GEMÜ®

Check Valve, Plastic

Construction

The GEMÜ N560 check valve comprises an angle seat globe valve body made of plastic (either PVC-U or PP-H). The sealing elements are manufactured from EPDM and FPM.

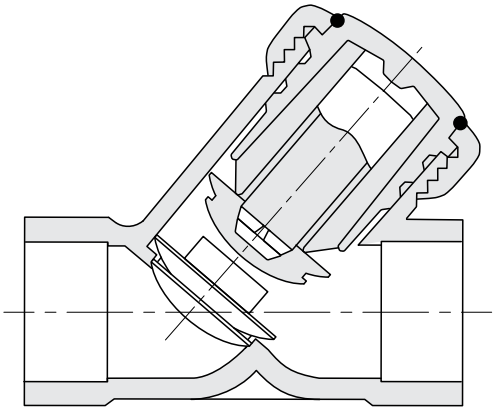
Features

- Corrosion-resistant materials
- Various connections are available (spigots,threaded sockets, solvent cement/welded sockets, flanges)

Advantages

- Easy to service
- Good flow capability due to the angle seat design
- Low weight

Sectional view



GEMÜ® N560

Technical data

Working medium

Corrosive, inert and liquid media which do not adversely affect the physical and chemical properties of the relevant valve body and seal materials.

Media temperature:	
PVC-U	10 to 60 °C
PP-H, grey	5 to 80 °C

Operating pressure

PVC-U at 20 °C (water)	max. 16 bar
PP-H, grey at 20 °C (water)	max. 10 bar

Ambient temperature

Valve body PVC-U	10 to 50 °C
Valve body PP-H	5 to 50 °C

Kv values [l/min]

DN	10	15	20	25	32	40	50	65	80	100
PVC-U	47	110	205	375	560	835	1300	1950	2600	3500
PP-H, grey	-	110	205	375	560	835	1300	1950	2600	-

Kv values determined for water at 20 °C, Δp 1 bar, with a fully open valve.

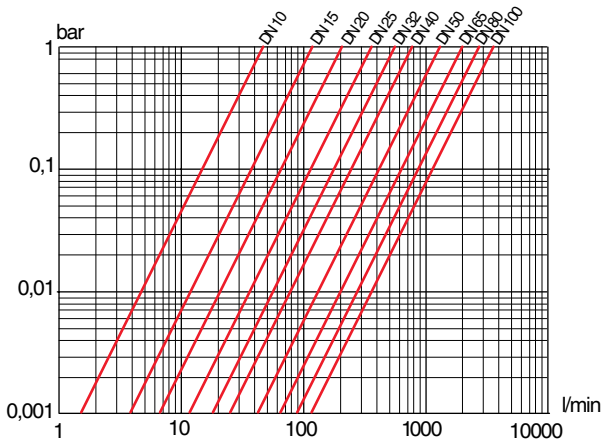
Pressure / temperature correlation

Temperature in °C (plastic body)		-20	-10	±0	5	10	20	25	30	40	50	60	70	80
Valve body material		Permissible operating pressure in bar												
PVC-U	Code 1	-	-	-	-	16.0	16.0	16.0	12.8	9.6	5.6	2.4	-	-
PP-H	Code G5	-	-	-	10.0	10.0	10.0	10.0	8.5	7.0	5.5	4.0	2.7	1.5

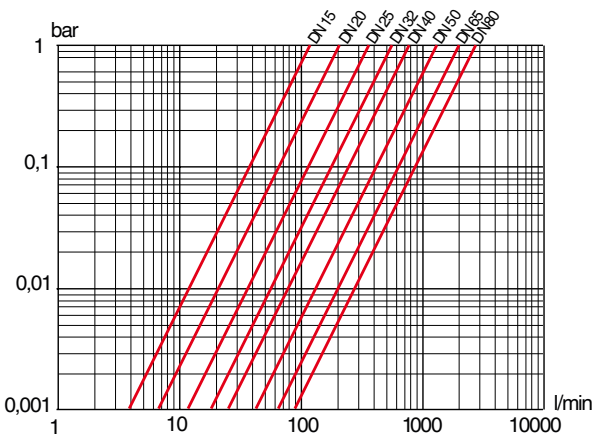
Data for extended temperature ranges on request. Please note that the ambient temperature and medium temperature generate a combined temperature at the valve body which must not exceed the above values.

