GEMÜ®

Strainer, Plastic

Construction

The GEMÜ N570 strainer has a body made of plastic (either PVC-U or PP-H). The sealing elements are manufactured from EPDM and FKM. Contaminants in the medium are retained by the integrated filter insert.

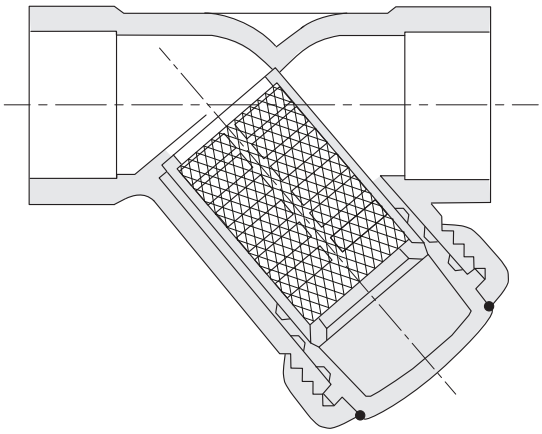
Features

- Corrosion-resistant materials
- Various connections are available (spigots,threaded sockets, solvent cement/welded sockets, flanges)
- Filter inserts made from PP-H, PVC-U or stainless steel (different mesh sizes available for each)

Advantages

- Easy to service
- Low weight

Sectional view



GEMÜ® N570

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	50 to 140 °F
PP-H, grey	41 to 176 °F

Operating pressure

PVC-U at 68 °F (water)	max. 232 psi
PP-H, grey at 68 °F (water)	max. 150 psi

Ambient temperature

Valve body PVC-U	50 to 122 °F
Valve body PP-H	41 to 122 °F

Cv values [gpm]

DN	10	15	20	25	32	40	50	65	80	100
PVC-U	1.54	2.81	4.91	7.23	13.2	17.9	28.78	45.63	73.71	119.34
PP-H, grey	-	2.81	4.91	7.23	13.2	17.9	28.78	45.63	73.71	119.34

Cv values determined for water at 68 °F, Δp 15 psi, with a fully open valve.

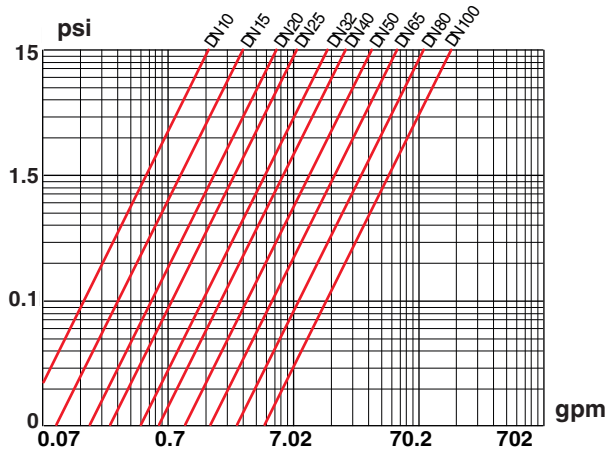
Pressure / temperature correlation

Temperature in °F (plastic body)		-4	14	32	41	50	68	77	86	104	122	140	158	176
Valve body material		Permissible operating pressure in psi												
PVC-U	Code 1, 3	-	-	-	-	232	232	232	186	139	81	35	-	-
PP-H	Code G5	-	-	-	150	150	150	150	123	105	80	60	39	22

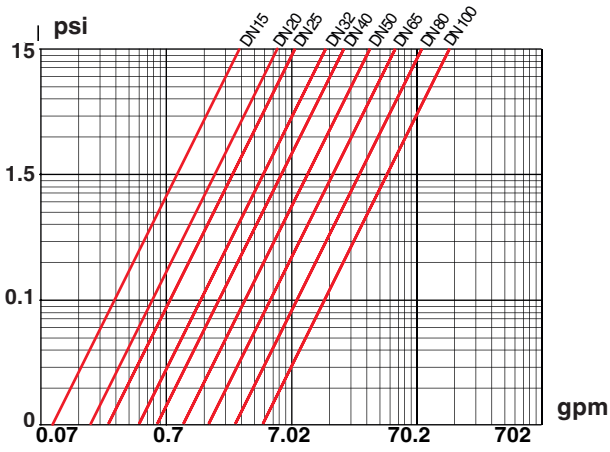
Data for extended temperature ranges on request. Please note that the ambient temperature and medium temperature generate a combined temperature at the valve body which must not exceed the above values.

