

# 3/2-Way Valve

# 7081



## DN 15 up to DN 50

**Pneumatically operated 3/2-way valve in stainless steel for the control of neutral, slightly aggressive and highly aggressive media.**

- compact design
- Unaffected by lightly contaminated media
- For temperatures from -30°C up to +200°C
- Working pressure up to 40 bar
- Versatile actuators



### Technical Information

Body material	Stainless steel 1.4408
Nominal sizes	DN 15 to DN 50
Connections	Pipe thread acc. DIN 2999 Rp 1/2" - 1 1/2" NPT thread 1/2" - 1 1/2"
Nominal pressure	PN 40
Max. fluid temperature:	
with metal bonnet	-30°C up to +170°C, opt. +200°C
with plastic bonnet	-30°C up to +135°C
Ambient temperature	-30°C up to +60°C
Viscosity of the media	maximum 600 mm <sup>2</sup> /s (600cSt)

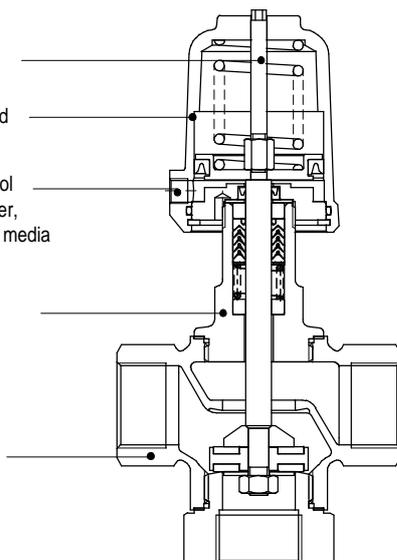
### Options

- limit switches
  - inductive proximity switch
  - electrical switch
- pilot valve
- additional manual operation
- version free of oil and grease

**distributing function: function 3**  
**mixing function: function 4**  
**shut - off function: function 7**

**actuator**  
**normally open: function 6**

- removeable position indicator
- bonnet can be rotated as required
- direct pressure control actuation by air, water, mineral oil and other media
- head section stainless steel
- body stainless (1.4408)



- bonnet material brass, chrome plated (actuator Ø 50mm, Ø 80mm), aluminium (actuator Ø 125 mm)

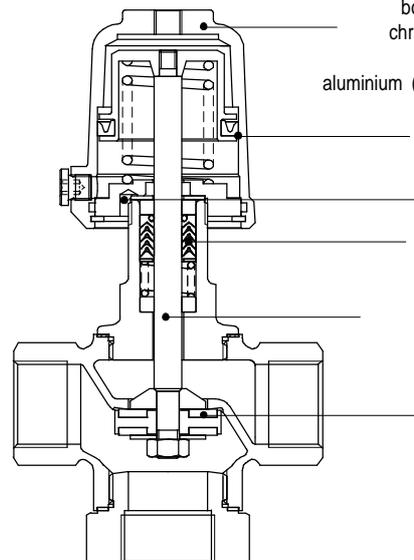
exterior lip sealing

leak detector

PTFE packing

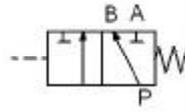
piston rod, roller burnished, stainless steel 1.4571

