

KF® Bellows-Sealed Right-Angle and Straight-Through Valves

Electropneumatically Operated
DN 10 KF to DN 40 KF



Bellows-sealed, electropneumatically operated right-angle valve DN 25 KF



Bellows-sealed, electropneumatically operated straight-through valve DN 25 KF

Features

Power and compressed air connections conforming to standards

Very silent and low-vibration opening and closing actuation

Very short opening and closing times

Clearly visible open or closed position indicator included as standard; electrical valve position indicator can be retrofitted (see page 12.12)

Materials

Valve body: choice of aluminum alloy or stainless steel.

Inner part: stainless steel.

Pneumatic actuator: aluminum alloy.

Gaskets: Viton O-rings.

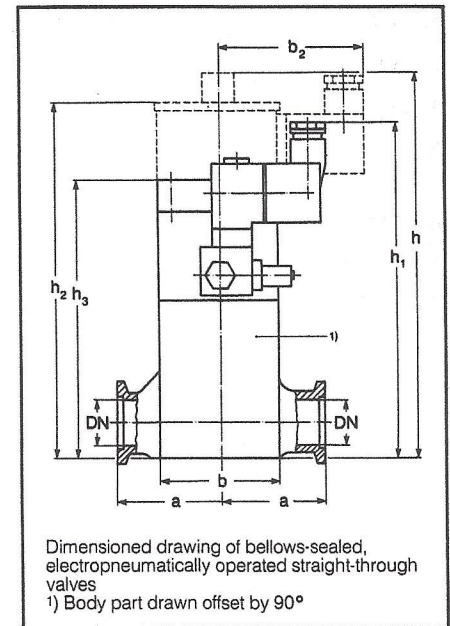
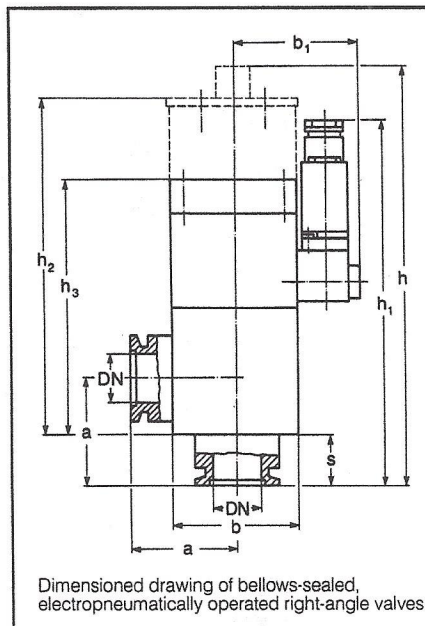
Valve top: high-quality plastics, temperature-resistant up to 80°C.

Technical Data

Standard Specifications	DN 10 KF	DN 16 KF	DN 25 KF	DN 40 KF
Conductance at molecular flow				
Right-angle valveltr/sec	1.6	3.0	12	32
Straight-through valveltr/sec	1.0	1.8	7.5	19
Weight-Right-angle valve with				
aluminum bodylb (kg)	1.1 (0.5)	1.1 (0.5)	2.6 (1.2)	5.5 (2.5)
stainless steel bodylb (kg)	1.3 (0.6)	1.3 (0.65)	3.7 (1.7)	7.2 (3.3)
Straight-through valvelb (kg)	—	1.5 (0.7)	4.4 (2.0)	10.1 (4.6)
Compressed-air connection	70-132 psi 1/8 inch (5 to 9 bar, hose dia. 4/6 mm)			
Opening/closing time at 6 bar compressed air pressure	32/51	32/51	75/110	155/250
Service life	more than 200,000 operations			
Leak rate, valve body and valve seat	<1 x 10 ⁻⁹ mbar ltr/sec			

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Dimensional Data

Dimensions, Inches (mm)

