

for piston-operated and diaphragm valves



Advantages/Benefits

- ▶ Complete and modularly designed accessory program
- ▶ More for less - costs for configurations that are really required only
- ▶ Easy maintenance and commissioning
- ▶ Increase of system and operational safety

Design

The modular designed accessory option package is the comprehensive addition to the Bürkert angle-seat and diaphragm valve Types 2000, 2001, 2002, 2030, 2031. 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 (retrofitting), commissioning and operation.

- Flexible and versatile due to modular accessory program:
- Easily retrofittable in situ
- increase of operational safety

Applications

- Electrical position feedback
- External magnetic inductive position feedback
- Electrical feedback signaller with optical position indication
- Max. stroke limitation
- Min./max. stroke limitation
- Manual override
- Namur-adapter for pilot valves





Advantages / Benefits

- ▶ Simple installation
- ▶ Retrofittable
- ▶ Self-adjusting trip cam for "closed" position
- ▶ Easily accessible elements and terminals
- ▶ Can be rotated through 360°
- ▶ LEDs provide local operational status and position indication
- ▶ Compact IP65 enclosure

Technical Data

Mechanical Limit Switch

Electrical specification

at voltage	max. inductive load	max. load resistance
125 V ≈	5 A	5 A
250 V ≈	5 A	5 A
24 V =	5 A	5 A
30 V =	2 A	5 A
50 V =	0.7 A	1 A
74 V =	0.25 A	0.6 A
125 V =	0.03 A	0.4 A
250 V =	0.02 A	0.25 A

All switches have changeover function.

Inductive Limit Switch in 3-wire Technology

Nominal voltage range	10 to 30 V DC
Current load	≤ 200 mA
Output resistance	4.7 kΩ
Current consumption	≤ 25 mA
Version	PNP

Inductive Limit Switch to DIN 19 234 EEx i

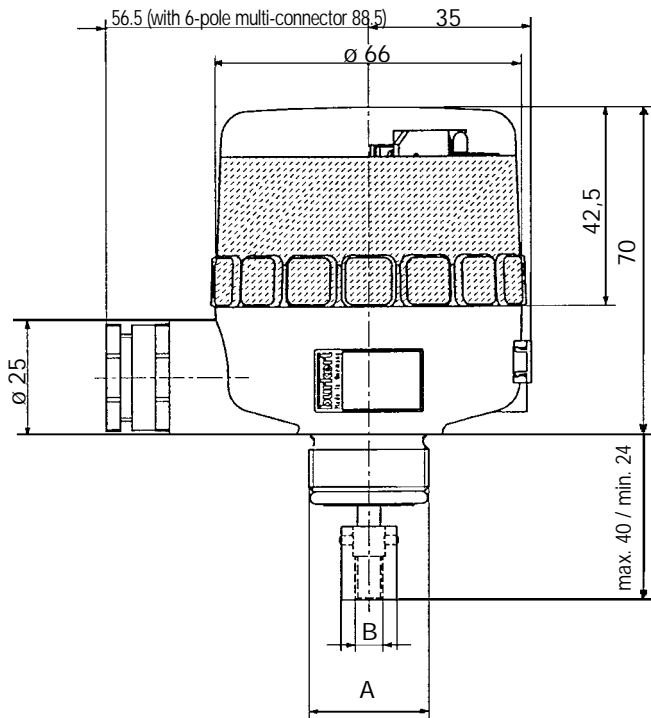
Nominal voltage	8 V DC	
Current consumption	damped	≤ 1 mA
	undamped	≥ 3 mA

Isolating barrier must be used.

Installation / Accessories

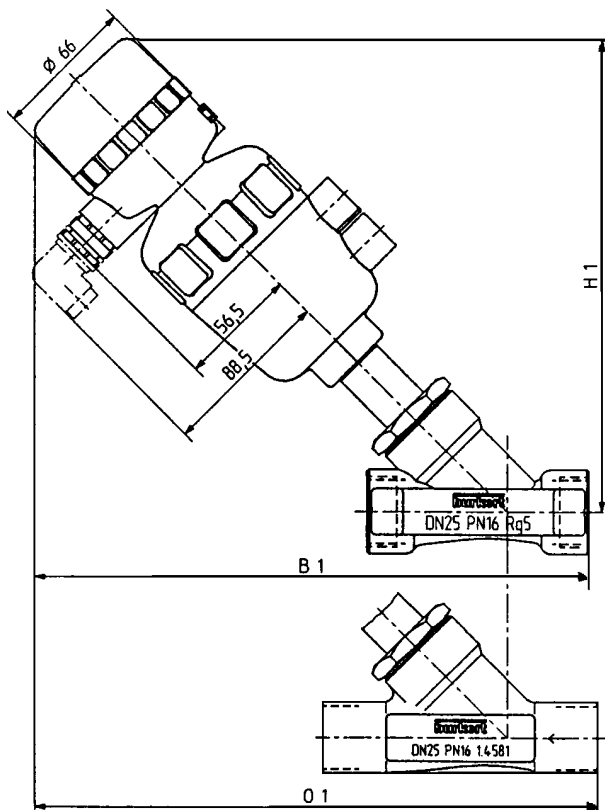
Installation	as required
Electrical connection	<ul style="list-style-type: none"> • PG 11 cable gland, internal: • screw terminals on PCB, • connector cross section up to 1.5 mm²