seating seal in PTFE

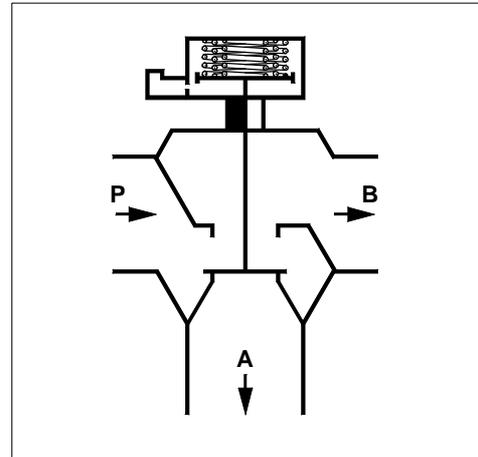
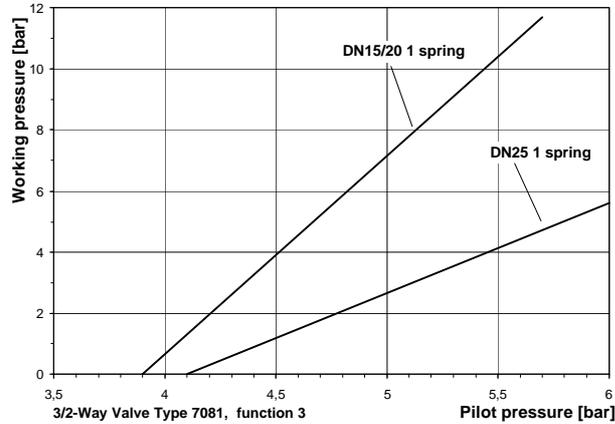


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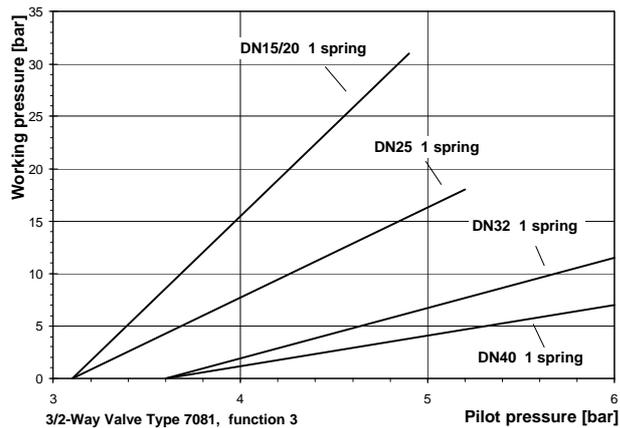
## 3/2-Way Valve, Distributing function (3)



Actuator diameter 50 mm



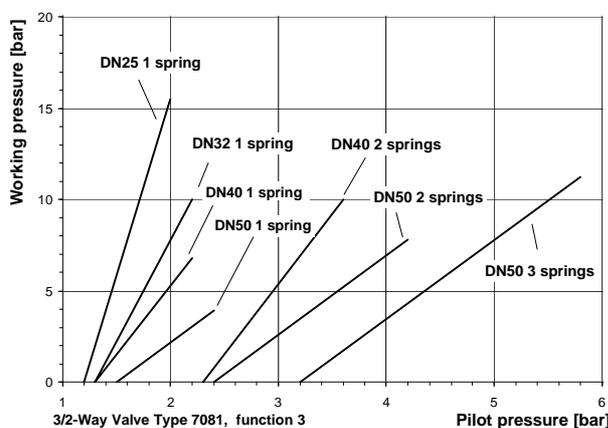
Actuator diameter 80 mm



### max. Pilot pressure, function 3

Nennweite DN	Antrieb Ø mm	Druckfedern	max. Steuerdruck (bar)
15/20	50	1	9
15/20	80	1	7
25	50	1	9
25	80	1	7
25	125	1	2,9
32	80	1	7
32	125	1	3
40	80	1	7,7
40	125	1	3
40	125	2	3,9
50	125	1	5,6
50	125	2	6,6
50	125	3	7,4

