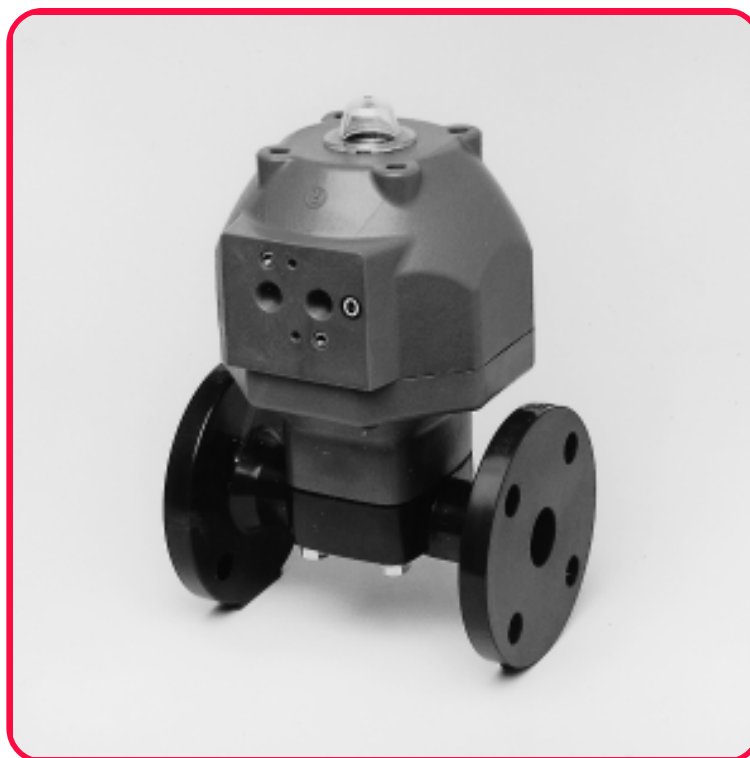


## Diaphragm valve type 14 with pneumatic actuator



Body material	PVC-U	PVC-C	PP	PVDF
Material of diaphragm	• EPDM		• CSM	
Working temperature <sup>1)</sup>	0 °C up to 60 °C <sup>3)</sup>	0 °C up to 90 °C <sup>3)</sup>	-20 °C up to 90 °C <sup>3)</sup>	-40 °C up to 120 °C <sup>3)</sup>
Nominal size	DN 15 up to DN 100			
Connection with pipe	• Flange connection acc. to DIN 2501 - PN 10 <sup>2)</sup>		• Socket or spigot end	
Length	• EN 558 - 1 series FTF 1 (DIN 3202 - series F 1)		• Company standard	
Actuator	Pneumatic, single or double acting			
Accessories	Limit switches, solenoid valves, positioners, lift limiter			

<sup>1)</sup> Designed for 10 years of use with a neutral medium (water)

<sup>2)</sup> Flange connection also acc. to ANSI available

<sup>3)</sup> Material of diaphragm:

