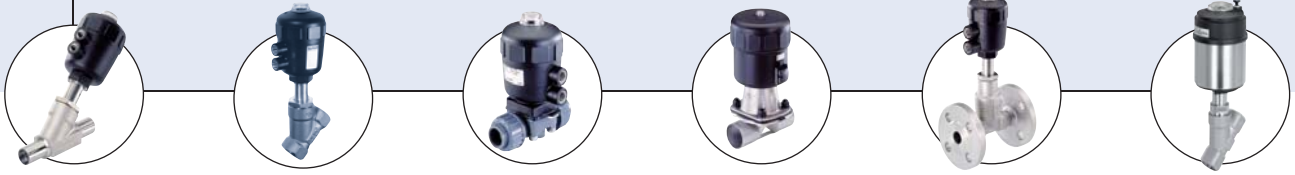


Accessories for pneumatic stroke and rotary actuators – CLASSIC and ELEMENT process valves

- Complete modular designed accessory program
- More for less - optimal configuration costs
- Easy maintenance and commissioning
- Increase system and operational safety

Type 2XXX can be combined with...



Type 2000
Angle-seat valve

Type 2002
Compact angle-seat valve

Type 2030
Plastic diaphragm valve

Type 2031
Diaphragm valve

Type 2012
Globe valve

Type 210X
ELEMENT Process valve

The modular designed accessory option package is the comprehensive addition to the Bürkert process valves with pneumatic, linear or quarter-turn actuator (Types 2000, 2002, 2012, 2030, 2031, 2031K, 2050, 2652, 2655, 2658, 2672, 2675). The flexible, easily accessible concept of modular accessories has been designed to cover individual application requirements in a cost-effective way.

The design has been optimized for easy installation (retro-fitting), commissioning and operation.

Technical data	
Type 8697 Electrical position feedback (Actuator Ø 20 bis 225)	Mechanical limit switches (0 to 48 V or 50 to 250 V AC/DC) Inductive limit switches (24 V DC, PNP shutter 3-wire with LEDs) Inductive limit switches (24 V DC, shutter 2-wire with LEDs) NAMUR Inductive limit switches (8.2 V DC, 2-wire with LEDs)
Type 1060 Position feedback (Actuator Ø 50-225)	Change-over contact
Adapters for proximity switches	Adapter for proximity switches M12 x 1 (fastening angle) Adapter for proximity switches (Nipple with thread M12x1)
Type 1071 External magnet inductive position feedback (Actuator Ø 50-125)	PNP
Stroke limitation (Actuator Ø 50-225)	Max. upper stroke limitation, without optical position indicator Max. and Min. stroke limitation, with optical position indicator
Manual override (Actuator Ø 50-125)	With visual position indication for valve operation when pressure drops
NAMUR-Adapter (Actuator Ø 50-125)	Adapter plate with screw connection for pilot valve

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Type 8697, electrical position feedback



The electrical position feedback Type 8697 is optimised for integrated mounting on the CLASSIC 20XX series. Mechanical or inductive limit switches register the position of the valve und gives an electrical feedback signal to the control system.

Besides the electrical position feedback signal the position of the valve is visually shown via LEDs. The housing is easy to clean and features proven electrical IP protection and chemicallyresistant materials for use in hygienic processing, in food, beverage and pharmaceutical industries.

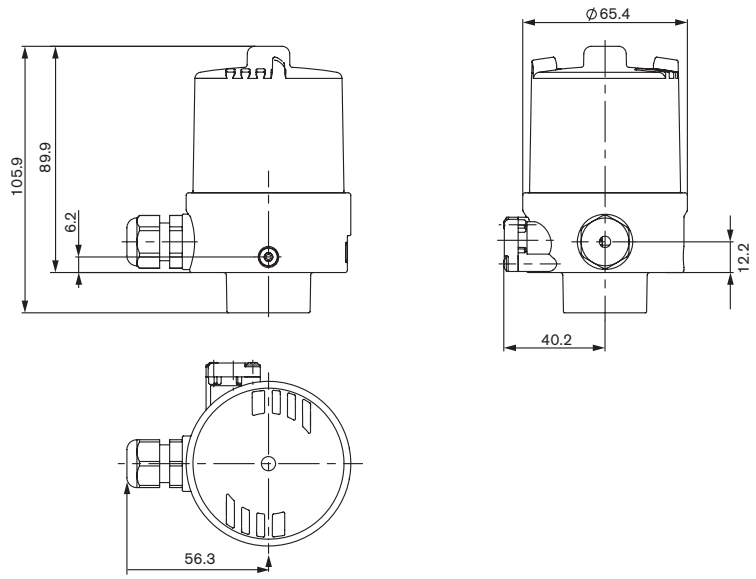
Technical Data	
Material - Body	PPS
Cover	PC
Sealing	EPDM
Operating voltage *	
Micro switch	24 V Version: 0 – 48 V AC/DC, max. 2A 230 V Version: 50 – 250 V AC/DC, max. 2 A
Initiator	10 to 30 V DC - max.100 mA per initiator
Position feedback	2x micro switch (0 – 48 V AC/DC, max. 2 A) 2x micro switch (50 – 250 V AC/DC, max. 2 A) 2x initiator (24 V DC), PNP shutter 3-wire **with LEDs** 2x initiator NAMUR (8.2 V DC) (2-wire) **with LEDs** 2x initiator (24 V DC), Schließer (2-wire) **with LEDs**
Stroke range valve spindle	2 to 36 mm
Ambient temperature	-20 to +60 °C (without ATEX or for II 2G Ex ia IIC T4 Gb) 0 to +55 °C (II 3D Ex tc IIIC T135°C Dc, II 3G Ex nA IIC T4 Gc) 0 to +55 °C (II 2D Ex ia IIIC T135°C Db IP64, II 2G Ex ia IIC T4 Gb)
Installation	as required, preferably with actuator in upright position
Protection type	IP65 and IP67 according to EN 60529, Type 4X
Protection class	3 acc. to DIN EN 61140
Conformity	EMC directive 2014/30/EU
Ignition protection	II 3D Ex tc IIIC T135 °C Dc II 3G Ex nA IIC T4 Gc II 2D Ex ia IIIC T135 °C Db IP64 II 2G Ex ia IIC T4 Gb
Approval	cULus certificate no. E238179
Electrical connection	
Multipole	M12, 8-pole
Cable gland	M16x1.5 SW22 (cable diameter 4 -8 mm), terminal screws 0.14 bis 1.5 mm²

