

POSITION DETECTORS

Pressure decay sensor

100 % pneumatic

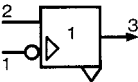
Also available in ATEX version for use in potentially explosive atmospheres in accordance with 94/9/EC Directive



Pressure decay sensor

81 504 025

Symbol

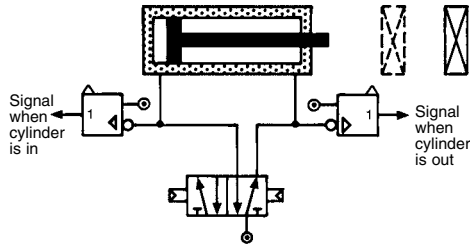


Characteristics

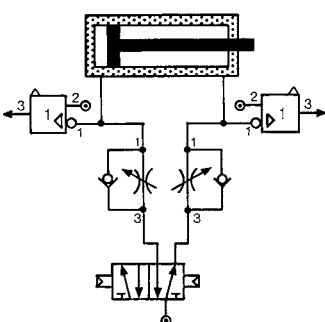
Operating pressure	bar	2 → 8
Flow at 6 bars	NI/min	200
Tripping point with 6 bar supply	b	0.3
Connection		Sub-base page 54-55
Operating temperature	°C	-5 → +50
Mechanical life	operations	≥10 ⁷
Weight	g	25

Connections

Without flow restrictor



With flow restrictor

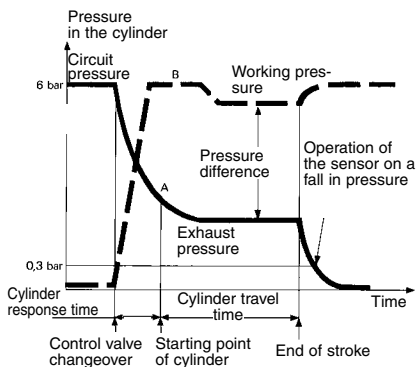


Principle of operation

Fitted in-line between the cylinder and the control valve, the sensor will give an output when the pressure in this line is exhausted and the cylinder is at end of stroke.

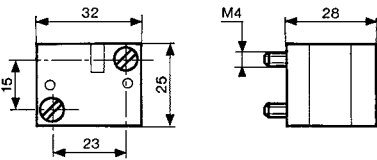
For the correct usage of sensors on a falling pressure, it is recommended that the practical cylinder load is limited to 60% of the theoretical force.

Evolution of pressure within a double-acting cylinder



Dimensions

81 504 025

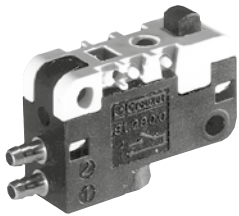


ATEX version products are available in the following catalogues: Pneumatic products for explosive atmospheres or on our website www.crouzet.com

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

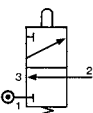
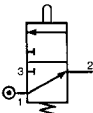
NO

NC

81 290 501

81 290 001

Symbol

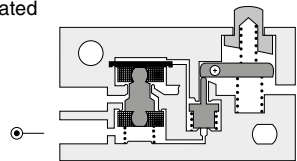


Characteristics

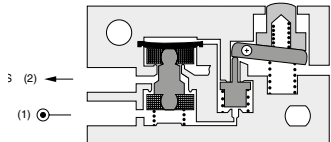
Orifice diameter	mm	2	2
Operating pressure	bar	3 → 8	3 → 8
Flow at 4 bars	NI/min	100	100
Activation force at 6 bars	N	< 0,5	< 0,5
Permissible fluids (air / inert gas)		●	●
Max/min of fluid temperatures	°C	-10 → +50	-10 → +50
operating	°C	-10 → +60	-10 → +60
storage	°C	-40 → +70	-40 → +70
Mechanical life 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



