

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

### **Construction**

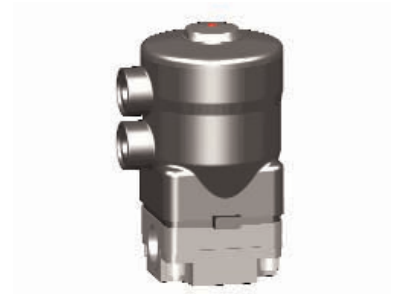
- Corrosion-resistant all plastic construction
- Maintenance-free piston actuator which can be controlled by any inert gas
- Integral optical position indicator
- Normally Closed, Normally Open and Double Acting control functions

### **Features**

- Suitable for inert and corrosive liquid and gaseous media
- Valve body and diaphragm are available in various materials
- Connection for pilot valves to NAMUR (except size 1)
- Control connection positioned in-line with piping as standard, thus installable in extremely restricted spaces

### **Advantages**

- Mounting plate for height compensation of differing body dimensions
- Upper part of actuator rotatable 4 x 90° (except size 1)
- Optional accessories:
  - Electrical remote indication
  - Electrical position indicator with microswitches or proximity sensors
  - Pneumatic or electro-pneumatic positioner
- Compact design



Actuator size 1



Actuator size 2-4

## Working medium

Suitable for any inert, corrosive, liquid and gaseous media, subject to the correct choice of body and diaphragm material.

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

## Control medium

Min. control pressure see table below

Max. control pressure 6 bar

Max. temperature of control medium 40°C

Nominal size	Control function 1 (bar)				Contr. funct. 2+3 (bar)		K <sub>v</sub> value	Weight	
(mm)	Working press.	Contr. press. A1	Contr. press. A2+3	Contr. press. A4	Working press.	Control pressure	(m³/h)	(kg)	
10	0 - 10	3.2-6 bar	3.8-6 bar	4.7-6 bar	0 - 10	max. 6 bar	2.8	0.40	
12	0 - 10				0 - 10	max. 6 bar	3.5	0.45	
15	0 - 10				0 - 10	max. 6 bar	5.6	1.80	
20	0 - 10				0 - 10	min. 3 bar	8.2	1.80	
25	0 - 10				0 - 10		10.5	1.80	
32	0 - 10				0 - 10		18.0	4.00	
40	0 - 10				0 - 10		max. 6 bar	25.0	4.00
50	0 - 10				0 - 10		46.0	7.40	

All pressures are given as gauge pressures.

## Body configuration

Ref. no.

Straight through D

## Connection

Ref. no.

Spigot ends for solvent / butt welding  
DIN (PVC-U, PP, PVDF, ABS) 0

Threaded sockets DIN ISO 228 1

Solvent cement / welded spigots  
for socket welding 2

PN 10 stub flange and backing ring  
to DIN 16962 T 12 4

PN 10 stub flange and backing ring to DIN 16962 T3 04

Union ends with metric sockets - DIN 7

Spigots for infrared butt welding (IR)  
for pipes to DIN 8077 series 4 20

Spigots for butt welding  
BCF (PVDF, DN 15-50) 28

Spigot ends for solvent / butt welding - inch 30

Union ends with imperial sockets - inch 33

Union ends with inserts for butt welding  
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.

Perbunan NBR 2

Viton® FPM 4

Ethylene-Propylene EPDM 14

PTFE/EPDM PTFE laminated 52

## Control function

Ref. no.

Normally closed 1

Normally open 2

Double acting 3

## Actuator size

Ref. no.