* Supply voltage according to UL NEC Class 2 for versions with cULus approval.

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Dimensions [mm]

Electrical position feedback for mounting on process valve ELEMENT Types 21XX



Ordering chart for electrical position feedback, Type 8697 (Actuator size 40 to 225)

End position feedback											
Inductive Switch 3-wire PNP	Inductive Switch 2-wire NAMUR	Inductive Switch 2-wire 24 V DC	Micro Switch 24 V DC	Micro Switch 50-250 V AC/DC	Feedback status LEDs	Electrical connection	ATEX / IECEx Cat. 3D/G Zone 22/2 [2]	ATEX / IECEx Cat. 2D/G Zone 21/1 [3]	ATEX/ IECEX Cat. 2G Zone 1 [4]	cULus	Item no. Actuator series CLASSIC Types 20XX
Feedback (without pilot valve)											
2					yes	Cable gland				yes	248 827
2					yes		yes				255 851
2					yes	M12 connector	yes				255 858
2					yes					yes	250 472
	2				yes	Cable gland		yes			248 831
	2				yes				yes		255 863
		2			yes					yes	248 826
		2			yes		yes				255 850
			2							yes	248 833
				2						yes	248 825

Note: cULus only valid for versions without ATEX approval

[2] II 3D Ex tc IIIC T135 / II 3G Ex nA IIC T4 Gc
[3] II 2D Ex ia IIIC T135°C IP64 / II 2G Ex ia IIC T4 Gb
[4] II 2G Ex ia IIC T4 Gb

Ordering chart adapter kit (has to be ordered separately)

Description	Actuator size	Item no.
Adapter kit CLASSIC Type 20xx	Ø40mm	698 573
	Ø50/63/80 mm	682 264
	Ø100/125 mm	682 265
	Ø175/225 mm	684 944

For installation kits to 3rd party process valves please see datasheet "Installation Kits for hygienic process valves" or contact your sales office for related drawings or individual engineering support

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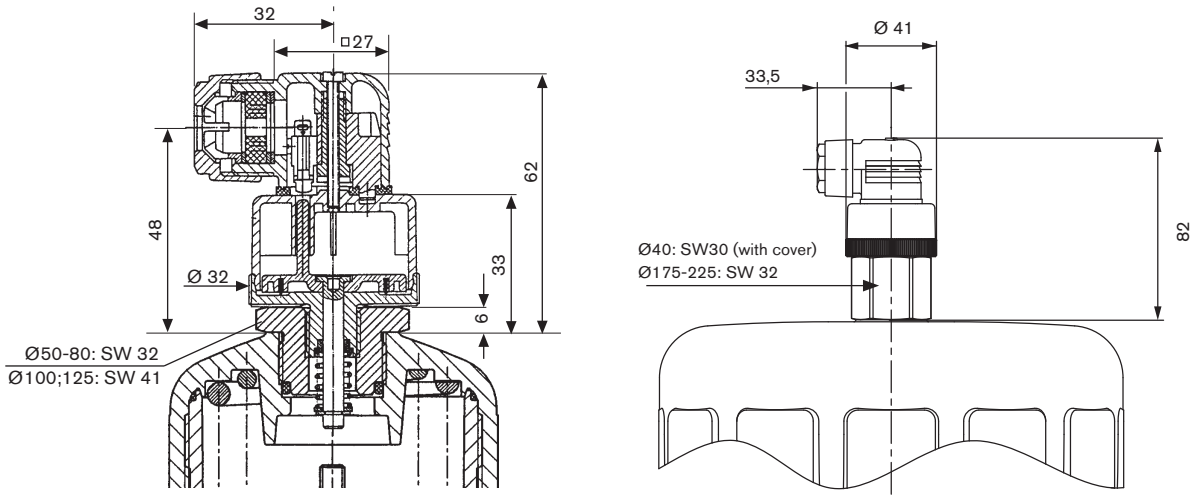
Electrical position feedback