Pressure loss diagram

PVC-U



PP-H, grey



Mesh spacing 0.06 in

Filter mesh overview						
Mesh spacing [in]	0.03	0.04	0.06	0.06	0.08	0.1
Filter material	1.4301 (Code 45)	PVC-U (Code 1)	PVC-U (Code 1)	PP (Code N5)	PVC-U (Code 1)	PVC-U (Code 1)
Number of holes [in^2]	40.3	19.38	6.2	6.2	5.43	4.65
ASTM mesh size	45	70	40	40	35	30
Hole [µin]	14567	78740	16535	16535	21653	22835

Filter surface										
DN	10	15	20	25	32	40	50	65	80	100
Total At [in^2]	2.48	2.48	3.64	5.58	8.2	10.7	15.65	30.53	38.28	61.38

Order data

Body configuration	Code
2/2-way body	D

Nominal size		Code
DN 10	NPS 3/8“	10
DN 15	NPS 1/2“	15
DN 20	NPS 3/4“	20
DN 25	NPS 1“	25
DN 32	NPS 1 1/4“	32
DN 40	NPS 1 1/2“	40
DN 50	NPS 2“	50
DN 65	NPS 2 1/2“	65
DN 80	NPS 3“	80
DN 100	NPS 4“	100

Connection	Code
Spigots DIN	0
Threaded sockets DIN ISO 228	1
Solvent cement/welded sockets	2
Flanges EN 1092, form B	4
Flanges ANSI Class 150 FF	41
Other connections upon request	

Valve body material	Code
PVC-U, grey	1
PVC-U, transparent	3
PP-H, grey	G5

Seal	Code
FKM	4
EPDM	14

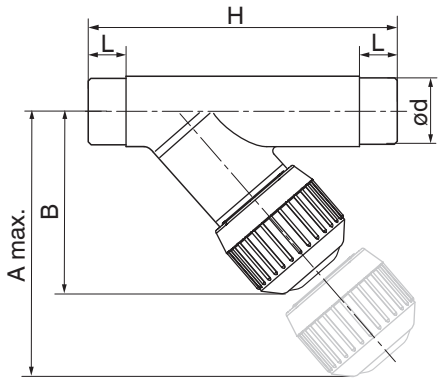
Mesh spacing	Code
0.03 in	07
0.04 in	10
0.06 in	15
0.08 in	20
0.1 in	25

Filter mesh	Code
PVC-U	1*
PP-H, nature	N5
1.4301	45*
* For valve body material G5 only up to DN 50 available	

Order example	N570	25	D	2	1	4	10	1
Type	N570							
Nominal size		25						
Body configuration (code)			D					
Connection (code)				2				
Valve body material (code)					1			
Seal (code)						4		
Mesh spacing (code)							10	
Filter mesh (code)								1

Dimensions [inch]

Spigots, connection code 0 Valve body material: PVC-U grey (code 1), PVC-U transparent (code 3)								
DN	PN Operating pressure		ød	A max.	B	L	H	Weight [lbs]
	Material code 1	Material code 3						
10	232 psi	150 psi	0.630	4.92	2.83	0.55	4.49	0.2
15	232 psi	150 psi	0.787	4.92	2.83	0.63	4.88	0.3
20	232 psi	150 psi	0.984	5.71	3.31	0.75	5.67	0.4
25	232 psi	150 psi	1.260	6.50	3.74	0.87	6.06	0.6
32	232 psi	150 psi	1.575	7.48	4.37	1.02	6.85	0.9
40	232 psi	150 psi	1.969	8.27	4.72	1.22	7.64	1.3
50	232 psi	150 psi	2.480	9.45	5.47	1.50	8.82	2.1

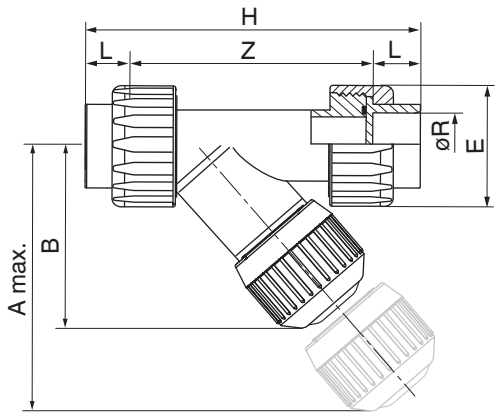


Dimensions [inch]