Actuator diameter 125 mm

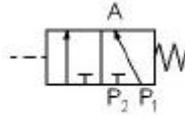


### Attention:

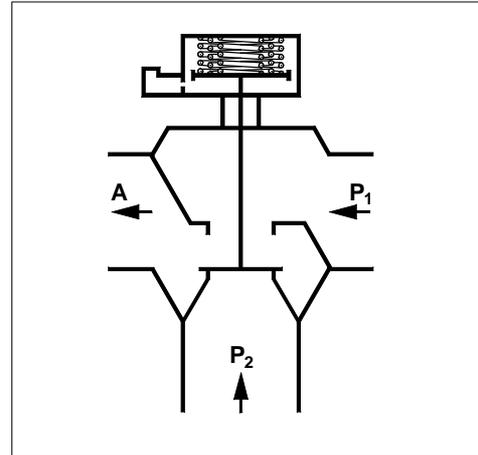
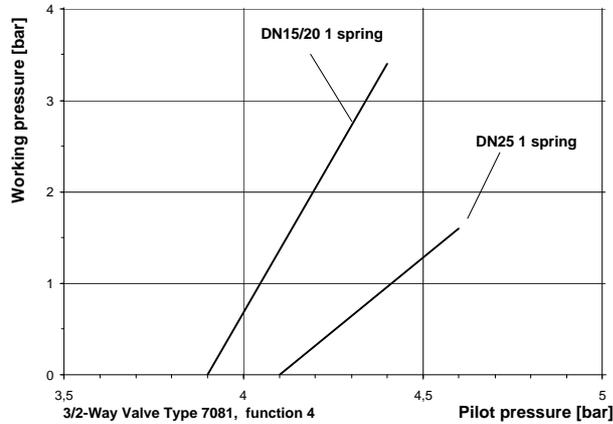
The maximum pilot pressure must not be exceeded since otherwise the piston rod would be damaged.

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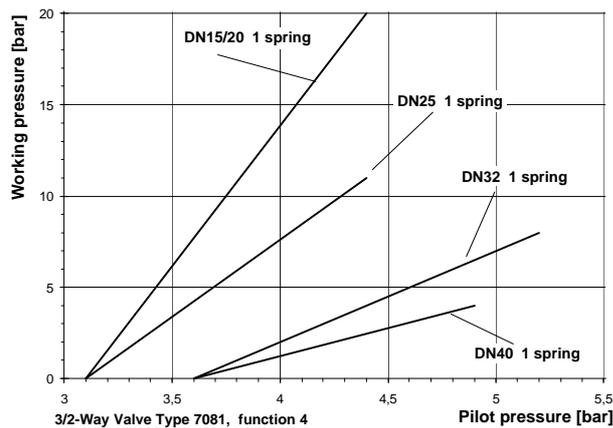
## 3/2-Way Valve, Mixing function (4)



Actuator diameter 50 mm



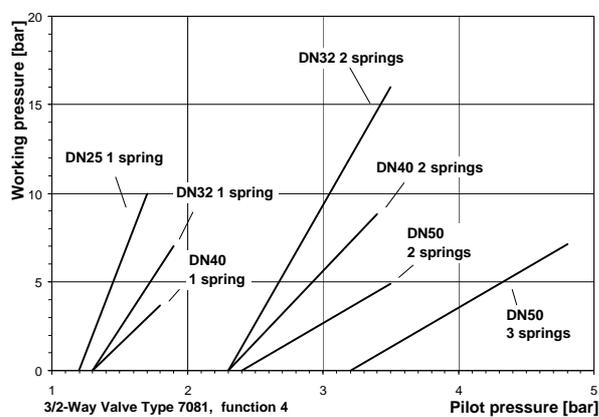
Actuator diameter 80 mm



### max. Pilot pressure, function 4

Nominal size DN	Actuator Ø mm	Springs	max. Pilot pressure (bar)
15/20	50	1	9,9
15/20	80	1	7,3
25	50	1	9,9
25	80	1	7,3
25	125	1	2,9
32	80	1	7,7
32	125	1	3
32	125	2	3,9
40	80	1	7,7
40	125	1	3
40	125	2	3,9
50	125	1	5,7
50	125	2	6,6
50	125	3	7,4