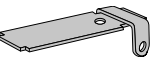
Activated



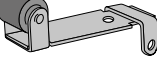
Operation accessories

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

161 A
flat R 25.4
70 507 524

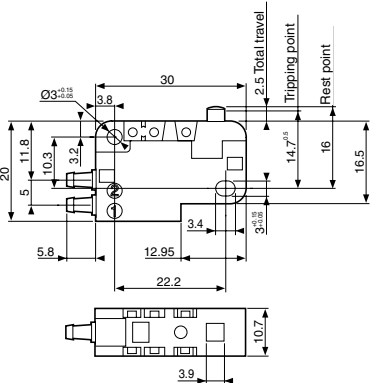


161 E
with roller R 24.1
70 507 529



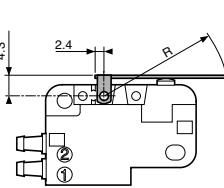
Dimensions

DIN 41365 Form A



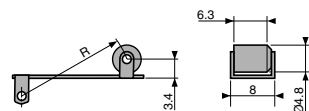
161 A

R 25.4 ±0,2



161 E

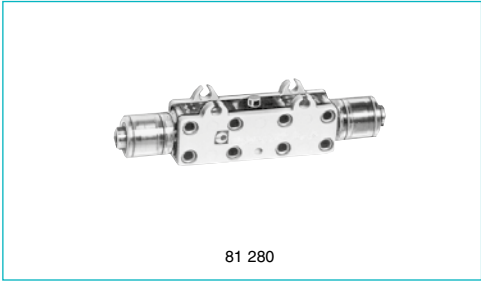
R 24.1 ±0,2



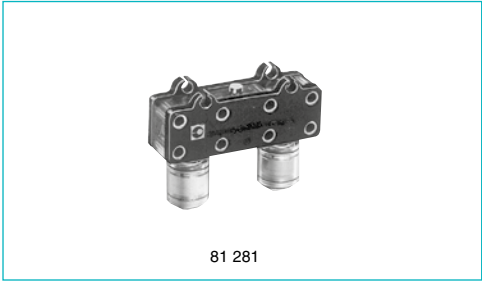
ATEX version products are available in the following catalogues: Pneumatic products for explosive atmospheres or on our website www.crouzet.com

“Microvalve” series position detectors

› 100 % pneumatic



81 280

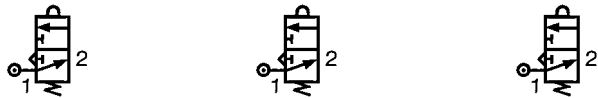


81 281

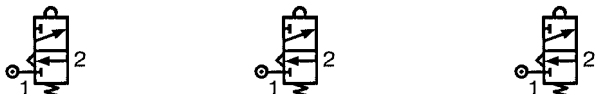
Version	NO	81 280 010	81 281 010	—
	NC	81 280 510	81 281 510	81 283 510
Features		Horizontal output	Vertical output	Rear connection by screw

Symbol

NO



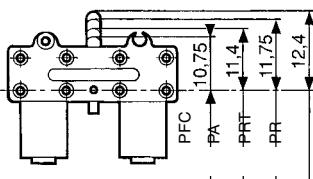
NC



Characteristics

Operating pressure	bar	2 → 8	2 → 8	2 → 8
Orifice diameter	mm	2.7	2.7	
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

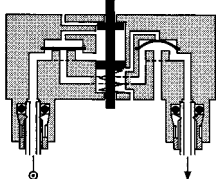
Principle of operation



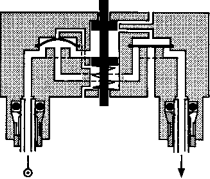
Actuation positions :

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

NC

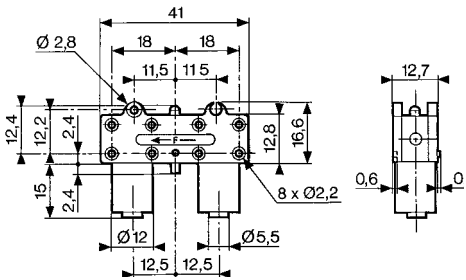


NO

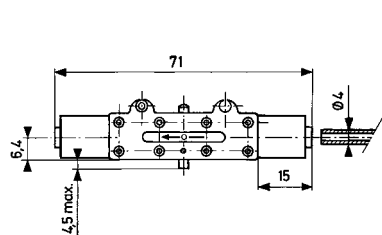


Dimensions

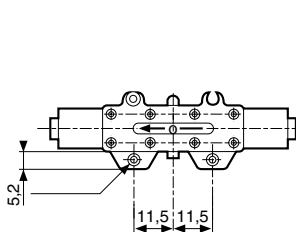
81 281 010 - 81 281 510



81 280 010 - 81 280 510

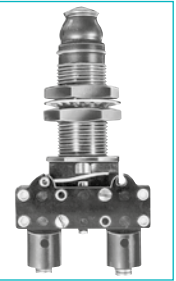
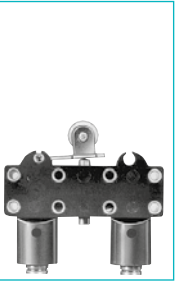
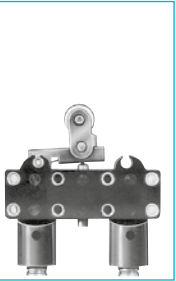


