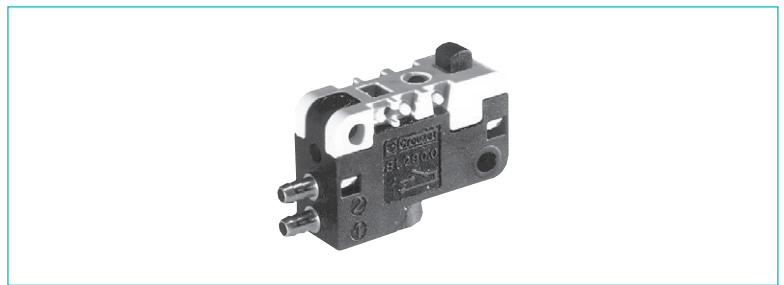


Low force position detector

- › 100 % pneumatic
- › Conforme à la norme DIN 41365 Forme A
- › Faible effort d'actionnement < 50 g à 6 bars
- › Pas de consommation permanente d'air comprimé

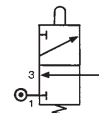
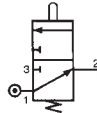


Also available in **ATEX** version for use in potentially explosive atmospheres in accordance with 94/9/EC Directive



Function	NO	81 290 501	—
	NC	—	81 290 001

Symbol

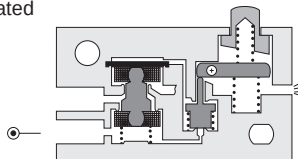


Characteristics

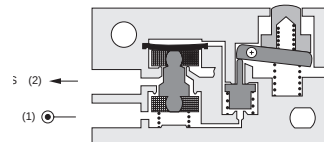
Orifice diameter mm		2	2
Operating pressure	bar	3 → 8	3 → 8
Flow at 4 bars	NI/min	100	100
Activation force at 6 bars	N	< 0,5	< 0,5
Permissible fluids (air / inert gas)		●	●
Max/min of fluid temperatures	°C	-10 → +50	-10 → +50
operating	°C	-10 → +60	-10 → +60
storage	°C	-40 → +70	-40 → +70
Mechanical life at 6 bars	operation	10 ⁷	10 ⁷
Response time on activation	ms	≤ 15	≤ 15
on release	ms	≤ 15	≤ 15
Barb connection for semi-rigid tubing		2.7 x 4	2.7 x 4
Weight	g	8.5	8.5

Principle of operation NC

Desactivated



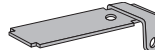
Activated



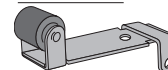
Operation accessories

Unless otherwise requested, flat and roller-ended levers are supplied loose.

161 A
flat R 25.4
70 507 524

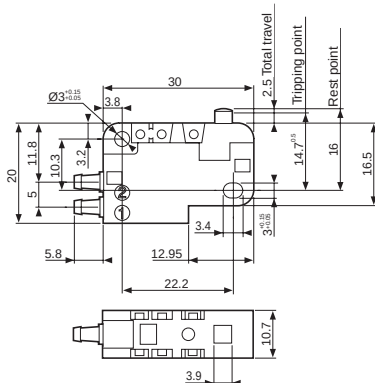


161 E
with roller R 24.1
70 507 529

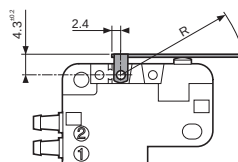


Dimensions

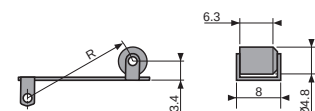
DIN 41635 Form A



161 A
R 25.4 ±0.2



161 E
R 24.1 ±0.2



ATEX version products are available in the following catalogues: **Pneumatic products for explosive atmospheres** or on our website www.crouzet-control.com

“Microvalve” series position detectors

› 100 % pneumatic



81 280



81 281

Version	NO	81 280 010	81 281 010	—
	NC	81 280 510	81 281 510	81 283 510
Features		Horizontal output	Vertical output	Rear connection by screw
Symbol				