Actuator diameter 125 mm

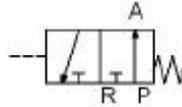


### Attention:

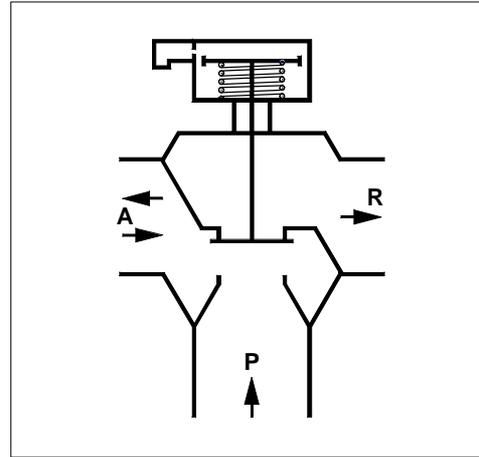
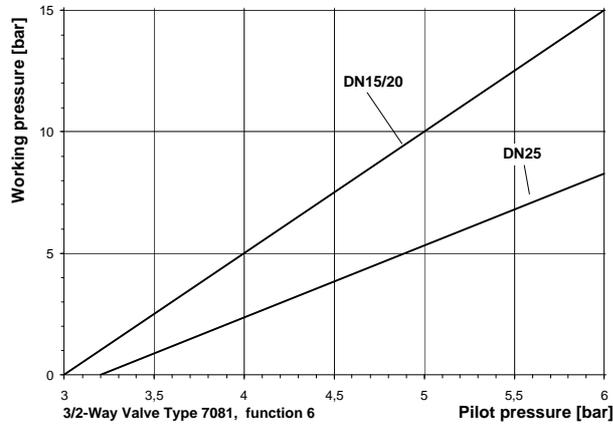
The maximum pilot pressure must not be exceeded since otherwise the piston rod would be damaged.

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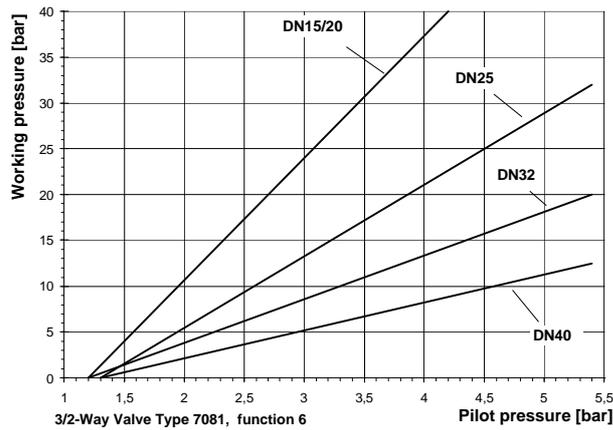
3/2-Way Valve, Actuator: normally open (6)



Actuator diameter 50 mm



Actuator diameter 80 mm



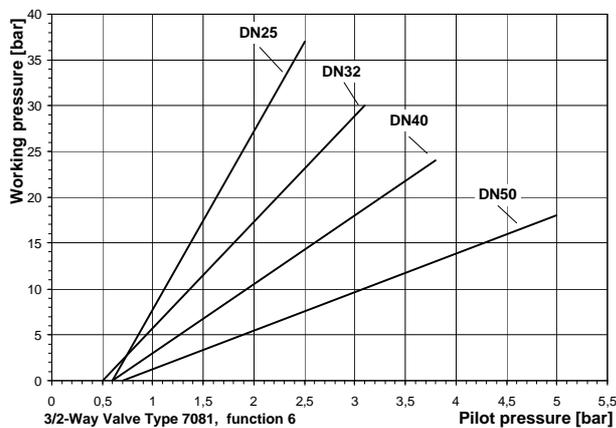
max. Pilot pressure, function 6

Nominal size DN	Actuator Ø mm	max. Pilot pressure (bar)
15/20	50	7
15/20	80	4,8
25	50	7
25	80	6
25	125	3
32	80	6
32	125	3,6
40	80	6
40	125	4,3
50	125	5,5

**Attention:**

The maximum pilot pressure must not be exceeded since otherwise the piston rod, or as the case may be, the seating seal would be damaged.

