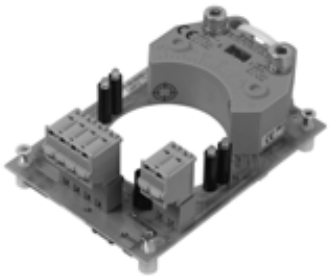


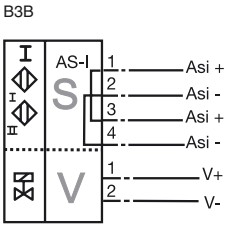
Model Number

PL1-F25-B3B-S

Features

- **For installation in housing**
- **Removable screw terminals**
- **PL1... with valve connection**
- **4-way LED indicator**
- **Satisfies machinery directive**
- **Lead breakage and short-circuit monitoring of the valve**
- **After an AS-interface communication error the valve voltage falls**

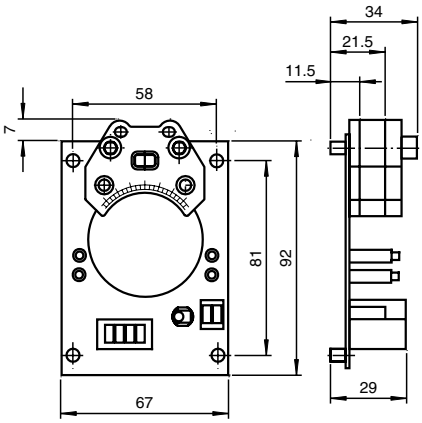
Connection



Accessories

BT32
Activator for F25 series
BT32XS
Activator for F25 series
BT32XAS
Activator for F25 series
BT33
Activator for F25 series
BT34
Activator for F25 series

Dimensions



Technical Data

General specifications		
Switching element function		AS-Interface
Rated operating distance	s_n	3 mm
Installation		embeddable mountable
Output polarity		AS-Interface
Assured operating distance	s_a	0 ... 2.43 mm
Reduction factor r_{Al}		0.5
Reduction factor r_{303}		1
Reduction factor r_{St37}		1.2
Slave type		A/B slave
AS-Interface specification		V3.0
Required master specification		≥ V2.1
Nominal ratings		
Operating voltage	U_B	26.5 ... 31.9 V via AS-Interface network
Switching frequency	f	0 ... 100 Hz
Reverse polarity protected		reverse polarity protected
Operating current	I_L	100 mA
Indicators/operating means		
LED PWR		AS-Interface voltage; LED green
LED IN		switching state (input); LED yellow
LED OUT		binary LED yellow/red yellow: switching state red: lead breakage/short-circuit
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)
Mechanical specifications		
Connection (system side)		screw terminals
Core cross-section (system side)		up to 2.5 mm^2
Connection (valve side)		screw terminals
Core cross-section (valve side)		up to 2.5 mm^2
Housing material		PBT
Sensing face		PBT
Protection degree		IP00
Note		The valve voltage is limitedof max. 26.4 V; valve power max. 2.1 W
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007 EN 50295:1999

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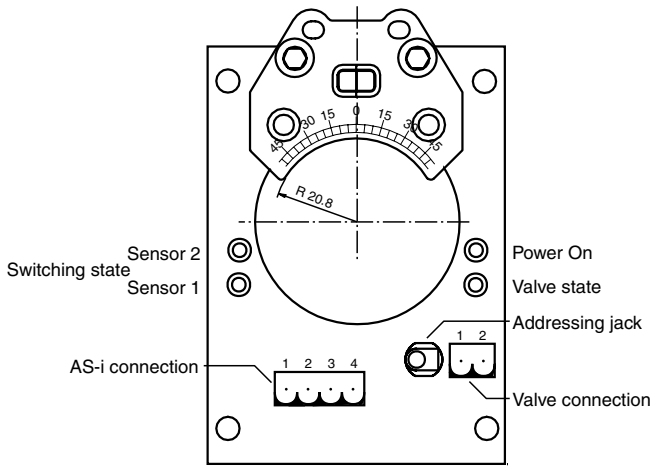
Supplementary information



Programming instructions

Address	00 preset, alterable via Busmaster or programming units
IO-code	D
ID-code	A
ID1-code	7
ID2-code	E

Data bit

Bit	Function
D0	valve status (0 = valve OFF; 1 = valve ON)
D1	valve fault [1] (0 = lead breakage/short circuit; 1 = no fault)
D2	switch output sensor 1 (0 = damped; 1 = undamped)
D3	switch output sensor 2 (0 = damped; 1 = undamped)

Parameterbit

Bit	Function
P0	not used
P1	not used
P2	not used
P3	not used

[1] Verification only with actuated valve (D0 = 1)

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Fixing devices are being used everywhere in great number for product flow monitoring. In the majority of applications, these fixing devices are controlled pneumatically through a shaft rotation of 90° whose end position is typically reported back to the control system.

Standard housings as described in VDI/VDE 3845 (connection points, actuator, drive mechanism-actuator accessories) containing feedback proximity switches are used in most cases. The drive mechanisms are usually controlled by a control valve.

This printed circuit board was developed for use in just such standard housings. It includes connection technology (2 x AS-i and control valve), the NCN3-F25 double sensor and AS-i switching technology.

Proximity switch states, the control command for the pilot valve and electrical power can be transferred over the AS-i lead (2 inputs, 1 output).

A socket is provided for address programming. This means it is not necessary to form a loop with the AS-i line. A break in the valve cable is detected when this valve is activated and is reported back to the control system via the AS-i.

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