

ITEM 105546 TP3-2131A024RC18C1993EXT2

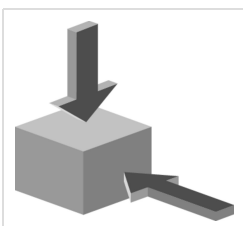
Description	Technical data	Accessories	Downloads
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Features

- › Auxiliary release on the front
- › Escape release from the rear
- › 2 illuminated pushbuttons
- › With door monitoring contact
- › Increased horizontal overtravel
- › Plug connector

Approach direction



- › Figure
Horizontal and vertical
Can be adjusted in 90° steps
Increased overtravel for horizontal approach direction

Solenoid operating voltage

› AC/DC 24 V +10%, -15%

Pushbuttons

- › Pushbutton white, illuminated
 - › Pushbutton blue, illuminated
-

Guard locking type

TP3 Closed-circuit current principle, guard locking by spring force. Release by applying voltage to the guard locking solenoid.

Switching element

2131 Slow-action switching contact 2 NC \ominus + 1 NO + 1 NC (door monitoring contact)

Auxiliary release

Is used for releasing the guard locking with the aid of a tool. To protect against tampering, the auxiliary release is sealed with sealing lacquer.

Escape release

This is used for manual release of guard locking from within the danger area without tools. With identification of On/Off position.

Approvals



Mechanical values and environment

Housing material	Reinforced thermoplastic
Weight	
	Net 0,5 kg
Ambient temperature	-20 ... 55 °C
Degree of protection	IP54
Mechanical life	1 x 10 ⁶
Contact material	Silver alloy, gold flashed
Switching principle	Slow-action switching contact
Installation position	Any
Number of door position positively driven contacts	2
Number of guard lock monitoring positively driven contacts	2

Number of guard lock monitoring NO contacts	1
Connection	1 x Built-in connector RC18 (18-pin)
Approach speed	max. 20 m/min
Actuation frequency	1200 1/h
Guard locking principle	Closed-circuit current principle
Locking force F_{max}	1300 N
Locking force F_{Zh}	1000 N
Retention force	10 N
Extraction force	20 N
Actuating force	10 N

Electrical connection ratings

Rated thermal current I_{th}	4 A
Utilization category according to EN 60947-5-1	AC-15 4A 50V DC-13 4A 24V
Solenoid operating voltage	AC/DC 24 V -15% ... +10%
Short circuit protection according to IEC 60269-1	(Fuse) 4A gG
Rated insulation voltage U_i	50 V
Rated impulse withstand voltage U_{imp}	1,5 kV
Switching voltage	Min. at 10mA 12 V
Switching current	Min. at 24V 1 mA
Power consumption	8 W
Solenoid duty cycle	100 %
Connection cross-section	0,34 ... 1,5 mm ²

Miscellaneous

Additional feature	1 x push button Blue (illuminated) ^[1] 1 x push button White (illuminated) ^[2]
C number	C1993 Escape release long

Reliability values acc. to EN ISO 13849-1

	Monitoring of guard locking and the safety guard position
B10 _D	3 x 10 ⁶
	Control of the guard locking
Category	Depending on external control of guard locking
Performance Level	Depending on external control of guard locking
PFH _D	Depending on external control of guard locking

