## Datasheet - T4VH 336 ST-AS



AS interface safety at work / Safety switchgear / Safety switches / 336 AS / AS - 336 Roller lever H  $\,$ 



(Minor differences between the printed image and the original product may

- 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 T4VH 336 ST-AS
Article number T4VH 336 ST-AS

EAN Code

exist!)

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 - 336 Rollenschwenkhebel H

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

Compliance with the Directives (Y/N) **C €**Suitable for safety functions (Y/N)

Yes

Actuator type A to EN 50041

Material of the housings

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

Lever material Metal film
 Roller material Plastic
 Material of the connector Metal film
 Material of the contacts Silver

Housing coating

Housing construction form Norm construction design

Weight

Materials

#### **Mechanical data**

Design of actuating element Roller lever

Design of electrical connection connector plug M12, 4-pole Mechanical life 1.000.000 operations

Switching frequency 5000 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 2.5

## **Ambient conditions**

Ambient temperature

Min. environmental temperature
 Max. environmental temperature

- 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 🖯

0

Number of auxiliary contacts

Number of safety contacts2Rated impulse withstand voltage800Rated insulation voltage32Thermal test current10 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

- 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
- Roller diameter
40.5
149.5
60.55
20

### 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

opositive break NC contact

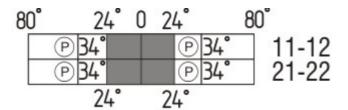
 $^{\scriptsize\textcircled{\scriptsize{1}}}_{\rm active}$ 

no active

o—\_\_\_o Normally-open contact

o----- Normally-closed contact

### Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open

Setting range

 $^{\textcircled{L}}_{\text{Break point}}$ 

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: T4VH 336 ST-AS- $\mathbf{FK}$ 

...-**FK** 

\$missingName\$

...-RMS

Available with metal roller

## **Ordering code**

S R 1K 3K H 1H

(1)

Plunger S
Roller plunger R
Offset roller lever 1K
Angle roller lever 3K
Roller lever H
Roller lever 1H
Roller lever 7H

(2) ST FK

connector plug M12, Metal film Connection for flat cable

### **Documents**

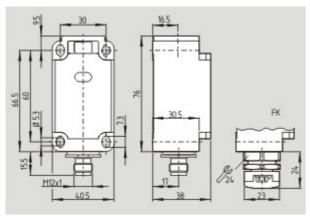
TÜV certification (de, en) 46 kB, 02.04.2014

Code: z\_t3p01

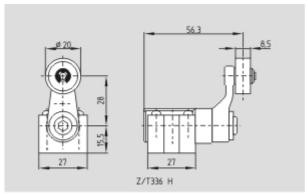
# **Images**



Product photo

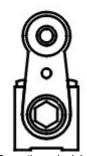


Dimensional drawing (basic component)



Dimensional drawing (actuator)





Operating principle

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 - 12:43:37h Kasbase 3.3.0.F.64I