

Directional valves → Pneumatically operated







Series 740

Brochure



Directional valves → Pneumatically operated

Series 740

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5/2-way valve, Series 740

► Qn = 700 - 950 l/min ► pipe connection ► compressed air connection output: Ø 8x1 - Ø 10x1 ► Can be assembled into blocks ► Manual override: without ► suitable for ATEX



00134170

Version	Diaphragm poppet valve
Pilot	internal
Sealing principle	soft sealing
Mounting on manifold strip	PRS strip
Working pressure min./max.	1.5 bar / 10 bar
Ambient temperature min./max.	-15 °C / +60 °C
Medium temperature min./max.	-15 °C / +60 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³

Materials:	
Housing	Polyoxymethylene; Polyarylamide
Seals	Acrylonitrile Butadiene Rubber

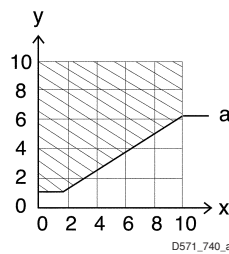
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

	Blocking principle	Compressed air connection				Flow rate value	Weight	Part No.
		Input	Output	Exhaust	Pilot connection	Qn		
						[l/min]	[kg]	
	Single base plate principle, Plate principle	Ø 8x1	Ø 8x1	M14x1	Ø 8x1	700	0.18	5717400000
		Ø 10x1	Ø 10x1			950		5717450000

Nominal flow Qn at 6.3 bar and Δp = 1 bar. with throttle

Pilot pressure range



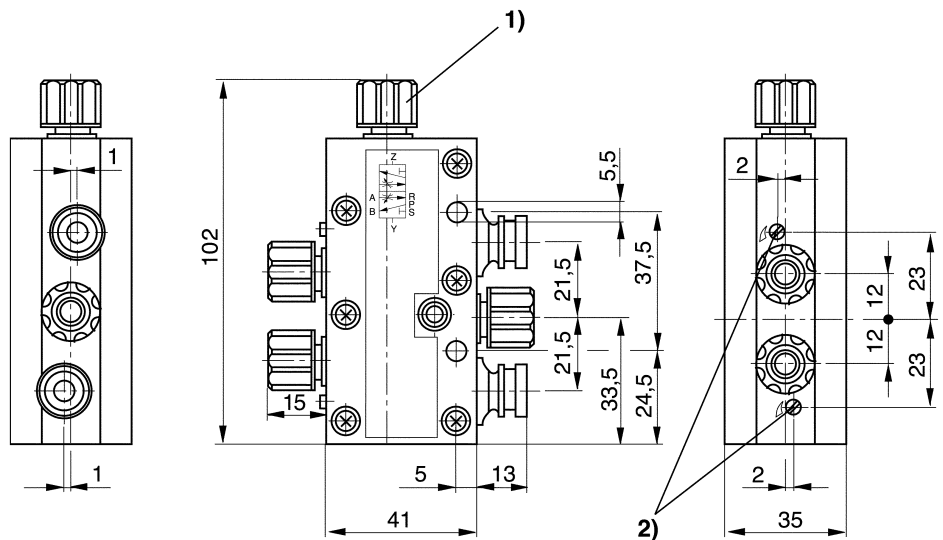
x: Working pressure (bar)
 y: Pilot pressure (bar)
 a: Min. pilot pressure at port 14 (Z) depending on working pressure

Directional valves → Pneumatically operated

5/2-way valve, Series 740

► $Q_n = 700 - 950 \text{ l/min}$ ► pipe connection ► compressed air connection output: $\text{Ø } 8 \times 1 - \text{Ø } 10 \times 1$ ► Can be assembled into blocks ► Manual override: without ► suitable for ATEX

Dimensions



1) for pipe $\text{Ø } 8 \times 1$

2) flow control screw for exhausts 5 (R) and 3 (S)

D571_740

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5/2-way valve, Series 740

► Qn = 700 - 950 l/min ► pipe connection ► compressed air connection output: Ø 8x1 - Ø 10x1 ► Can be assembled into blocks ► Manual override: with detent ► suitable for ATEX