in combination with Actuator BETAETIGER-P-GT

Mechanical values and environment

Overtravel A B C D E	2 mm
Overtravel K L M N	1,5 mm

in combination with Actuator BETAETIGER-P-GNT

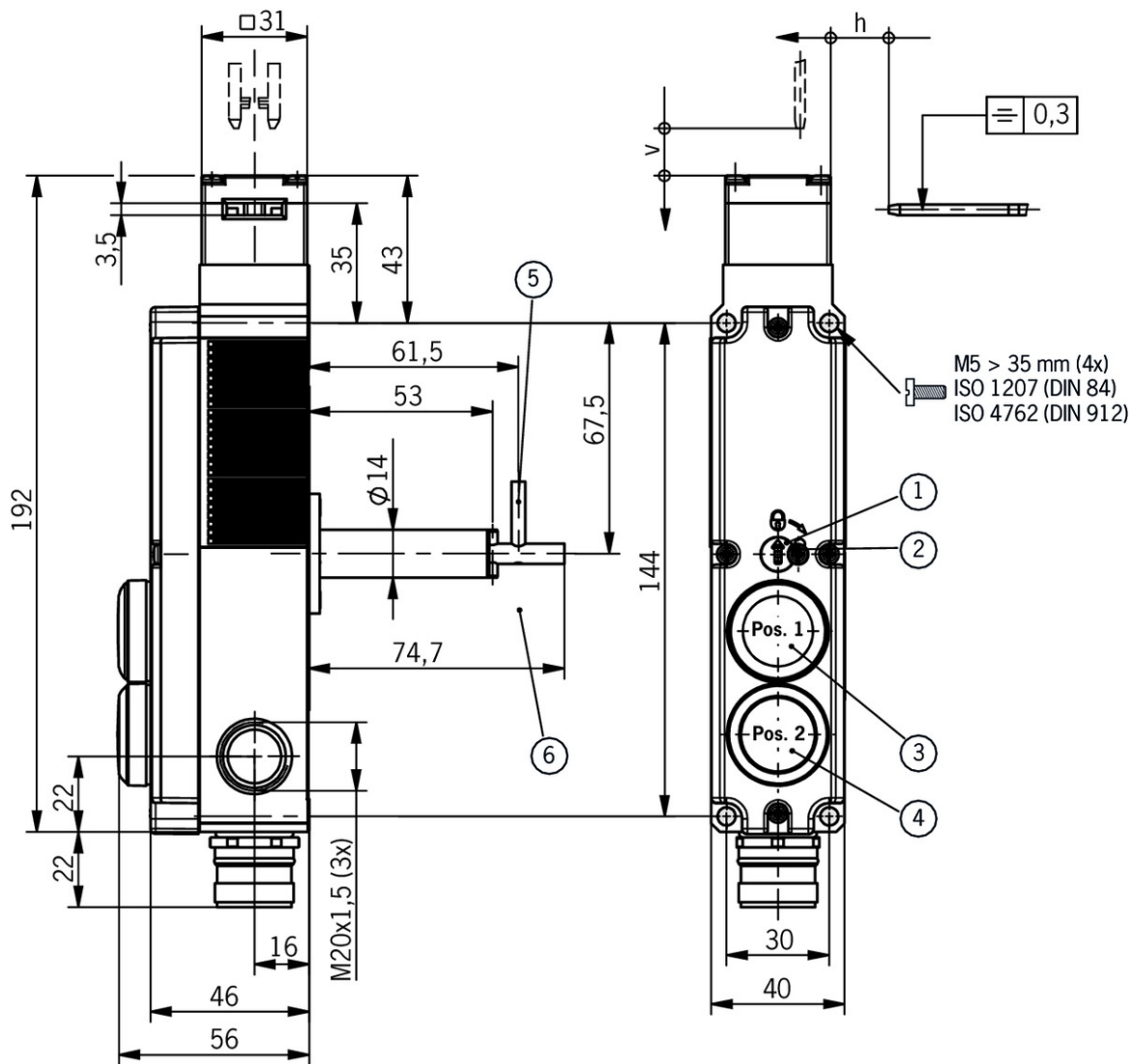
Mechanical values and environment

Overtravel A B C D E	7 mm
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[1] 24V (max. breaking capacity 250mW)

[2] 24V (breaking capacity max. 250mW)

