

Special Items Steel/PTFE

Injection Pipes (Steel/PTFE)

Injection Nozzles (PTFE)

Sight Glasses

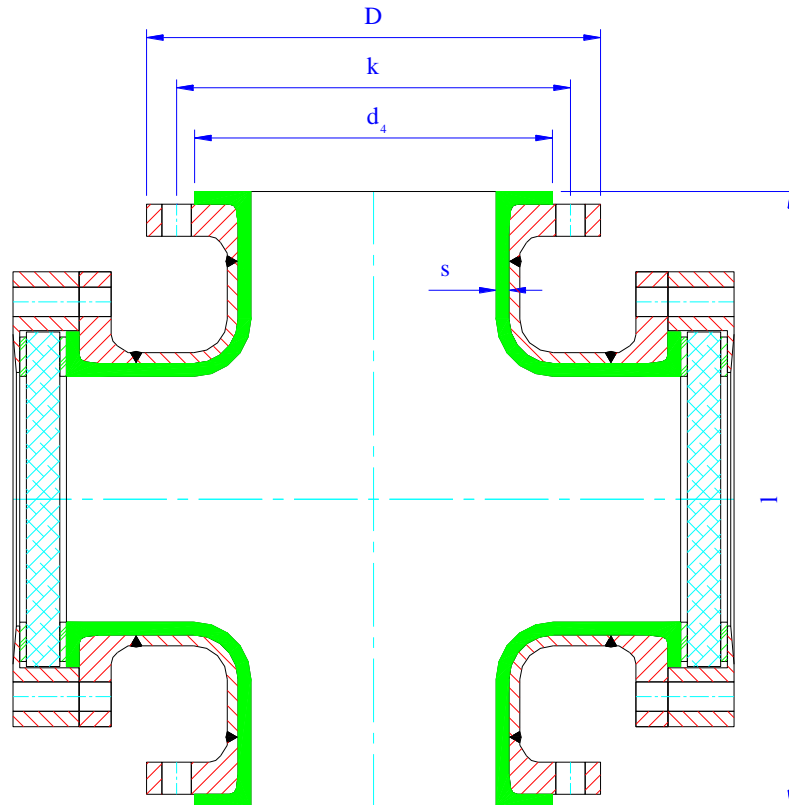
Strainers (Y-Type)

Dip Pipes

SIGHT GLASS according to ANSI B 16.5 Class 150

Material specification: Steel frame: ASTM A 234 Grade WPB according to ANSI B 16.28
 St. 52.0 according to DIN 1629
 Flanges: ASTM A 105 according to ANSI B 16.5
 Lining: Virgin PTFE according to ASTM-D 4894
 Delivery terms: according to DIN 2874

Dimensions expressed in mm



DN	s	d ₄	k	D	l
½"	3	35	60.3	88.9	108.0
¾"	3	43	69.8	98.4	117.5
1"	3	51	79.4	107.9	127.0
1¼"	3	64	88.9	117.5	140.0
1½"	3	73	98.4	127.0	165.0
2"	3	92	120.6	152.4	178.0
2½"	3.5	105	139.7	177.8	190.5
3"	4	127	152.4	190.5	203.0
4"	4.5	157	190.5	228.6	229.0
5"	4.5	186	215.9	254.0	254.0
6"	5	216	241.3	279.4	267.0
8"	6	270	298.4	342.9	292.0
10"	7	324	361.9	406.4	305.0

Upon demand "Heavy Duty" lining available for vacuum services
 Borosilicate Glass against surcharge
 Further dimensions upon request
 Vent holes upon operator's request

