

# 3/2-Way Valve 7080

## DN 15 up to DN 40

**Pneumatically operated 3/2-way valve for the control of neutral and slightly aggressive media.  
(Stainless steel version, Data sheet Type 7081)**

- Compact design
- Unaffected by lightly contaminated media
- For temperatures from -40°C up to +200°C
- Working pressure up to 16 bar
- Versatile actuators in different sizes



### Technical Information

Body material	bronze Rg5
Nominal sizes	DN 15 to DN 40
Connections	Pipe thread acc. ISO 7/1 (DIN EN 10226-1) Rp 1/2" - 1 1/2" NPT thread 1/2" - 1 1/2"
Nominal pressure	PN 16
Media temperature: with metal bonnet	-30°C up to +170°C, opt. -40°C up to +200°C
with plastic bonnet	-30°C up to 135°C
Ambient temperature	-30°C to +60°C
Viscosity of the media	maximum 600 mm <sup>2</sup> /s (600cSt, 80°E)
Leakage acc. EN 12266-1	leakage class A
Packing leakage	tested according to TA-Luft as defined in DIN EN ISO 15848-1 and VDI 2440

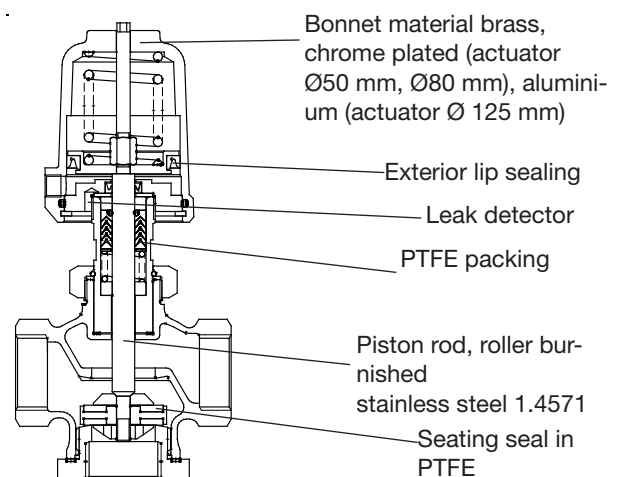
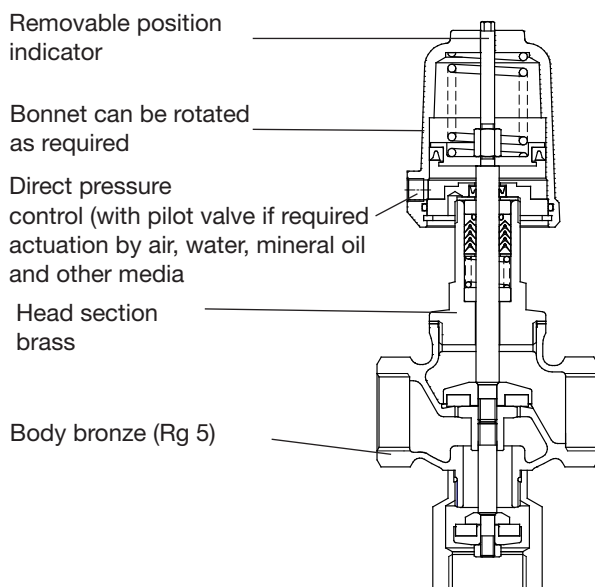
### Options

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

\*: Please consider further temperature versions and limits in technical bulletin 32

