GEMÜ R677

Manually operated diaphragm valve



Features

- Compact system design due to flow-optimized high-flow valve bodies
- Lockable handwheel optionally available
- Position feedback optionally available
- Integral optical position indicator

Description

The GEMÜ R677 2/2-way diaphragm valve has a low maintenance plastic actuator and is manually operated. An integrated optical position indicator is standard. The high-flow valve body provides compact dimensions at high flow rates.

Technical specifications

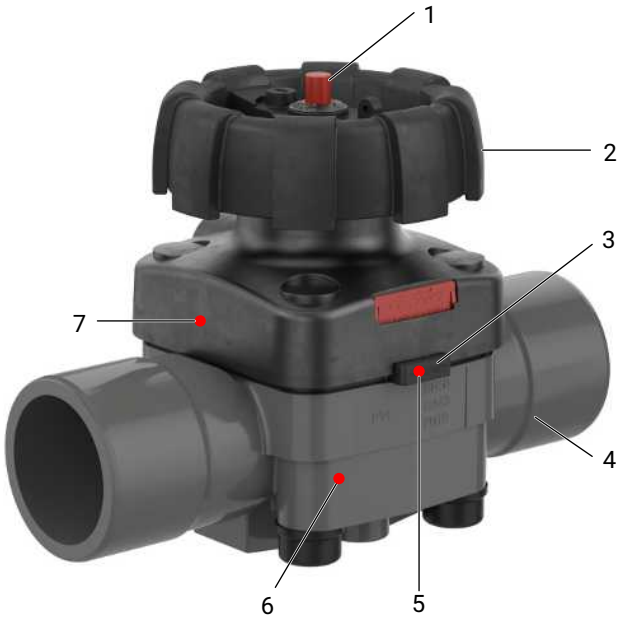
- **Media temperature:** 14 to 176 °F
- **Ambient temperature:** -10 to 122 °F
- **Operating pressure :** 0 to 150 psi
- **Nominal sizes:** 1/2" (DN 15) until 4" (DN 100)
- **Body configurations:** Straight through body
- **Connection standards :** ANSI I ASTM I BS I DIN I EN I ISO I JIS
- **Connection types:** Fitting screw connection I Flange I Spigot
- **Body materials:** ABS I Inliner PP-H, grey / outliner PP, reinforced I Inliner PVDF/outliner PP, reinforced I PP, reinforced I PVC-U, grey I PVDF
- **Diaphragm materials:** EPDM I FKM I NBR I PTFE/EPDM
- **Conformities:** ACS I EAC I FDA I System 1+

Technical data depends on the respective configuration

further information
webcode: GW-R677

Product description

Construction



Item	Name	Materials
1	Optical position indicator	PP-H red
2	Actuator	PP- H 30% glass fibre reinforced
3	Diaphragm	NBR, FKM, EPDM, PTFE / EPDM one-piece, PTFE / EPDM two-piece
4	Valve body	PVC-U, grey ABS PP, reinforced PVDF Inliner PP-H, grey / outliner PP, reinforced Inliner PVDF / outliner PP, reinforced
5	CONEXO diaphragm RFID chip (see Conexo information)	
6	CONEXO body RFID chip (see Conexo information)	
7	CONEXO actuator RFID chip (see Conexo information)	

GEMÜ CONEXO

The interaction of valve components that are equipped with RFID chips and an associated IT infrastructure actively increase process reliability.



Thanks to serialization, every valve and every relevant valve component such as the body, actuator or diaphragm, and even automation components, can be clearly traced and read using the CONEXO pen RFID reader. The CONEXO app, which can be installed on mobile devices, not only facilitates and improves the "installation qualification" process, but also makes the maintenance process much more transparent and easier to document. The app actively guides the maintenance technician through the maintenance schedule and directly provides him with all the information assigned to the valve, such as test reports, testing documentation and maintenance histories. The CONEXO portal acts as a central element, helping to collect, manage and process all data.

For further information on GEMÜ CONEXO please visit:
www.gemu-group.com/conexo

Ordering

GEMÜ Conexo must be ordered separately with the ordering option "CONEXO".

Availability

Availability of valve bodies

Spigot

MG	DN	Connection type code [1]						
		0			20		30	7X
		Material code [2]						
		1	5, 20	71, 75	20	71, 75	1, 4	1, 4, 71, 20
20	15	X	-	X	-	X	X	X
	20	X	-	X	-	X	X	X
	25	X	-	X	-	X	X	X
25	32	X	-	X	-	X	X	X
40	40	X	-	X	-	X	X	X
	50	X	-	X	-	X	X	X
50	65	X	X	-	X	-	X	-
80	80	X	X	-	X	-	X	-
100	100	X	X	-	X	-	X	-

MG = diaphragm size, X = standard

1) **Connection type**
Code 0: Spigot DIN
Code 20: Spigot for IR butt welding
Code 30: Spigot – inch, for welding or solvent cementing, depending on the body material
Code 7X: Body with threaded spigots for unions

2) **Valve body material**
Code 1: PVC-U, grey
Code 4: ABS
Code 5: PP, reinforced
Code 20: PVDF
Code 71: Inliner PP-H, grey, outliner PP, reinforced
Code 75: Inliner PVDF/outliner PP, reinforced

Union end

MG	DN	Connection type code [1]																
		07						7				7R, 3P	33		3M	3T	78	
		Material code																
		1	4	5	20	71	75	1	4	71	75	1	1	4	1	1	71	75
20	15	X	X	-	-	X	X	X	X	X	X	X	X	X	X	-	X	X
	20	X	X	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X
	25	X	X	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X
25	32	X	X	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X
40	40	X	X	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X
	50	X	X	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X
50	65	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-
80	80	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100	100	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

MG = diaphragm size, X = standard

1) **Connection type**
Code 07: Spigot body with GEMÜ 1035 union end, DIN insert (socket)
Code 7: Union end with insert (socket) – DIN
Code 7R: Union end with insert (Rp threaded socket) – DIN
Code 33: Union end with inch insert – BS (socket)
Code 3M: Union end with inch insert – ASTM (socket)
Code 3P: Union end with NPT threaded socket insert
Code 3T: Union end with JIS insert (socket)
Code 78: Union end with insert (for IR butt welding) – DIN