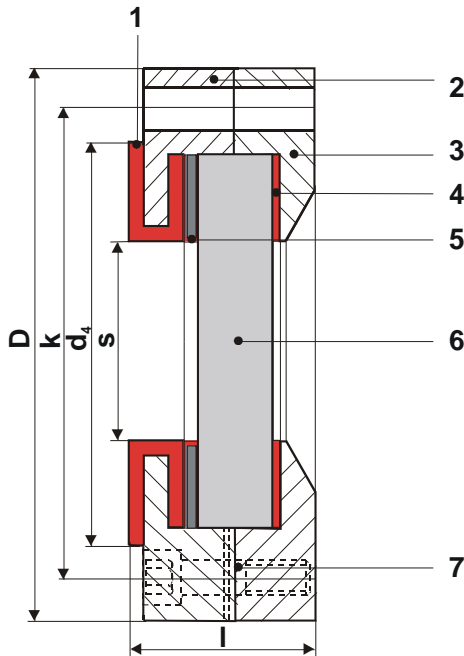
Steel/PTFE-Components

ANSI

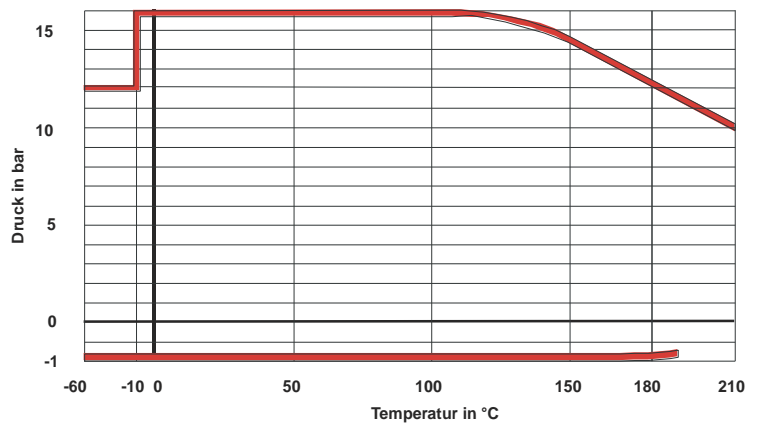
Reactor Sight Glass

2" - 10" ANSI 150

Pos.	Part	Material	Standard
1	Lining	virgin PTFE or PTFE electrostatically conductive	ASTM D 4894
2	Basic Flange	P235GH (1.0345), P245GH (1.0352)	DIN EN 10253-2, DIN EN 10222-2
3	Cover Flange	P235GH (1.0345), P245GH (1.0352)	DIN EN 10253-2, DIN EN 10222-2
4	Gasket	rein PTFE or PTFE electrostatically conductive	ASTM D 4894
5	Gasket	PTFE or PTFE electrostatically conductive	ASTM D 4894
6	Glass Body	Borosilicate Glass (see diagram)	DIN 7080
7	Socket Screw	Steel 8.8 DIN/ISO 898	DIN 912
Surface Treatment		Ball Blasting acc. to SIS 05 5900 SA 2 ½ ; Epoxivinyll-Priming	



Druck - Temperatur - Diagramm



Size	D	k	d ₄	nxd ₂	l	kg
2"	152.4	120.6	92.1	4 x 19.0	41	7,9
3"	190.5	152.4	127.0	4 x 19.0	49	9,5
4"	228.6	190.5	157.2	8 x 19.0	49	11,0
5"	254.0	215.9	185.7	8 x 22.2	59	16,0
6"	279.4	241.3	215.9	8 x 22.2	59	19,5
8"	342.9	298.4	269.9	8 x 22.2	60	34,0
10"	406.4	361.9	323.8	12 x 25.4	68	48.0

Kindly observe the temperature borderline of Borosilicate Glass: Temperature intervals (Δt) exceeding 80 °C shall be obviated

Size	2"	3"	4"	5"	6"	8"	10"
PTFE-Thickness	3,0	3,5	4,0	4,5	5,0	6,0	7,0
Visor Diameter	75	75	115	130	148	194	247

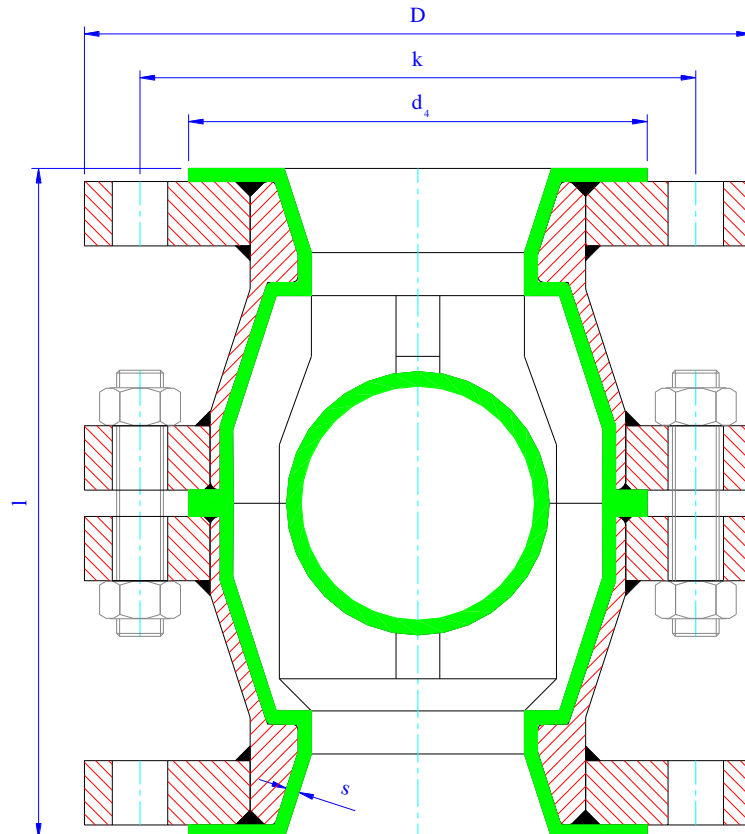
BALL CHECK VALVE according to ANSI B 16.5 Class 150

