

proflex[®]

italprotec
critical fluids solutions



ENGLISH

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The information contained hereafter does not relieve the user from making sure the supplied products are safe and suitable before using them.

PROFLEX Italian registered trademark of Italprotec.



Proflex® flexible hoses are used both for conveying corrosive fluids and toxic or hot chemicals and for transferring fluids in chemical, pharmaceutical and food industries.

The ever-growing demand of technologically advanced systems for fluids handling has supported the need and the development of fast and reliable flexible connections, removing potential dangers mainly caused by:

CORROSION, CONTAMINATION, TEMPERATURE and PRESSURE

Choosing the most suitable flexible hose is of capital importance in order to improve the quality of your products, eliminate your plant down-time due to a wrong choice, and above all guarantee the operators' safety when working.

FUNDAMENTAL CRITERIA WHEN CHOOSING A FLEXIBLE HOSE

- **Quality**

The high-quality materials Proflex® flexible hoses are made of ensure their suitability to several applications in chemical, pharmaceutical and food industries.

We can assist you with the choice of the most appropriate hose thanks to our technicians' skill and professionalism and to our 15-years-long experience.

- **Resistance to temperature**

Real working temperature often hinders the use of flexible hoses. The temperature rating indicated in our specifications represents the operating limits of the hose.

If the working temperature approaches such limits, we suggest considering other parameters as well, such as pressure, type of connection and danger of the conveyed material.

- **Resistance to pressure**

Maximum working pressure (WP) is derived from burst pressure (BP) with 4:1 or 3:1 safety factor as indicated in our specifications.

The operating working pressure is usually below maximum values, while being above minimum values for vacuum.

- **Materials**

*The wide range of available materials, such as PTFE, FEP, Silicone, UPE (high atomic weight Polyethylene), EPDM, EPM (ethylene-propylene copolymer), NBR, and so on, makes it easy to find a solution to **corrosion, abrasion and contamination** of conveyed materials.*

The outer cover should also be evaluated according to environmental and working conditions.

- **Inner tube**

The choice of the innercore may vary in line with:

- Requested flexibility
- Need of a self-draining hose
- Possible stagnation problems

Convuluted tubes are more flexible, whereas product stagnation can be avoided by using a smooth inner tube.

• **Fittings**

The variety of crimping (see page 25), lined (see page 31) or flare-thru (see page 34) designed fittings allows a shrewd choice in accordance with conveyed products, working conditions and other required features.

In particular, flare-thru designed fittings (e.g. on our TLCT hose) should be preferred to avoid the product stagnation. Stainless steel fittings assembled on Silicone flexible hoses have been specially designed to reduce stagnation to the minimum.

Overall, all the fittings have an anti-ejection coupling slot that guarantees the utmost safety of the operator.

• **Compliance with regulations**

The fittings and flexible hoses are made of materials that are in accordance with both national and international current regulations.

The certificates of conformity that are issued only refer to resins and materials that are being used.

INSPECTION AND TESTING

Visual and dimensional inspection

Each assembled hose undergoes a dimensional check to guarantee that it meets the required size, allowing for the agreed upon tolerance.

A visual inspection is carried out to ensure that the external cover is flawless and that no slits are present on the PTFE or FEP flaring on the fittings (if any).

Standard Tolerance

Up to 600 mm ± 5 mm

Up to 1.500 mm ± 10 mm

Over 1.500 mm ± 1%

Pressure Testing

It is performed on 100% of the assembled hoses. Each hose is tested with air in water for five minutes; the test is positive if no bubbles are visible.

Other tests, among which the hydraulic one, can be performed if agreed upon in advance.

Traceability

Each flexible hose is stamped at an end with the year and month of manufacturing, supplier's logo and a progressive number. Such data are filed, along with the tests that the hose has undergone. This allows to accurately trace the assembly date and to know all the characteristics of the hose.

Customized marking

A custom-built marking can be made on request on a stainless steel tag that is fastened to the flexible hose.

PED 97/23/CE directive

According to what prescribes the directive, all the flexible hoses illustrated in this catalogue are classified either in the schedule VIII (dangerous liquids) or in the schedule IX (non dangerous liquids), and according to art. 3 par. 3 are not subjected to CE marking.

For the applications not indicated in these schedules, we'll do a feasibility analysis to determine the correct category.

Proflex® flexible hoses are high-quality, utterly reliable products, they guarantee a long working life if they are properly installed, as described below.

To preserve the hose's features, its length should be appropriate, no torque allowed and its minimum bend radius complied with.

The hose ends should neither be bent nor twisted and their length should be five times the hose nominal bore (see picture A).

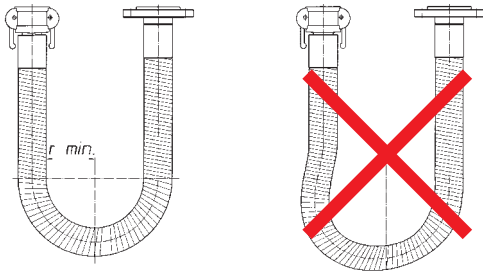
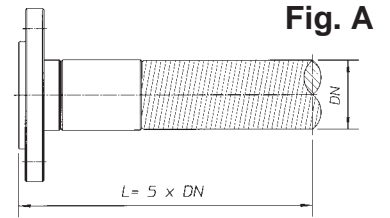


Fig. B

Flexible hoses should never be used below their bend radius (see picture B).

The given values on the minimum bend radius are to be complied with when installing a hose, otherwise this could result in its shorter working life.

In some instances, such as vacuum or high pressure, the hose can be bent only twice its minimum bend radius. When this occurs, a fixed elbow should be installed.

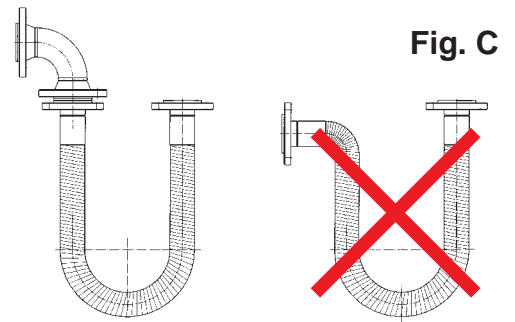


Fig. C

Bending the hose beyond the accepted limit could damage the assembly, can cause the hose's deflection and, eventually, its breaking (see picture C).

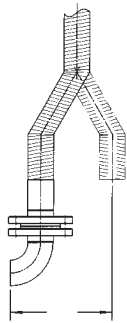
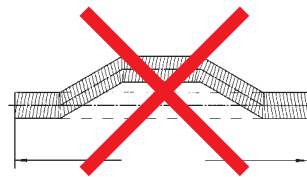


Fig. D

Flexible hoses should not be used as bellows, all axial movement should be avoided. The hose cannot be stretched nor compressed along its longitudinal axis when being installed (see picture D).



The hose should not be twisted during installation. This accounts for a huge number of broken hoses. Twisting can usually be avoided by mounting the hose or connecting it in a different way and by using swivel fittings (see picture E).

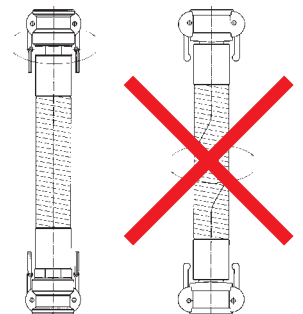


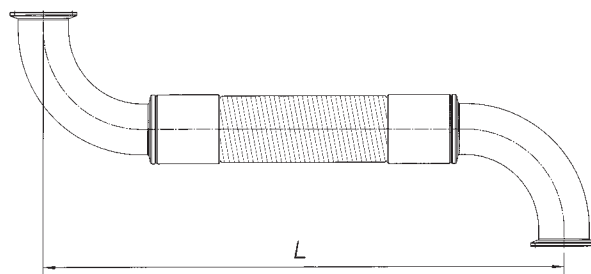
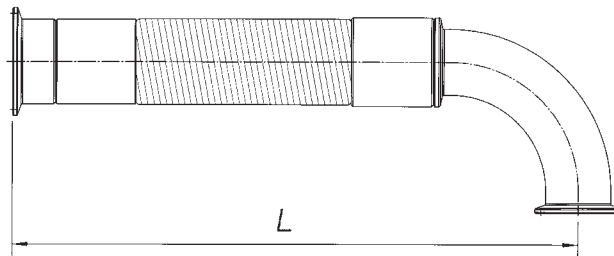
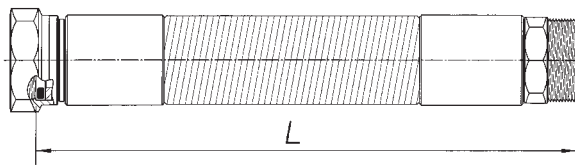
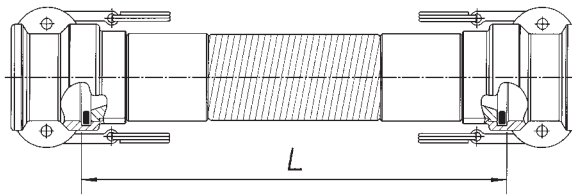
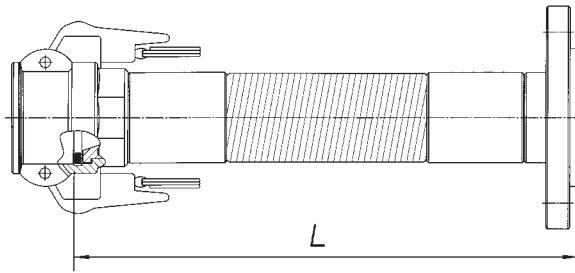
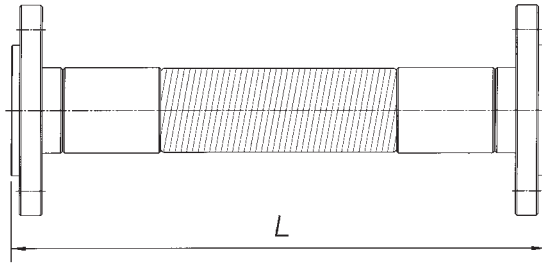
Fig. E

INSTALLATION

HOW TO MEASURE THE HOSE'S LENGTH

The length of flexible hoses should always be calculated from one end-fitting to the other. If Cam and Groove fittings or fittings with swivel joints are involved, the overall length will be worked out starting from the inner fitting or the gasket (if any).

Flexible hoses that are assembled with an elbow should be measured starting from its centre distance. Should the hose have two elbows, their orientation should be specified.



Features:

White FEP-lined smooth flexible hose for universal use and severe applications.

Odourless and chemically inert.

Can be cleaned in place and in autoclave up to +135°C.

Corrosion-resistant, it is non-stick and can be assembled in place.

Standards:

F.D.A. compliant Par. 21-177.1550

U.S. Pharmacopeia Cl. VI

TLCT design:

FEP tube

Multiple textile reinforcement

No. 2 helix wire supports

Green EPDM or F.D.A. compliant white external cover; it withstands ozone and abrasive products.

Temperature rating:

-40°C to +177°C

Availability:

From stock, in coils of up to 30 meters (up to size 2")

Applications:

Chemical, pharmaceutical, electronic, dairy, food, petrochemical industries

New:

SPEED-LOCK®, Autelok™, DIN or ANSI flanged, Clamp fittings are available with a zero-entrapment flare-thru design.



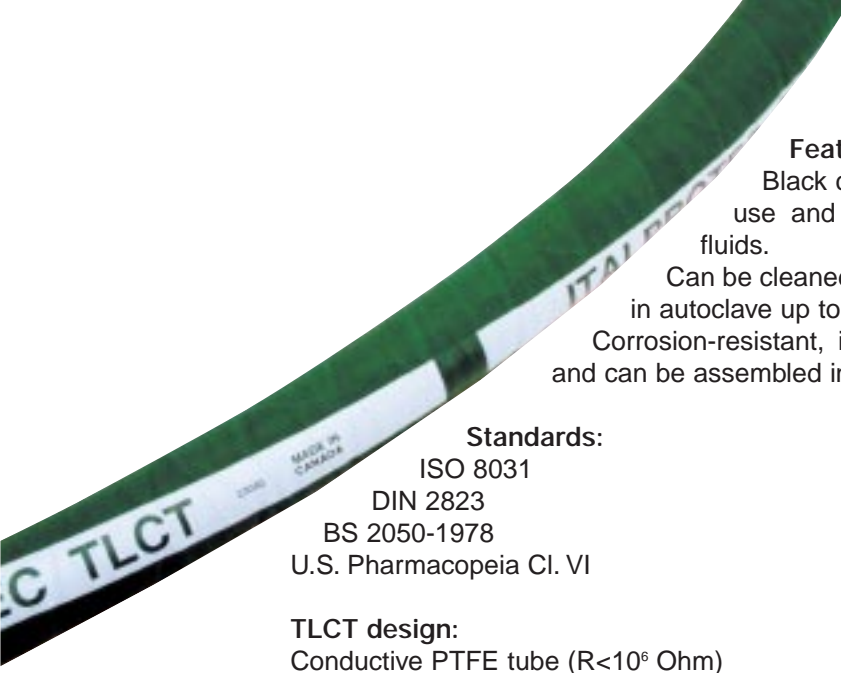
DN	ID	OD	Bend radius	WP@20°C ¹	BP@20°C	Vacuum ²	Weight
	mm	mm	mm	bar	bar	Torr	Kg/mt
15	12,7	23,1	65	35	147	10	0,52
20	19,0	31,7	85	35	140	10	0,92
25	25,4	38,1	121	32	126	10	1,12
32	31,8	44,5	178	22	112	10	1,46
40	38,1	52,1	229	20	94	10	1,78
50	50,8	67,3	294	17	84	10	2,23
65	63,5	81,3	457	13	63	20	3,50
80	76,2	94,0	559	10	49	35	3,72
100	101,6	119,4	864	10	42	50	5,36

1) WP will decrease by 1% for every 1°C temperature rise over 100°C.

2) Vacuum resistance will decrease by 1% for every 1°C temperature rise over 100°C.

Vacuum resistance is measured by bending the hose twice its minimum bend radius at +20°C.





Features:

Black conductive PTFE-lined smooth flexible hose for universal use and severe applications, when handling highly flammable fluids.

Can be cleaned in place and in autoclave up to +135°C.

Corrosion-resistant, it is non-stick and can be assembled in place.

Standards:

- ISO 8031
- DIN 2823
- BS 2050-1978
- U.S. Pharmacopeia Cl. VI

TLCT design:

- Conductive PTFE tube ($R < 10^6$ Ohm)
- Multiple textile reinforcement
- No. 2 helix wire supports
- Green EPDM external braid withstands ozone and abrasive products.

Temperature rating:

-40°C to +177°C

Availability:

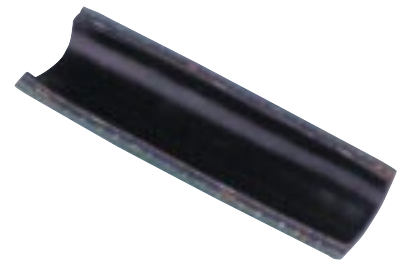
In coils of up to 30 meters.

Applications:

Chemical, petrochemical, textile industries.

New:

SPEED-LOCK®, Autolok™, DIN or ANSI flanged fittings are available with a zero-entrapment flare-thru design.



TLCT AS

DN	ID	OD	Bend radius	WP@20°C ¹	BP@20°C	Vacuum ²	Weight
	mm	mm	mm	bar	bar	Torr	Kg/mt
20	19,0	31,7	115	34	136	10	0,92
25	25,4	38,1	155	31	124	10	1,12
40	38,1	52,1	280	20	80	10	1,78
50	50,8	67,3	345	17	68	10	2,23

1) WP will decrease by 1% for every 1°C temperature rise over 100°C.

2) Vacuum resistance will decrease by 1% for every 1°C temperature rise over 100°C.

Vacuum resistance is measured by bending the hose twice its minimum bend radius at +20°C.

