1/6	7.00	24.00	53.00	
9615330608		65	85.00	16.00	95 x 1/6	8.00	28.00	70.00	
9615330609		80	99.00	20.00	110 x 1/4	8.00	28.00	85.00	
9615330610		100	119.00	20.00	130 x 1/4	10.00	30.00	104.00	
									BLIND BBS H3 (ID=0.8/OD=1.0) DIN 11864-1/11853-1
9615330701		10	21.90	18.00	9.00	3.00			
9615330702		15	27.90	24.00	9.00	3.00			
9615330703		20	35.90	30.00	10.00	3.00			
9615330704		25	42.90	35.00	12.00	3.00			
9615330705		32	48.90	41.00	13.00	3.00			
9615330706		40	54.90	48.00	13.00	3.00			
9615330707		50	66.90	61.00	14.00	3.00			
9615330708		65	84.90	79.00	16.00	4.00			
9615330709		80	98.90	93.00	16.00	4.00			
9615330710		100	118.90	114.00	20.00	5.00			

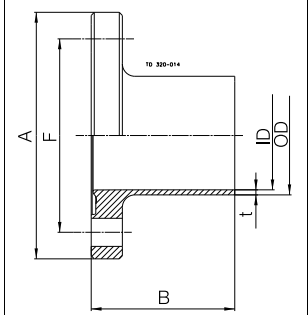
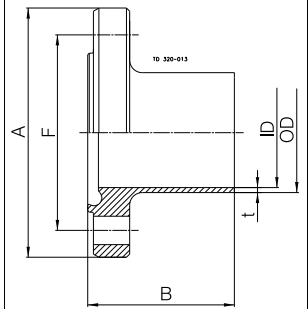
Product code: 5035

Item No.	PPL EUR	Item No.	PPL EUR			Size DN	Dimension (mm)		
EPDM		FPM				mm	B	D	O-RING R DIN 11864/11853
9612906201		9612906211				10	3.50	12.00	
9612906202		9612906212				15	3.50	18.00	
9612906203		9612906213				20	3.50	22.00	
9612906204		9612906214				25	3.50	28.00	
9612906205		9612906215				32	5.00	34.00	
9612906206		9612906216				40	5.00	40.00	
9612906207		9612906217				50	5.00	52.00	
9612906208		9612906218				65	5.00	68.00	
9612906209		9612906219				80	5.00	83.00	
9612906210		9612906220				100	5.00	102.00	
9612906221		9612906223				125	5.00	127.00	
9612906222		9612906224				150	5.00	152.00	

Product code: 5057

1.5

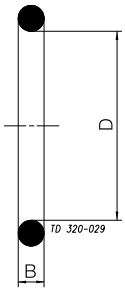
Item No	PPL EUR	Item No	PPL EUR	Size DN	Dimension (mm)			FLANGE GROOVE NF H3 (ID=0.8/OD=1.0) DIN 11853-2
					OD/ID x t	A	B	
1.4307 (304L)		1.4404 (316L)		mm				
8010000383		8010000506		10	13.00/10.00 x 1.50	54.00	25.50	37.00
8010000384		8010000507		15	19.00/16.00 x 1.50	59.00	25.50	42.00
8010000385		8010000508		20	23.00/20.00 x 1.50	64.00	25.50	47.00
8010000386		8010000509		25	29.00/26.00 x 1.50	70.00	25.50	53.00
8010000388		8010000510		32	35.00/32.00 x 1.50	76.00	25.50	59.00
8010000390		8010000511		40	41.00/38.00 x 1.50	82.00	25.50	65.00
8010000391		8010000512		50	53.00/50.00 x 1.50	94.00	25.50	77.00
8010000392		8010000513		65	70.00/66.00 x 2.00	113.00	25.50	95.00
8010000394		8010000514		80	85.00/81.00 x 2.00	133.00	27.50	112.00
8010000395		8010000515		100	104.00/100.00 x 2.00	159.00	27.50	137.00
8010000396		8010000516		125	129.00/125.00 x 2.00	183.00	29.50	161.00
8010000397		8010000517		150	154.00/150.00 x 2.00	213.00	29.50	188.00
								FLANGE COLLAR BF H3 (ID=0.8/OD=1.0) DIN 11853-2
8010000398		8010000518		10	13.00/10.00 x 1.50	54.00	24.00	37.00
8010000399		8010000519		15	19.00/16.00 x 1.50	59.00	24.00	42.00
8010000400		8010000520		20	23.00/20.00 x 1.50	64.00	24.00	47.00
8010000401		8010000521		25	29.00/26.00 x 1.50	70.00	24.00	53.00
8010000402		8010000522		32	35.00/32.00 x 1.50	76.00	24.00	59.00
8010000403		8010000523		40	41.00/38.00 x 1.50	82.00	24.00	65.00
8010000404		8010000524		50	53.00/50.00 x 1.50	94.00	24.00	77.00
8010000405		8010000525		65	70.00/66.00 x 2.00	113.00	24.00	95.00
8010000406		8010000526		80	85.00/81.00 x 2.00	133.00	26.00	112.00
8010000408		8010000527		100	104.00/100.00 x 2.00	159.00	26.00	137.00
8010000409		8010000528		125	129.00/125.00 x 2.00	183.00	28.00	161.00
8010000410		8010000529		150	154.00/150.00 x 2.00	213.00	28.00	188.00