NO



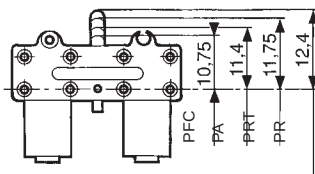
NC



Characteristics

Operating pressure	bar	2 → 8	2 → 8	2 → 8
Orifice diameter	mm	2.7	2.7	2.7
Flow at 6 bars	NI/min	200	200	138
Operating force at 6 bars	N	15	15	15
Effective travel	mm	1	1	1
Push-in connection for semi-rigid tubing (NFE 49100)	mm	Ø 4	Ø 4	Ø 4
Operating temperature	°C	-5 → +50	-5 → +50	-5 → +50
Mechanical life	operat.	5 x 10 ⁶	5 x 10 ⁶	5 x 10 ⁶
Weight	g	14	14	20

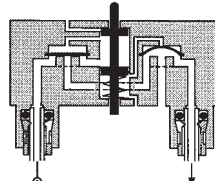
Principle of operation



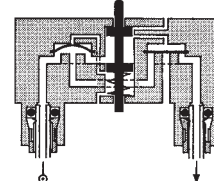
Actuation positions :

PFC : End of travel position
 PA : Operating position (max output kV)
 PRT : Release position (max. exhaust kV)
 PR : Rest position

NC

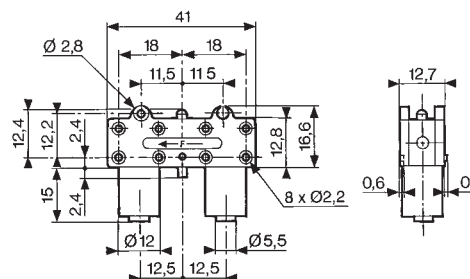


NO

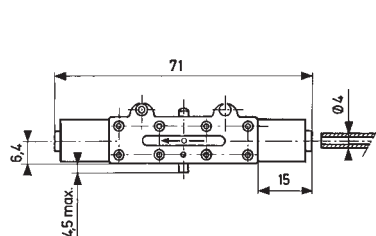


Dimensions

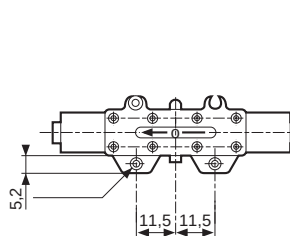
81 281 010 - 81 281 510



81 280 010 - 81 280 510

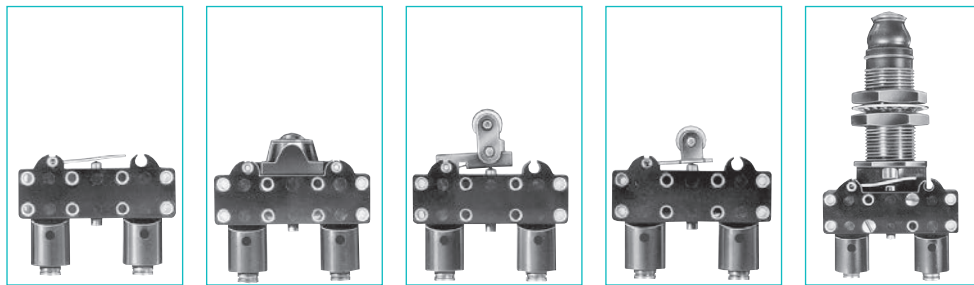


81 283 510



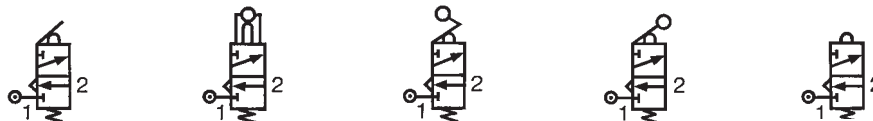
“Microvalve” series position detectors

› 100 % pneumatic



Features			Short lever	With ball	Roller trip	With roller	Threaded barrel Ø 16 Plunger
Version	NC	Vertical output	81 281 502	81 281 504	81 281 508	81 281 509	81 737 501

