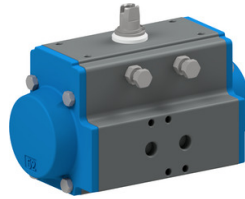


Stainless steel ball valves Series BA527



Design type	Piston actuator with 2 opposed pistons, elastic sealing, actuator in all details in accordance with ISO 5211 or NAMUR recommendations, End positions adjustable on both sides $\pm 5^\circ$, Piston diameter 52...330mm
Function	available in double-acting 0...90° or single-acting Version 0...90°
Actuation	pneumatic
Connection	Female thread to ISO7/1, NAMUR valve direct flange-mountable
Materials Standard version	Aluminium hard anodized, Steel pinion nickel-plated, Piston guide POM, Seals NBR
Medium temperature	-20...+80°C
Ambient temperature	-20...+80°C
Operating pressure range	1...8bar
Control medium	filtered and lubricated or non-lubricated compressed air
End-position cushioning	none, the actuator is not able to absorb mass
Mounting type	above flange pattern after ISO 5211, F03...F25
Mounting position	any
Approvals	ATEX II 2G Ex h IIC T6...T3 Gb / II 2D Ex h IIIC T85°C...T200°C Db, SIL3 (52-270)
Special version	Pinion in stainless steel, PTFE-coated actuator, Nickel-plated actuator, Medium temperatures and Ambient temperatures from -40...+80°C, or rather -20...+150°C
Accessories	assembled manual, pneumatic or electric control valve electrical end position feedback, Positioner in I/P or P/P Version Adjustment of the switching speed
Ordering note	Please also specify control pressure and operating temperature when ordering.





Größen: DN04 bis DN50

Gehäuse: S355
Kugel + Schaltwelle: Automatenstahl, Edelstahl (1.4571/316Ti)
Dichtungen: Kunststoff, Metall

Anschlüsse:

Zölliges Gewinde, NPT Gewinde,
Schneidringverschraubung leichte und schwere Reihe, UNC/UNF-Einschraubgewinde

Druckstufen:

bis PN500 (Maßtabelle beachten)

Einsatzbereiche:

Hydraulik, Mobilhydraulik, Lackieranlagen, Dampf, Thermoöl, Industrieanlagen, Schiffsbau, Papierindustrie
(Dichtungs- und Gehäusewerkstoffe zum Teil angepasst an den Anwendungsfall!)

Betriebstemperatur:

Standard: -20°C bis +80°C

Oberflächen:

Brüniert, verzinkt, Zink Nickel

Sonderausführungen auf Anfrage!

- Abschießvorrichtungen
- Antriebe
- Endschalter
- Rasterungen
- Sonderwerkstoffe

Dimensions: DN04 to DN50

body: S355
ball + stem: free cutting steel, stainless steel (1.4571/316Ti)
sealing: plastics, metal

Adapter:

BSP thread, NPT thread, compression fitting light and heavy series, UNC/UNF female thread

Pressure range:

up to PN500 (note table of dimensions)

Field of application:

hydraulics, paint industries, steam, thermo oil, industrial plants, ship building, paper industry
(Coating seals and body materials adapted to application!)

Temperature range:

standard: -20°C to +80°C (-4 to +176°F)

Surface:

black oxide finishing, zinc-layer, zinc nickel

Special equipment on request!

- locking device
- actuators
- position switches
- detent kits
- special materials