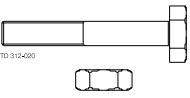


Material Item No.	PPL EUR	Size DN	Dimension (mm)						
1.4404 (316L)		mm	A	B	C	D	E	BLIND BBF H3 (ID=0.8/OD=1.0) DIN 11864-2/11853-2	
9615331203		10	54.00	37.00	22.40	10.00	4.00 x 9.00		
9615331204		15	59.00	42.00	28.40	10.00	4.00 x 9.00		
9615331205		20	64.00	47.00	32.40	10.00	4.00 x 9.00		
9615331206		25	70.00	53.00	38.40	10.00	4.00 x 9.00		
9615331207		32	76.00	59.00	47.70	10.00	4.00 x 9.00		
9615331208		40	82.00	65.00	53.70	10.00	4.00 x 9.00		
9615331209		50	94.00	77.00	65.70	10.00	4.00 x 9.00		
9615331210		65	113.00	95.00	81.70	10.00	8.00 x 9.00		
9615331211		80	133.00	112.00	97.70	12.00	8.00 x 11.00		
9615331212		100	159.00	137.00	116.70	14.00	8.00 x 11.00		
9615331213		125	183.00	161.00	141.70	14.00	8.00 x 11.00		
9615331214		150	213.00	188.00	167.70	16.00	8.00 x 14.00		
									BLIND BNF H3 (ID=0.8/OD=1.0) DIN 11864-2/11853-2
9615331303		10	54.00	37.00	22.30	11.50	4.00 x 9.00		
9615331304		15	59.00	42.00	28.30	11.50	4.00 x 9.00		
9615331305		20	64.00	47.00	32.30	11.50	4.00 x 9.00		
9615331306		25	70.00	53.00	38.30	11.50	4.00 x 9.00		
9615331307		32	76.00	59.00	47.60	11.50	4.00 x 9.00		
9615331308		40	82.00	65.00	53.60	11.50	4.00 x 9.00		
9615331309		50	94.00	77.00	65.60	11.50	4.00 x 9.00		
9615331310		65	113.00	95.00	81.60	11.50	8.00 x 9.00		
9615331311		80	133.00	112.00	97.60	13.50	8.00 x 11.00		
9615331312		100	159.00	137.00	116.60	15.50	8.00 x 11.00		
9615331313		125	183.00	161.00	141.60	15.50	8.00 x 11.00		
9615331314		150	213.00	188.00	167.60	17.50	8.00 x 14.00		

Product code: 5035

1.5

Item No.	PPL EUR	Item No.	PPL EUR			Size DN	Dimension (mm)		
EPDM		FPM				mm	B	D	O-RING R DIN 11864/11853
9612906201		9612906211				10	3.50	12.00	
9612906202		9612906212			15	3.50	18.00		
9612906203		9612906213			20	3.50	22.00		
9612906204		9612906214			25	3.50	28.00		
9612906205		9612906215			32	5.00	34.00		
9612906206		9612906216			40	5.00	40.00		
9612906207		9612906217			50	5.00	52.00		
9612906208		9612906218			65	5.00	68.00		
9612906209		9612906219			80	5.00	83.00		
9612906210		9612906220			100	5.00	102.00		
9612906221		9612906223			125	5.00	127.00		
9612906222		9612906224			150	5.00	152.00		

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

11853-3 NKS and BKS in 1.4404 and H3

1.5

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

Product code: 5060

Material Item No.	PPL EUR	Size DN	Dimension (mm)			
1.4404 (316L)		mm	OD/ID x t	A	B	MALE GS H3 (ID=0.8/OD=1.0) DIN 11864-1
9613403901		10	13.00/10.00 x 1.50	28 x 1/8	41.00	
9613403902		15	19.00/16.00 x 1.50	34 x 1/8	41.00	
9613403903		20	23.00/20.00 x 1.50	44 x 1/6	43.00	
9613403904		25	29.00/26.00 x 1.50	52 x 1/6	43.00	
9613403905		32	35.00/32.00 x 1.50	58 x 1/6	48.00	
9613403906		40	41.00/38.00 x 1.50	65 x 1/6	48.00	
9613403907		50	53.00/50.00 x 1.50	78 x 1/6	48.00	
9613403908		65	70.00/66.00 x 2.00	95 x 1/6	60.00	
9613403909		80	85.00/81.00 x 2.00	110 x 1/4	64.00	
9613403910		100	104.00/100.00 x 2.00	130 x 1/4	64.00	
						LINER BS H3 (ID=0.8/OD=1.0) DIN 11864-1
9613403911		10	13.00/10.00 x 1.50		39.00	
9613403912		15	19.00/16.00 x 1.50		39.00	
9613403913		20	23.00/20.00 x 1.50		38.00	
9613403914		25	29.00/26.00 x 1.50		40.00	
9613403915		32	35.00/32.00 x 1.50		47.00	
9613403916		40	41.00/38.00 x 1.50		47.00	
9613403917		50	53.00/50.00 x 1.50		48.00	
9613403918		65	70.00/66.00 x 2.00		61.00	
9613403919		80	85.00/81.00 x 2.00		61.00	
9613403920		100	104.00/100.00 x 2.00		66.00	

Product code: 5044

1.5

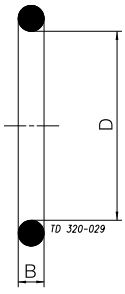
Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)				NUT F HSF0 (ID=0.8/OD=1.6) DIN 11851
					A	B	C	D	
1.4301 (304)		1.4404 (316L)		mm					
9611306420		9612150701		10	38.00	18.00	28 x 1/8	19.00	
9611306430		9612150702		15	44.00	18.00	34 x 1/8	25.00	
9611290021		9612150703		20	54.00	20.00	44 x 1/6	31.00	
3131800141		9612150704		25	63.00	21.00	52 x 1/6	36.00	
3131800142		9612150705		32	70.00	21.00	58 x 1/6	42.00	
3131800143		9612150706		40	78.00	21.00	65 x 1/6	49.00	
3131800144		9612150707		50	92.00	22.00	78 x 1/6	62.00	
3131800145		9612150708		65	112.00	25.00	95 x 1/6	80.00	
3131800146		9612150710		80	127.00	29.00	110 x 1/4	94.00	
3131800148		9612150711		100	148.00	31.00	130 x 1/4	115.00	
9611306450		9612150712		125	178.00	34.00	160 x 1/4	138.00	
9611306460		9612150713		150	210.00	40.00	190 x 1/4	164.00	