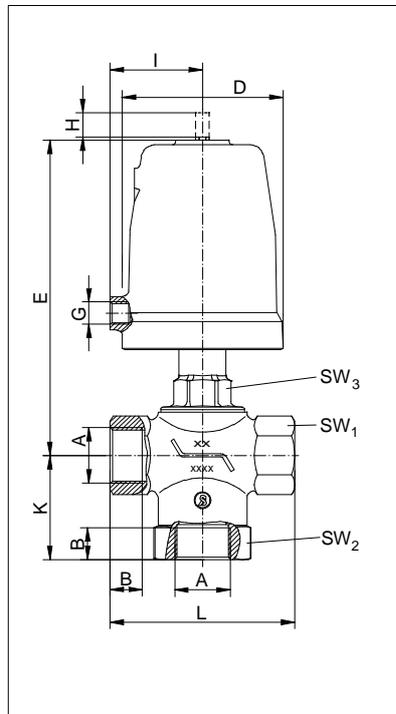
Actuator diameter 125 mm



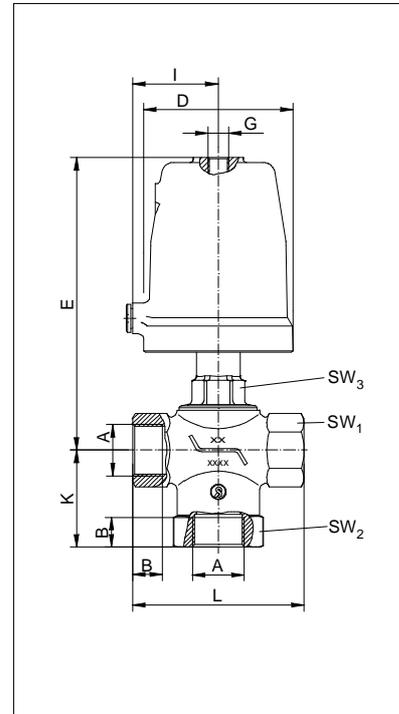


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## Dimensions and Weights



**Distributing, mixing and shut-off function  
function 3, 4 and 7**



**Actuator: normally open  
function 6**

DN	piston	A Rp/NPT	B Rp	B NPT	D	E	G	H stroke	I	K	L	SW1	SW2	SW3	Weight (kg)
15	50	1/2"	15	14,5	62	140	G 1/8"	14	34,5	62	90	26	41	30	1,8
15	80	1/2"	15	14,5	98	178	G 1/4"	14	55	62	90	26	41	30	3,4
20	50	3/4"	16,3	15	62	140	G 1/8"	14	34,5	62	90	32	41	30	1,8
20	80	3/4"	16,3	15	98	178	G 1/4"	14	55	62	90	32	41	30	3,4
25	50	1"	19,1	18	62	151	G 1/8"	14	34,5	63	110	41	55	30	2,2
25	80	1"	19,1	18	98	190	G 1/4"	14	55	63	110	41	55	30	3,8
25	125	1"	19,1	18	146	215	G 1/4"	14	80	63	110	41	55	30	5,7
32	80	1 1/4"	21,4	18,4	98	194	G 1/4"	15	55	74	130	48	65	30	4,4
32	125	1 1/4"	21,4	18,4	146	219	G 1/4"	15	80	74	130	48	65	30	6,3
40	80	1 1/2"	21,4	18,4	98	195	G 1/4"	23	55	88	140	58	75	32	5,3
40	125	1 1/2"	21,4	18,4	146	220	G 1/4"	23	80	88	140	58	75	32	7,2
50	125	2"	25,7	19	146	248	G 1/4"	23	80	95	180	85	90	36	10,4

Dimensions in mm

DN	Kvs - value			
	P-B	P-A	P1-A	P2-A
15	5,5	7	5,5	7
20	7,5	11	7,5	11
25	12,5	19	12,5	19
32	19	28	19	28
40	32	43	34	51
50	51	65	51	65