for horizontal and vertical assembly

Material specification:

Steel frame:	ASTM A 105 according to ANSI B 16.5 St 52.0 according to DIN 1629
Flanges:	ASTM A 105 according to ANSI B 16.5
Lining:	Virgin PTFE according to ASTM-D 4894
Delivery terms:	according to DIN 2874

Dimensions expressed in mm



DN	s	d ₄	k	D	l
½"	3	35	60.3	88.9	108.0
¾"	3	43	69.8	98.4	117.5
1"	3	51	79.4	107.9	127.0
1¼"	3	64	88.9	117.5	140.0
1½"	3	73	98.4	127.0	165.0
2"	3	92	120.6	152.4	178.0
2½"	3.5	105	139.7	177.8	190.5
3"	4	127	152.4	190.5	203.0
4"	4.5	157	190.5	228.6	229.0
6"	5	216	241.3	279.4	267.0
8"	6	270	298.4	342.9	292.0

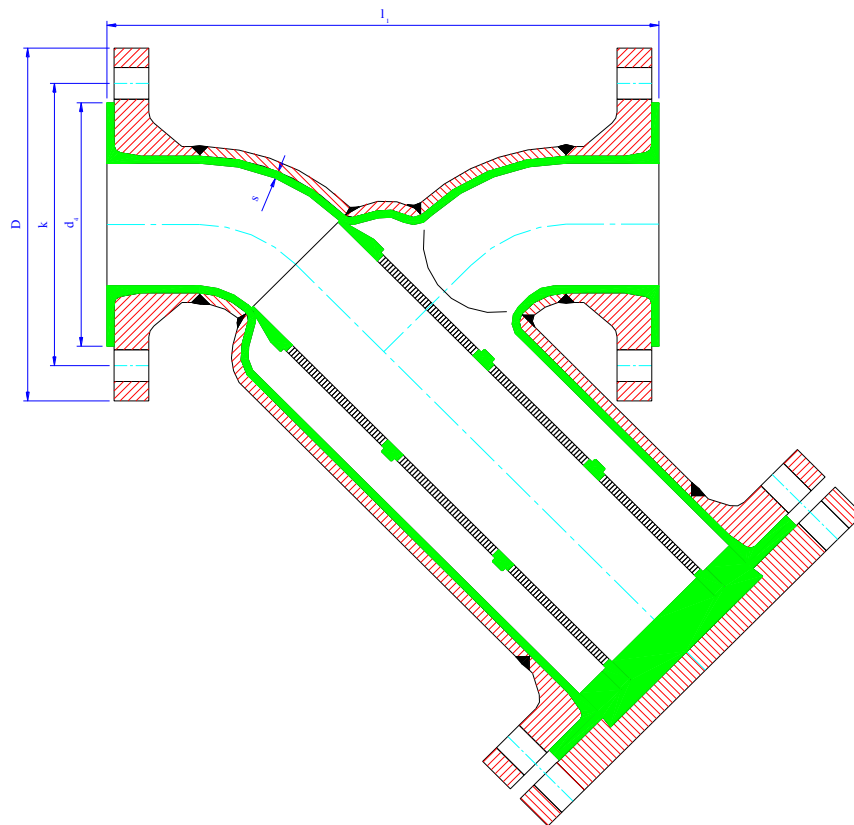
Upon request combined ball check valves - sight glasses are available in dimensions 1" to 4"

Ball check valves are regularly delivered with full ptfе sphere: additional types of spheres can be supplied
Vent holes upon operator's request