Product code: 5060

Material Item No.	PPL EUR	Size DN	Dimension (mm)						
1.4404 (316L)		mm	A	B	C	D	E	F	BLIND BGS H3 (ID=0.8/OD=1.0) DIN 11864-1/11853-1
9615330601		10	22.00	12.00	28 x 1/8	4.00	24.00	13.00	
9615330602		15	28.00	12.00	34 x 1/8	4.00	24.00	19.00	
9615330603		20	36.00	14.00	44 x 1/6	5.00	24.00	23.00	
9615330604		25	43.00	14.00	52 x 1/6	6.00	24.00	29.00	
9615330605		32	49.00	14.00	58 x 1/6	7.00	24.00	35.00	
9615330606		40	55.00	14.00	65 x 1/6	7.00	24.00	41.00	
9615330607		50	67.00	14.00	78 x 1/6	7.00	24.00	53.00	
9615330608		65	85.00	16.00	95 x 1/6	8.00	28.00	70.00	
9615330609		80	99.00	20.00	110 x 1/4	8.00	28.00	85.00	
9615330610		100	119.00	20.00	130 x 1/4	10.00	30.00	104.00	
									BLIND BBS H3 (ID=0.8/OD=1.0) DIN 11864-1/11853-1
9615330701		10	21.90	18.00	9.00	3.00			
9615330702		15	27.90	24.00	9.00	3.00			
9615330703		20	35.90	30.00	10.00	3.00			
9615330704		25	42.90	35.00	12.00	3.00			
9615330705		32	48.90	41.00	13.00	3.00			
9615330706		40	54.90	48.00	13.00	3.00			
9615330707		50	66.90	61.00	14.00	3.00			
9615330708		65	84.90	79.00	16.00	4.00			
9615330709		80	98.90	93.00	16.00	4.00			
9615330710		100	118.90	114.00	20.00	5.00			

Product code: 5035

1.5

Item No.	PPL EUR	Item No.	PPL EUR			Size DN	Dimension (mm)		
EPDM		FPM				mm	B	D	O-RING R DIN 11864/11853
9612906201		9612906211				10	3.50	12.00	
9612906202		9612906212				15	3.50	18.00	
9612906203		9612906213				20	3.50	22.00	
9612906204		9612906214				25	3.50	28.00	
9612906205		9612906215				32	5.00	34.00	
9612906206		9612906216				40	5.00	40.00	
9612906207		9612906217				50	5.00	52.00	
9612906208		9612906218				65	5.00	68.00	
9612906209		9612906219				80	5.00	83.00	
9612906210		9612906220				100	5.00	102.00	
9612906221		9612906223				125	5.00	127.00	
9612906222		9612906224				150	5.00	152.00	

Product code: 5060

Item No	PPL EUR	Size DN	Dimension (mm)				FLANGE GROOVE NF H3 (ID=0.8/OD=1.0) DIN 11864-2	
			OD/ID x t	A	B	F		
1.4404 (316L)		mm						
9613403921		10	13.00/10.00 x 1.50	54.00	41.50	37.00		
9613403922		15	19.00/16.00 x 1.50	59.00	41.50	42.00		
9613403923		20	23.00/20.00 x 1.50	64.00	41.50	47.00		
9613403924		25	29.00/26.00 x 1.50	70.00	41.50	53.00		
9613403925		32	35.00/32.00 x 1.50	76.00	46.50	59.00		
9613403926		40	41.00/38.00 x 1.50	82.00	46.50	65.00		
9613403927		50	53.00/50.00 x 1.50	94.00	46.50	77.00		
9613403928		65	70.00/66.00 x 2.00	113.00	55.50	95.00		
9613403929		80	85.00/81.00 x 2.00	133.00	59.50	112.00		
9613403930		100	104.00/100.00 x 2.00	159.00	59.50	137.00		
9615331113		125	129.00/125.00 x 2.00	183.00	61.50	161.00		
9615331114		150	154.00/150.00 x 2.00	213.00	61.50	188.00		
								FLANGE COLLAR BF H3 (ID=0.8/OD=1.0) DIN 11864-2
9613403931		10	13.00/10.00 x 1.50	54.00	40.00	37.00		
9613403932		15	19.00/16.00 x 1.50	59.00	40.00	42.00		
9613403933		20	23.00/20.00 x 1.50	64.00	40.00	47.00		
9613403934		25	29.00/26.00 x 1.50	70.00	40.00	53.00		
9613403935		32	35.00/32.00 x 1.50	76.00	45.00	59.00		
9613403936		40	41.00/38.00 x 1.50	82.00	45.00	65.00		
9613403937		50	53.00/50.00 x 1.50	94.00	45.00	77.00		
9613403938		65	70.00/66.00 x 2.00	113.00	54.00	95.00		
9613403939		80	85.00/81.00 x 2.00	133.00	58.00	112.00		
9613403940		100	104.00/100.00 x 2.00	159.00	58.00	137.00		
9615331013		125	129.00/125.00 x 2.00	183.00	60.00	161.00		
9615331014		150	154.00/150.00 x 2.00	213.00	60.00	188.00		