Pressure loss diagram

PVC-U



PP-H, grey



Order data

Body configuration	Code
2/2-way body	D

Valve body material	Code
PVC-U, grey	1
PP-H, grey	G5

Connection	Code
Spigots DIN	0
Threaded sockets DIN ISO 228	1
Solvent cement / welded sockets DIN	2
Flanges EN 1092 / PN 10 / form B	4
Flanges ANSI Class 150 FF	41

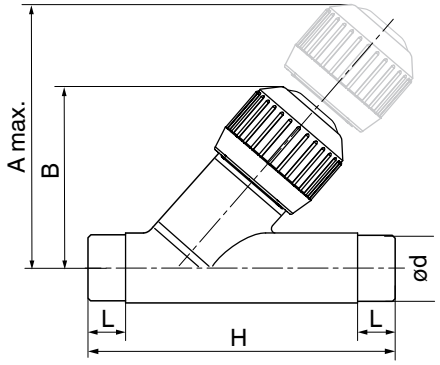
Seal	Code
FPM	4
EPDM	14

Order example	N560	25	D	2	1	4
Type	N560					
Nominal size		25				
Body configuration (code)			D			
Connection (code)				2		
Valve body material (code)					1	
Seal (code)						4

Dimensions [mm]

Spigots, connection code 0
Valve body material: PVC-U grey (code 1)

DN	PN Operating pressure	ød	A max.	B	L	H	Weight [g]
10	16 bar	16	125	72	14	114	125
15	16 bar	20	125	72	16	124	135
20	16 bar	25	145	84	19	144	225
25	16 bar	32	165	95	22	154	360
32	16 bar	40	190	111	26	174	590
40	16 bar	50	210	120	31	194	835
50	16 bar	63	240	139	38	224	1420

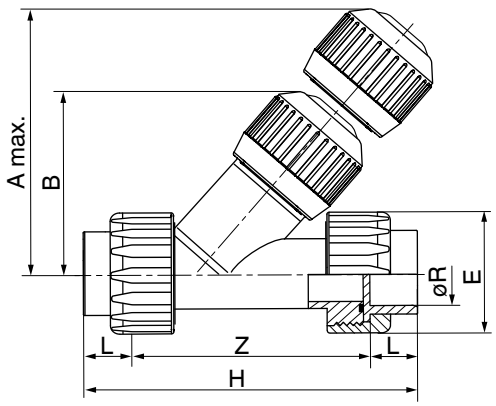


Dimensions [mm]

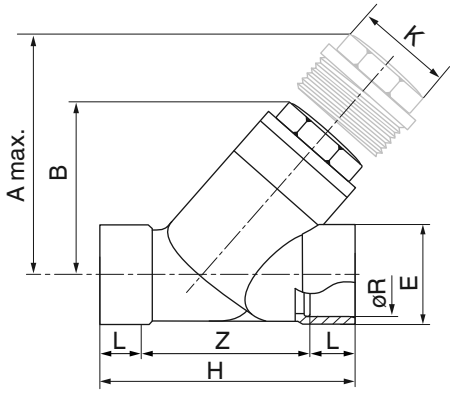
Threaded sockets, connection code 1 Valve body material: PVC-U grey (code 1)										
DN	PN Operating pressure	øR	A max.	B	E	L	Z	H	K	Weight [g]
10	16 bar	3/8”	125	72	55	11.4	112.2	135	-	221
15	16 bar	1/2”	125	72	55	15.0	113.0	143	-	230
20	16 bar	3/4”	145	84	66	16.3	127.4	160	-	390
25	16 bar	1”	165	95	75	19.1	144.8	183	-	602
32	16 bar	1 1/4”	190	111	87	21.4	171.2	214	-	932
40	16 bar	1 1/2”	210	120	100	21.4	192.2	235	-	1341
50	16 bar	2”	240	139	120	25.7	233.6	285	-	2348
65	10 bar	2 1/2”	300	179	104	30.2	182.6	243	96	3485
80	6 bar	3”	325	192	116	33.3	195.4	262	105	4520
100	6 bar	4”	385	231	138	39.3	246.4	325	-	6965