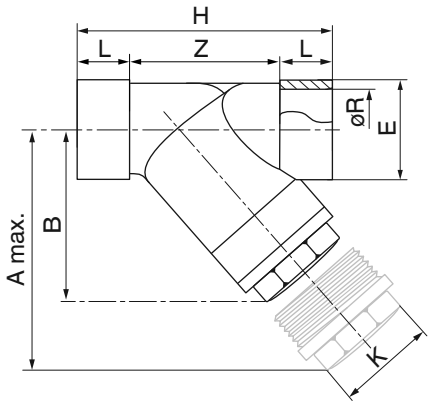
Threaded sockets, connection code 1 Valve body material: PVC-U grey (code 1), PVC-U transparent (code 3)											
DN	PN Operating pressure		øR	A max.	B	E	L	Z	H	K	Weight [lbs]
	Material code 1	Material code 3									
10	232 psi	232 psi	3/8”	4.92	2.83	2.17	0.45	4.42	5.31	-	0.4
15	232 psi	232 psi	1/2”	4.92	2.83	2.17	0.59	4.45	5.63	-	0.5
20	232 psi	232 psi	3/4”	5.71	3.31	2.60	0.64	5.02	6.30	-	0.8
25	232 psi	232 psi	1”	6.50	3.74	2.95	0.75	5.70	7.20	-	1.1
32	232 psi	150 psi	1 1/4”	7.48	4.37	3.43	0.84	6.74	8.43	-	1.6
40	232 psi	150 psi	1 1/2”	8.27	4.72	3.94	0.84	7.57	9.25	-	2.4
50	232 psi	150 psi	2”	9.45	5.47	4.72	1.01	9.20	11.22	-	4.1
65	150 psi	90 psi	2 1/2”	11.81	7.05	4.09	1.19	7.19	9.57	3.78	5.3
80	90 psi	60 psi	3”	12.80	7.56	4.57	1.31	7.69	10.31	4.13	6.5
100	90 psi	60 psi	4”	15.16	9.09	5.43	1.55	9.70	12.80	-	9.7

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 [lbs]
15	150 psi	1/2”	4.92	2.80	2.17	0.59	4.45	5.63	0.3
20	150 psi	3/4”	5.71	3.27	2.56	0.64	5.02	6.30	0.4
25	150 psi	1”	6.50	3.70	2.91	0.75	5.70	7.20	0.6
32	150 psi	1 1/4”	7.48	4.29	3.39	0.84	6.74	8.43	1.0
40	150 psi	1 1/2”	8.27	4.69	3.90	0.84	7.57	9.25	1.5
50	150 psi	2”	9.45	5.61	4.72	1.01	9.20	11.22	2.4

DN 10 – DN 50



DN 65 – DN 100

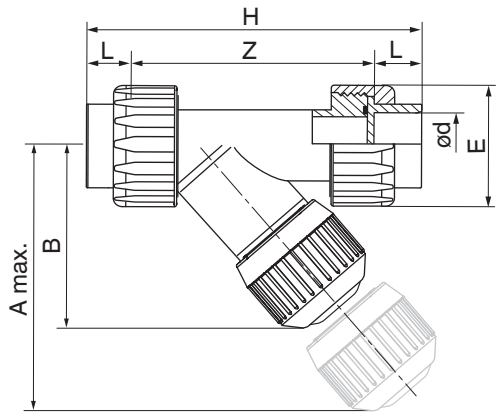


Dimensions [inch]

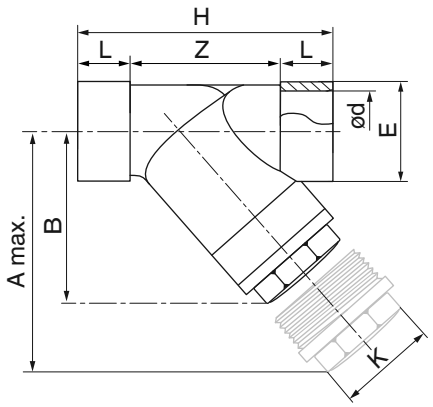
Solvent cement sockets, connection code 2 Valve body material: PVC-U grey (code 1), PVC-U transparent (code 3)											
DN	PN Operating pressure		ød	A max.	B	E	L	Z	H	K	Weight [lbs]
	Material code 1	Material code 3									
10	232 psi	232 psi	0.630	4.92	2.83	2.17	0.55	4.21	5.31	-	0.4
15	232 psi	232 psi	0.787	4.92	2.83	2.17	0.63	4.06	5.31	-	0.5
20	232 psi	232 psi	0.984	5.71	3.31	2.60	0.75	4.72	6.22	-	0.8
25	232 psi	232 psi	1.260	6.50	3.74	2.95	0.87	5.20	6.93	-	1.2
32	232 psi	150 psi	1.575	7.48	4.37	3.43	1.02	6.10	8.15	-	1.6
40	232 psi	150 psi	1.969	8.27	4.72	3.94	1.22	7.13	9.57	-	2.4
50	232 psi	150 psi	2.480	9.45	5.47	4.72	1.50	8.74	11.73	-	4.1
65	150 psi	90 psi	2.953	11.81	7.05	4.09	1.73	6.10	9.57	3.78	5.3
80	90 psi	60 psi	3.543	12.80	7.56	4.57	2.01	6.30	10.31	4.13	6.6
100	90 psi	60 psi	4.331	15.16	9.09	5.43	2.40	7.99	12.80	-	10.2