Dimensions in mm



Actuator diameter	A	B
ø50, ø63, ø80	M26x1,5	M6
ø100, ø125	M36x2	M1

Dimensions for Type 2000 in mm



Specifications

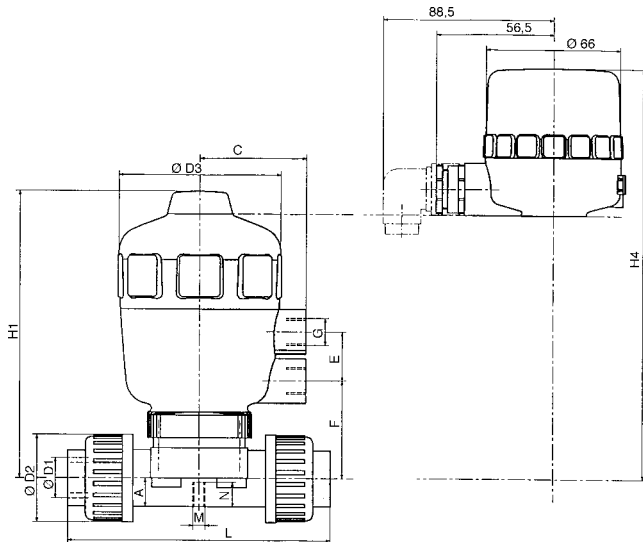
DN	Actuator (ø) Type	B1	H1	O1
13/15	D (50)	224	188	225
20	D (50)	229	196	232
25	E (63)	263	224	268
25	F (80)	285	246	289
32	G (100)	277	237	281
32	F (80)	306	261	310
32	E (63)	351	310	355
40	E (63)	281	240	289
40	F (80)	301	264	309
40	G (100)	355	314	363
40	H (125)	383	342	391
50	E (63)	301	256	306
50	F (80)	321	276	326
50	G (100)	376	370	381
50	H (125)	400	355	405
65	F (80)	347	290	--
65	G (100)	398	341	--
65	H (125)	426	369	--

Electrical Position Feedback

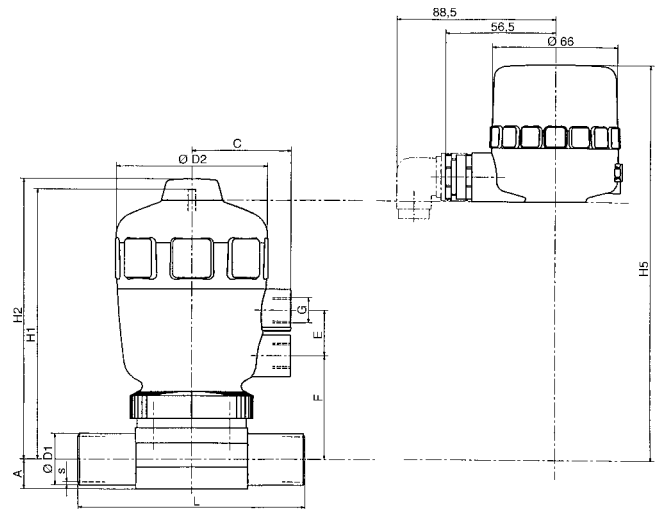
for piston-operated and diaphragm valves

Dimensions in mm

Type 2030



Type 2031



Specifications Type 2030

DN	Actuator Type	H1	H4	D3
15	D	123	182	64
15	E	139	198	80
20	E	148	207	80
20	F	173	232	101
25	E	157	216	80
25	F	176	235	101
32	G	231	287	127
40	G	239	295	127
40	H	277	333	153
50	G	249	305	127
50	H	284	340	153

