

## Diaphragm Valve, Plastic Design 2/2 way, pneumatically operated

### Construction

- All medium wetted parts and housing made of plastic
- Low maintenance flat diaphragm actuator
- Valve sizes DN 15 - 50 are self-opening due to integral springs as standard
- Valve sizes DN 65 and 80 are opened by the pressure of the working medium on the diaphragm
- Control functions "opened by spring tension" (DN 15-50) and "opened by working pressure" (DN 65 and 80) are available



### Features

- Suitable for inert and corrosive\* liquid and gaseous media
- Valve body and diaphragm are available in various materials
- The valve is insensitive to contaminated media
- Optional mounting position and flow direction

### Advantages

- Optional accessories
  - Stroke limiter with optical position indicator
  - Electrical position indicator
  - Electrical position indicator with microswitches or proximity sensors



\* see information on working medium on page 2

### 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.

Max. perm. temperature of working medium:  
See datasheet "Technical Information on Plastic Materials"

### Control medium

Inert Gas

Min. required control pressure see diagram p.8

Max. perm. control pressure 6 bar

Max. perm. temp. of control medium 40°C

### Connection

Ref. no.

#### Spigot ends for solvent / butt welding

DIN selection series 0  
Inch 30

#### Spigots for infrared butt welding (IR)

DIN 8077 series 4 20

#### Spigots for butt welding

WNF/BCF 28

#### Threaded connections

Union ends with metric sockets - DIN 7

Union ends with imperial sockets, inch 33

Union ends with insert for butt welding acc. to DIN 16962 T 13 series 4 78

### Valve body material

Ref. no.

PVC-U 1

ABS 4

PP 5

PVDF 20

Lining PPH natural 70

Lining PPH grey acc. RAL 7032 71

### Diaphragm material

Ref. no.

CSM 1

NBR 2

FPM 4

EPDM 14

PTFE/EPDM modified PTFE fully laminated 52

### Control function

Ref. no.

Closed by control medium, opened by spring tension (DN 15-50) 2

Closed by control pressure, opened by working pressure (DN 65+80) 5

Nominal size (mm)	Working pressure (bar)		K <sub>v</sub> value (m³/h)	Weight (kg)
	C.f. 2	C.f. 5		
15	0 - 10	-	5.6	1.0
20	0 - 10	-	8.2	1.0
25	0 - 10	-	10.5	1.0
32	0 - 10	-	18.0	2.2
40	0 - 10	-	25.0	2.2
50	0 - 10	-	46.0	3.5
65	-	0.5-10	78.0	9.6
80	-	0.5-10	120.0	9.6

All pressures are gauge pressures when applied upstream only.

\* Due to the low overall actuator height, flange connections not feasible. If flanges are required, we recommend GEMÜ type 690 control function 2.

### Body configuration

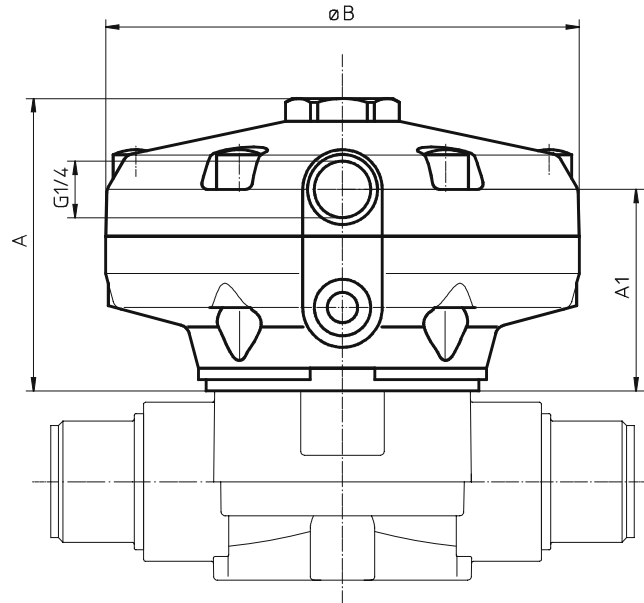
Ref. no.