Y-STRAINER according to ANSI B 16.5 Class 150

Material specification: Steel frame:	ASTM A 106 Grade B according to ANSI B 36.10 API 5L Grade B according to ANSI B 36.10
Flanges:	ASTM A 234 Grade WPB according to ANSI B 16.28 ASTM A 105 according to ANSI B 16.5
Lining:	Virgin PTFE according to ASTM-D 4894
Filtering Cartridge:	Standard PTFE (white) or glass filled PTFE
Mesh Aperture:	Standard 210 micron, supplementary mesh-sizes upon request (550, 1.000, 2.000 and 3.000 micron)
Delivery terms:	according to DIN 2874

Dimensions expressed in mm



DN	s	l ₁	d ₄	k	D
1"	3	160	51	79.4	107.9
1½"	3	200	73	98.4	127.0
2"	3	230	92	120.6	152.4
3"	4	310	127	152.4	190.5
4"	4.5	350	157	190.5	228.6
6"	5	480	216	241.3	279.4
8"	6	600	270	298.4	342.9
10"	7	640	324	361.9	406.4

Drain vent available against surcharge
Strainers follow DIN face-to-face dimensions. Flanges, however, according to ANSI B 16.5
Vent holes upon operator's request.

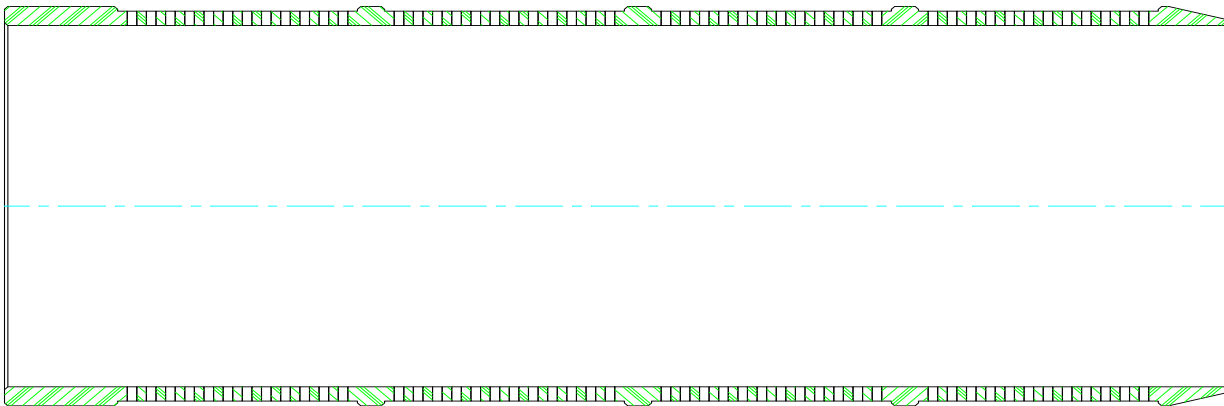
ASSEMBLY INSTRUCTIONS OF PTFE SPARE BASKETS FOR STRAINERS

The strainers in carbon steel PTFE-lined by L.M.P. Fluorcarbon allow the possibility to assemble PTFE-Cartridges of different filtering dimensions or as spare parts of existing cartridges.

The strainers in carbon steel are lined in PTFE, which is varying in terms of shrinkage due to the typical production of the single batches: this event is influencing the final dimension of the inserted PTFE-Basket, as well.

Therefore, every PTFE-Spare basket must be adjusted to its individual strainer body.

The shape of the PTFE-Spare cartridges is cylindrical, with two different ends: on one side the basket shows a cone, while on the other side it shows a cylinder, according to the following drawing.



The dimension which must be adjusted is the overall length: please **machine the cylindrical end only and never the conical end**.

