

2/2-way automatic valve – type PK02

with pneumatic rotary actuator actubar®

Technical data sheet



Product description



Automatic valve in brass with floating precision ball. The valve is pneumatically (double or singleacting) operated and is characterised by long service life and high operational safety.

Technical data of 2/2-way ball valve

Technical data	
Nominal size	DN12 – DN80
Connection type	inside thread G 1/2" to G 3" acc. to DIN EN ISO 228-1
Mounting position	any orientation
Nominal pressure rating	DN 12 – 25: PN 40 DN 32: PN 32 DN 40 – 65: PN 30 DN 80: PN 25
Operating pressure	see pressure-temperature diagram
Temperature range	-20 °C to 120 °C
Materials	casing: forging brass, chromium-plated ball: brass, chromium-plated switching shaft: brass, nickel-plated sealing bowl: PTFE switching shaft seal: PTFE + FKM
Flow media	neutral gases and liquids (other media on request)
Flow direction	any direction

Technical data actuator AD/AS

Technical data	
Control pressure	2 to 8 bar
Control medium	air or neutral gases (further mediums upon request) acc. to DIN ISO 8573-1 Class 4 (min. requirement)
Ambient temperature	-20 °C to +80 °C (standard) -20 °C to +160 °C
Actuation	pneumatic double or single-acting
End position setting	+5° to -10° adjustable in both end positions
Interfaces	acc. to EN ISO 5211 and VDI/VDE 3845
Certificates	SIL 3 by TÜV Rheinland, test basis IEC61508 Parts 1-2 and 4-7:2010

Product features

- full bore
- maintenance-free
- optional extras with limit-switch-boxes and solenoid valves, positioners
- blow-out secure shaft
- application also in vacuum and high flow speeds
- alternatively also with electric actuation, manual lever or gear-driven available

Special versions

On demand.

Pressure-temperature diagram

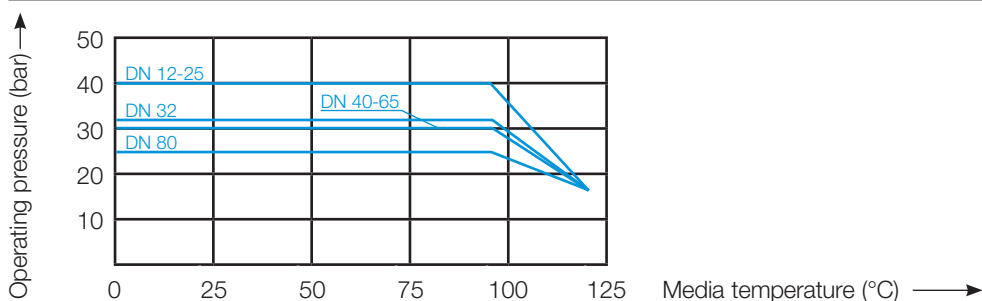


Table of dimensions

Rp	DN	Actuator	A	B	C	D	E	F	G	H	I	SW	Weight (kg)
1/4"	12	001	80	64	104,5	22,5	G 1/8"	/	45	45	29	26	0,68
		002	136		118,5	27,5	G 1/8"	/	59	59			1,07
		004	144		142,5	24	G 1/8"	82	68	68			1,55
3/8"	15	001	80	64	104,5	22,5	G 1/8"	/	45	68	29	26	0,66
		002	136		118,5	27,5	G 1/8"	/	59	59			1,05
		004	144		142,5	24	G 1/8"	82	68	68			1,53
1/2"	15	001	80	64	104,5	22,5	G 1/8"	/	45	45	29	26	0,62
		002	136		118,5	27,5	G 1/8"	/	59	59			1,01
		004	144		142,5	24	G 1/8"	82	68	68			1,49
3/4"	20	001	80	76	112,0	22,5	G 1/8"	/	45	45	32,5	32	0,75
		002	136		126,0	27,5	G 1/8"	/	59	59			1,14
		004	144		150,0	24	G 1/8"	82	68	68			1,62
		006	159		166,0	32	G 1/8"	90	76	84			2,22
1/0"	25	002	136	88	134,0	27,5	G 1/8"	/	59	59	37	40	1,44
		004	144		158,0	24	G 1/8"	82	68	68			1,92
		006	159		174,0	32	G 1/8"	90	76	84			2,52
5/4"	32	002	136	96	144,5	27,5	G 1/8"	/	59	59	42	50	1,68
		004	144		168,5	24	G 1/8"	82	68	68			2,16
		006	159		184,5	32	G 1/8"	90	76	84			2,76
		008	173		208,5	31	G 1/8"	109	98	108			3,92
3/2"	40	004	144	103	190,0	24	G 1/8"	82	68	68	58	54	2,37
		006	159		206,0	32	G 1/8"	90	76	84			2,97
		011	215		230,0	31	G 1/8"	109	98	108			4,13
		018	213		254,0	35	G 1/4"	127	114	132			4,75
2/0"	50	004	144	121	203,0	24	G 1/8"	82	68	68	64	70	3,27
		006	159		219,0	32	G 1/8"	90	76	84			3,87
		011	215		243,0	31	G 1/8"	109	98	108			5,03
		018	213		267,0	35	G 1/4"	127	114	132			5,65