SKH mit Abschießvorrichtung
SKH with locking device

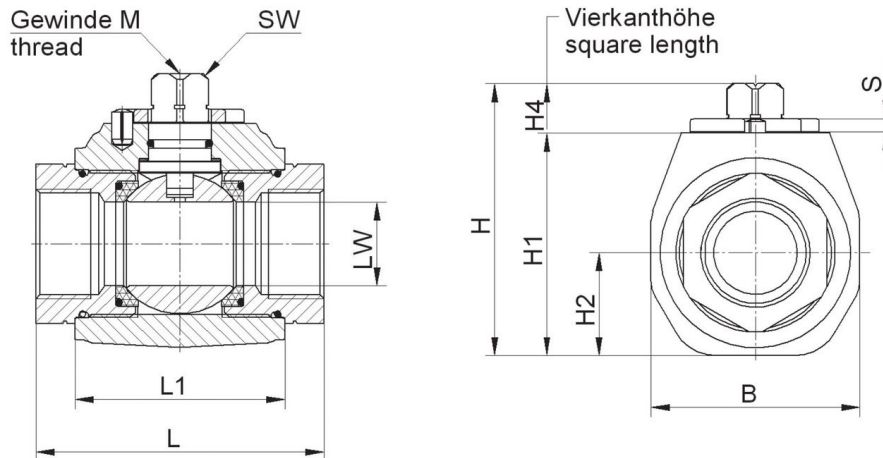


SKH mit Endschalter
SKH with position switch



Gehäusemaße ohne Deckel

Body dimensions without cover



DN ²⁾ mm	LW mm	PN ¹⁾ bar	L1 mm	B mm	H mm	H1 mm	H2 mm	H4 mm	SW mm	M	S mm
4	Ø 5	500	35	33	49,4	38	18,8	11	9	M5	3
6	Ø 6	500	35	33	49,4	38	18,8	11	9	M5	3
8	Ø 8	500	35	33	49,4	38	18,8	11	9	M5	3
10	Ø 10	400	42	35	49,2	38	16,3	10,9	9	M5	3
13	Ø 13	400	47	38	51,2	40	17,3	10,9	9	M5	3
16	Ø 15	400	48,2	50 ²⁾	62,5	46,3	19	15,5	12	M6	3,5
20	Ø 20	400	61	63 ²⁾	77,2	60,8	28,5	16	14	M6	4
25	Ø 24	400	66,2	68 ²⁾	80,7	64,3	29,5	16	14	M6	4
32	Ø 32	400	80	80	104,4	85,4	39,5	18,5	17	M8	5
40	Ø 38 ²⁾	400	85	84	111,4	92,4	42	18,5	17	M8	5
50	Ø 47,5	400	100	104	129	110	52	18,5	17	M8	5

¹⁾ Max. zul. PN und Anzugsdrehmoment sind den Angaben der Rohrverschraubungshersteller zu entnehmen. • Druckabschläge entspr. Einsatzbereich/Werkstoffen sind zu beachten. • Maßänderungen vorbehalten.

For PN max. and tightening torque see data of the compression fitting manufacturer. • Reduced press. rating must be taken into consideration acc. to application and materials. • Dimensions subject to change without notice.

²⁾ Gehäuse in Rundaussführung möglich.
Round body possible.

Bestellbeispiel

Order example

Serie	Anschluss ⁴⁾	Nennweite	Werkstoff ⁵⁾	Zubehör / Sonder ⁵⁾ s. Rubrik Zubehör
Series	Connection ⁴⁾	Nominal size	Material ⁵⁾	Equipment / specials ⁵⁾ see category equipment
SKH	28L	25	3123 1	

⁴⁾ Anschlüsse der linken und rechten Seite beliebig kombinierbar
left and right side connectors can be used in any combination

⁵⁾ Gerne helfen wir Ihnen bei der Auswahl der geeigneten Werkstoffe und Sonderausstattungen weiter.
We would be glad helping you to choose proper material and equipment.



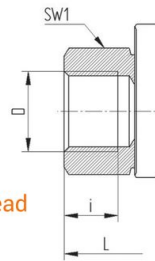
Schraubstutzen für SKH

Screw sockets for SKH

Anschlußart Connection

Rohrgewinde DIN/ISO 228

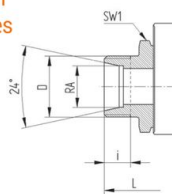
BSP female thread DIN/ISO 228



DN	LW	Gewindegröße • Screw size Bestellschlüssel • Order code	Gewindegröße bei DIN2353 • Screw size for DIN2353	L	i	SW1	Gewicht • Weight
mm	mm		mm	mm	mm	mm	kg
4	Ø 5	G 1/8	—	69	8	22	0,35
6	Ø 6	G 1/4	—	69	12	22	0,35
10	Ø 8	G 3/8	—	69	12	22	0,35
10	Ø 10	G 3/8	—	73	12	27	0,5
13	Ø 13	G 1/2	—	85	14	30	0,65
20	Ø 20	G 3/4	—	96	16	41	1,5
25	Ø 24	G 1	—	113	18	46	2
32	Ø 24	G 5/4	—	121	20	50	2,1
40	Ø 24	G 3/2	—	124	22	55	2,1
32	Ø 32	G 5/4	—	110	20	60	3,2
40	Ø 32	G 3/2	—	135	22	60	3,2
40	Ø 38	G 3/2	—	120	22	70	4
50	Ø 38	G 2	—	147	24	75	4,7
50	Ø 48	G 2	—	140	24	85	5,9

