

Datasheet - ZQ 700 ST-AS



AS interface safety at work / Safety switchgear / Pull-wire emergency stop switches / ZQ 700 AS



- Thermoplastic enclosure
- One tension force for cable lengths up to 10 m
- Release push button
- Position indicator
- Twisting of towing eye not possible
- wire pull and breakage detection
- Double-insulated
- Integrated AS-Interface
- Suitable for AS-i Power24
- AS-Interface M12 connector, bottom

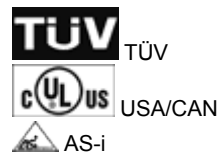
(Minor differences between the printed image and the original product may exist!)

Ordering details

Product type description	ZQ 700 ST-AS
Article number	101215046
EAN Code	4030661404455
eCl@ss	27-37-12-90

Approval


Approval



Classification

Standards	EN ISO 13849-1, IEC 61508
PL	up e
Control category	up 4
PFH value	$\leq 1.4 \times 10^{-8}/h$
- notice	up to max. 5.000 switching cycles/year
SIL	up 3
Mission time	20 Years


Global Properties

Permanent light	ZQ 700 AS
Standards	EN 60947-5-1, EN ISO 13850, EN 50295, EN ISO 13849-1, IEC 61508
Compliance with the Directives (Y/N) 	Yes
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
- Material of the cover	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Weight	
Response time	< 100
Emergency-Stop button (Y/N)	No

Mechanical data

Design of electrical connection	Connector M12, 4-pole
Mechanical life	> 100.000 operations
Switching frequency	max. 1/s
Actuating force	max. 200 N
actuating travel	max. 400 mm
restistance to shock	15 g / 11 ms
Resistance to vibration	10 ... 150 HZ, Amplitude 0,35 mm / 5 g
Length of wire	max. 10 m

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 type IP	IP67
Protection rating	II, 
Air clearances and creepage distances To IEC/EN 60664-1	
- Rated impulse withstand voltage U_{imp}	800 V
- Rated insulation voltage U_i	32 V
- Overvoltage category	III
- Degree of pollution	3

Electrical data

Switching principle	Snap switch element
positive break NC contact 	

Electrical data - AS interface

AS-i Supply voltage	18 ... 31.6 VDC, Protection against polarity reversal
- Min. supply voltage	18
- Max. supply voltage	31.6
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
- IO-Code	0x0
- ID-Code	0xB
- ID-Code1	0xF
- ID-Code2	0xF
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	
- P0	Channel 2 switched
- P1	not used
- P2	not used
- P3	not used
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)	No
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Dimensions

Dimensions of the sensor

- Width of sensor	40.5
- Height of sensor	182.5
- Length of sensor	51

Pin assignment

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

notice

Recommended cable lengths for pull-wire Emergency-Stop switches in relation to the range of ambient temperature.

As the thimbles are subject to deformation in case of wire pull, the wire should be pulled several times after fitting. After that, the wire must be re-tensioned using the eyebolt or the tensioner.

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

At 2 m ... 5 m m distance intermediate wire supports are required, see accessories

Indication legend

A = Position indicator

B = Emergency-Stop button

C = reset button

1 = Wire rope

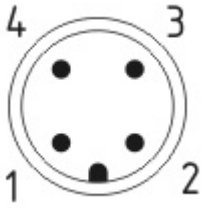
2 = Eyebolt

3 = nut






4 = Wire clamp

- 5 = Tensioning Jack
- 6 = Wire thimble
- 7 = shackle
- 8 = rope tensioner

Diagram



Note Diagram

-  positive break NC contact
-  active
-  no active
-  Normally-open contact
-  Normally-closed contact

Ordering code

ZQ 700 (1)-AS

(1)

ST

Connector M12

FK

Documents

Operating instructions and Declaration of conformity (fr) 464 kB, 02.02.2018

Code: mrl_zq700as_fr

Operating instructions and Declaration of conformity (nl) 462 kB, 12.02.2018

Code: mrl_zq700as_nl

Operating instructions and Declaration of conformity (jp) 659 kB, 11.08.2011

Code: mrl_zq700as_jp

Operating instructions and Declaration of conformity (da) 462 kB, 12.02.2018

Code: mrl_zq700as_da

Operating instructions and Declaration of conformity (es) 463 kB, 02.02.2018

Code: mrl_zq700as_es

Operating instructions and Declaration of conformity (pt) 463 kB, 12.02.2018

Code: mrl_zq700as_pt

Operating instructions and Declaration of conformity (de) 443 kB, 22.11.2017

Code: mrl_zq700as_de

Operating instructions and Declaration of conformity (en) 458 kB, 22.11.2017

Code: mrl_zq700as_en

Operating instructions and Declaration of conformity (pl) 478 kB, 12.02.2018

Code: mrl_zq700as_pl

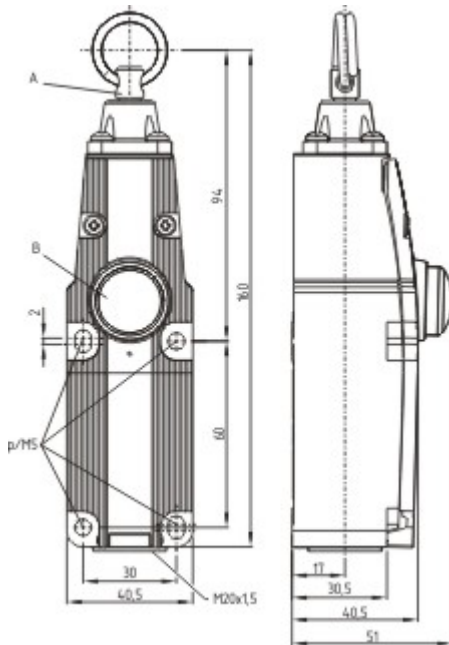
Operating instructions and Declaration of conformity (it) 459 kB, 02.02.2018