Table of dimensions (continuation)

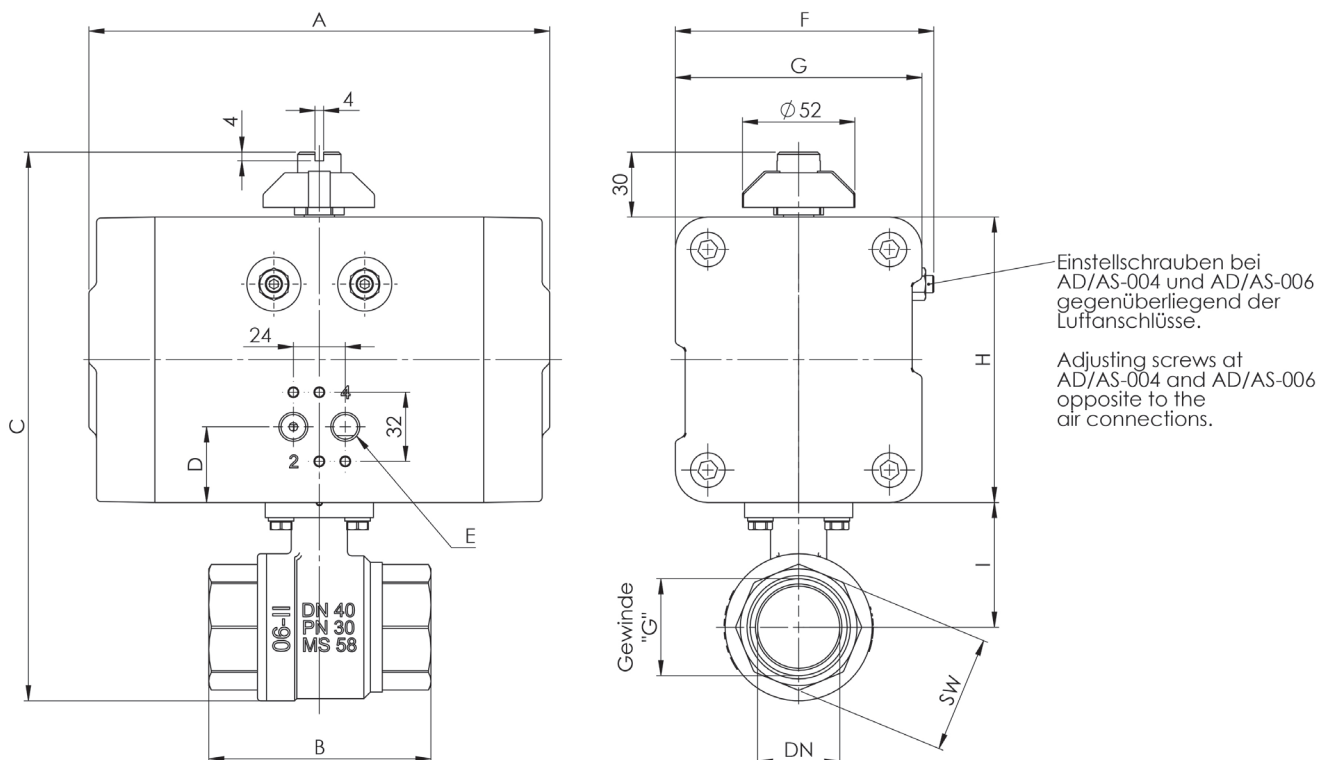
Rp	DN	Actuator	A	B	C	D	E	F	G	H	I	SW	Weight (kg)
5/2"	65	006	159	165	259,0	32	G 1/8"	90	76	84	90	85	5,66
		008	173		283,0	31	G 1/8"	109	98	108			6,82
		018	213		307,0	35	G 1/4"	127	114	132			7,44
		026	281		307,0	35	G 1/4"	127	114	132			8,65
3/0"	80	008	173	188	303,0	31	G 1/8"	109	98	108	100	100	8,49
		011	215		303,0	31	G 1/8"	109	98	108			9,11
		018	213		327,0	35	G 1/4"	127	114	132			10,32
		026	281		327,0	35	G 1/4"	127	114	132			11,79

Actuator classification (for max. diff. press. of 10 bar)

AD			
Rp	DN	4 bar actuators	6 bar actuators
1/4"	12	AD-001	AD-001
3/8"	15	AD-001	AD-001
1/2"	15	AD-001	AD-001
3/4"	20	AD-002	AD-001
1/0"	25	AD-002	AD-002
5/4"	32	AD-004	AD-002
3/2"	40	AD-006	AD-004
2/0"	50	AD-006	AD-004
5/2"	65	AD-008	AD-006
3/0"	80	AD-008	AD-006

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

Dimensions



Ordering code

PKO-	1/0-	025-	C-	AS 006-	08
	Connecting size in inch	Nominal size	Spring effect: C = spring force closing A = spring force opening (details not applicable by double-acting version)	Actuator identification	Spring-code (details not applicable by double-acting version)

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