Symbol

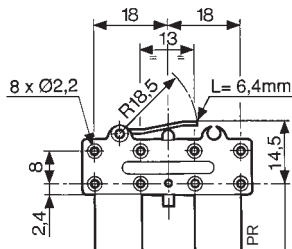


Characteristics

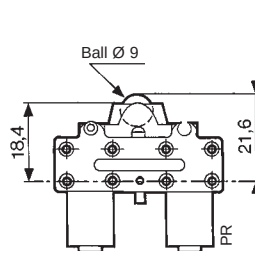
Operating pressure	bar	2 → 8	2 → 8	2 → 8	2 → 8	2 → 8
Orifice diameter	mm	2.7	2.7	2.7	2.7	2.7
Flow at 6 bars	NI/min	200	200	200	200	200
Operating force at 6 bars	N	15	15	15	15	25
Effective travel	mm	1	1	1	1	1
Push-in connection for semi-rigid tubing (NFE 49100)	mm	Ø 4	Ø 4	Ø 4	Ø 4	Ø 4
Operating temperature	°C	-5 → +50	-5 → +50	-5 → +50	-5 → +50	-5 → +50
Mechanical life	operat.	5 x 10 ⁶	5 x 10 ⁶	5 x 10 ⁶	5 x 10 ⁶	5 x 10 ⁶
Weight	g	16	18	18	18	90

Dimensions

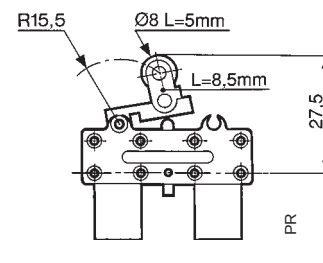
81 281 502



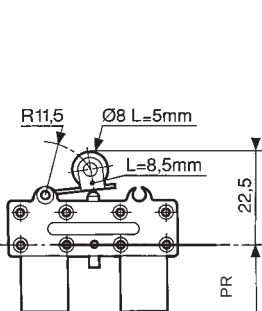
81 281 504



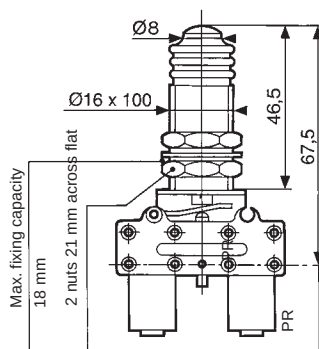
81 281 508



81 281 509



81 737 501

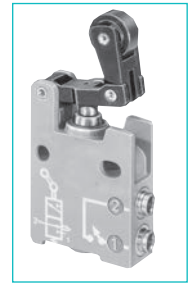
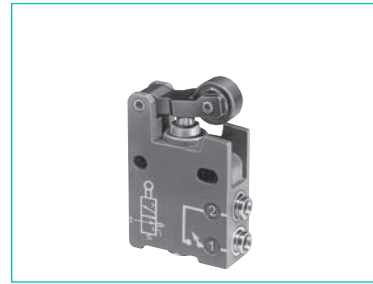
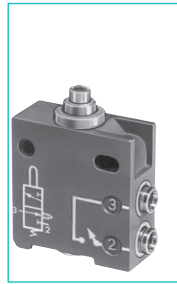


Actuation positions :

PR : Rest position

"Miniature" series position detectors

- › 100 % pneumatic
- › All metal

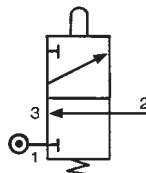


Part numbers

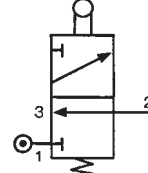
Version	Push-in connection for semi-rigid tubing (NFE 49100)			
NC	Ø 4 silenced exhaust	81 921 501	81 921 701	81 921 702
	M5 connectable exhaust	—	—	—
	Ø 4 connectable exhaust *	—	—	—
NO	Ø 6 connectable exhaust *	—	—	—
	Ø 4 silenced exhaust	—	—	—
NO	Ø 6 silenced exhaust	—	—	—
Control		Simple plunger	Lever with plastic roller	Lever with roller bearing
			Lever with one-way trip plastic roller	