Rohrverschraubung, leichte Reihe DIN 2353 L

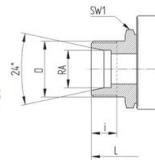
For compression fitting, light series DIN 2353 L



4	Ø 5	6L	M 12x1,5	67	7,5	22	0,3
6	Ø 6	8L	M 14x1,5	67	7,5	22	0,3
8	Ø 8	10L	M 16x1,5	71	8,5	22	0,3
10	Ø 8	12L	M 18x1,5	71	8,5	22	0,3
10	Ø 10	12L	M 18x1,5	75	8,5	27	0,5
13	Ø 10	15L	M 22x1,5	77	9,5	27	0,5
13	Ø 13	15L	M 22x1,5	84	9,5	30	0,6
16	Ø 13	18L	M 26x1,5	84	9,5	30	0,6
20	Ø 20	22L	M 30x2	102	12	41	1,5
25	Ø 24	28L	M 36x2	108	12	46	2
32	Ø 24	35L	M 45x2	114	13,5	50	2,1
40	Ø 24	42L	M 52x2	114	13,5	55	2,2
32	Ø 32	35L	M 45x2	128	13,5	60	3
40	Ø 32	42L	M 52x2	128	13,5	60	3
40	Ø 38	42L	M 52x2	133	13,5	70	3,8

Rohrverschraubung, schwere Reihe DIN 2353 S

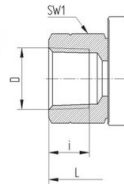
For compression fitting, heavy series DIN 2353 S



4	Ø 5	8S	M 16x1,5	73	9,5	22	0,35
6	Ø 6	10S	M 18x1,5	73	9,5	22	0,35
8	Ø 8	12S	M 20x1,5	77	9,5	22	0,35
10	Ø 10	14S	M 22x1,5	84	11,5	27	0,5
13	Ø 13	16S	M 24x1,5	87	11,5	30	0,6
16	Ø 13	20S	M 30x2	91	13,5	30	0,65
20	Ø 20	25S	M 36x2	110	15	41	1,5
25	Ø 24	30S	M 42x2	120	17	46	2,1
32	Ø 24	38S	M 52x2	125	19	55	2,3
32	Ø 32	38S	M 52x2	140	19	60	3,1

NPT-Innengewinde ANSI B 1.20.1

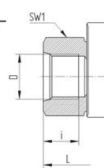
NPT female thread ANSI B 1.20.1



4	Ø 5	1/8 NPT	—	69	8	22	0,35
6	Ø 6	1/4 NPT	—	69	11,5	22	0,35
10	Ø 10	3/8 NPT	—	73	12	27	0,5
13	Ø 13	1/2 NPT	—	92	15,5	30	0,65
20	Ø 20	3/4 NPT	—	97	16	41	1,5
25	Ø 24	1 NPT	—	113	19	46	2
32	Ø 24	5/4 NPT	—	131	19,5	50	2,1
40	Ø 24	3/2 NPT	—	139	19,5	55	2,3
32	Ø 32	5/4 NPT	—	115	19,5	60	3,2
40	Ø 38	3/2 NPT	—	135	19,5	70	4
50	Ø 48	2 NPT	—	140	20	85	5,9

UN/UNF-Einschraub- gewinde SAE J514

UN/UNF female thread SAE J514



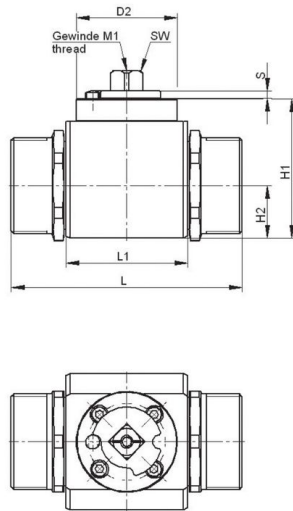
6	Ø 6	7 16 - 20 UNF-2B	—	69	11,5	22	0,35
10	Ø 9	9 16 - 18 UNF-2B	—	75	12,7	27	0,5
13	Ø 11,5	3/4 - 16 UNF-2B	—	85	14,3	30	0,65
20	Ø 18	1 1/16 - 12 UN-2B	—	96	19	41	1,5
25	Ø 22	1 5/16 - 12 UN-2B	—	114	19	46	2
32	Ø 30	1 5/8 - 12 UN-2B	—	122	19	50	2,2
40	Ø 35	1 7/8 - 12 UN-2B	—	128	19	60	2,4
50	Ø 44	2 1/2 - 12 UN-2B	—	140	19	80	5,9