81 283 510



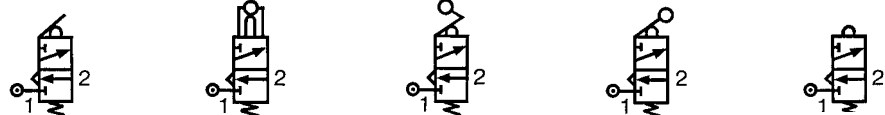
“Microvalve” series position detectors

› 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

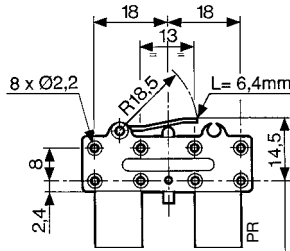


Characteristics

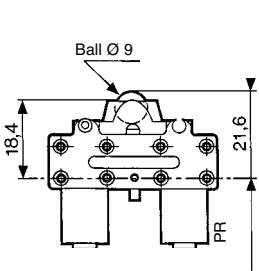
Operating pressure	bar	2 → 8	2 → 8	2 → 8	2 → 8	2 → 8
Orifice diameter	mm	2.7	2.7	2.7	2.7	2.7
Flow at 6 bars	NI/min	200	200	200	200	200
Operating force at 6 bars	N	15	15	15	15	25
Effective travel	mm	1	1	1	1	1
Push-in connection for semi-rigid tubing (NFE 49100)	mm	Ø 4	Ø 4	Ø 4	Ø 4	Ø 4
Operating temperature	°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

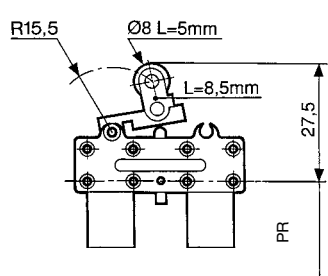
81 281 502



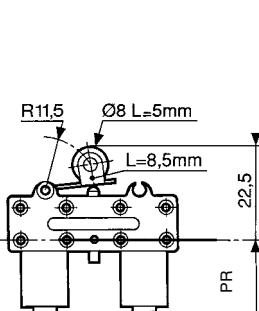
81 281 504



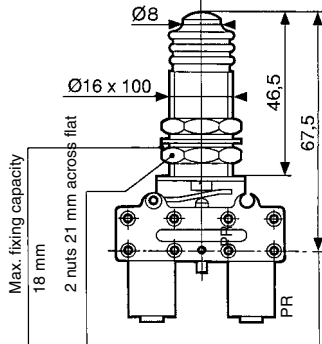
81 281 508



81 281 509



81 737 501



Actuation positions :

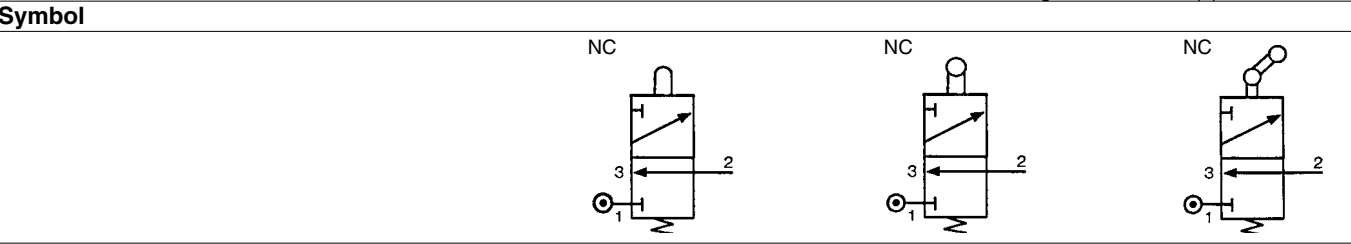
PR : Rest position

"Miniature" series position detectors

- 100 % pneumatic
- All metal

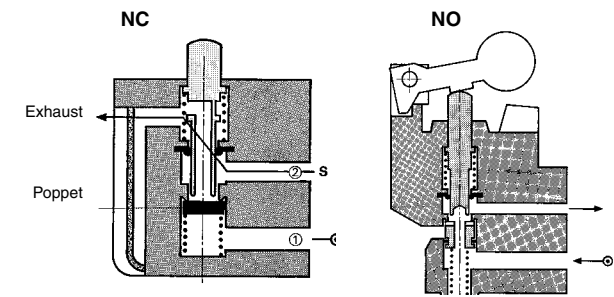


Part numbers					
Version	Push-in connection for semi-rigid tubing (NFE 49100)				
NC	Ø 4 silenced exhaust	81 921 501	81 921 701	81 921 702	81 921 707
	M5 connectable exhaust	—	—	—	—
	Ø 4 connectable exhaust *	—	—	—	—
	Ø 6 connectable exhaust *	—	—	—	—
NO	Ø 4 silenced exhaust	—	—	—	—
	Ø 6 silenced exhaust	—	—	—	—
Control		Simple plunger	Lever with plastic roller	Lever with roller bearing	Lever with one-way trip plastic roller

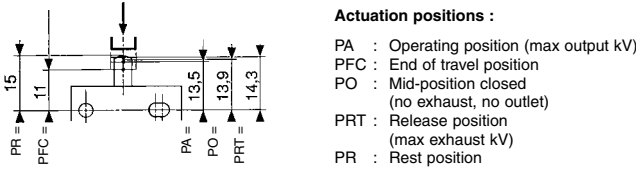


Characteristics					
Operating pressure	bar	0.1 → 8	0.1 → 8	0.1 → 8	0.1 → 8
Orifice diameter	mm	2.7	2.7	2.7	2.7
Flow at 6 bars	NI/min	200	200	200	200
Actuation force at 6 bars	N	18	18	18	18
Circuit function : NC		•	•	•	•
Circuit function: NO		—	—	—	—
Connectable exhaust		—	—	—	—
Operating temperature	°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