Specifications Type 2031

DN	Actuator Type	H2	H5	D2
15	D	118	177	64
15	E	135	194	80
20	E	146	205	80
20	F	172	231	101
25	E	155	214	80
25	F	175	234	101
32	G	229	285	127
40	G	232	288	127
40	H	271	327	153
50	G	243	299	127
50	H	277	333	153
65	H	290	346	157



Advantages / Benefits

- ▶ For combinations with stroke adjustment and manual override
- ▶ Reliable switching function
- ▶ Space-saving design, simple installation
- ▶ LED-display
- ▶ Reverse polarity protection
- ▶ Short circuit-proof
- ▶ Pulsed PNP
- ▶ Protected against inductive spikes

Design

The magnet-sensitive sensors are reacting to the approach of the solenoid piston¹⁾ of a piston-operated or diaphragm valve of the series 2000-2031. Thus, the piston position can be optically and electrically displayed and evaluated via LED.

- For actuator versions equipped with magnetic piston only.
- Combination options with stroke limitation or manual override

Technical Data

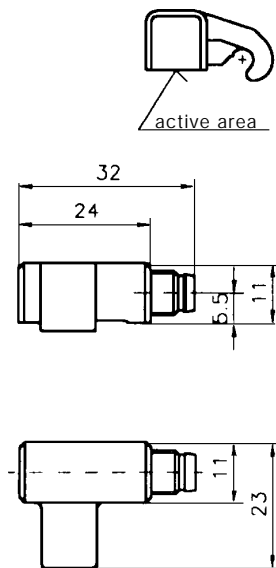
Nominal field strength $ H_n $	1.2 kA/m
Working field strength $ H_a $	≥ 2 kA/m
Hysteresis	≤ 45 % of H_n
Ambient temperature	-20 °C ... +70 °C
Temp.drift of switch-on point	≤ 0.3 %/°C
Operating voltage U_B	10 ... 30 V DC
Residual ripple	≤ 15 %
Max. power rating I_a	200 mA
Capacitive load	≤ 1 μ F
Voltage drop U_d	≤ 2.5 V
Raise time	≤ 0.5 ms
Switch-off time	20 ... 50 ms
Power consumption*)	$\leq 12/\leq 10$ mA
Housing material	PBTP (GF-reinforced)
Rating (DIN 40 050)	IP 67
Weight	6 g

*)damped/undamped

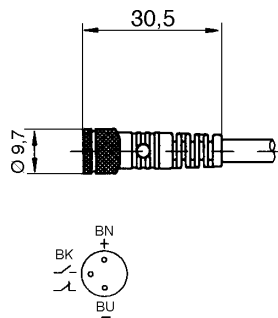
¹⁾ For versions with solenoid piston only

Consisting of solenoid piston, sensor fixation, elbow joint, proximity sensor

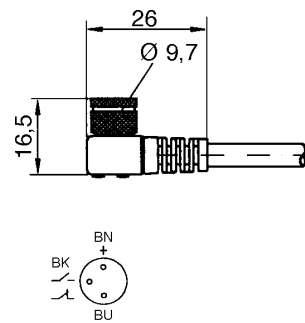
Sensor Type 1071 with plug connector, IP 67



Plug connector, straight, without LED, cable 3m

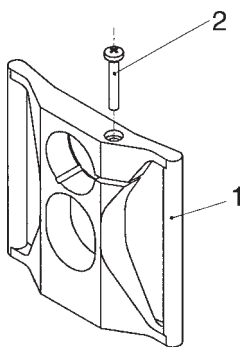


Elbow plug connector, with LED, cable 3m

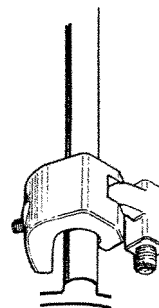


Installation

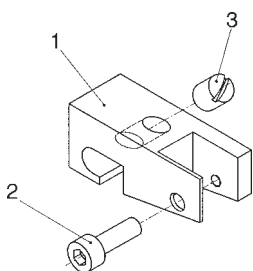
Sensor bracket, consisting of fixation 1 and EJOT-PT-screw 2



Mount sensor to elbow joint and sensor fixation



Elbow joint:
 1 elbow joint
 2 Cheesehead screw DIN 912-M4x12-A2
 3 Pin DIN 913-M6x10-A2



For ordering specifications of required individual parts, please refer to ordering chart.

