

Datasheet - EX-AZ 415-02/11ZPK-3D

Safety switch with separate actuator / EX-AZ 415



- Adjustable ball latch to 500 N
- 2 switches with different actuating functions in one enclosure
- 103.6 mm x 84.6 mm x 103.6 mm
- 2 cable entries M 20 x 1.5
- Spring-loaded actuators
- High level of contact reliability with low voltages and currents
- Ex certified
- Metal enclosure
- Long life

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

Ordering details

Product type description	EX-AZ 415-02/11ZPK-3D
Article number	EX-AZ 415-02/11ZPK-3D
EAN Code	
eCl@ss	27-27-26-02

Approval

Approval




EEX

Classification

Standards	EN ISO 13849-1
B10d Normally-closed contact (NC)	2.000.000
B10d Normally open contact (NO)	1.000.000
- notice	at 10% I _e and ohmic load
Mission time	20 Years
notice	$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$

Global Properties

Permanent light	EX-AZ 415
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Standards	Ex tD A22 IP67 T60°C X, EN 60947-5-1, EN 61241-1, BG-GS-ET-15
Compliance with the Directives (Y/N) 	Yes
Materials	
- Material of the housings	light alloy die-casting
- Material of the contacts	Silver
Housing coating	painted
Weight	

Mechanical data

Design of electrical connection	Screw connection
Cable cross-section of the cable glands	
- Min. Cable cross-section of the cable glands	Ø 6
- Max. Cable cross-section of the cable glands	Ø 12
Cable section	
- Min. Cable section	0,75
- Max. Cable section	1.5
Mechanical life	1.000.000 operations
notice	All indications about the cable section are including the conductor ferrules.
higher Latching force (Y/N)	Yes
Latching force	30 ... 500
Positive break force	min. 31 N
positive break travel	3.8
Max. Actuating speed	1

Ambient conditions

Ambient temperature	
- Min. environmental temperature	-10
- Max. environmental temperature	+50
Protection class	IP67 to IEC/EN 60529

Electrical data

Design of control element	Normally open contact (NO), Opener (NC)
Switching principle	Creep circuit element
Number of auxiliary contacts	2
Number of safety contacts	2
Rated impulse withstand voltage U_{imp}	4 kV
Rated insulation voltage U_i	250 V
Thermal test current I_{the}	6 A
Utilisation category	AC-15: 230 V / 4 A, DC-13: 24 V / 4 A
Max. fuse rating	6 A gG D-fuse

ATEX

Explosion protection categories for gases	None
Explosion protection Zones for gases	None
Explosion protected category for dusts	ATEX dust ex-protection, Cat. 3
Explosion protection Zones for dusts	22

Dimensions

Dimensions of the sensor

- Width of sensor	103.6
- Height of sensor	84.6
- Length of sensor	46.5

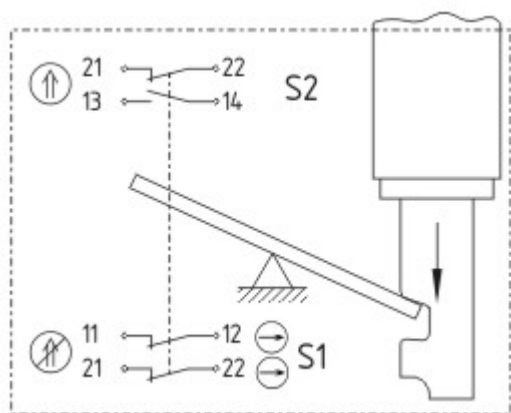
Included in delivery

Actuators must be ordered separately.
Including Ex-certified screwed cable gland and screw plug

Keywords

Keywords Ex, EEx, ATEX, Ex AZ 415, Ex AZ415, AZ 415 Ex, AZ415 ex, AZ415ex, ATEX AZ415

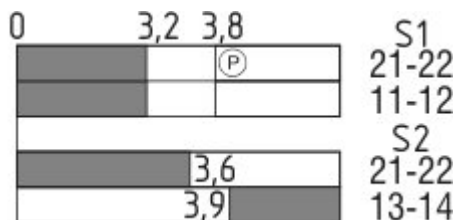
Diagram



Note Diagram

- positive break NC contact
- active
- no active
- Normally-open contact
- Normally-closed contact

Switch travel diagram



Notes Switch travel diagram

- Contact closed
- Contact open
- Setting range
- Break point
- Positive opening sequence/- angle
- VS** adjustable range of NO contact
- VÖ** adjustable range of NC contact
- N** after travel

Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch.