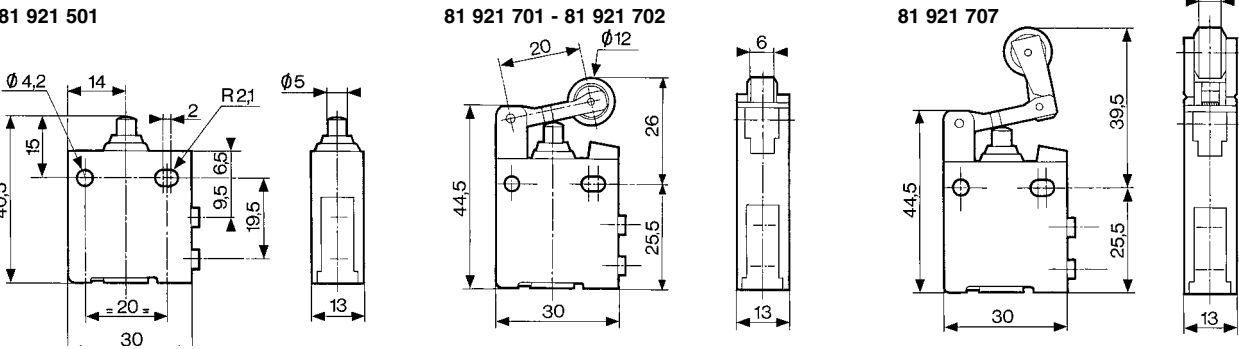
Principle of operation



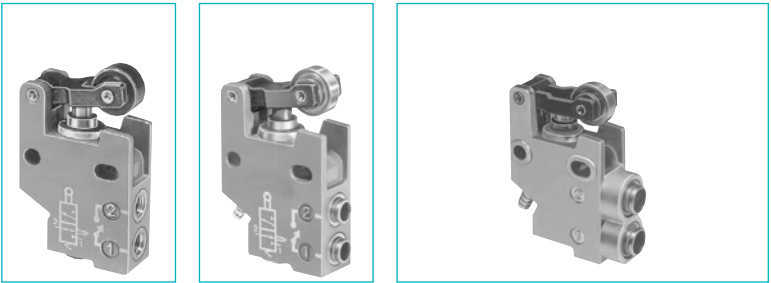
Actuation travel
Vertical attack
Simple plunger