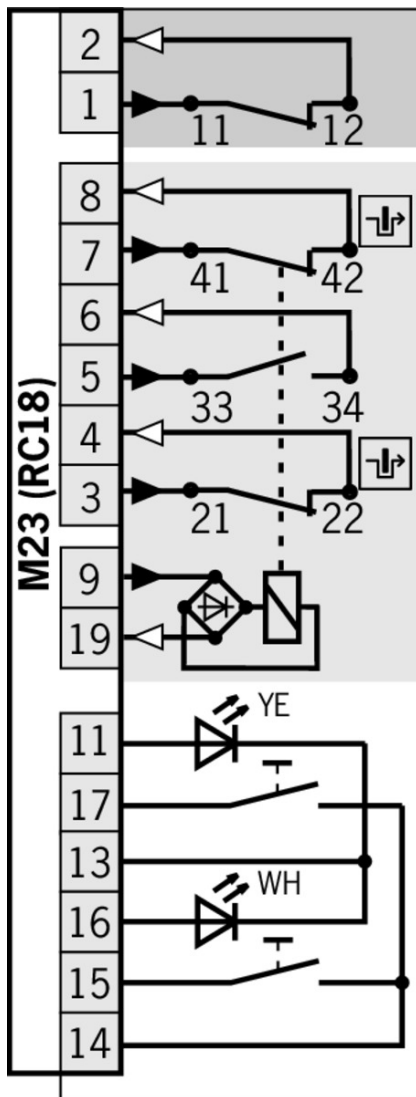
Dimension drawing





Legende

- 1 Auxiliary release
- 2 Locking screw
- 3 Pushbutton white, illuminated
- 4 Pushbutton blue, illuminated
- 5 Escape release, basic position
- 6 Escape release, unlocked position