Product code: 5060

1.5

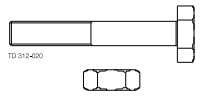
Material Item No.	PPL EUR	Size DN	Dimension (mm)						
1.4404 (316L)		mm	A	B	C	D	E	BLIND BBF H3 (ID=0.8/OD=1.0) DIN 11864-2/11853-2	
9615331203		10	54.00	37.00	22.40	10.00	4.00 x 9.00		
9615331204		15	59.00	42.00	28.40	10.00	4.00 x 9.00		
9615331205		20	64.00	47.00	32.40	10.00	4.00 x 9.00		
9615331206		25	70.00	53.00	38.40	10.00	4.00 x 9.00		
9615331207		32	76.00	59.00	47.70	10.00	4.00 x 9.00		
9615331208		40	82.00	65.00	53.70	10.00	4.00 x 9.00		
9615331209		50	94.00	77.00	65.70	10.00	4.00 x 9.00		
9615331210		65	113.00	95.00	81.70	10.00	8.00 x 9.00		
9615331211		80	133.00	112.00	97.70	12.00	8.00 x 11.00		
9615331212		100	159.00	137.00	116.70	14.00	8.00 x 11.00		
9615331213		125	183.00	161.00	141.70	14.00	8.00 x 11.00		
9615331214		150	213.00	188.00	167.70	16.00	8.00 x 14.00		
									BLIND BNF H3 (ID=0.8/OD=1.0) DIN 11864-2/11853-2
9615331303		10	54.00	37.00	22.30	11.50	4.00 x 9.00		
9615331304		15	59.00	42.00	28.30	11.50	4.00 x 9.00		
9615331305		20	64.00	47.00	32.30	11.50	4.00 x 9.00		
9615331306		25	70.00	53.00	38.30	11.50	4.00 x 9.00		
9615331307		32	76.00	59.00	47.60	11.50	4.00 x 9.00		
9615331308		40	82.00	65.00	53.60	11.50	4.00 x 9.00		
9615331309		50	94.00	77.00	65.60	11.50	4.00 x 9.00		
9615331310		65	113.00	95.00	81.60	11.50	8.00 x 9.00		
9615331311		80	133.00	112.00	97.60	13.50	8.00 x 11.00		
9615331312		100	159.00	137.00	116.60	15.50	8.00 x 11.00		
9615331313		125	183.00	161.00	141.60	15.50	8.00 x 11.00		
9615331314		150	213.00	188.00	167.60	17.50	8.00 x 14.00		

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		9612906211				10	3.50	12.00	
9612906202		9612906212				15	3.50	18.00	
9612906203		9612906213				20	3.50	22.00	
9612906204		9612906214				25	3.50	28.00	
9612906205		9612906215				32	5.00	34.00	
9612906206		9612906216				40	5.00	40.00	
9612906207		9612906217				50	5.00	52.00	
9612906208		9612906218				65	5.00	68.00	
9612906209		9612906219				80	5.00	83.00	
9612906210		9612906220				100	5.00	102.00	
9612906221		9612906223				125	5.00	127.00	
9612906222		9612906224				150	5.00	152.00	

Product code: 5060

1.5

Item No.	PPL EUR	Flange size DIN/DN	Nuts	Screws	
1.4301 (304)		mm			Screws and nut set
9612905161		10-50	4 x M8 x 30	4 x M8	
9612905162		65	8 x M8 x 30	8 x M8	
9612905164		80	8 x M10 x 35	8 x M10	
9612905165		100-125	8 x M10 x 40	8 x M10	
9612905166		150	8 x M12 x 50	8 x M12	

Product code: 5060

Item No.	PPL EUR	Size DN	Dimension (mm)			
			OD/ID x t	A	B	
1.4404 (316L)		mm				CLAMP LINER GROOVE NKS H3 (ID=0.8/OD=1.0) DIN 11864-3
9613403941		10	13.00/10.00 x 1.50	34.00	39.50	
9613403942		15	19.00/16.00 x 1.50	34.00	39.50	
9613403943		20	23.00/20.00 x 1.50	50.50	39.50	
9613403944		25	29.00/26.00 x 1.50	50.50	40.00	
9613403945		32	35.00/32.00 x 1.50	50.50	45.50	
9613403946		40	41.00/38.00 x 1.50	64.00	45.50	
9613403947		50	53.00/50.00 x 1.50	77.50	46.00	
9613403948		65	70.00/66.00 x 2.00	91.00	58.00	
9613403949		80	85.00/81.00 x 2.00	106.00	60.00	
9613403950		100	104.00/100.00 x 2.00	130.00	61.50	
						CLAMP LINER COLLAR BKS H3 (ID=0.8/OD=1.0) DIN 11864-3
9613403951		10	13.00/10.00 x 1.50	34.00	38.00	
9613403952		15	19.00/16.00 x 1.50	34.00	38.00	
9613403953		20	23.00/20.00 x 1.50	50.50	38.00	
9613403954		25	29.00/26.00 x 1.50	50.50	38.50	
9613403955		32	35.00/32.00 x 1.50	50.50	44.00	
9613403956		40	41.00/38.00 x 1.50	64.00	44.00	
9613403957		50	53.00/50.00 x 1.50	77.50	44.50	
9613403958		65	70.00/66.00 x 2.00	91.00	56.50	
9613403959		80	85.00/81.00 x 2.00	106.00	58.50	
9613403960		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

Product code: 5060

1.5

Material Item No.	PPL EUR	Size DN	Dimension (mm)				
1.4404 (316L)		mm	A	B	C	D	BLIND BBKS H3 (ID=0.8/OD=1.0) DIN 11864-3/11853-3
9615331601		10	34.00	22.40	11.50	25.00	
9615331602		15	34.00	28.40	11.50	25.00	
9615331603		20	50.50	32.40	11.50	42.00	
9615331604		25	50.50	38.40	11.50	42.00	
9615331605		32	50.50	47.70	11.50	42.00	
9615331606		40	64.00	53.70	11.50	54.00	
9615331607		50	77.50	65.70	13.50	62.00	
9615331608		65	91.00	81.70	13.50	78.00	
9615331609		80	106.00	97.70	13.50	93.00	
9615331610		100	130.00	116.70	13.50	115.00	
							BLIND BNKS H3 (ID=0.8/OD=1.0) DIN 11864-3/11853-3
9615331701		10	34.00	22.40	13.00	25.00	
9615331702		15	34.00	28.40	13.00	25.00	
9615331703		20	50.50	32.40	13.00	42.00	
9615331704		25	50.50	38.40	13.00	42.00	
9615331705		32	50.50	47.70	13.00	42.00	
9615331706		40	64.00	53.70	13.00	54.00	
9615331707		50	77.50	65.70	15.00	62.00	
9615331708		65	91.00	81.70	15.00	78.00	
9615331709		80	106.00	97.70	15.00	93.00	
9615331710		100	130.00	116.70	15.00	115.00	