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 [lbs]
15	150 psi	0.787	4.92	2.80	2.17	0.57	4.27	5.41	-	0.3
20	150 psi	0.984	5.71	3.27	2.56	0.63	4.92	6.18	-	0.4
25	150 psi	1.260	6.50	3.70	2.91	0.71	5.61	7.03	-	0.6
32	150 psi	1.575	7.48	4.29	3.39	0.81	6.46	8.07	-	1.0
40	150 psi	1.969	8.27	4.69	3.90	0.93	7.74	9.59	-	1.5
50	150 psi	2.480	9.45	5.61	4.72	1.08	9.41	11.57	-	2.4
65	90 psi	2.953	11.81	6.93	4.06	1.22	7.05	9.49	3.78	3.5
80	60 psi	3.543	12.80	7.60	4.53	1.40	7.44	10.24	4.13	4.2
100	60 psi	4.331	15.16	9.02	5.43	1.63	9.45	12.72	-	6.6

DN 10 – DN 50



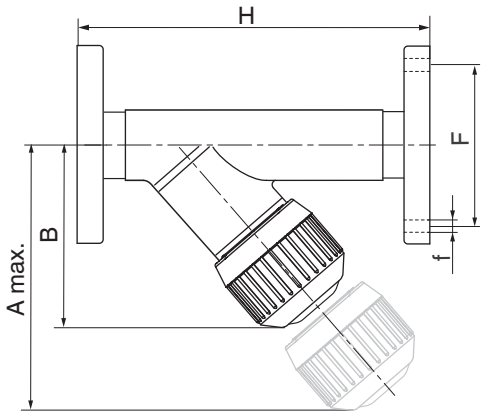
DN 65 – DN 100



Dimensions [inch]

Flanges – DIN, connection code 4 Valve body material: PVC-U grey (code 1), PVC-U transparent (code 3)									
DN	PN Operating pressure		d	A max.	B	H	F	f	Weight [lbs]
	Material code 1	Material code 3							
15	232 psi	150 psi	0.79	4.92	2.83	5.12	2.37	0.55	0.6
20	232 psi	150 psi	0.98	5.71	3.31	5.91	2.75	0.55	0.9
25	232 psi	150 psi	1.26	6.5	3.74	6.3	3.13	0.55	1.2
32	232 psi	150 psi	1.57	7.48	4.37	7.09	3.5	0.71	1.9
40	232 psi	150 psi	1.97	8.27	4.72	7.87	3.87	0.71	2.6
50	232 psi	150 psi	2.48	9.45	5.47	9.06	4.75	0.71	3.9
65	150 psi	90 psi	2.95	11.81	7.05	14.02	5.5	0.67	7.9
80	90 psi	60 psi	3.54	12.8	7.56	15.91	6	0.67	10.8
100	90 psi	60 psi	4.33	15.16	9.09	18.7	7.5	0.67	15.0

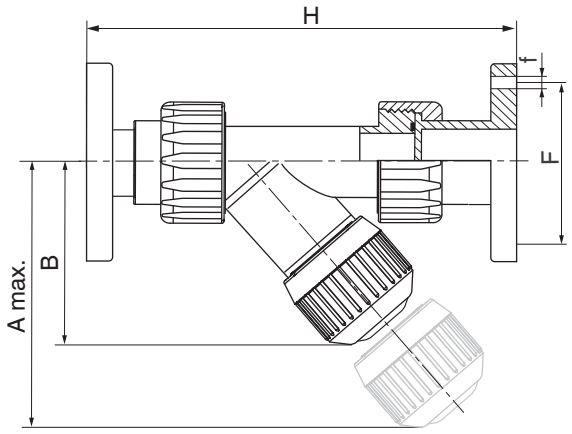
Flanges – ANSI, connection code 41 Valve body material: PVC-U grey (code 1), PVC-U transparent (code 3)									
DN	PN Operating pressure		d	A max.	B	H	F	f	Weight [lb]
	Material code 1	Material code 3							
15	232 psi	150 psi	1/2”	4.92	2.83	5.12	2.37	0.63	0.57
20	232 psi	150 psi	3/4”	5.71	3.31	5.91	2.75	0.63	0.87
25	232 psi	150 psi	1”	6.50	3.74	6.30	3.13	0.63	1.23
32	232 psi	150 psi	1 1/4”	7.48	4.37	7.09	3.50	0.63	1.87
40	232 psi	150 psi	1 1/2”	8.27	4.72	7.87	3.87	0.63	2.58
50	232 psi	150 psi	2”	9.45	5.47	9.06	4.75	0.75	3.88
65	150 psi	90 psi	2 1/2”	11.81	7.05	14.02	5.50	0.75	7.94
80	90 psi	60 psi	3”	12.80	7.56	15.91	6.00	0.75	10.82
100	90 psi	60 psi	4”	15.16	9.09	18.70	7.50	0.75	14.97