Flange

MG	DN	Connection type code [1]									
		4					39				
		Material code [2]									
		1	5	20	71	75	1	5	20	71	75
20	15	X	-	-	X	X	X	-	-	X	X
	20	X	-	-	X	X	X	-	-	X	X
	25	X	-	-	X	X	X	-	-	X	X
25	32	X	-	-	X	X	X	-	-	X	X
40	40	X	-	-	X	X	X	-	-	X	X
	50	X	-	-	X	X	X	-	-	X	X
50	65	X	X	X	-	-	X	X	X	-	-
80	80	X	X	X	-	-	X	X	X	-	-
100	100	X	X	X	-	-	X	X	X	-	-

MG = diaphragm size, X = standard

1) **Connection type**
Code 4: Flange EN 1092, PN 10, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1
Code 39: Flange ANSI Class 125/150 RF, length only for body configuration D acc. to EN 558 series 1, ISO 5752, basic series 1

2) **Valve body material**
Code 1: PVC-U, grey
Code 5: PP, reinforced
Code 20: PVDF
Code 71: Inliner PP-H, grey, outliner PP, reinforced
Code 75: Inliner PVDF/outliner PP, reinforced

Availability of product conformity – drinking water hygiene suitability according to system 1+ (special function 1)

MG	DN	Connection type code [1]				Material code	Diaphragm material code
		0	30	7	33	1	28
20	15	X	X	X	X	X	X
	20	X	X	X	X	X	X
	25	X	X	X	X	X	X
25	32	X	X	X	X	X	X
40	40	X	X	X	X	X	X
	50	X	X	X	X	X	X
50	65	X	X	-	-	X	X
80	80	X	X	-	-	X	X
100	100	X	X	-	-	X	X

MG = diaphragm size

1) **Connection type**
Code 0: Spigot DIN
Code 7: Union end with insert (socket) – DIN
Code 30: Spigot – inch, for welding or solvent cementing, depending on the body material
Code 33: Union end with inch insert – BS (socket)

Order data

The order data provide an overview of standard configurations.

Please check the availability before ordering. Other configurations available on request.

Order codes

1 Type	Code
Diaphragm valve, manually operated, plastic handwheel, optical position indicator	R677

2 DN	Code
DN 15	15
DN 20	20
DN 25	25
DN 32	32
DN 40	40
DN 50	50
DN 65	65
DN 80	80
DN 100	100

3 Body configuration	Code
2/2-way body	D

4 Connection type	Code
Spigot	
Spigot DIN	0
Spigot for IR butt welding	20
Spigot – inch, for welding or solvent cementing, depending on the body material	30
Body with threaded spigots for unions	7X
Union end	
Union end with insert (socket) – DIN	7
Spigot body with GEMÜ 1035 union end, DIN insert (socket)	07
Union end with insert (Rp threaded socket) – DIN	7R
Union end with inch insert – BS (socket)	33
Union end with inch insert – ASTM (socket)	3M
Union end with NPT threaded socket insert	3P
Union end with JIS insert (socket)	3T
Union end with insert (for IR butt welding) – DIN	78
For DN 65 code 07: Spigot body with fitting screw connection see data sheet 1035.	
Flange	
Flange EN 1092, PN 10, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1	4
Flange ANSI Class 125/150 RF, length only for body configuration D acc. to EN 558 series 1, ISO 5752, basic series 1	39

5 Valve body material	Code
PVC-U, grey	1
ABS	4

5 Valve body material	Code
PP, reinforced	5
PVDF	20
Inliner PP-H, grey, outliner PP, reinforced	71
Inliner PVDF/outliner PP, reinforced	75

6 Diaphragm material	Code
Elastomer	
NBR	2
FKM	4
EPDM	17
EPDM	29
PTFE	
PTFE/EPDM one-piece	54
PTFE/EPDM two-piece	5M
Note: The PTFE/EPDM diaphragm (code 5M) is available from diaphragm size 25.	

7 Control function	Code
Manually operated	0
Manually operated, with lockable handwheel	L

8 Actuator version	Code
with connection thread for electrical position indicator	
Actuator size EDZ	EDZ
Actuator size EFZ	EFZ
Actuator size FDZ	FDZ
Actuator size HDZ	HDZ
Actuator size KDZ	KDZ
Actuator size MDZ	MDZ
Actuator size NDZ	NDZ
without connection thread for electrical position indicator	
Actuator size ED (diaphragm size 20)	ED
Actuator size EF (diaphragm size 20)	EF
Actuator size FD (diaphragm size 25)	FD
Actuator size HD (diaphragm size 40)	HD
Actuator size KD (diaphragm size 50)	KD

9 CONEXO	Code
Without	
Integrated RFID chip for electronic identification and traceability	C

10 Special version	Code
Drinking water hygiene suitability according to system 1+, UBA-BWGL for plastics and other organic materials, Cold and hot water (23 °C–60 °C)	1

Order example

Order option	Code	Description
1 Type	R677	Diaphragm valve, manually operated, plastic handwheel, optical position indicator
2 DN	15	DN 15
3 Body configuration	D	2/2-way body
4 Connection type	7	Union end with insert (socket) – DIN
5 Valve body material	1	PVC-U, grey
6 Diaphragm material	17	EPDM
7 Control function	0	Manually operated
8 Actuator version	EDZ	Actuator size EDZ
9 CONEXO	C	Integrated RFID chip for electronic identification and traceability
10 Special version	1	Drinking water hygiene suitability according to system 1+, UBA-BWGL for plastics and other organic materials, Cold and hot water (23 °C–60 °C)

Technical data

Medium

Working medium: Corrosive, inert, gaseous and liquid media which have no negative impact on the physical and chemical properties of the body and diaphragm material.

Temperature

Ambient temperature:

Valve body material	
PVC-U, grey (code 1)	50 — 122 °F
ABS (code 4)	14 — 122 °F
PP, reinforced (code 5)	41 — 122 °F
PVDF (code 20)	14 — 122 °F
Inliner PP-H grey / outliner PP, reinforced (code 71)	41 — 122 °F
Inliner PVDF / outliner PP, reinforced (code 75)	23 — 122 °F

Storage temperature: 50 — 104 °F

Pressure

Operating pressure:

MG	DN	Diaphragm materials	
		Elastomer	PTFE
20	**15**	0 - 150	0 - 150
	20	0 - 150	0 - 150
	25	0 - 150	0 - 150
25	**32**	0 - 150	0 - 150
40	**40**	0 - 150	0 - 150
	50	0 - 150	0 - 150
50	**65**	0 - 150	0 - 150
80	**80**	0 - 150	0 - 90
100	**100**	0 - 150	0 - 90

All pressures are psi - gauge pressures. Operating pressure values were determined with static operating pressure applied on one side of a closed valve. Sealing at the valve seat and atmospheric sealing is ensured for the given values.
Information on operating pressures applied on both sides and for high purity media on request.