Features:

Multi-purpose hose for the delivery or inlet of several chemicals (acids, bases, solvents, paints, ink) and foodstuff (fat, oil, wine, beer, drinking water, milk, etc.).

Standards:

F.D.A. compliant Par. 21-177.1520
D.M. dated 21/03/1973 and amendments thereof.
BGA and KTW.

CHEMFLEX design:

UPE tube (high molecular weight Polyethylene).
Multiple textile reinforcement.
No. 1 helix wire support.
Black external cover in antistatic rubber ($R < 10^6$ Ohm).

Temperature rating:

From -35°C to $+100^{\circ}\text{C}$.
Resistant to saturated steam up to 130°C for 30 minutes maximum.

Availability:

From stock, in coils of 10, 20 or 40 meters.

Applications:

Chemical, petrochemical, pharmaceutical, food, electronic industries.

Special executions:

External cover with frets or corrugated profile to increase flexibility.

CHEMFLEX AS

UPE tube with a helically shaped black antistatic stripe ($R < 10^6$ Ohm, in accordance with DIN 2823 to help dissipating electrostatic charges.



DN	ID	OD	Bend radius	WP@20°C	BP@20°C	Vacuum ¹	Weight
	mm	mm	mm	bar	bar	Torr	Kg/mt
15	13,0	23,0	80	10	30	75	0,39
20	19,0	31,0	120	10	30	75	0,64
25	25,0	38,0	180	10	30	75	0,86
32	32,0	45,0	230	10	30	75	1,04
40	38,0	51,0	280	10	30	75	1,32
50	51,0	66,0	360	10	30	75	1,93
65	63,5	80,0	480	10	30	75	2,74
80	76,0	94,0	580	10	30	75	3,60
100	102,0	120,0	800	10	30	75	4,50

1) Vacuum resistance is measured by bending the hose twice its minimum bend radius at $+20^{\circ}\text{C}$.

Features:

White FEP-lined smooth flexible hose for universal use and severe applications. Odourless and chemically inert. Can be cleaned in place. And in autoclave up to + 135°C. Corrosion-resistant, it is non-stick and can be assembled in place.

Standards:

F.D.A. compliant Par. 21-177.1550
U.S. Pharmacopeia Cl. VI

PharmaSmooth design:

Inner liner in FEP. Multiple textile reinforcement. Nr. 2 helix wire supports. Grey EPDM extra smooth outer surface, enabling You to quickly and easily remove dirt on the over all cleanliness of Your operation.

Temperature rating:

Da -40°C a +177°C .

Availability:

From stock, in coils up to 30 meters (till size DN 2”).



Applications:

Pharmaceutical, chemical, cosmetic, electronic, food industries.

Standard fittings:

Tri-Clamp®, DIN 11851, SMS, IDF-ISS, Cam-lock, DIN-ANSI flanged , GAS-NPT threaded.

New:

Tri-Clamp®, DIN 11851, SMS, Cam-lock, flanged DIN - ANSI fittings are available with a zero-entrapment flare-thru design, Autolok® fitting available with a zero-entrapment flare-thru design prevent accidental unlocking.

Special execution:

SS304 or blu polypropylene external braid.

DN	iD	eD	Bend radius	WP@20°C ¹	BP@20°C	Vacuum ²	Weight
	mm	mm	mm	bar	bar	Torr	Kg/mt
15	12,7	23,1	64	35	147	10	0,52
20	19,0	31,7	83	35	140	10	0,92
25	25,4	38,1	121	32	126	10	1,12
32	31,8	44,5	178	22	112	10	1,46
40	38,1	52,1	229	21	94	10	1,78
50	50,8	67,3	293	18	84	10	2,23
65	63,5	81,3	458	14	63	10	3,50
80	76,2	94,0	559	10	49	10	3,72
100	101,6	119,4	865	10	42	10	5,36

- 1) WP will decrease by 1% for every 1°C temperature rise over 100°C.
- 2) Vacuum resistance will decrease by 1% for every 1°C temperature rise over 100°C; vacuum resistance is measured by bending the hose twice its minimum bend radius at + 20°C. WP, BP and vacuum ratings at 21°C.

Features:

Flexible hose with smooth white tube.
 The high-quality rubber it is composed of make it ideally resistant to all detergents.
 Flexible, handy, it accepts the smallest bend radius without kinking.

Standards:

F.D.A. compliant Par. 21-177.2600
 D.M. dated 21/03/1973 and amendments thereof.
 BgVV.
 Food grade RAL.

FOODFLEX design:

White NBR tube.
 Multiple highly resistant textile braids.
 No. 2 helix embedded wire support.
 External cover in corrosion resistant blue CR rubber; with-stands atmospheric agents and animal and vegetable fat.



Temperature rating:

From -20°C to +90°C.
 (resistant to saturated steam up to +130°C for 30 minutes maximum).

Availability:

From stock, in coils of up to 40 meters.

Applications:

Foodstuff and fat products, such as milk, dairy products, cheese, oil; in cosmetic and pharmaceutical industries in non-critical applications.

Special executions:

External cover in different colours and with frets or corrugated profile to increase flexibility.

FOODFLEX

DN	ID	OD	Bend radius	WP@20°C	BP@20°C	Vacuum ¹	Weight
	mm	mm	mm	bar	bar	Torr	Kg/mt
15	13,0	23,0	35	10	30	100	0,40
20	19,0	30,0	50	10	30	100	0,60
25	25,0	36,0	75	10	30	100	0,74
32	32,0	43,0	80	10	30	100	0,90
40	38,0	50,0	110	10	30	100	1,30
50	51,0	63,0	150	10	30	100	1,70
65	63,5	76,0	190	10	30	100	2,20
80	76,0	90,0	220	10	30	100	2,80
100	102,0	117,0	500	10	30	100	4,10

1) Vacuum resistance is measured by bending the hose twice its minimum bend radius at +20°C.

Features:

Flexible hose with smooth white tube.
The high-quality rubber it is composed of make it ideally resistant to all detergents.
Flexible, handy, it accepts the smallest bend radius without kinking.

Standards:

F.D.A. compliant Par. 21-177.2600
D.M. dated 21/03/1973 and amendments thereof.
BgVV Ctg. II

ALIFLEX design:

Non-toxic white EPDM tube.
Multiple textile supports.
Nr. 1 helix embedded wire support.
External cover in corrosion resistant red rubber; withstands atmospheric agents and animal and vegetable fat.



Temperature rating:

From -40°C to +120°C.
(resistant to saturated steam up to +140°C for 30 minutes maximum).

Availability:

In coils of up to 40 meters.

Applications:

Foodstuff and non-fat products, such as drinks, fruit juice, wine and beer. Cosmetic and pharmaceutical industries in non-critical applications.

Special executions:

External cover in different colours and with frets or corrugated profile to increase flexibility.

ALIFLEX

DN	ID	OD	Bend radius	WP@20°C	BP@20°C	Vacuum ¹	Weight
	mm	mm	mm	bar	bar	Torr	Kg/mt
15	13,0	23,0	65	10	30	75	0,38
20	19,0	31,0	95	10	30	75	0,65
25	25,0	38,0	125	10	30	75	0,92
32	32,0	45,0	160	10	30	75	1,10
40	38,0	51,0	190	10	30	75	1,45
50	51,0	66,0	255	10	30	75	2,10
65	63,5	80,0	350	10	30	75	2,95
80	76,0	93,0	420	10	30	75	3,60
100	102,0	119,0	550	10	30	75	4,80

1) Vacuum resistance is measured by bending the hose twice its minimum bend radius at +20°C.

Features:

Smooth flexible hose lined in PTFE.
 It is generally used in any application.
 Odourless, colourless and chemically inert.
 For demanding applications, with pulsating pressures or extreme bend radii, the hose is supplied with a stainless steel double braid.

Standards:

Virgin PTFE tube F.D.A. compliant Par. 21-177.1550
 Conductive PTFE tube BS 2050:1978 compliant.

PROLINE design:

Virgin PTFE tube.
 Conductive PTFE tube ($R < 10^6$ Ohm).
 AISI 304 stainless steel single or double external braid.

Temperature rating:

From -30°C to +200°C.

Availability:

Maximum length:
 DN 1/8" and DN 1/4" 100 meters
 DN 3/8" and DN 1/2" 75 meters
 DN 3/4" and DN 1" 30 meters

Applications:

Chemical, pharmaceutical, electronic, dairy, food, petrochemical, motor, textile, mechanical industries, etc.

Special executions:

External braid covered in transparent silicone.
 Antifriction and anti-spark rubber rings.



PROLINE

DN	ID	OD	PTFE thickness	Bend radius	WP@20°C ¹	BP@20°C	Vacuum ²	Weight
	mm	mm	mm	mm	bar	bar	Torr	Kg/mt
1/4"	6,5	9,2	0,76	76	220	670	10	0,09
3/8"	9,8	13,2	0,89	127	180	550	10	0,15
1/2"	13,1	16,7	0,89	153	160	480	10	0,25
3/4"	19,3	22,7	0,89	204	100	300	10	0,34
1"	25,6	29,5	0,89	305	80	240	30	0,46

1) WP will decrease by 1% for every 1°C temperature rise over 176°C.

2) Vacuum resistance will decrease by 1% for every 1°C temperature rise over 176°C.

Vacuum resistance is measured by bending the hose twice its minimum bend radius at +20°C.

Features:

Open pitch helically convoluted PTFE tube without external braid.
 It can be easily cleaned, it is totally self-draining and highly flexible.
 It is mainly used in applications with free fall fluids, light suction or as bellows for slight side movements.

Standards:

Virgin PTFE tube F.D.A. compliant Par. 21-177.1550
 Conductive PTFE tube BS 2050:1978 compliant.

PROWELL design:

Virgin PTFE tube.
 Conductive PTFE tube ($R < 10^6$ Ohm).

Temperature rating:

From -30°C to +200°C.

Availability:

Maximum length:

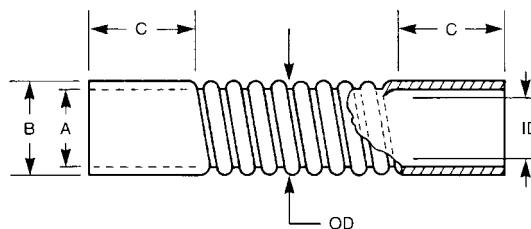
DN 15 and 20	70 meters	DN 50	40 meters
DN 25	40 meters	DN 65	30 meters
DN 32	20 meters	DN 80	20 meters
DN 40	50 meters	DN 100	15 meters

Applications:

Chemical, pharmaceutical, electronic, dairy, food, petrochemical, textile industries, etc.

Special executions:

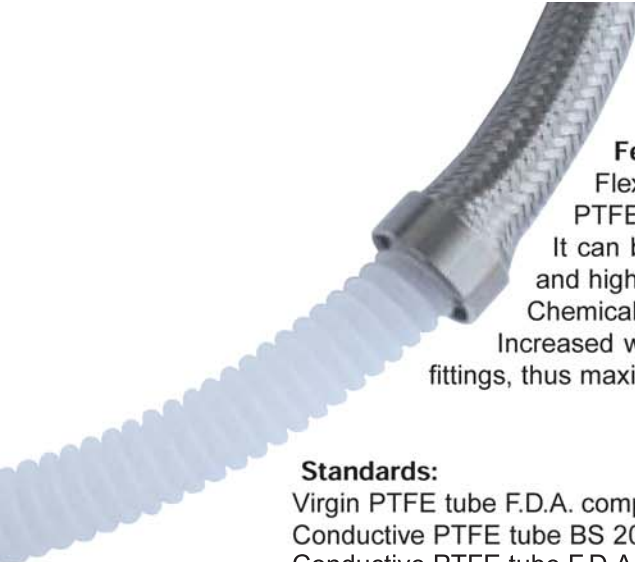
External braid covered in transparent silicone.
 Antifriction and anti-spark rubber rings.



DN	ID	OD	A	B	C	PTFE thickness ¹	Bend radius	WP@20°C	Vacuum ²	Weight
	mm	mm	mm	mm	mm	mm	mm	bar	Torr	Kg/mt
15	14	19	14	16	35	0,90	60	3,0	-	0,15
20	20	28	20	22	35	1,00	90	3,0	-	0,20
25	25	34	24	26	35	1,10	100	3,0	-	0,25
32	32	42	33	35	35	1,15	135	2,7	-	0,50
40	37	47	38	41	35	1,45	140	2,7	-	0,55
50	50	61	49	52	35	1,50	150	2,0	-	0,75
65	63	82	60	63	50	1,60	200	1,4	-	1,00
80	74	92	72	75	50	1,60	220	1,0	-	1,20
100	101	122	105	109	50	1,82	350	0,7	-	2,25

1) Wall thickness on the convolution.

2) WP will decrease by 1% for every 1°C temperature rise over 121°C.



Features:

Flexible hose with open pitch helically convoluted PTFE tube.
 It can be easily cleaned, it is completely self-draining and highly flexible.
 Chemically inert, it is non-stick and can be sterilised.
 Increased wall thickness to allow flaring on the majority of fittings, thus maximising flow rate.

Standards:

Virgin PTFE tube F.D.A. compliant Par. 21-177.1550
 Conductive PTFE tube BS 2050:1978 compliant.
 Conductive PTFE tube F.D.A. compliant Par. 21-178.3297

PROCHEM design:

Type	Tube	Braid
PROCHEM	Virgin PTFE	AISI 304
PROCHEM PP	Virgin PTFE	Polypropylene
PROCHEM AS	Conductive PTFE (R<10 ⁶ Ohm)	AISI 304
PROCHEM AS PP	Conductive PTFE (R<10 ⁶ Ohm)	Polypropylene

Temperature rating:

From -30°C to +200°C with stainless steel braid.
 From -30°C to +120°C with Polypropylene braid.

Availability:

Maximum length:

DN 15 and 20	70 meters	DN 40	50 meters	DN 80	20 meters
DN 25	40 meters	DN 50	40 meters	DN 100	15 meters
DN 32	20 meters	DN 65	30 meters		

Special executions:

In applications with pulsating pressures, full vacuum (max 42 Torr) or extreme bend radii, PROCHEM flexible hose can be supplied with a stainless steel helix wire support.
 External braid covered in transparent silicone.
 Antifriction and anti-spark rubber rings.

PROCHEM

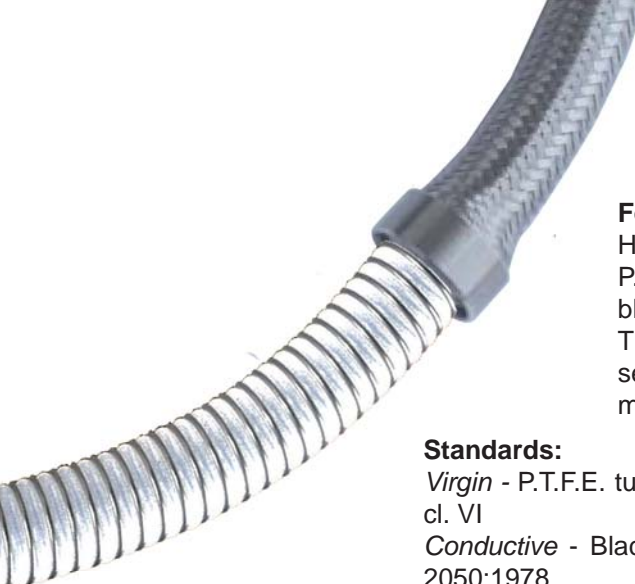
DN	ID	OD	PTFE thickness ¹	Bend radius	WP@20°C ²	BP@20°C	Vacuum ³	Weight
	mm	mm	mm	mm	bar	bar	Torr	Kg/mt
15	14	19	0,90	60	15	60	160	0,20
20	20	30	1,00	90	15	60	160	0,39
25	25	36	1,10	100	15	60	160	0,54
32	32	44	1,15	140	12	48	160	0,68
40	37	49	1,45	180	12	48	160	1,00
50	50	63	1,50	220	10	40	160	1,70
65	63	85	1,60	330	8	32	210	2,15
80	74	95	1,60	355	7	28	260	3,30
100	101	126	1,82	410	7	28	260	4,00

1) Wall thickness on the convolution.