Symbol

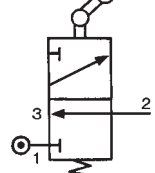
NC



NC



NC

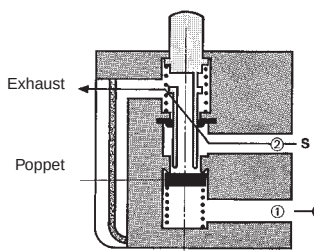


Characteristics

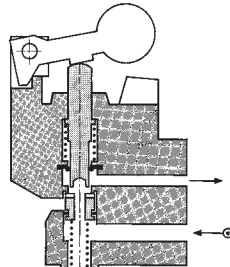
Operating pressure	bar	0.1 → 8	0.1 → 8	0.1 → 8	0.1 → 8
Orifice diameter	mm	2.7	2.7	2.7	2.7
Flow at 6 bars	NI/min	200	200	200	200
Actuation force at 6 bars	N	18	18	18	18
Circuit function : NC		•	•	•	•
Circuit function: NO		—	—	—	—
Connectable exhaust					
Operating temperature	°C	-5 → +50	-5 → +50	-5 → +50	-5 → +50
Mechanical life	operations	≥10 ⁷	≥10 ⁷	≥10 ⁷	≥10 ⁷
Weight	g	62	75	80	77

Principle of operation

NC



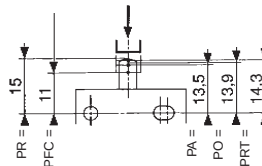
NO



Actuation travel

Vertical attack

Simple plunger

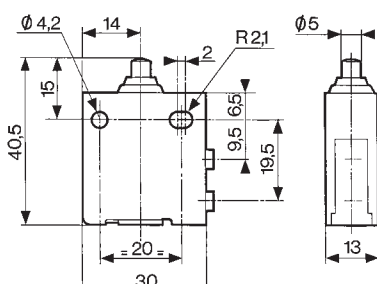


Actuation positions :

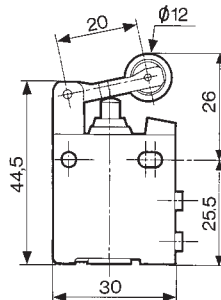
- PA : Operating position (max output kV)
- PFC : End of travel position
- PO : Mid-position closed (no exhaust, no outlet)
- PRT : Release position (max exhaust kV)
- PR : Rest position

Dimensions

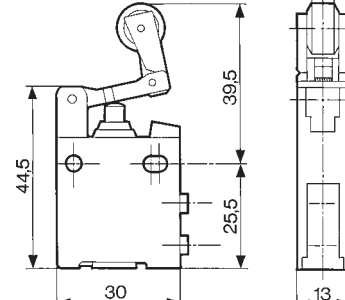
81 921 501



81 921 701 - 81 921 702

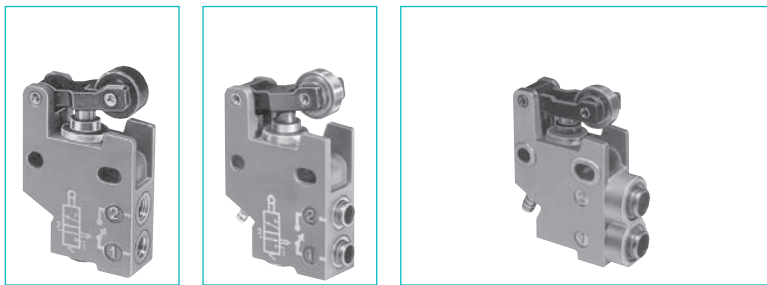


81 921 707

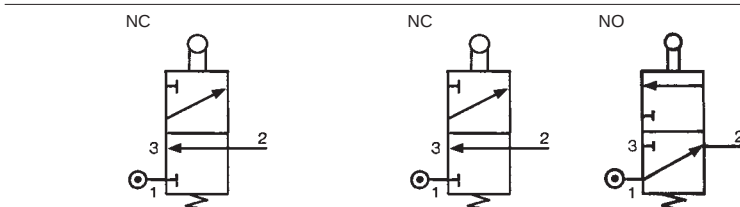


* with barb for tube Ø 2.7 x 4

Material: body zamak

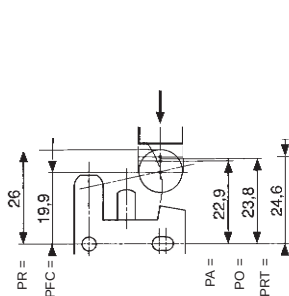


—	—	—	—
81 921 806	—	—	—
—	81 921 714	—	—
—	—	81 921 719	81 921 717
—	—	81 921 911	81 921 912
—	—	81 921 901	81 921 902
Lever with plastic roller	Lever with roller bearing	Lever with plastic roller	Lever with roller bearing