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		9612906211				10	3.50	12.00	
9612906202		9612906212				15	3.50	18.00	
9612906203		9612906213				20	3.50	22.00	
9612906204		9612906214				25	3.50	28.00	
9612906205		9612906215				32	5.00	34.00	
9612906206		9612906216				40	5.00	40.00	
9612906207		9612906217				50	5.00	52.00	
9612906208		9612906218				65	5.00	68.00	
9612906209		9612906219				80	5.00	83.00	
9612906210		9612906220				100	5.00	102.00	
9612906221		9612906223				125	5.00	127.00	
9612906222		9612906224				150	5.00	152.00	

Product code: 5054

1.5

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			FERRULE KK HSF0 (ID=0.8/OD=1.6) DIN 32676
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	A	B	
9612156101		9612156121		10	13.00/10.00 x 1.50	34.00	18.00	
9612156102		9612156122		15	19.00/16.00 x 1.50	34.00	18.00	
9612156103		9612156123		20	23.00/20.00 x 1.50	34.00	18.00	
9612156104		9612156124		25	29.00/26.00 x 1.50	50.50	21.50	
9612156105		9612156125		32	35.00/32.00 x 1.50	50.50	21.50	
9612156106		9612156126		40	41.00/38.00 x 1.50	50.50	21.50	
9612156107		9612156127		50	53.00/50.00 x 1.50	64.00	21.50	
9612156108		9612156128		65	70.00/66.00 x 2.00	91.00	28.00	
9612156109		9612156129		80	85.00/81.00 x 2.00	106.00	28.00	
9612156110		9612156130		100	104.00/100.00 x 2.00	119.00	28.00	
9612156141		9612156145		125	129.00/125.00 x 2.00	155.00	28.00	
9612156142		9612156146		150	154.00/150.00 x 2.00	183.00	28.00	

Item No.	PPL EUR	Size DN	Dimension (mm)				FERRULE KL HSF0 (ID=0.8/OD=1.6) DIN 32676
1.4404 (316L)		mm	OD/ID x t	A	B	L	
9613444001		10	13.00/10.00 x 1.50	34.00	28.60	23.00	
9613444002		15	19.00/16.00 x 1.50	34.00	28.60	24.00	
9613444003		20	23.00/20.00 x 1.50	34.00	28.60	25.00	
9613444004		25	29.00/26.00 x 1.50	50.50	36.00	30.00	
9613444005		32	35.00/32.00 x 1.50	50.50	36.00	32.00	
9613444006		40	41.00/38.00 x 1.50	50.50	36.00	33.00	
9613444007		50	53.00/50.00 x 1.50	64.00	36.00	33.00	
9613444008		65	70.00/66.00 x 2.00	91.00	48.00	42.00	
9613444009		80	85.00/81.00 x 2.00	106.00	48.00	42.00	
9613444010		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

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

Product code: 5035

1.5

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimensions (mm)			Gasket D DIN 32676
EPDM		PTFE		mm	A	B	D	
9611992009		9612991586		10	36.20	5.50	10.20	
9611992010		9612991587		15	36.20	5.50	16.20	
9611992011		9612991588		20	36.20	5.50	20.20	
9611992012		9612991589		25	52.70	5.50	26.20	
9611992013		9612991590		32	52.70	5.50	32.20	
9611992014		9612991591		40	52.70	5.50	38.20	
9611992015		9612991592		50	66.20	5.50	50.20	
9611992016		9612991593		65	93.20	5.50	66.20	
9611992017		9612991594		80	108.20	5.50	81.20	
9611992018		9612991595		100	121.20	5.50	100.20	
9611993205				125	157.20	5.50	125.20	
9611993206				150	185.20	5.50	150.20	

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimensions (mm)			Gasket D DIN 32676
NBR		FPM		mm	A	B	D	
9611991999		9611994182		10	36.20	5.50	10.20	
9600992000		9611994183		15	36.20	5.50	16.20	
9600992001		9611994184		20	36.20	5.50	20.20	
9600992002		9611994185		25	52.70	5.50	26.20	
9600992003		9611994186		32	52.70	5.50	32.20	
9600992004		9611994187		40	52.70	5.50	38.20	
9600992005		9611994188		50	66.20	5.50	50.20	
9600992006		9611994189		65	93.20	5.50	66.20	
9600992007		9611994190		80	108.20	5.50	81.20	
9600992008		9611994191		100	121.20	5.50	100.20	
*		9611995100		125	157.20	5.50	125.20	
*		9611993210		150	185.20	5.50	150.20	

* On request

Product code: 5049

Item No.	PPL EUR	Size DN mm	Dimension (mm)			Image
			A	B	C	
A13MHM Clamp ring						
211053		25-40	54.00			
211054		50	67.10			
211056		65	94.50			
211057		100	122.20			
Clamp ring						
9611993113		10-15-20	37.00			
9611993114		80	109.00			
9611994192		100	134.00			
9611993203		125	159.00			
9611993204		150	187.00			
Clamp ring (Allen Screws)						
9611311051		25-40	58.50	85.50		
9611311052		50	72.00	99.00		
9611311054		65	99.00	126.00		
9611311055		100	127.00	154.00		
13MHM						
212195		25-40	54.00			
212196		50	67.50			
212198		65	94.50			
212199		100	122.60			
Clamp ring, wingnut						
9611994458		10-20	37.50			
9611994453		25-40	54.00			
9611994454		50	67.50			
9611994456		65	94.50			
9611994459		80	109.50			
9611994457		100	122.60			

This page is intentionally left blank

1.6 Fit To DIN Tubes

Price lists

Fit to DIN Tubes, Bends	1.6.84
Fit to DIN Tubes, Tees	1.6.87
Fit to DIN Tubes, Flanges	1.6.88
Fit to DIN Tubes, Seals	1.6.89
Fit to DIN Tubes, End Caps with Thread	1.6.91
Fit to DIN Tubes, Hose Liner	1.6.92
Fit to DIN Tubes, Other Fittings	1.6.93

