

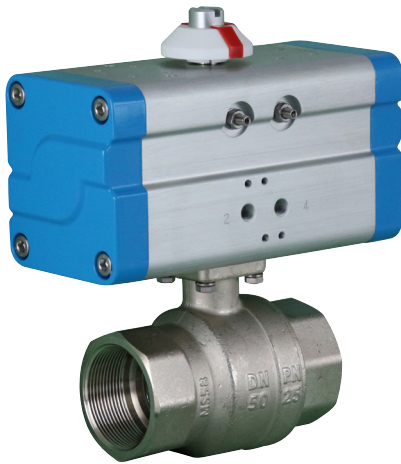
2/2-way Automatic valve - Type PKO

with pneumatic actuator actubar®

Technical Datasheet



Product description



Brass shut-off valve with floating precision ball. The valve is pneumatically actuated (double or single acting) and is characterised by its long service life and high operational reliability.

Technical data 2/2-way ball valve

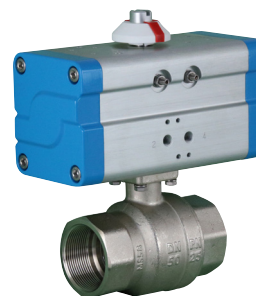
Technical data	
Nominal diameter	DN 8 - DN 80
Connection type	Female thread Rp 1/4" to Rp 3/0" DIN ISO 7/1
Installation position	any
Nominal pressure stage	DN 8- 32: PN 40 DN 40 - 65: PN 25 DN 80: PN 16
Operating pressure	see pressure-temperature diagram
Temperature range	-20°C to +150°C (DN 80 to +130°C)
Materials	Casing: Pressed brass, nickel-plated Ball: Brass, chrome-plated Shaft: Brass, nickel-plated Sealing shells: PTFE Shaft seal: PTFE + HNBR
Flow media	Neutral gases and liquids (other media on request)
Flow direction	any

Technical data AD/AS actuator

Technical data	
Control pressure	2 to 8 bar
Control medium	Air or neutral gases (other media on request) in accordance with DIN ISO 8573-1 Class 4 (minimum requirement)
Ambient temperature	-20 °C to +80 °C (standard) -20 °C to +160 °C
Actuation	Pneumatic double-acting or single-acting
End position adjustment	From AD-004 +5° to -10° adjustable in both end positions
Interfaces	according to EN ISO 5211 and VDI/VDE 3845
Certificates	SIL 3 by TÜV Rheinland, test specifications IEC61508 Parts 1-2 and 4-7:2010

Product features

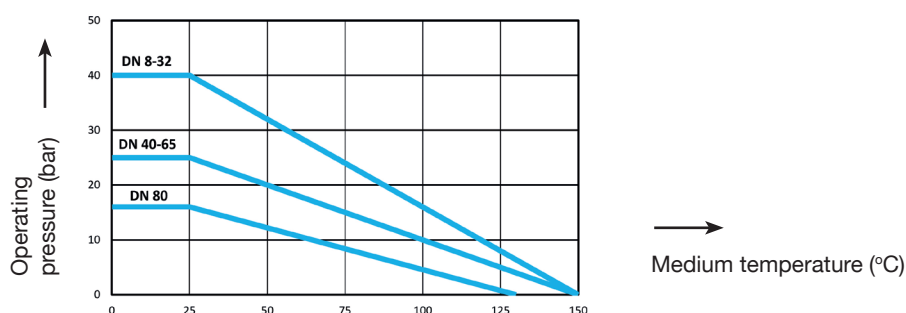
- Full bore
- Maintenance-free
- Can be optionally equipped with end position feedback, positioners and solenoid valves
- Blow-out proof spindle
- Alternatively also available with electric actuator or gearbox



Special Versions

Please contact us.

