

2/2-way automatic valve – type PKI

with pneumatic actuator agturn®

Technical data sheet



Product description



Shut-off valve is made of three stainless steel parts with floating precision ball. The valve is operated pneumatically (double- and single-acting) and is characterised by a long service life and high operational safety.

Technical data of 2/2-way ball valve

Technical data	
Nominal size	DN15 – DN100
Connection type	inside thread Rp 1/2" to Rp 4" acc. to ISO 7-1 alternatively: welding ends acc. to EN 12627:1999
Mounting position	any orientation
Nominal pressure rating	DN 15 – 50: PN 63 DN 65 – 100: PN 50
Operating pressure	see pressure-temperature diagram
Temperature range	-20 °C to 180 °C
Materials	casing: stainless steel AISI 316 (1.4408) ball, switching shaft: stainless steel AISI 316 (1.4401) sealing bowl: PTFE switching shaft seal: DN 15 – DN 100 PTFE + FKM
Flow media	neutral gases and liquids (other media on request)
Flow direction	any direction

Technical data of drive GD/GS

Technical data	
Control pressure	2 to 8 bar
Control medium	air or neutral gases (other media on request) acc. to DIN ISO 8573-1 Class 4 (minimum requirement)
Ambient temperature	-20 °C to +80 °C (standard) -20 °C to +160 °C
Actuation	pneumatically double- or single-acting
End position adjustment	+5° to -5° 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 passage
- maintenance-free
- optionally available with end position feedback, position controllers and solenoid valves
- anti-blowout spindle
- usage also with vacuum and high flow velocities
- alternatively also can be delivered with electric rotary actuator, hand lever or gearbox



End position adjustment



Solenoid valve interface

Special designs

Please contact us.

Pressure-temperature diagram

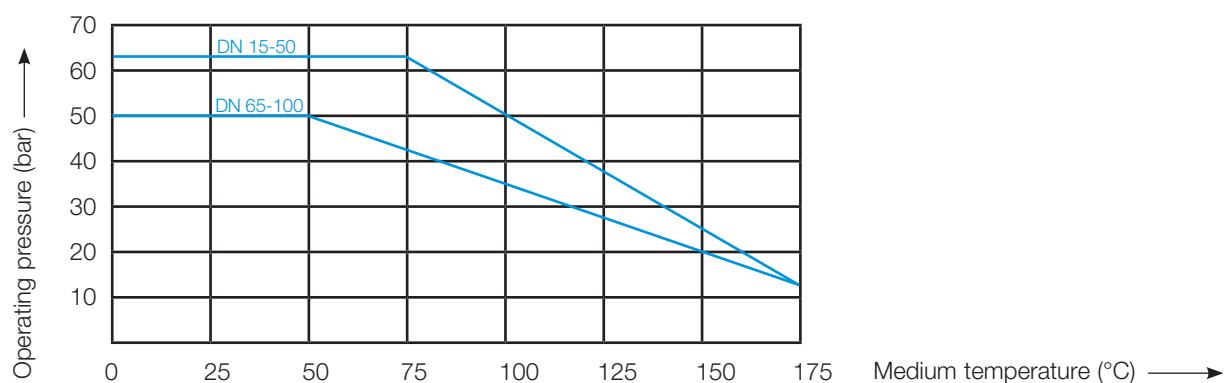


Table of dimensions

Rp	DN	Actuator	A	B	C	D	E	F	G	H	I	øJ	øK	L	SW	Weight (kg)
1/2"	15	032	114	70	146,0	24,5	G 1/8"	/	55	49	36	22	19	/	27	1,29
		040	120		157,0	24	G 1/4"	/	60,5	60				15		1,46
		052	147		169,0	48	G 1/4"	74,5	60	72				9		1,86
3/4"	20	032	114	77	153,0	24,5	G 1/8"	/	55	49	40	28	24	/	33,5	1,50
		040	120		164,0	24	G 1/4"	/	60,5	60				15		1,67
		052	147		176,0	48	G 1/4"	74,5	60	72				9		2,07
		063	165		196,0	61	G 1/4"	83	72	88				12		2,77
1/0"	25	040	120	92	177,0	24	G 1/4"	/	60,5	60	47	34	30	15	40	2,23
		052	147		189,0	48	G 1/4"	74,5	60	72				9		2,63
		063	165		205,0	61	G 1/4"	83	72	88				12		3,33
		075	182		216,5	73,3	G 1/4"	95	84	99,5				11		3,88
5/4"	32	052	147	105	197,0	48	G 1/4"	74,5	60	72	51	43	38	9	50	3,11
		063	165		213,0	61	G 1/4"	83	72	88				12		3,81
		075	182		224,5	73,3	G 1/4"	95	84	99,5				11		4,36
		083	208		234,0	80	G 1/4"	103	92	109				12		5,06
3/2"	40	063	165	120	225,0	61	G 1/4"	83	72	88	60	49	41,5	12	57	4,67
		083	208		246,0	80	G 1/4"	103	92	109				12		5,92
		092	262		253,5	91	G 1/4"	109,5	102	116,5				9		7,91
2/0"	50	063	165	140	244,0	61	G 1/4"	83	72	88	69	61	54	12	72	6,30
		075	182		255,5	73,3	G 1/4"	95	84	99,5				11		6,85
		083	208		265,0	80	G 1/4"	103	92	109				12		7,55
		092	262		272,5	91	G 1/4"	109,5	102	116,5				9		9,54
		083	208		316,0	80	G 1/4"	103	92	109				12		11,75
5/2"	65	092	262	185	323,5	91	G 1/4"	109,5	102	116,5	110	77	69	9	85	13,74
		105	270		340,0	99,5	G 1/4"	124,5	115	133				7,5		14,56
		125	301		362,0	127	G 1/4"	142	135	155				8,5		18,50