Piston ø 54 DN 10, 12, 15 1

Piston ø 85 DN 15, 20, 25 2

Piston ø 105 DN 32, 40 3

Piston ø 125 DN 50 4

## Order example

630

15

D

7

1

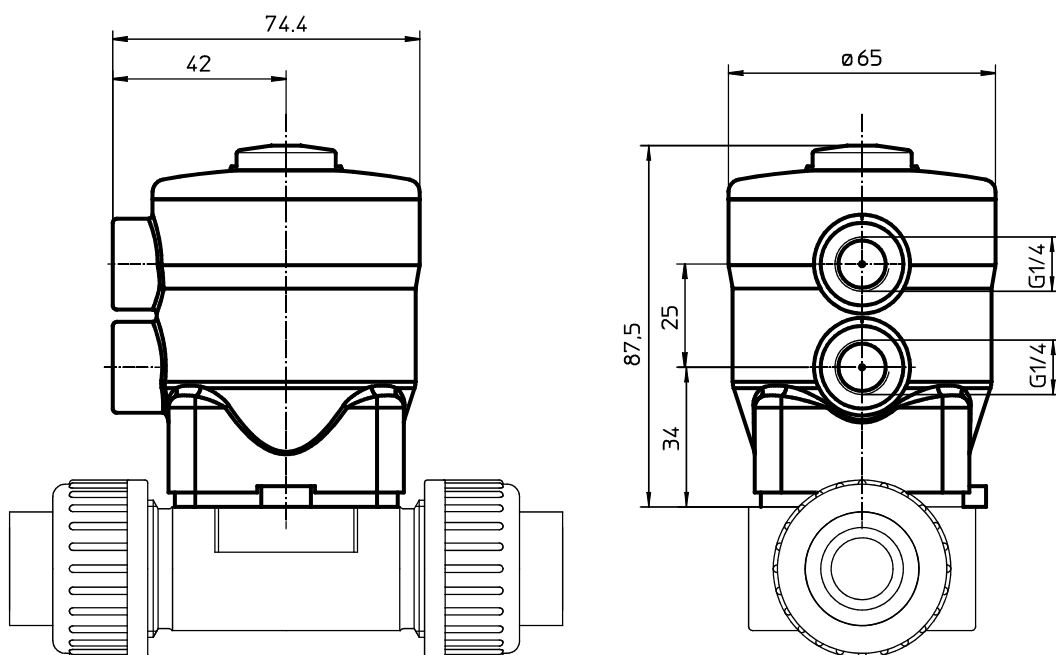
14

1

2

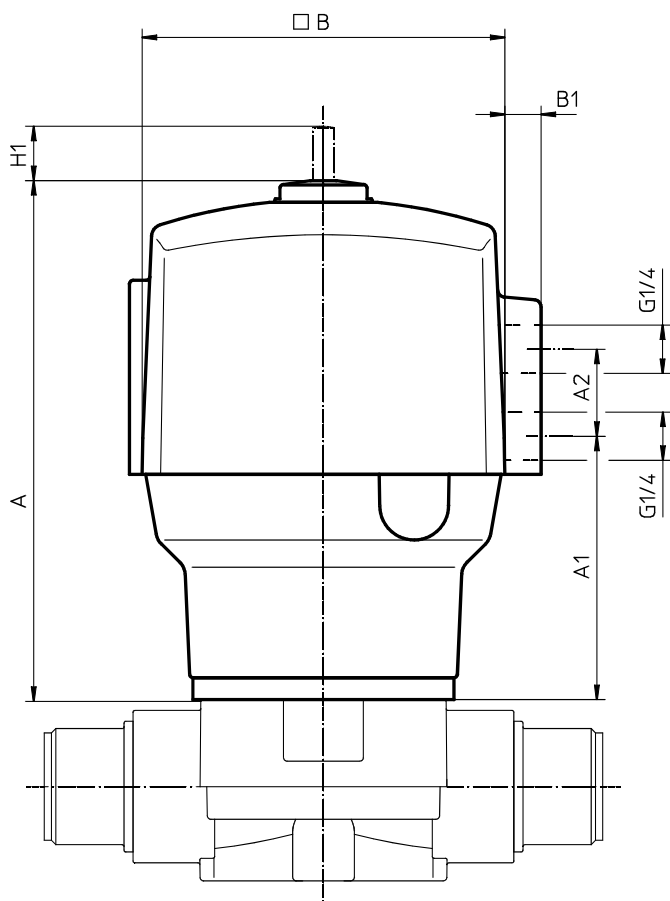
Type	630							
Nominal size (mm)		15						
Body configuration (D)			D					
Connection (reference number)				7				
Body material (reference number)					1			
Diaphragm material (reference number)						14		
Control function (reference number)							1	
Actuator size (reference number)								2