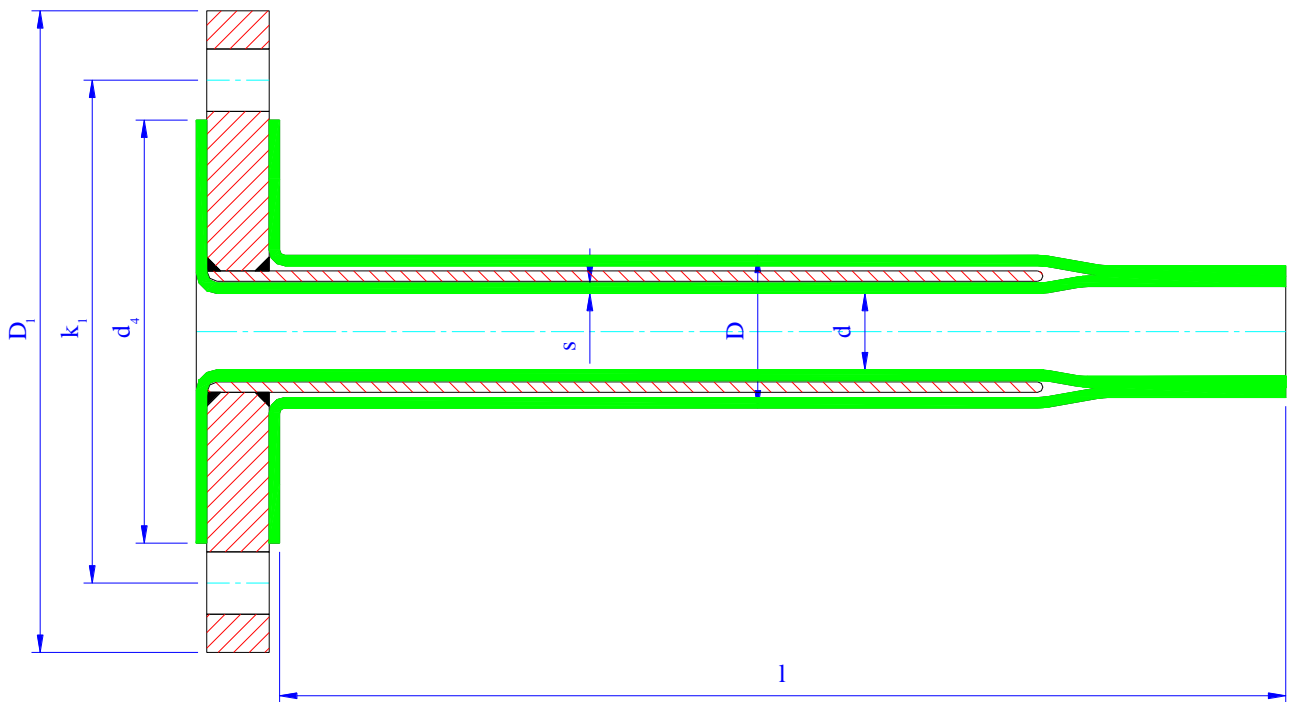
Put the basket on a lathe and by using a cutting tool start to machine the cylindrical end: the basket shall be ready once it smoothly fits into the hull of the strainer and the closing flange without leaving a space in between.

Suggestion: it is recommended to remove PTFE step by step (for instance 1÷ 2 mm per time), in order not to shorten too much the PTFE-Cartridge.

INJECTION PIPE according to ANSI B 16.5 Class 150

Material specification: Carbon Steel Tube: ASTM A 106 Grade B according to ANSI B 36.10
 API 5L Grade B according to ANSI B 36.10
 Flange: ASTM A 105 according to ANSI B 16.5
 Lining: Virgin PTFE according to ASTM-D 4894
 Delivery Terms: according to DIN 2874

Dimensions expressed in mm



DN	d_4	k_1	D_1	D	d	l_{max}
½"	35	60.3	88.9	38 (29)	20 (13)	3.000
¾"	43	69.8	98.4	38	20	3.000
1"	51	79.4	107.9	44	22	3.000
1¼"	64	88.9	117.5	54	31	3.000
1½"	73	98.4	127.0	54	37	3.000
2"	92	120.6	152.4	70	48	3.000
2½"	105	139.7	177.8	82	63	3.000
3"	127	152.4	190.5	107	75	3.000
4"	157	190.5	228.6	131	99	3.000
5"	185	215.9	254.0	159	122	3.000
6"	216	241.3	279.4	206	149	3.000
8"	270	298.4	342.9	238	194	3.000
10"	324	361.9	406.4	309	248	3.000