Pressure rating: PN 10

Leakage rate: Leakage rate A (acc. to EN 12266-1)

Pressure/temperature correlation:

Valve body material		Temperature in °F (valve body)											
Materials	Code	-10	±0	5	10	20	25	30	40	50	60	70	80
PVC-U	**1**	-	-	-	150	150	150	120	90	52	23	-	-
ABS	**4**	150	150	150	150	150	150	120	90	60	30	-	-
PP	**5**	-	-	150	150	150	150	125	105	80	60	40	23
PP-H	**71**	-	-	150	150	150	150	125	105	80	60	40	23
PVDF	**20**	150	150	150	150	150	150	130.5	120	105	92	80	70
PVDF	**75**	150	150	150	150	150	150	130.5	120	105	92	80	70

Data for extended temperature ranges on request. Please note that the ambient temperature and media temperature generate a combined temperature at the valve body which must not exceed the above values.

Cv values:

MG	DN	Cv values
20	**15**	7.0
	20	11.7
	25	14.0
25	**32**	23.4
40	**40**	49.1
	50	53.8
50	**65**	81.9
80	**80**	140.4
100	**100**	221.1

MG = diaphragm size
Cv values in gpm
Cv values determined acc.to DIN EN 60534 standard, inlet pressure 72.5 psi, Δp 14.5 psi, PVC-U valve body and soft elastomer diaphragm.
The Cv values for other product configurations (e.g. other diaphragm or body materials) may differ. In general, all diaphragms are subject to the influences of pressure, temperature, the process and their tightening torques. Therefore the Cv values may exceed the tolerance limits of the standard.
The Cv value curve (Cv value dependent on valve stroke) can vary depending on the diaphragm material and duration of use.

Product conformity

Pressure Equipment Directive: 2014/68/EU

EAC: TR CU 010/2011

Drinking water: Drinking water hygiene suitability according to system 1+ (special function 1)
System 1+

Food: FDA

Materials

Materials:

Diaphragm material	O-ring material
PTFE	FKM
NBR	EPDM
FKM	FKM
EPDM	EPDM

Mechanical data

Protection class: IP 65 acc. to EN 60529

Weight:

Actuator

MG	Actuator size	Weight
20	**ED**	0.66
20	**EF**	0.77
25	**FD**	0.88
40	**HD**	1.32
65	**KD**	2.20
80	**MD**	8.38
100	**ND**	11.24

MG = diaphragm size, weight in kg

Valve body

MG	DN	Spigot		Union end				Flange
		Connection type code						
		0, 30	20	3P, 7, 7R	33	3M, 3T	78	4, 39
20	**15**	0.26	0.22	0.37	0.53	0.57	0.60	1.48
	20	0.29	0.26	0.46	0.62	0.66	0.79	1.85
	25	0.35	0.31	0.57	0.73	0.84	0.82	2.82
25	**32**	0.49	0.40	0.88	1.54	1.61	1.39	4.17
40	**40**	1.10	0.88	1.61	1.83	2.05	2.49	5.20
	50	1.26	1.04	2.20	3.09	3.31	3.53	6.79
50	**65**	2.03	7.87	-	-	-	-	7.05
80	**80**	8.82	7.28	-	-	-	-	14.77
100	**100**	9.70	8.82	-	-	-	-	18.08

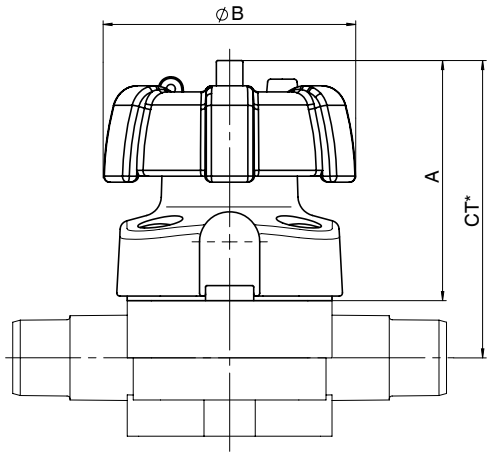
Weights in lb
MG = diaphragm size

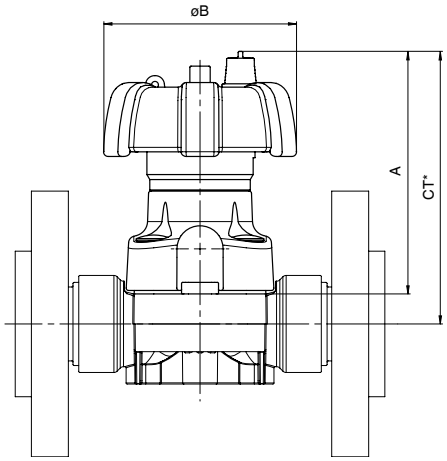
Installation position: Optional

Flow direction: Optional

Dimensions

Actuator dimensions





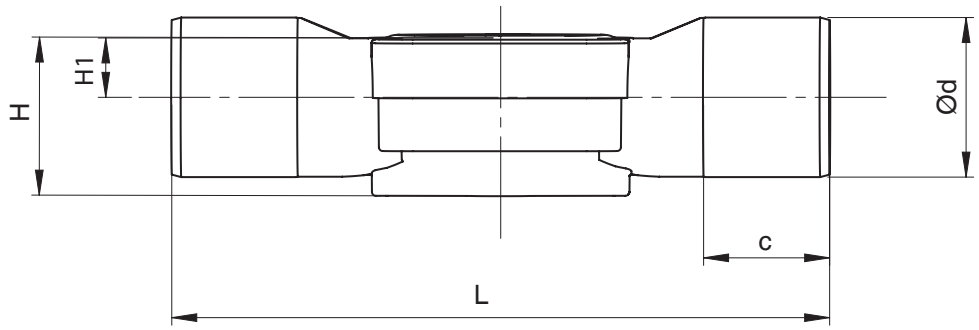
Actuator size EF
connection code 4, 39

MG	DN	Actuator size	ØB	A	
				Control function 0	Control function L
20	**15 – 25**	**ED**	3.54	2.95	3.27
20	**15 - 25**	**EF**	3.54	3.90	4.21
25	**32**	**FD**	3.54	3.11	3.43
40	**40 - 50**	**HD**	4.49	3.90	3.98
50	**65**	**KD**	5.51	4.69	4.80
80	**80**	**MD**	8.43	6.57	6.65
100	**100**	**ND**	8.43	8.50	8.31

