

3. Ex switchgear Belt-alignment switches



Application Ex belt alignment switches are suitable for use on material handling equipment. The design details in relation to body dimensions, materials, electrical loading capacity, rated values and quality characteristics are to a great extent determined by the variety of application, from precision mechanics to heavy engineering.

Design and mode of operation Ex belt alignment switches are actuated when the conveyor belt becomes misaligned. Depending on the plant arrangements, this signal can be used to switch the equipment off or to provide automatic correction of the belt alignment.

Features **EEx 335 4VSR**

- 2 contacts
- Metal enclosure
- Mounting details to EN 50041
- 1 cable entry
- IP 65

EEx ZS 73 SR

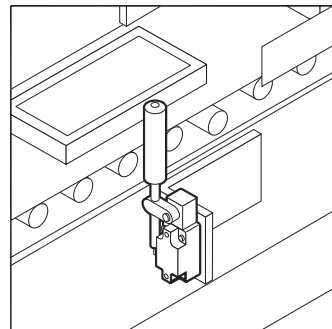
- 2 contacts
- Metal enclosure
- Push button or key release

EEx ZS 75 SR

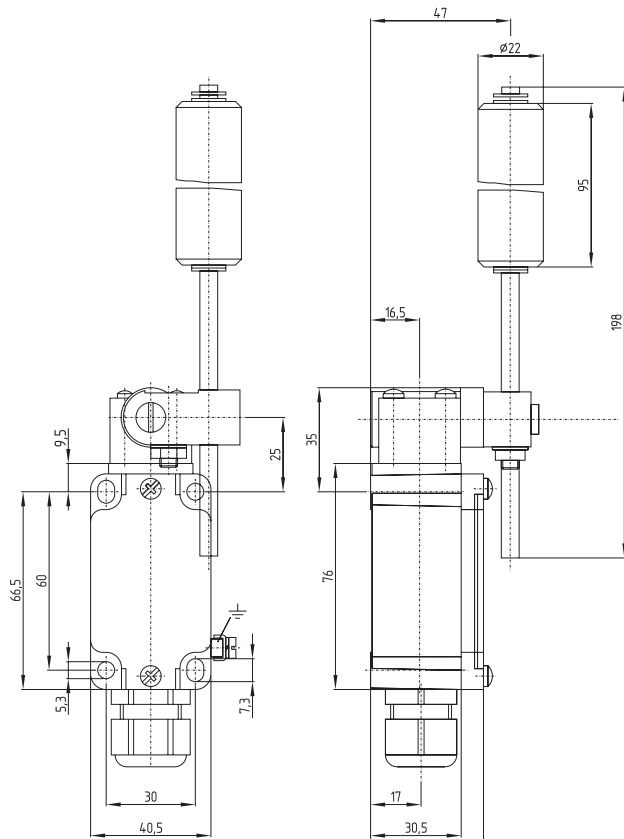
- 4 contacts
- Metal enclosure
- Push button or key release

Note Technical data are shown in tabular form in chapter 3.4.

Applications



3. Ex switchgear
3.1 Belt-alignment switches
EEEx 335 4VSR range



Features

- Metal enclosure
- 2 contacts
- II 2G EEx de IIC T6
II 2D IP65 T80°C
- Mounting details to EN 50041
- Adjustable-length rod lever with nylon roller
- 1 cable entry
- IP 65
- For light to medium duty
- Patented low-wear actuator head

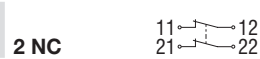
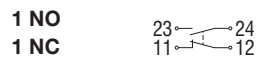
Info

Version for equipment category 3D
 (dust-Ex zone 22) available
 Ordering suffix: -3D

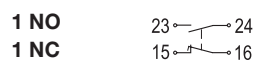
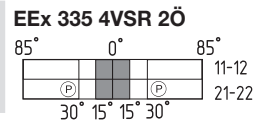
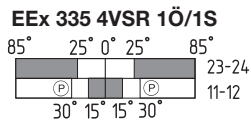
Approvals