Electrical Feedback Signaller

with optical position indication

Type 1060



Advantages / Benefits

- ▶ For alarm and emergency devices, safety disconnectors and sequence arrangements
- ▶ Additional optical position indication
- ▶ Simple installation
- ▶ Retrofittable
- ▶ Easily accessible elements and terminals
- ▶ Compact IP65 enclosure

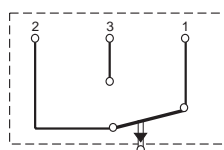
Technical Data

Microswitch	1 changeover contact
Switching load	250 V /≈ non-inductive or induct. load max. 5A incandescent filament load 0.5A
	250 V/= non-inductive load 0.25A inductive load 0.02A incandescent filament load 0.02A

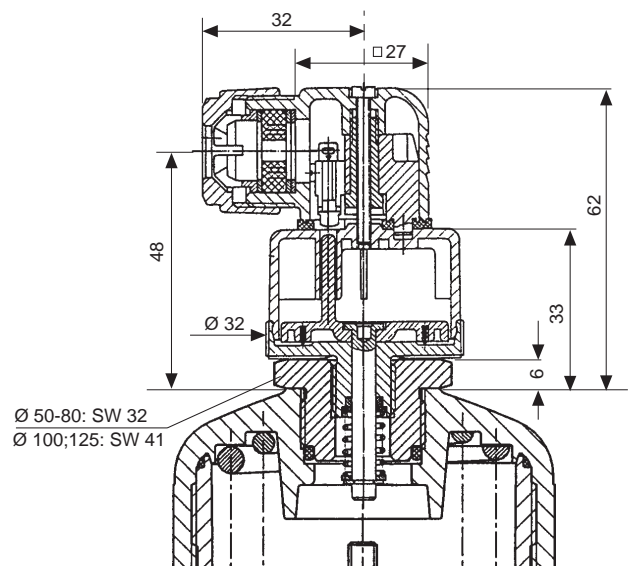
Rating IP 65

Connection solder connections, cable entry sealed by gland with cable grip to suit cable ø 5-9 mm

Wiring diagram
 1 Common terminal
 2 Normally closed terminal
 3 Normally open terminal



Dimensions in mm



Max. Stroke Limitation*

without optical position indication

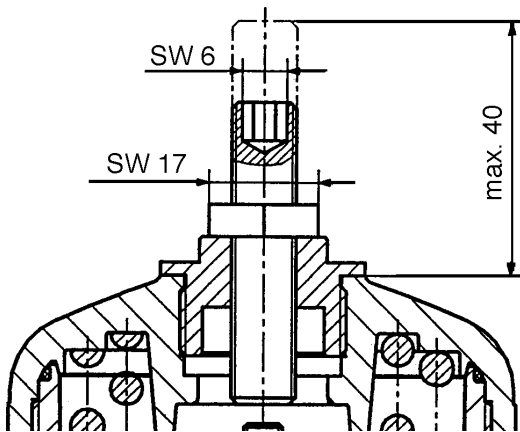


Advantages / Benefits

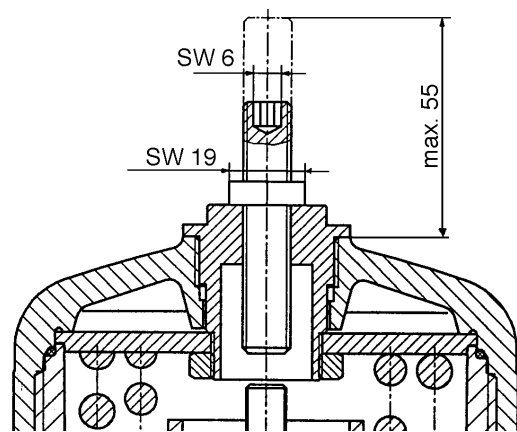
- ▶ Stroke limitation single version*
- ▶ Easy adjustment with Allen key
- ▶ Can be combined with external inductive position indication Type 1071