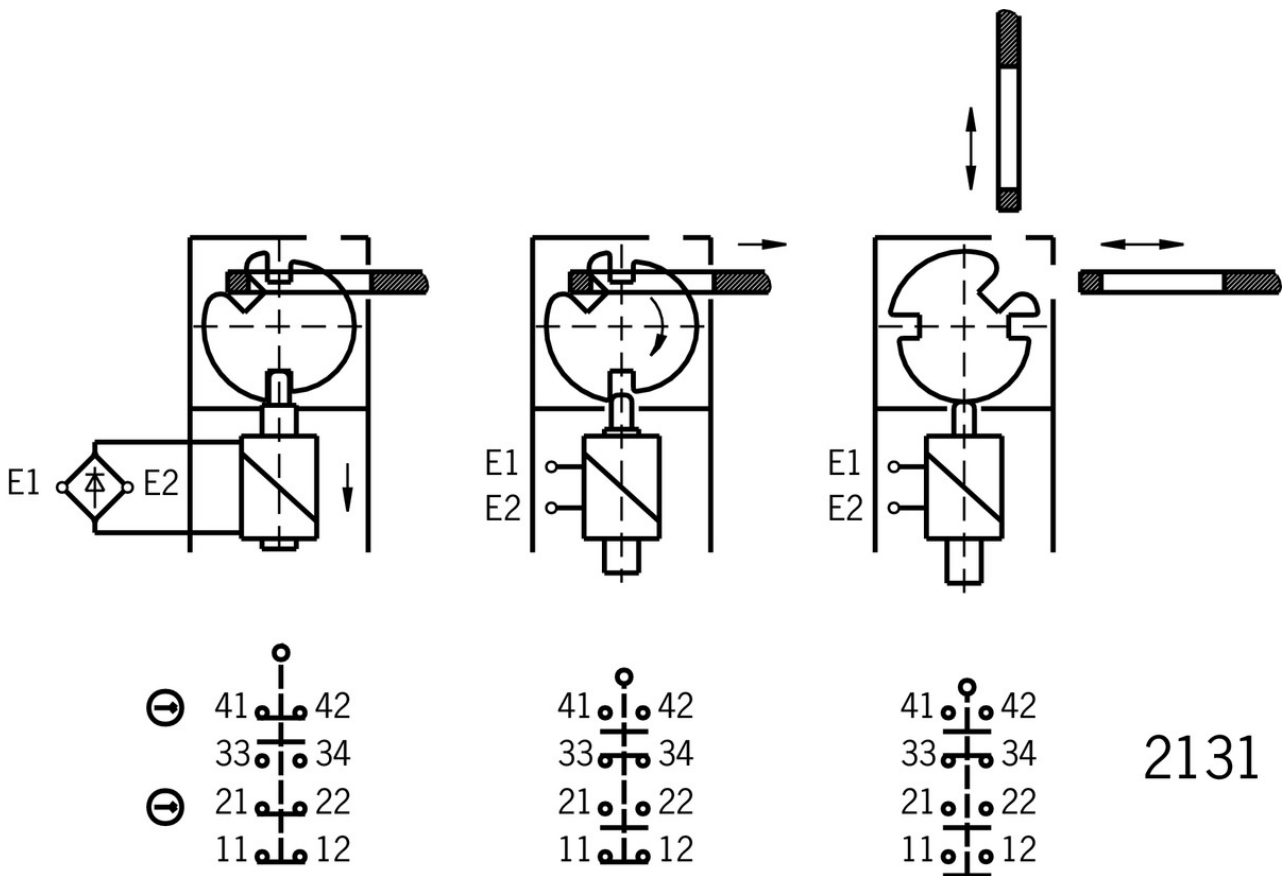
2131 EXT2



Legende

-  Solenoid monitoring
-  Door monitoring

Switching functions



Actuator

- ✓ Bent actuator for safety switches NP/GP/TP, increased overtravel



074571 BETAETIGER-P-WN

✓ Features

- › Actuators made of stainless steel
- › Two stainless safety screws per actuator



074577 BETAETIGER-P-WNT

✓ Features

- › Actuators made of stainless steel
- › Two stainless safety screws per actuator
- › Actuators with rubber bushings

- ✓ Bent actuator for safety switches NP/GP/TP



070038 BETAETIGER-P-WT

✓ Features

- › Actuators made of stainless steel
- › Two stainless safety screws per actuator
- › Actuators with rubber bushings

059227 BETAETIGER-P-W



- ✓ Features
 - › Actuators made of stainless steel
 - › Two stainless safety screws per actuator
-

✓ Actuators for safety switches NP/GP/TP



- 070046** BETAETIGER-P-GT
- ✓ Features
 - › Actuators made of stainless steel
 - › Two stainless safety screws per actuator
 - › Actuators with rubber bushings
-



- 059226** BETAETIGER-P-G
- ✓ Features
 - › Actuators made of stainless steel
 - › Two stainless safety screws per actuator
-

✓ Actuators for safety switches NP/GP/TP, increased overtravel



- 074576** BETAETIGER-P-GNT
- ✓ Features
 - › Actuators made of stainless steel
 - › Two stainless safety screws per actuator
 - › Actuators with rubber bushings
-



- 074570** BETAETIGER-P-GN
- ✓ Features
 - › Actuators made of stainless steel
 - › Two stainless safety screws per actuator
-

✓ Hinged actuator left/right for safety switches NP/GP/TP



- 059440** RADIUSBETAETIGER-P-LR
- ✓ Features
 - › Actuators made of stainless steel
 - › Two stainless safety screws per actuator
 - › For doors hinged on right and left
-

✓ Hinged actuator top/bottom for safety switches NP/GP/TP



- 070050** RADIUSBETAETIGER-P-OU
- ✓ Features
 - › Actuators made of stainless steel
 - › Two stainless safety screws per actuator
 - › For doors hinged at top and bottom
-

✓ Hinged actuator top/bottom for safety switches NP/GP/TP, increased overtravel

- 074572** RADIUSBETAETIGER-P-OUN
- ✓ Features



- › Actuators made of stainless steel
- › Two stainless safety screws per actuator
- › For doors hinged at top and bottom

▼ Hinged actuator left/right for safety switches NP/GP/TP, increased overtravel



074573 RADIUSBETAETIGER-P-LRN

▼ Features

- › Actuators made of stainless steel
- › Two stainless safety screws per actuator
- › For doors hinged on right and left