Product code: 5012

1.6

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			BEND 45 HSF3 (ID=0.8/OD=0.8)
					OD/ID x t	L	R	
1.4307 (304)		1.4404 (316L)		mm				
9611293821		9611293822		25	28.00/25.00 x 1.50	34.00	50.00	
9611293831		9611293832		32	34.00/31.00 x 1.50	37.00	55.00	
9611293841		9611293842		40	40.00/37.00 x 1.50	41.00	60.00	
9611293851		9611293852		50	52.00/49.00 x 1.50	48.00	70.00	

*On request

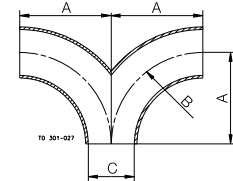
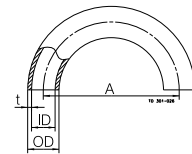
Product code: 5012

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			
				mm	OD/ID x t	L	R	
1.4307 (304L)		1.4404 (316L)		mm	OD/ID x t	L	R	BEND 90 HSF3 (ID=0.8/OD=0.8)
9612154558		9612154508		10	13.00/10.00 x 1.50	38.00	26.00	
9612154559		9612154509		15	19.00/16.00 x 1.50	47.00	35.00	
9612154560		9612154510		20	23.00/20.00 x 1.50	52.00	40.00	
9612154561		9612154511		25	29.00/26.00 x 1.50	70.00	50.00	
9612154562		9612154512		32	35.00/32.00 x 1.50	78.00	55.00	
9612154563		9612154513		40	41.00/38.00 x 1.50	85.00	60.00	
9612154564		9612154514		50	53.00/50.00 x 1.50	97.00	70.00	
9611304060		9611304062		65	70.00/66.00 x 2.00	110.00	80.00	
9611304080		9611304082		80	85.00/81.00 x 2.00	118.00	90.00	
9611304090		9611304092		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 (ID=0.8/OD=1.6)
9615220009		9615220021		10	13.00/10.00 x 1.50	38.00	26.00	
9615220010		9615220022		15	19.00/16.00 x 1.50	47.00	35.00	
9615220011		9615220023		20	23.00/20.00 x 1.50	52.00	40.00	
9615220012		9615220024		25	29.00/26.00 x 1.50	70.00	50.00	
9615220013		9615220025		32	35.00/32.00 x 1.50	78.00	55.00	
9615220014		9615220026		40	41.00/38.00 x 1.50	85.00	60.00	
9615220015		9615220027		50	53.00/50.00 x 1.50	97.00	70.00	
9615220016		9615220028		65	70.00/66.00 x 2.00	110.00	80.00	
9615220017		9615220029		80	85.00/81.00 x 2.00	118.00	90.00	
9615220018		9615220030		100	104.00/100.00 x 2.00	140.00	100.00	
								BEND 90 HSF3 (ID=0.8/OD=0.8) SHORT
9611309100		9611309101		10	12.00/9.00 x 1.50	26.00	26.00	
9611301060		9611309111		15	18.00/15.00 x 1.50	35.00	35.00	
9611301061		9611309131		20	22.00/19.00 x 1.50	40.00	40.00	
9611301062		9611309121		25	28.00/25.00 x 1.50	50.00	50.00	
9611301063		9611309141		32	34.00/31.00 x 1.50	55.20	55.00	
9611301064		9611309151		40	40.00/37.00 x 1.50	60.00	60.00	
9611301065		9611309161		50	52.00/49.00 x 1.50	70.00	70.00	
								BEND 90 HSF3 (ID=0.8/OD=0.8)
9611304120		9611304122		10	12.00/9.00 x 1.50	38.00	26.00	
9611304130		9611304132		15	18.00/15.00 x 1.50	47.00	35.00	
9611293921		9611293922		20	22.00/19.00 x 1.50	52.00	40.00	
9611304140		9611304142		25	28.00/25.00 x 1.50	70.00	50.00	
9611304150		9611304152		32	34.00/31.00 x 1.50	78.00	55.00	
9611304160		9611304162		40	40.00/37.00 x 1.50	85.00	60.00	
9611304170		9611304172		50	52.00/49.00 x 1.50	97.00	70.00	

Product code: 5012

1.6

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		10	12.00/9.00 x 1.50	52.00		
9612156802		9612156826		15	18.00/15.00 x 1.50	68.00		
9612156803		9612156827		20	22.00/19.00 x 1.50	76.00		
9612156804		9612156828		25	28.00/25.00 x 1.50	100.00		
9612156805		9612156829		32	34.00/31.00 x 1.50	110.00		
9612156806		9612156830		40	40.00/37.00 x 1.50	120.00		
9612156807		9612156831		50	52.00/49.00 x 1.50	140.00		
9612156808		9612156832		65	70.00/66.00 x 2.00	160.00		
9612156809		9612156833		80	85.00/81.00 x 2.00	180.00		
9612156810		9612156834		100	104.00/100.00 x 2.00	200.00		
T-double bend - OD: Semi bright, ID: Raw								
9612154201		9612154215		25		49.00	50.00	25.00
9612154202		9612154216		32		54.00	55.00	31.00
9612154203		9612154217		40		59.00	60.00	37.00
9612154204		9612154218		50		69.00	70.00	49.00
9612154205		9612154219		65		79.00	80.00	66.00
9612154206		9612154220		80		89.00	90.00	81.00
9612154207		9612154221		100		99.00	100.00	100.00