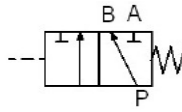
### normal function, normally closed

### distributing, mixing function and shut - off function

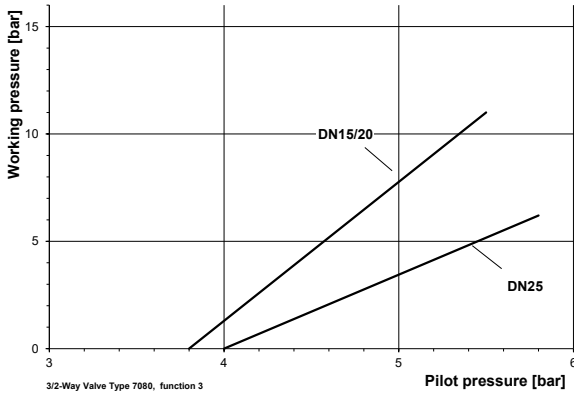


# 3/2-Way Valve 7080

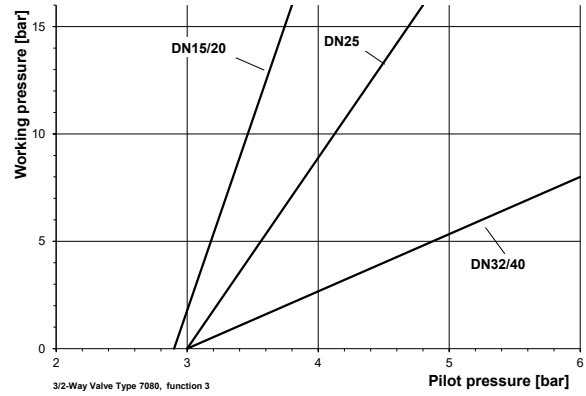
## 3/2-Way Valve, Distributing function (3)



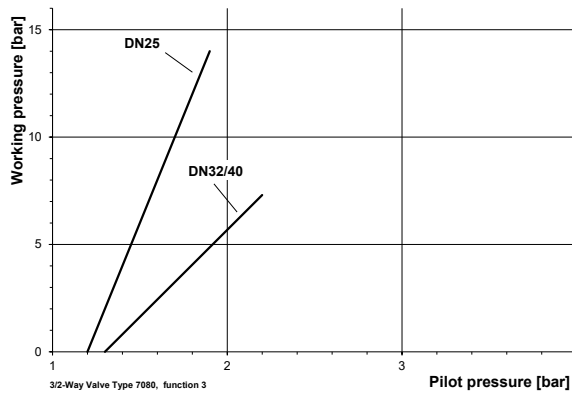
Actuator diameter 50 mm



Actuator diameter 80 mm



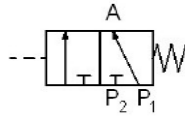
Actuator diameter 125 mm



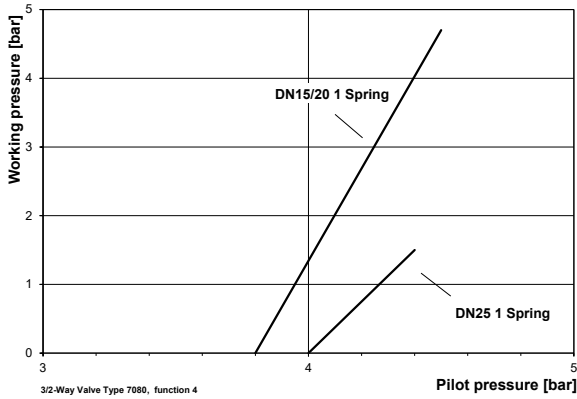
### max. adm. pilot pressure

Nominal size DN	Actuator Ø mm	Springs	max. Pilot pressure (bar)
15/20	50	1	9
15/20	80	1	7
25	50	1	9
25	80	1	7
25	125	1	2,8
32/40	80	1	7
32/40	125	1	3

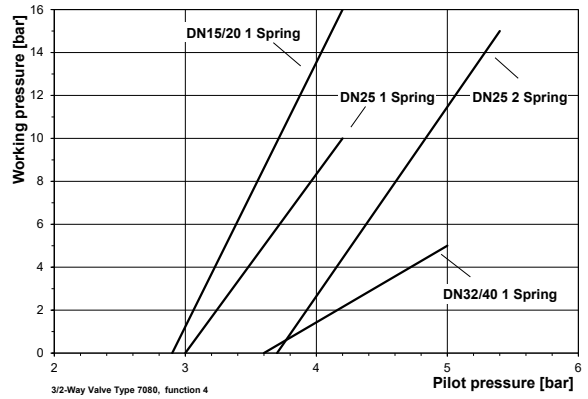
## 3/2-Way Valve, Mixing function (4)