CSM: -20 up to 80 °C

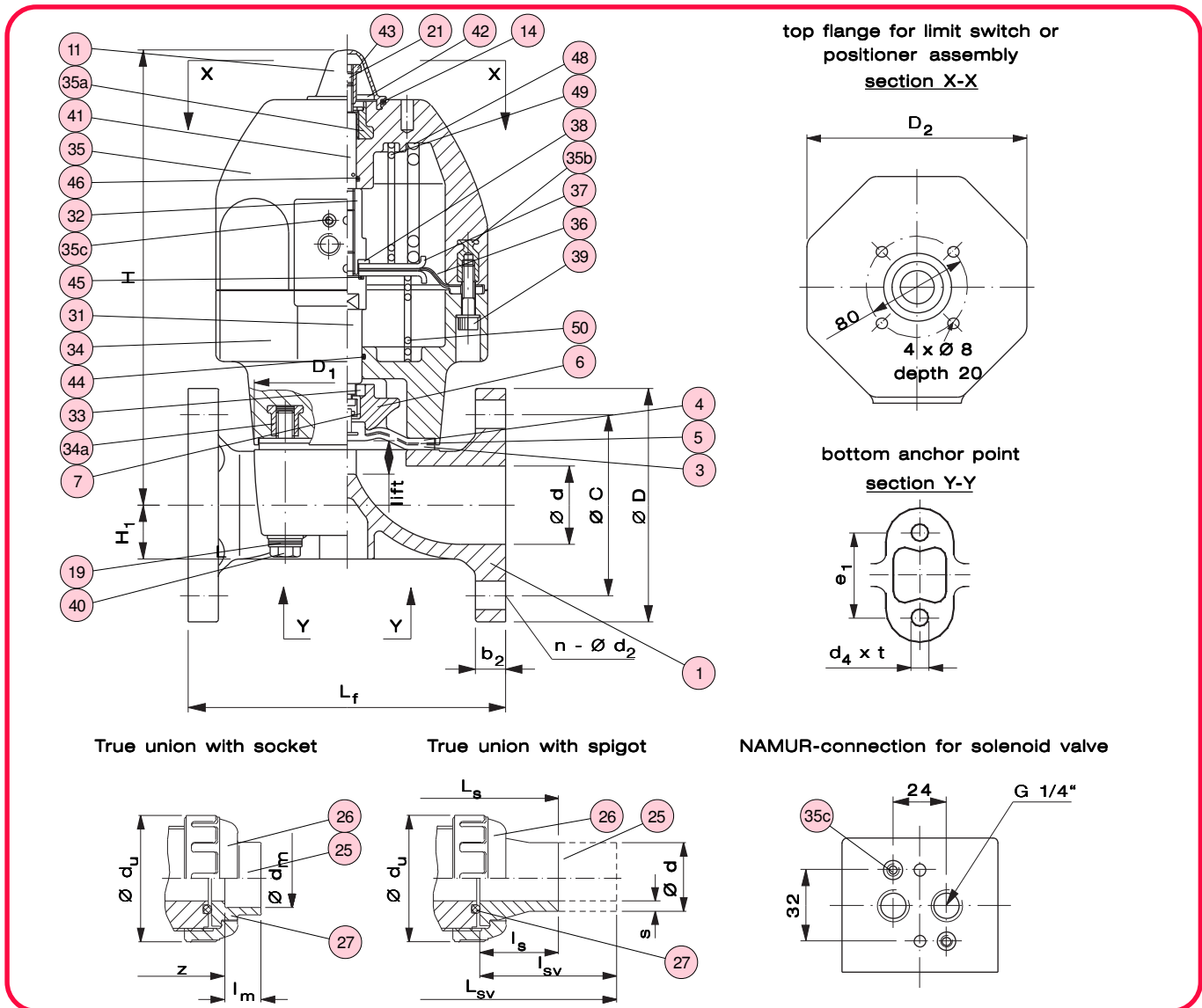
EPDM: -40 up to 90 °C

PTFE: -40 up to 120 °C

### Example for an invitation to tender text:

Diaphragm valve type 14 DN 50, PN 10, PVC-U/PTFE, flange connection acc. to DIN 2501-PN 10, length acc. to EN 558-1 series FTF 1, with pneumatic actuator type AN-4AO, single acting spring to close, air pressure 4 to 6 bar, optical position indicator, adjustable stroke limiter

# Diaphragm valve type 14 with pneumatic actuator



No.	Description	Number	Material
1	Body	1	PVC-U/-C, PP, PVDF
3	Diaphragm <sup>*)</sup>	1	EPDM, CSM, PTFE <sup>**)</sup>
4	Cushion <sup>2)</sup>	1	EPDM
5	Diffusion stop inlay	1	PVDF
6	Compressor	1	PVDF
7	Joint	1	1.4301
11	Gauge cover	1	PC
14	O-ring (A)	1	EPDM
19	Spring washer <sup>3)</sup>	4	1.4301
21	Screw	1	1.4301
25	Connector (socket, spigot)	2	PVC-U/-C, PE 100, PP, PVDF
26	Union nut	2	PVC-U/-C, PP, PVDF
27	O-ring (C) <sup>*)</sup>	2	EPDM, FPM
31	Spindle (A)	1	Brass C 6783
32	Spindel (B)	1	Brass C 6783
33	Thrust ring	1	Brass C 6783
34	Cylinder body	1	PP-G
34a	Insert nut	4	Brass C 3604

\*) Wearing parts  
 2) with PTFE diaphragm only  
 \*\*) PTFE diaphragm with EPDM cushion  
 3) with PVDF body only