2) WP will decrease by 1% for every 1°C rise over 121°C.

3) Vacuum resistance will decrease by 1% for every 1°C rise over 121°C.

Vacuum resistance measured by bending the hose twice its minimum bend radius at 20°C.



Features:

Helically convoluted flexible hose; increased P.T.F.E. wall thickness to allow flaring. Highly flexible, self-draining, it can be cleaned and is non-stick. The tube extends through the fittings: this maximises flow rates and eliminates contact of transferred materials with any metallic surface.

Standards:

Virgin - P.T.F.E. tube F.D.A compliant Par. 21- 177.1550 and U.S.P. cl. VI
Conductive - Black antistatic P.T.F.E. ($R < 10^6$ Ohm) compliant BS 2050:1978



SS304 wire placed between the convolutions for high-vacuum applications. SS304 stainless steel external braid.

Temperature rating:

from -30°C to +180°C (with SS304 braid)
 from -30°C to +120°C (with PP braid)

Application:

Chemical, pharmaceutical, food, cosmetic, electronic, petrochemical industries etc.

Fitting options:

Cam-lock, flanged DIN-ANSI, DIN 11851, SMS, IDF-ISS, GAS-NPT threaded.

News:

Flared ends on Autolok™ fittings with self-locking device.

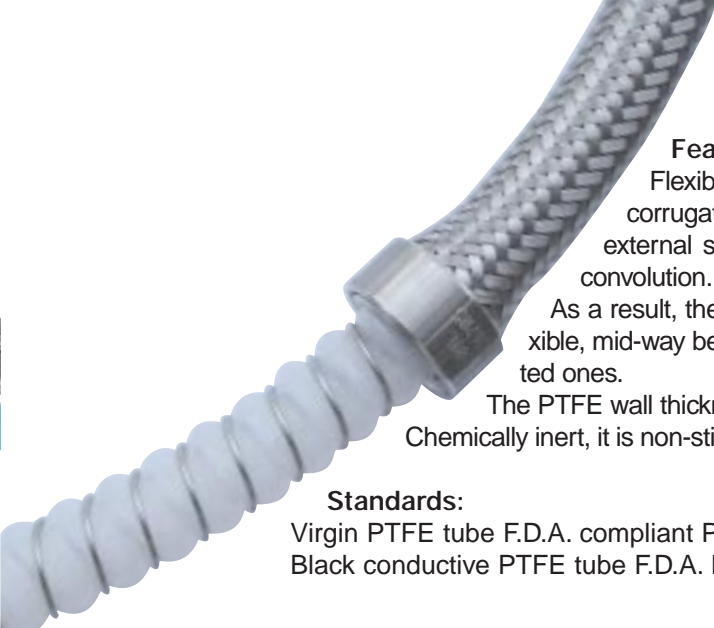
Special executions:

SS316 external braid and blue PP external braid.
 Rubber or traslucent silicone acid-proof covering.
 EPDM anti-rubbing rings placed each 250 mm on the external braind.
 Electrical traced insulation to keep hot the product.

PROCHEM SPIRA

DN	ID	OD	Thickness PTFE ¹	Bend radius	WP@20°C ²	BP@20°C ²	Vacuum	Weight
mm	mm	mm	mm	mm	bar	bar	Torr	Kg / m
15	12,7	19,0	0,8	25	35	140	150	0,22
19	19,0	29,5	1,0	55	35	140	150	0,54
25	19,0	29,5	1,1	85	35	140	150	0,89
32	31,8	44,0	1,2	100	35	140	150	1,18
40	37,0	49,0	1,5	120	35	140	150	1,71
50	50,0	65,0	1,5	165	25	100	150	2,61
65	63,0	85,5	1,6	230	14	56	150	3,44
80	74,0	97,5	1,6	260	12	48	200	4,71
100	99,0	125,0	1,8	400	10	40	200	5,55

1) Reference values at ambience temperature (20°C)
 2) Vacuum resistance measured by bending the hose twice its minimum bending radius at ambience temperature (20°C)

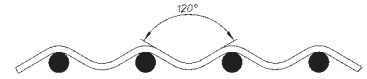


Features:

Flexible hose with low profile helically corrugated PTFE tube, 120° spread and external stainless steel helix between each convolution.

As a result, the hose is easier to clean, more flexible, mid-way between smooth tubes and convoluted ones.

The PTFE wall thickness allows both flaring and crimping on most types of fittings. Chemically inert, it is non-stick and can be easily cleaned in place (CIP) and steamed in place (SIP).



Standards:

Virgin PTFE tube F.D.A. compliant Par. 21-177.1550

Black conductive PTFE tube F.D.A. Par. 21-178.3297 and BS 2050:1978 compliant.

PROCHEM BP design:

Type	Tube	Braid
PROCHEM BP	Virgin PTFE	AISI 304
PROCHEM BP PP	Virgin PTFE	Polypropylene
PROCHEM BP AS	Conductive PTFE (R<10 ⁷ Ohm)	AISI 304
PROCHEM BP AS PP	Conductive PTFE (R<10 ⁷ Ohm)	Polypropylene

Temperature rating:

From -30°C to +200°C with stainless steel braid.

From -30°C to +120°C with Polypropylene braid.

Availability:

Maximum length:

DN 15 and 65	15 meters	DN 100	7 meters
DN 80	11 meters		

Special executions:

External braid covered in transparent silicone.

Antifriction and anti-spark rubber rings.

PROCHEM BP

DN	ID mm	OD mm	PTFE thickness ¹ mm	Bend radius mm	WP@20°C ² bar	Vacuum ³ Torr	Weight Kg/mt
15	9,5	19,0	1,00	38	41	10	0,33
20	14,3	25,0	1,25	51	35	10	0,45
25	20,6	32,0	1,65	70	31	10	0,70
32	25,4	38,0	1,65	82	27	10	0,82
40	31,7	48,0	1,65	100	23	10	1,50
50	44,4	60,0	1,65	140	20	10	2,10
65	50,8	73,0	1,65	178	16	60	2,58
80	63,5	89,0	1,65	230	14	60	3,30
100	89,0	114,0	2,00	300	10	60	5,30

1) Wall thickness on the convolution.

2) WP will decrease by 1% for every 1°C temperature rise over 121°C.

3) Vacuum resistance will decrease by 1% for every 1°C temperature rise over 130°C.

Vacuum resistance measured by bending the hose twice its minimum bend radius at 20°C.

Features:

Flexible hose with low profile helically convoluted and highly flexible PTFE tube.
Specially designed for the simple and safe crimping of hose shank fittings, both in stainless steel and lined in PFA or other materials, such as PTFE, PVDF, Polypropylene.

Standards:

Virgin PTFE tube F.D.A. compliant Par. 21-177.1550
Conductive PTFE tube BS 2050:1978 compliant.

ULTRAFLEX design:

Virgin PTFE tube.
Conductive PTFE tube ($R < 10^6$ Ohm).
AISI 304 external braid.

Temperature rating:

From -30°C to +180°C.

Availability:

Maximum length:

DN 15	24 meters
DN 20 and 25	18 meters
DN 32 and 40	14 meters
DN 50	11 meters

Applications:

Chemical, pharmaceutical, electronic, dairy, food, petrochemical industries.

Special executions:

External braid covered in transparent silicone.
Antifriction and anti-spark rubber rings.



ULTRAFLEX

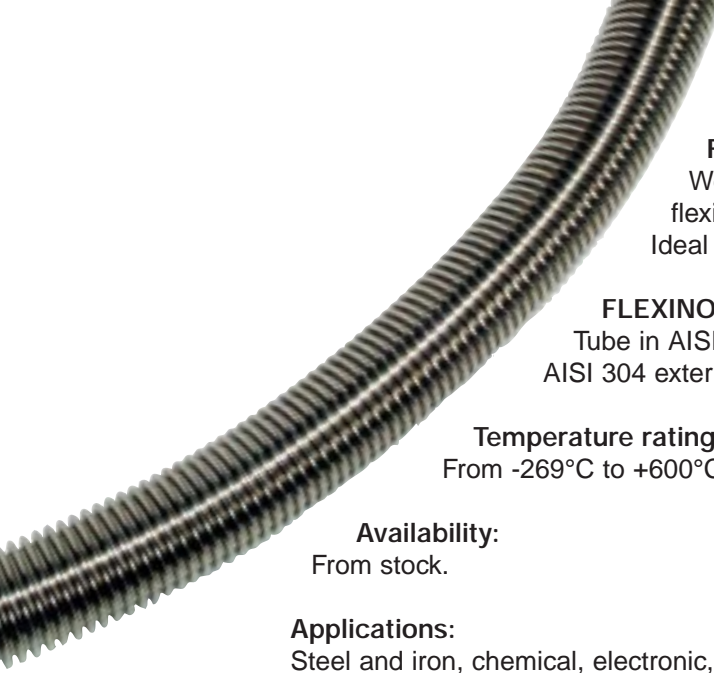
DN	ID mm	OD mm	PTFE thickness ¹ mm	Bend radius mm	WP@20°C ² bar	BP@20°C bar	Vacuum ³ Torr	Weight Kg/mt
15	12,7	19,0	0,90	25	103	310	400	0,31
20	19,0	25,0	0,90	65	69	207	400	0,43
25	25,4	33,0	1,00	90	46	138	450	0,65
32	31,8	41,0	1,00	125	34	103	550	0,75
40	38,1	48,0	1,00	150	30	90	550	0,80
50	50,8	59,0	1,10	200	23	69	600	1,00

1) Wall thickness on the convolution.

2) WP will decrease by 1% for every 1°C temperature rise over 100°C.

3) Vacuum resistance will decrease by 1% for every 1°C temperature rise over 100°C.

Vacuum resistance measured by bending the hose twice its minimum bend radius at 20°C.



Features:

Weldless tube with parallel convolutions, it is perfectly tight and highly flexible.

Ideal for conveying steam and hot fluids.

FLEXINOX design:

Tube in AISI 321 or AISI 316L stainless steel with parallel convolutions.
AISI 304 external braid.

Temperature rating:

From -269°C to +600°C.

Availability:

From stock.

Applications:

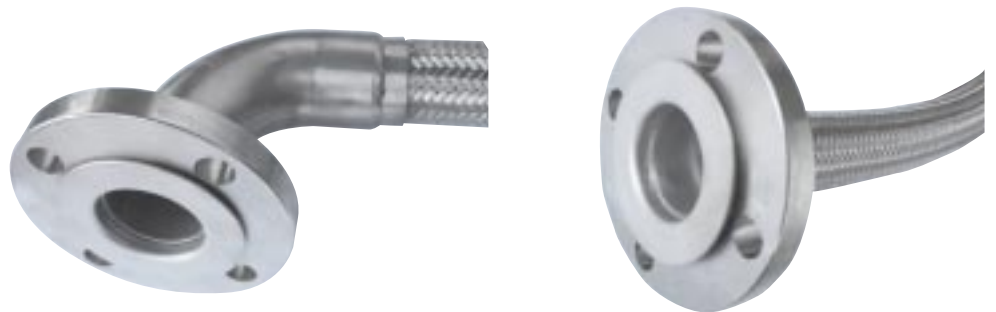
Steel and iron, chemical, electronic, petrochemical, textile, naval and motor industries.

Fitting options:

UNI-DIN or ANSI flanges, Cam and Groove, threaded, DIN 11851, DIN 28450, Clamp, buttweld, etc.

Special executions:

Smooth PFTE tube (MTL – Metal Lined) flared on the fittings for highly corrosive products (DN 1", 1 1/2", 2", 3").



FLEXINOX

DN	ID	OD	Static bend radius	Dynamic bend radius	WP@20°C	BP@20°C	Weight
	mm	mm	mm	mm	bar	bar	Kgmt
6	6,2	10,8	25	80	132	528	0,16
8	8,3	13,3	35	125	125	500	0,21
10	10,2	15,7	40	130	98	392	0,29
12	12,2	18,2	45	140	73	292	0,32
16	16,2	23,3	60	160	69	276	0,38
20	20,2	28,3	70	170	57	228	0,47
25	25,5	34,2	85	190	55	220	0,58
32	34,2	43,0	105	260	38	152	0,90
40	40,1	52,0	130	300	38	152	1,16
50	50,4	62,6	160	320	28	112	1,82
65	65,4	83,2	200	440	25	100	2,30
80	80,2	101,2	240	700	25	100	3,62
100	100,2	121,2	290	750	19	76	4,75
125	126,2	148,2	500	1.000	16	64	5,54
150	149,8	174,8	700	1.300	12	48	6,65

Features:

Internally and externally smooth flexible hose in “**Platinum Cured**” Silicone of high-purity bio-pharmaceutical grade.

It is generally used in biotechnology, in very critical medical and pharmaceutical applications.

Autoclavable, it can be cleaned in place (CIP) and steamed in place (SIP) up to +135°C.

Due to the permeation and diffusion of the silicone during cleaning and steaming of the hose, the mechanical and volumetric features of the silicone naturally degenerate. It is therefore advisable to check the hoses every total 150 hours’ cleaning and steaming.

Conformity:

Type	F.D.A. Par. 21 177.2600	U.S.P. Class VI	E.P. 3.1.9	ISO 10993	U.S.D.A.
STHT-C	✓	✓	✓	✓	✓
STHT-R	✓	✓	✓	✓	✓
STHT-W	✓	✓	✓	✓	✓

STHT design:

Type	Silicone	No. of plies	Wire support
STHT-C	Platinum Cured	-	no
STHT-R	Platinum Cured	1 in Nomex	no
STHT-W	Platinum Cured	4 in Nomex	yes

Temperature rating:

From -60°C to +260°C.

Availability:

STHT-C Coils of 7,62 – 15,24 and 30,48 meters.

STHT-R Coils of 15,24 meters.

STHT-W Pipes of 3,6 meters.

Special executions:

Coloured tape identification.

Only for STHT-C and R available with vulcanised or re-usable clamp.

