## Digital position indicator Type 2040

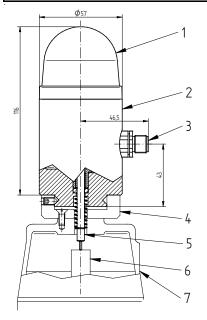


# Optical and electronic position indicator for mounting on pneumatic valves with linear or part-turn actuator.

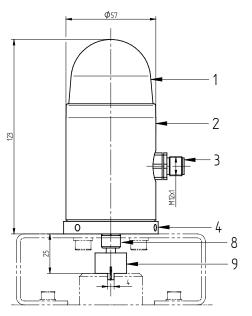
- Compact design
- Visual display of valve position
- Valve position output via switching contacts
- Error message output
- Display and output of maintenance intervals
- Direct mounting on valve actuator
- Self-teaching adaptation to valve actuator
- Configuration and diagnostics using "DeviceConfig"
  PC software (version 7.02.00 or higher)
- Schutzart: IP 65

### **Technical data**

Supply voltage	24V DC (±10%)	
Current consumption	max. 100mA	
Current capacity of switching	max. 100mA	
outputs		
Temperature range	-4 to +167°F	
Configuration	Using "DeviceConfig" PC software	
Adaptation	Self-teaching (semi-automatic)	
Stroke range	0,25 - 1,14 inch (6 – 29 mm)	
Switching hysteresis	approx 2,5%	
Mounting on control valve	By standardised mounting kits	
Body material	Aluminium, anodized	
Material of the dome	Polycarbonate	
Protection to DIN 40050	IP65	



1	Dome
2	Position indicator
3	Connection (M12x1)
4	Mounting kit
5	Sensing pin
6	Stop
7	Actuator
8	Rotation angle indicator
9	Coupling



Version for linear drives

Version for part-turn actuators

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### Description

The digital position indicator type 2040 displays the current position of the valve (open or closed) and outputs it via two switching contacts (NPN).

A sensing pin records the stroke of the actuator, which is converted into an analogue signal. The electronic unit evaluates the signal, outputs a visual signal and switches the relevant contact.

The position indicator also indicates various errors, such as sticking of the valve. Errors are indicated by default by a red lamp and are additionally outputted by way of a switching contact (NPN).

Various maintenance intervals can also be set. When a scheduled maintenance time is reached a visual indicator is displayed and the error signalling output (NPN switch) emits a recurring pulsating signal (1Hz).

The adaptation to the valve is semi-automatic, by simply operating the actuator in calibration mode.

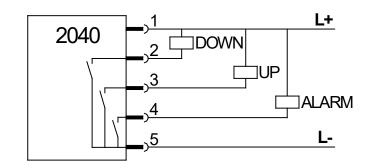
All settings can be custom-configured in the "DeviceConfig" program.

#### **Connection diagram**

In the event of inductive loads occurring, install a free-wheeling diode close to the inductive load (e.g. 1N4007). For digital processing of the switching outputs use an operating resistor.

The switching outputs can be reversed in the communications software.

Their maximum current capacity is 100 mA, so relays can also be operated directly for example.



Top view of plug	Pin on plug	Function
2	Pin 1	Supply voltage +24V
	Pin 2	NPN_DOWN
<b>3</b> (• • <sup>5</sup> •)1	Pin 3	NPN_UP
	Pin 4	NPN_ERROR
4	Pin 5	Supply voltage -

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