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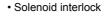
SCHMERSAL

Datasheet - AZM 170 BZ ST-AS RP

AS interface safety at work / Safety switchgear / Solenoid interlock / AZM 170 AS

Preferred typ





- Integrated AS-Interface
- Thermoplastic enclosure
- 90 mm x 84 mm x 30 mm
- Double-insulated
- High holding force
- Combined monitoring of actuator and solenoid interlock



(Minor differences between the printed image and the original product may exist!)

Ordering details

Product type description
Article number
EAN Code
eCl@ss

Approval

Approval





Classification

Standards	EN ISO 13849-1, IEC 61508
PL	up c
Control category	1
PFH	1.16 x 10-6 / h
- notice	up to max. 100.000 switching cycles/year
SIL	up 1
Mission time	20 Years
If a fault evolution for becardous demand of the 1 shapped mechanics is authorized and an adequate protection against temporing is answed	

If a fault exclusion for hazardous damage of the 1-channel mechanics is authorized and an adequate protection against tampering is ensured,

suitable for use up to:	
Standards	EN ISO 13849-1, IEC 61508
PL	up d
Control category	3
PFH value	1.01 x 10-7 / h
- notice	up to max. 100.000 switching cycles/year
SIL	up 2
Mission time	20 Years

Global Properties

Permanent light	AZM 170 AS
Standards	EN 50295, EN 60947-5-1, IEC 61508, EN ISO 13849-1
Compliance with the Directives (Y/N) CE	Yes
Number of actuating directions	2
Active principle	electromechanical
Duty cycle ED	Magnet 100 %
Materials	
- Material of the housings	glass-fibre reinforced thermoplastic, Plastic self-extinguishing,
Housing coating	None
Weight	310
Guard locking monitored (Y/N)	Yes
Actuator monitored (Y/N)	Yes
Response time	< 100

Mechanical data

Design of electrical connection	connector plug M12, 4-pole
Mechanical life	> 1.000.000 operations
Manual release (Y/N)	No
Latching force	30
Clamping force F	1000 N
Max. Actuating speed	2

Ambient conditions

Ambient temperature			
- Min. environmental temperature	-25		
- Max. environmental temperature	+55		
Storage and transport temperature			
- Min. Storage and transport temperature	-25		
- Max. Storage and transport temperature	+85		
Relative humidity	30 95		
- non-condensing			
- non-icing			
Protection class	IP67 to IEC/EN 60529		
Protection rating			
Air clearances and creepage distances To IEC/EN 60664-1			
- Rated impulse withstand voltage Uimp	0,8 kV		
- Rated insulation voltage Ui	32 VDC		
- Overvoltage category	III		
- Degree of pollution	3		

Electrical data

Power to unlock	Yes
Power to lock	No

Electrical data - AS interface

AS-i Supply voltage	26.5 31.6 VDC, Protection against polarity reversal
AS-i operating current	≤ 50
AS-i Device insulation	internally short-circuit proof
AS-i Specification	
- version	V 2.1
- Profile	S-7.B.F.E
- IO-Code	0x7
- ID-Code	0xB
- ID-Code1	0xF
- ID-Code2	0xE
AS-i Inputs	
- Channel 1	Data bits DI 0/DI 1= dynamic code transmission
- Channel 2	Data bits DI 2/DI 3= dynamic code transmission
AS-i Outputs	
- DO 0	Solenoid control
- DO 1	not used
- DO 2	not used
- DO 3	not used
AS-i Parameter bits	
- P0	Safety guard and actuator detected
- P1	Solenoid interlock locked
- P2	not used
- P3	not used
AS-i input module address	0

- Default on address 0, programmable via the AS-Interface Master or Hand-held programming device

Electrical data - Auxiliary voltage (Aux)

Supply voltage UB	24 VDC (-15 % / +10 %) stabilised PELV
Operating current	≤ 500
Device insulation	\leq 4 A (if used in accordance with UL 508)