Threaded sockets, connection code 1 Valve body material: PP-H grey (code G5)									
DN	PN Operating pressure	øR	A max.	B	E	L	Z	H	Weight [g]
15	10 bar	1/2”	125	71.0	55	15.0	113.0	143	165
20	10 bar	3/4”	145	83.0	65	16.3	127.4	160	227
25	10 bar	1”	165	94.0	74	19.1	144.8	183	380
32	10 bar	1 1/4”	190	109.0	86	21.4	171.2	214	645
40	10 bar	1 1/2”	210	119.0	99	21.4	192.2	235	915
50	10 bar	2”	240	142.5	120	25.7	233.6	285	1555

DN 10 – DN 50



DN 65 – DN 100

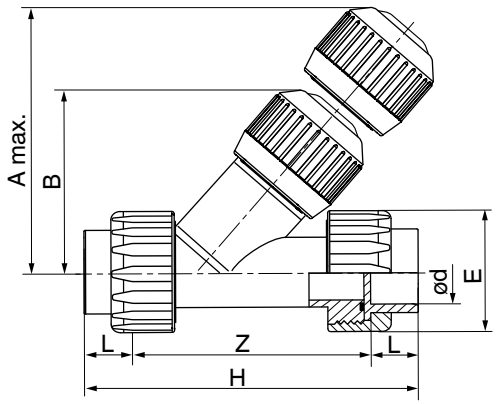


Dimensions [mm]

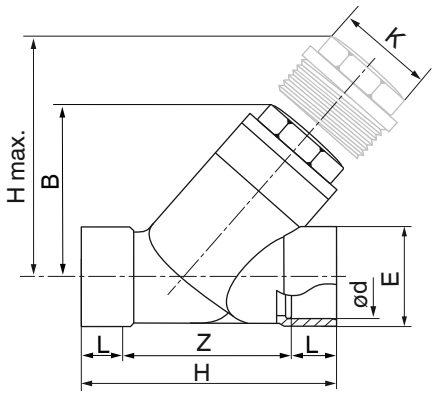
Solvent cement sockets, connection code 2 Valve body material: PVC-U grey (code 1)										
DN	**PN Operating pressure**	**ød**	**A max.**	**B**	**E**	**L**	**Z**	**H**	**K**	**Weight [g]**
10	16 bar	16	125	72	55	14	107	135	-	218
15	16 bar	20	125	72	55	16	103	135	-	226
20	16 bar	25	145	84	66	19	120	158	-	388
25	16 bar	32	165	95	75	22	132	176	-	606
32	16 bar	40	190	111	87	26	155	207	-	923
40	16 bar	50	210	120	100	31	181	243	-	1335
50	16 bar	63	240	139	120	38	222	298	-	2313
65	10 bar	75	300	179	104	44	155	243	96	3485
80	6 bar	90	325	192	116	51	160	262	105	4530
100	6 bar	110	385	231	138	61	203	325	-	7170

