Datasheet - TR 336 ST-AS

AS interface safety at work / Safety switchgear / Safety switches / 336 AS / AS - 336 Roller plunger r

(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
- 40,5 mm x 96 mm x 38 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

Ordering details

Product type description	TR 336 ST-AS
Article number	TR 336 ST-AS
EAN Code	
eCl@ss	27-27-26-01

Approval

Approval	cULus, TÜV

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 - 336 Rollendruckbolzen R
Standards	EN 50295, EN 60947-5-1, EN ISO 13849-1, IEC 61508
Compliance with the Directives (Y/N) CE	Yes
Suitable for safety functions (Y/N)	Yes
Actuator type	C to EN 50041
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
- Material of the connector	Metal film
- 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	Roller plunger
restistance to shock	30 / 11
Resistance to vibration	10 … 150, Amplitude 0,35 / 5
Actuating speed with actuating angle 30° to switch axis	
- Min. Actuating speed	
- Max. Actuating speed	0,5

Ambient conditions

Ambient temperature	
- Min. environmental temperature	−25
- Max. environmental temperature	+60
- 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

Electrical data

Design of control element	Opener (NC)
Switching principle	Creep circuit 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 electronics	
- Total	
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	40.5
- Height of sensor	136.6
- Length of sensor	38

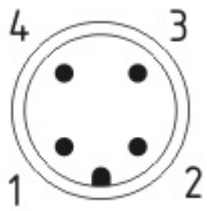
Pin assignment

1	AS interface +
2	None
3	AS interface −
4	None

notice

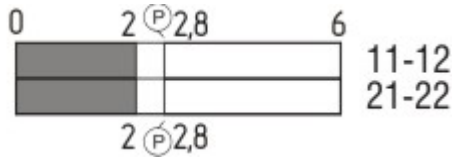
The addressing must take place via the M12 connector or the flat cable connection.

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: TR 336 ST-AS-**FK**

...**-FK**	$missingName$

Ordering code

T**(1)** 336 **(2)**-AS

(1)

S	Plunger S
R	Roller plunger R
1K	Offset roller lever 1K
3K	Angle roller lever 3K

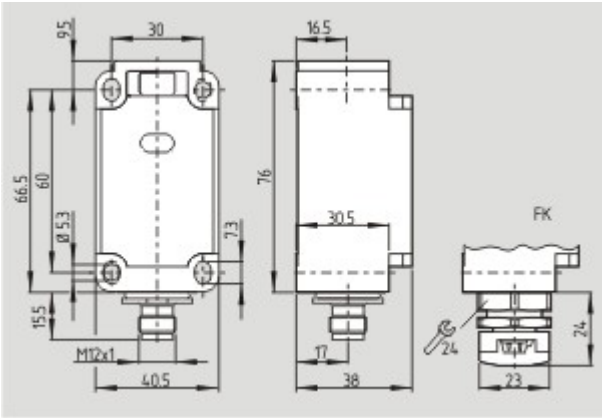
H	Roller lever H
1H	Roller lever 1H
7H	Roller lever 7H
(2)	
ST	connector plug M12, Metal film
FK	Connection for flat cable

Documents

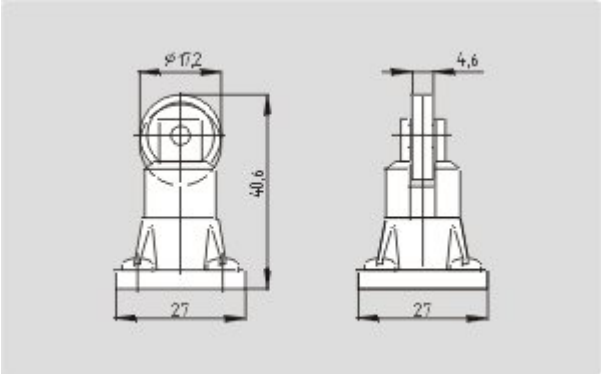
TÜV certification (de, en) 46 kB, 02.04.2014
Code: z_t3p01

Images

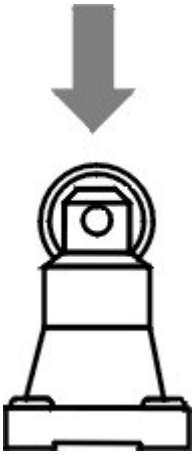
Product photo



Dimensional drawing (basic component)



Dimensional drawing (actuator)


Operating principle

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