* only for control function code L
* CT = A + H1 (see body dimensions)

Body dimensions

Spigot DIN / inch (code 0, 30)



Connection type spigot DIN (code 0) [1], body material PVC-U (code 1), PP (code 5), PVDF (code 20), inliner/outliner (code 71, 75) [2]

MG	DN	NPS	c			ød	H			H1	L
			Material				Material				
			1	5, 20	71, 75		1	5, 20	71, 75		
20	15	1/2"	0.63	-	0.71	0.79	1.42	-	1.42	0.39	4.88
	20	3/4"	0.75	-	0.75	0.98	1.50	-	1.50	0.47	5.67
	25	1"	0.87	-	0.87	1.26	1.54	-	1.54	0.51	6.06
25	32	1¼"	1.26	-	1.26	1.57	1.61	-	1.61	0.59	6.85
40	40	1½"	1.38	-	1.02	1.97	2.49	-	2.49	0.91	7.64
	50	2"	1.50	-	1.30	2.48	2.49	-	2.49	0.91	8.82
50	65	2½"	1.81	1.81	-	2.95	3.10	3.10	-	1.53	11.18
80	80	3"	2.01	2.01	-	3.54	4.61	4.61	-	2.44	11.81
100	100	4"	2.40	2.40	-	4.33	5.51	5.51	-	2.95	13.39

Connection type spigot - inch (code 30) [1], body material PVC-U (code 1), ABS (code 4) [2]

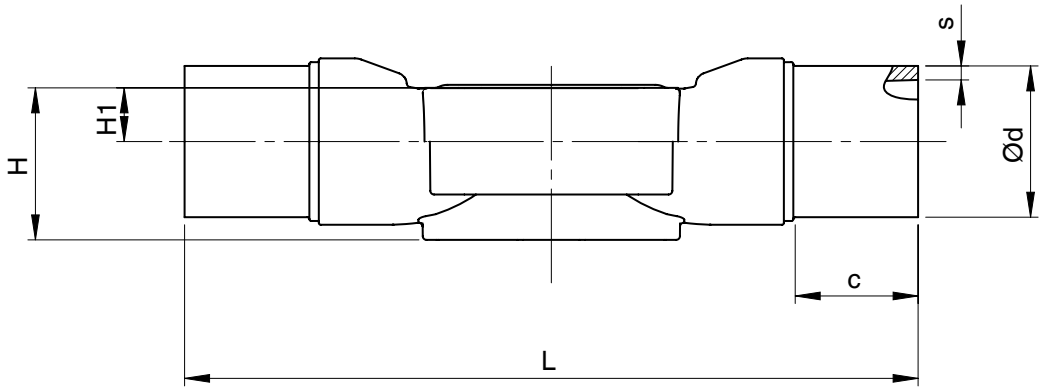
MG	DN	NPS	c	ød	H	H1	L
20	15	1/2"	0.94	0.84	1.42	0.39	5.55
	20	3/4"	1.06	1.05	1.50	0.47	5.67
	25	1"	1.18	1.32	1.54	0.51	6.06
25	32	1¼"	1.30	1.66	1.61	0.59	6.85
40	40	1½"	1.38	1.90	2.49	0.91	7.64
	50	2"	1.57	2.37	2.49	0.91	8.82
50	65	2½"	1.81	2.87	3.10	1.53	11.18
80	80	3"	2.01	3.50	4.61	2.44	11.81
100	100	4"	2.40	4.50	5.51	2.95	13.39

Dimensions in inch
MG = diaphragm size

1) **Connection type**
Code 0: Spigot DIN
Code 30: Spigot – inch, for welding or solvent cementing, depending on the body material

2) **Valve body material**
Code 1: PVC-U, grey
Code 4: ABS
Code 5: PP, reinforced
Code 20: PVDF
Code 71: Inliner PP-H, grey, outliner PP, reinforced
Code 75: Inliner PVDF/outliner PP, reinforced

Spigot IR (code 20)



Connection type spigot IR (code 20) [1], body material inliner/outliner (code 71, 75) [2]

MG	DN	NPS	c	ød	H	H1	L	s	
								Material	
								71	75
20	**15**	**1/2"**	1.30	0.79	1.42	0.39	6.06	0.07	0.07
	20	**3/4"**	1.30	0.98	1.50	0.47	6.06	0.09	0.07
	25	**1"**	1.30	1.26	1.54	0.51	6.06	0.11	0.09
25	**32**	**1¼"**	1.30	1.57	1.61	0.59	7.64	0.15	0.09
40	**40**	**1½"**	1.30	1.97	2.49	0.91	7.64	0.18	0.12
	50	**2"**	1.30	2.48	2.49	0.91	8.82	0.23	0.12

Connection type spigot IR (code 20) [1], body material PVDF (code 20) [2]

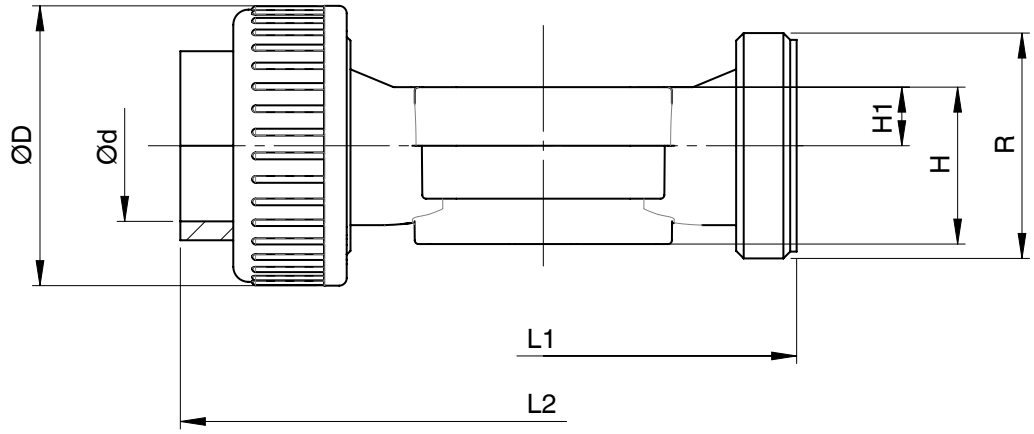
MG	DN	NPS	c	ød	H	H1	L	s
50	**65**	**2½"**	1.69	2.95	3.10	1.53	11.18	0.14
80	**80**	**3"**	2.01	3.54	4.61	2.44	11.81	0.17
100	**100**	**4"**	2.32	4.33	5.51	2.95	13.39	0.21