Dimensions in mm

Actuator version D, E, F



Actuator version G, H



* Upper stroke limitation only

* Control function A only

Min./Max. Stroke Limitation

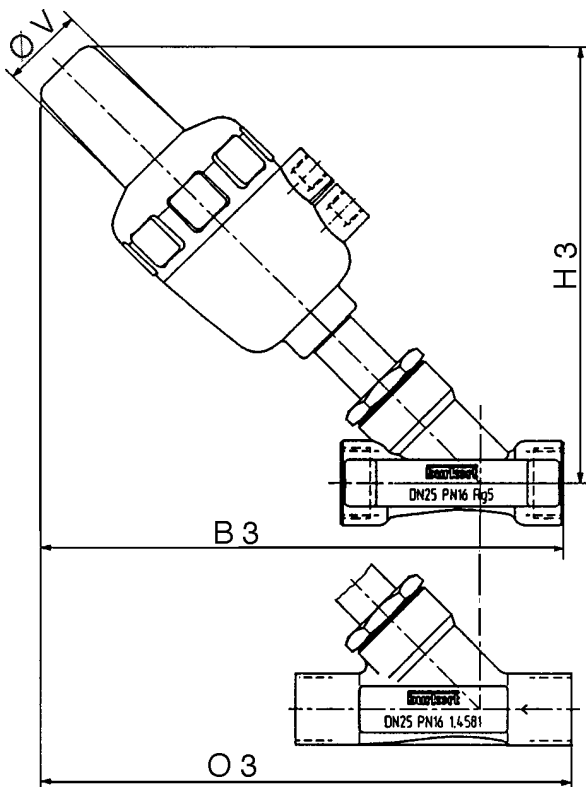
with optical position indication



Advantages / Benefits

- ▶ Max./min. flow setting
- ▶ Integrated, clear optical position indication
- ▶ Retrofittable
- ▶ Upper and lower stop adjustable with standard screw driver
- ▶ To be used as manual override
- ▶ Can be combined with external inductive position indication Type 1071
- ▶ Two versions available (actuator 50-80 and 100-125 mm)

Dimensions for Type 2000 in mm

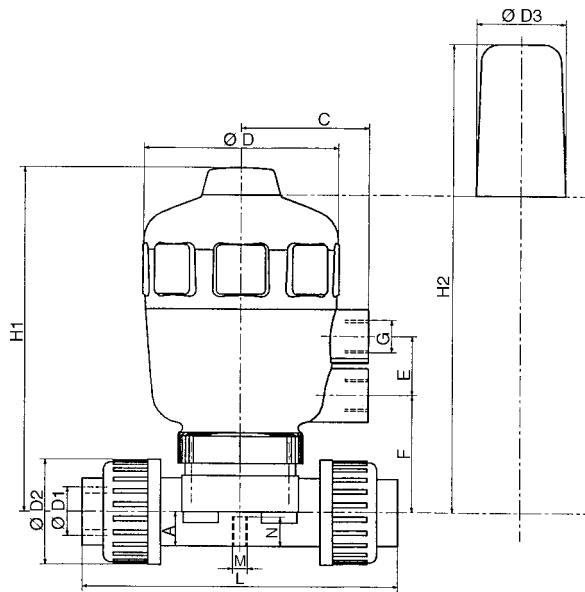


Specification

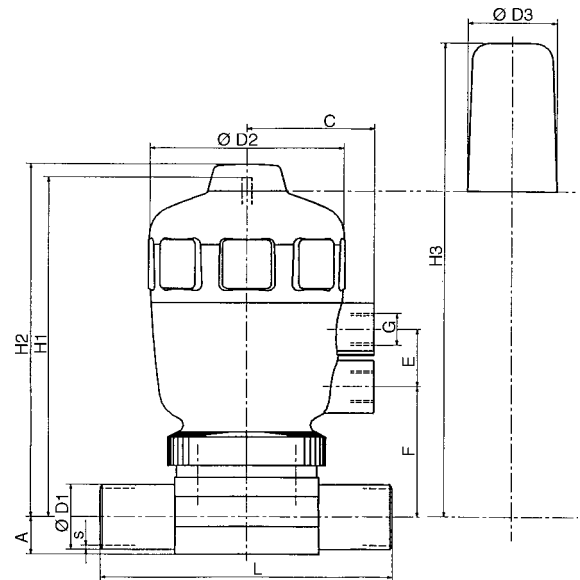
DN	Actuator(ø) Type	B3	H3	O3	ø V
13/15	D (50)	210	174	211	39
20	D (50)	215	182	218	39
25	E (63)	246	207	251	39
25	F (80)	262	223	266	39
32	E (63)	260	220	264	39
32	F (80)	283	238	287	39
32	G (100)	345	304	349	53
40	E (63)	264	223	272	39
40	F (80)	278	241	286	39
40	G (100)	349	308	357	53
40	H (125)	370	329	378	53
50	E (63)	284	239	289	39
50	F (80)	298	253	303	39
50	G (100)	370	346	375	53
50	H (125)	387	342	392	53
65	F (80)	324	267	--	39
65	G (100)	392	355	--	39
65	H (125)	413	356	--	53

