

# 5/4 Directional Control Valves



Nominal sizes 6 to 22  
 Solenoid pilot operated seat valve  
 Connection: Internal thread/Flanged design  
 Interface to DIN 24341, Form AZ  
 Operating pressure: 16 bar max. (see parameters)

Catalog Register

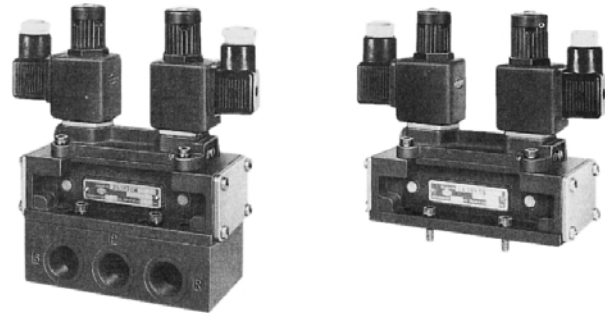
P11

Publication 7501058.06.05.89

## Description

Solenoid valve for filtered lubricated<sup>1)</sup> or non-lubricated air

Flow direction: Fixed  
 Temperature range: -10 to +60 °C

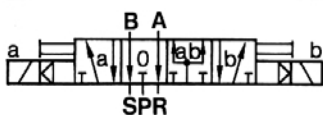


## Features

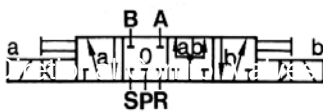
- high flow rate
- easily interchangeable solenoids
- flanged units for manifold mounting
- modular system
- external pressure supply possible (control pressure ≥ operating pressure)
- standard manual override

## Parameters

Nom. size	Port size	Operating pressure [bar]		k <sub>v</sub> -value (C <sub>v</sub> (US) ≈ k <sub>v</sub> × 1.2)	Switching time [ms]	Design with base				Design without base			
		min.	max.			Weight [kg]	Sectional drawing No.	Dimensional drawing No.	Cat. No.	Weight [kg]	Sectional drawing No.	Dimensional drawing No.	Cat. No.



6	G 1/4	2	16	0.7	25	1.2	01	01	2550801.0201	1.0	01	01	2555801.0201
12	G 1/2	2	16	2.0	35	1.8	01	01	2551301.0201	1.5	01	01	2556301.0201
18	G 3/4	2	16	3.0	45	3.0	01	01	2551801.0201	2.5	01	01	2556801.0201
22	G 1	2	15	6.5	60	5.0	01	02	2552301.0201 <sup>2)</sup>	–	–	–	–



6	G 1/4	2	16	0.7	25	1.7	02	01	2550901.0201	1.6	02	01	2555901.0201
12	G 1/2	2	16	2.0	35	2.6	02	01	2551401.0201	2.2	02	01	2556401.0201
18	G 3/4	2	16	3.0	45	4.4	02	01	2551901.0201	2.5	02	01	2556901.0201
22	G 1	2	15	6.5	60	6.4	02	02	2552401.0201 <sup>2)</sup>	–	–	–	–

● For manifold systems equipped with 5-ported directional control valves see publication 7501076, pneumatics catalog, reg. 13

<sup>1)</sup> Recommended: Shell Hydrol DO 32, Shell Voltol 46, Esso Febis K 32 or lubricants of the same quality.

<sup>2)</sup> Without manual override

## Solenoids

Standard voltages	DC		AC		Other voltages available on request
			50 Hz	60 Hz	
	12 V	24 V	24 V	115 V	
24 V	42 V	42 V	220 V		
48 V	48 V				
100 V	110 V				
110 V	220 V				
200 V	240 V				