Straight through D

Order example	667	15	D	0	1	14	2
Type	667						
Nominal size		15					
Body configuration (reference number)			D				
Connection (reference number)				0			
Body material (reference number)					1		
Diaphragm material (reference number)						14	
Control function (reference number)							2

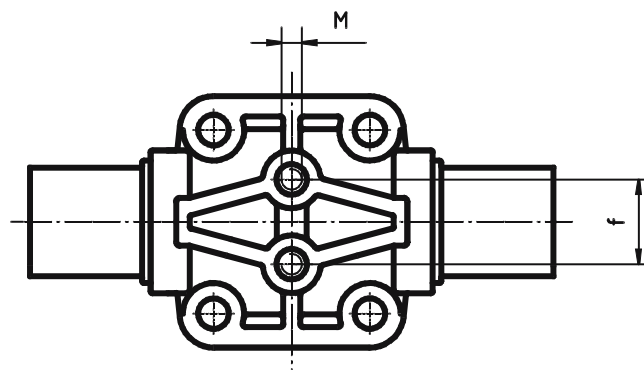
### Actuator dimensions (mm)

DN	ø B	A	A1
15-25	125	78	54
32-40	155	108	74
50	210	133	89
65-80	258	152	103



### Mounting dimensions (mm)

DN	M	f
15	M6	25.0
20	M6	25.0
25	M6	25.0
32	M8	44.5
40	M8	44.5
50	M8	44.5
65	M12	100.0
80	M12	100.0

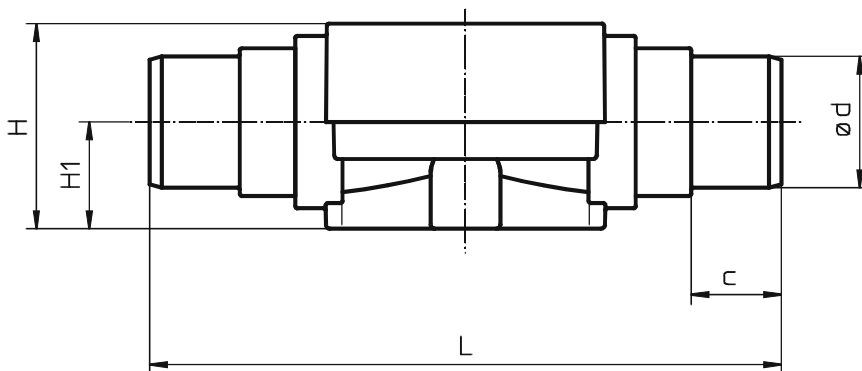


**Body dimensions - Solvent cement / butt weld spigots DIN ref.no. 0 (mm)**

DN	Material ref.no. 1					Material ref.no. 5					Material ref.no. 20					Material ref.no. 70, 71				
	L	H	H1	ød	c	L	H	H1	ød	c	L	H	H1	ød	c	L	H	H1	ød	c
15	124	45	26	20	16	124	45	26	20	16	124	45	26	20	16	124	50	26	20	16
20	144	45	26	25	19	144	45	26	25	19	144	45	26	25	19	144	50	26	25	19
25	154	45	26	32	22	154	45	26	32	22	154	45	26	32	22	154	50	26	32	22
32	174	74	40	40	26	174	68	40	40	24	174	68	40	40	24	174	74	40	40	24
40	194	74	40	50	31	194	68	40	50	27	194	68	40	50	26	194	74	40	50	26
50	224	78	40	63	39	224	75	40	63	40	224	75	40	63	29	224	82	40	63	29
65	284	117	55	75	44	284	117	55	75	44	284	117	55	75	44	-	-	-	-	-
80	300	117	55	90	51	300	117	55	90	51	300	117	55	90	51	-	-	-	-	-

**Body dimensions -  
Solvent cement and butt weld spigots  
INCH ref.no. 30, material ref.no. 1 (mm)**

DN	L	H	H1	ød	c
15	141	45	26	21.4	24
20	145	45	26	26.7	27
25	54	45	26	33.6	30
32	174	68	40	42.2	33
40	194	68	40	48.3	39
50	224	75	40	60.3	40
65	284	117	55	75.2	44
80	300	117	55	88.9	51