Dimensions in inch
MG = diaphragm size

1) **Connection type**
Code 20: Spigot for IR butt welding

2) **Valve body material**
Code 20: PVDF
Code 71: Inliner PP-H, grey, outliner PP, reinforced
Code 75: Inliner PVDF/outliner PP, reinforced

Union end DIN (code 7)



Connection type union end (code 7) [1], body material PVC-U (code 1), ABS (code 4), inliner/outliner (code 71, 75) [2], diaphragm sizes 20 – 40

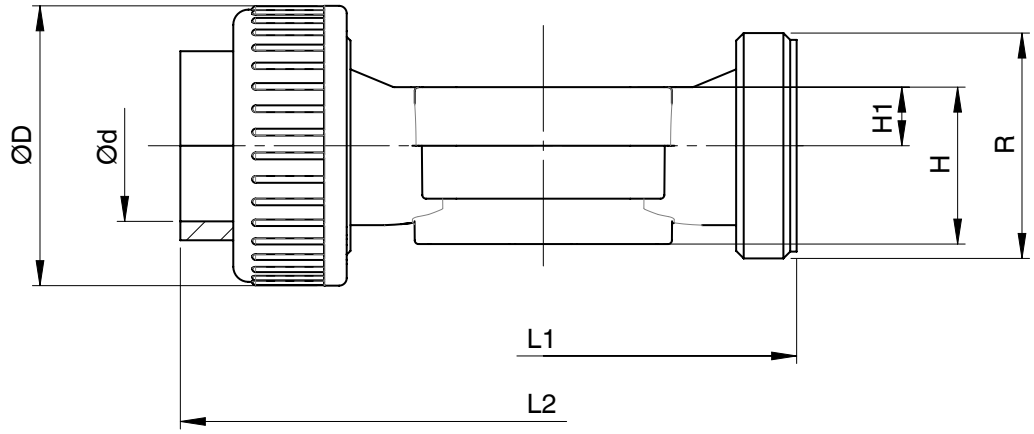
MG	DN	NPS	ød	øD	H	H1	L1	L2				R
								Material				
								1	4	71	75	
20	**15**	**1/2"**	0.79	1.69	1.42	0.39	4.25	5.75	5.91	5.63	5.75	G 1
	20	**3/4"**	0.98	2.09	1.50	0.47	4.25	5.98	6.14	5.75	5.91	G 1¼
	25	**1"**	1.26	2.36	1.54	0.51	4.57	6.54	6.69	6.22	6.38	G 1½
25	**32**	**1¼"**	1.57	2.91	1.61	0.59	5.28	7.56	7.72	7.13	7.24	G 2
40	**40**	**1½"**	1.97	3.27	2.49	0.91	6.06	8.74	8.74	8.15	8.27	G 2¼
	50	**2"**	2.48	4.06	2.49	0.91	7.24	10.47	10.47	9.65	9.76	G 2¾

Dimensions in inch
MG = diaphragm size

1) **Connection type**
Code 7: Union end with insert (socket) – DIN

2) **Valve body material**
Code 1: PVC-U, grey
Code 4: ABS
Code 71: Inliner PP-H, grey, outliner PP, reinforced
Code 75: Inliner PVDF/outliner PP, reinforced

Union end inch (code 33, 3M, 3T)



Connection type union end inch (code 33, 3M, 3T) [1], body material PVC-U (code 1) [2], diaphragm sizes 20 - 40

MG	DN	NPS	ød			øD		H	H1	L1	L2			R	
			Connection type								Connection type				
			33	3M	3T	33, 3M	3T				33	3M	3T	33, 3M	3T
20	**15**	**1/2"**	0.84	0.84	0.87	1.69	2.09 *	1.42	0.39	4.25	5.75	6.22	5.98	G 1	G 1¼ *
	20	**3/4"**	1.06	1.05	1.02	2.09	2.09	1.50	0.47	4.25	5.98	6.46	5.98	G 1¼	G 1¼
	25	**1"**	1.32	1.32	1.26	2.36	2.36	1.54	0.51	4.57	6.54	7.09	6.54	G 1½	G 1½
25	**32**	**1¼"**	1.67	1.66	1.50	2.91	2.91	1.61	0.59	5.28	7.56	8.03	7.56	G 2	G 2
40	**40**	**1½"**	1.90	1.90	1.89	3.27	3.27	2.49	0.91	6.06	8.74	9.06	8.74	G 2¼	G 2¼
	50	**2"**	2.38	2.38	2.36	4.06	4.06	2.49	0.91	7.24	10.39	10.47	10.47	G 2¾	G 2¾

Connection type BS (code 33) [1], body material ABS (code 4) [2]

MG	DN	NPS	ød	øD	H	H1	L1	L2	R
20	**15**	**1/2"**	0.84	1.69	1.42	0.39	4.25	5.91	G 1
	20	**3/4"**	1.06	2.09	1.50	0.47	4.25	6.14	G 1¼
	25	**1"**	1.32	2.36	1.54	0.51	4.57	6.69	G 1½
25	**32**	**1¼"**	1.67	2.91	1.61	0.59	5.28	7.80	G 2
40	**40**	**1½"**	1.90	3.27	2.49	0.91	6.06	8.66	G 2¼
	50	**2"**	2.38	4.06	2.49	0.91	7.24	10.39	G 2¾