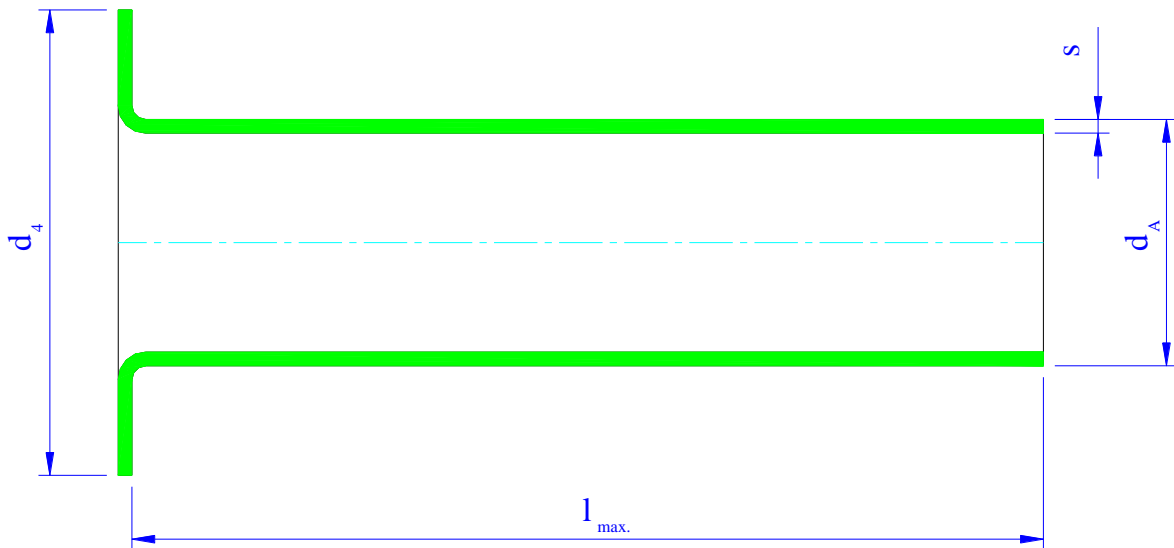
Supplementary dimensions available upon request
 Additional shapes (inclined, recessed etc.) and various outlet modifications (spraying nozzles) on demand
 Vent holes upon operator's request

PTFE INJECTION NOZZLE (without steel insert)

Material specification:
Delivery terms:

Virgin PTFE according to ASTM-D 4894
according to DIN 2874

Dimensions expressed in mm

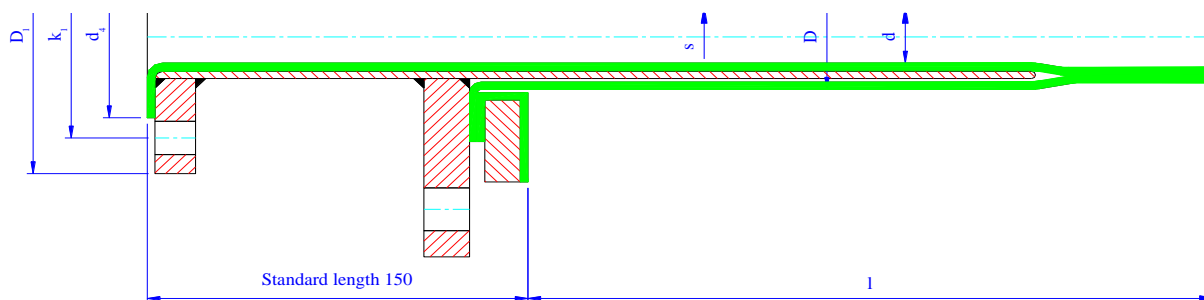


DN	s	d_A	d_4	l_{max}
½"	3	16	35	3.000
¾"	3	21	43	3.000
1"	3	26	51	3.000
1¼"	3	34	64	3.000
1½"	3	39	73	3.000
2"	3	51	92	3.000
2½"	3.5	69	105	3.000
3"	4	78	127	3.000
4"	4.5	103	157	3,000
5"	4.5	131	185	3.000
6"	5	154	216	3.000
8"	6	206	270	3.000
10"	7	260	324	3.000
12"	7	311	381	3.000

DIP PIPE according to ANSI B 16.5 Class 150

Material Specification: Carbon Steel Tube: ASTM A 106 Grade B according to ANSI B 36.10
 API 5L Grade B according to ANSI B 36.10
 Flanges: ASTM A 105 according to ANSI B 16.5
 Lining: Virgin PTFE according to ASTM D 4894
 Delivery Terms: according to DIN 2874

Dimensions expressed in mm



DN	s	d ₄	k ₁	D ₁	D	d	DN ₂	l _{max}
½"	3	35	60.3	88.9	38 (29)	20 (13)	adapted to flange of reaction vessel	3.000
¾"	3	43	69.8	98.4	38	20		3.000
1"	3	51	79.4	107.9	44	22		3.000
1¼"	3	64	88.9	117.5	54	31		3.000
1½"	3	73	98.4	127.0	54/70	37		3.000
2"	3	92	120.6	152.4	70	48		3.000
2½"	3.5	105	139.7	177.8	82	63		3.000
3"	4	127	152.4	190.5	107	75		3.000
4"	4.5	157	190.5	228.6	131	99		3.000
5"	4.5	185	215.9	254.0	159	122		3.000
6"	5	216	241.3	279.4	206	149		3.000
8"	6	270	298.4	342.9	238	194		3.000
10"	7	324	361.9	406.4	309	248	3.000	