00134171

Version	Diaphragm poppet valve
Pilot	internal
Sealing principle	soft sealing
Mounting on manifold strip	PRS strip
Working pressure min./max.	1.5 bar / 10 bar
Ambient temperature min./max.	-15 °C / +60 °C
Medium temperature min./max.	-15 °C / +60 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Materials:	
Housing	Polyoxymethylene
Seals	Acrylonitrile Butadiene Rubber

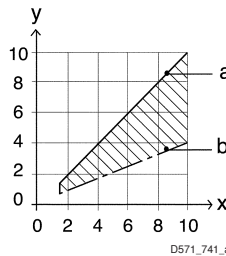
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	Blocking principle	Compressed air connection				Flow rate value	Weight	Note	Part No.
		Input	Output	Exhaust	Pilot connection	Qn			
						[l/min]	[kg]		
	Single base plate principle, Plate	Ø 8x1	Ø 8x1	M14x1	Ø 8x1	700	0.23	1)	5717410000
		Ø 10x1	Ø 10x1			950			5717460000

1) See diagram
Nominal flow Qn at 6.3 bar and Δp = 1 bar.
with throttle

Pilot pressure range



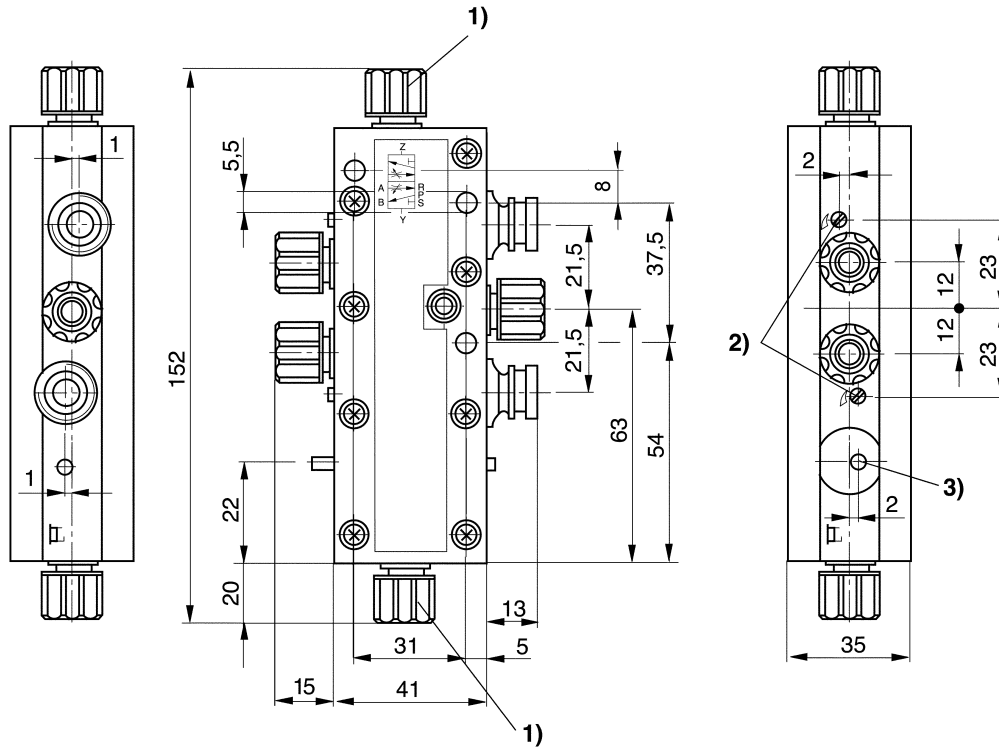
x: operating pressure (bar) y: control pressure (bar)
 a: maximum control pressure depending on operating pressure
 b: minimum control pressure depending on operating pressure

Directional valves → Pneumatically operated

5/2-way valve, Series 740

► $Q_n = 700 - 950 \text{ l/min}$ ► pipe connection ► compressed air connection output: $\text{Ø } 8 \times 1 - \text{Ø } 10 \times 1$ ► Can be assembled into blocks ► Manual override: with detent ► suitable for ATEX

Dimensions



D571_746

- 1) for pipe $\text{Ø } 8 \times 1$
 2) flow control screw for exhausts 5 (R) and 3 (S)
 3) position indicator

Directional valves → Pneumatically operated

5/2-way valve, Series 740 CP

- ▶ Qn = 950 l/min ▶ pipe connection ▶ compressed air connection output: Ø 10x1 ▶ Can be assembled into blocks
- ▶ corrosion-protected ▶ Manual override: without ▶ suitable for ATEX