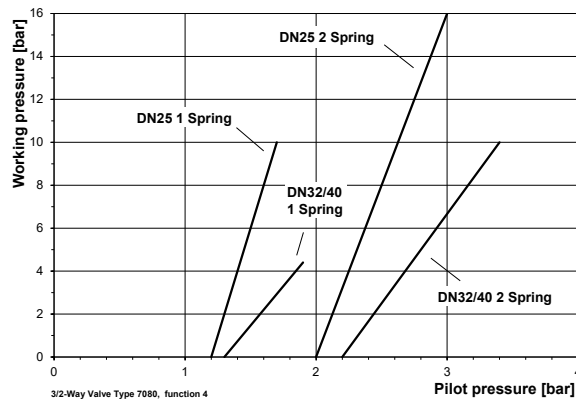
Actuator diameter 50 mm



Actuator diameter 80 mm



Actuator diameter 125 mm



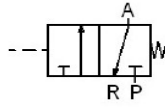
### max. adm. pilot pressure

Nominal size DN	Actuator Ø mm	Springs *	max. Pilot pressure (bar)
15/20	50	1	9,8
15/20	80	1	7,2
25	50	1	9,8
25	80	1	7,2
25	80	2	7,9
25	125	1	2,8
25	125	2	3,6
32/40	80	1	7,7
32/40	125	1	3
32/40	125	2	3,9

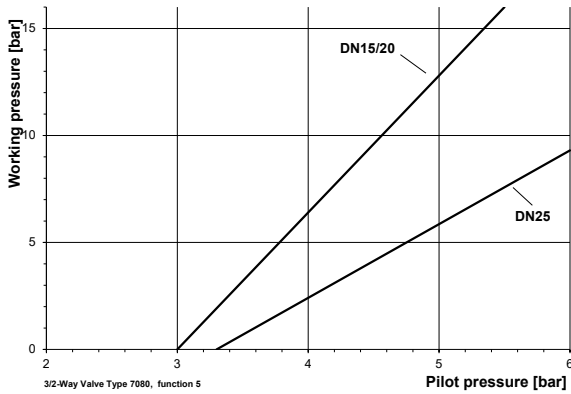
\* standard spring configuration  
1 spring

# 3/2-Way Valve 7080

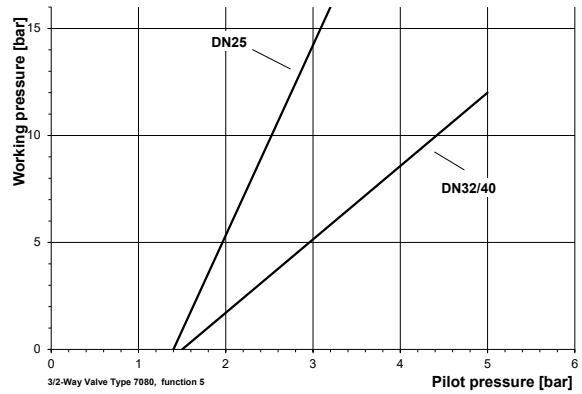
## 3/2-Way Valve, actuator: normally closed (5)