Dimensions in mm

Type 2030



Type 2031



Specifications Type 2030

DN	Actuator Type	H1	H2	D3
15	D	123	173	39
15	E	139	189	39
20	E	148	198	39
20	F	173	223	39
25	E	157	207	39
25	F	176	226	39
32	G	231	304	53
40	G	239	312	53
40	H	277	350	53
50	G	249	322	53
50	H	284	357	53

Specifications Type 2031

DN	Actuator Type	H2	H3	D3
15	D	118	177	39
15	E	135	194	39
20	E	146	205	39
20	F	172	231	39
25	E	155	214	39
25	F	175	234	39
32	G	229	285	53
40	G	232	288	53
40	H	271	327	53
50	G	243	299	53
50	H	277	333	53
65	H	290	346	53

Manual Override

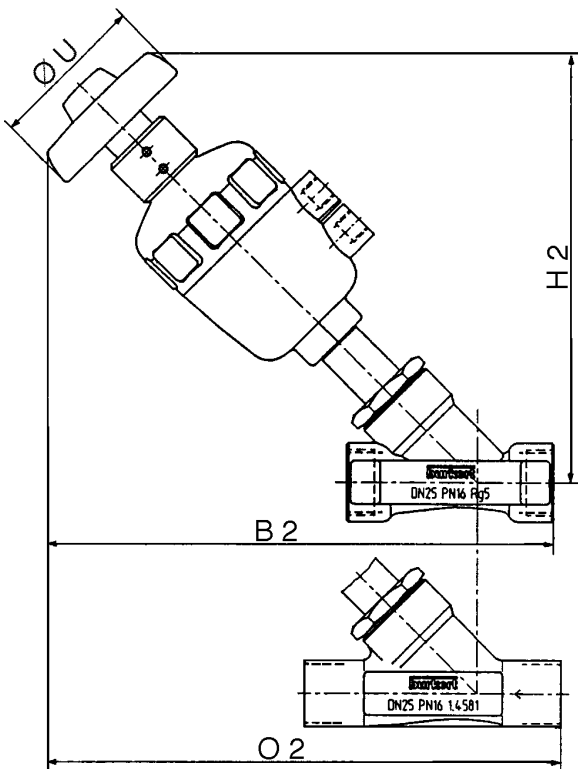
with optical position indication



Advantages / Benefits

- ▶ Normally closed manual override (Control function "closed when depressurized" only)
- ▶ Integrated optical position indication
- ▶ Retrofittable
- ▶ Can be combined with external inductive position indication Type 1071

Dimensions for Type 2000 in mm



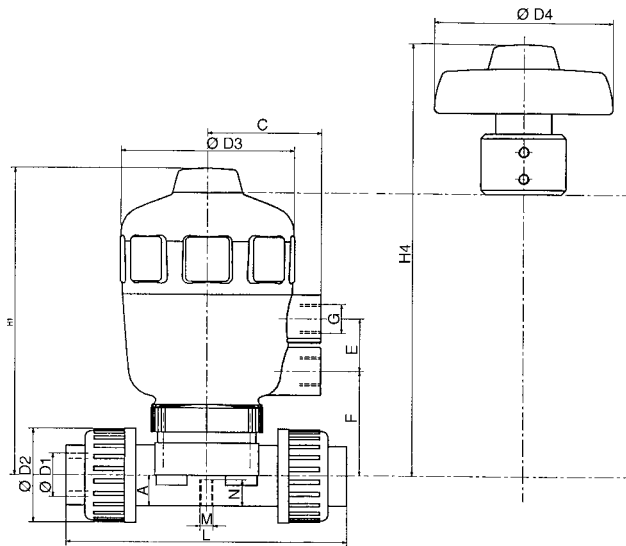
Specifications

DN	Actuator (ø) Type	B2	H2	O2	ø U
13/15	D (50)	221	185	222	80
20	D (50)	226	193	229	80
25	E (63)	257	218	262	80
25	F (80)	274	235	278	80
32	E (63)	271	231	275	80
32	F (80)	295	250	299	80
32	G (100)	363	322	367	150
40	E (63)	275	234	283	80
40	F (80)	290	253	298	80
40	G (100)	367	326	375	150
40	H (125)	388	347	396	150
50	E (63)	295	250	300	80
50	F (80)	310	265	315	80
50	G (100)	388	382	393	150
50	H (125)	405	360	410	150
65	F (80)	336	279	--	80
65	G (100)	410	353	--	150
65	H (125)	431	374	--	150