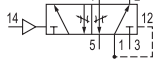


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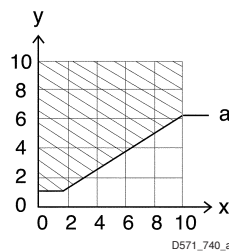
Version	Diaphragm poppet valve
Pilot	internal
Sealing principle	soft sealing
Mounting on manifold strip	PRS strip
Working pressure min./max.	2 bar / 10 bar
Ambient temperature min./max.	-15 °C / +60 °C
Medium temperature min./max.	-15 °C / +60 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Materials:	
Housing	Polyoxymethylene
Seals	Acrylonitrile Butadiene Rubber
Front plate	Polyarylamide

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
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		Input	Output	Exhaust	Pilot connection	Qn			
						[l/min]	[kg]		
	Single base plate principle, Plate principle	Ø 10x1	Ø 10x1	M14x1	Ø 8x1	950	0.18	1)	5717451000
1) See diagram Nominal flow Qn at 6.3 bar and Δp = 1 bar. with throttle									

Pilot pressure range



- x: Working pressure (bar)
- y: Pilot pressure (bar)
- a: Min. pilot pressure at port 14 (Z) depending on working pressure

Directional valves → Pneumatically operated

5/2-way valve, Series 740 CP

- ▶ Qn = 950 l/min ▶ pipe connection ▶ compressed air connection output: Ø 10x1 ▶ Can be assembled into blocks
- ▶ corrosion-protected ▶ Manual override: with detent ▶ suitable for ATEX



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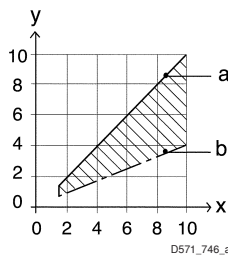
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1) See diagram Nominal flow Qn at 6.3 bar and Δp = 1 bar. with throttle									

Pilot pressure range



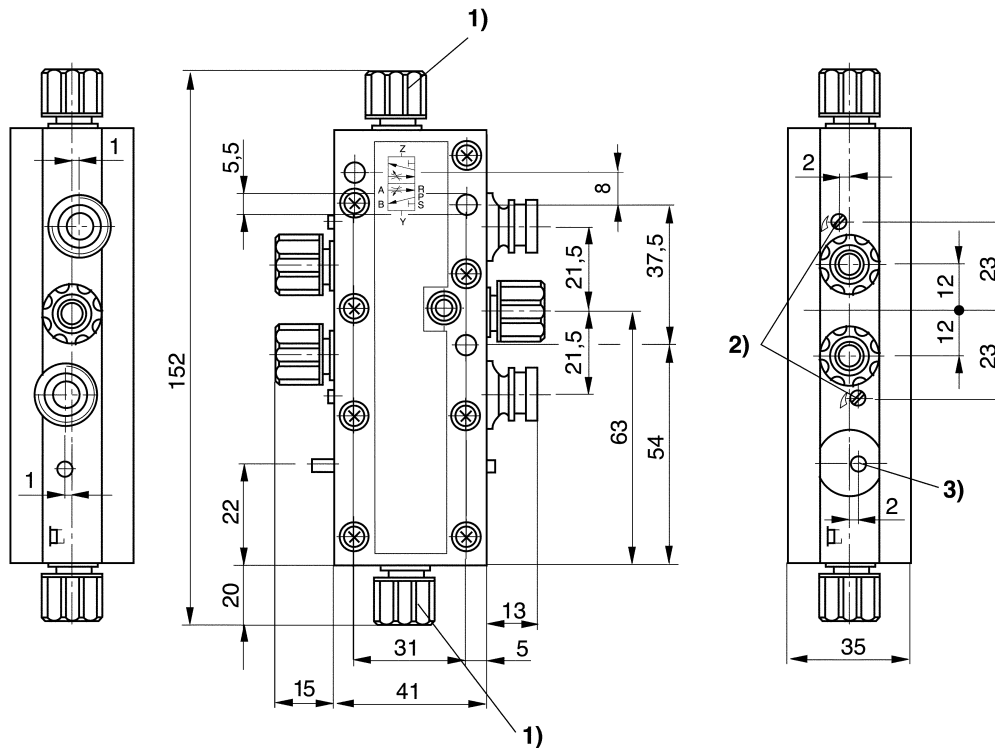
x: operating pressure (bar) y: control pressure (bar)
 a: maximum control pressure depending on operating pressure
 b: minimum control pressure depending on operating pressure