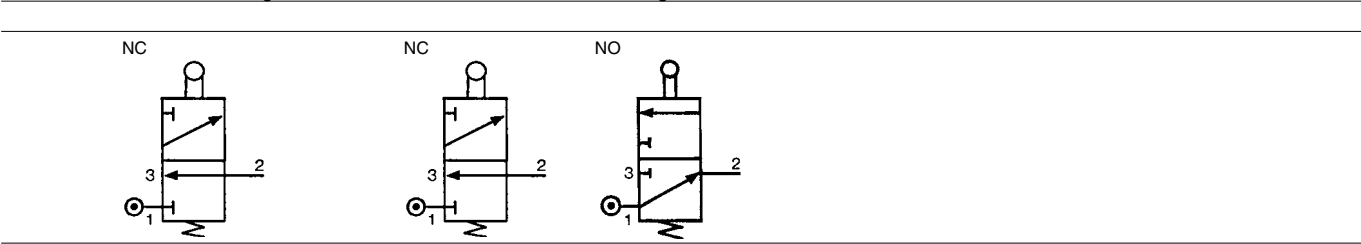
Dimensions



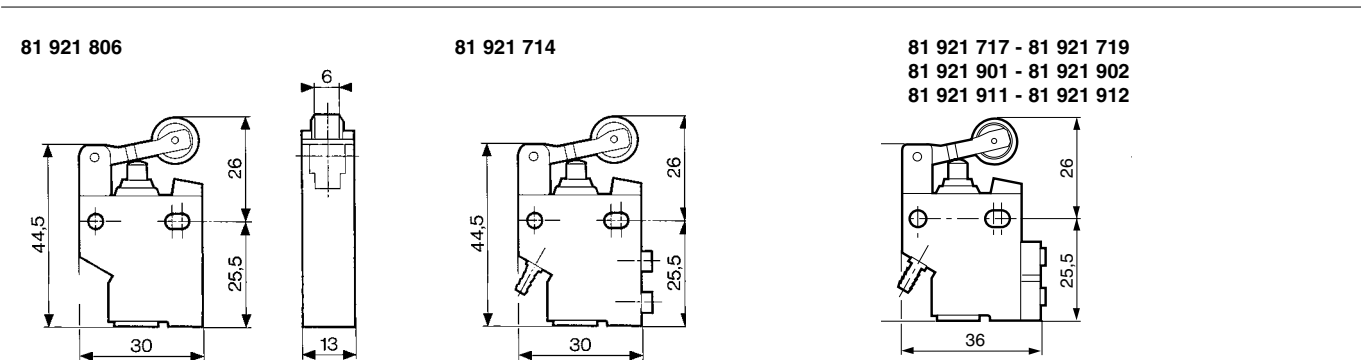
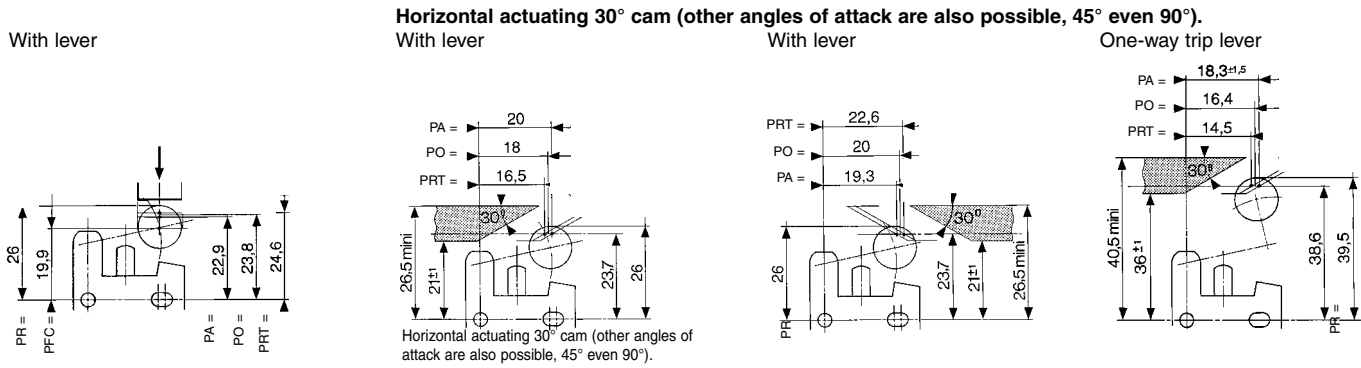
* with barb for tube Ø 2.7 x 4
Material: body zamak



—	—	—	—
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



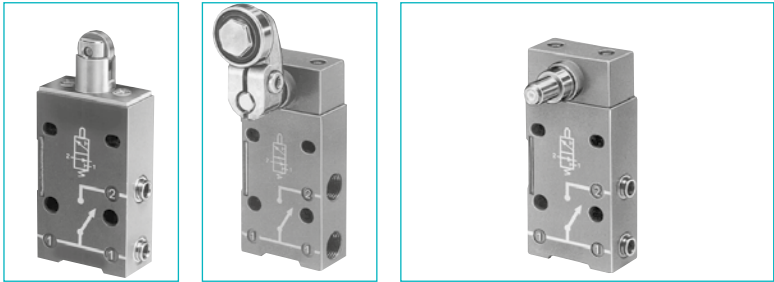
0.1 → 8	0.1 → 8	0.1 → 8	0.1 → 8
2.7	2.7	2.7	2.7
200	200	200	200
18	18	18	18
•	•	•	•
—	—	•	•
-5 → +50	-5 → +50	-5 → +50	-5 → +50
≥10 ⁷	≥10 ⁷	≥10 ⁷	≥10 ⁷
75	80	100	100



Material: body zamak
Other configuration on demand

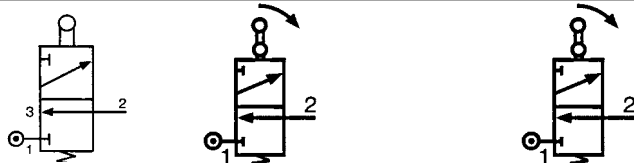
"Compact" series position detectors

- 100 % pneumatic
- All metal



Part numbers				
Features	Direct acting 81 922 401	Rotary actuator 81 922 205	Rotary actuator 81 922 010	Rotary actuator 81 922 210
Version	Roller plunger with unthreaded barrel	Right-hand rotary head with roller lever (CNOMO)	Programmable rotary head without lever	Programmable rotary head without lever

Symbol



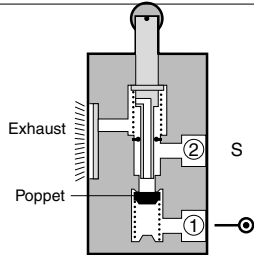
Characteristics

Connection	BSP push-in for semi-rigid tubing (NFE 49100)	mm	Ø 4	1/8	Ø 4	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