Code: mrl_zq700as_it

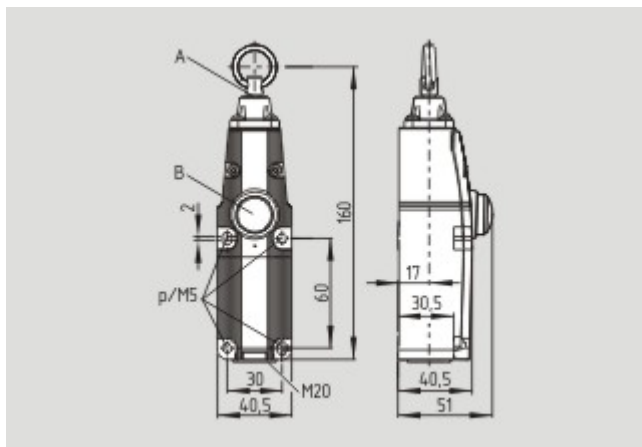
TÜV certification (en, de) 44 kB, 02.04.2014

Code: z_zq7p01

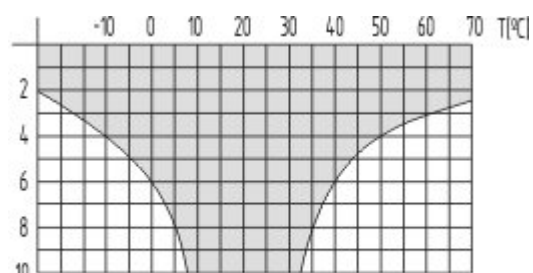
Images



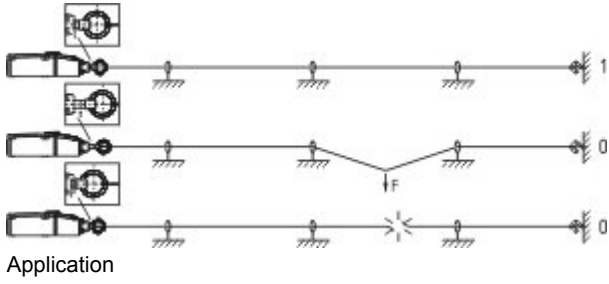
Dimensional drawing (basic component)



Dimensional drawing (basic component)



Characteristic curve



System components

Accessories



101162986 - Eyebolt BM 8 x 70



101192471 - Eyebolt BM 8 x 70 NIRO



101084928 - Eyebolt BM 10 x 40



101203477 - Wire clamp 3 mm NIRO



101203569 - Wire clamp 4 mm NIRO



101203478 - Wire clamp 5 mm NIRO



101190917 - Duplex wire clamp 3 mm NIRO

- for Wire rope Ø 3 mm



101203569 - Duplex wire clamp 4 mm NIRO

- for Wire rope Ø 3 mm



101196043 - Egg-shaped wire clamp GR 3

- for Wire rope Ø 3 mm



101077072 - Egg-shaped wire clamp GR 4

- for Wire rope Ø 4 mm



101203472 - WIRE THIMBLE 3 mm NIRO

- for Wire rope Ø 3 mm
- to DIN 6899



101170750 - WIRE THIMBLE 4 mm

- for Wire rope Ø 4 mm
- to DIN 6899



101203475 - WIRE THIMBLE 4 mm NIRO

- for Wire rope Ø 4 mm
- to DIN 6899

101203476 - WIRE THIMBLE 5 mm NIRO

- for Wire rope Ø 5 mm
- to DIN 6899



101192433 - PULLEY

- for Wire rope Ø 3 mm
- To guide the wire rope where the path is not a straight line



101087930 - TENSIONING JACK M6

- For exact adjustment of the tension of the wire rope
- to DIN 1480



103005863 - TENSION SPRING ACC-700-RZ173I

- To maintain the reaction force



101186490 - SHACKLE NIRO

- Shackle for fixing the wire rope to the eyebolt



101078670 - WIRE ROPE 5 mm

- With red PVC sheath
- Ø 5 mm total
- Steel core Ø 3 mm
- Quantity: Meter



103003628 - WIRE UNIT COMPLETE 5 m

- Ready-to-fit
- With red PVC sheath



103003629 - WIRE UNIT COMPLETE 10 m

- Ready-to-fit
- With red PVC sheath





103003865 - WIRE UNIT COMPLETE 15 m

- Ready-to-fit
- With red PVC sheath



103003866 - WIRE UNIT COMPLETE 20 m

- Ready-to-fit
- With red PVC sheath



101170761 - WIRE UNIT COMPLETE 25 m

- Ready-to-fit
- With red PVC sheath



103003630 - WIRE UNIT COMPLETE 30 m

- Ready-to-fit
- With red PVC sheath



103003867 - WIRE UNIT COMPLETE 40 m

- Ready-to-fit
- With red PVC sheath



103003631 - WIRE UNIT COMPLETE 50 m

- Ready-to-fit
- With red PVC sheath



101186704 - rope tensioner S 900

- Smooth adjustment
 - Only one tool
 - Antiskid
 - Time-saving
 - Ergonomic
 - No risk of injury
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