## Actuator dimensions for actuator size 1, DN 10-15 (mm)



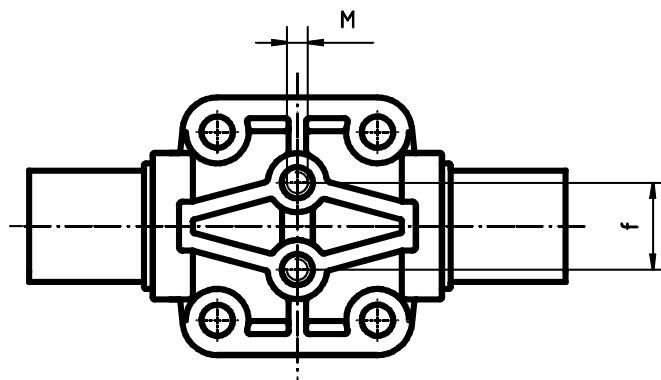
## Actuator dimensions for actuator sizes 2-4, DN 15-50 (mm)

DN	B	B1	A	A1	A2
15-25	100	11	141	73	24
32-40	125	9	192	93	65
50	150	8	230	110	65

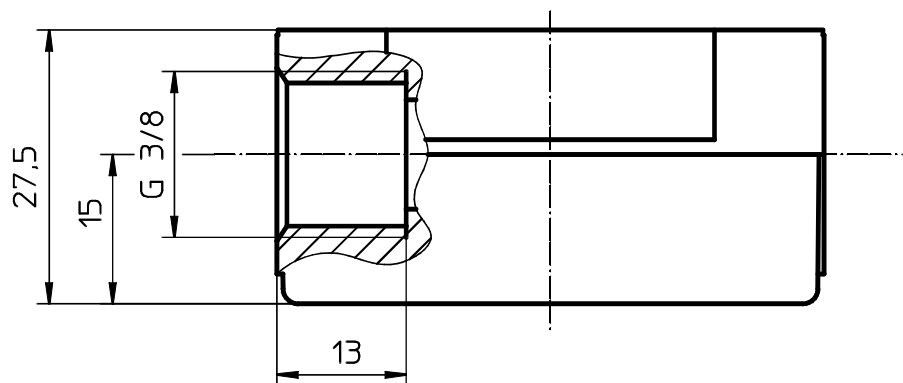


## Mounting dimensions (mm)

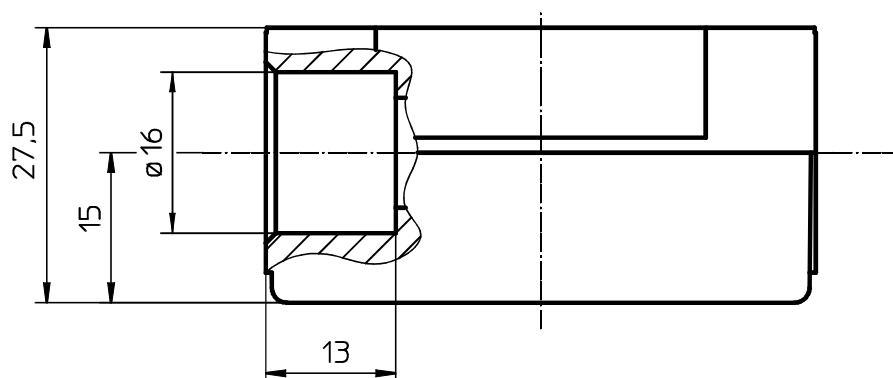
DN	M	f
15	M6	25.0
20	M6	25.0
25	M6	25.0
32	M8	44.5
40	M8	44.5
50	M8	44.5