STHT





STHT-C

Code ¹	ID mm	OD mm	Thk mm	Code ¹	ID mm	OD mm	Thk mm	Code ¹	ID mm	OD mm	Thk mm
STHT-C-012-0	0,30	0,61	0,15	STHT-C-156-1	4,00	5,50	0,79	STHT-C-500-1	12,70	14,30	0,79
STHT-C-020-0	0,51	0,91	0,20	STHT-C-156-2	4,00	7,10	1,58	STHT-C-500-2	12,70	15,90	1,58
STHT-C-025-0	0,64	1,20	0,28	STHT-C-156-3	4,00	8,70	2,38	STHT-C-500-3	12,70	17,40	2,38
STHT-C-030-0	0,76	1,70	0,45	STHT-C-156-4	4,00	10,30	3,17	STHT-C-500-4	12,70	19,10	3,17
STHT-C-030-2	0,76	4,10	1,57	STHT-C-156-5	4,00	13,50	4,76	STHT-C-500-5	12,70	22,20	4,76
STHT-C-040-0	1,00	2,20	0,58	STHT-C-156-6	4,00	16,70	6,35	STHT-C-500-6	12,70	25,40	6,35
STHT-C-058-0	1,50	1,90	0,23	STHT-C-187-1	4,70	6,40	0,79	STHT-C-625-1	15,90	17,40	0,79
STHT-C-062-1	1,60	3,20	0,79	STHT-C-187-2	4,70	7,90	1,58	STHT-C-625-2	15,90	19,10	1,58
STHT-C-062-2	1,60	4,70	1,58	STHT-C-187-3	4,70	9,50	2,38	STHT-C-625-3	15,90	20,60	2,38
STHT-C-062-3	1,60	6,40	2,38	STHT-C-187-4	4,70	11,10	3,17	STHT-C-625-4	15,90	22,20	3,17
STHT-C-062-4	1,60	7,90	3,17	STHT-C-187-5	4,70	14,20	4,76	STHT-C-625-5	15,90	25,40	4,76
STHT-C-062-5	1,60	7,90	4,76	STHT-C-187-6	4,70	17,40	6,35	STHT-C-625-6	15,90	28,50	6,35
STHT-C-062-6	1,60	14,20	6,35	STHT-C-250-1	6,40	7,90	0,79	STHT-C-750-1	19,10	20,60	0,79
STHT-C-078-1	2,00	3,60	0,79	STHT-C-250-2	6,40	9,50	1,58	STHT-C-750-2	19,10	22,20	1,58
STHT-C-078-2	2,00	5,20	1,58	STHT-C-250-3	6,40	11,10	2,38	STHT-C-750-3	19,10	23,80	2,38
STHT-C-078-3	2,00	6,70	2,38	STHT-C-250-4	6,40	12,70	3,17	STHT-C-750-4	19,10	25,40	3,17
STHT-C-078-4	2,00	8,30	3,17	STHT-C-250-5	6,40	15,80	4,76	STHT-C-750-5	19,10	28,50	4,76
STHT-C-078-5	2,00	11,50	4,76	STHT-C-250-6	6,40	19,00	6,35	STHT-C-750-6	19,10	31,70	6,35
STHT-C-078-6	2,00	14,70	6,35	STHT-C-312-1	7,90	9,50	0,79	STHT-C-875-1	22,20	23,80	0,79
STHT-C-093-1	2,40	4,00	0,79	STHT-C-312-2	7,90	11,10	1,58	STHT-C-875-2	22,20	25,40	1,58
STHT-C-093-2	2,40	5,50	1,58	STHT-C-312-3	7,90	12,70	2,38	STHT-C-875-3	22,20	26,90	2,38
STHT-C-093-3	2,40	7,10	2,38	STHT-C-312-4	7,90	14,30	3,17	STHT-C-875-4	22,20	28,50	3,17
STHT-C-093-4	2,40	8,70	3,17	STHT-C-312-5	7,90	17,40	4,76	STHT-C-875-5	22,20	31,70	4,76
STHT-C-093-5	2,40	11,90	4,76	STHT-C-312-6	7,90	20,60	6,35	STHT-C-875-6	22,20	34,90	6,35
STHT-C-093-6	2,40	15,10	6,35	STHT-C-375-1	9,50	11,10	0,79	STHT-C-1000-1	25,40	26,90	0,79
STHT-C-125-1	3,20	4,70	0,79	STHT-C-375-2	9,50	12,70	1,58	STHT-C-1000-2	25,40	28,50	1,58
STHT-C-125-2	3,20	6,40	1,58	STHT-C-375-3	9,50	14,30	2,38	STHT-C-1000-3	25,40	30,10	2,38
STHT-C-125-3	3,20	7,90	2,38	STHT-C-375-4	9,50	15,80	3,17	STHT-C-1000-4	25,40	31,70	3,17
STHT-C-125-4	3,20	9,50	3,17	STHT-C-375-5	9,50	19,00	4,76	STHT-C-1000-5	25,40	34,90	4,76
STHT-C-125-5	3,20	12,70	4,76	STHT-C-375-6	9,50	22,20	6,35	STHT-C-1000-6	25,40	38,10	6,35
STHT-C-125-6	3,20	15,80	6,35								



STHT-R

DN	ID mm	OD mm	Thickness mm	Bend radius mm	WP@20°C ² bar	BP@20°C bar
1/16"	1,60	7,90	3,15	On request	13,30	51,60
1/8"	3,20	9,50	3,15	On request	11,60	46,60
3/16"	4,70	11,40	3,35	On request	10,60	43,30
1/4"	6,40	12,70	3,40	25,40	11,30	38,30
3/8"	9,50	15,80	3,55	50,80	10,00	43,30
1/2"	12,70	22,20	3,80	76,20	9,30	33,30
5/8"	15,90	25,40	4,30	101,60	7,60	26,60
3/4"	19,10	28,60	4,40	101,60	6,60	23,30
7/8"	22,20	31,70	4,60	127,00	6,60	23,30
1"	25,40	34,90	4,60	152,40	4,30	15,00



STHT-W

DN	ID mm	OD mm	Bend radius mm	WP@20°C ³ bar	BP@20°C bar	Vacuum Torr
1/2"	12,7	21,1	76	10	34	10
3/4"	19,0	28,7	102	8	34	10
1"	25,4	35,0	152	8	34	10
1 1/2"	38,1	47,7	190	8	34	10
2"	50,8	60,4	203	7	24	10
2 1/2"	63,5	65,5	230	5	24	10
3"	76,2	85,8	254	5	24	10
4"	101,6	110,0	On request	On request	On request	On request

- 1) It can be assembled with crimping, re-usable or vulcanised fittings.
- 2) WP will decrease by 10% for every 93°C temperature rise.
- 3) WP will decrease by 5% for every 93°C temperature rise.

Features:

Propharm silicone hoses are used in various services. **Peroxide Cured** ones are generally used for food, beverage and non-critical pharmaceutical applications. **Platinum Cured** ones are the right choice when less contamination is required.

Propharm hoses are autoclavable, can be cleaned in place (CIP) and steamed in place (SIP) up to +135°C for about 60 minutes.

Due to the permeation and diffusion of the silicone during cleaning and steaming of the hose, the mechanical and volumetric features of the silicone naturally degenerate. It is therefore advisable to check the hoses every total 150 hours' cleaning and steaming.

Standards:

Type	FDA Par.21 177.2600	U.S.P. Class VI	E.P. 3.1.9	D.M. 21/03/73	BGA Class XVA	French Official Journal 25/11/92
AF	✓	-	-	✓	✓	✓
AF-HP	✓	✓	✓	✓	✓	✓
CF	✓	-	-	✓	✓	✓
CF-HP	✓	✓	✓	✓	✓	✓
EF	✓	-	-	✓	✓	✓
EF-HP	✓	✓	✓	✓	✓	✓
VS	✓	-	-	-	✓	-
VX	✓	-	-	-	✓	-
VD	✓	-	-	-	✓	-

Propharm design:

Type	Silicone	No. of plies	Wire support
AF	Peroxide Cured	4 in Polyester	no
AF-HP	Platinum Cured	4 in Polyester	no
CF	Peroxide Cured	4 in Polyester	yes
CF-HP	Platinum Cured	4 in Polyester	yes
EF	Peroxide Cured	4 in Polyester	yes
EF-HP	Platinum Cured	4 in Polyester	yes
VS	Peroxide Cured	1 in Polyester	no
VX	Peroxide Cured	4 in Polyester	yes
VD	Peroxide Cured	4 in Polyester	yes

Temperature rating:

From -60°C to +180°C.

Availability:

From stock.

4 meters long for AF, AF-HP, CF, CF-HP, EF, EF-HP, VX, VD.

Coils of 10 and 20 meters for VS.

PROPHARM

AF



DN	ID	OD	Bend radius	WP@20°C	BP@20°C	Vacuum
	mm	mm	mm	bar	bar	Torr
1/2"	12,7	22,5	205	8	32	200
3/4"	19,0	28,8	255	7	28	300
1"	25,4	35,2	305	6	24	400
1¼"	31,8	41,6	-	5	20	450
1½"	38,1	47,8	-	5	20	550
2"	50,8	60,6	-	4	16	550
2½"	63,5	73,3	-	3	12	700
3"	76,2	86,0	-	3	12	700
4"	101,6	114,0	-	2	8	700

WP will decrease by 1% for every 1°C temperature rise over 100°C.

CF



DN	ID	OD	Bend radius	WP@20°C	BP@20°C	Vacuum
	mm	mm	mm	bar	bar	Torr
1/2"	12,7	25,1	75	10	40	120
3/4"	19,0	31,4	85	10	40	120
1"	25,4	37,8	105	10	40	120
1¼"	31,8	44,2	120	10	40	120
1½"	38,1	50,5	140	10	40	120
2"	50,8	63,2	250	9	36	120
2½"	63,5	75,9	300	6	24	175
3"	76,2	88,6	390	5	20	175
4"	101,6	114,0	880	4	10	215

WP will decrease by 1% for every 1°C temperature rise over 100°C.

EF



DN	ID	OD	Bend radius	WP@20°C	BP@20°C	Vacuum
	mm	mm	mm	bar	bar	Torr
1/2"	12,7	25,1	60	10	40	120
3/4"	19,0	31,4	70	10	40	120
1"	25,4	37,8	85	10	40	120
1¼"	31,8	44,2	95	10	40	120
1½"	38,1	50,5	120	10	40	120
2"	50,8	63,2	190	9	9	120
2½"	63,5	75,9	235	6	6	175
3"	76,2	88,6	315	5	5	175
4"	101,6	114,0	705	4	4	215

WP will decrease by 1% for every 1°C temperature rise over 100°C.

VS



DN	ID	OD	Bend radius	WP@20°C	BP@20°C
	mm	mm	mm	bar	bar
1/4"	6,3	13,2	40	9,0	27
5/16"	7,9	15,0	45	7,5	21
3/8"	9,5	16,6	55	7,0	21
1/2"	12,7	20,3	70	5,0	15
5/8"	15,8	24,5	85	4,0	12
3/4"	19,0	27,9	95	3,5	10
7/8"	22,2	31,3	110	3,0	9
1"	25,4	34,5	135	3,0	9
1 1/4"	31,8	40,8	160	2,0	6

WP will decrease by 1% for every 1°C temperature rise over 100°C.

VX



DN	ID	OD	Bend radius	WP@20°C	BP@20°C	Vacuum
	mm	mm	mm	bar	bar	Torr
1/2"	12,7	22,2	75	11	33	120
3/4"	19,0	28,2	90	9	27	120
1"	25,4	34,2	105	8	24	120
1 1/4"	31,8	41,2	130	7	21	120
1 1/2"	38,1	47,2	155	6	18	120
2"	50,8	61,2	280	5	15	120
2 1/2"	63,5	72,2	320	5	15	175
3"	76,2	85,2	470	4	12	175
4"	101,6	111,2	945	2	6	215

WP will decrease by 1% for every 1°C temperature rise over 100°C.

VD



DN	ID	OD	Bend radius	WP@20°C	BP@20°C	Vacuum
	mm	mm	mm	bar	bar	Torr
1/2"	12,7	23,6	65	16	48	80
3/4"	19,0	30,6	80	13	39	80
1"	25,4	36,6	90	12	36	80
1 1/4"	31,8	43,6	110	11	33	80
1 1/2"	38,1	49,6	130	10	30	80
2"	50,8	62,6	210	9	27	80
2 1/2"	63,5	74,6	265	7	21	150
3"	76,2	87,6	380	6	18	150
4"	101,6	113,6	800	4	12	180

WP will decrease by 1% for every 1°C temperature rise over 100°C.

Proflex fittings have a “two-piece” design (hose shank + crimping ferrule). The hose shank is attached to the hose through the swaging of the ferrule. This system, along with a correct installation of the hose and the respect of its working conditions, allow the flexible hoses to be used in the most severe applications without the fittings “slipping” out of the hose.

Fittings are made in AISI 316 stainless steel to convey most fluids. Fittings for pharmaceutical and food applications are supplied in AISI 316L or AISI 304L stainless steel for their low level of Carbon ($\leq 0.03\%$).

Sanitary fittings, after being lathed, are mechanically finished at $\leq 0.4 \mu\text{m}$ and then electro-polished on demand. Electro-polishing improves their roughness, removes superficial impurities and reduces particle pollution from 10 to 40 times. The finishing of the contact surfaces is of capital importance in pharmaceutical industry, since it is necessary to prevent stagnation and remove any micro-roughness where germs and bacteria could proliferate.

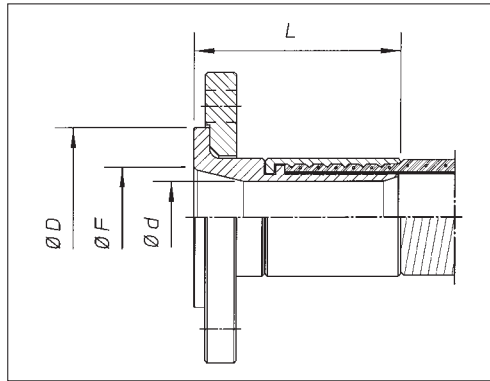


Superior metal fittings such as Hastelloy, Titanium, Monel can be supplied on request.

CRIMPING FITTINGS

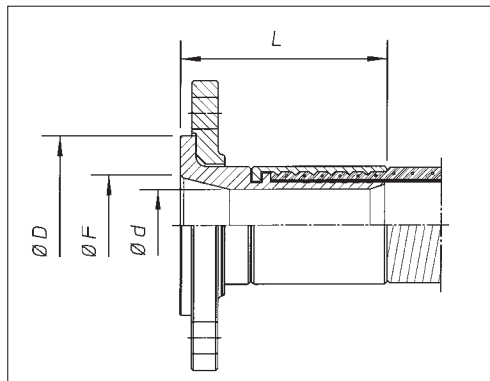
	TLCT	TLCT-AS	CHEMFLEX	PHARMAFLEX	FOODFLEX	ALIFLEX	PROLINE	PROWELL	PROCHEM	PROCHEM BP	ULTRAFLEX	STHT R and W	PROPHARM
DIN flanged	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
ANSI flanged	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
AUTOLOK “D”	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
AUTOLOK “C”	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
SPEED-LOCK “D”	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
SPEED-LOCK “C”	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
SPEED-LOCK “E”	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
Buttweld	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
Clamp	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
45° Clamp	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
90° Clamp	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
Reducing clamp	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
DIN 11851 with round nut	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
Threaded DIN 11851	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
SMS with round nut	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
Threaded SMS	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
Female threaded	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
Male threaded	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
Female DIN 28450	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓
Sight glass	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓

Fitting in 316 SS with UNI-DIN flange¹



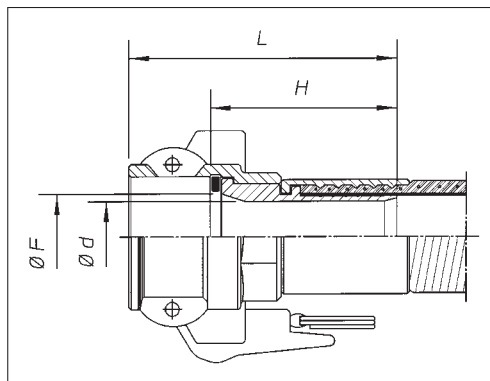
DN	L	F	D	d
15	52	12	35	9
20	67	20	47	15
25	67	26	58	21
32	69	32	64	28
40	75	40	75	33
50	85	50	92	45
65	105	65	105	58
80	130	80	127	69
100	140	100	158	96

Fitting in 316 SS with ANSI flange¹



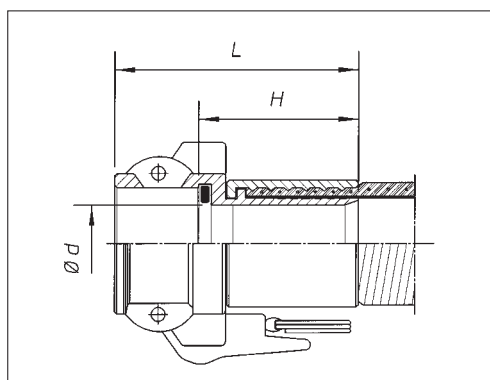
DN	L	F	D	d
15	52	12	35	9
20	67	20	47	15
25	67	26	58	21
32	69	32	64	28
40	75	40	75	33
50	85	50	92	45
65	105	65	105	58
80	130	80	127	69
100	140	100	158	96

Loose AUTOLOK "D" in 316 SS with PTFE/Viton gasket



DN	L	H	F	d
20	88	64	20	15
25	105	76	26	21
32	110	75	32	28
40	115	79	38	33
50	131	88	45	45
65	150	106	58	58
80	172	126	73	69
100	175	126	101	96

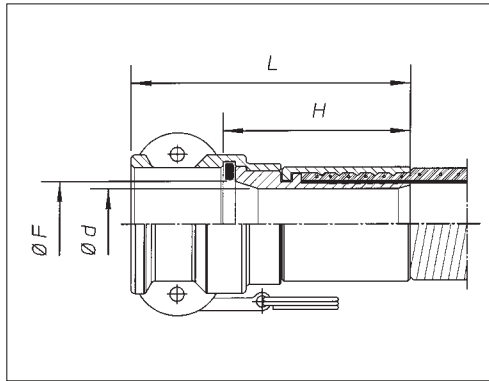
Fixed AUTOLOK "C" in 316 SS with PTFE/Viton gasket



DN	L	H	d
20	76	51	14
25	82	53	20
32	88	53	26
40	90	54	32
50	103	60	45
65	119	75	55
80	125	79	67
100	169	120	90

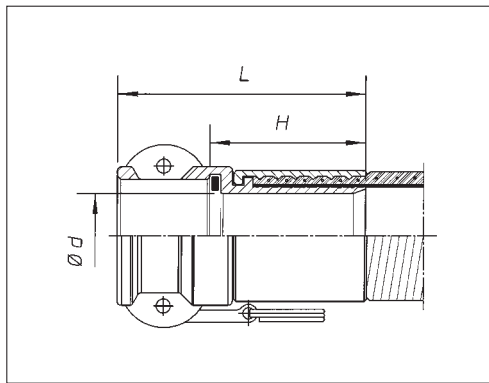
1) See page 46 for flange type and dimensions.