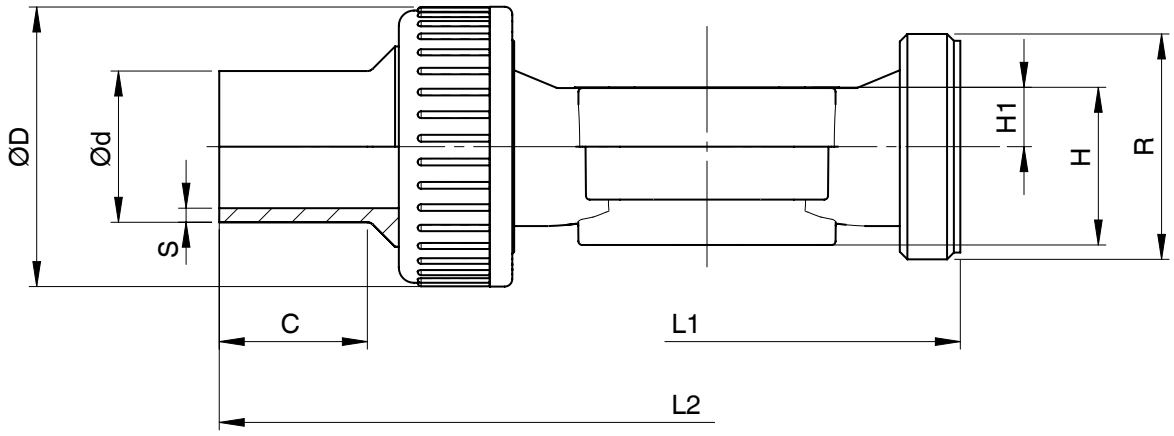
Dimensions in inch
MG = diaphragm size

* Insert requires valve body DN 20

1) **Connection type**
Code 33: Union end with inch insert – BS (socket)
Code 3M: Union end with inch insert – ASTM (socket)
Code 3T: Union end with JIS insert (socket)

2) **Valve body material**
Code 1: PVC-U, grey
Code 4: ABS

Union end DIN (code 78)



Connection type union end DIN, IR butt welding (code 78)[1], body materials inliner/outliner (code 71, 75)[2]

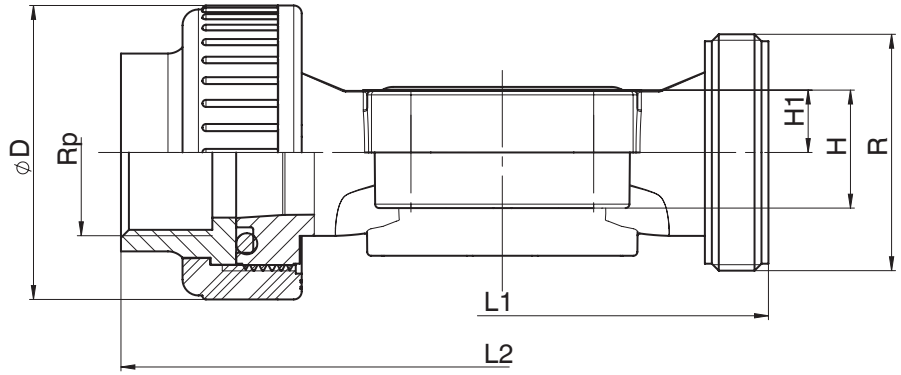
MG	DN	NPS	c	ød	øD	H	H1	L1	L2	R	s	
											Material	
											71	75
20	**15**	**1/2"**	1.42	0.79	1.69	1.42	0.39	4.25	8.43	G 1	0.07	0.07
	20	**3/4"**	1.46	0.98	2.09	1.50	0.47	4.25	8.66	G 1¼	0.09	0.07
	25	**1"**	1.54	1.26	2.36	1.54	0.51	4.57	9.21	G 1½	0.11	0.09
25	**32**	**1¼"**	1.54	1.57	2.91	1.61	0.59	5.28	10.16	G 2	0.15	0.09
40	**40**	**1½"**	1.69	1.97	3.27	2.49	0.91	6.06	11.18	G 2¼	0.18	0.12
	50	**2"**	1.69	2.48	4.06	2.49	0.91	7.24	12.60	G 2¾	0.23	0.12

Dimensions in inch
MG = diaphragm size

1) **Connection type**
Code 78: Union end with insert (for IR butt welding) – DIN

2) **Valve body material**
Code 71: Inliner PP-H, grey, outliner PP, reinforced
Code 75: Inliner PVDF/outliner PP, reinforced

Union end Rp (code 7R), NPT (Code 3P)



Connection type union end Rp (code 7R), NPT (code 3P)[1], body material PVC-U (code 1)[2]

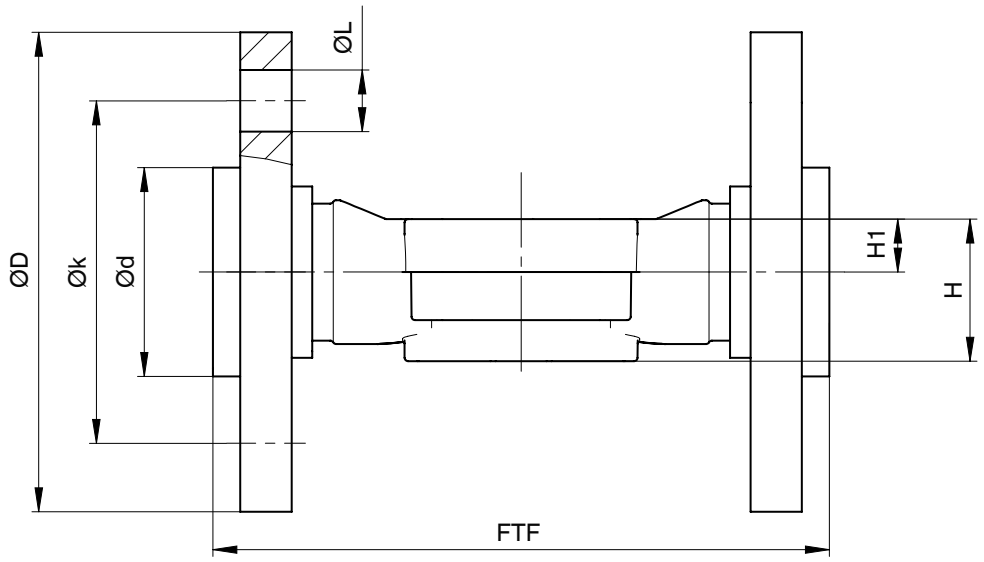
MG	DN	NPS	øD	H	H1	L1	L2	R	Rp/NPT
20	**15**	**1/2"**	1.69	1.42	0.39	4.25	5.75	G 1	1/2
	20	**3/4"**	2.09	1.50	0.47	4.25	5.98	G 1¼	3/4
	25	**1"**	2.36	1.54	0.51	4.57	6.54	G 1½	1
25	**32**	**1¼"**	2.91	1.61	0.59	5.28	7.56	G 2	1¼
40	**40**	**1½"**	3.27	2.49	0.91	6.06	8.74	G 2¼	1½
	50	**2"**	4.06	2.49	0.91	7.24	10.47	G 2¾	2