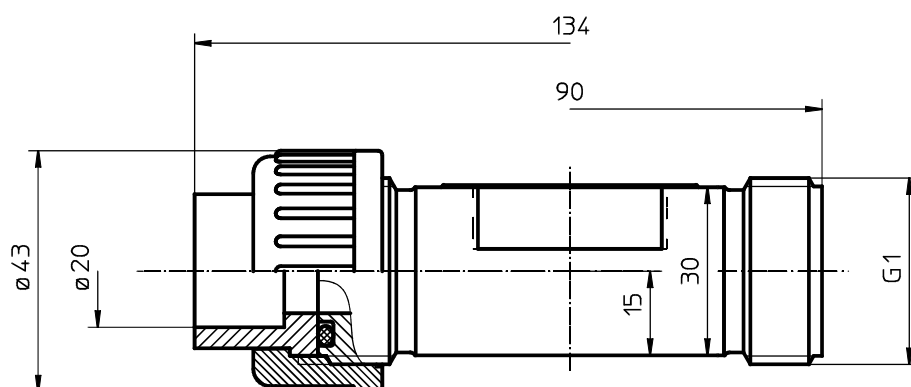
**Body dimensions - Threaded sockets (for actuator 1, DN 10-15) ref. no. 1, material ref. no. 1, 5 (mm)**



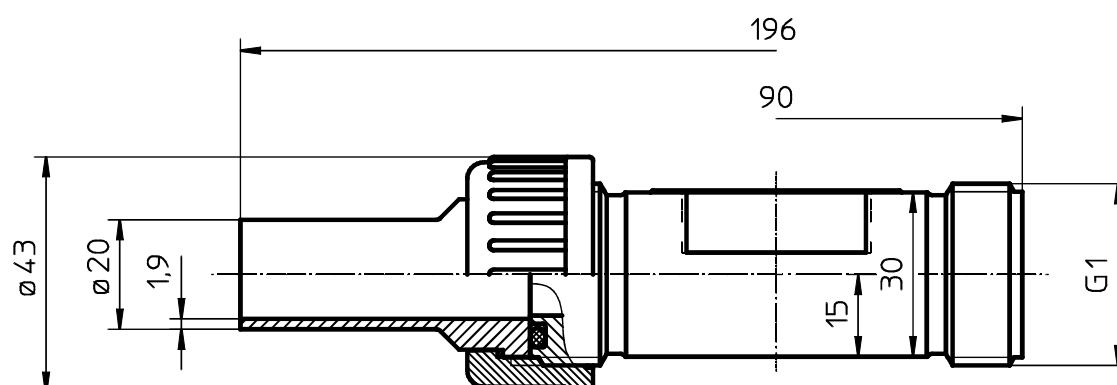
**Body dimensions - Solvent cement / welded spigots for socket welding ref. no. 2, material ref. no. 1 (mm)**



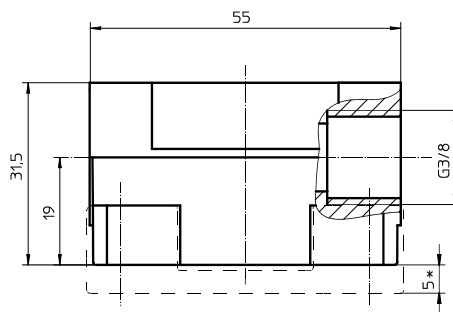
**Body dimensions - Union ends with metric sockets  
- DIN ref. no. 7, material ref. no. 1, 5 (mm)**