Function expansion

▼ Built-in LED



087423 EINBAULEUCHTE LED M20X1,5



095510 EINBAULEUCHTE LED-F M20X1,5

▼ Lockout bar NP/GP/TP



096105 SPERREINSATZ TP

▼ Features

- › Prevents unintentional closing of the door
- › Can be secured with padlocks

▼ Latch spring for increased retention force

076501 RASTFEDER NP/TP

▼ Lock for auxiliary release for safety switches CTP/TP/STP



084177 SCHLOSS TP VERSCHIEDENSCHLIESSEND

▼ Features

- › Lock unique locking
- › Key removable in “unlocked” and “locked” positions



086236 SCHLOSS TP GLEICHSCHLIESSEND

▼ Features

- › Identical locking
- › Key removable in “unlocked” and “locked” positions



109212 SCHLOSS TP GLEICHSCHLIESSEND C2293

▼ Features

- › Identical locking
 - › Key can be removed only in “locked” position
-

▼ Emergency unlocking for safety switches CTP/TP/STP



099877 NOTENTSPERRUNG TP/STP

▼ Release with automatic reset for safety switches CTP/TP/STP



103110 ENTRIEGELUNG RUECKSTELLEND TP/STP

▼ Wire front release



096230 AE-B-A1-02,0-096230

▼ Features

- › Can be used as escape release or emergency unlocking
 - › No automatic return
 - › Sheath length 2 m (rope length 6 m)
-



098313 AE-B-A1-03,0-098313

▼ Features

- › Can be used as escape release or emergency unlocking
 - › No automatic return
 - › Sheath length 3 m (rope length 6 m)
-



098314 AE-B-A1-04,0-098314

▼ Features

- › Can be used as escape release or emergency unlocking
 - › No automatic return
 - › Sheath length 4 m (rope length 6 m)
-

▼ Insertion funnel for safety switches NP..A/GP/TP..A



086237 EINFUEHRTRICHTER-P

▼ LED set



093752 TP LED SET

▼ Features

- › LED set
-

▼ Handle for wire front release



099795 AY-HDL-099795

▼ Features

- › Suitable for all wire front releases

-
- ▼ Handle for escape release for safety switches TP/STP/STA



105329 FE-GRIFF

Mounting accessories

- ▼ Mounting plates EMP-SB for safety switches CTP, TP...A, STA, STP and TX



093456 EMP-SB

- ▼ Features

- › For vertical and horizontal mounting of safety switches TP...A, STA, STP and TX

- ▼ Mounting plates EMP-B1 for actuators for safety switches CTP, TP...A, STA, STP, TX and TZ



093457 EMP-B1

- ▼ Mounting plates EMP-B2 for actuators for safety switches CTP, TP...A, STA, STP, TX and TZ



093458 EMP-B2

- ▼ Safety screws M5 x 25

073457 M5X25/V100

- ▼ Features

- › Safety screws M5 x 25
- › Packaging unit 100 pieces

- ▼ Safety screws for actuators, M5 x 10

073455 M5X10-NIRO/V100 NZ/TZ

- ▼ Features

- › Safety screws M5 x 10
- › Packaging unit 100 pieces

- ▼ Safety screws for safety switches M4 x 14, large head

086232 M4X14-NIRO/V100

- ▼ Features

- › Safety screws M4 x 14 (large head)
- › Packaging unit 100 pieces

- ▼ Switch bracket for bolt NP/TP
-



073539 SCHALTERAUFNAHME TP

▼ Features

- › Switch bracket made of steel
 - › For doors hinged on the left or right
-

Bolt

▼ Bolt BTC-T/GP... with escape release for safety switches GP and TP



106302 BTC-T/GP-S-TH-01-F

▼ Features

- › Aluminum bolt
 - › For doors hinged on the left or right
 - › Lever for escape release from the danger area
 - › Pushbutton in open position
 - › Can be locked in open position with padlocks
 - › Actuator included
-

▼ Bolt 0 NP/TP for safety switches NP, GP and TP



073535 RIEGEL 0 NP/TP OHNE RASTUNG

▼ Features

- › Steel bolt
 - › For doors hinged on the left or right
 - › Can be locked in open position with padlocks
 - › Actuator included
-

▼ Bolt 1 NP/TP for safety switches NP, GP and TP



073536 RIEGEL 1 NP/TP 1X RASTUNG ZU

▼ Features

- › Steel bolt
 - › For doors hinged on the left or right
 - › Can be locked in open position with padlocks
 - › Actuator included
 - › Detent mechanism closed position
-

▼ Bolt TP/GP... with escape release for safety switches GP and TP



086186 RIEGEL TP-AF

▼ Features

- › Steel bolt
 - › Lever for escape release from the danger area
 - › For doors hinged on the right
 - › Detent knob in open position
 - › Can be locked in open position with padlocks
 - › Actuator included
-