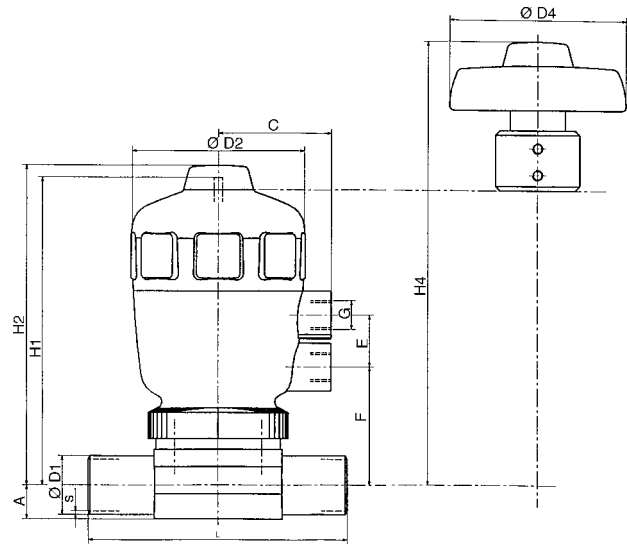
* Control function "closed when depressurized" only

Dimensions in mm

Type 2030



Type 2031



Specifications Type 2030

DN	Actuator Type	H1	H4	D4
15	D	123	182	80
15	E	139	198	80
20	E	148	207	80
20	F	173	232	80
25	E	157	216	80
25	F	176	235	80
32	G	231	287	150
40	G	239	295	150
40	H	277	333	150
50	G	249	305	150
50	H	284	340	150

Specifications Type 2031

DN	Actuator Type	H2	H4	D4
15	D	118	174	80
15	E	135	191	80
20	E	146	202	80
20	F	172	228	80
25	E	155	211	80
25	F	175	231	80
32	G	229	299	150
40	G	232	302	150
40	H	271	341	150
50	G	243	313	150
50	H	277	347	150
65	H	290	360	150

Namur-Adapter for Pilot Valves



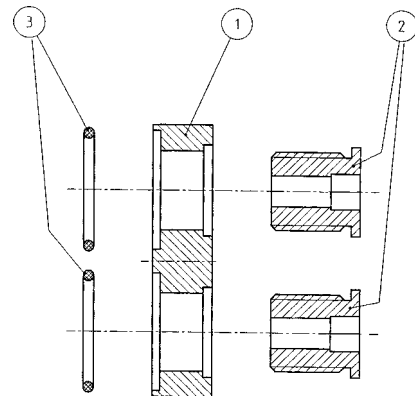
Advantages / Benefits

- ▶ Namur interface allows easy installation of pilot valve to actuator (retrofitable)
- ▶ Increased operational reliability when using the Bürkert pilot valves Types 311, 375, 470

Technical Data

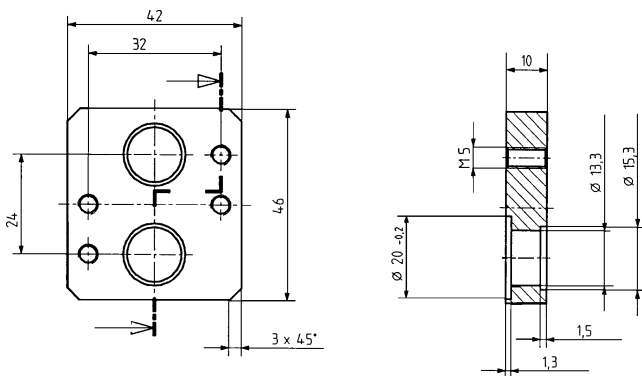
Materials

- | | |
|----------------------------|-----------------------------------|
| ① Plate and ② hollow screw | Steel 1.4021 or
CuZn39 Pb3 F44 |
| ③ O-rings | DIN3771
16x2-N-NBR75 |