Directional valves → Pneumatically operated

5/2-way valve, Series 740 CP

- ▶ $Q_n = 950 \text{ l/min}$ ▶ pipe connection ▶ compressed air connection output: $\text{Ø } 10 \times 1$ ▶ Can be assembled into blocks
- ▶ corrosion-protected ▶ Manual override: with detent ▶ suitable for ATEX

Dimensions



- 1) for pipe $\text{Ø } 8 \times 1$
- 2) flow control screw for exhausts 5 (R) and 3 (S)
- 3) position indicator

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Series 740

Accessories

Subbases and accessories



5727-501

Ambient temperature min./max.
Medium
Working pressure min./max.

-15 °C / +50 °C
Compressed air
See table below

Materials:
Subbase
Seals

Polyoxymethylene
Acrylonitrile Butadiene Rubber

Technical Remarks

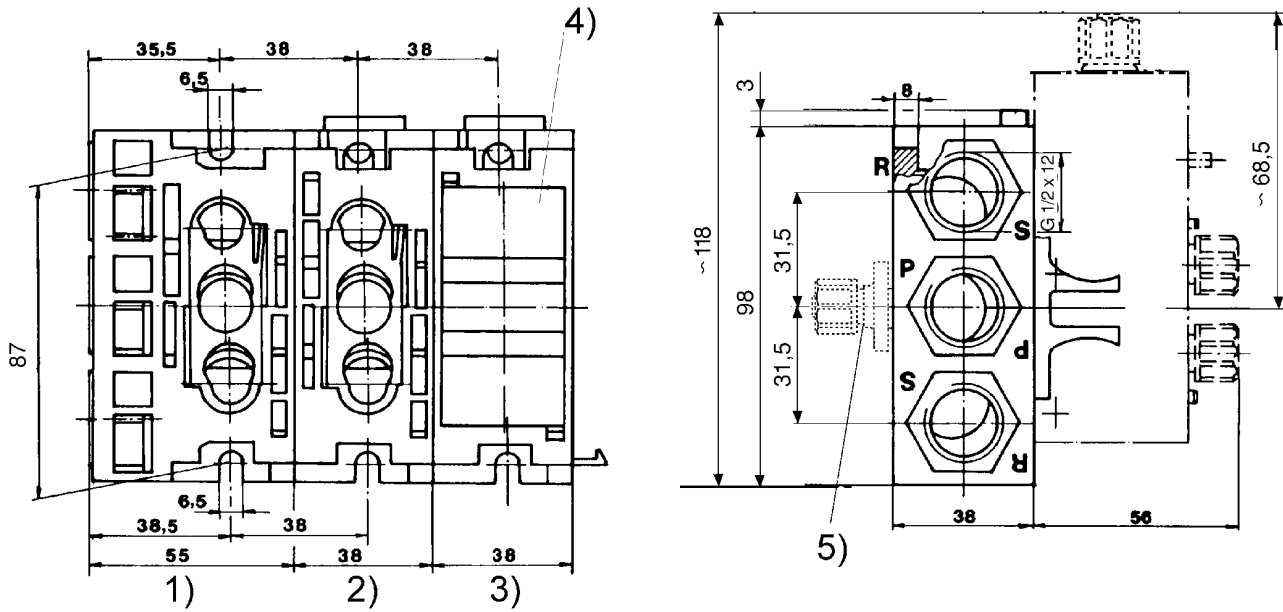
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- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

Type	Working pressure min./max.	Weight	Part No.
		[kg]	
Supply plate, complete with O-rings	0 / 10	0.245	8985003902
Supply plate, corrosion-protected, complete with O-rings	0 / 10	0.237	8985003972
Sandwich plate 740, complete with O-rings.	0 / 10	0.089	8985003922
End plate	0 / 10	0.092	8985003912
Dummy flange for reserve places complete with seals	0 / 10	0.033	5727406012
Adapter for separate air supply	-	0.008	8939102500