Model	a	b	b ₁	b ₂	h	h ₁	h ₂	h ₃	s
Right-Angle									
DN 10 KF.....AI	1 ³ / ₁₆ (30)	17 ¹ / ₁₆ (36)	1 ²⁹ / ₃₂ (48)	2 ²⁷ / ₃₂ (72)	6 ¹ / ₈ (155)	5 ¹³ / ₃₂ (137)	5 ³ / ₃₂ (129)	3 ¹⁹ / ₃₂ (91)	7 ¹ / ₁₆ (11)
.....SS	—	—	—	—	—	—	4 ¹⁵ / ₁₆ (125)	3 ⁷ / ₁₆ (87)	1 ⁹ / ₃₂ (15)
DN 16 KF.....AI	1 ⁹ / ₁₆ (40)	17 ¹ / ₁₆ (36)	1 ²⁹ / ₃₂ (48)	2 ²⁷ / ₃₂ (72)	6 ¹ / ₂ (165)	5 ²⁹ / ₃₂ (150)	5 ³ / ₃₂ (129)	3 ¹⁹ / ₃₂ (91)	2 ⁷ / ₃₂ (21)
.....SS	—	—	—	—	—	—	4 ¹⁵ / ₁₆ (125)	3 ⁷ / ₁₆ (87)	1 (25)
DN 25 KF.....AI	1 ³¹ / ₃₂ (50)	2 ³ / ₈ (60)	2 ³ / ₈ (60)	2 ²⁷ / ₃₂ (72)	7 ²³ / ₃₂ (196)	6 ¹¹ / ₁₆ (170)	6 ³ / ₁₆ (157)	4 ¹¹ / ₁₆ (119)	3 ¹ / ₃₂ (24)
.....SS	—	—	—	—	—	—	6 (152)	4 ¹ / ₂ (114)	1 ⁵ / ₃₂ (29)
DN 40 KF.....AI	2 ⁹ / ₁₆ (65)	3 ⁵ / ₃₂ (80)	2 ³ / ₄ (70)	2 ²⁷ / ₃₂ (72)	9 ¹ / ₈ (232)	7 ¹ / ₂ (190)	7 ⁷ / ₁₆ (192)	6 ³ / ₃₂ (154)	1 (25)
.....SS	—	—	—	—	—	—	7 ³ / ₃₂ (180)	5 ¹⁹ / ₃₂ (142)	1 ¹ / ₂ (37)
Straight-Through									
DN 16 KF.....SS	1 ⁹ / ₁₆ (40)	17 ¹ / ₁₆ (36)	1 ²⁹ / ₃₂ (48)	2 ²⁷ / ₃₂ (72)	6 ¹ / ₂ (165)	5 ⁷ / ₁₆ (138)	6 (152)	4 ¹ / ₂ (114)	—
DN 25 KF.....SS	1 ³¹ / ₃₂ (50)	2 ³ / ₈ (60)	2 ³ / ₈ (60)	2 ²⁷ / ₃₂ (72)	7 ²³ / ₃₂ (196)	6 ¹⁵ / ₃₂ (164)	6 ³ / ₄ (171)	5 ¹ / ₄ (133)	—
DN 40 KF.....SS	2 ⁹ / ₁₆ (65)	3 ⁵ / ₃₂ (80)	2 ³ / ₄ (70)	2 ²⁷ / ₃₂ (72)	9 ¹ / ₈ (232)	7 ¹ / ₂ (190)	8 ¹ / ₂ (216)	7 (178)	—

Ordering Information

Item	DN 10 KF	DN 16 KF	DN 25 KF	DN 40 KF
Bellows-sealed right-angle valve, electropneumatically operated, without servocontrol valve¹				
Aluminum body.....Cat. No.	297 20	297 21	297 22	297 23
Stainless steel body.....Cat. No.	298 20	298 21	298 22	298 23
Bellows-sealed straight-through valve, electropneumatically operated, without servocontrol valve¹				
Stainless steel body.....Cat. No.	—	299 21	299 22	299 23
Electrical valve position indicatorCat. No.	287 80	287 80	287 80	287 80

¹ Servocontrol valves for electropneumatically operated valves with KF small-flanged ports. For other voltages, see page 12.12.