Technical data	
Material	plastic
Electrical connection	solder connections, cable entry sealed by gland with cable grip to suit cable Ø 5-9 mm
Protection class category	IP65
Max. continuous temperature	+125 °C
Micro switch	change-over contact
Contact rating Max. 250 V AC Max. 250 V DC	 Max. 5 A resistance or inductive load current 0.25 A resistance or 0.02 A inductive load current
Installation	screwed in instead of the visual position indicator

The electrical position feedback is screwed in, instead of the visual position indicator. While the valve is opening, the piston of the actuator lifts a palm-button. This button actuates a micro switch with change-over contact, which gives the electrical feedback of the valve position. The palm-button also acts as an optical position indicator.

Dimensions [mm]



Ordering chart

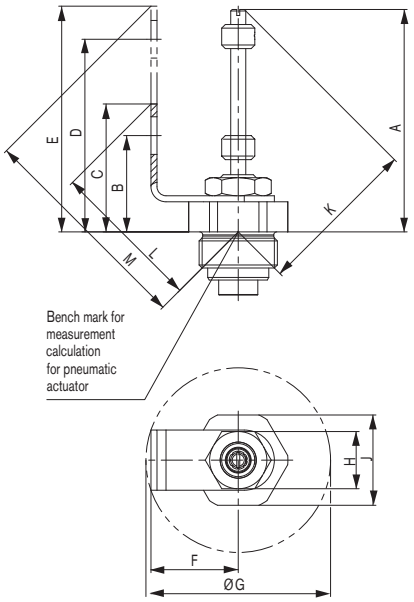
Actuator size ø	Item no.
40	293 113 [1]
40 (Seat valve)	158 244
40 (Diaphragm valve)	158 220
50-80	701 515
100, 125	701 516
175, 225	655 696

[1] For valves built as of 2016

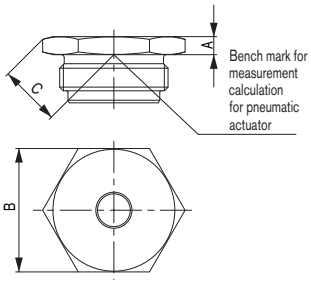
Adapters for proximity switches CLASSIC valves



Adapter for proximity switches M12x1 (fastening angle)



Adapter for proximity switch (nipple with M12x1 thread)



Actuator size (Ø)	A	B	C	Item no.
40	25	A/F30	29.5	on request
50, 63, 80	6	A/F32	17	648 152
100, 125	6	A/F41	21	649 257
175, 225	28.5	A/F32	33	669 773

Sensor	Actuator size (Ø)	A	B	C	D	E	F	Ø G	H	J	K	L	M	Item no.
single	50, 63, 80	65.5	32	42.5	-	-	29	61.5	A/F19	A/F30	48	51	-	649 381
single	100, 125	80.5	35	45.5	-	-	29	61.5	A/F19	A/F30	49	53	-	649 382
double	50, 63, 80	80.5	28	-	74	85	24	52	A/F19	A/F30	59	-	78	667 988
double	100, 125	95.5	31	-	77	88	24	52	A/F19	A/F30	69	-	80	667 989
double	175, 225	145	68	-	136	147	24	52	A/F19	A/F30	104	-	121	669 810

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Type 1071, external magnetic inductive position feedback

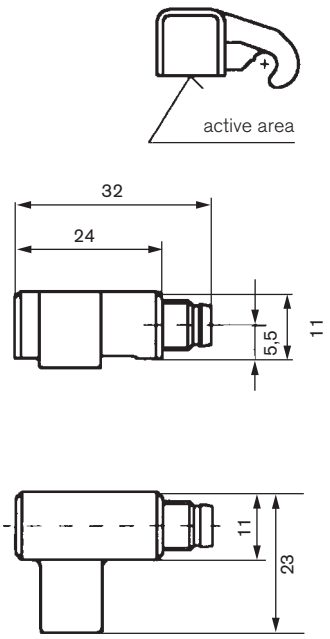


The magnetic-inductive sensors react to the approach of the magnetic piston of the series 2XXX piston operated seat or diaphragm valves. Thus, the piston position can be optically and electrically displayed with an LED. In addition it permits the use of a stroke limiter or manual override.