**Body dimensions - Union ends with inserts for butt welding ref. no. 78, material ref. no. 5 (mm)**

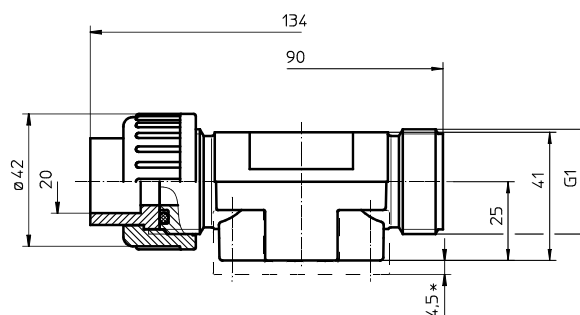


## Body dimensions - Threaded sockets ref. no. 1, material ref. no. 20 (mm)



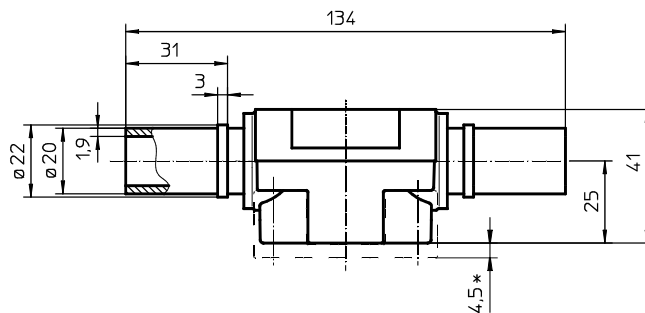
\* Dimensions in conjunction with mounting plate GEMÜ 1041

## Body dimensions - Union ends with metric sockets - DIN ref. no. 7, material ref. no. 20 (mm)



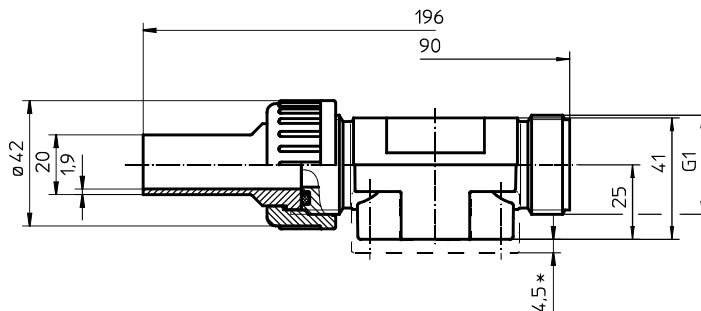
\* Dimensions in conjunction with mounting plate GEMÜ 1041

## Body dimensions - Spigots for butt welding ref. no. 28, material ref. no. 20 (mm)



\* Dimensions in conjunction with mounting plate GEMÜ 1041

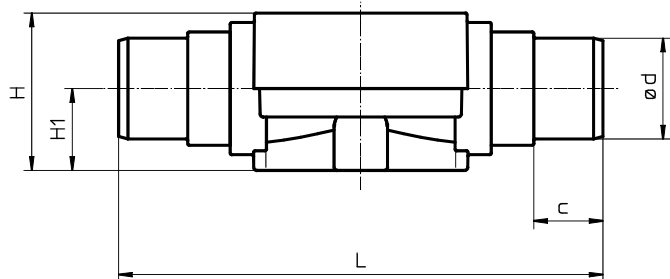
## Body dimensions - Union ends with inserts for butt welding ref. no. 78, material ref. no. 20 (mm)



\* Dimensions in conjunction with mounting plate GEMÜ 1041

**Body dimensions -Spigot ends for solvent / butt welding DIN (for actuators 2-4, DN 15-50) ref. no. 0 (mm)**

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



**Body dimensions - Spigot ends for solvent / butt welding INCH ref. no. 30, material ref. no. 1, 4 (mm)**

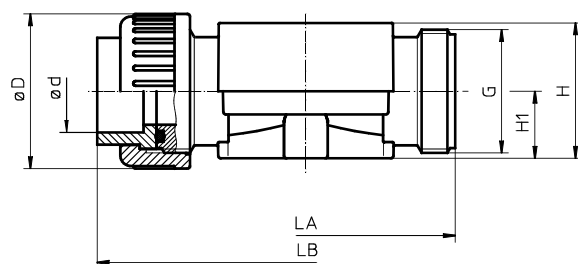
DN		L	H	H1	ød	c
15	1/2"	141	45	24	21.4	24
20	3/4"	145	45	24	26.7	27
25	1"	154	45	24	33.6	30
32	1 1/4"	174	68	40	42.2	33
40	1 1/2"	194	68	40	48.3	39
50	2"	224	75	40	60.3	40