## Current draw

Solenoid	DC	Solenoids AC	
		Inrush	Holding
0201	12 W	0201 22 VA	15 VA

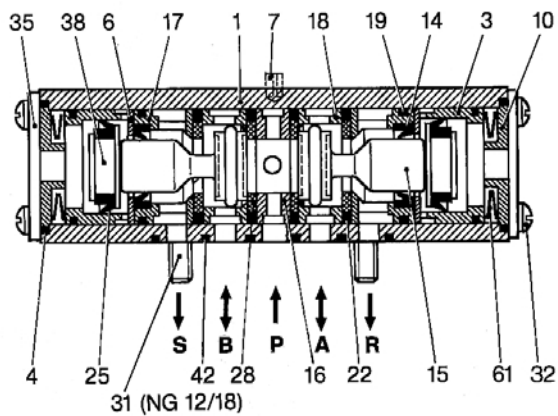
Protection to DIN 40050: IP 65

Connector to DIN 43650

For complete technical data see pneumatics catalog, reg. 17, publication 7500775

## Sectional drawing

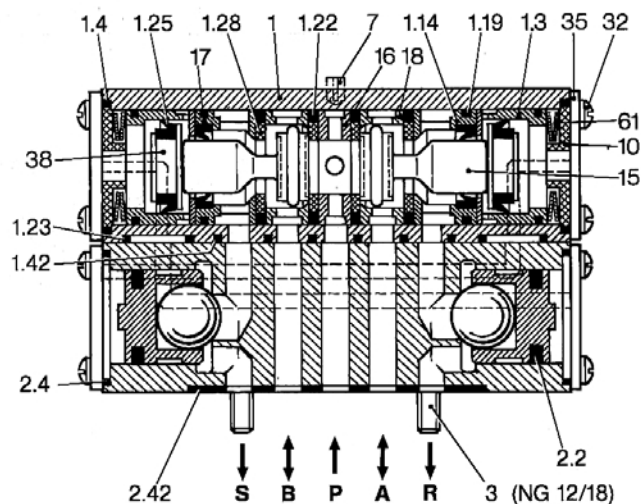
01



Nom. size	Component No.
6	2580920
12	2580620
18	2581420

1 Body	*19 O-ring
3 Bush	*22 O-ring
*4 O-ring	*25 Lip ring
6 Disc	*28 Sealing disc
7 Safety pin	31 Screw
10 Disc	32 Screw
*14 Lip ring	35 Plate
15 Spindle	38 Piston
16 Ring	*42 Seal
17 Ring	61 Cup spring
18 Ring	

02



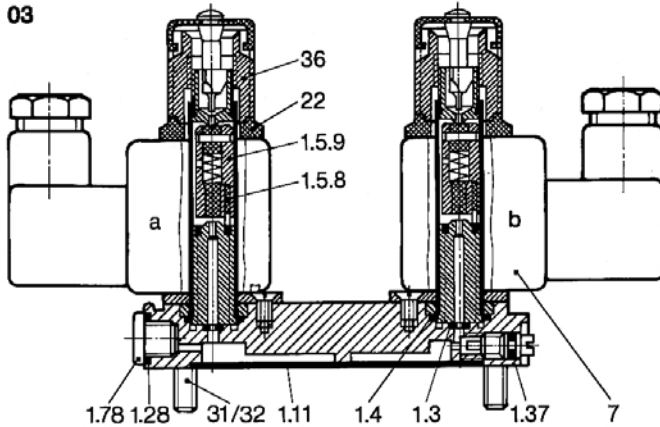
Nom. size	Component No.
6	2580921
12	2580621
18	2581421

1 Body	*2.42 Sealing disc
1.3 Bush	3 Screw
*1.4 O-ring	7 Safety pin
*1.14 Lip ring	10 Disc
*1.19 O-ring	15 Spindle
*1.22 O-ring	16 Ring
*1.23 O-ring	17 Ring
*1.25 Lip ring	18 Ring
*1.28 Sealing disc	32 Screw
*1.42 Sealing disc	35 Plate
*2.2 Sealing ring	38 Piston
*2.4 O-ring	61 Cut spring

**Sectional drawing**

Pilot valves, component No. **2580829.0201**

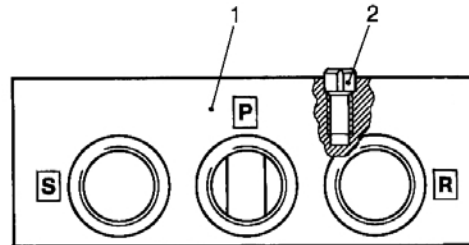
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- \*1.3 O-ring
- \*1.4 O-ring
- \*1.5.8 Spring assy.
- \*1.5.9 Plunger
- \*1.11 Seal
- \*1.28 Seal
- \*1.37 O-ring
- 1.78 Plug
- 7 Solenoid
- 22 Disc
- 31 Screw, size 12/18
- 32 Screw, size 6
- 36 Manual override