Loose SPEED-LOCK "D" in 316 SS with PTFE/Viton gasket



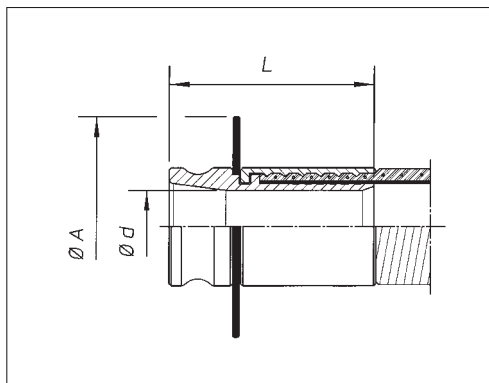
DN	L	H	F	d
20	88	64	20	15
25	105	76	26	21
32	110	75	32	28
40	115	79	38	33
50	131	88	45	45
65	150	106	58	58
80	172	126	73	69
100	175	126	101	96

Fixed SPEED-LOCK "C" in 316 SS with PTFE/Viton gasket



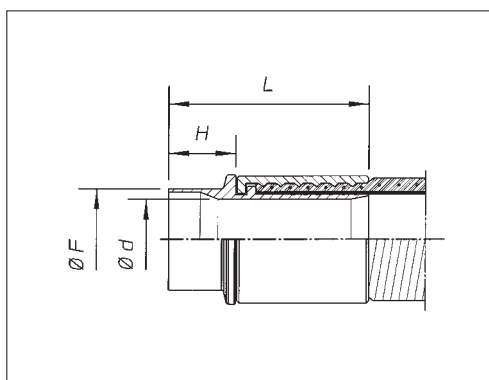
DN	L	H	d
15	65	52	10
20	80	56	14
25	85	56	20
32	91	57	26
40	95	59	32
50	107	64	45
65	121	77	55
80	140	94	67
100	180	130	90

Fixed SPEED-LOCK "E" in 316 SS with guard



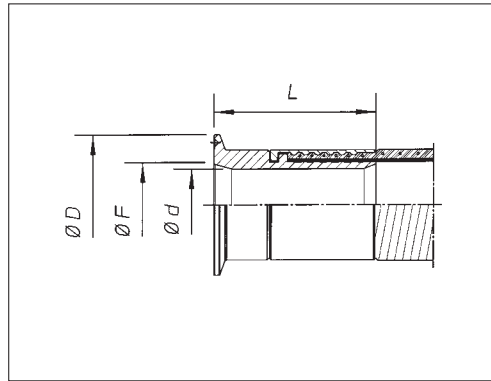
DN	L	d	A
15	66	15	70
20	86	19	70
25	92	24	80
32	99	31	90
40	101	37	90
50	120	46	110
65	132	56	130
80	155	73	130
100	158	102	170

Buttweld in 316L SS



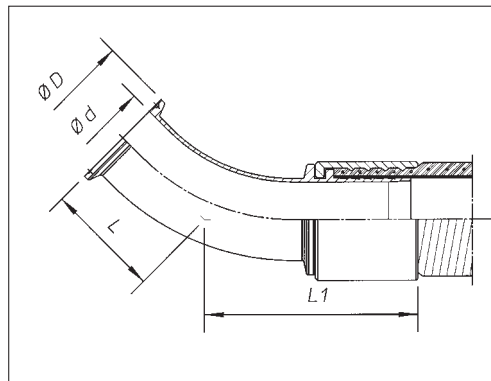
DN	L	H	F	d
15	52	20	12,7	9
20	65	22	19,0	15
25	65	22	25,4	21
40	65	22	38,1	34
50	75	22	50,8	46
65	93	30	63,5	59
80	110	30	76,2	69
100	158	35	101,6	96

Clamp in 316L SS



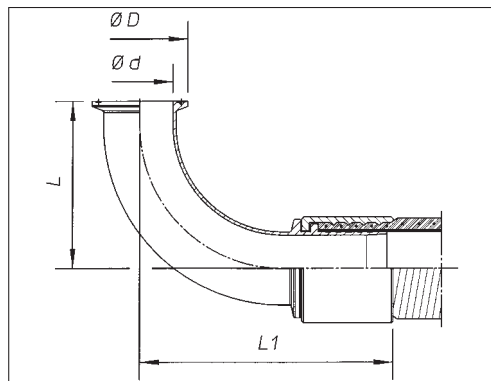
DN	L	D	F	d
15	42	25,4	9	9
20	58	25,4	15	15
25	58	50,4	22	20
32	58	50,4	32	28
40	65	50,4	35	33
50	75	63,9	48	46
65	83	77,4	61	59
80	102	90,9	74	71
100	102	118,9	97	96

45° clamp in 316L SS



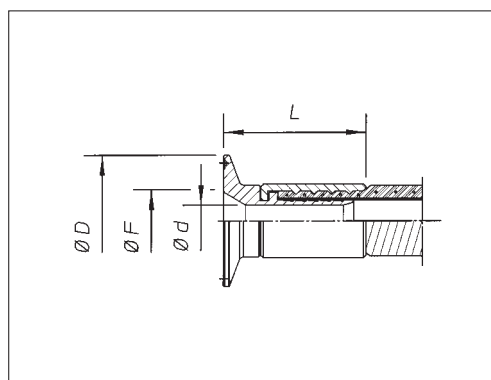
DN	L	L1	D	d
15	27	55	25,4	9
20	27	70	25,4	15
25	43	73	50,4	22
40	54	96	50,4	35
50	71	129	63,9	48

90° clamp in 316L SS



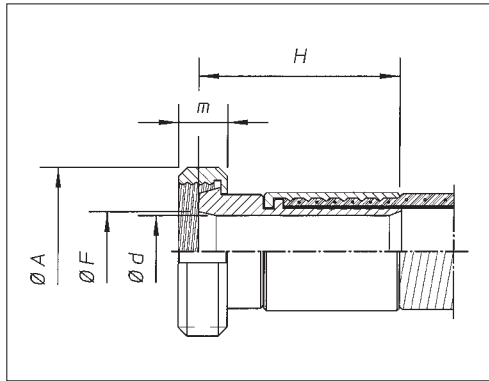
DN	L	L1	D	d
15	53	76	25,4	9
20	53	91	25,4	15
25	65	105	50,4	22
40	87	130	50,4	35
50	116	202	63,9	48

Reducing clamp in 316L SS



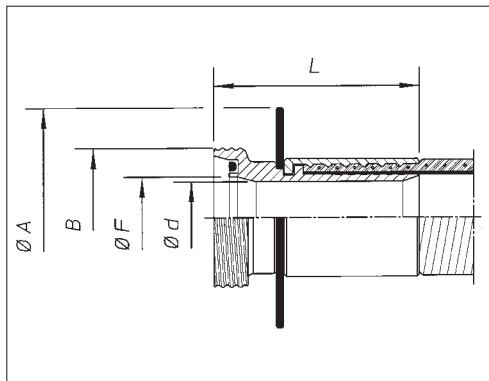
DN	L	D	F	d
25x15	48	50,4	22	9
25x20	58	50,4	22	15
40x20	65	50,4	35	15
40x25	65	50,4	35	20
50x20	65	63,9	48	15
50x25	65	63,9	48	20
50x40	65	63,9	48	33

DIN 11851 fitting in 304L-316L¹ SS with round nut in 304L



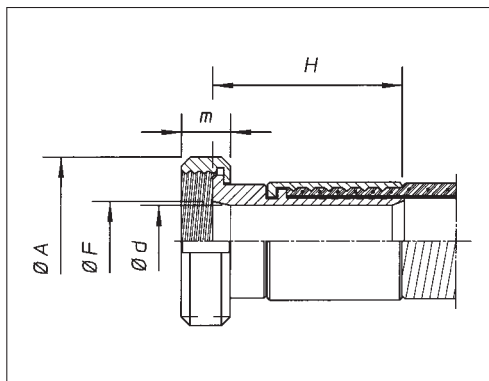
DN	H	A	F	d	m
15	50	44	15	9	15
20	72	54	20	15	17
25	72	63	26	21	18
32	72	70	32	28	18
40	77	78	38	34	18
50	82	92	50	46	19
65	93	112	66	59	21
80	118	127	80	69	25
100	125	148	100	96	26

Threaded DIN 11851 fitting in 304L-316L¹ SS with guard



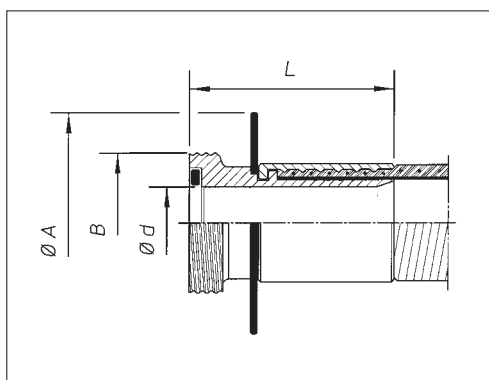
DN	L	A	B	F	d
15	50	70	34-8	15	9
20	72	70	44-8	19	15
25	72	80	52-6	25	21
32	72	90	58-6	32	28
40	77	100	65-6	39	34
50	91	110	78-6	50	46
65	103	130	95-6	65	59
80	125	150	110-4	80	69
100	135	170	130-4	100	96

SMS fitting in 316L SS with round nut in 304L



DN	H	A	F	d	m
25	59	51	22	21	20
40	65	74	35	33	25
50	79	84	48	46	26
65	85	100	60	58	30
80	110	114	72	69	32
100	120	150	98	96	45

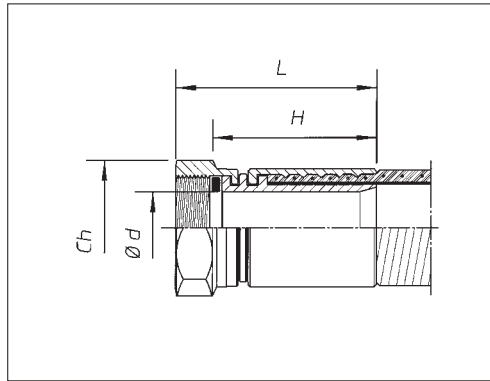
Threaded SMS fitting in 316L SS with guard



DN	L	A	B	d
25	72	70	40-6	21
40	77	90	60-6	34
50	82	100	70-6	46
65	93	130	85-6	59
80	118	130	98-6	69
100	125	170	120-4	96

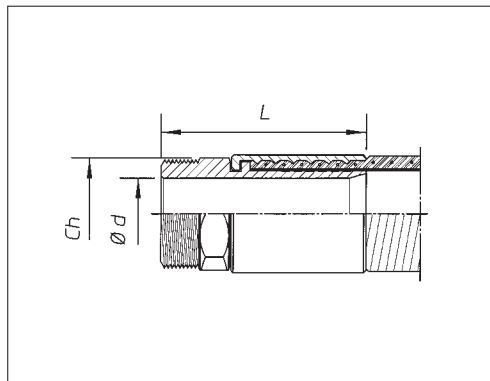
1) Fittings in AISI 304L available from DN 50 on.

BSPP¹ female threaded fitting in 316 SS with swivel nut



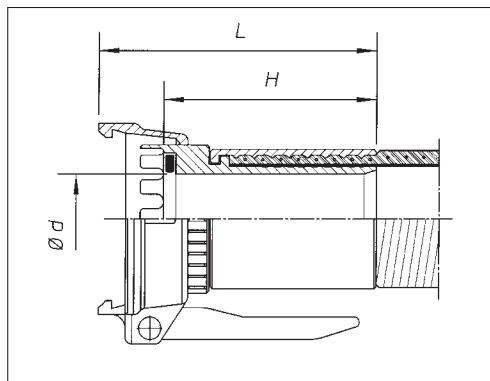
DN	L	H	d	Ch
1/2"	53	36	9	27
3/4"	69	50	15	32
1"	72	50	21	41
1 1/4"	76	52	28	46
1 1/2"	81	54	34	55
2"	94	64	45	65
2 1/2"	114	74	59	85
3"	130	90	69	95
4"	130	90	96	130

BSPT² male threaded fitting in 316 SS



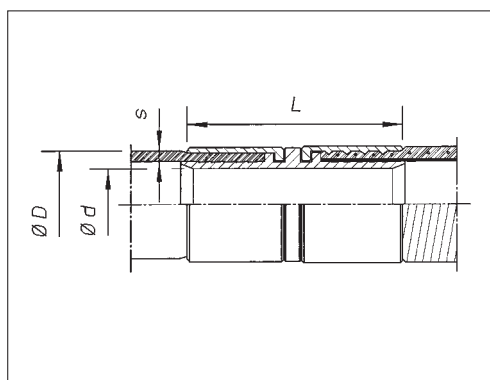
DN	L	d	Ch
1/2"	60	9	24
3/4"	73	15	27
1"	77	21	36
1 1/4"	75	28	46
1 1/2"	82	34	50
2"	97	45	65
2 1/2"	105	59	80
3"	125	69	95
4"	135	96	120

DIN 28450 fitting in 316 SS with loose nut and PTFE gasket



DN	L	H	d
50	115	85	46
80	145	115	69

PFA/FEP sight glass with fitting in 316L SS



DN	L	D	s	d
20	95	25	3,2	15
25	95	28	3,2	21
40	100	41	3,2	34
50	120	53	3,2	46

1) 60° or NPT thread available
2) NPT thread available

Proflex PFA-lined fittings are as safe and reliable as crimping ones; moreover, their lining makes them the right choice when highly corrosive chemicals are present.

Unlike PTFE, PFA lining is perfectly anchored to the stainless steel fitting, both on the hose shank (thanks to clearance holes) and on the dovetail sealing surface. Thanks to these anchorages the fittings can be used with full vacuum.

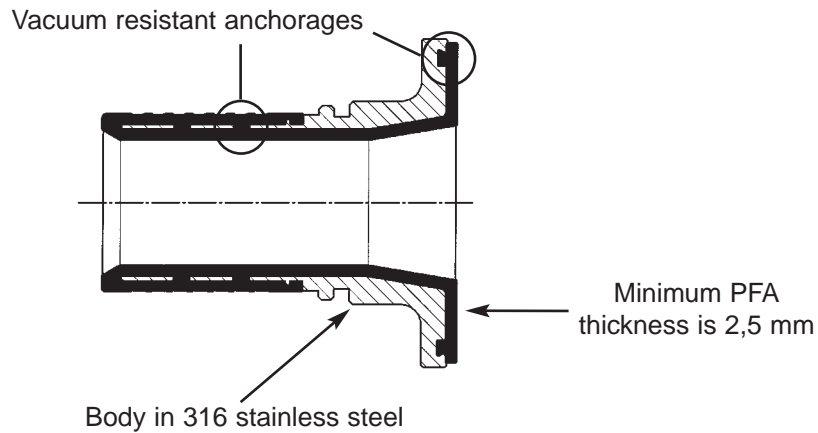
The lining (through a **transformolding** process) is very precise and this assures a uniform flow-rate even in low nominal bore fittings.