Sonderstutzen mit zölligem Außengewinde, metrischem Innen- oder Außengewinde sowie Schottverschraubungen auf Anfrage!
Special connections with imperial male thread, metric female or male threads, as well as bulkhead connections on request!

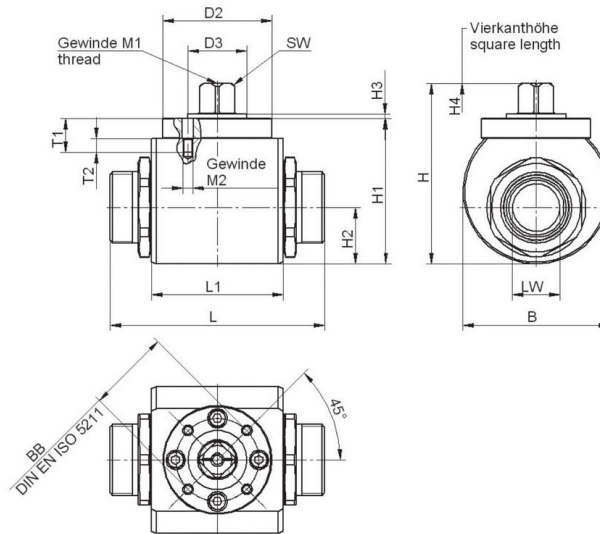


Gehäusemaße mit Deckel für Antriebsaufbau (DfA) oder Griff (DfG) Body dimensions with cover for actuator (DfA) or handle mounting (DfG)

Deckel für Griff (DfG)
Cover for handle mounting (DfG)



Deckel für Antriebsaufbau (DfA)
Cover for actuator mounting (DfA)



DN ²⁾ mm	LW mm	PN ¹⁾ bar	L1 mm	B mm	H mm	H1 mm	H2 mm	H4 mm	SW mm	M1	D2 mm	T1 mm	T2 mm	M2	BB		D3 mm	H3 mm	S mm
															ISO	mm			
10	Ø 10	400	43,2	49,5	56,2	45,5	17,3	10,3	9	M5	Ø 49	12	6	M5	F03	Ø 36	Ø 25	2	3
13	Ø 13	400	48,2	54	60	49,3	20	10,3	9	M5	Ø 49	12	6	M5	F03	Ø 36	Ø 25	2	3
16	Ø 15	400	48,2	59	67,6	54,8	21	12,3	12	M6	Ø 49	13	6,5	M5	F03	Ø 36	Ø 25	2	3,5
20	Ø 20	400	62,2	69	86,8	69,3	26,5	15	14	M6	Ø 55	17,3	7	M5	F04	Ø 42	Ø 30	2	4
25	Ø 24	400	66,2	74	91,1	73,6	28,5	15	14	M6	Ø 55	17,3	7	M5	F04	Ø 42	Ø 30	2	4
32	Ø 32	400	80	80	119,3	98,3	39,5	18,5	17	M8	Ø 64,5	20,6	8	M6	F05	Ø 50	Ø 35	2	5
40	Ø 38	400	85	84	126,3	105,3	42	18,5	17	M8	Ø 64,5	20,6	8	M6	F05	Ø 50	Ø 35	2	5
50	Ø 47,5	400	100	104	143,8	122,8	52	18,5	17	M8	Ø 64,5	20,6	8	M6	F05	Ø 50	Ø 35	2	5

¹⁾ Max. zul. PN und Anzugsdrehmoment sind den Angaben der Rohrverschraubungshersteller zu entnehmen. • Druckabschläge entspr. Einsatzbereich/Werkstoffen sind zu beachten. • Maßänderungen vorbehalten.

For PN max. and tightening torque see data of the compression fitting manufacturer. • Reduced press. rating must be taken into consideration acc. to application and materials. • Dimensions subject to change without notice.