Directional valves → Pneumatically operated

Series 740
Accessories

Dimensions



Tightening torque for all screws max. 35 Nm

- 1) Inlet plate
- 2) Through plate
- 3) End plate
- 4) Dummy flange
- 5) Adapter for separate air supply

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Directional valves → Pneumatically operated

Series 740
Accessories

Fittings - Accessories, Series 740



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Fig. 1

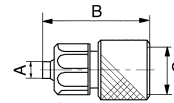


Fig. 2

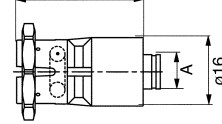


Fig. 3

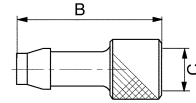


Fig. 4

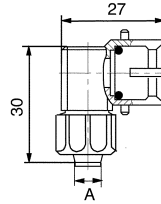


Fig. 5

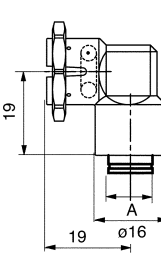


Fig. 6

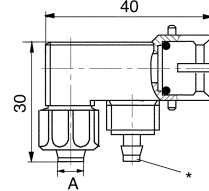


Fig. 7

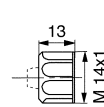


Fig. 8

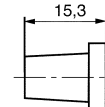


Fig. 9

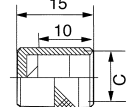
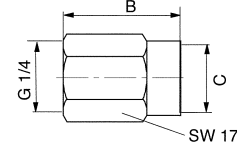


Fig. 10



D893_900

Part No.	Type	Ø A	B	C	Fig.
8939008500	Reducing fitting Ø 8x1 to Ø 6x incl. O-ring	4	25	M12x1	Fig. 1
8939008510	Reducing fitting Ø 10x1 to Ø 6x1 incl. O-ring	4	26	M14x1	Fig. 1
8939008520	Reducing fitting Ø 10x1 to Ø 8x1 incl. O-ring	6	27	M14x1	Fig. 1
8938000910	Reducing fitting Ø 8x1 to Ø 6x1, push-in incl. O-ring	6	29.5	-	Fig. 2
8938000920	Reducing fitting Ø 8x1 to Ø 8x1, push-in incl. O-ring	8	29.5	-	Fig. 2
8939008800	fitting, for port R and S for 8x1	6	24	M14x1	Fig. 1
8931220200	Tubing connector for fabric-reinforced tubing Ø 8x3, incl. O-Ring	8	33	M12x1	Fig. 3
8938306520	elbow fitting Ø 10x1 to Ø 6x1, incl. O-ring	4	-	-	Fig. 4
8938306530	elbow fitting Ø 10x1 to Ø 8x1, incl. O-ring	6	-	-	Fig. 4
8938306540	elbow fitting Ø 10x1 to Ø 10x1, incl. O-ring	8	-	-	Fig. 4
8919905414	Tube nut for silencer	-	-	-	Fig. 7
8993809904	Silencers	-	-	-	Fig. 8
8919905502	Screw plug, Ø 8x1	-	-	M12x1	Fig. 9
8919905512	Screw plug, Ø 10x1	-	-	M14x1	Fig. 9
8932404100	Adapter, Ø 8x1, G 1/4, incl. O-ring	-	27	M12x1	Fig. 10

Bosch Rexroth AG
Pneumatics
Ulmer Straße 4
D - 30880 Laatzen
Phone +49 511 2136-0
Fax +49 511 2136-2 69
sales-pneumatics@boschrexroth.de
www.boschrexroth.com/pneumatics

Your contact:

Canada

Bosch Rexroth Canada Corp.
3426 Mainway Drive
Burlington, Ontario L7M 1A8
Tel. +1 905 335-5511
Fax +1 905 335-4184

Australia

Bosch Rexroth Pty. Ltd.
3 Valediction Road
Kings Park NSW 2148
Sydney
Tel. +61 2 9831-7788
Fax +61 2 9831-5553

U.S.A.

Bosch Rexroth Corp.
1953 Mercer Road
Lexington, KY 40511-1021
Kentucky
Tel. +1 859 254-8031
Fax +1 859 254-4188

Great Britain

Bosch Rexroth Ltd.
Broadway Lane
South Cerney
Cirencester, GL7 5UH
Gloucestershire
Tel. +44 1285 86-3000
Fax +44 1285 86-3003

further contacts:
www.boschrexroth.com/addresses

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