Order example: EX-AZ 415-02/11ZPK-3D-**1637**

...-**1637** 0,3 µm gold-plated contacts

Ordering code

EX-AZ 415-(1)ZPK-(2)-3D

(1)

11/11 1 Normally open contact (NO), 1 Opener (NC) / 1 Normally open contact (NO), 1 Opener (NC)

02/11 2 Opener (NC) / 1 Normally open contact (NO), 1 Opener (NC)

02/20 2 Opener (NC) / 2 Normally open contact (NO)

02/02 2 Opener (NC) / 2 Opener (NC)

(2)

1637 gold-plated contacts

Documents

Operating instructions and Declaration of conformity (it) 290 kB, 13.10.2017

Code: mrl_ex-az415_it

Operating instructions and Declaration of conformity (pl) 311 kB, 17.02.2014

Code: mrl_ex-az415_pl

Operating instructions and Declaration of conformity (pl) 333 kB, 16.02.2018

Code: mrl_ex-az415_pl

Operating instructions and Declaration of conformity (en) 297 kB, 28.09.2017

Code: mrl_ex-az415_en

Operating instructions and Declaration of conformity (nl) 319 kB, 07.08.2018

Code: mrl_ex-az415_nl

Operating instructions and Declaration of conformity (fr) 296 kB, 13.10.2017

Code: mrl_ex-az415_fr

Operating instructions and Declaration of conformity (es) 323 kB, 17.10.2017

Code: mrl_ex-az415_es

Operating instructions and Declaration of conformity (sv) 282 kB, 17.02.2014

Code: mrl_ex-az415_sv

Operating instructions and Declaration of conformity (de) 274 kB, 28.09.2017

Code: mrl_ex-az415_de

Operating instructions and Declaration of conformity (pt) 287 kB, 17.02.2014

Code: mrl_ex-az415_pt

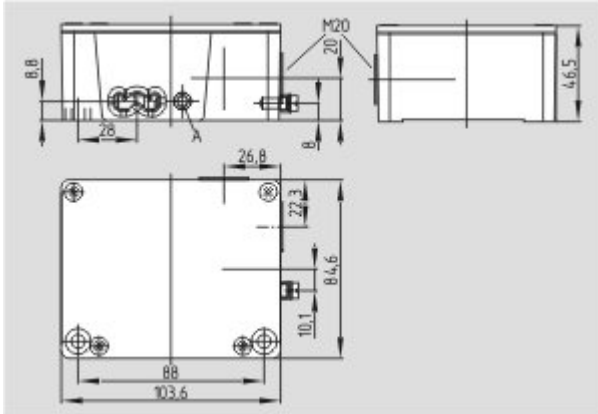
Operating instructions and Declaration of conformity (pt) 265 kB, 02.01.2017

Code: mrl_ex-az415_pt

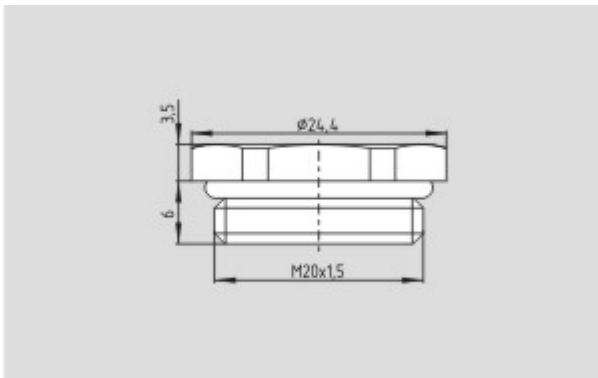
Operating instructions and Declaration of conformity (jp) 760 kB, 27.07.2011

Code: mrl_ex-az415_jp

Images



Dimensional drawing (basic component)



Dimensional drawing (miscellaneous)

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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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