EC Type test certificate:
 DMT 01 ATEX E 178

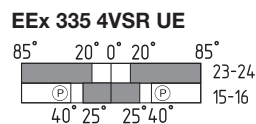
**Contacts/
 Switch travel**



Slow action



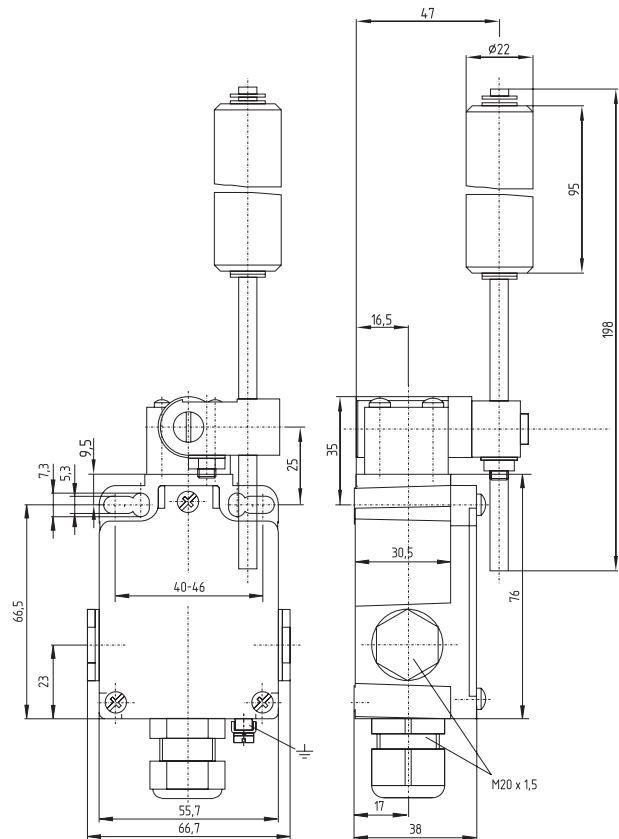
Slow action
 overlapping contacts



3. Ex switchgear

3.2 Belt-alignment switches

EEEx 355 4VSR range



Features

- Metal enclosure
- 2 contacts
- II 2G EEx de IIC T6
II 2D IP67 T80°C
- Mounting details to EN 50041
- Adjustable-length rod lever with nylon roller
- 3 cable entries
- IP 65
- For light to medium duty
- Patented low-wear actuator head

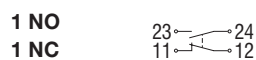
Info

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Ordering suffix: -3D

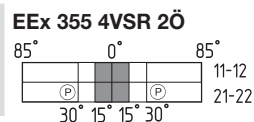
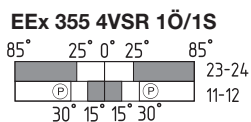
Approvals

EC Type test certificate:
BVS 04 ATEX E 126

Contacts/ Switch travel



Slow action

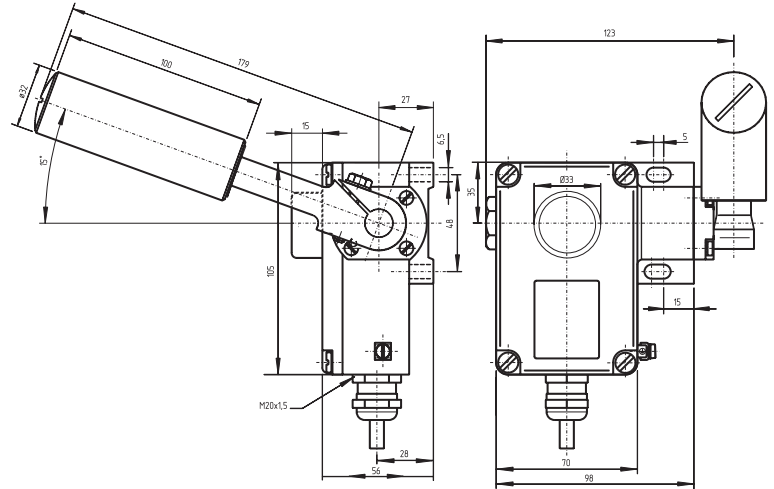


Slow action
overlapping contacts



3.
3.3

Ex switchgear
Belt-alignment switches
EEx 73 SR range



Features

- Metal enclosure
- 2 contacts
- Ex II 2G EEx d IIC T6
II 2D IP65 T80°C
- Reset by push button
or key possible

Cable length

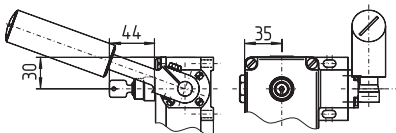
- On the Ex belt-alignment switches
the cables are 3 m long
- Other lengths on enquiry

Approvals

EC Type test certificate:
PTB 03 ATEX 1070 X*

*referring to the switch insert

Key reset



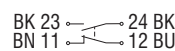
Info

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Ordering suffix: -3D

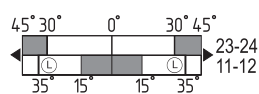
3D version is equipped with wiring compartment.