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

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

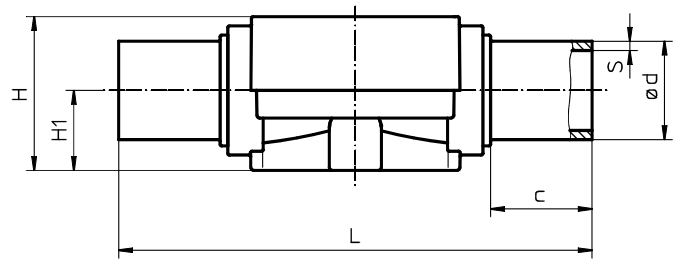
**Body dimensions - Union ends with imperial sockets - INCH ref. no. 33, material ref. no. 1 (mm)**

DN		LA	LB	H	H1	øD	ød	G
15	1/2"	108	150	51	26	43	21.4	1
20	3/4"	108	156	51	26	53	26.7	1 1/4
25	1"	116	170	51	26	60	33.6	1 1/2
32	1 1/4"	134	198	74	40	74	42.2	2
40	1 1/2"	154	220	74	40	83	48.3	2 1/4
50	2"	182	262	82	40	103	60.3	2 3/4



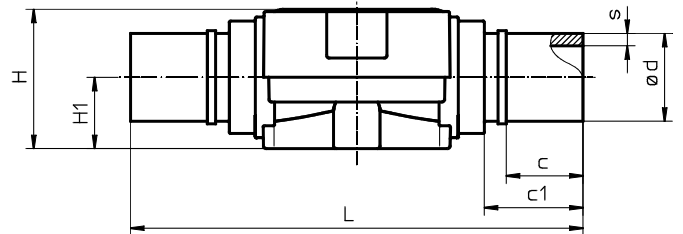
Body dimensions - Spigots for PP butt welding ref. no. 20, material ref. no. 70, 71 (mm)

DN	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



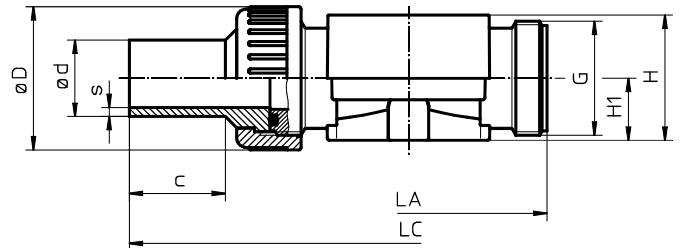
Body dimensions - Spigots for PVDF butt welding ref. no. 28 (mm)

DN	L	H	H1	ød	c	c1	s
15	165	45	24	20	38	36	1.9
20	165	45	24	25	38	36	1.9
25	165	45	24	32	38	36	2.4
32	209	68	40	40	37	46	2.4
40	209	68	40	50	37	46	3.0
50	235	75	40	63	37	46	3.0



Body dimensions - Union ends with inserts for butt welding 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



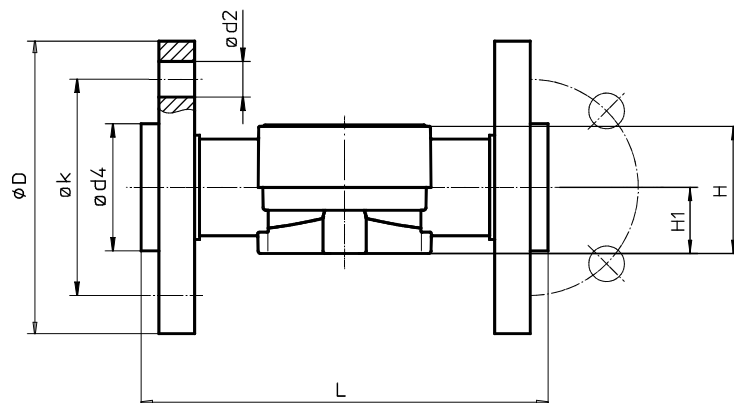
Body dimensions with flanges ref. no. 4 (mm)