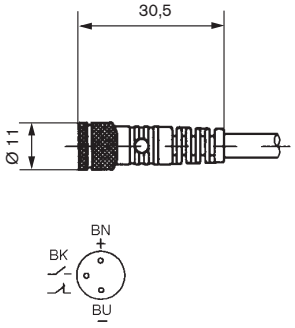
Technical data	
Material sensor body fixing bracket	 PBTP (GF-reinforced) Pressure casting, stainless steel
Ambient temperature	-20 to+70 °C
Electrical connection	Plug connection or cable (3m long)
Protection class	IP67
Mounting	by means of fixing brackets at piston actuator (see drawing)
Version	PNP
Operating voltage	10…30 V DC
Power consumption damped undamped	 ≤ 12 mA ≤ 10 mA
Nominal field strength	$\lvert H_n \rvert$ = 1.2 kA/m
Working field strength	$\lvert H_a \rvert \geq$ kA/m
Hysteresis	≤ 45 % of H_n
Temperature drift of switch-on point	≤ 0.3 %/°C
Ripple	≤ 15 %
Acceptable current load	Max. 200 mA
Acceptable capacitive load	≤ 1 µF
Voltage drop U_d	≤ 2.5 V
Turn on time	≤ 0.5 ms
Switch-off time	20 to 50 ms
Weight	6g

Dimensions [mm]

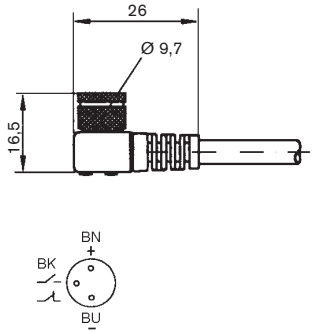
Sensor Type 1071 with plug connector, IP 67



Plug connector, straight, without LED, cable 3m



Elbow plug connector, with LED, cable 3m



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Ordering charts for external magnetic inductive position feedback, Type 1071

Required individual parts: magnetic piston, fixing bracket, sensor, plug

Magnetic piston

Actuator size Ø [mm]	Item no.
50	630 063
63	630 064
80	630 065
100	630 066
125	630 067

Sensor bracket

Actuator size Ø	Item no.
50	670 027
all other actuators	636 239

Elbow joint

Material	Item no.
Stainless steel	636 241
Pressure casting	780 558

Sensor

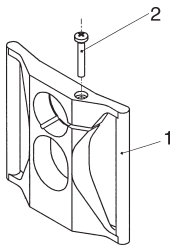
Version	Item no.
inductive with plug connection (with LED)	780 110
inductive with 3m cable (with LED)	780 111

Plug for sensor with plug connection

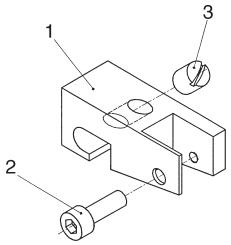
Version	Item no.
angled, with 3m cable	780 112
straight, with 3m cable	780 113

Mounting information

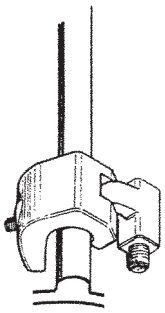
Sensor bracket
1 Bracket
2 Screws



Elbow joint
1 Elbow joint
2 Screws
3 Pins



Mount sensor to elbow joint and sensor bracket



Mounting note magnetic piston

To mount the magnet piston the use of a special key is necessary to open the actuator cover. (Ordering information on page 9)

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Stroke limiter for stroke actuators CLASSIC valves

Ø 40-125 [mm] Ø 175-225 [mm]



Technical data	
Max. stroke limitation	
Special feature	without visual position indicator (upper stroke limitation only)
Mounting	screw in stroke limiter (instead of the transparent cover for the visual position indicator)
	For Ø 100 and Ø 125, actuator cover must be removed for mounting, to do this a special key is required (see page 10)

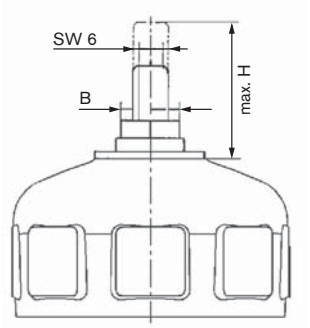
Ø 50-125 [mm] Ø 175-225 [mm]



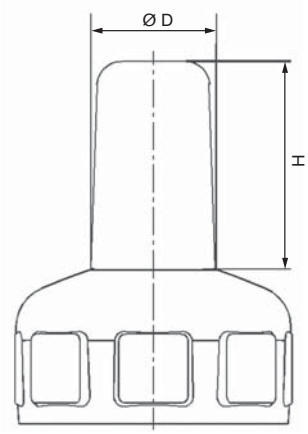
Max./min. Hubbegrenzung	
Special feature	Max. & min. flow setting (upper and lower stroke limitation) with visual position indicator
Mounting	Actuator cover must be removed for mounting, to do this a special key is required (see page 10)

Dimensions [mm]

Actuator size 40-225



Actuator size Ø	B	H
40, 50, 63, 80	SW 17	40
100, 125	SW 19	55
175, 225	SW24	97



Actuator size Ø	Ø D	H
50, 63, 80	39	50
100, 125	53	73
175, 225	86	172

Ordering chart

Max. stroke limitation without visual position indicator
(single version, only for valves with circuit function A, normally closed.)