No.	Description	Number	Material
35	Cylinder bonnet	1	PP-G
35a	Threaded bushing	1	1.4301
35b	Threaded bushing	8	Brass C 3604
35c	Thread insert	2	1.4301
36	Actuator diaphragm	1	NBR
37	Plate	2	1.4301
38	Spring ring	1	1.4301
39	Screw, washer (A)	8	1.4301
40	Screw, washer (B)	4	1.4301
41	Indicator bolt	1	1.4301
42	Washer	1	1.4301
43	Stroke limiter	1	1.4301
44	O-ring (D)	1	NBR
45	O-ring (E)	1	NBR
46	O-ring (F)	1	NBR
48	Spring (A) <sup>4)</sup>	1	Spring steel
49	Spring (B) <sup>4)</sup>	1	Spring steel
50	Spring (C) <sup>5)</sup>	1	Spring steel

1) with pin from material 1.4301  
 4) Air to open actuator only  
 5) Air to close actuator only

## Diaphragm valve type 14 with pneumatic actuator

### Dimensions - flanged end

Dimensions in mm														
DN	d	C	D	D <sub>1</sub>	D <sub>2</sub>	L <sub>f</sub>	b <sub>2</sub>	Lift	H <sub>1</sub>	H	e <sub>1</sub>	d <sub>4</sub>	t	n x d <sub>2</sub>
15	16	65	95	54 x 66	130	130	12	10	12,5	186	25	7	13	4 x 14
20	20	75	105	54 x 66	130	150	13	10	14,5	186	25	7	13	4 x 14
25	25	85	115	67 x 80	130	160	13	12	18,5	193	25	7	13	4 x 14
32	32	100	140	67 x 80	130	180	16	12	22,5	197	25	7	13	4 x 18
40	40	110	150	108 x 108	174	200	20	21	27,5	293	45	9	15	4 x 18
50	52	125	165	123 x 123	174	230	22	25	36,0	302	45	9	15	4 x 18

### Dimensions and weights - true union with socket or spigot

Dimensions in mm														
DN	d	d <sub>u</sub>	Cement socket			Weld socket			Spigot					
			d <sub>m</sub>	z	l <sub>m</sub>	d <sub>m</sub>	z	l <sub>m</sub>	s <sup>1)</sup> SDR 11	s <sup>1)</sup> SDR 17,6	l <sub>SV</sub> <sup>3)</sup>	l <sub>S</sub> <sup>2)</sup>	L <sub>SV</sub> <sup>3)</sup>	L <sub>S</sub> <sup>2)</sup>
15	16	48	20	96	16	20	96	15	2,5	-	47	30	246	188
20	20	60	25	109	19	25	109	16	2,7	-	64	25	272	198
25	25	70	32	128	22	32	128	18	3,0	-	61	18	296	216
32	32	82	40	136	26	39	136	21	3,6	-	65	20	320	222
40	40	100	50	184	31	49	184	24	4,6	2,9	69	20	372	268
50	52	106	63	218	38	63	219	28	5,8	3,6	87	18	447	297

<sup>1)</sup> PVDF-weld spigot with differing wall thickness s

<sup>2)</sup> Weld spigot, short (PP-R, PVDF)

<sup>3)</sup> Weld spigot, long (PP-R)

### Weight in kg/pc.

DN	Flanged, double acting				True union, double acting				Additional weight	
	PVC-U	PVC-C	PP	PVDF	PVC-U	PVC-C	PP	PVDF	Single acting Air to open	Single acting Air to close
15	2,1	2,1	2,0	2,2	1,9	1,9	1,8	2,0	0,4	0,1
20	2,2	2,2	2,0	2,3	2,0	2,0	1,9	2,1	0,4	0,1
25	2,4	2,5	2,2	2,6	2,2	2,3	2,1	2,4	0,5	0,1
32	2,7	2,7	2,4	2,9	2,4	2,4	2,2	2,6	0,4	0,1
40	5,2	6,3	4,8	5,5	5,0	5,1	4,6	5,3	1,3	0,4
50	6,1	6,1	5,4	6,5	5,4	5,4	4,9	5,7	1,3	0,4

### Actuator assignment

DN	Double acting	Single acting	
		Air to open	Air to close
15 20	AN - 1 DA	AN - 1 AO	AN - 1 AS
25 32	AN - 2 DA	AN - 2 AO	AN - 2 AS
40 50	AN - 3 DA AN - 4 DA	AN - 3 AO AN - 4 AO	AN - 3 AS AN - 4 AS

Type Ident.-label	Double acting				Single acting, air to close				Single acting, air to open			
	1 DA	2 DA	3 DA	4 DA	1 AO	2 AO	3 AO	4 AO	1 AS	2 AS	3 AS	4 AS
Air consumption [l/lift]	2,6	2,7	9,6	9,8	0,8	0,8	3,4	3,4	1,8	1,9	6,1	6,3