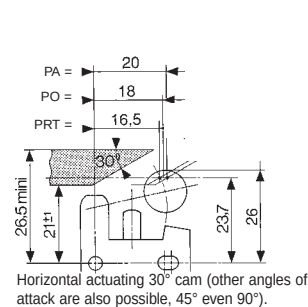
0.1 → 8	0.1 → 8	0.1 → 8	0.1 → 8
2.7	2.7	2.7	2.7
200	200	200	200
18	18	18	18
•	•	•	•
—	—	•	•
-5 → +50	-5 → +50	-5 → +50	-5 → +50
≥10 ⁷	≥10 ⁷	≥10 ⁷	≥10 ⁷
75	80	100	100

With lever

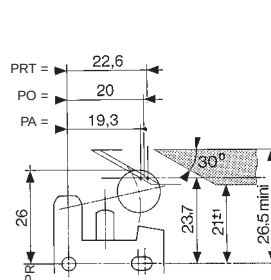


Horizontal actuating 30° cam (other angles of attack are also possible, 45° even 90°).

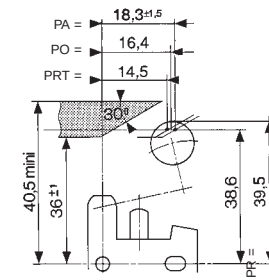
With lever



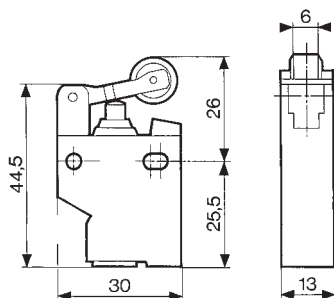
With lever



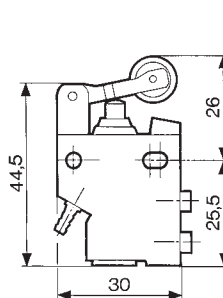
One-way trip lever



81 921 806



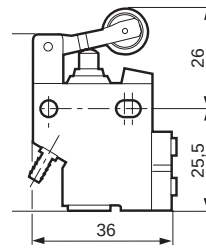
81 921 714



81 921 717 - 81 921 719

81 921 901 - 81 921 902

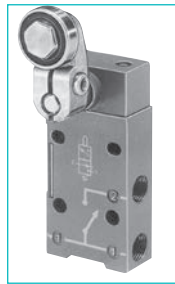
81 921 911 - 81 921 912



Material: body zamak
Other configuration on demand

"Compact" series position detectors

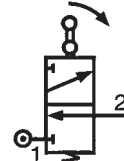
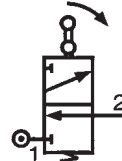
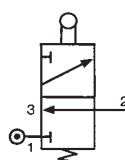
- › 100 % pneumatic
- › All metal



Part numbers

Features	Direct acting 81 922 401 Roller plunger with unthreaded barrel	Rotary actuator 81 922 205 Right-hand rotary head with roller lever (CNOMO)	Rotary actuator 81 922 010 Programmable rotary head wit- hout lever	Rotary actuator 81 922 210 Programmable rotary head wit- hout lever
Version				

Symbol



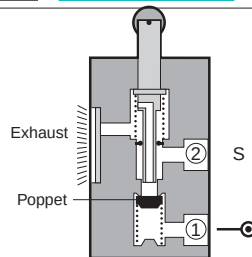
Characteristics

Connection	BSP push-in for semi-rigid tubing (NFE 49100)	mm	—	1/8	—	1/8
Operating pressure	bar	0.1 → 8	0.1 → 8	0.1 → 8	0.1 → 8	0.1 → 8
Bore diameter	mm	3	3	3	3	3
Flow at 6 bars	Nm³/h	200	200	200	200	200
Activation force at 6 bars	daN	2.5	2.5	2.5	2.5	2.5
Circuit function: NC		•	•	•	•	•
Mechanical life	operations	> 10 ⁷	> 10 ⁷	> 10 ⁷	> 10 ⁷	> 10 ⁷
Silenced or connectable (1/8) exhaust		•	•	•	•	•
Operating temperature	°C	-5 → +50	-5 → +50	-5 → +50	-5 → +50	-5 → +50
Weight	g	150	193	175	175	175

Accessories

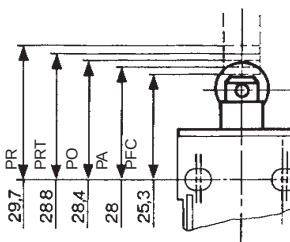
Lever with roller	plastic	79 452 103	—	•	•	•
Lever with roller	bearing	79 452 104	—	•	•	•
Lever with adjustable roller	plastic	79 452 123	—	•	•	•
Lever with adjustable roller	bearing	79 452 124	—	•	•	•
Adjustable steel rod lever		79 452 133	—	•	•	•

Principle of operation



Vertical attack

Detectors with roller plunger with unthreaded barrel.