Conductive PFA-lined fittings are available when it is necessary to dissipate electrostatic charges, in particular for highly flammable materials.

Fittings in lathed plastic materials (PVDF, PTFE, PP, among others) or Polypropylene lined fittings are made on request.

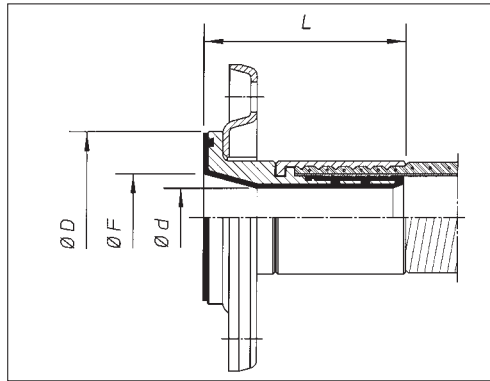


LINED FITTINGS



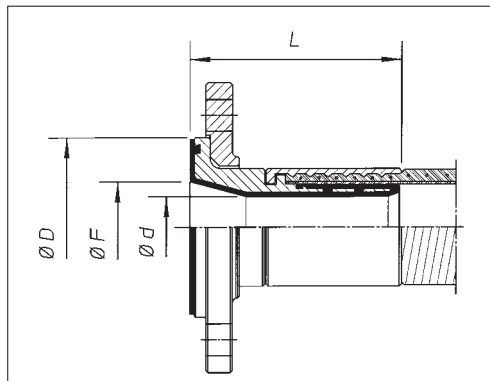
	TLCT	TLCT-AS	CHEMFLEX	PHARMAFLEX	FOODFLEX	ALIFLEX	PROLINE	PROWELL	PROCHEM	PROCHEM BP	ULTRAFLEX	STHT	PROPHARM
DIN flanged	✓	✓	✓	✓			✓			✓	✓		
ANSI flanged	✓	✓	✓	✓			✓			✓	✓		
AUTOLOK "D"	✓	✓	✓	✓			✓			✓	✓		
SPEED-LOCK "D"	✓	✓	✓	✓			✓			✓	✓		
SPEED-LOCK "E"	✓	✓	✓	✓			✓			✓	✓		
Female DIN 28450	✓	✓	✓	✓						✓	✓		
DIN 11851 with round nut	✓	✓	✓	✓			✓			✓	✓		
SMS with round nut	✓	✓	✓	✓			✓			✓	✓		

Fitting in 316 SS-PFA with UNI-DIN flange¹



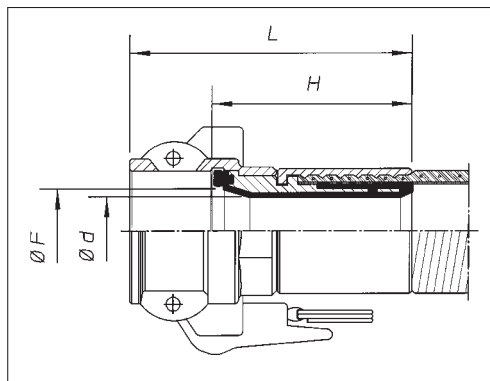
DN	L	D	F	d
20	64	47	15	12
25	69	58	20	16
32	80	68	28	22
40	90	78	40	27
50	102	92	46	39
65	115	105	57	51
80	140	127	66	60
100	150	158	90	87

Fitting in 316 SS-PFA with ANSI flange¹



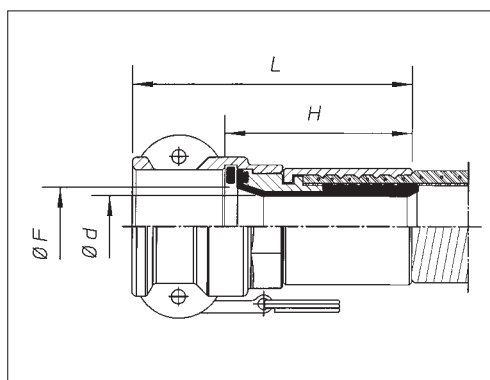
DN	L	D	F	d
20	64	47	15	12
25	69	58	20	16
32	80	68	28	22
40	90	78	40	27
50	102	92	46	39
65	115	105	57	51
80	140	127	66	60
100	150	158	90	87

Loose AUTOLOK "D" in 316 SS-PFA with FEP/Silicone gasket



DN	L	H	F	d
20	91	67	15	12
25	105	76	20	16
32	117	83	28	22
40	130	94	37	27
50	150	107	45	39
65	164	120	57	51
80	188	142	66	60
100	206	157	96	87

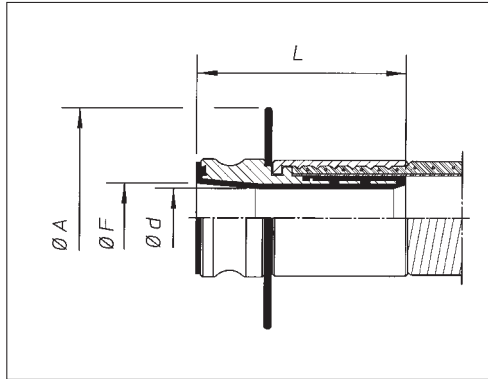
Loose SPEED-LOCK "D" in 316 SS-PFA with FEP/Silicone gasket



DN	L	H	F	d
20	91	67	15	12
25	105	76	20	16
32	117	83	28	22
40	130	94	37	27
50	150	107	45	39
65	164	120	57	51
80	188	142	66	60
100	206	157	96	87

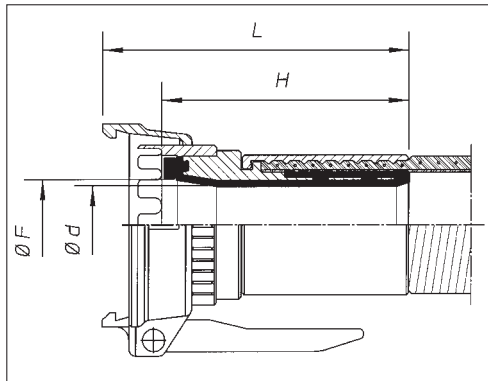
1) See page 46 for flange type and dimensions.

Fixed SPEED-LOCK "E" in 316 SS-PFA with guard



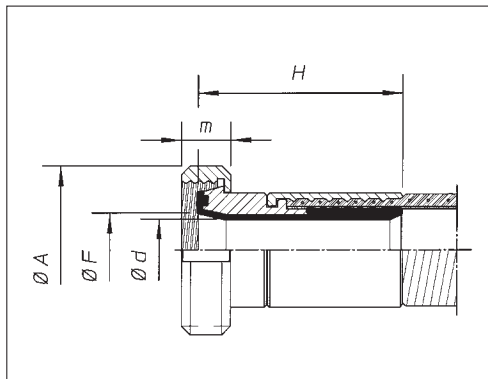
DN	L	F	d	A
20	67	15	12	70
25	77	20	16	80
32	90	28	22	90
40	100	37	27	90
50	120	45	39	110
65	127	57	51	130
80	140	66	60	130
100	158	96	87	170

DIN 28450 fitting in 316 SS-PFA with loose nut and PTFE gasket



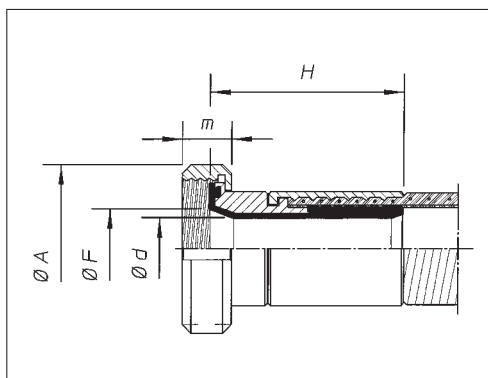
DN	L	H	d
50	115	85	46
80	145	115	69

DIN 11851 fitting in 316L SS-PFA with round nut in AISI 304L



DN	H	A	F	d	m
25	72	63	20	16	18
40	90	78	33	27	18
50	100	92	45	39	19
80	120	127	75	60	25

SMS fitting in 316L SS-PFA with round nut in AISI 304L



DN	H	A	F	d	m
25	59	51	17	16	20
40	79	74	29	27	25
50	92	84	42	39	26
80	120	114	66	60	32

The main advantage of a flexible hose with a PTFE or FEP tube, besides its being multi-purpose, is that the liner can be flared onto the fitting.

Through hot modelling, the tube is being stuck to the fitting's sealing surface.

This high-tech solution protects the fitting from corrosion and allows the flow-rate to be steady inside the hose.

In particular, our TLCT flexible hose (with smooth FEP tube) assembled with flared fittings meets the need of pharmaceutical and food industries to remove all stagnation and have a smooth continuous inner surface, in compliance with current international regulations.

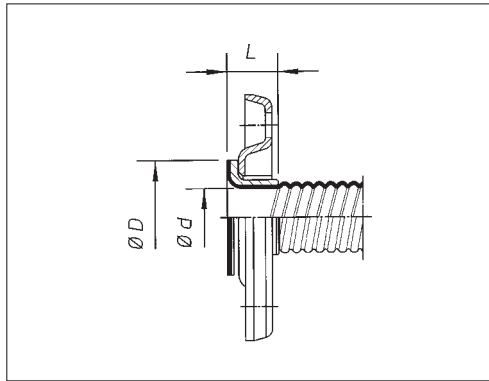
AISI 304L fittings and crimping ferrules guarantee a better resistance to external corrosion.



FLARED FITTINGS

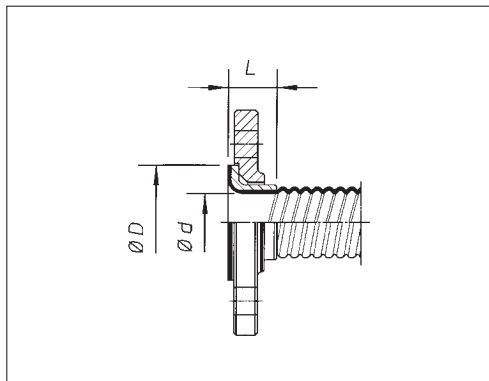
	TLCT	TLCT-FAS	CHEMFLEX	PHARMAFLEX	FOODFLEX	ALIFLEX	PROLINE	PROWELL	PROCHEM	PROCHEM BP	ULTRAFLEX	STHT	PROPHARM
DIN flanged	✓	✓						✓	✓	✓			
ANSI flanged	✓	✓						✓	✓	✓			
AUTOLOK "D"	✓							✓	✓	✓			
SPEED-LOCK "D"	✓							✓	✓	✓			
Female threaded	✓							✓	✓	✓			
Male threaded	✓												
Clamp	✓							✓	✓	✓			
DIN 11851 with round nut	✘							✓	✓	✓			
SMS with round nut	✘							✓	✓	✓			

Fitting in 304 SS-PTFE with UNI-DIN flange¹



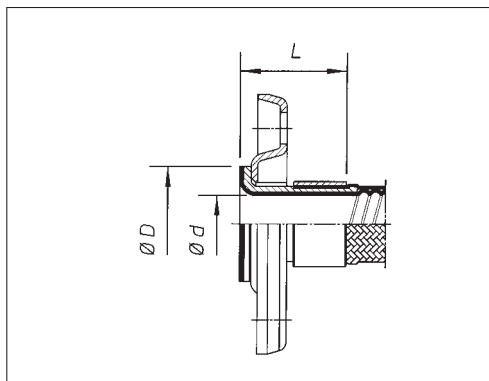
DN	L	D	d
15	24	35	14
20	26	47	20
25	26	58	24
32	26	68	33
40	26	78	38
50	30	92	49
65	40	105	60
80	40	127	72
100	40	158	105

Fitting in 304 SS-PTFE with ANSI flange¹



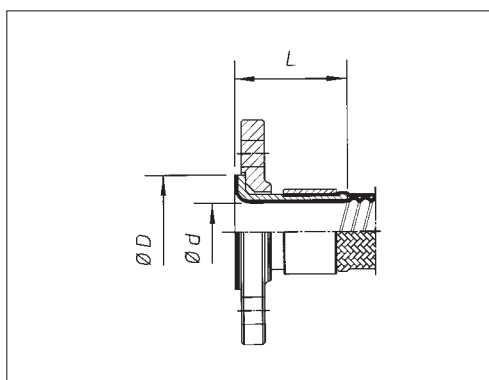
DN	L	D	d
15	24	35	14
20	26	47	20
25	26	58	24
32	26	68	33
40	26	78	38
50	30	92	49
65	40	105	60
80	40	127	72
100	40	158	105

Fitting in 304 SS-PTFE with UNI-DIN flange¹



DN	L	D	d
15	46	35	14
20	53	47	20
25	53	58	24
32	53	68	33
40	53	78	38
50	62	92	49
65	71	105	60
80	76	127	72
100	76	158	105

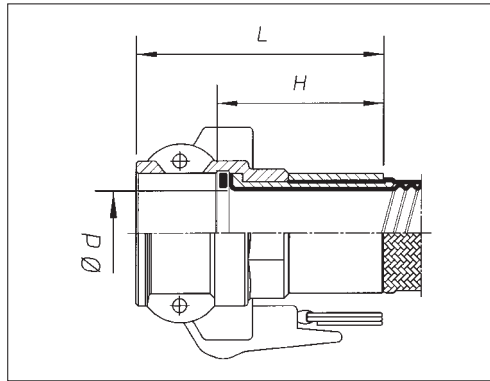
Fitting in 304 SS-PTFE with ANSI flange¹



DN	L	D	d
15	46	35	14
20	53	47	20
25	53	58	24
32	53	68	33
40	53	78	38
50	67	92	49
65	71	105	60
80	76	127	72
100	76	158	105

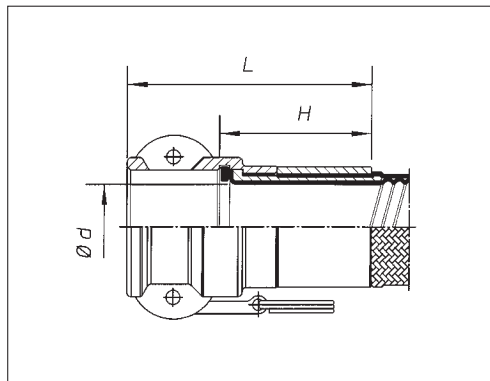
1) See page 46 for flange type and dimensions.