Welded sockets, connection code 2 Valve body material: PP-H grey (code G5)										
DN	**PN Operating pressure**	**ød**	**A max.**	**B**	**E**	**L**	**Z**	**H**	**K**	**Weight [g]**
15	10 bar	20	125	71.0	55	14.5	102.5	137.5	-	165
20	10 bar	25	145	83.0	65	16.0	125.0	157.0	-	227
25	10 bar	32	165	94.0	74	18.0	142.5	178.5	-	380
32	10 bar	40	190	109.0	86	20.5	164.0	205.0	-	645
40	10 bar	50	210	119.0	99	23.5	196.5	243.5	-	915
50	10 bar	63	240	142.5	120	27.5	239.0	294.0	-	1555
65	6 bar	75	300	176.0	103	31.0	179.0	241.0	96	2450
80	4 bar	90	325	193.0	115	35.5	189.0	260.0	105	3130

DN 10 – DN 50



DN 65 – DN 100

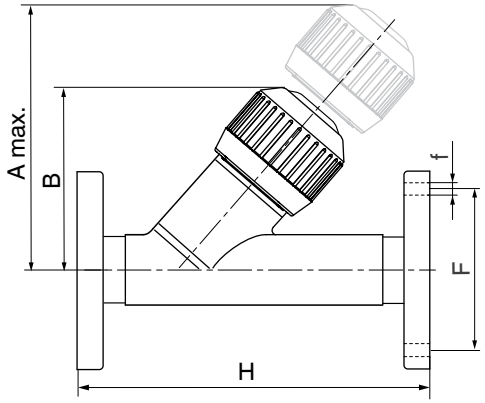


Dimensions [mm]

Flanges – DIN, connection code 4 Valve body material: PVC-U grey (code 1)								
DN	**PN Operating pressure**	**d**	**A max.**	**B**	**H**	**F**	**f**	**Weight [g]**
15	16 bar	20	125	72	130	65	14	280
20	16 bar	25	145	84	150	75	14	430
25	16 bar	32	165	95	160	85	14	640
32	16 bar	40	190	111	180	100	18	1035
40	16 bar	50	210	120	200	110	18	1405
50	16 bar	63	240	139	230	125	18	2235
65	10 bar	75	300	179	356	145	17	4600
80	6 bar	90	325	192	404	160	17	6300
100	6 bar	110	385	231	475	180	17	9200

Flanges – DIN, connection code 4 Valve body material: PP-H grey (code G5)								
DN	**PN Operating pressure**	**d**	**A max.**	**B**	**H**	**F**	**f**	**Weight [g]**
15	10 bar	20	125	72	162.5	65	14	265
20	10 bar	25	145	84	193.0	75	14	327
25	10 bar	32	165	95	210.5	85	14	480
32	10 bar	40	190	111	243.5	100	18	795
40	10 bar	50	210	120	277.0	110	18	1065
50	10 bar	63	240	139	330.5	125	18	1705

Flanges – ANSI, connection code 41 Valve body material: PP-H grey (code G5)								
DN	**PN Operating pressure**	**d**	**A max.**	**B**	**H**	**F**	**f**	**Weight [g]**
15	10 bar	1/2”	125	72	162.5	60.3	15.9	265
20	10 bar	3/4”	145	84	193.0	69.9	15.9	327
25	10 bar	1”	165	95	210.5	79.4	15.9	480
32	10 bar	1 1/4”	190	111	243.5	88.9	15.9	795
40	10 bar	1 1/2”	210	120	277.0	98.4	15.9	1065
50	10 bar	2”	240	139	330.5	120.7	19.1	1705



Overview of valve bodies for GEMÜ N560								
Connection code	**0**	**1**		**2**		**4**		**41**
Material code	**1**	**1**	**G5**	**1**	**G5**	**1**	**G5**	**G5**
DN								
10	X	X	-	X	-	-	-	-
15	X	X	X	X	X	X	X	X
20	X	X	X	X	X	X	X	X
25	X	X	X	X	X	X	X	X
32	X	X	X	X	X	X	X	X
40	X	X	X	X	X	X	X	X
50	X	X	X	X	X	X	X	X
65	-	X	-	X	X	X	-	-
80	-	X	-	X	X	X	-	-
100	-	X	-	X	-	X	-	-

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Should there be any doubts or misunderstandings, the German version of this data sheet is the authoritative document!

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