Actuation positions :

- PA : Operating position (max output kV)
- PFC : End of travel position
- PO : Mid-position closed (no exhaust, no outlet)
- PRT : Release position (max exhaust kV)
- PR : Rest position

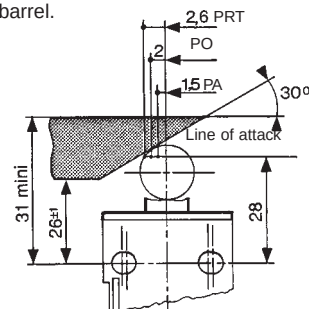
The detectors 81 922 010 and 81 922 210 can operate to both left and right.

Material: body zamak

Other configuration on demand

Horizontal attack

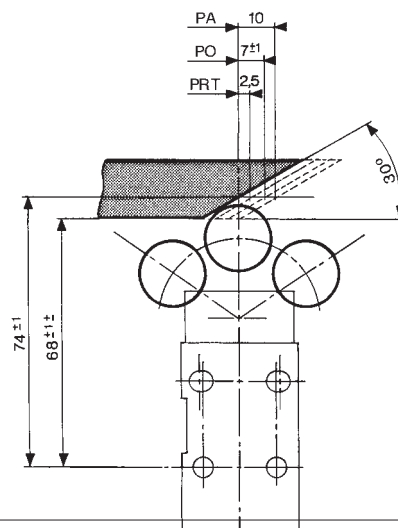
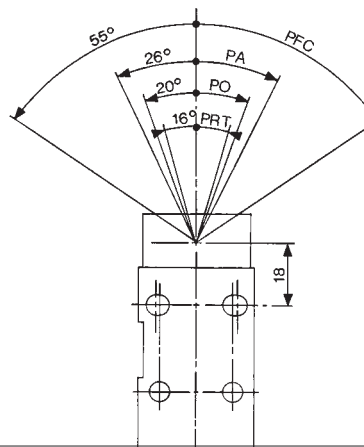
Detectors with roller plunger with unthreaded barrel.



Rotary actuator

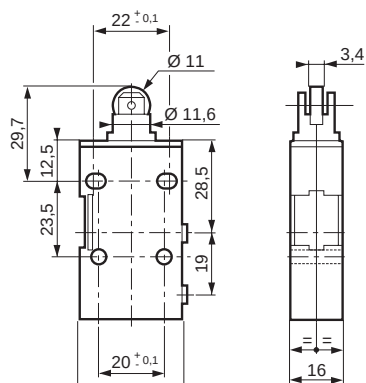
Detectors with levers

81 922 - 81 922 0 - 81 922 2



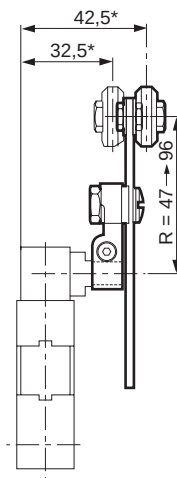
Dimensions

81 922 401

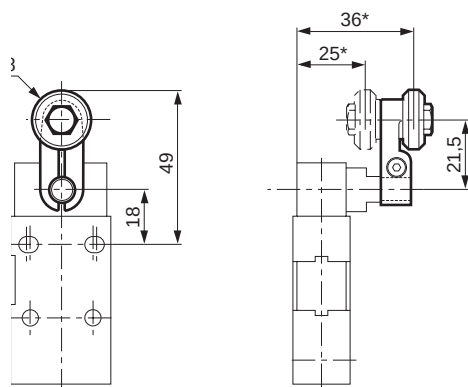
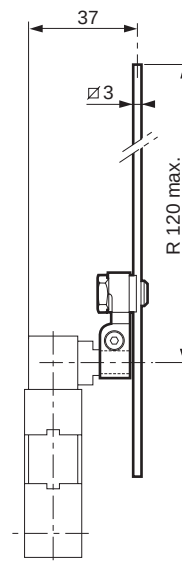