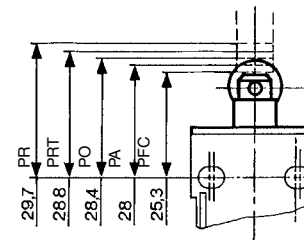
Lever with roller	plastic	79 452 103	—	•	•	•
Lever with adjustable bearing	bearing	79 452 104	—	•	•	•
Lever with adjustable plastic roller	plastic	79 452 123	—	•	•	•
Lever with adjustable bearing	bearing	79 452 124	—	•	•	•
Adjustable steel rod lever	—	79 452 133	—	•	•	•

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

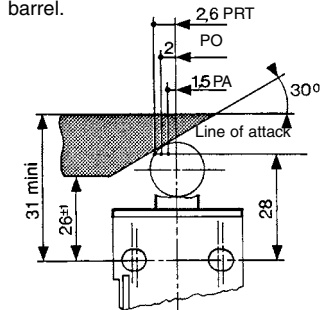
The detectors 81 922 010 and 81 922 210 can operate to both left and right.

Material: body zamak

Other configuration on demand

Horizontal attack

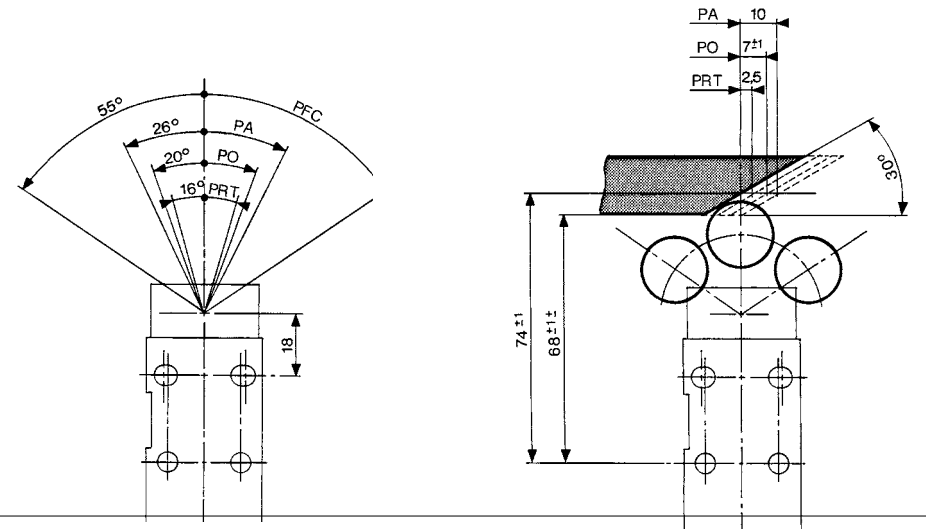
Detectors with roller plunger with unthreaded barrel.



Rotary actuator

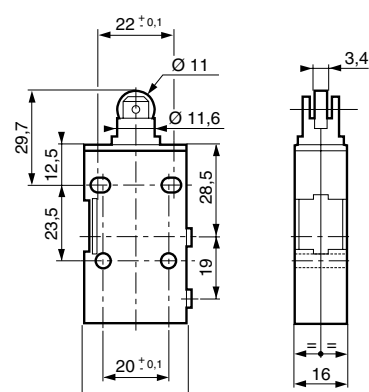
Detectors with levers

81 922 - 81 922 0 - 81 922 2



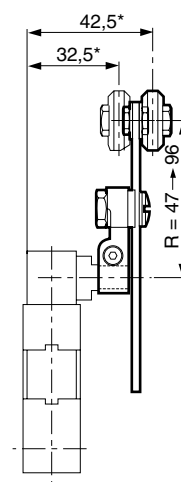
Dimensions

81 922 401

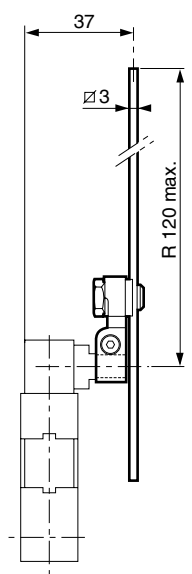


81 922 205 - 81 922 0 - 81 922 2
79 452 103 - 79 452 104

79 452 123 - 79 452 124

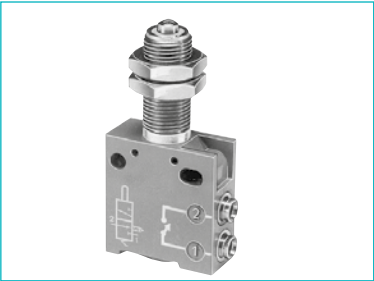


79 452 133



"Adjustable stop" series position detectors

- › 100 % pneumatic
- › All metal

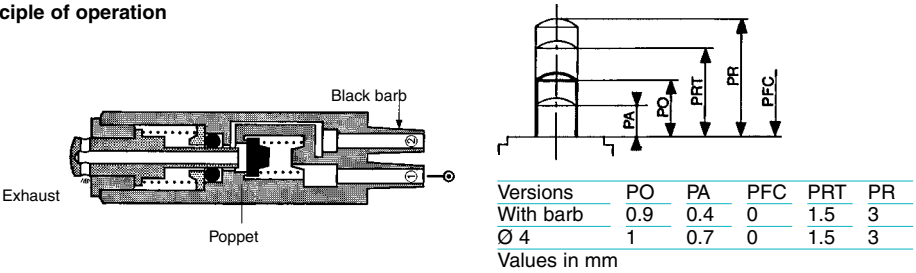


Part numbers		81 923 001	81 921 505
Push-in connection for semi-rigid tubing (NFE 49100)		Barb for tube 2.7 x 4	Push-in connector for tube Ø 4
Symbol			