Supplementary sizes upon request

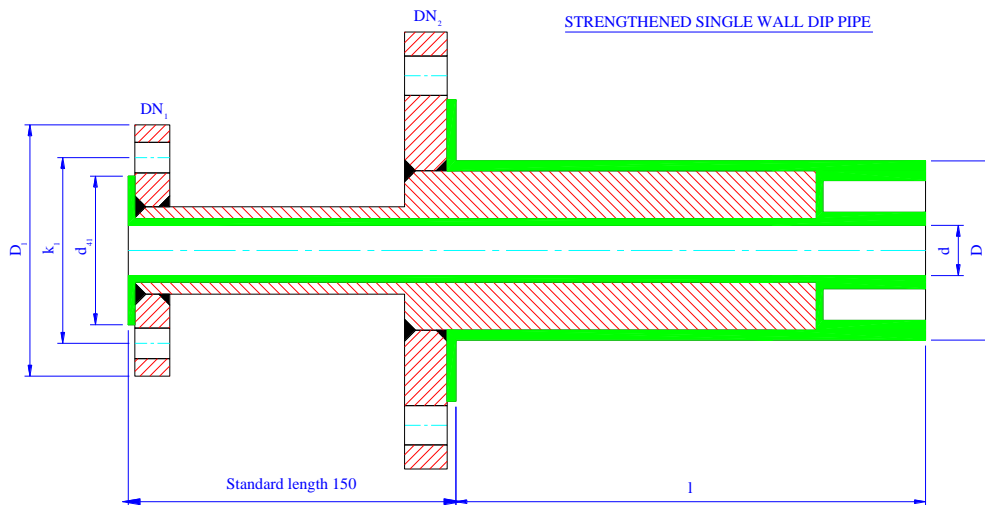
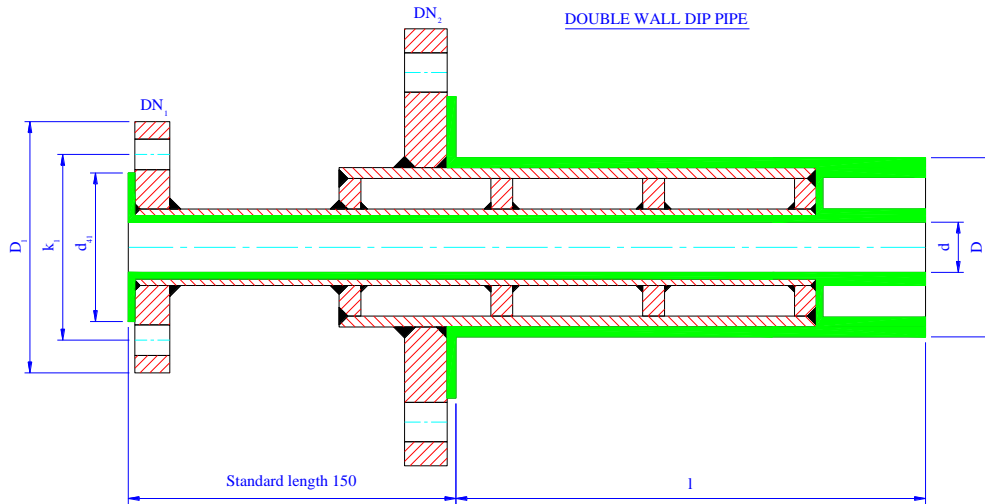
Special dip pipes (curved, spraying nozzles etc.) on request

The manufacturer will advise whether adapting rings and/or reinforcing tails become necessary

DOUBLE WALL DIP PIPE according to ANSI B 16.5 Class 150

Material specification: Carbon Steel Tube: ASTM A 106 Grade B according to ANSI B 36.10
 API 5L Grade B according to ANSI B 36.10
 Flanges: ASTM A 105 according to ANSI B 16.5
 Lining: Virgin PTFE according to ASTM D 4894
 Delivery Terms: according to DIN 2874

Dimensions expressed in mm



DN	s	d ₄₁	k ₁	D ₁	D	d	DN ₂	l _{max}
¾"	3	43	69.8	98.4	70	20	adapted to flange of reaction vessel	3.000
1"	3	51	79.4	107.9	70	22		3.000
1½"	3	73	98.4	127.0	82	37		3.000
2"	3	92	120.6	152.4	107	48		3.000
2½"	3.5	105	139.7	177.8	107	63		3.000
3"	4	127	152.4	190.5	131	75		3.000
4"	4.5	157	190.5	228.6	159	99		3.000

