

ZS235-11Z-M20



- Metal enclosure
- 30 mm x 63,5 mm x 30 mm
- 1 Cable entry M 20 x 1.5
- Mounting details to EN 50047
- Wide range of alternative actuators
- Good resistance to oil and petroleum spirit
- Actuator heads can be repositioned by 4 x 90°
- Snap action with constant contact pressure up to switching point

Data

Ordering data

Product type description	ZS 235-11Z
Article number (order number)	101164340
EAN (European Article Number)	4030661205564
eCI@ss number, Version 9.0	27-27-26-01

Approval - Standards

Certificates	cULus
	cCSAus
	CCC
	EAC

General data

Product name	Z 235 plunger S
Standards	IEC 60947-5-1
	ISO 13849-1
	BG-GS-ET-15
Housing construction form	Norm construction design
Actuator type to DIN EN 50047	B
Enclosure material	Zink
Enclosure coating material	Painted
Material of the contacts, electrical	Silver
Gross weight	149 g

General data - Features

Safety functions	Yes
Number of auxiliary contacts	1
Number of safety contacts	1

Safety appraisal

Standards	ISO 13849-1
Mission Time	20 Year(s)

Safety appraisal - Safety outputs

B10d Normally-closed contact (NC)	20,000,000 Operations
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Mechanical data

Actuating element	Plunger
Mechanical life, minimum	20,000,000 Operations
Actuating force, minimum	9 N
Positive break force, minimum	19 N
Actuating speed, minimum	10 mm/min
Actuating speed, maximum	1 m/s

Mechanical data - Connection technique

Terminal Connector	Screw connection
Cable section, minimum	0.75 mm ²
Cable section, maximum	2.5 mm ²
Note (Cable section)	All indications about the cable section are including the conductor ferrules.

Mechanical data - Dimensions

Height of sensor	75.5 mm
Length of sensor	30 mm
Width of sensor	30 mm

Ambient conditions

Protection class	IP67
Ambient temperature, minimum	-30 °C
Ambient temperature, maximum	+80 °C

Ambient conditions - Insulation value

Rated impulse withstand voltage	6 kV
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Electrical data

Thermal test current	10 A
Required rated short-circuit current to EN 60947-5-1	1,000 A
Utilisation category AC-15	230 VAC
Utilisation category AC-15	4 A
Utilisation category DC-13	24 VDC
Utilisation category DC-13	1 A
Switching element	NO contact, NC contact
Switching principle	Snap switch element
Bounce duration, maximum	3 ms
Switching frequency	5,000 /h
Switchover time, minimum	5.5 ms

Ordering code

Product type description:

(1)(2) 2(3)5-(4)Z(5)-(6)-(7)-(8)-(9)

(1)

Z	Snap action
T	Slow action

(2)

S	Plunger S
R	Roller plunger R
4S	Plunger 4S
4R	Roller plunger 4R
1R	Offset roller lever 1R
K	Offset roller lever K
3K	Angle roller lever 3K
4K	Angle roller lever 4K
K4	Angle roller lever K4
1H	Roller lever 1H
7H	Roller lever 7H
10H	Rod lever 10H
12H	Roller lever 12H
14H	Roller lever 14H
AF	Spring rod lever AF
RMS	Brass roller

(3)

- 3** slim design
- 5** large design

(4)

- 02** 2 NC contact
- 11** 1 NO contacts/1 NC contact
- 20** 2 NO contacts, (switches with 2 NO contacts are not suitable for safety applications)

(5)

- H** Slow action with staggered contacts
- UE** Slow action with overlapping contacts

(6)

- without** Cable entry M20
- ID** IDC method of termination
- NPT** Cable entry NPT 1/2"
- ST** M12 connector with A-coding (Caution! According to EN 60204-1, the versions with connector must only be used in PELV circuits.)
- ST-2310** M12 connector with B-coding (Caution! According to EN 60204-1, the versions with connector must only be used in PELV circuits.)

(7)

- 2574** Enclosure with L-shaped mounting holes (horizontally or vertically adjustable)

(8)

- 2138** Roller lever 7H for position switches with safety function

(9)

- 1637** Gold-plated contacts

Pictures

Product picture (catalogue individual photo)



ID: k235sf01

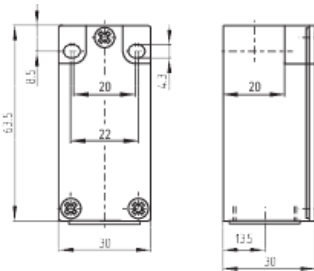
| 481,6 kB | .jpg | 144.639 x 331.258 mm - 410 x 939

Pixel - 72 dpi

| 166,2 kB | .png | 74.083 x 169.333 mm - 210 x 480

Pixel - 72 dpi

Dimensional drawing basic component



ID: 1-235g01

| 24,6 kB | .cdr |

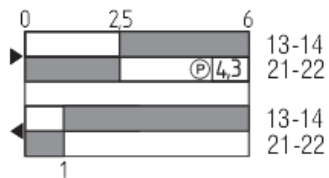
| 4,0 kB | .png | 74.083 x 61.383 mm - 210 x 174 Pixel

- 72 dpi

| 114,7 kB | .jpg | 352.778 x 293.158 mm - 1000 x 831

Pixel - 72 dpi

Switch travel diagram



ID: kr235s12

| 2,4 kB | .png | 74.083 x 39.158 mm - 210 x 111 Pixel

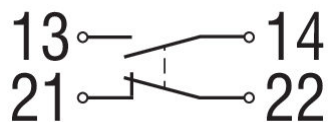
- 72 dpi

| 69,2 kB | .jpg | 352.778 x 187.325 mm - 1000 x 531

Pixel - 72 dpi

| 25,8 kB | .cdr |

Diagram



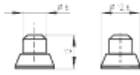
ID: k1o1sk01

| 52,2 kB | .jpg | 352.778 x 143.581 mm - 1000 x 407

Pixel - 72 dpi

Dimensional drawing actuator

ID: 1s236g01



| 36,9 kB | .cdr |

| 29,8 kB | .jpg | 352.778 x 248.003 mm - 1000 x 703

Pixel - 72 dpi

| 1,7 kB | .png | 74.083 x 52.211 mm - 210 x 148 Pixel
- 72 dpi

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The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

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