Base

Nom. size	Component No.
6	<b>2558100</b>
12	<b>2558200</b>
18	<b>2558300</b>



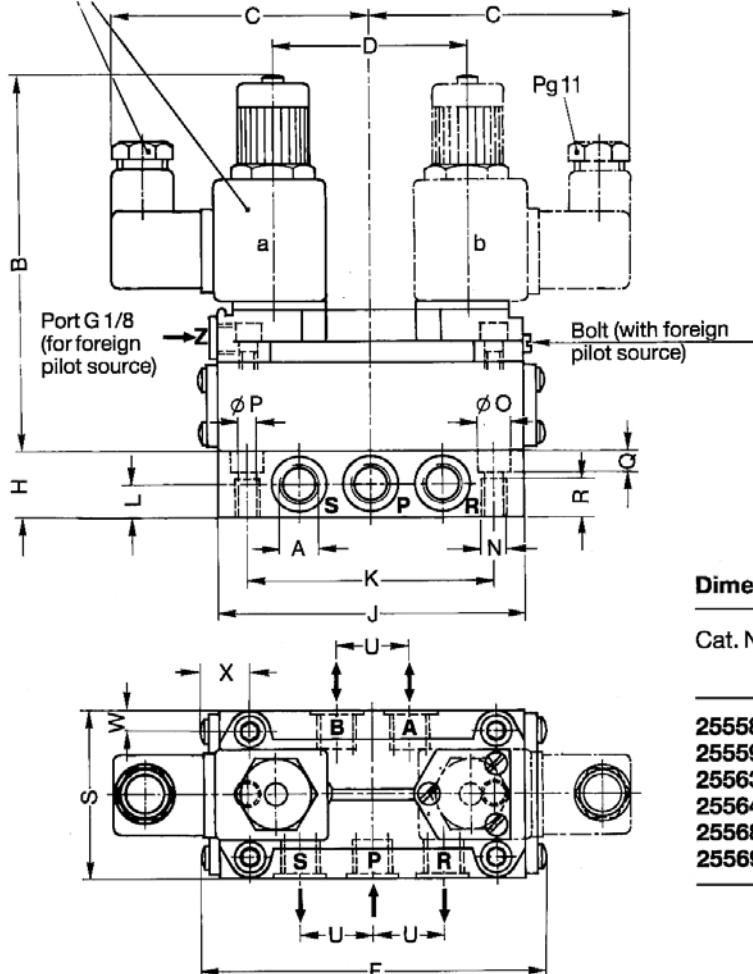
- 1 Plate
- 2 Safety pin

All parts marked \* are enclosed in spare parts kit. Please state Cat. Nos. of kit and corresponding valve to avoid misinterpretations.

**Dimensional drawing**

01

Solenoid and connector can be indexed 90°



**Dimensional table for units without base [mm]**

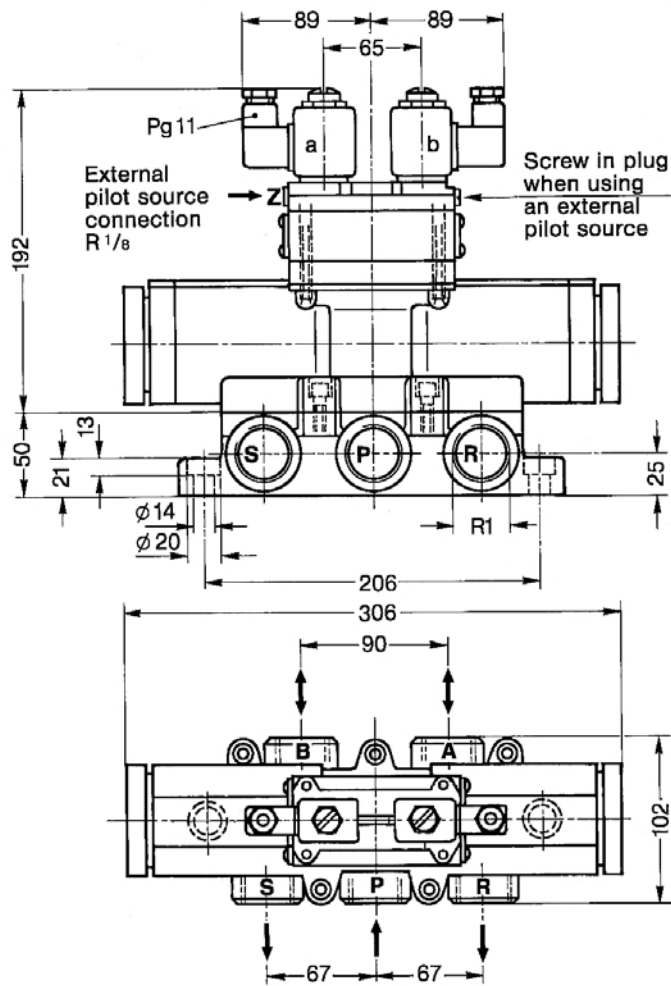
Cat. No.	Nom. size	≈B	≈C	D	F	S	W	X
<b>2555801.0201</b>	6	123	89	65	114	55	6.5	16
<b>2555901.0201</b>	6	153	89	65	114	55	6.5	16
<b>2556301.0201</b>	*2	133	89	65	138	66	8	44
<b>2556401.0201</b>	12	173	89	65	138	66	8	44
<b>2556801.0201</b>	18	155	89	65	181	83	9.5	57
<b>2556901.0201</b>	18	208	89	65	187	84	10	64