Dimensions in inch
MG = diaphragm size

1) **Connection type**
Code 7R: Union end with insert (Rp threaded socket) – DIN
Code 3P: Union end with NPT threaded socket insert

2) **Valve body material**
Code 1: PVC-U, grey

Flange EN (code 4)



Connection type flange EN (code 4) [1], body material PVC-U (code 1) [2]

MG	DN	NPS	ød	øD	FTF	H	H1	øk	øL	n
20	**15**	**1/2"**	1.34	3.74	5.12	1.42	0.39	2.56	0.55	4
	20	**3/4"**	1.61	4.13	5.91	1.50	0.47	2.95	0.55	4
	25	**1"**	1.97	4.53	6.30	1.54	0.51	3.35	0.55	4
25	**32**	**1¼"**	2.40	5.51	7.09	1.61	0.59	3.94	0.71	4
40	**40**	**1½"**	2.87	5.91	7.87	2.49	0.91	4.33	0.71	4
	50	**2"**	3.54	6.50	9.06	2.49	0.91	4.92	0.71	4
50	**65**	**2½"**	4.17	7.28	11.42	3.10	1.53	5.71	0.71	4
80	**80**	**3"**	4.92	7.87	12.20	4.61	2.44	6.30	0.71	8
100	**100**	**4"**	5.91	8.66	13.78	5.51	2.95	7.09	0.71	8

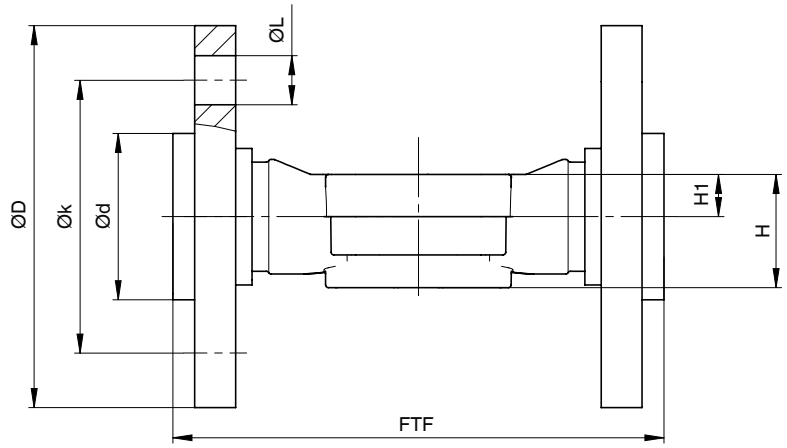
Connection type flange EN (code 4) [1], body materials PP (code 5), PVDF (code 20) [2]

MG	DN	NPS	ød		øD	FTF	H	H1	øk	øL	n
			Material								
			5	20							
50	**65**	**2½"**	4.80	4.72	7.28	11.42	3.10	1.53	5.71	0.71	4
80	**80**	**3"**	5.43	4.92	7.87	12.20	4.61	2.44	6.30	0.71	8
100	**100**	**4"**	6.22	5.91	8.66	13.78	5.51	2.95	7.09	0.71	8

Dimensions in inch
MG = diaphragm size
n = number of bolts

1) **Connection type**
Code 4: Flange EN 1092, PN 10, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1

2) **Valve body material**
Code 1: PVC-U, grey
Code 5: PP, reinforced
Code 20: PVDF



Connection type flange EN (code 4) [1], body material inliner/outliner (code 71, 75) [2]

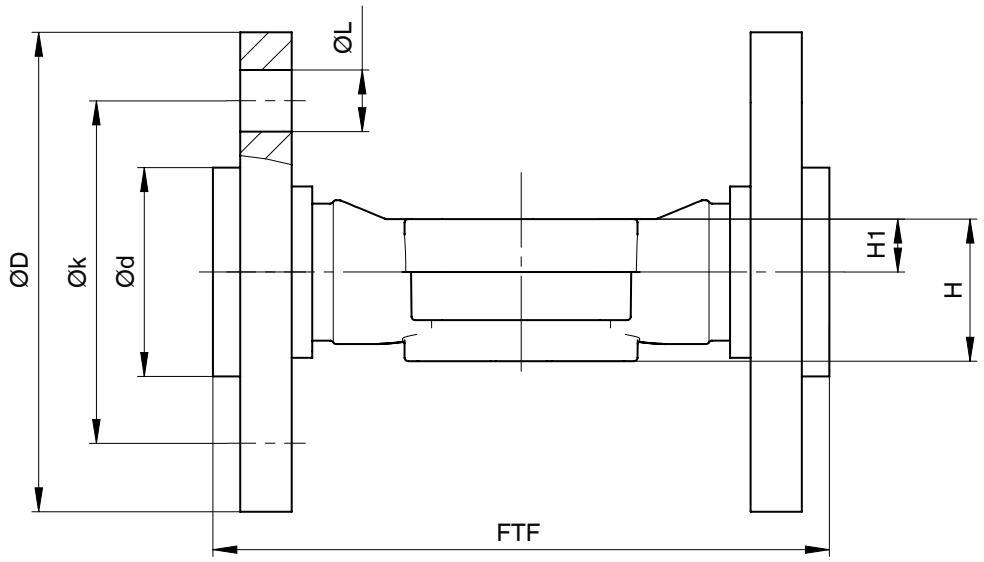
MG	DN	NPS	ød	øD	FTF	H	H1	øk	øL	n
20	**15**	**1/2"**	1.77	3.74	5.12	1.42	0.39	2.56	0.55	4
	20	**3/4"**	2.28	4.13	5.91	1.50	0.47	2.95	0.55	4
	25	**1"**	2.68	4.53	6.30	1.54	0.51	3.35	0.55	4
25	**32**	**1¼"**	3.07	5.51	7.09	1.61	0.59	3.94	0.71	4
40	**40**	**1½"**	3.46	5.91	7.87	2.49	0.91	4.33	0.71	4
	50	**2"**	4.02	6.50	9.06	2.49	0.91	4.92	0.71	4