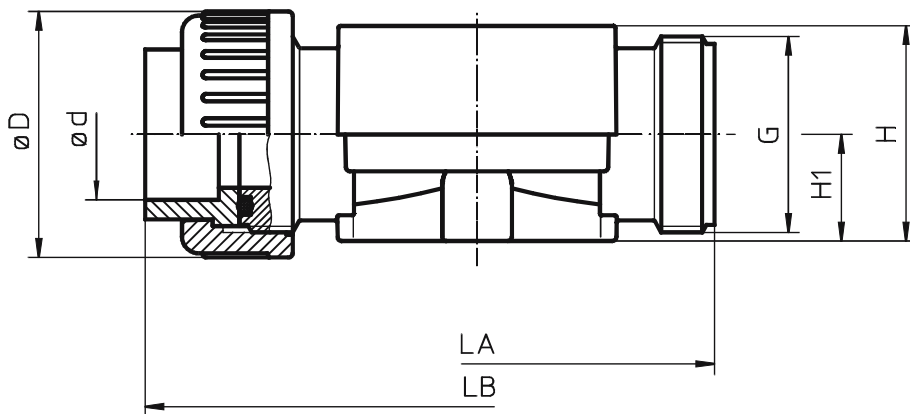


**Body dimensions - Union ends with metric sockets DIN ref.no. 7 (mm)**

DN	Material ref.no. 1							Material ref.no. 70,71						
	LA	LB	H	H1	øD	ød	G	LA	LB	H	H1	øD	ød	G
15	108	146	51	26	43	20	1	108	144	50	26	43	20	1
20	108	152	51	26	53	25	1 1/4	108	146	50	26	53	25	1 1/4
25	116	166	51	26	60	32	1 1/2	116	162	50	26	60	32	1 1/2
32	134	192	74	40	74	40	2	134	186	74	40	74	40	2
40	154	222	74	40	83	50	2 1/4	154	210	74	40	83	50	2 1/4
50	182	264	82	40	103	63	2 3/4	182	248	82	40	103	63	2 3/4
65	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-	-	-	-	-

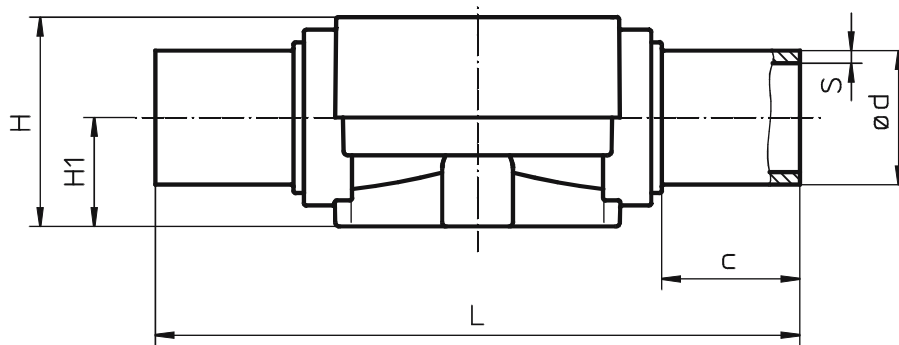
**Body dimensions - Union ends with imperial sockets  
INCH ref. no. 33, material ref.no. 1 (mm)**

DN	LA	LB	H	H1	øD	ød	G
15	108	150	51	26	43	21,4	1
20	108	156	51	26	53	26,7	1 1/4
25	116	170	51	26	60	33,6	1 1/2
32	134	198	74	40	74	42,2	2
40	154	220	74	40	83	48,3	2 1/4
50	182	262	82	40	103	60,3	2 3/4
65	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-



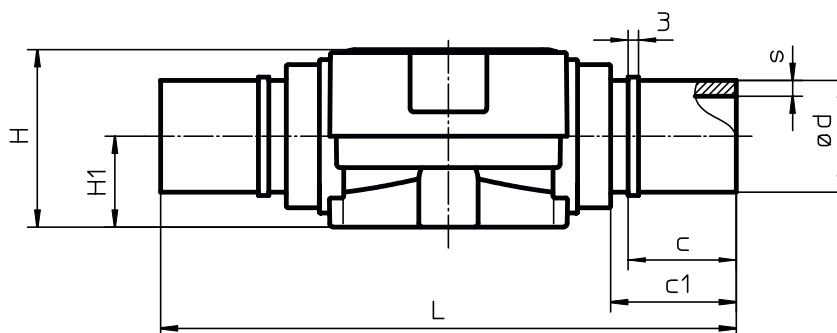
### Body dimensions - Welded spigots for Infrared butt welding (IR) ref.no.20 (mm)

DN	Material ref. no. 20						Material ref. no. 70 u. 71					
	L	H	H1	ød	S	c	L	H	H1	ød	S	c
15	-	-	-	-	-	-	154	50	26	20	1.9	33
20	-	-	-	-	-	-	154	50	26	25	2.3	33
25	-	-	-	-	-	-	154	50	26	32	3.0	33
32	-	-	-	-	-	-	194	74	40	40	3.7	33
40	-	-	-	-	-	-	194	74	40	50	4.6	33
50	-	-	-	-	-	-	224	82	40	63	5.8	33
65	284	117	55	75	3.6	43	-	-	-	-	-	-
80	300	117	55	90	4.3	51	-	-	-	-	-	-