086188 RIEGEL TP-CF

▼ Features

- › Steel bolt
 - › Lever for escape release from the danger area
 - › For doors hinged on the left
 - › Detent knob in open position
 - › Can be locked in open position with padlocks
 - › Actuator included
-

▼ Bolt TP/GP... for safety switches GP and TP



084430 RIEGEL TP-A

▼ Features

- › Steel bolt
 - › For doors hinged on the right
 - › Can be locked in open position with padlocks
 - › Actuator included
-



084432 RIEGEL TP-C

▼ Features

- › Steel bolt
 - › For doors hinged on the left
 - › Can be locked in open position with padlocks
 - › Actuator included
-

Connection material

▼ Female plug RC18 straight



074616 RC18EF

▼ Features

- › Plug connector M23, straight
 - › Number of pins: 19-pin with screen bonding clamp
-

▼ Female plug RC18 angled



074617 RC18WF

▼ Features

- › Plug connector M23, angled
 - › Number of pins: 19-pin with screen bonding clamp
-

▼ Replacement crimp contacts for female connector RC18

094309 CRIMPKONTAKT BUCHSE RCF

▼ Features

- › 19 crimp sockets
 - › Conductor cross-section 19 x 0.75 - 1 mm²
 - › For plug connector RC18
-

▼ Female plug RC18 straight with option C1825

077025 RC18EF-C1825



- ▼ Features
 - › Plug connector M23, straight
 - › Number of pins: 19-pin with screen bonding clamp
-

- ▼ Female connector RC18 angled with option C1825



- 077026** RC18WF-C1825
 - ▼ Features
 - › Plug connector M23, angled
 - › Number of pins: 19-pin with screen bonding clamp
-

- ▼ Replacement crimp contacts for female connector RC18 with option C1825

- 094310** CRIMPKONTAKT BUCHSE RCF-C1825
 - ▼ Features
 - › 19 crimp sockets
 - › Conductor cross-section 16 x 0.25 - 0.5 mm² and 3 x 0.75 - 1 mm²
 - › For plug connector RC18..C1825
-

- ▼ Connection cable with plug connector M23 with option C1825, 1.5m, straight



- 092761** C-M23F19-19XDIFPU01,5-MA-092761
 - ▼ Features
 - › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 1.5 m
 - › With flying lead
 - › Cores color-coded
-

- ▼ Connection cable with plug connector M23 with option C1825, 15m, straight



- 077016** C-M23F19-19XDIFPU15,0-MA-077016
 - ▼ Features
 - › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 15 m
 - › With flying lead
 - › Cores color-coded
-

- ▼ Connection cable with plug connector M23 with option C1825, 6m, straight



- 077014** C-M23F19-19XDIFPU06,0-MA-077014
 - ▼ Features
 - › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 6 m
 - › With flying lead
 - › Cores color-coded
-

-
- ▼ Connection cable with plug connector M23 with option C1825, 8m, straight



077015 C-M23F19-19XDIFPU08,0-MA-077015

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 8 m
 - › With flying lead
 - › Cores color-coded
-

- ▼ Connection cable with plug connector M23 with option C1825, 10m, straight



092898 C-M23F19-19XDIFPU10,0-MA-092898

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 10 m
 - › With flying lead
 - › Cores color-coded
-

- ▼ Connection cable with plug connector M23 with option C1825, 20m, straight



092726 C-M23F19-19XDIFPU20,0-MA-092726

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 20 m
 - › With flying lead
 - › Cores color-coded
-

- ▼ Connection cable with plug connector M23 with option C1825, 25m, straight



092727 C-M23F19-19XDIFPU25,0-MA-092727

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 25 m
 - › With flying lead
 - › Cores color-coded
-

- ▼ Connection cable with plug connector M23 with option C1825, 30m, straight



095993 C-M23F19-19XDIFPU30,0-MA-095993

▼ Features

- › M23 plug connector, 18-pin + PE
- › Straight plug connector
- › PUR cable
- › Cable length 30 m

- › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 40m, straight



102490 C-M23F19-19XDIFPU40,0-MA-102490

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 40 m
 - › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23, 19-pin, 1.5m, straight