**Dimensional table for units without base**

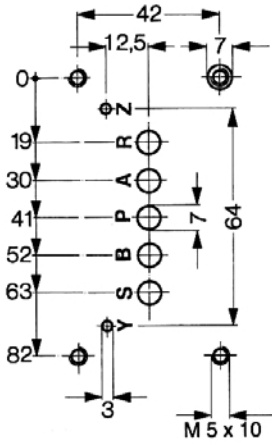
Cat. No.	Nom. size	A	≈B	≈C	D	F	H	J	K	L	N	∅O	∅P	Q	R	S	U
2550801.0201	6	G 1/4	123	89	65	114	22	102	82	11	M 8	11	6.5	7	15	55	24
2551301.0201	12	G 1/2	133	89	65	138	45	124	100	16	M 8	11	6.5	7	15	69	34
2551801.0201	18	G 3/4	155	89	65	181	58	130	100	21	M 10	14.5	8.4	9	15	89	42
2550901.0201	6	G 1/4	153	89	65	114	22	102	82	11	M 8	11	6.5	7	15	55	24
2551401.0201	12	G 1/2	173	89	65	138	45	124	100	16	M 8	11	6.5	7	15	69	34
2551901.0201	18	G 3/4	208	89	65	187	58	130	100	21	M 10	14.5	8.4	9	15	89	42

**Dimensional drawing**

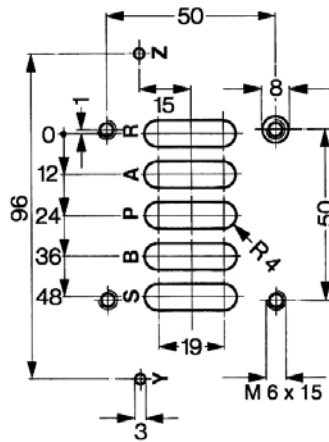
02



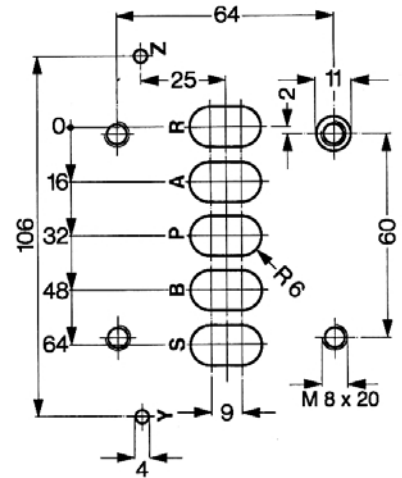
## Interface to DIN 24341 Form AZ



Nominal size 6









Nominal size 12



Nominal size 18

## Additional elements Manual overrides

Cat. No.	0565847	0565849	0565916	0565851	0565855	
						
	Manual override without detent shown left	Detented version after removal of cap shown right	Manual override without detent	Manual override without detent (push-button concealed)	Mock-up	Disc for manual override, for valves equipped with solenoids 02XX and 07XX

Design pressure actuated (by foreign pilot source) with electromagnetic pilot valve: Mount plug 1.23 and remove plug 1.78.