Dimensions [inch]

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 [lbs]**
15	150 psi	0.79	4.92	2.83	6.40	2.56	0.55	0.5
20	150 psi	0.98	5.71	3.31	7.60	2.95	0.55	0.6
25	150 psi	1.26	6.50	3.74	8.29	3.35	0.55	0.9
32	150 psi	1.57	7.48	4.37	9.59	3.94	0.71	1.4
40	150 psi	1.97	8.27	4.72	10.91	4.33	0.71	1.8
50	150 psi	2.48	9.45	5.47	13.01	4.92	0.71	2.8

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 [lbs]**
15	150 psi	1/2”	4.92	2.83	6.40	2.56	0.63	0.5
20	150 psi	3/4”	5.71	3.31	7.60	2.95	0.63	0.6
25	150 psi	1”	6.50	3.74	8.29	3.35	0.63	0.9
32	150 psi	1 1/4”	7.48	4.37	9.59	3.94	0.63	1.4
40	150 psi	1 1/2”	8.27	4.72	10.91	4.33	0.63	1.8
50	150 psi	2”	9.45	5.47	13.01	4.92	0.75	2.8



Overview of valve bodies for GEMÜ N570														
Connection code	**0**		**1**			**2**			**4**			**41**		
Material code	**1**	**3**	**1**	**3**	**G5**	**1**	**3**	**G5**	**1**	**3**	**G5**	**1**	**3**	**G5**
DN														
10	X	X	X	X	-	X	X	-	-	-	-	-	-	-
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
25	X	X	X	X	X	X	X	X	X	X	X	X	X	X
32	X	X	X	X	X	X	X	X	X	X	X	X	X	X
40	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
65	-	-	X	X	-	X	X	X	X	X	-	X	X	-
80	-	-	X	X	-	X	X	X	X	X	-	X	X	-
100	-	-	X	X	-	X	X	X	X	X	-	X	X	-

Filter mesh overview												
Mesh spacing [in]	**0.03**		**0.04**		**0.06**		**0.06**		**0.08**		**0.1**	
Filter material	**1.4301** (Code 45)		**PVC-U** (Code 1)		**PVC-U** (Code 1)		**PP** (Code N5)		**PVC-U** (Code 1)		**PVC-U** (Code 1)	
Strainer material	**PVC** (Code 1, 3)	**PP** (Code G5)	**PVC** (Code 1, 3)	**PP** (Code G5)	**PVC** (Code 1, 3)	**PP** (Code G5)	**PVC** (Code 1, 3)	**PP** (Code G5)	**PVC** (Code 1, 3)	**PP** (Code G5)	**PVC** (Code 1, 3)	**PP** (Code G5)
DN												
10	X	-	X	-	X	-	-	-	X	-	X	-
15	X	X	X	X	X	X	-	X	X	X	X	X
20	X	X	X	X	X	X	-	X	X	X	X	X
25	X	X	X	X	X	X	-	X	X	X	X	X
32	X	X	X	X	X	X	-	X	X	X	X	X
40	X	X	X	X	X	X	-	X	X	X	X	X
50	X	X	X	X	X	X	-	X	X	X	X	X
65	X	-	X	-	X	-	-	X	X	-	X	-
80	X	-	X	-	X	-	-	X	X	-	X	-
100	X	-	X	-	X	-	-	X	X	-	X	-

Subject to alteration · 10/2023 · 88723706

GEMÜ Gebr. Müller · Apparatebau GmbH & Co.KG · Fritz-Müller-Str. 6-8 · D-74653 Ingelfingen-Criesbach · Tel. +49 (0) 7940 123-0 · Fax +49 (0) 7940 123-224
info@gemue.de · www.gemu-group.com