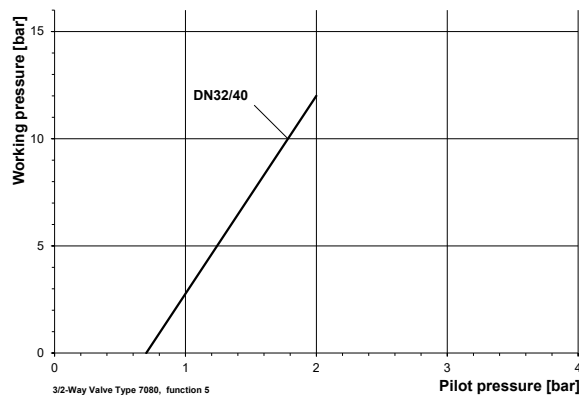
Actuator diameter 50 mm



Actuator diameter 80 mm



Actuator diameter 125 mm

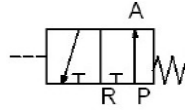


### max. adm. pilot pressure

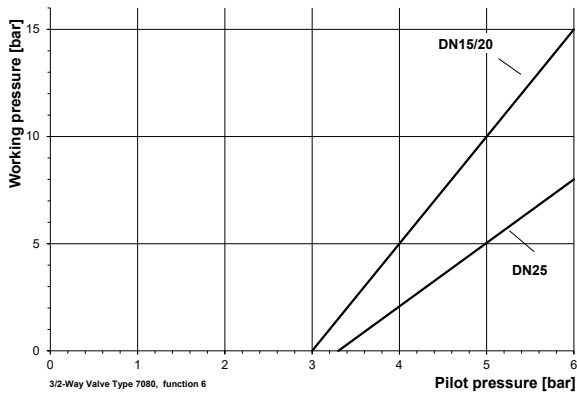
Nominal size DN	Actuator Ø mm	max. Pilot pressure (bar)
15/20	50	9
25	50	9
25	80	5,6
32/40	80	5,5
32/40	125	2

# 3/2-Way Valve 7080

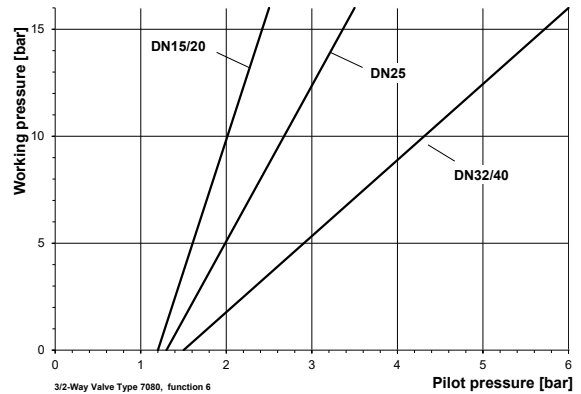
## 3/2-Way Valve, actuator: normally open (6)



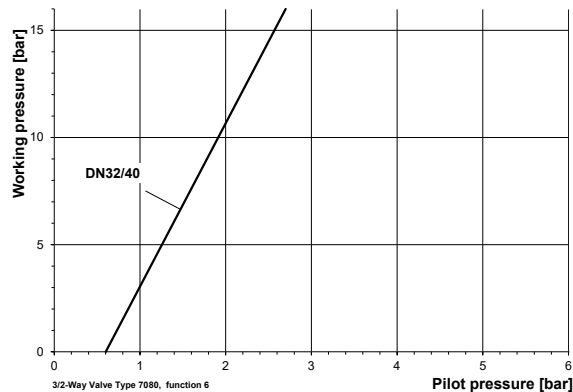
Actuator diameter 50 mm



Actuator diameter 80 mm



Actuator diameter 125 mm

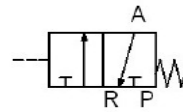


### max. adm. pilot pressure

Nominal size DN	Actuator Ø mm	max. Pilot pressure (bar)
15/20	50	9
15/20	80	5
25	50	9
25	80	6,4
25	125	2,6
32	125	3,8

# 3/2-Way Valve 7080

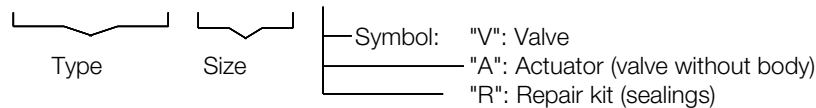
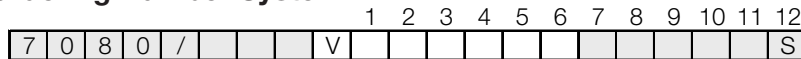
## 3/2-Way Valve, actuator: shut-off function (7)



