

Smart Positioner with HART Protocol PEK151



Device features Smart

- Auto-start with self-calibration
- Self-diagnostics, status and diagnostic messages
- Easy operation with four keys
- Full text graphical LCD

With communication

- HART protocol
- Configuration by means of local keys, hand-held terminal(HART), PC

Without communication

- Input signal 4 to 20 mA

Common Features

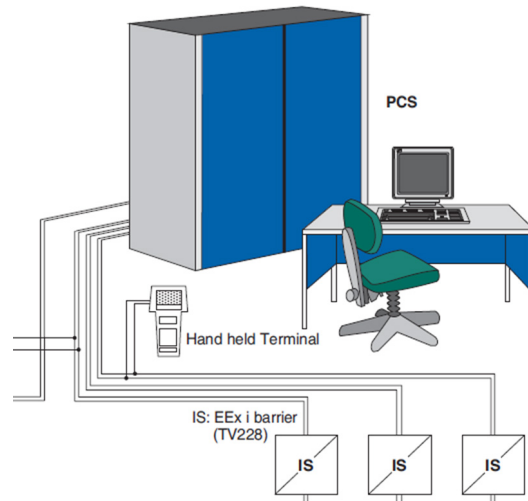
- Version: Single Acting
- Input/Communication: HART Communication (4-20 mA)
- Additional Inputs/Outputs: Prepared for additional Input/Outputs
- Built-In Limit Switch : Without Built-In Limit Switch
- Cable Entry: M20 x 1.5 without Cable Gland
- Attachment Kit: Order as Auxiliary
- Manifold: Pneumatic connection 1/4 -18 NPT made of an additional manifold
- Options: LCD with Menu-Language in English

Specifications

Positioner	
Travel range	Adjustable within the nominal travel, max. ratio 1 : 5
Reference variable	Signal range 4 to 20 mA, 2-wire unit, reverse polarity protection, min. span 4 mA, static destruction limit 40 V, internal current limit 60 mA
Input	24 V DC , Reverse polarity protection
Minimum current	3.6 mA for display, 3.8 mA for operation
Supply air	Supply pressure from 1.4 to 6 bar (20 to 90 psi)
Signal pressure (output)	0 bar up to supply pressure
Characteristic, user-defined adjustable over operating software	Linear/equal percentage/reverse equal percentage
Hysteresis	≤ 3 %
Sensitivity	≤ 1 %
Transit time	Separately adjustable up to 240 seconds for supply air and exhaust air
Direction of action	Reversible
Air consumption, steady state	Independent from supply pressure
Permissible ambient temperature	-40 to +80 °C
Degree of protection	IP 65
Electromagnetic compatability	Complying with EN 61000-6-2, EN 61000-6-
Explosion protection	EEx d IIC T6 acc. to FM/CSA II 2 G EEx d IIC T6 / II 2 G EEx de IIC T6 acc. to ATEX

Optional analog position transmitter	Two-wire transmitter
Supply voltage	11 to 35 V DC, reverse polarity protection, static destruction limit 45 V
Output signal	4 to 20 mA
Direction of action	Reversible
Operating range	-1.25 to 103 % of the travel range, corresponding to 3.8 to 20.5 mA, optionally also for fault alarm over 2.4 or 21.6 mA acc. to NAMUR Recommendation NE 43
Characteristic	Linear
Hysteresis and HF influence	Same as positioner
Other influences	Same as positioner
Fault alarm	Can be issued with current signal 2.4 mA or 21.6 mA
Materials	
Housing: Die-cast aluminum	
Weight	Approx. 2.5 kg
Communication (local)	PEK interface
Communication (HART)	HART® field communication protocol
Software requirements (HART)	PEK-151 can work with PEK handheld communicator. For PC: PEK configurator

System Configuration



Electrical Connection

How to connect a Hart modem to a charger and modem Hart is as follows.

Be careful when connecting the Hart Module in this way. It is also necessary to use the configurator device of the Pars Electronic Company, shown below, in this process.