Characteristics

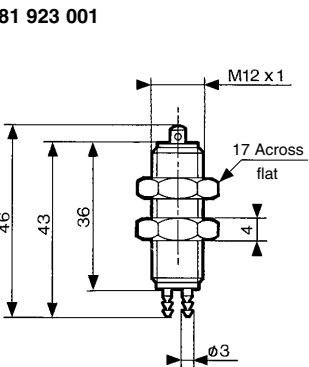
Operating pressure	bar	0,1 → 8	0,1 → 8
Orifice diameter	mm	2	2,7
Flow at 6 bars	NI/min	130	200
Actuation force at 6 bars	N	16	21
Circuit function: NC		•	•
Max. load: without shock	daN	1000	1000
Will stop a 63 mm Ø cylinder : 6 bar supply		•	•
Operating temperature	°C	-5 → +50	-5 → +50
Mechanical life	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

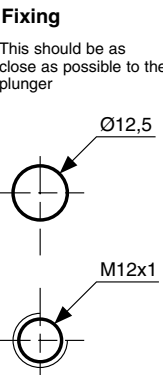
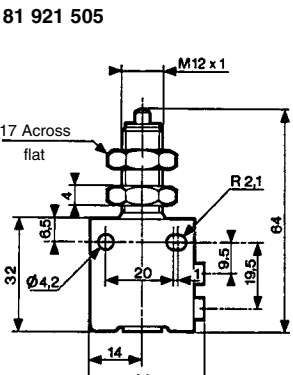


Actuation positions :
PA : Operating position (max output kV)
PFC : End of travel position
PO : Mid-position closed (no exhaust, no outlet)
PRT : Release position (max exhaust kV)
PR : Rest position

Dimensions

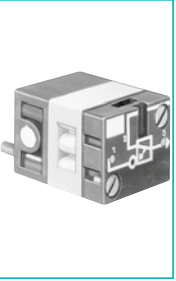
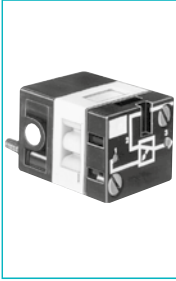


Material: body zamak



Position detectors use with relay

- › 100 % pneumatic
- › All metal
- › Low force operation <N 1
- › Very low force Version 30 mN

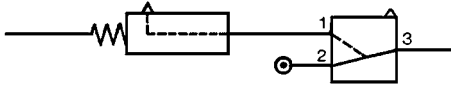


References		81 512 201	81 512 401	81 502 435	81 505 435
Version		with ball	with wire	Positive	Negative
Symbole					

Characteristics

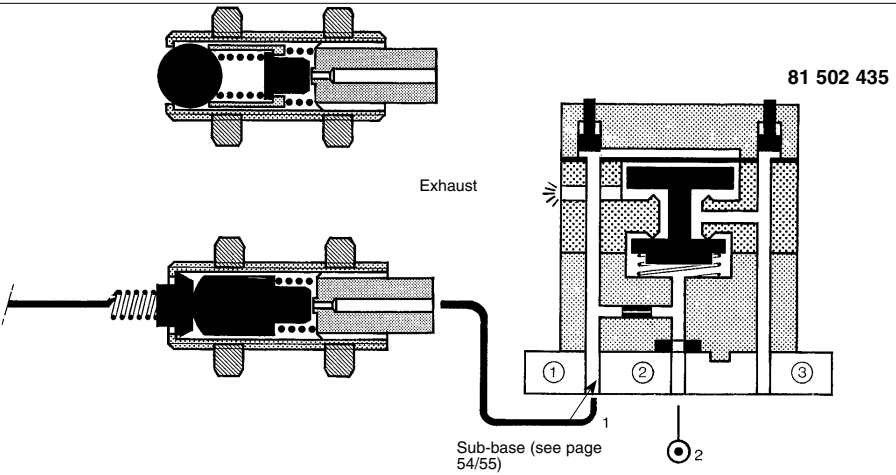
Push-in connection for semi-rigid tubing (NFE 49100)	mm	Ø 4	Ø 4		
Life at 6 bars	operations	10 ⁷	10 ⁷		
Actuation force at 6 bars	N	0,8	0,025		
Fluid used: that delivered by the leak sensor relay..		•	•		
Operating temperature	°C	-5 → +50	-5 → +50	-5 → +50	-5 → +50
Weight	g	24,5	23,5	35	35
Operating pressure	bar			2 → 8	2 → 8
Sensor consumption for relay supply at 6 bar	NI/			5	5
The distance between relay and sensor must be less than 15 m for a tube Ø 2.7 x 4 mm				•	•
Connection - sub-base see pages 54/55				•	•
Mechanical life	operations			≥10 ⁷	≥10 ⁷