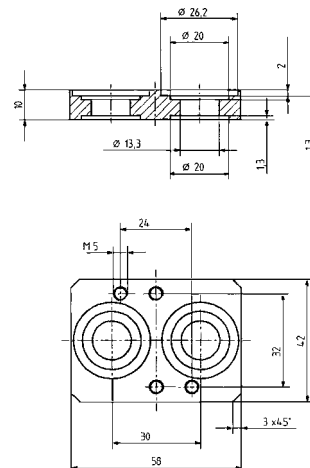


Dimensions in mm

Adapter for actuators Ø 50-80



Adapter for actuators Ø 100-125



Hollow screw with hexagonal socket SW 6

Combination Options of Accessories

	Electrical position feedback Type 1062	External magnet inductive position feedback Type 1071	Electrical feedback signaller with optical position indication Type 1060	Max. stroke limitation	Min./max. stroke limitation	Manual override with opt. position indication	Namur-adapter for pilot valves
Electrical position feedback Type 1062		and	or	or	or	or	and
External magnet inductive position feedback Type 1071	and		and	and	and	and	and
Electrical feedback signaller with optical position indication Type 1060	or	and		or	or	or	and
Max. stroke limitation	or	and	or		or	or	and
Min./max. stroke limitation	or	and	or	or		or	and
Manual override with opt. position indication	or	and	or	or	or		and
Namur-adapter for pilot valves	and	and	and	and	and	and	

Electrical Position Feedback Type 1062 - Ordering Chart

With mechanical limit switches:

Actuator size	Valve position feedback (changeover switch)	Ordering numbers	
		110V - 250V AC/DC	12V - 48V AC/DC
50-80 mm	OPEN	005415K	007462U
	CLOSED	005409E	007461T
	OPEN/CLOSED	005416L	007463V
100-125 mm	OPEN	007459H	007465X
	CLOSED	007458G	007464W
	OPEN/CLOSED	007460E	007466Y

Note: Voltage ranges 48-110 VAC/DC available on request.

With inductive limit switches:

Actuator size	Valve position feedback (normally open contact)	Ordering numbers	
		Standard Inductive 10-30VDC	NAMUR Exi 8VDC
50-80 mm	OPEN	005434N	007471V
	CLOSED	005422J	007470G
	OPEN/CLOSED	005461Z	007472W
100-125 mm	OPEN	007468A	007473X
	CLOSED	007467Z	007474Y
	OPEN/CLOSED	007469B	007475Z

Specification tag	Order-No.	633529W
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External Magnet Inductive Position Feedback Type 1071 - Ordering Chart

Solenoid piston

Actuator size	Actuator type	Order-No.
ø 50 ¹⁾ mm	D	630063F ¹⁾
ø 63 mm	E	630064G
ø 80 mm	F	630065H
ø100 mm	G	630066A
ø125 mm	H	630067B

¹⁾ For Types 2000/2001 only

Sensor fixation

Actuator size	Actuator type	Order-No.
ø 50 ¹⁾ mm	D	636239E ¹⁾
ø 63 - 125 mm	E-H	636239E

¹⁾ For Types 2000/2001 only

Elbow joint

Material	Order-No.
Diecasting	780558K
Stainless steel	636241G

Sensor

Type	Version	Order-No.
1071	plug connector	780110E
1071	with cable (no LED)	780111T

Plug Connector

Version	Order-No.
Elbow plug, cable 3m	780112U
Straight plug connector, no LED	ohne LED
780113V	

Ordering Chart - Accessories

Min./max. stroke limitation with optical position indication

Actuator size	Actuator type	Order-No.
ø 50 mm	D	636820Z
ø 63 mm	E	636820Z
ø 80 mm	F	636820Z
ø100 mm	G	636821N
ø125 mm	H	640703Y

Electrical feedback signaller Type 1060 with installation nipple

Actuator size	Actuator type	Order-No.
ø 50 mm	D	701515V
ø 63 mm	E	701515V
ø 80 mm	F	701515V
ø100 mm	G	701516W
ø125 mm	H	701516W

Max. stroke limitation without optical position indication

Actuator size	Actuator type	Order-No.
ø 50 mm	D	637866U
ø 63 mm	E	637866U
ø 80 mm	F	637866U
ø100 mm	G	637867V
ø125 mm	H	637868E

Manual override with optical position indication (Control function "closed when depressurized")

Actuator size	Actuator type	Order-No.
ø 50 mm	D	636822P
ø 63 mm	E	636822P
ø 80 mm	F	636822P
ø100 mm	G	636823Q
ø125 mm	H	636823Q

Namur-adapter complete (brass)

Actuator size	Actuator type	Order-No.
ø 50 mm	D	637113R ¹⁾
ø 63 mm	E	637113R
ø 80 mm	F	637113R
ø100 mm	G	637114J
ø125 mm	H	637114J

Namur-adapter complete (stainless steel)

Actuator size	Actuator type	Order-No.
ø 50 mm	D	632974T ¹⁾
ø 63 mm	E	632974T
ø 80 mm	F	632974T
ø100 mm	G	634275G
ø125 mm	H	634275G

¹⁾ For Angle-Seat Valve Type 2000/2001/2002 only.