*On request

Material Item No.	PPL EUR	Material Item No.	PPL EUR	Size DN	Dimension (mm)			
					OD/ID x t	L		
1.4307 (304L)		1.4404 (316L)		mm				Tee, form TS, non standard
9611309220		9611309221		10	12.00/9.00 x 1.50	26.00		
9611309230		9611309231		15	18.00/15.00 x 1.50	35.00		
9611309240		9611309241		20	22.00/19.00 x 1.50	40.00		
9611309250		9611309251		25	28.00/25.00 x 1.50	50.00		
9611309260		9611309261		32	34.00/31.00 x 1.50	55.00		
9611309270		9611309271		40	40.00/37.00 x 1.50	60.00		
9611309280		9611309281		50	52.00/49.00 x 1.50	70.00		
1.4301 (304)						L₁	L₂	Tee, short, form TK, non standard
9612150004		9612150032		25	28.00/25.00 x 1.50	50.00	15.50	
9612150005		9612150033		32	34.00/31.00 x 1.50	55.00	18.50	
9612150006		9612150034		40	40.00/37.00 x 1.50	60.00	21.50	
9612150007		9612150035		50	52.00/49.00 x 1.50	70.00	29.50	

Material Item No.	PPL EUR	Size DN	Pressure class	Dimension (mm)			Complete flange	
				OD/ID x t	A	B		C
1.4404 (316L)		mm	PN (bar)					
9612498701		25	16	29.00/26.00 x 1.50	79.00	50.00	4 x M8	
9612498702		32	16	35.00/32.00 x 1.50	79.00	50.00	4 x M8	
9612498703		40	16	41.00/38.00 x 1.50	87.00	50.00	4 x M8	
9612498704		50	16	53.00/50.00 x 1.50	106.00	50.00	4 x M8	
9612498705		65	10	70.00/66.00 x 2.00	125.00	50.00	4 x M8	
9612498706		80	10	85.00/81.00 x 2.00	140.00	50.00	8 x M8	
9612498707		100	10	104.00/100.00 x 2.00	160.00	50.00	8 x M8	
9612498708		125	10	129.00/125.00 x 2.00	190.00	60.00	8 x M10	
9612498709		150	10	154.00/150.00 x 2.00	215.00	60.00	8 x M10	
					B	E	F	Flange with O-ring groove
9612493001		25	16	29.00/26.00 x 1.50	25.00	10.00	64.00	
9612493002		32	16	35.00/32.00 x 1.50	25.00	10.00	64.00	
9612493003		40	16	41.00/38.00 x 1.50	25.00	10.00	72.00	
9612493004		50	16	53.00/50.00 x 1.50	25.00	10.00	91.00	
9612493005		65	10	70.00/66.00 x 2.00	25.00	10.00	110.00	
9612493006		80	10	85.00/81.00 x 2.00	25.00	10.00	125.00	
9612493007		100	10	104.00/100.00 x 2.00	25.00	10.00	143.00	
9612493008		125	10	129.00/125.00 x 2.00	30.00	15.00	171.00	
9612493009		150	10	154.00/150.00 x 2.00	30.00	15.00	196.00	
								Flange without O-ring groove
9612492901		25	16	29.00/26.00 x 1.50	25.00	10.00	64.00	
9612492902		32	16	35.00/32.00 x 1.50	25.00	10.00	64.00	
9612492903		40	16	41.00/38.00 x 1.50	25.00	10.00	72.00	
9612492904		50	16	53.00/50.00 x 1.50	25.00	10.00	91.00	
9612492905		65	10	70.00/66.00 x 2.00	25.00	10.00	110.00	
9612492906		80	10	85.00/81.00 x 2.00	25.00	10.00	125.00	
9612492907		100	10	104.00/100.00 x 2.00	25.00	10.00	143.00	
9612492908		125	10	129.00/125.00 x 2.00	30.00	15.00	171.00	
9612492909		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		DN 25-65	4xM8x30	4xM8	
9612499302		DN 80 -100	8xM8x30	8xM8	
9612499302		DN 125-150	8xM10x40	8xM10	

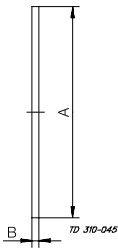
Product code: 5063

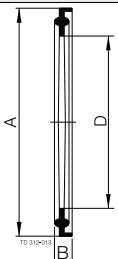
Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)			
NBR		EPDM		mm	A	B	C	Seal ring
		9611900253		10	10.50	20.00	5.00	
		9611900254		15	16.50	26.00	5.00	
		9611900255		20	20.50	33.00	5.00	
		9611900256		25	26.50	40.00	6.00	
		9611900257		32	32.50	46.00	6.00	
		9611900258		40	38.50	52.00	6.00	
		9611900259		50	50.50	64.00	6.00	
		9611900260		65	66.50	81.00	6.00	
		9611900261		80	81.50	88.00	6.00	
		9611900263		100	100.50	104.00	6.00	
		9611900264		125	125.00	142.00	7.00	
		9611900265		150	150.00	167.00	7.00	
								Seal ring, 8 mm
9611991838		9611991851		25		8.00		
9611991839		9611991852		32		8.00		
9611991840		9611991853		40		8.00		
9611991841		9611991854		50		8.00		
9611991842		9611991855		65		8.00		
9611991843		9611991856		75		8.00		
9611991844		9611991857		80		8.00		
9611991845		9611991858		100		8.00		

Item No.	PPL EUR	Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)			
EPDM		Silicone (Q)		FPM		mm	A	B	C	Flange seal
9612402601		9612402611		9612402621		25	37.20	4.10	27.40	
9612402602		9612402612		9612402622		32	43.20	4.10	33.40	
9612402603		9612402613		9612402623		40	49.20	4.10	39.40	
9612402604		9612402614		9612402624		50	61.20	4.10	51.40	
9612402605		9612402615		9612402625		65	77.20	4.10	67.40	
9612402606		9612402616		9612402626		80	92.20	4.10	82.40	
9612402607		9612402617		9612402627		100	111.20	4.10	101.40	
9612402608		9612402618		9612402628		125	136.20	4.10	126.40	
9612402609		9612402619		9612402629		150	161.20	4.10	151.40	