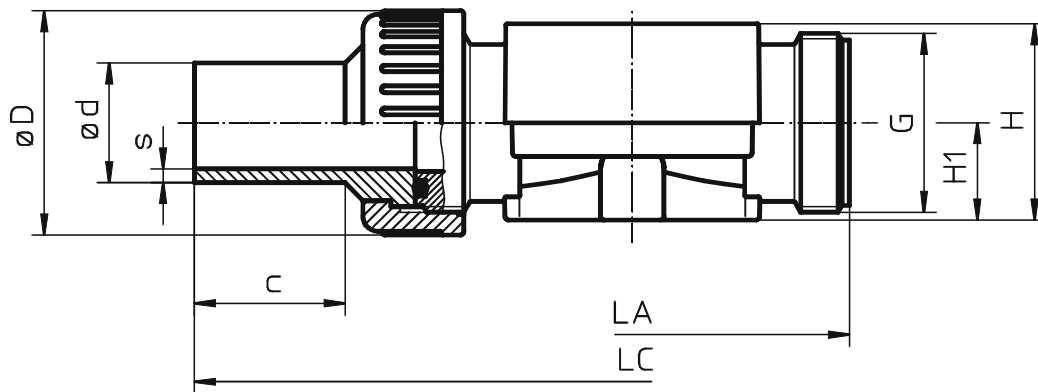
### Body dimensions - Welded spigots for PVDF butt-welding ref.no. 28 , material ref.no. 30 (mm)

DN	L	H	H1	ød	c	c1	s
15	154	50	26	20	31	37	1.9
20	154	50	26	25	31	37	1.9
25	154	50	26	32	31	37	2.4
32	194	74	40	40	40	46	2.4
40	194	74	40	50	40	46	3.0
50	224	82	40	63	40	46	3.0



**Body dimensions - Union ends with metric butt weld spigots ref. no. 78, material ref.no. 70,71 (mm)**

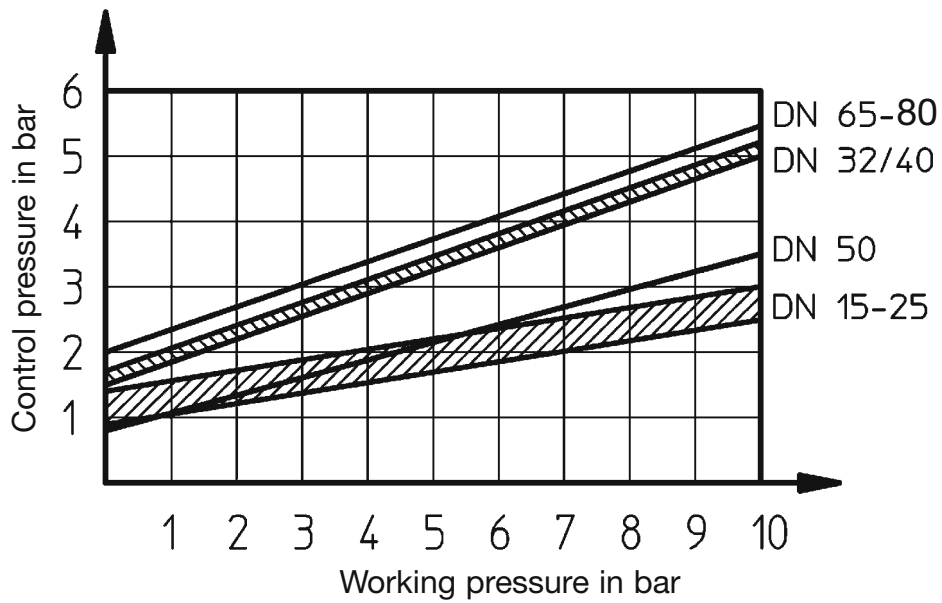
DN	LA	LC	H	H1	øD	ød	G	s	c
15	108	214	50	26	43	20	1	1.9	37
20	108	220	50	26	53	25	1 1/4	2.3	39
25	116	234	50	26	60	32	1 1/2	3.0	40
32	134	258	74	40	74	40	2	3.7	41
40	154	284	74	40	83	50	2 1/4	4.6	43
50	182	318	82	40	103	63	2 3/4	5.8	43
65	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-



**Overview of valve bodies for GEMÜ 667**

Material	PVC-U (ref.no. 1)				PP (ref.no. 5)			PP (ref.no. 70, Kz 71)						PVDF (ref.no. 20)						ABS (ref.no. 4)	
	0	7	30	33	0	4	04	0	4	04	7	20	78	0	4	04	7	20	28	78	30
DN 15	X	X	X	X	X	X	-	X	X	-	X	X	X	X	X	-	X	-	X	X	X
DN 20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X
DN 25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X
DN 32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X
DN 40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X
DN 50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X
DN 65	X	-	X	-	X	X	X	-	-	-	-	-	-	X	X	X	-	X	-	-	X
DN 80	X	-	X	-	X	X	X	-	-	-	-	-	-	X	X	X	-	X	-	-	X

Control function 2



Further plastic diaphragm valves , accessories and other products see our Product Range catalogue and Price List.  
Contact GEMÜ.



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AND CONTROL SYSTEMS