Loose AUTOLOK "D" in 304 SS-PTFE with FEP/Silicone gasket



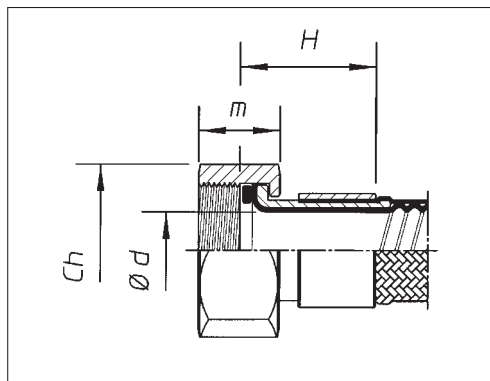
DN	L	H	d
20	82	59	20
25	92	63	24
32	92	63	33
40	92	63	38
50	115	72	49
65	116	72	60
80	129	83	72
100	143	94	105

Loose SPEED-LOCK "D" in 304 SS-PTFE with FEP/Silicone gasket



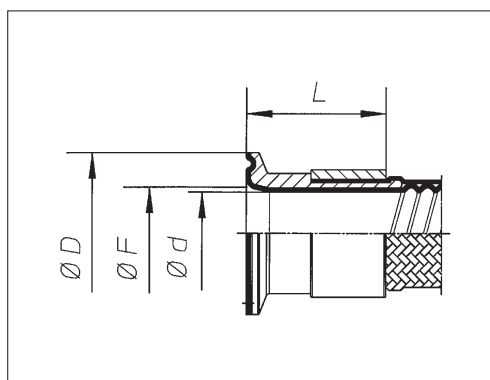
DN	L	H	d
20	82	59	20
25	92	63	24
32	92	63	33
40	92	63	38
50	115	72	49
65	116	72	60
80	129	83	72
100	143	94	105

BSPP female threaded in 304 SS-PTFE with loose nut



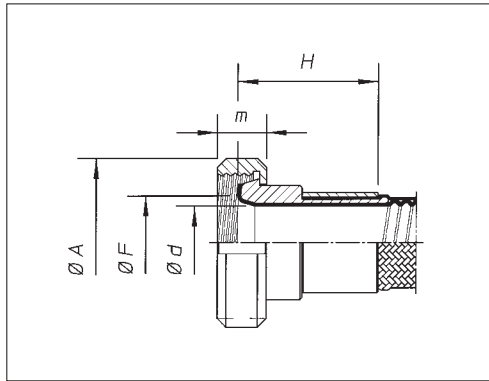
DN	H	d	m	Ch
3/4"	59	14	19	30
1"	63	20	22	41
1 1/4"	63	24	24	46
1 1/2"	63	32	27	55
2"	72	39	30	65
2 1/2"	72	49	40	85
3"	83	60	45	95
4"	94	72	50	130

Clamp in 304L SS-PTFE



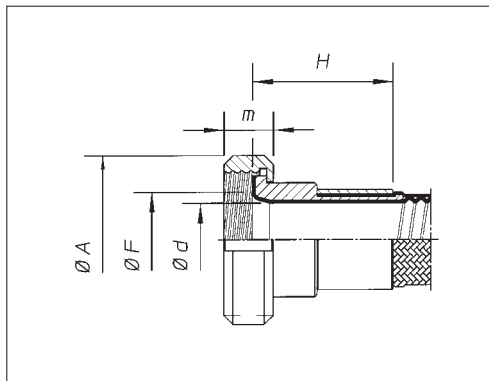
DN	L	D	F	d
25	45	50,4	22	20
40	53	50,4	35	33
50	60	63,9	47	38

DIN 11851 fitting in 304L SS-PTFE with round nut in 304L



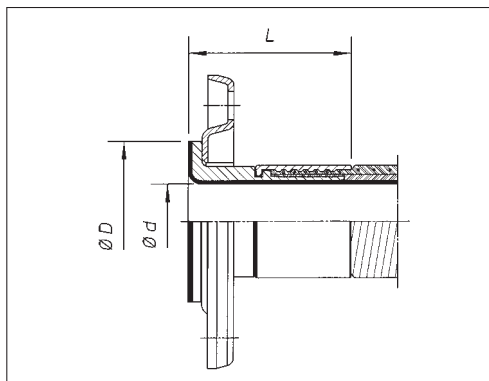
DN	H	A	F	d	m
25	60	63	24	24	18
40	60	78	36	33	18
50	60	92	47	43	19
80	70	127	77	72	25

SMS fitting in 304L SS-PTFE with round nut in 304L



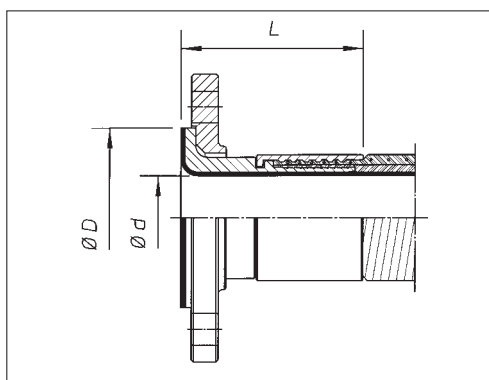
DN	H	A	F	d	m
25	60	51	24	24	20
40	60	74	36	33	25
50	60	84	43	43	26
80	70	114	72	72	32

Fitting in 304 SS-FEP with UNI-DIN flange¹



DN	L	D	d
20	54	43	19
25	58	51	25
32	63	68	32
40	63	73	38
50	77	92	51
65	82	105	63

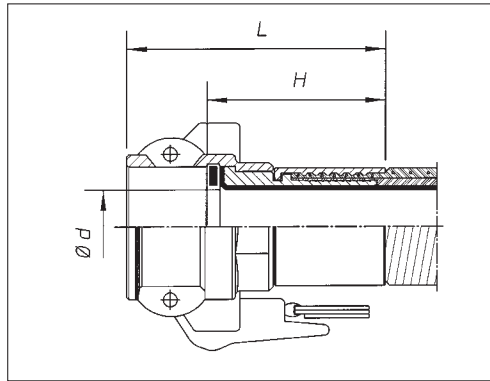
Fitting in 304 SS-FEP with ANSI flange¹



DN	L	D	d
20	54	43	19
25	58	51	25
32	63	68	32
40	63	73	38
50	77	92	51
65	82	105	63

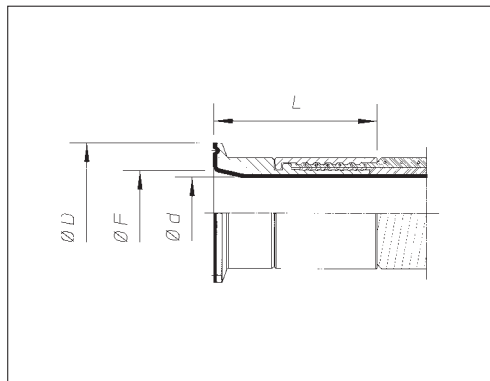
1) See page 46 for flange type and dimensions.

Loose AUTOLOK "D" in 304 SS-FEP with FEP/Silicone gasket



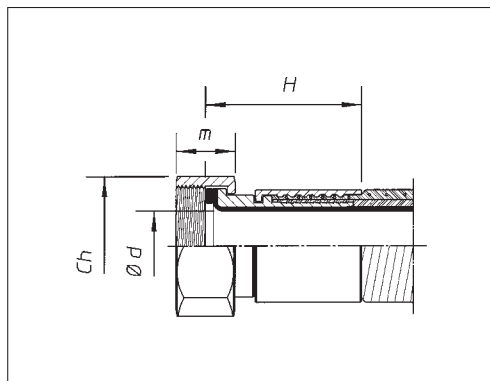
DN	L	H	d
20	84	60	19
25	91	62	25
32	97	63	31
40	101	65	38
50	127	84	51
65	133	89	63

Clamp in 304L SS-FEP



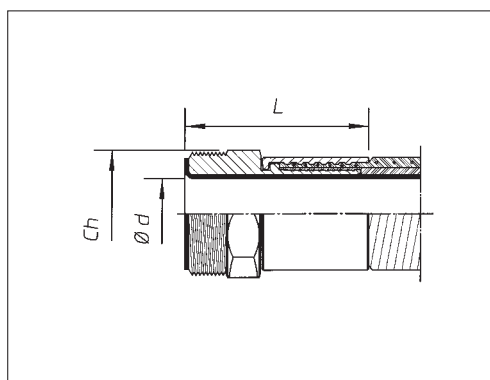
DN	L	D	F	d
25	45	50,4	22	19
40	53	50,4	35	32
50	60	63,9	47	38

BSPP threaded fitting in 304 SS-FEP with loose nut



DN	H	d	m	Ch
1"	60	19	22	41
1 1/4"	62	25	24	46
1 1/2"	63	32	27	55
2"	65	38	30	65
2 1/2"	84	51	40	85

BSPP male threaded in 304 SS-FEP



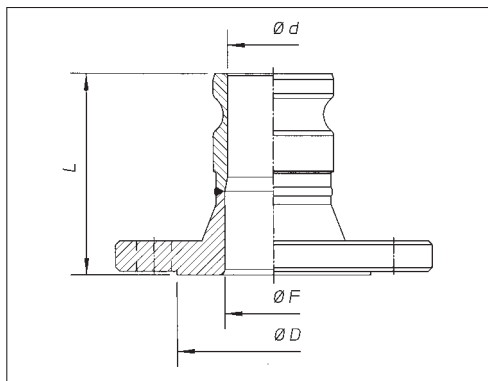
DN	L	d	Ch
1"	57	19	36
1 1/4"	64	25	46
1 1/2"	68	32	50
2"	86	38	65
2 1/2"	103	51	80

FLANGED CONNECTIONS

Proflex is also a comprehensive range of flanged connections for flexible hoses, to satisfy every demand in terms of material and design.

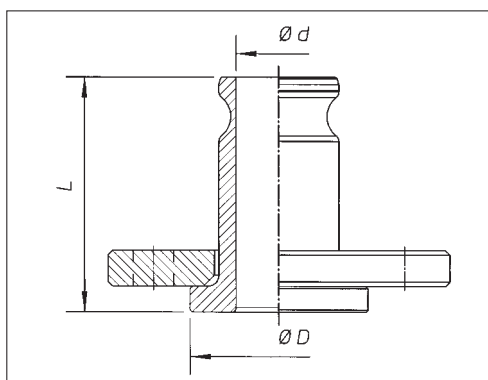
Different fittings from the ones exemplified below can be supplied on request.

“LAS” SPEED-LOCK with fixed flange¹ in 316 SS



DN	L	D DIN	D ANSI	F	d
15	74	45	35	16	13
20	74	58	43	23	20
25	78	68	51	28	24
32	88	78	63	37	32
40	88	88	73	43	38
50	94	102	92	55	48
65	106	122	105	68	60
80	110	138	127	82	74
100	113	158	158	108	102

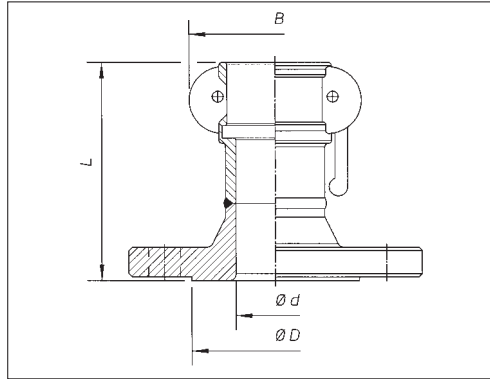
“LAS” SPEED-LOCK in 316 SS with loose flange¹



DN	L	D	d
15	70	47	13
20	85	47	21
25	95	58	24
32	100	68	32
40	105	78	38
50	115	92	48
65	125	105	60
80	130	127	73
100	130	158	99

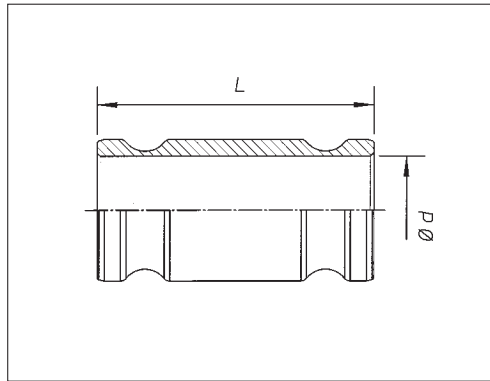
1) See page 46 for flange type and dimensions.

“LBS” SPEED-LOCK with fixed flange¹ in 316 SS



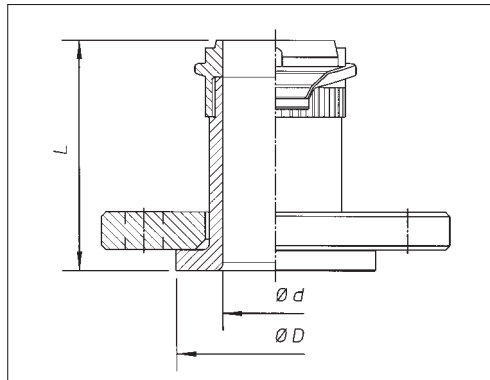
DN	L	D DIN	D ANSI	d
15	86	45	35	13
20	89	58	43	20
25	100	68	51	24
32	110	78	63	32
40	114	88	73	38
50	122	102	92	48
65	130	122	105	60
80	141	138	127	74
100	147	158	158	102

SPEED-LOCK “AD” in 316 SS



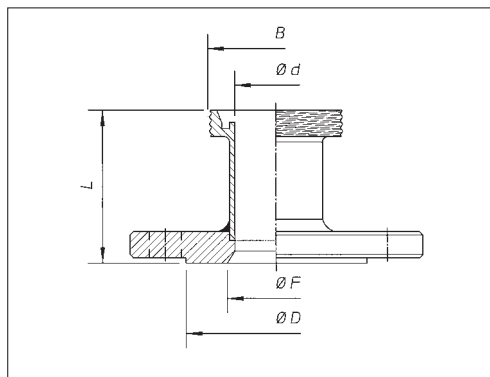
DN	L	d
15	70	13
20	74	21
25	92	24
32	104	32
40	108	38
50	128	48
65	134	60
80	134	73
100	144	99

DIN 28450 fitting in 316 SS with loose flange¹



DN	L	D	d
50	115	92	50
80	130	127	75

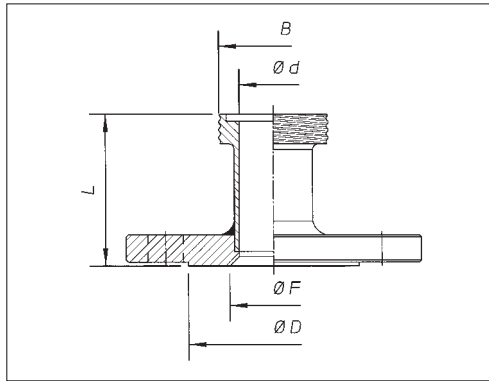
Threaded DIN 11851 fitting in 304L-316L² SS with fixed flange¹



DN	L	B	D	F	d
15	30	34-8	45	16	16
20	33	44-8	58	22	20
25	39	52-6	68	28	26
32	45	58-6	78	37	32
40	45	65-6	88	43	38
50	48	78-6	102	54	50
65	53	95-6	122	70	66
80	58	110-4	138	82	81
100	67	130-4	158	107	100

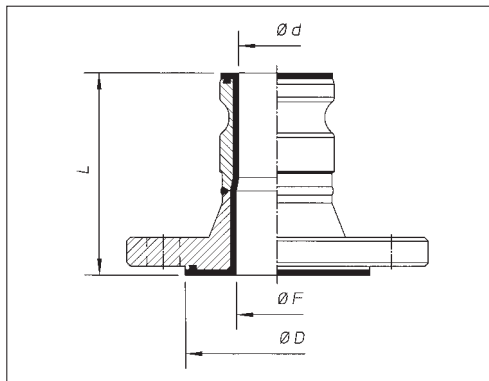
1) See page 46 for flange type and dimensions.
 2) Fittings in AISI 304L are available from DN 50 on.