Product code: 5063

1.6

Item No.	PPL EUR	Item No.	PPL EUR	Size DN	Dimension (mm)		Seal disc
NBR		EPDM		mm	A	B	
9611291131				10	28.00	3.00	
9611291141				15	34.00	3.00	
9611291151				20	44.00	3.00	
9611291161				25	52.00	3.00	
9611291171				32	58.00	3.00	
9611291181				40	65.00	3.00	
9611291191				50	78.00	3.00	
9611291201				65	95.00	3.00	
9611291221				80	110.00	3.00	
9611291241				100	130.00	3.00	
9611291251				125	160.00	3.00	
9611291261				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						10	36.20	5.10	10.00	
9611992020						15	36.20	5.10	16.00	
9611992021						20	36.20	5.10	20.00	
9611992022						25	52.70	5.10	26.00	
9611992023						32	52.70	5.10	32.00	
9611992024						40	52.70	5.10	38.00	
9611992025						50	66.20	5.10	50.00	
9611992026						65	93.20	5.10	66.00	
9611992027						80	108.20	5.10	81.00	
9611992028						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)			End cap with chain and NBR seal disc
					A	B	C	
1.4307 (304L)		1.4404 (316L)		mm				
9611291411		9612152301		10	38.00	19.00	28.00 x 1/8	
9611291421		9612152302		15	44.00	19.00	34.00 x 1/8	
9611291431		9612152303		20	54.00	21.00	44.00 x 1/6	
9611291441		9612152304		25	63.00	22.00	52.00 x 1/6	
9611291451		9612152305		32	70.00	22.00	58.00 x 1/6	
9611291461		9612152306		40	78.00	22.00	65.00 x 1/6	
9611291471		9612152307		50	92.00	23.00	78.00 x 1/6	
9611291481		9612152308		65	112.00	26.00	95.00 x 1/6	
9611291491		9612152309		80	127.00	30.00	110.00 x 1/4	
9611291511		9612152310		100	148.00	32.00	130.00 x 1/4	
9611291521		9612152311		125	178.00	36.00	160.00 x 1/4	
9611291531		9612152312		150	210.00	41.00	190.00 x 1/4	
9611291271		9612152201		10	38.00	19.00	28.00 x 1/8	
9611291281		9612152202		15	44.00	19.00	34.00 x 1/8	
9611291291		9612152203		20	54.00	21.00	44.00 x 1/6	
9611291301		9612152204		25	63.00	22.00	52.00 x 1/6	
9611291311		9612152205		32	70.00	22.00	58.00 x 1/6	
9611291321		9612152206		40	78.00	22.00	65.00 x 1/6	
9611291331		9612152207		50	92.00	23.00	78.00 x 1/6	
9611291341		9612152208		65	112.00	26.00	95.00 x 1/6	
9611291351		9612152209		80	127.00	30.00	110.00 x 1/4	
9611291371		9612152210		100	148.00	32.00	130.00 x 1/4	
9611291381		9612152211		125	178.00	36.00	160.00 x 1/4	
9611291391		9612152212		150	210.00	41.00	190.00 x 1/4	

1.6

Material Item No.	PPL EUR	Size DN	Dimension (mm)					n x K	Hose liner
			ØD4	ØD5	ØD7	L			
1.4404 (316L)		mm							
9615386501		15	28.30	12.00	19.00	40.00	3 x 6		
9615386502		20	36.30	16.00	23.00	40.00	3 x 6		
9615386503		25	43.80	23.00	29.00	53.00	3 x 8		
9615386504		32	49.80	29.50	35.00	53.00	3 x 8		
9615386505		40	55.80	35.00	41.00	63.00	3 x 9		
9615386506		50	68.30	46.00	53.00	68.00	3 x 10		
9615386507		65	85.60	65.00	70.00	77.00	3 x 10		
9615386508		80	99.40	80.00	85.00	87.00	3 x 12		
9615386509		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		25	80.00	63.00	24.00	27.00	
9612157705		32	90.00	70.00	31.00	34.00	
9612157706		40	105.00	84.00	32.00	43.00	
9612157707		50	120.00	97.00	45.00	53.00	
9612157708		65	140.00	113.00	60.00	68.00	
9612157709		80	160.00	132.00	74.00	83.00	
9612157710		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	
1.4404 (316L)					
					Half socket
9611295663		1/8	14.00	7.50	
9611295673		1/4	18.00	11.00	
9611295683		3/8	21.30	11.50	
9611295693		1/2	26.40	15.00	
9611295703		3/4	31.80	16.50	
9611295713		1	39.50	19.00	
9611295723		1 1/4	48.30	21.50	
9611295733		1 1/2	54.50	21.50	
9611295743		2	66.30	26.00	
9611295753		2 1/2	82.00	30.00	
9611295763		3	95.00	33.00	
Socket					
9611295443		1/8	14.00	17.00	
9611295453		1/4	18.00	25.00	
9611295463		3/8	21.30	26.00	
9611295473		1/2	26.40	34.00	
9611295483		3/4	31.80	36.00	
9611295493		1	39.50	43.00	
9611295503		1 1/4	48.30	48.00	
9611295513		1 1/2	54.50	48.00	
9611295523		2	66.30	56.00	
9611295533		2 1/2	82.00	65.00	
9611295543		3	95.00	71.00	
1.4571 (316Ti)					
					Welding male part
9611295884		1/8		30.00	
9611295894		1/4		30.00	
9611295904		3/8		30.00	
9611295914		1/2		35.00	
9611295924		3/4		40.00	
9611295934		1		40.00	
9611295944		1 1/4		50.00	
9611295954		1 1/2		50.00	
9611295964		2		55.00	
9611295974		2 1/2		60.00	
9611295984		3		65.00	

*On request

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 to access the information.

The information provided in this catalogue is given in good faith and Alfa Laval does not accept any responsibility for the accuracy of its content, or for any consequences that may arise from the use of the information supplied or materials described. Copyright© Alfa Laval 2021. All rights reserved.



Distributed by:

NELSON JAMESON INC.