81 922 205 - 81 922 0 - 81 922 2
79 452 103 - 79 452 104

79 452 123 - 79 452 124

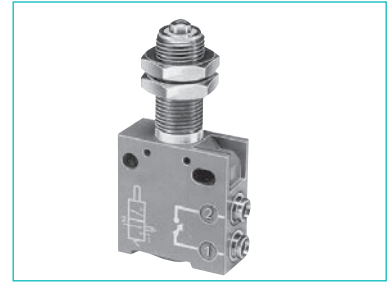
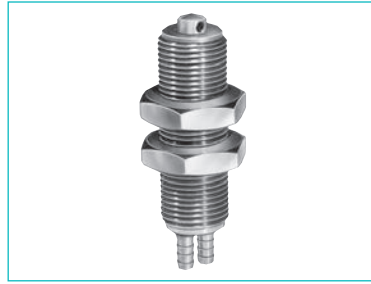


79 452 133



"Adjustable stop" series position detectors

- › 100 % pneumatic
- › All metal



Part numbers

Push-in connection for semi-rigid tubing (NFE 49100)

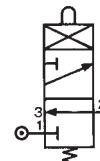
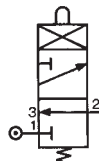
81 923 001

Barb for tube 2.7 x 4

81 921 505

Push-in connector for tube Ø 4

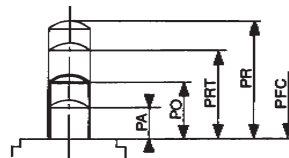
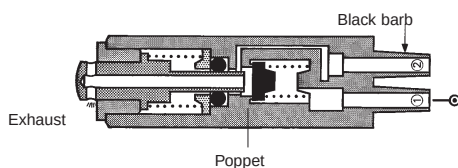
Symbol



Characteristics

Operating pressure	bar	0,1 → 8	0,1 → 8
Orifice diameter	mm	2	2,7
Flow at 6 bars	NI/min	130	200
Actuation force at 6 bars	N	16	21
Circuit function: NC		•	•
Max. load: without shock	daN	1000	1000
Will stop a 63 mm Ø cylinder : 6 bar supply		•	•
Operating temperature	°C	-5 → +50	-5 → +50
Mechanical life	operations	≥10 ⁷	≥10 ⁷
Weight	g	27	90
Actuation positions			
PA : Operating position (max output kV)	mm	0,4	0,7
PFC : End of travel position	mm	0	0
PO : Mid-point closed (no exhaust, no outlet)	mm	0,9	1
PRT : Release position (max. exhaust kV)	mm	1,5	1,5
PR : Rest position	mm	3	3

Principle of operation



Versions	PO	PA	PFC	PRT	PR
With barb	0.9	0.4	0	1.5	3
Ø 4	1	0.7	0	1.5	3

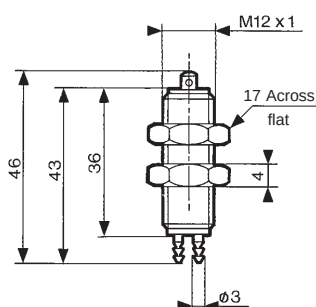
Values in mm

Actuation positions :

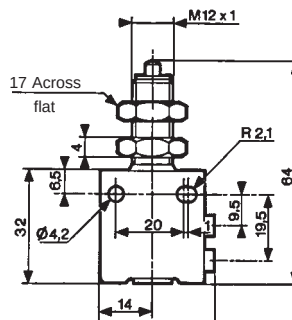
- PA : Operating position (max output kV)
- PFC : End of travel position
- PO : Mid-position closed
(no exhaust, no outlet)
- PRT : Release position
(max exhaust kV)
- PR : Rest position

Dimensions

81 923 001

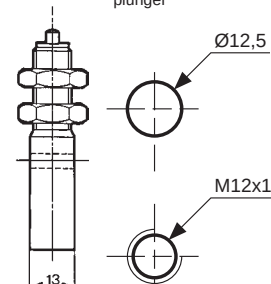


81 921 505



Fixing

This should be as close as possible to the plunger



Material: body zamak