Dimensions in inch
MG = diaphragm size
n = number of bolts

1) **Connection type**
Code 4: Flange EN 1092, PN 10, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1

2) **Valve body material**
Code 71: Inliner PP-H, grey, outliner PP, reinforced
Code 75: Inliner PVDF/outliner PP, reinforced

Flange ANSI Class (code 39)



Connection type flange ANSI (code 39) [1], body material PVC-U (code 1) [2]

MG	DN	NPS	ød	øD	FTF	H	H1	øk	øL	n
20	**15**	**1/2"**	1.34	3.74	5.12	1.42	0.39	2.36	0.63	4
	20	**3/4"**	1.61	4.13	5.91	1.50	0.47	2.76	0.63	4
	25	**1"**	1.97	4.53	6.30	1.54	0.51	3.11	0.63	4
25	**32**	**1¼"**	2.40	5.51	7.09	1.61	0.59	3.50	0.63	4
40	**40**	**1½"**	2.87	5.91	7.87	2.49	0.91	3.86	0.63	4
	50	**2"**	3.54	6.50	9.06	2.49	0.91	4.76	0.75	4
50	**65**	**2½"**	4.17	7.28	11.42	3.10	1.53	5.51	0.75	4
80	**80**	**3"**	4.92	7.87	12.20	4.61	2.44	5.98	0.75	4
100	**100**	**4"**	5.91	9.02	13.78	5.51	2.95	7.48	0.75	8

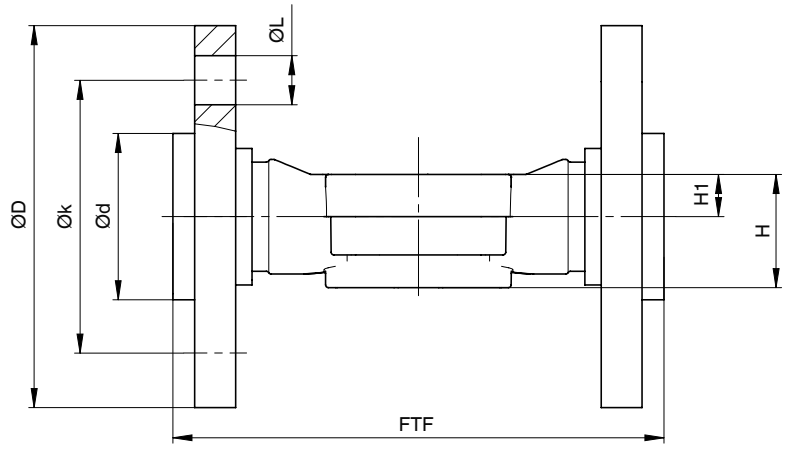
Connection type flange ANSI (code 39) [1], body material PP (code 5), PVDF (code 20) [2]

MG	DN	NPS	ød		øD	FTF	H	H1	øk	øL	n
			Material								
			5	20							
50	**65**	**2½"**	4.80	4.72	7.28	11.42	3.10	1.53	5.51	0.75	4
80	**80**	**3"**	5.24	4.92	7.87	12.20	4.61	2.44	5.98	0.75	4
100	**100**	**4"**	6.22	5.91	9.02	13.78	5.51	2.95	7.48	0.75	8

Dimensions in inch
MG = diaphragm size
n = number of bolts

1) **Connection type**
Code 39: Flange ANSI Class 125/150 RF, length only for body configuration D acc. to EN 558 series 1, ISO 5752, basic series 1

2) **Valve body material**
Code 1: PVC-U, grey
Code 5: PP, reinforced
Code 20: PVDF



Connection type flange ANSI (code 39)[1], inliner/outliner body material (code 71, 75)[2]

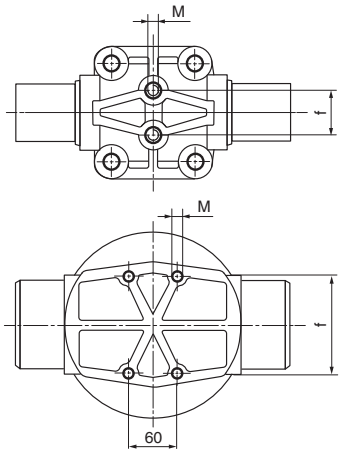
MG	DN	NPS	ød	øD	FTF	H	H1	øk	øL	n
20	**15**	**1/2"**	1.77	3.74	5.12	1.42	0.39	2.36	0.63	4
	20	**3/4"**	2.13	4.13	5.91	1.50	0.47	2.76	0.63	4
	25	**1"**	2.48	4.53	6.30	1.54	0.51	3.11	0.63	4
25	**32**	**1¼"**	2.87	5.51	7.09	1.61	0.59	3.50	0.63	4
40	**40**	**1½"**	3.23	5.91	7.87	2.49	0.91	3.86	0.63	4
	50	**2"**	4.02	6.50	9.06	2.49	0.91	4.76	0.75	4

Dimensions in inch
MG = diaphragm size
n = number of bolts

1) **Connection type**
Code 39: Flange ANSI Class 125/150 RF, length only for body configuration D acc. to EN 558 series 1, ISO 5752, basic series 1

2) **Valve body material**
Code 71: Inliner PP-H, grey, outliner PP, reinforced
Code 75: Inliner PVDF/outliner PP, reinforced

Valve body mounting



MG	DN	M Connection code 0, 4, 7, 7R, 20, 33, 39, 3M, 3T, 78	M Connection code 30	f
20	15 – 25	M6	M6 *	0.98
25	32	M6	M6 *	0.98
40	40 - 50	M8	M8 *	1.75
50	65	M8	M8 *	1.75

MG	DN	M Connection code 0, 4, 7, 7R, 20, 33, 39, 3M, 3T, 78	M Connection code 30	f
80	80	M12	1/2“ **	3.94
100	100	M10	3/4“ **	4.72

* Inch thread on request

** Metric thread on request



Subject to alteration | 03.2026 | 88749326

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