Connection

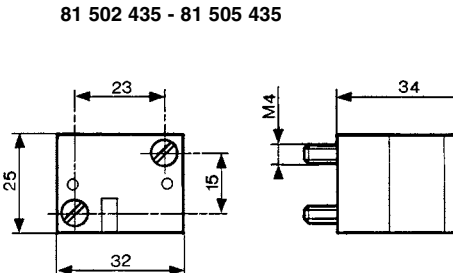
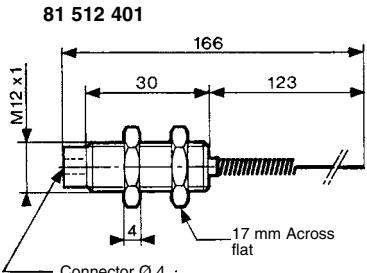
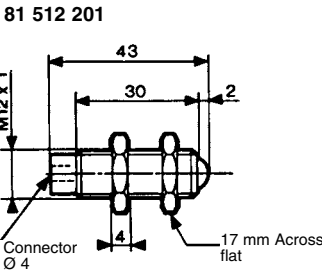


Principle of operation

Supplied at industrial pressure, the relay produces a permanent bleed at its input port. A sensor shutting off this bleed causes the relay to switch.



Dimensions



Material: brass

Amplifier with intégral régulator, positive output

- › Setting Flow
- › Fixing rail 35mm wide



Part numbers

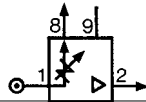
Amplifiers with integral regulator

81 510 001

Version

Positive output

Symbol



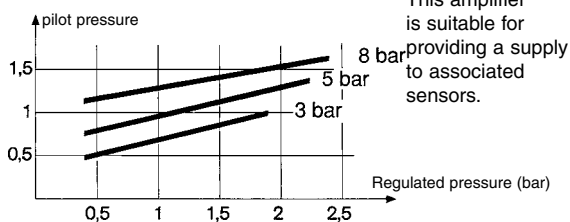
Characteristics

Pressure to make	mb	0.5 → 1.5	—	—
Reduced pressure supplied at port 8	bar	0.5 → 2.5	—	—
Flow through port 8	Nm³/h	0.1 → 2.5	—	—
Consumption of amplifier only	NI/h	100 → 200	—	—
Permissible overload for 1 hour	mb	300	—	—
Operating temperature	°C	-5 → +50	-5 → +50	-5 → +50
Mechanical life	operations	3 x 10 ⁶	3 x 10 ⁶	3 x 10 ⁶
Weight	g	380	—	—
Detectors (see page 28)		Proximity Ø 12	Gap Ø 18	Proximity Ø 12
Nominal range	mm	81 371 401	81 372 201	81 372 401
Min. total consumption for detection (0.5 b regulated pressure)		8	18	100
Max. total consumption for short response time (2.5 b regulated pressure)	NI/h	880	140	—
Min. detectable	NI/h	2750	400	920
dimensions nominal sensing distance	mm	Ø 3	Ø 2 - Ø 1.5	Ø 7 - Ø 6.5
Max. frequency of use	2	2	—	—
Force exerted by the jet on the parts to be detected	Hz	5	5	5
	N	0.02 → 0.7	0.01 → 0.03	0.1

Connection

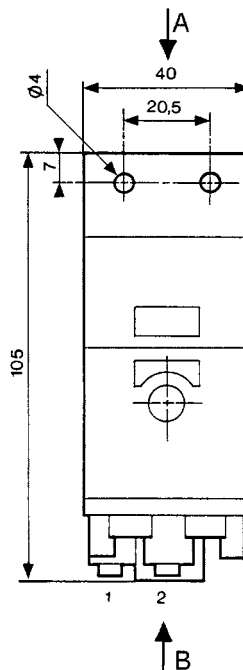
To use with detectors page 32

Principle of operation

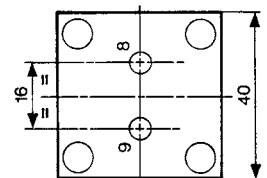


Dimensions

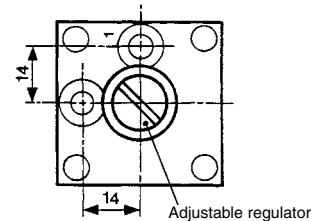
Push-in connection for semi-rigid tubing Ø 4 mm (NFE 49100)



Viewed from B



Viewed from A





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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