Smart Valve Monitor

Type 3738 Electronic Limit Switch



- Automation of on/off valves
- Compact attachment according to VDI/VDE 3845 with integrated air lines or according to NAMUR
- Intrinsically safe
- Wear-free, contactless position sensing
- Self-calibrating limit contacts
- Integrated diagnostic functions
- Use in safety instrumented systems





Technical data

	Type 3738-20 NAMUR contacts according to EN 60947-5-6	Type 3738-50 FOUNDATION™ fieldbus communication Input and output blocks: 5x Digital Input, 1x Analog Input, 5x Digital Output
Power supply	Supplied by NAMUR contact	Supplied over FOUNDATION™ fieldbus
Permissible ambient temperature	-25 to 80 °C (integrated solenoid valve) -40 to 80 °C (external solenoid valve)	
Position sensing	Contactless magnetoresistive sensor	
Permissible range of rotation	Min.: 0 to 30°, max.: 0 to 170°	
Degree of protection	IP 66	
Safety approval	TÜV/IEC 61508, can be used up to SIL 2 in single-channel version (up to SIL 3 in redundant version)	
Explosion protection	Operation with external solenoid valve: Ex e · Operation with integrated solenoid valve: Ex ia	
Operation	Configuration using rotary pushbutton	
Attachment	VDI/VDE 3845, level 2, any mounting position	

Version with integrated solenoid valve		
Version	3/2-way or 5/2-way function (using a molded seal)	
K _{vs}	0.32	
Supply air	2.4 to 6 bar	
Service life	1,000,000 switching cycles	
Nominal voltage	24 V DC	

Version with external solenoid valve

Observe manufacturer's specifications for the solenoid valve used Maximum permissible switching capacity of 6 V DC, max. 18 mW

Functions

- Automatic initialization for simple start-up
- Solenoid valve status indicated by LED
- Advanced partial stroke test (PST) to verify the operability of the on/off valve
- Rotary motion counter, temperature indication, operating hours counter, transit time measurement (increasing/decreasing)