²⁾ Gehäuse in Rundausführung möglich.
Round body possible.

Für Medium Hydrauliköl: Antriebsaufbau ohne Deckel!
For hydraulic oil: actuator mounting without cover!

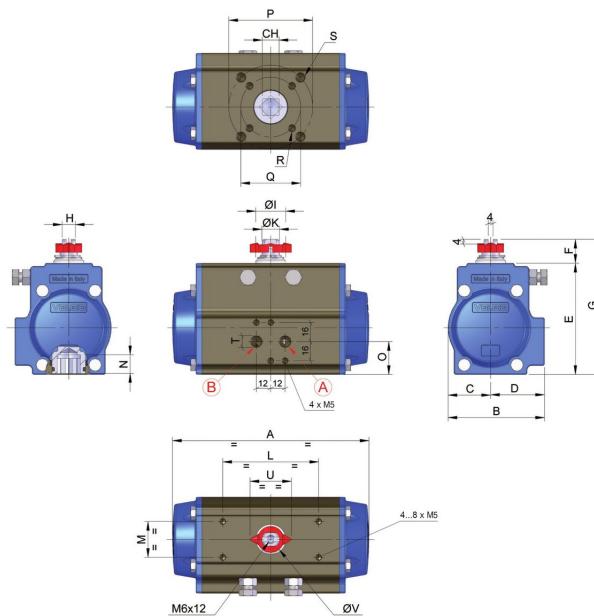
Bestellbeispiel Order example

Serie 050	Anschluss ⁴⁾	Nennweite	Werkstoff ⁵⁾	Zubehör / Sonder ³⁾ s. Rubrik Zubehör
Series 050	Connection ⁴⁾	Nominal size	Material ⁵⁾	Equipment / specials ³⁾ see category equipment
SKH	28L	25	3123 1	DFG (Deckel für Griff · for handle mounting)
SKH	28L	25	3123 1	DFA (Deckel für Antrieb · for actuator mounting)

Pneumatic rotary actuator according to ISO 5211 Type PAD075, PAS1155



Dimensions PAD and PAS



(A)
= Counterclockwise direction of rotation

(B)
= Clockwise direction of rotation

CH	A	B	C	D	E	F	G	H	ØI	J	ØK	L	M	N	Type single-acting	Type double-acting
17	210	94,5	42	52,5	111	20	131	13	29	8	19	80	30	19	-	PAD075
22	333	137	64	73	162,5	30	192,5	22	49	14	32	80/130	30	24	PAS1155	-

O	P	Q	R	S	T ISO 7/1	Weight [approx. kg]		Flange ISO 5211	Type single-acting	Type double-acting
						PAD	PAS			
35	70	50	M6x8	M8x12	G1/8"	2,8	3,4	F05/F07	-	PAD075
50	102	70	M8x12	M10x15	G1/4"	8,9	11,5	F07/F10	PAS1155	-



Torques for double-acting rotary actuators at various control pressures

Type	Torque in newton metres [Nm]							
	2,5 bar	3 bar	4 bar	5 bar	5,5 bar	6 bar	7 bar	8 bar
PAD075	29	35	47,5	60	66	72	84,5	97

Torques for single-acting rotary actuators at various control pressures

Type	Torque in newton metres [Nm]									
	3 bar	Spring set	4 bar	Spring set	5,5 bar	Spring set	6 bar	Spring set	7 bar	Spring set
PAS115	41	01	54,7	03	71,1	05	90,4	05	90,4	05

The type designation must be supplemented with the spring set No. (see Order code). The specified torques are minimum torques. The closing and opening torque are different.

Air consumption in NI/stroke

Type	Piston diameter [mm]	
	75	115
Counterclockwise rotation PAD/PAS	0,36	1,29
Clockwise rotation PAD	0,44	-

To determine the air consumption, the air consumption must be multiplied by the absolute pressure and the number of strokes per minute.

Actuation time approx. [s]

Type	Piston diameter [mm]	
	75	115
Counterclockwise rotation PAD	0,18	-
Clockwise rotation PAD	0,15	-
Counterclockwise rotation PAS	-	0,92
Clockwise rotation PAS	-	0,75

Actuation time at 6 bar control pressure and without mounted pilot valve.

Illustrations non-binding

Design, dimensional and material changes reserved

Illustrations non-binding

Design, dimensional and material changes reserved