Nominal Size DN	Diff. Pressure max (bar)	Pilot pressure (bar)	Actuator Ø mm	Springs *
DN15/20	4,5	3,8 - 9,7	D50	1
DN15/20	9	4,8 - 10	D50	2
DN25	3,5	4,9 - 10	D50	2
DN15/20	16	2,9 - 7,2	D80	1
DN25	10	3,2 - 7,4	D80	1
DN25	16	4,4 - 8,7	D80	3
DN32/40	7	4,4 - 8,5	D80	2
DN32/40	9	5,4 - 9,5	D80	3
DN32/40	4	1,5 - 3,0	D125	1
DN32/40	10	2,2 - 3,9	D125	2
DN32/40	14	3,0 - 4,6	D125	3

\*: standard

### Ordering Number System

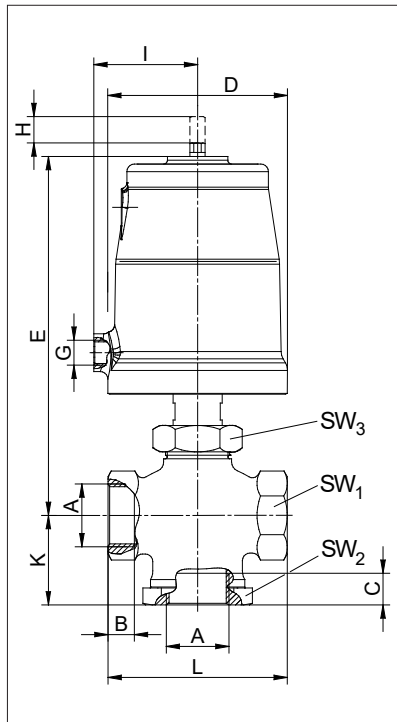


1 - 6 : Please quote all 6 sections.  
7 - 12: Quote only if required.

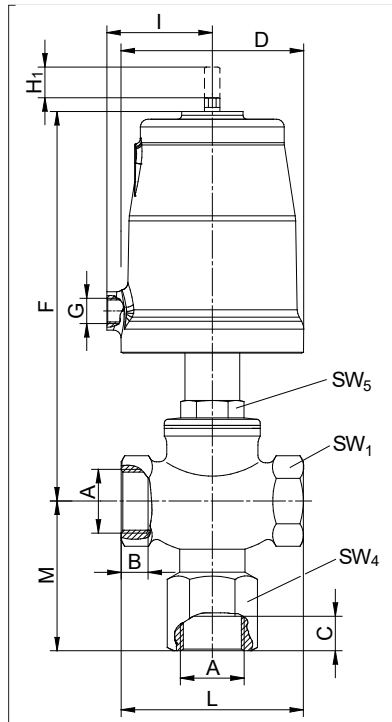
1. Body type	2. Connection	3. Body material	4. Seating seal	5. Pilot function	6. Actuator
3 3/2-way, diverting	0 BSP-thread acc. ISO 228-1	1 Bronze Rg5	0 PTFE	0 spring closes (function 3/4/5/7 only)	0 piston Ø50mm 1 piston Ø80mm 2 piston Ø125mm
4 3/2-way, mixing	5 NPT-thread (1/2" up to 1 1/2")			1 spring opens (function 6 only)	
5 3/2-way, spring closes				3 double acting	
6 3/2-way, spring opens					
7 3/2-way, shut-off function NC					
7. Springs	8.	9. Packing	10. Temperature version	11. Accessories	12. Special versions
- standard 1 1 spring 2 2 springs 3 3 springs	- without significance	- standard packing underneath 2	- standard high temperature version H	- no accessories 1 electrical position indicator with one switch 2 electrical position indicator with two switches 3 manual emergency operation 4 additional manual operation 5 stroke limitation 6 pilot valve DN 2, 230 V AC 7 pilot valve DN 2, 24 V DC K electr. position indicator compact M position indicator with two ind. switch 10 - 36 V DC (PNP) P position indicator with one ind. switch 10 - 36 V DC (PNP) T position indicator compact, inductive 10 - 30 V DC (PNP)	S special versions M position indicator with cable bushing N position indicator with plug connection

Ordering example: 7080/050V601011- - - - 7:  
3/2-way valve type 7080, normal function, DN 50, pipe thread acc. DIN 2999, body material bronze (Rg5), PTFE seat material, spring opens, actuator 80 mm, pilot valve 24 V DC.