Actuator size Ø [mm]	Item no.
40-80	637 866
100	637 867
125	637 868
175-225	655 600

Min./Max. stroke limitation with visual position indicator

Actuator size Ø [mm]	Item no.
50-80	636 820
100	636 821
125	640 703
175-225 (diaphragm valve)	655 631
175 (globe valve)	659 038
225 (globe valve)	659 423

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Stroke limiter for stroke actuators ELEMENT valves

Ø 50 [mm]



Ø 70–130 [mm]



Technical data	
Max. stroke limitation	
Special feature	without visual position indicator (upper stroke limitation only)
Mounting	screw in stroke limiter (instead of the transparent cover for the visual position indicator)

Ø 50 [mm]



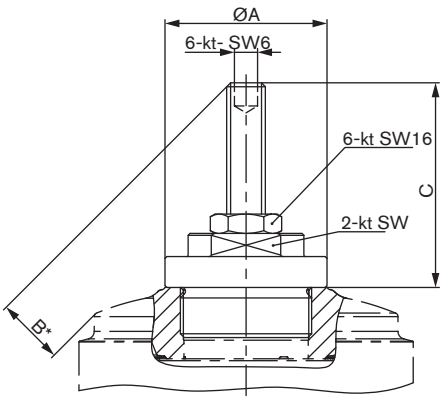
Ø 70–130 [mm]



Max./min. stroke limitation	
Special feature	Max. & min. flow setting (upper and lower stroke limitation) with visual position indicator
Mounting	screw in stroke limiter (instead of the transparent cover for the visual position indicator)

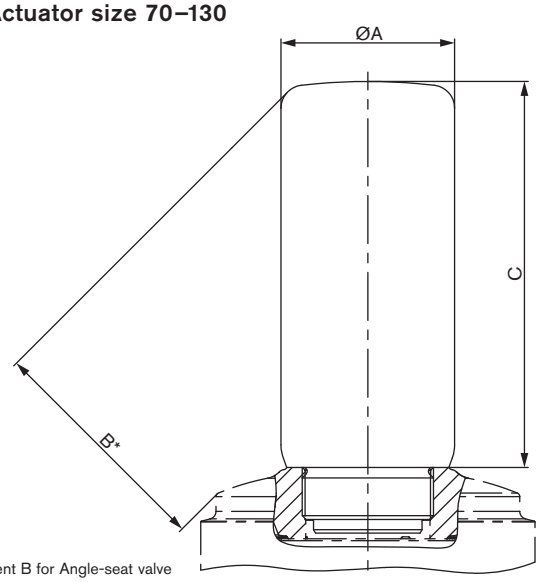
Dimensions [mm]

Actuator size 50



Actuator	ØA	B	C	2-kt SW
D	20	15	40	17
M	42	18	53	24
N		16		
P		2		

Actuator size 70–130



* Measurement B for Angle-seat valve

Actuator	ØA	B	C
D	45	38	100
M		61	
N		59	
P		45	

Ordering chart

Max. stroke limitation without visual position indicator
(single version, only for valve with circuit function A, normally closed by spring action.)

Actuator size Ø [mm]	Item no.
50	677 535
70–130	673 962

Min./Max. stroke limitation with visual position indicator

Actuator size Ø [mm]	Item no.
50	673 950
70–130	673 951

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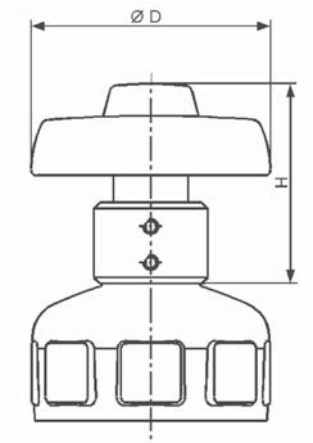
Manual override for stroke actuator (with visual position indicator)



Manual override with visual position indicator for manual valves when pressure drops

Technical data	
Version	Manual opening (only for control function A, i.e. unpressurised closed)

Dimensions [mm]



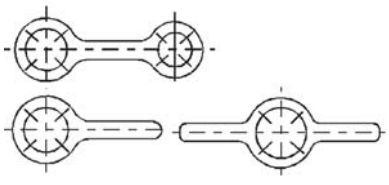
Actuator size Ø	Ø D	H
50, 63, 80	80	68
100, 125	150	85

Ordering chart (with visual position indicator)

Actuator size Ø [mm]	Item no.
50-80	636 822
100, 125	636 823

Ordering chart for mounting key (for actuator cover)

Actuator size Ø [mm]	Item no.
40 and 50	639 175
63	639 170
80	639 171
100	639 172
125	639 173



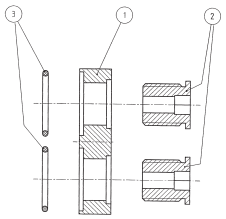
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NAMUR-Adapter for pilot valve