LED switching conditions display

LED switching conditions display (Y/N)	Yes
AS-i LED switching conditions display	
(1) green LED	Supply voltage
(2) red LED	Communication error / slave address = 0
(3) yellow LED	Enabling status
ATEX	

ATEX

Explosion protection categories for gases	None
Explosion protected category for dusts	None

Dimensions

Dimensions of the sensor	
- Width of sensor	90
- Height of sensor	75.5
- Length of sensor	30

Pin assignment

1	AS-i +
2	Aux - (P)
3	AS-i –
4	Aux + (P)

notice

Interlocks with power to lock principle may only be used in special cases after a thorough evaluation of the accident risk, since the guarding device can immediately be opened on failure of the electrical power supply or when the main switch is opened.

Included in delivery

Actuators must be ordered separately.

Ordering code

AZM 170 (1) (2)-AS(3)(4)(5)(6)

(1)	
В	Actuator monitored
BZ	Combined monitoring of actuator and solenoid interlock
(2)	
ST	male connector M12
(3)	
without	Latching force 5 N
R	Latching force 30 N
(4)	
without	Power to unlock
A	Power to lock
(5)	
P	Solenoid supply 24 VDC (Aux)
(6)	
2197	Manual release for Power to unlock

Documents

Operating instructions and Declaration of conformity (pt) 340 kB, 15.01.2018 Code: mrl_azm170as_pt

Operating instructions and Declaration of conformity (pl) 355 kB, 28.03.2018 Code: mrl_azm170as_pl

Operating instructions and Declaration of conformity (nl) 319 kB, 13.08.2018 Code: mrl_azm170as_nl

Operating instructions and Declaration of conformity (en) 341 kB, 22.11.2017

Code: mrl_azm170as_en

Operating instructions and Declaration of conformity (jp) 464 kB, 14.04.2011 Code: mrl_azm170as_jp

Operating instructions and Declaration of conformity (de) 320 kB, 22.11.2017 Code: mrl_azm170as_de

Operating instructions and Declaration of conformity (da) 242 kB, 13.10.2015 Code: mrl_azm170as_da

Operating instructions and Declaration of conformity (fr) 340 kB, 15.01.2018 Code: mrl_azm170as_fr

Operating instructions and Declaration of conformity (it) 340 kB, 15.01.2018 Code: mrl_azm170as_it

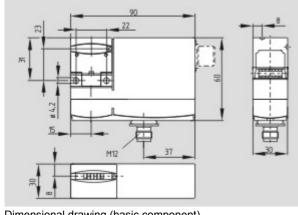
Operating instructions and Declaration of conformity (es) 343 kB, 15.01.2018 Code: mrl_azm170as_es

TÜV certification (de, en) 870 kB, 22.02.2010 Code: z_azmp03

Images



Product photo

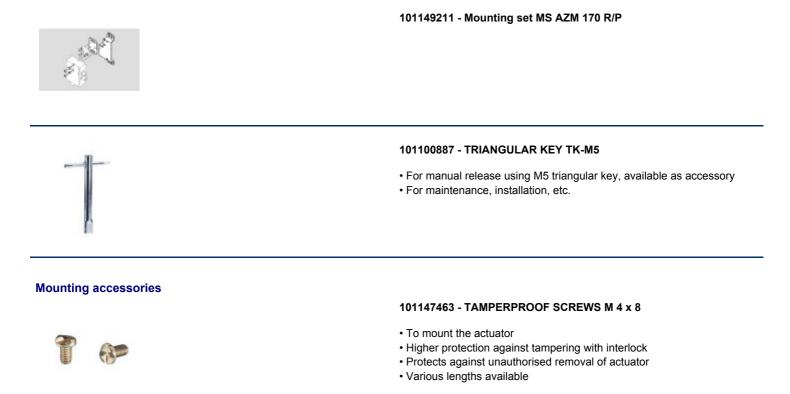


Dimensional drawing (basic component)

Actuator







K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, D-42279 Wuppertal The data and values have been checked throroughly. Technical modifications and errors excepted.

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