Pressure - Temperature Diagram



Dimension Table

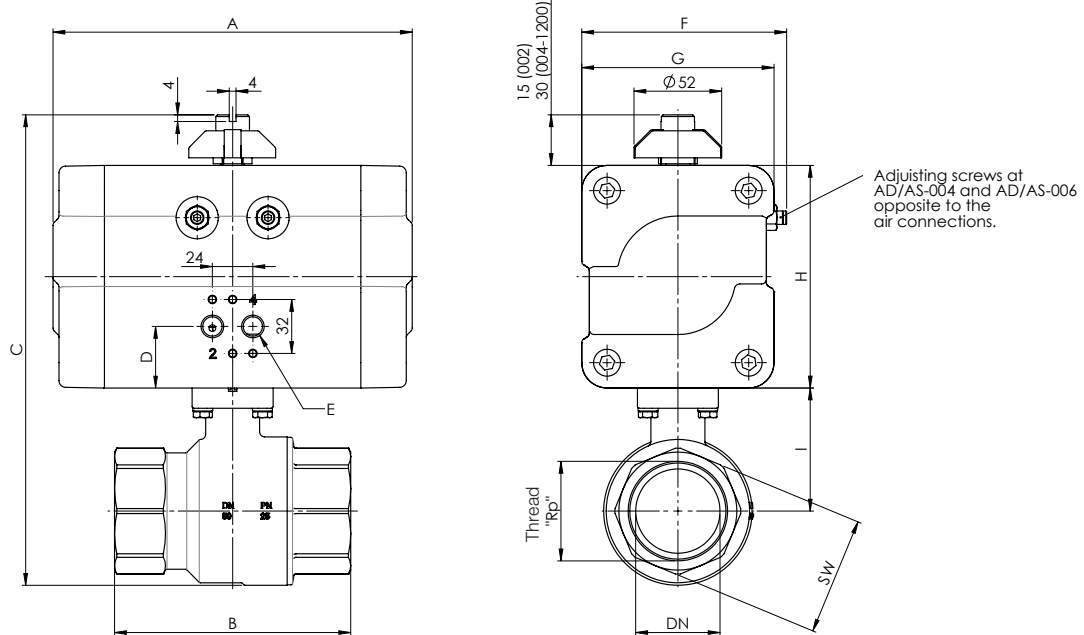
Thread Rp	DN	Actuator	A	B	C	D	E	F	G	H	I	SW	Weight (kg)
1/4"	8	002	136	74.5	128.0	27.5	G 1/8"	/	59	59	38	26	1.07
3/8"	10	002	136	73.5	128.0	27.5	G 1/8"	/	59	59	38	26	1.05
1/2"	15	002	136	74	128.0	27.5	G 1/8"	/	59	59	38	26	1.08
3/4"	20	002	136	79	134.0	27.5	G 1/8"	/	59	59	40.5	32	1.19
		004	144		158.0	24	G 1/8"	82	68	68		32	1.67
		002	136		142.0	27.5	G 1/8"	/	59	59			1.46
1/0"	25	004	144	89	166.0	24	G 1/8"	82	68	68	44	41	1.94
		006	159		182.0	32	G 1/8"	90	76	84			2.54
		002	136		159.0	27.5	G 1/8"	/	59	59			1.92
5/4"	32	004	144	109	183.0	24	G 1/8"	82	68	68	55	50	2.40
		006	159		199.0	32	G 1/8"	90	76	84			3.00
		002	136		171.5	27.5	G 1/8"	/	59	59			2.34
3/2"	40	004	144	118.5	203.3	24	G 1/8"	82	68	68	61.5	55	2.82
		006	159		219.3	32	G 1/8"	90	76	84			3.42
		006	159		223.0	32	G 1/8"	90	76	84			4.63
2/0"	50	011	215	137.5	247.0	31	G 1/8"	109	98	108	73	70	6.41
		018	213		271.0	36.5	G 1/4"	127	114	132			7.62
		006	159		249.8	32	G 1/8"	90	76	84			5.20
5/2"	65	011	215	152	273.8	31	G 1/8"	109	98	108	82.75	83	6.98
		018	213		297.8	36.5	G 1/4"	127	114	132			8.19
		026	281		297.8	36.5	G 1/4"	127	114	132			9.66
3/0"	80	008	173	183	299.0	31	G 1/8"	109	98	108	94.5	98	8.74
		018	213		323.0	36.5	G 1/4"	127	114	132			10.57
		037	301		352.0	40.5	G 1/4"	155	138	161			14.00

Actuator assignment, with max. differential pressure of 10 bar

Thread Rp	DN	AD	
		4 bar Actuators	6 bar Actuators
1/4"	8	AD-002	AD-002
3/8"	10	AD-002	AD-002
1/2"	15	AD-002	AD-002
3/4"	20	AD-002	AD-002
1/0"	25	AD-002	AD-002
5/4"	32	AD-004	AD-002
3/2"	40	AD-004	AD-002
2/0"	50	AD-006	AD-006
5/2"	65	AD-011	AD-006
3/0"	80	AD-018	AD-008

Thread Rp	DN	AS	
		4 bar Actuators	6 bar Actuators
1/4"	8	AS-002-06	AS-002-06
3/8"	10	AS-002-06	AS-002-06
1/2"	15	AS-002-06	AS-002-06
3/4"	20	AS-004-06	AS-002-08
1/0"	25	AS-006-06	AS-004-10
5/4"	32	AS-006-08	AS-004-10
3/2"	40	AS-008-07	AS-006-10
2/0"	50	AS-018-06	AS-011-09
5/2"	65	AS-026-07	AS-018-09
3/0"	80	AS-037-06	AS-018-12

Dimensioned drawing



Order details

PKO-	1/0-	025-	C-	AS 006-	08
	Connection dimension in inches	Nominal diameter	Spring effect: C = spring force closing A = spring force opening (Not applicable for double acting version)	Actuator designation	Spring code (specification not applicable for double acting version)

The descriptions and images contained in this product data sheet are for information purposes only and are without guarantee. bar GmbH reserves the right to make technical and design changes to its products without prior notice.
Warranty: All purchases and purchase contracts are subject to the express acceptance of the General Terms and Conditions of Sale and Delivery by the purchaser, which can be found on the website www.bar-gmbh.de/agb. bar GmbH hereby objects to any deviating or additional conditions to the General Terms and Conditions of Sale and Delivery which have been communicated to the purchaser in any form whatsoever without the written consent of an authorised representative of bar GmbH.

bar pneumatische Steuerungssysteme GmbH
Auf der Hohl 1 • 53547 Dattenberg • Germany
Tel. +49 (0) 2644 96070 • Fax +49 (0) 2644 960735
bar-info@wattswater.com • www.bar-gmbh.de