Threaded SMS fitting in 316L SS with fixed flange¹



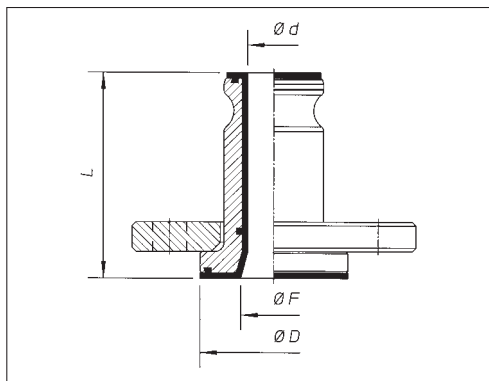
DN	L	B	D	F	d
25	29	40-6	68	28	21
40	36	60-6	88	43	34
50	38	70-6	102	54	46
65	43	85-6	122	70	59
80	48	98-6	138	82	69
100	48	120-4	158	107	96

"LAS" SPEED-LOCK with fixed flange¹ in 316 SS-PFA



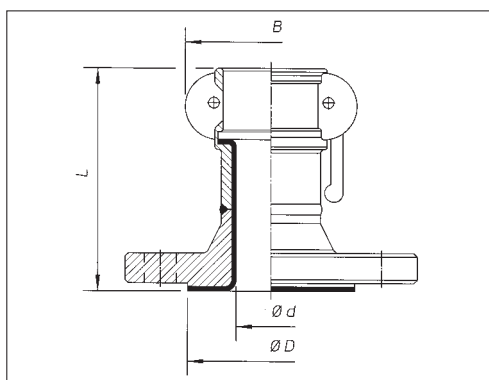
DN	L	D DIN	D ANSI	F	d
20	77	58	43	18	15
25	81	68	51	23	19
32	91	78	63	32	27
40	91	88	73	38	33
50	97	102	92	50	43
65	109	122	105	63	55
80	113	138	127	77	69
100	116	158	158	103	97

"LAS" SPEED-LOCK in 316 SS-PFA with loose flange¹



DN	L	D	F	d
20	85	47	20	17
25	95	58	25	20
32	100	68	32	28
40	105	78	40	32
50	115	92	50	42
65	125	105	65	55
80	130	127	80	70
100	130	158	100	94

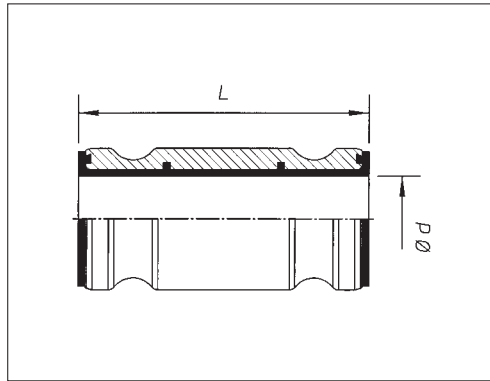
"LBS" SPEED-LOCK with fixed flange¹ in 316 SS-PTFE



DN	L	D DIN	D ANSI	d
20	92	58	43	17
25	103	68	51	23
32	113	78	63	32
40	117	88	73	38
50	125	102	92	49
65	133	122	105	68
80	144	138	127	78
100	150	158	158	102

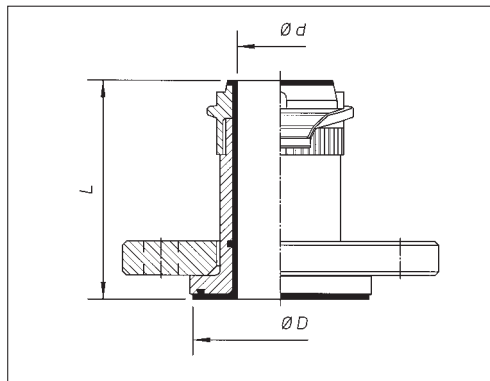
1) See page 46 for flange type and dimensions.

SPEED-LOCK "AD" in 316 SS-PFA



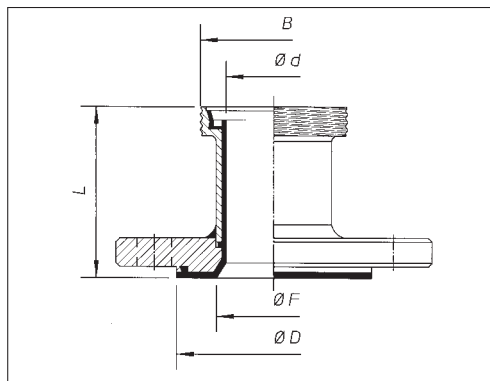
DN	L	d
20	74	16
25	92	20
32	104	28
40	108	32
50	128	42
65	134	55
80	134	70
100	144	94

DIN 28450 fitting in 316 SS-PFA with loose flange¹



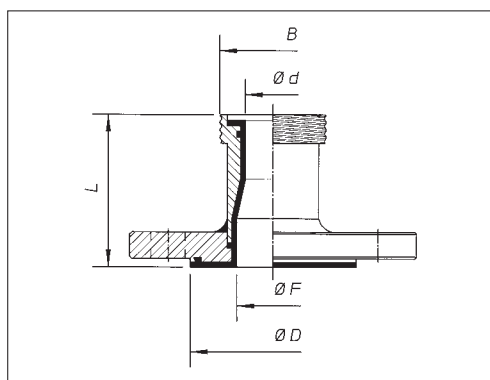
DN	L	D	d
50	115	92	45
80	130	127	70

Threaded DIN 11851 fitting in 316L SS-PFA with fixed flange¹



DN	L	B	D	F	d
25	70	52-6	68	23	26
40	80	65-6	88	38	38
50	90	78-6	102	49	50
80	110	110-4	138	77	81

Threaded SMS fitting in 316L SS-PFA with fixed flange¹



DN	L	B	D	F	d
25	70	40-6	68	23	16
40	80	60-6	88	38	29
50	90	70-6	102	49	41
80	110	98-6	138	77	64

1) See page 46 for flange type and dimensions.



Features:

Quick connect couplings with ball-locking, screw locking or flate face mechanism, available in a wide range of seals; this allows their use with most of the fluids for many applications and are especially indicated for the handling of dangerous and very expensive fluids. They are the ideal solution to avoid leakages of product during connecting and disconnecting of the flexible hoses. Available with BSPP or NPT thread.

Compliance:

ISO 7241-1-B

Quick couplings design:

Body, female and male parts in 316 SS.

Obturator spring in 316 SS.

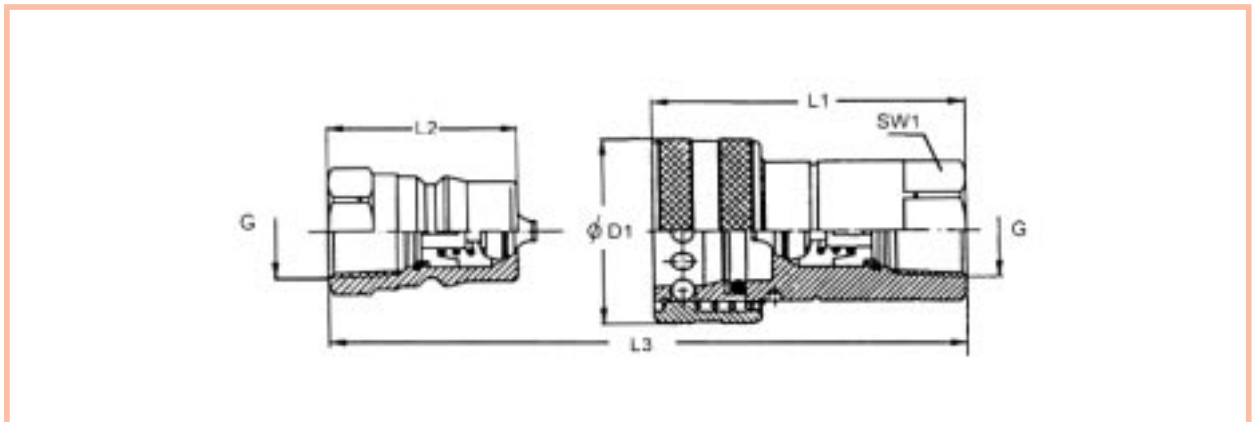
Seal gasket in FPM.

Anti-ejection o-ring in PTFE.

Working temperature:

From -40° C to +260° C.

QUICK COUPLINGS



G	D1	L1	L2	L3	SW1	WP@20°C	Section
mm	mm	mm	mm	mm	mm	bar	mm ²
1/8"	24	50	31	62,5	14	300	13
1/4"	28	58	37	74,5	19	300	22
3/8"	35	64	39	78,5	24	250	42
1/2"	42	75	48	95,0	30	250	79
3/4"	52	86	58	105,0	34	250	169
1"	60	102	63	126,0	41	200	230
1 1/4"	75	126	73	198,0	65	140	950
1 1/2"	75	126	83	198,0	65	140	950
2"	105	124	88	222,0	90	90	1880

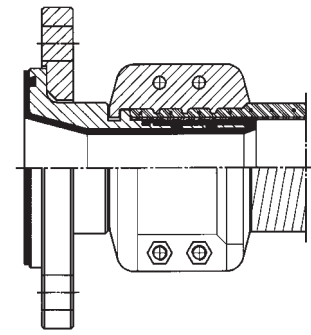
SAFELOK - clamps

SAFELOK clamps in two halves according to DIN 2817/2826 in 316 SS or aluminium assure a reliable, easy, correct and safe assembling of hose shank fittings into rubber covered flexible hoses without SS braid.

SAFELOK clamps in two halves make assembling a flexible hose without any special equipment an easy and safe matter.

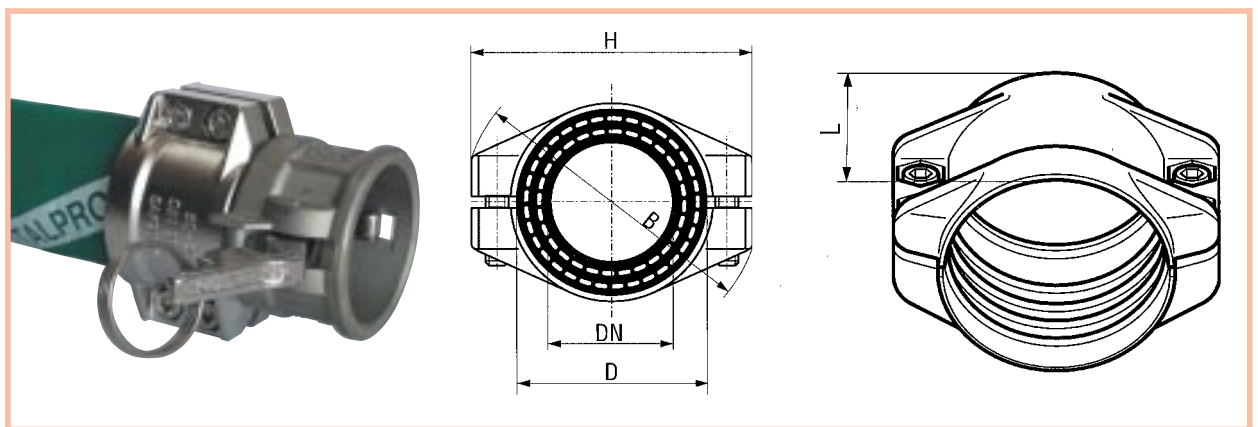
The use of our quality fittings and clamps substitutes for the crimping ferrule and the same time shows the advantage of assembling the hose in place.

This coupling system fits the concept of "two pieces execution" ensuring that the fitting is not ejected out of the hose.



Aluminium clamps with zinc-plated screws are available for extemporary and cheap applications; electro-polished 316 stainless steel clamps are to be preferred with corrosive fluids or environment.

SAFELOK CLAMPS



DN	D mm	H mm	L mm	DIN	Bolts q.ty	Material
1/2"	22-24	56	50	2817	4xM6x20	Aluminium - 316 SS
	24-26	53	65	2826	4xM6x20	316 SS
3/4"	30-33	65	50	2817	4xM6x20	Aluminium - 316 SS
	32-34	68	65	2826	4xM8x25	316 SS
1"	36-39	73	50	2817	4xM6x20	Aluminium - 316 SS
	39-41	77	65	2826	4xM6x20	316 SS
1 1/4"	43-46	75	50	2817	4xM6x20	Aluminium - 316 SS
	47-50	86	75	2826	4xM6x20	316 SS
1 1/2"	50-52	83	50	2817	4xM6x20	Aluminium - 316 SS
	53-56	101	90	2826	4xM10x40	316 SS
2"	64-67	103	57	2817	4xM8x25	Aluminium - 316 SS
	67-69	111	100	2826	4xM8x25	316 SS
2 1/2"	78-82	120	74	2817	4xM8x25	Aluminium - 316 SS
	84-87	120	74	2817	4xM8x25	Aluminium
3"	89-93	132	76	2817	4xM8x25	Aluminium - 316 SS
	94-97	132	76	2817	4xM8x25	Aluminium
4"	114-119	166	120	2817	4xM10x40	Aluminium - 316 SS
	122-126	174	120	2817	4xM10x40	Aluminium

Safety clamp according to DIN 2817/2826 complete with zinc plated or stainless steel hardware according to DIN 912/934.

HOW TO ASSEMBLE

SAFELOK CLAMPS



Cut the hose by means of a manual or automatic fine-toothed hacksaw.



Pull out the helix wire end, if any.



Bend it inside the hose, to guarantee conductivity, if required.



Use a lubricant to make inserting the fitting easier.



Insert the fitting by slightly rotating it.



Mount the clamp so as to avoid interfering with the arms.



At the beginning use longer bolts to pull the two halves together.



Then use the in screws supplied.



Final assembling.

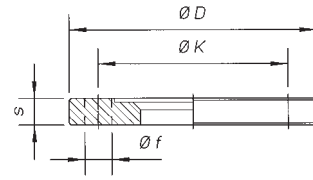
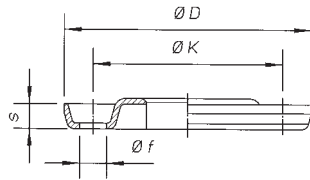
NO



YES



The two halves should always be parallel even when they do not get together.

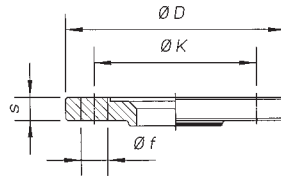


Pressed flange DIN PN 10				
DN	D	k	F	s
15	95	65	4x14	12
20	105	75	4x14	14
25	115	85	4x14	17
32	140	100	4x18	17
40	150	110	4x18	17
50	165	125	4x18	19
65	185	145	4x18	20
80	200	160	8x18	20
100	220	180	8x18	22

Forged flange DIN PN 10-16 ¹				
DN	D	k	F	s
15	95	65	4x14	14
20	105	75	4x14	16
25	115	85	4x14	16
32	140	100	4x18	16
40	150	110	4x18	16
50	165	125	4x18	18
65	185	145	4x18	18
80	200	160	8x18	20
100	220	180	8x18	20

Forged flange DIN PN 40			
D	k	F	s
95	65	4x14	16
105	75	4x14	18
115	85	4x14	18
140	100	4x18	18
150	110	4x18	18
165	125	4x18	20
185	145	8x18	22
200	160	8x18	24
220	180	8x22	24

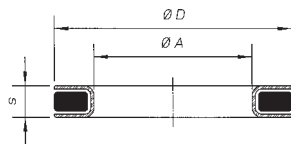
1) PP with steel insert, PVC and Aluminium flanges available



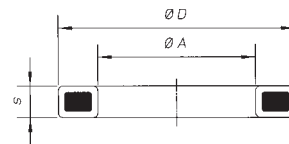
ANSI flange 150 lbs ¹				
DN	D	k	F	s
1/2"	88,9	60,3	4x15,9	11,1
3/4"	98,4	69,8	4x15,9	12,7
1"	107,4	79,4	4x15,9	14,3
1 1/4"	117,5	88,9	4x15,9	15,9
1 1/2"	127,0	98,4	4x15,9	17,5
2"	152,4	120,6	4x19,0	19,0
2 1/2"	177,8	139,7	4x19,0	22,2
3"	190,5	152,4	4x19,0	23,8
4"	228,6	190,5	8x19,0	23,8

ANSI flange 300 lbs				
DN	D	k	F	s
1/2"	95,6	66,7	4x15,9	14,3
3/4"	117,5	82,5	4x19,0	15,9
1"	123,8	88,9	4x19,0	17,5
1 1/4"	133,3	98,4	4x19,0	19,0
1 1/2"	155,6	114,3	4x22,2	20,6
2"	165,1	127,0	8x19,0	22,2
2 1/2"	190,5	149,2	8x22,2	25,4
3"	209,5	168,3	8x22,2	28,6
4"	254,0	200,0	8x22,2	31,7

1) PP with steel insert and PVC flanges available



PTFE-Viton



FEP-Silicone

DN	D	A	s
1/2"	26	17	3,96
3/4"	35	22	5,53
1"	40	27	6,35
1 1/4"	49	34	6,35
1 1/2"	55	41	6,35
2"	66	51	6,35
2 1/2"	79	60	6,35
3"	94	76	6,35
4"	123	102	6,35

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