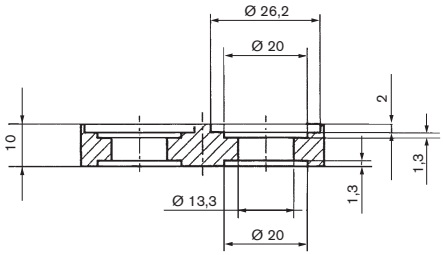
Mounting for NAMUR-Adapter

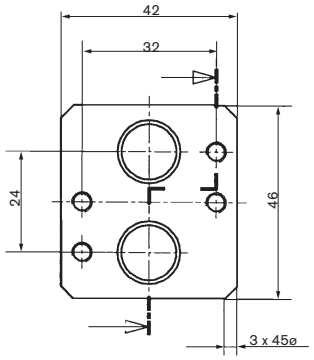
1 Plate
2 Hollow screw
3 O-rings

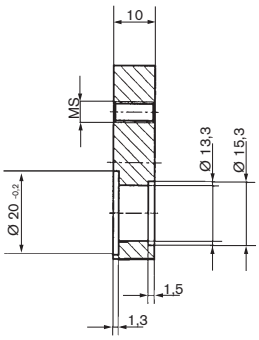


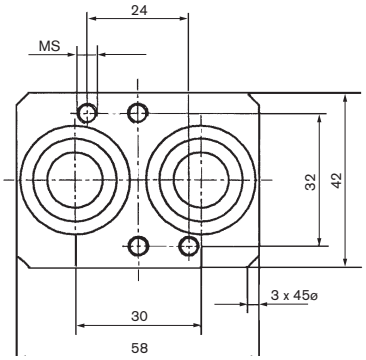
Technical data	
Material plate and hollow screw	Steel 1.4021 or CuZn39 Pb3 F44
Seal O-rings	NBR 75

Dimensions [mm]









Version 1
Namur-Adapter for **stroke actuator**
Ø 50 to 80 for angle seat and globe valve
Ø 63 to 100 for diaphragm valve
NAMUR adapter for **rotary actuator**
Ø 63 on request

Version 2
Namur-Adapter for **stroke actuator**
Ø 100 and 125 for angle seat and globe valve
Ø 125 for diaphragm valve
NAMUR adapter for **rotary actuator**
Ø 100

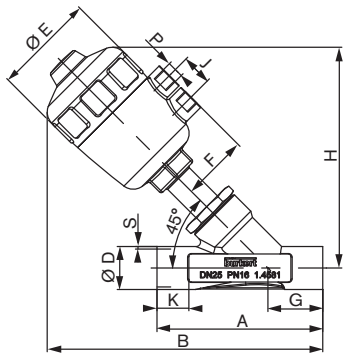
Ordering chart

Actuator size Ø [mm]	Material	Item no.
Version 1	Stainless steel	632 974
Version 2	Stainless steel	634 275
Version 1	Brass	637 113
Version 2	Brass	637 114

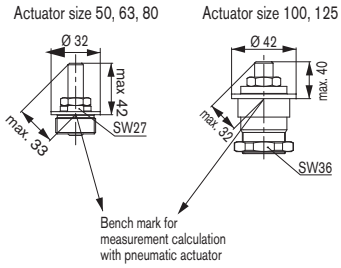
DTS 1000102756 EN Version: X Status: RL (released | freigegeben | validé) printed: 07.08.2017

Dimensions for Type 2000

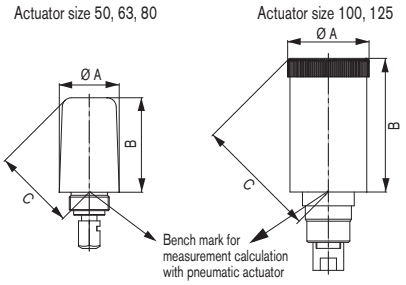
Weld end body acc. to EN ISO1127/ ISO4200 and DIN 11850 Series 2



Max. Stroke limiter (single version)

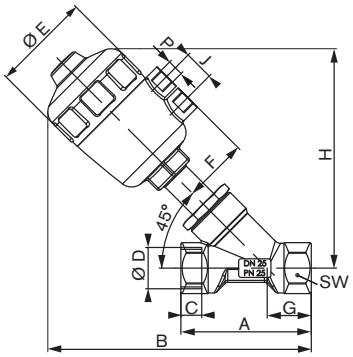


Min/Max. Stroke-limiter

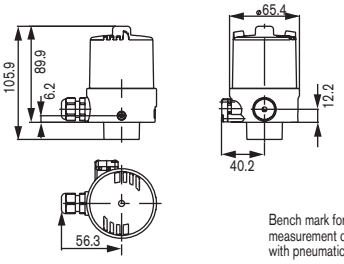


Actuator size	ØA	B	C
50, 63, 80	39	62	54
100, 125	53	87	80

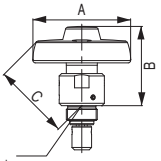
Threaded body



Electrical control feedback Type 8697

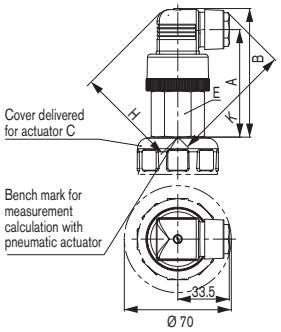


Hand wheel



Actuator size	ØA	B	C
50, 63, 80	80	66.7	64.9
100, 125	150	83.9	96.3

Optical position indicator with electrical feedback Type 1060



Actuator size	A	B	E	H	K
40	70	84	SW30	65	80
50, 63, 80	44	58.5	SW32	47	62
100, 125	44	58.5	SW41	47	62

