Datasheet - Z3K 236 ST-AS



AS interface safety at work / Safety switchgear / Safety switches / 236 AS / AS - 236 Angle roller lever 3K



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

- AS-Interface M12 connector
- · Thermoplastic enclosure
- · Wide range of alternative actuators
- · Good resistance to oil and petroleum spirit
- 30 mm x 77 mm x 30 mm
- Actuator heads can be repositioned by 4 x 90°
- Mounting details to EN 50047
- · AS-Interface LED and status display
- Integrated AS-Interface
- Suitable for AS-i Power24
- Actuation from bottom parallel to the switch, therefore only suitable for small housings.

Ordering details

Product type description Z3K 236 ST-AS
Article number Z3K 236 ST-AS
EAN Code

eCl@ss 27-27-26-01

Approval

Approval



Classification

Standards EN ISO 13849-1, IEC 61508

PL up c
Control category up 1

PFH 1.14 x 10-6/

- notice up to max. 100000 switching cycles/year

SIL up 1
Mission time 20 Years

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 up 3

PFH value 1.01 x 10-7/

- notice up to max. 100000 switching cycles/year

SIL up 2
Mission time 20 Years

Global Properties

Permanent light AS - 236 Winkelhebel 3K

Standards EN 50295, EN 60947-5-1, EN ISO 13849-1, IEC 61508

Materials

- Material of the housings Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

30 ... 95

- Material of the connector- Material of the contacts- Silver

Housing coating

Housing construction form Norm construction design

Weight

Mechanical data

Design of electrical connection connector plug M12, 4-pole

Mechanical life 1.000.000 operations

Switching frequency 5000

Design of actuating element Angle roller lever

Actuating force 9
restistance to shock 30 / 11

Resistance to vibration 10 ... 150, Amplitude 0,35 / 5

Positive break force

Actuating speed for vertical actuation

- Max. Actuating speed

Ambient conditions

Ambient temperature

Min. environmental temperature
 Max. environmental temperature
 Min. Storage and transport temperature
 Max. Storage and transport temperature
 Max. Storage and transport temperature

- non-condensing

Relative humidity

- non-icing

Protection class IP67 to IEC/EN 60529

Protection rating II

Electrical data

Design of control element Opener (NC)

Switching principle Snap switch element

- positive break NC contact

Number of auxiliary contacts 0

Number of safety contacts 2
Rated impulse withstand voltage 800
Rated insulation voltage 32

Thermal test current 10 A

Utilisation category AC-15: 230 V / 4 A, DC-13: 24 V / 1 A

Max. fuse rating 6 A gG D-fuse

Electrical data - AS interface

AS-i Supply voltage 18 ... 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 3.0
- Profile S-0.B.F.F

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 ... DO 3 not used AS-i Parameter bits P1 ... P3 not used - P0 Channel 2 switched

AS-i input module address 0

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

LED switching conditions display

LED switching conditions display (Y/N)

Yes

AS-i LED switching conditions display

(1) yellow LED Channel 1 / AS-i SaW Bit 0,1

(2) green/red LED (AS-i duo LED) Supply voltage / Communication error / slave address = 0

(3) yellow LED Channel 2 / AS-i SaW Bit 2,3

ATEX

Explosion protection categories for gases

None
Explosion protected category for dusts

None

Dimensions

Dimensions of the sensor

- Width of sensor
- Height of sensor
- Length of sensor
35
- 107
- Length of sensor
30

Pin assignment

1 AS interface +

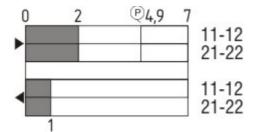
2 None

3 AS interface –

4 None

5 Functional earth connection

Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open

Setting range

(L) 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: Z3K 236 ST-AS-**FK**

.

...-FK

\$missingName\$

Ordering code

(1)(2) 236 (3)-AS

(1)

Z Snap action
T Slow action

(2)

S Plunger S

R Roller plunger R

1R Offset roller lever 1R

K Angle roller lever K

3K Angle roller lever 3K

4K Angle roller lever 4K **K4** Angle roller lever K4

1H Roller lever 1H
12H Roller lever 12H

14H Roller lever 14H Roller lever 7H

ST connector plug M12, Plastic
FK Connection for flat cable

Documents

(3)

Code: mrl_zt235-236as_it

Operating instructions and Declaration of conformity (pt) 314 kB, 09.10.2018

Code: mrl zt235-236as pt

Operating instructions and Declaration of conformity (de) 320 kB, 09.10.2018

Code: mrl_zt235-236as_de

Operating instructions and Declaration of conformity (es) 312 kB, 09.10.2018

Code: mrl_zt235-236as_es

Operating instructions and Declaration of conformity (da) 301 kB, 09.10.2018

Code: mrl_zt235-236as_da

Operating instructions and Declaration of conformity (nl) 346 kB, 09.10.2018

Code: mrl_zt235-236as_nl

Operating instructions and Declaration of conformity (en) 313 kB, 09.10.2018

Code: mrl_zt235-236as_en

Operating instructions and Declaration of conformity (fr) 314 kB, 09.10.2018

Code: mrl_zt235-236as_fr

Operating instructions and Declaration of conformity (jp) 422 kB, 09.10.2018

Code: mrl_zt235-236as_jp

Operating instructions and Declaration of conformity (pl) 327 kB, 09.10.2018

Code: mrl_zt235-236as_pl

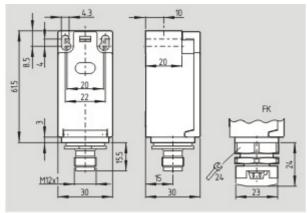
TÜV certification (de, en) 249 kB, 20.01.2017

Code: z_235p03

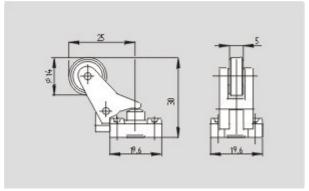
Images



Product photo



Dimensional drawing (basic component)



Dimensional drawing (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. Generiert am 13.02.2019 - 12:41:22h Kasbase 3.3.0.F.64l