Material ref. no. 5, 20											Material ref. no. 70, 71									
DN	L	øk	øD	ød2	ød4	H	H1	ød4	H	H1	L	øk	øD	ød2	ød4	H	H1	H	H1	No. of bolt holes
15	150*	65	95	14	34	45	24	45	50	26	-	-	95	14	34	-	-	50	26	4
20	150	75	105	14	41	45	24	41	50	26	164	75	105	14	41	45	24	50	26	4
25	160	85	115	14	50	45	24	50	50	26	182	85	115	14	50	45	24	50	26	4
32	180	100	140	18	61	69	40	61	74	40	182	100	140	18	61	69	40	74	40	4
40	200	110	150	18	73	69	40	73	74	40	204	110	150	18	73	69	40	74	40	4
50	230	125	165	18	90	75	40	90	82	40	238	125	165	18	90	75	40	82	40	4

Body dimensions with flanges ref. no. 04 (mm)

Material ref. no. 5, 20											Material ref. no. 70, 71									
DN	L	øk	øD	ød2	ød4	H	H1	ød4	H	H1	L	øk	øD	ød2	ød4	H	H1	H	H1	No. of bolt holes
15	150*	65	95	14	34	45	24	45	50	26	-	-	95	14	34	-	-	50	26	4
20	150	75	105	14	41	45	24	41	50	26	164	75	105	14	41	45	24	50	26	4
25	160	85	115	14	50	45	24	50	50	26	182	85	115	14	50	45	24	50	26	4
32	180	100	140	18	61	69	40	61	74	40	182	100	140	18	61	69	40	74	40	4
40	200	110	150	18	73	69	40	73	74	40	204	110	150	18	73	69	40	74	40	4
50	230	125	165	18	90	75	40	90	82	40	238	125	165	18	90	75	40	82	40	4

\* no DIN length



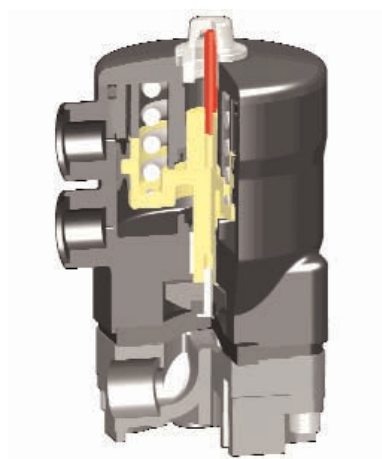
## Overview of valve bodies for GEMÜ 630, actuator 1, DN 12-15

Body material (ref. no.)	PVC-U (ref. no. 1)			PP (ref. no. 5)			PVDF (ref.no. 20)			
Connection (ref. no.)	1	2	7	1	7	78	1	7	28	78
DN 12	X	X	-	X	-	-	X	-	-	-
DN 15	-	-	X	-	X	X	-	X	X	X

## Overview of valve bodies for GEMÜ 630, actuators 2-4, DN 15-50

Body material (ref. no.)	PVC-U (ref. no. 1)				PP (ref. no. 5)			PP (ref. no. 70, ref. no. 71)						PVDF (ref. no. 20)						ABS (ref. no. 4)
Connection (ref. no.)	0	7	30	33	0	4	04	0	4	04	7	20	78	0	4	04	7	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

### Sectional view GEMÜ 630



### Accessories for GEMÜ 630 -Please order the respective datasheets separately



Electrical position  
indicator GEMÜ 1235



Intelligent electro-pneumatic positioner  
GEMÜ 1435



Electrical position  
indicator GEMÜ 1215

### Mounting plate GEMÜ 1041



### Pilot valve GEMÜ 324



**GEMÜ**® VALVES, ACTUATORS  
AND CONTROL SYSTEMS