Table of dimensions (continuation)

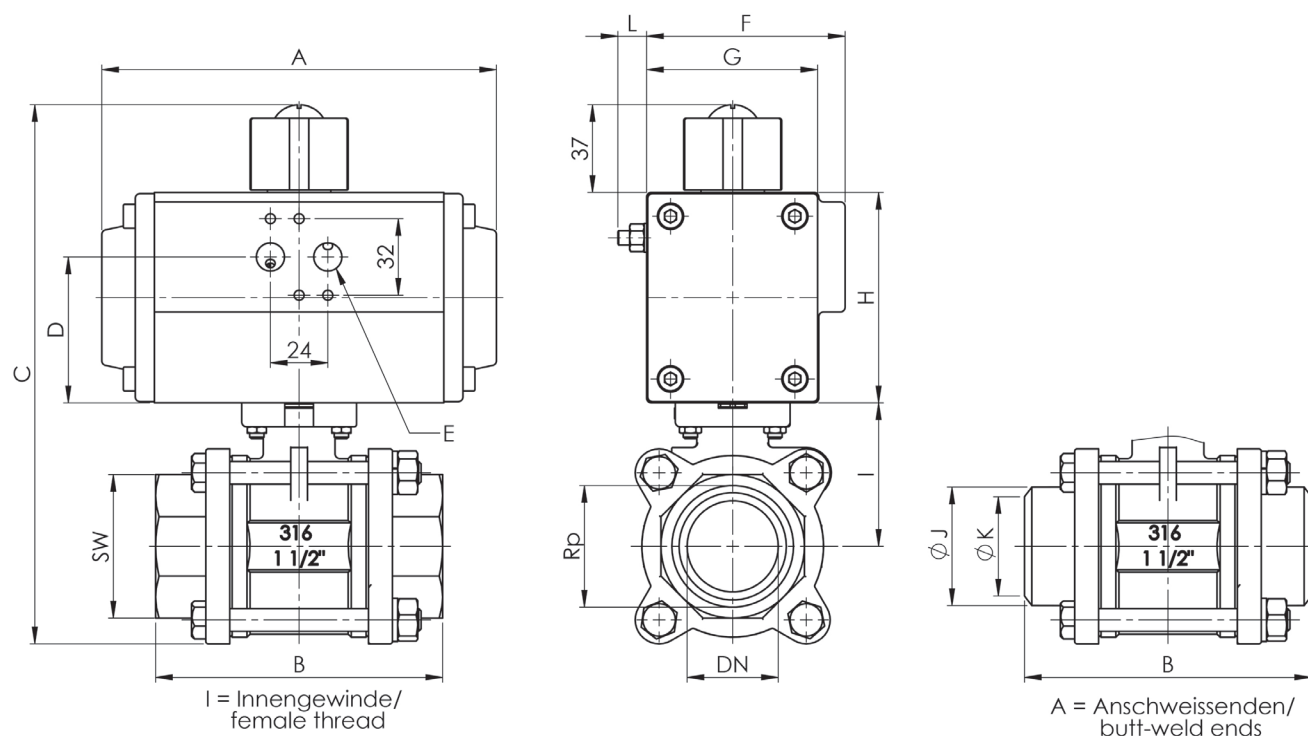
Rp	DN	Actuator	A	B	C	D	E	F	G	H	I	øJ	øK	L	SW	Weight (kg)
3/0"	80	092	262	205	338,0	91	G 1/4"	109,5	102	116,5	118	90	84	9	100	17,54
		105	270		355,0	99,5	G 1/4"	124,5	115	133				7,5		18,36
		125	301		377,0	127	G 1/4"	142	135	155				8,5		22,30
		140	395		394,0	138	G 1/4"	/	152	172				7		26,32
4/0"	100	105	270	240	398,0	99,5	G 1/4"	124,5	115	133	133	116	107	7,5	130	27,66
		125	301		420,0	127	G 1/4"	142	135	155				8,5		31,60
		140	395		437,0	138	G 1/4"	/	152	172				7		35,62
		160	454		462,0	159,5	G 1/4"	/	174	197				6		46,12

Actuator assignment

GD			
Rp	DN	4 bar actuators	6 bar actuators
1/2"	15	GD-040	GD-032
3/4"	20	GD-040	GD-032
1/0"	25	GD-052	GD-040
5/4"	32	GD-063	GD-052
3/2"	40	GD-063	GD-063
2/0"	50	GD-075	GD-063
5/2"	65	GD-092	GD-083
3/0"	80	GD-105	GD-092
4/0"	100	GD-125	GD-105

GS			
Rp	DN	4 bar actuators	6 bar actuators
1/2"	15	GS-052-08	GS-052-10
3/4"	20	GS-063-08	GS-052-12
1/0"	25	GS-075-08	GS-063-12
5/4"	32	GS-083-07	GS-063-12
3/2"	40	GS-092-07	GS-083-10
2/0"	50	GS-092-08	GS-083-12
5/2"	65	GS-125-08	GS-105-12
3/0"	80	GS-140-08	GS-125-12
4/0"	100	GS-160-07	GS-140-10

Dimensional drawing



Ordering code

PKI-	1/0-	I-	025-	C	GS-063-	12
	Connection dimension in inches	Connection: I = Inside thread A = Welding ends	Nominal size	Spring effect: C = Spring force closing A = Spring force opening (not applicable for double-acting design)	Actuator designation	Spring code (not applicable for double-acting design)

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