Contacts/
Switch travel

1 NO
1 NC



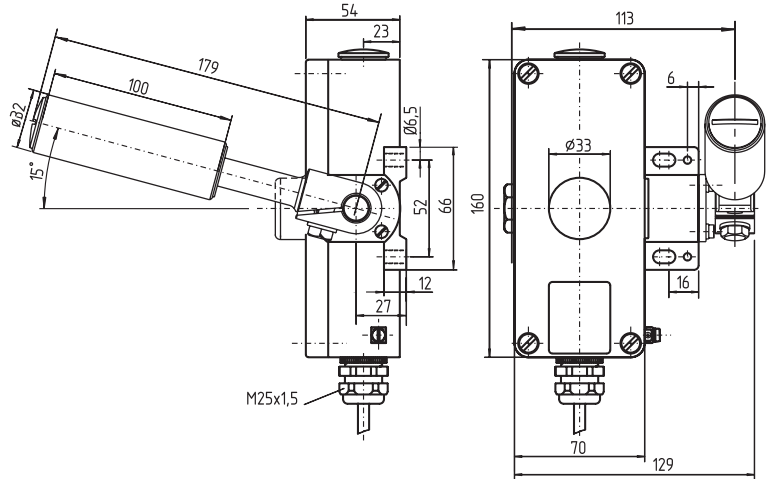
Push button reset
Key reset



EEx 73 SR 10/1S VD
EEx 73 SR 10/1S VS

3.
3.4

Ex switchgear
Belt-alignment switches
EEx 75 SR range



Features

- Metal enclosure
- 2 or 4 contacts
- II 2G EEx d IIC T6 II 2D IP65 T80°C
- Reset by push button or key possible

Cable length

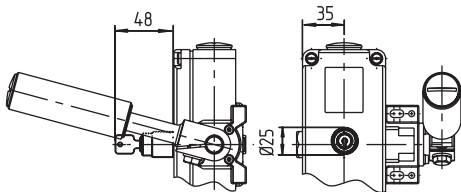
- On the Ex belt-alignment switches the cables are 3 m long
- Other lengths on enquiry

Approvals

EC Type test certificate: PTB 03 ATEX 1070 X*

*referring to the switch insert

Key reset



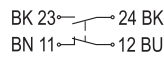
Info

Version for equipment category 3D (dust-Ex zone 22) available
Ordering suffix: -3D

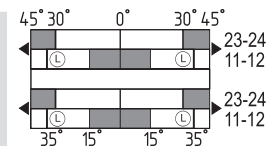
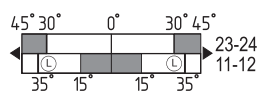
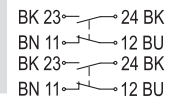
3D version is equipped with wiring compartment.

Contacts/
Switch travel

1 NO
1 NC



2 NO
2 NC



Without latch interlock
Push button reset
Key reset

EEx 75 SR 1Ö/1S
EEx 75 SR 1Ö/1S VD
EEx 75 SR 1Ö/1S VS

EEx 75 SR 2Ö/2S
EEx 75 SR 2Ö/2S VD
EEx 75 SR 2Ö/2S VS

3. 3.5

Ex switchgear Belt-alignment switches Technical data



	EEx 335 4VSR EEx 355 4VSR	EEx ZS 73 SR	EEx ZS 75 SR
Standards:	IEC 60947-5-1; EN 50014; EN 50018; EN 50281-1-1		
	EN 50019	-	
Ex marking:	EEx 335: II 2G EEx de IIC T6 II 2D IP65 T80°C	II 2G EEx d IIC T6 II 2D IP65 T80°C	
	EEx 355: II 2G EEx de IIC T6 II 2D IP67 T80°C		
Certification:	EEx 335: DMT 01 ATEX E 178 EEx 355: BVS 04 ATEX E 126	PTB 03 ATEX 1070 X*	
Enclosure:	Zinc die-cast, enamel finish	Aluminium die-cast, enamel finish	
Cover:	Steel, enamel finish	Thermoplastic	Same like enclosure
Protection class:	EEx 335: IP 65; EEx 355: IP 67	IP 54 for version with key reset, IP 65 for version with push button reset	
	to IEC/EN 60529		
Contact material:	Silver		
Switch insert:	EEx 95	1 x EX 14 KU VD	1 x bzw. 2 x EX 14 KU VD
Contact type:	Change-over contact, double break Zb galvanically separated contact bridges or 2 NC contacts	Change-over contact, double break Zb galvanically separated contact bridges	
Switching system:	IEC 60947-5-1; slow action		
Termination:	M3 screw terminals, max. 1.5 mm ² (incl. conductor ferrules)	Cable H05VV-F 4 x 0.75 mm ²	
Rated impulse	withstand voltage U _{imp} : 4 kV		
Rated insulation voltage U _i :	250 V		
Thermal test current I _{th} :	6 A		
Utilisation category:	AC-15; DC-13		
Rated operating	current/voltage I _e /U _e :		
	6 A/250 VAC; 0.25 A/230 VDC		
Max. fuse rating:	6 A gL/gG D-fuse		
Ambient temperature:	-20 °C ... +60 °C	-20 °C ... +65 °C	
Mechanical life:	> 1 million operations		
	₀₁₅₈		

* referring to the switch insert