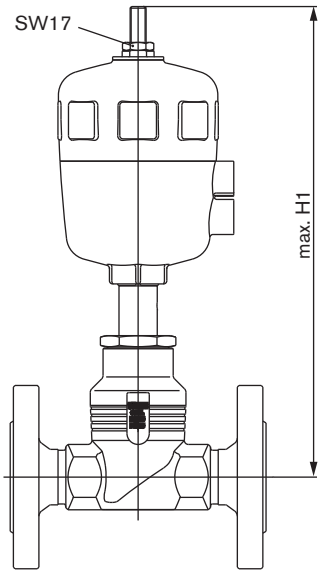
DTS 1000102756 EN Version: X Status: RL (released | freigegeben | validé) printed: 07.08.2017

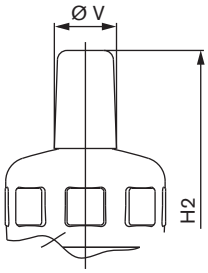
Dimensions for Type 2000 (continued)

All bodies						All weld end bodies				Weld end bodies acc. to EN ISO 1127/ ISO 4200			Weld end bodies acc. to DIN11850 Series 2			Threaded body						
DN	Actuator size Ø	Ø E	F	P	J	B	H	A	G	K	Ø D	S	K	Ø D	S	B	H	A	C	ØD	G	SW
13	40	53	33	G 1/8	16.5	–	–	–	–	–	–	–	–	–	–	137	113	65	12	G 3/8	24	27
	40	53	33	G 1/8	16.5	–	–									146	115	85	14	G 1/2	31	27
	50	64	44	G 1/4	24	–	–									170	140					
	63	80	52	G 1/4	24	–	–									203	172					
	80	101	60	G 1/4	24	–	–									224	193					
15	40	53	33	G 1/8	16.5	148	114	100	34	20	21.3	1.6	20	19	1.5	–	–	–	–	–	–	–
	50	64	44	G 1/4	24	174	137									–	–					
	63	80	52	G 1/4	24	–	–									–	–					
	80	101	60	G 1/4	24	–										–	–					
20	40	53	33	G 1/8	16.5	158	119	115	39	25	26.9	1.6	25	23	1.5	155	120	95	16	G 3/4	35	32
	50	64	44	G 1/4	24	181	145									179	144					
	63	80	52	G 1/4	24	209	170									206	171					
	80	101	60	G 1/4	24	–	–	–	–	–	–	–	–	–	–	225	190					
25	40	53	33	G 1/8	16.5	–	–	–	–	–	–	–	–	–	–	160	126	105	18	G 1	35.5	41
	50	64	44	G 1/4	24	191	148	130	43	30	33.7	2	30	29	1.5	188	152					
	63	80	52	G 1/4	24	217	173									213	177					
	80	101	60	G 1/4	24	238	195									234	198					
32	63	80	52	G 1/4	24	230	186	145	45	30	42.4	2	30	35	1.5	224	183	120	20	G 11/4	41	50
	80	101	60	G 1/4	24	259	210									246	205					
	100	127	73	G 1/4	30	301	256									296	255					
40	63	80	52	G 1/4	24	238	189	160	49	30	48.3	2	30	41	1.5	227.3	188	130	22	G 11/2	40	55
	80	101	60	G 1/4	24	258	213									249	209					
	100	127	73	G 1/4	30	309	260									299.3	260					
	125	158	86	G 1/4	30	337	288									329	289					
50	63	80	52	G 1/4	24	255	205	175	50	30	60.3	2.6	30	53	1.5	249	204	150	24	G 2	45	70
	80	101	60	G 1/4	24	275	225									270	225					
	100	127	73	G 1/4	30	327	271									317	272					
	125	158	86	G 1/4	30	351	301									347	302					
65	63	80	52	G 1/4	24	271	221	210	50	26	76.1	2.3	26	70	2.0	275	218	185	26	G 21/2	57	85
	80	101	60	G 1/4	24	292	242									296	239					
	100	127	73	G 1/4	30	340	290									344	287					
	125	158	86	G 1/4	30	370	320									374	317					

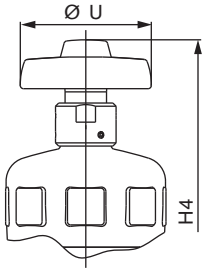
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Dimensions for Type 2012