Upon demand supplementary dimensions available
 Special dip pipes (curved, spraying nozzles etc.) on request
 The manufacturer will recommend supplementary adapting ring and/or reinforcing tail
 Double wall dip pipes with heating jackets, flanged connectors or threaded connections on demand

CSI SpA
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SGO N° 032A
COA N° 0320
RD N° 0328
SP N° 0408
AD N° 0806

Memoria degli accordi
of Mutual Recognition to EA, UK, etc.
Agreement of EA, UK, and EAC
Mutual Recognition Agreements

Registrazione numero/Registration number

PED/0497/412/05

CERTIFICATO CE DEL TIPO EC TYPE EXAMINATION CERTIFICATE

si certifica che la Società/we certify that the Company

LMP FLUORCARBON S.r.l.

Via Marconi, 127 - 21020 TAINO (VA) - ITALY

ha realizzato il seguente Tipo di Insieme in pressione che soddisfa i Requisiti Essenziali di Sicurezza dell'Allegato I e le procedure del Modulo B, Allegato III, della Direttiva 97/23/CE

has realized the following Type of pressure Assembly that meets the Essential Safety Requirements of Annex I and the procedures of Module B, Annex III, of the 97/23/EC Directive

TUBI DRITTI E CURVI CON DIRAMAZIONI E NON, RIDUZIONI E VISORI IN ACCIAIO AL CARBONIO RIVESTITI IN PTFE

PTFE-LINED PIPES AND SHAPED CARBON STEEL PARTS, REDUCERS AND SIGHT GLASSES

32<=DN<=300: PS_{max} 21 barg; 350<=DN<=600: PS_{max} 10 barg

TS_{min} -10 °C; TS_{max} +200 °C

Gruppo Fluidi/Fluid Group 1; Categoria/Category I - II - III

Il Fabbricante è autorizzato ad apporre sull'Attrezzatura in pressione di cui sopra, dopo la marcatura CE, il numero di identificazione dell'Organismo Notificato.

The Manufacturer is authorized to provide the above pressure Equipment with the CE marking, followed by the Notified Body identification number.

CE 0497

20/05/2005

Prima emissione
First Issue

29/10/2015

Ultima emissione
Latest issue

19/05/2025

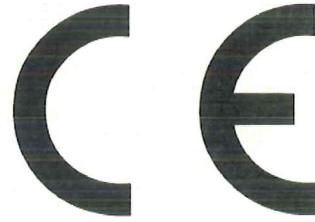
Scadenza
Expiring

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Sede Legale
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CSI[®]
CERT

Registrazione numero/*Registration number*

PED/0497/413/05

CERTIFICATO CE DEL TIPO
EC TYPE EXAMINATION CERTIFICATE

si certifica che la Società/*we certify that the Company*

LMP FLUORCARBON S.r.l.
Via Marconi, 127 - 21020 TAINO (VA) - ITALY

ha implementato e mantiene la conformità al Tipo - Certificato CE n° PED/0497/412/05 - ai Requisiti Essenziali di Sicurezza dell'Allegato I e alle Procedure del Modulo C1 - Allegato III della Direttiva 97/23/CE
has implemented and maintains the compliance with the Type, Certificate CE nb. PED/0497/412/05 - with the Essential Safety Requirements of Annexe I and with the Procedure of Module C1 - Annexe III of the 97/23/EC Directive

allo scopo di produrre e collaudare
for manufacturing and testing

TUBI DRITTI E CURVI CON DIRAMAZIONI E NON, RIDUZIONI E VISORI RIVESTITI IN PTFE

PTFE-LINED PIPES AND SHAPED PARTS, REDUCERS AND SIGHT GLASSES

$32 \leq DN \leq 150$: PS_{max} 16 barg; $150 < DN \leq 600$: PS_{max} 10 barg
Gruppo Fluido/*Fluid Group* 1 - Categoria/*Category* I - II - III

Il Fabbricante è autorizzato ad apporre sull'Attrezzatura in pressione di cui sopra, dopo la marcatura CE, il numero di identificazione dell'Organismo Notificato.
The Manufacturer is authorized to provide the above pressure Equipment with the CE marking, followed by the Notified Body identification number.

CE 0497

20/05/2005

Prima emissione
First issue

30/04/2014

Ultima emissione
Latest issue

19/05/2017

Scadenza
Expiring