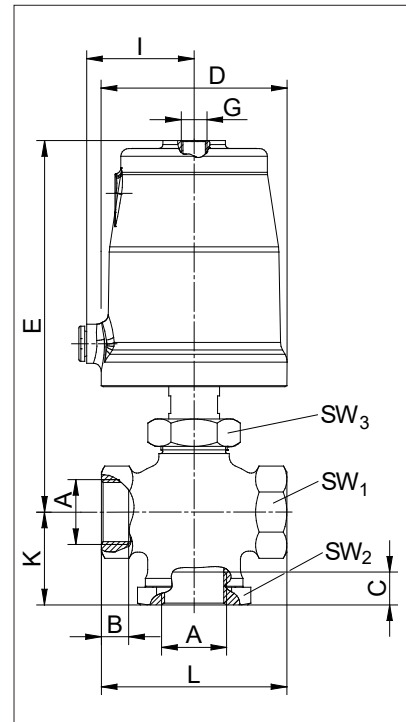
## Dimensions and Weights



distributing and mixing function shut - off function (7)



normal function, normally closed

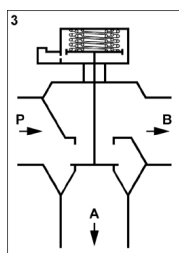


normal function, normally open

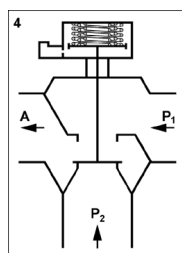
Size	piston	A	B	C	C	D	E	F	G	H	H1	I	K	L	M	SW1	SW2	SW3	SW4	SW5	Kvs value	Weight kg
				G	NPT					stroke	stroke											
15	50	Rp1/2"	13	13,2	15	62	152	147	G 1/8"	9	5	34,5	39	80	68	33	41	41	36	30	5,3	1,5
15	80	Rp1/2"	13	13,2	15	98	191	186	G 1/4"	9	5	55	39	80	68	33	41	41	36	30	5,3	3,1
20	50	Rp3/4"	13	16,3	15	62	152	147	G 1/8"	9	5	34,5	42	80	68	33	41	41	36	30	7,3	1,5
20	80	Rp3/4"	13	16,3	15	98	191	186	G 1/4"	9	5	55	42	80	68	33	41	41	36	30	7,3	3,1
25	50	Rp1"	14	16,8	18	62	152	165	G 1/8"	11	8	34,5	47	95	73	41	55	41	41	30	12,3	1,9
25	80	Rp1"	14	16,8	18	98	191	204	G 1/4"	11	8	55	47	95	73	41	55	41	41	30	12,3	3,5
25	125	Rp1"	14	16,8	18	146	215	228	G 1/4"	11	8	80	47	95	73	41	55	41	41	30	12,3	5,6
32	80	Rp1 1/4"	18	19	19	98	208	211	G 1/4"	18,5	9	55	61	132	93	58	75	41	55	32	20	4,8
32	125	Rp1 1/4"	18	19	19	146	232	235	G 1/4"	18,5	9	80	61	132	93	58	75	41	55	32	20	6,7
40	80	Rp1 1/2"	18	19	19	98	208	211	G 1/4"	18,5	9	55	61	132	93	58	75	41	55	32	23	4,8
40	125	Rp1 1/2"	18	19	19	146	232	235	G 1/4"	18,5	9	80	61	132	93	58	75	41	55	32	23	6,7

Dimensions in mm

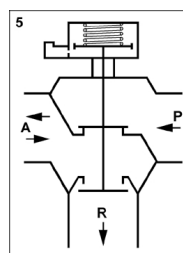
## Versions



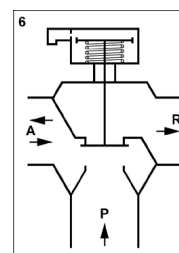
distributing function



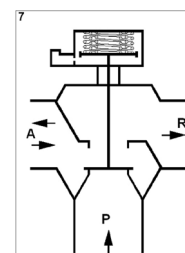
mixing function



actuator NC



actuator NO



shut - off function NC