110301 C-M23F19-19XDIFPU01,5-MA-110301

▼ Features

- › M23 female plug, 19-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 1.5 m
 - › With flying lead
 - › Cores numbered, black
-

▼ Connection cable with plug connector M23, 19-pin, 3m, straight



110302 C-M23F19-19XDIFPU03,0-MA-110302

▼ Features

- › M23 female plug, 19-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 3 m
 - › With flying lead
 - › Cores numbered, black
-

▼ Connection cable with plug connector M23, 19-pin, 6m, straight



110303 C-M23F19-19XDIFPU06,0-MA-110303

▼ Features

- › M23 female plug, 19-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 6 m
 - › With flying lead
 - › Cores numbered, black
-

▼ Connection cable with plug connector M23, 19-pin, 10m, straight



110304 C-M23F19-19XDIFPU10,0-MA-110304

▼ Features

- › M23 female plug, 19-pin

- › Straight plug connector
 - › PUR cable
 - › Cable length 10 m
 - › With flying lead
 - › Cores numbered, black
-

▼ Connection cable with plug connector M23, 19-pin, 15m, straight



110305 C-M23F19-19XDIFPU15,0-MA-110305

▼ Features

- › M23 female plug, 19-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 15 m
 - › With flying lead
 - › Cores numbered, black
-

▼ Connection cable with plug connector M23, 19-pin, 20m, straight



110306 C-M23F19-19XDIFPU20,0-MA-110306

▼ Features

- › M23 female plug, 19-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 20 m
 - › With flying lead
 - › Cores numbered, black
-

▼ Connection cable with plug connector M23, 19-pin, 25m, straight



110307 C-M23F19-19XDIFPU25,0-MA-110307

▼ Features

- › M23 female plug, 19-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 25 m
 - › With flying lead
 - › Cores numbered, black
-

Instructions












▼ Návod k použití Bezpečnostní spínač TP...

Doc. no. **Version** **Language** **Download**

Betriebsanleitung Sicherheitsschalter TP... Manual de instrucciones Interruptores de seguridad TP... Mode d'emploi pour les interrupteurs de sécurité TP... Operating Instructions Safety Switches TP...	2084123	15-12/17	   	 5.7 MB
Návod k použití Bezpečnostní spínač TP...	2084123	15-12/17		 1.5 MB
Driftsvejledning for sikkerhedsafbryder TP...	2084123	15-12/17		 1.5 MB
Manual de instruções Chave de segurança TP...	2084123	15-12/17		 1.5 MB
Istruzioni di impiego dei finecorsa di sicurezza TP...	2084123	15-12/17		 1.5 MB

Catalogs

- Bezpečnostní spínače s plastovým pouzdem Sicherheitsschalter mit Kunststoffgehäuse Safety Switches with Plastic Housing Interruptores de seguridad con carcasa plástica Interrupteurs de sécurité avec boîtier plastique 塑料壳体 的安全开关

	Doc. no.	Version	Language	Download
Sicherheitsschalter mit Kunststoffgehäuse	096955	11-03/18		 6.6 MB
Interrupteurs de sécurité avec boîtier plastique	100677	11-03/18		 6.6 MB
Interruptores de seguridad con carcasa plástica	104855	11-03/18		 6.6 MB
Bezpečnostní spínače s plastovým pouzdem	121649	11-03/18		 6.6 MB
Safety Switches with Plastic Housing	096956	11-03/18		 6.6 MB
塑料壳体 的安全开关	116243	11-03/18		 6.2 MB

Declaration of conformity

- EU prohlášení o shodě

	Doc. no.	Version	Language	Download
EU-Konformitätserklärung Declaración UE de conformidad Déclaration UE de conformité Dichiarazione di conformità EU declaration of conformity	2077153	25-02/17	    	 0.3 MB
EU prohlášení o shodě EU-overensstemmelseserklæring Δήλωση συμμόρφωσης της ΕΕ EU-vaatimustenmukaisuusvakuutus EU-típusbizonyítvány EU-conformiteitsverklaring Deklaracja zgodności UE Declaração de Conformidade UE Declarația de conformitate UE EÚ vyhlásenie o zhode	2077153	25-02/17	         	 0.5 MB