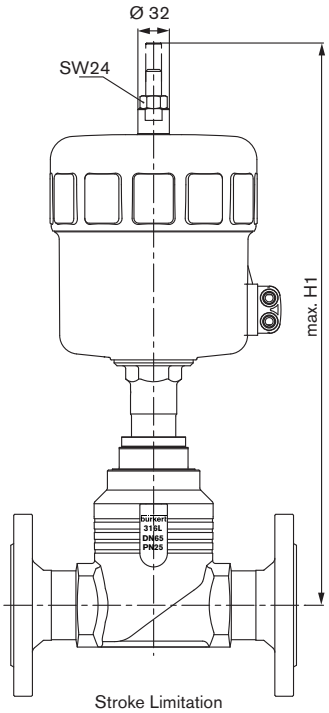


Min. / Max. stroke limiter

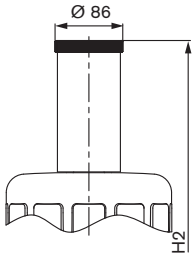


Hand wheel

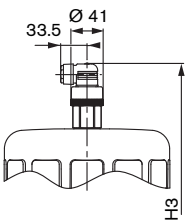
DN	Actuator size	H1	H2	H4	ØV	ØU
10	50	234	260	267	39	80
15	50	234	260	267	39	80
20	50	236	262	269	39	80
20	63	269	296	303	39	80
25	50	243	269	276	39	80
25	63	273	300	307	39	80
25	80	295	322	329	39	80
32	63	293	320	327	39	80
32	80	316.5	343	350	39	80
40	63	298	325	332	39	80
40	80	321.5	348	355	39	80
40	125	425	470	467	53	150
50	80	331.5	358	365	39	80
50	100	397.5	443	440	53	150
50	125	430	475	472	53	150



Stroke Limitation
Single Version



Min. / Max. Stroke Limitation



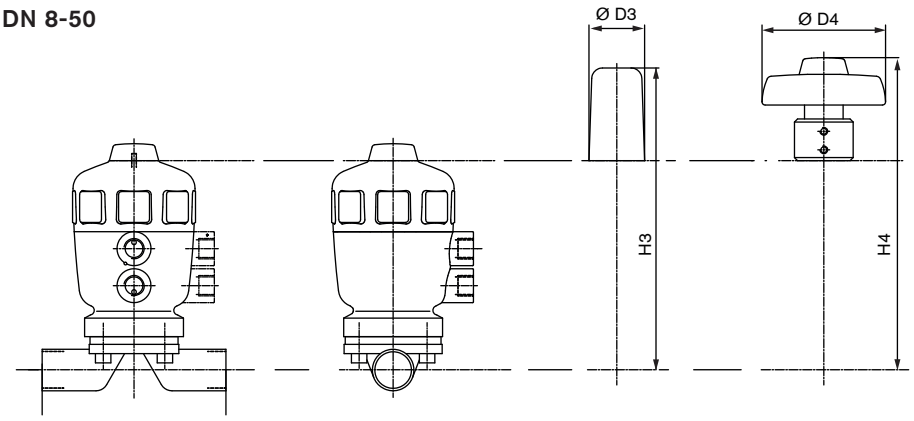
Electrical
Position Feedback
Type 1060

DN	Actuator size	H1	H2	H3
65	175	571.7	647.5	561.5
80	175	581	656	569
80	225	576.5	651.5	564.5
100	225	586.5	661.5	574.5

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Dimensions for Type 2030

DN 8-50



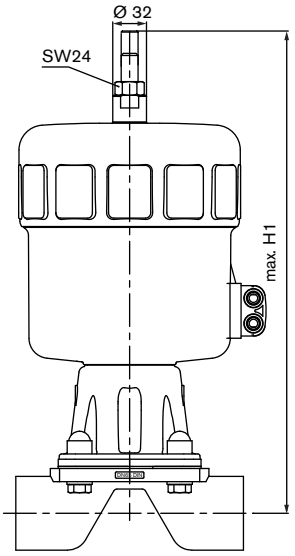
Standard version
body with weld end

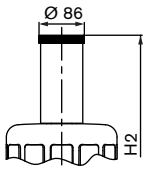
Options: Stroke limiter

Manual override

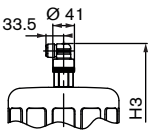
DN	Act. size (Ø)	ØD3	ØD4	H3	H4
8	40				
15	50	39	80	172	178
15	63	39	80	189	195
20	63	39	80	198	204
20	80	39	80	224	230
25	63	39	80	207	213
25	80	39	80	227	233
32	100	53	150	303	300
40	100	53	150	308	305
40	125	53	150	347	344
50	100	53	150	317	314
50	125	53	150	351	348

DN 65-100





Min. / Max. Stroke
Limitation



Electrical
Position Feedback
Type 1060

DN	Actuator size	H1	H2	H3
65	175	462.3	543.5	457.6
80	175	480.0	555.0	468.0
80	225	476.4	550.7	463.7
100	225	486.9	563.5	476.5

For valve dimensions please see separate Datasheets

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