TP1-528A024MC2480 (ORDER NO. 137545)

Auxiliary release on the front

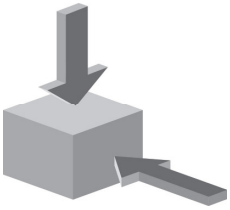
Without door monitoring contact

Increased horizontal overtravel



DESCRIPTION

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%

Guard locking type

TP1 Closed-circuit current principle, guard locking by spring force. Release by applying voltage to the guard locking solenoid.

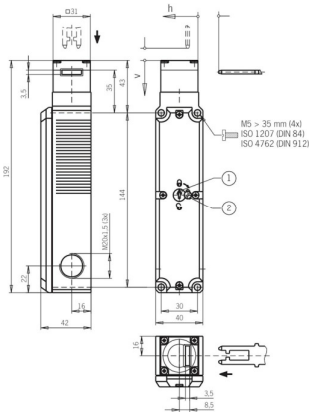
Switching element

528 Slow-action switching contact 1 NC ⊖ + 1 NO

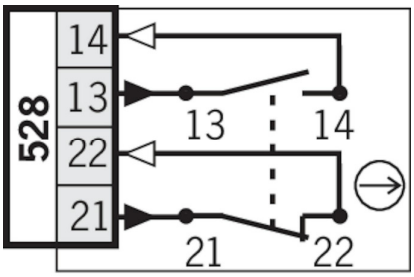
Auxiliary release

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.

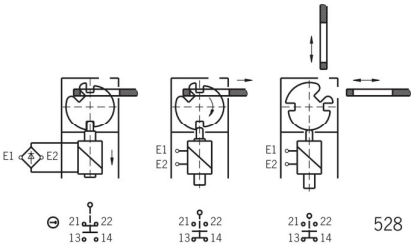
Dimension drawing



528



Switching functions



TECHNICAL DATA

Approvals

Mechanical values and environment

Housing material	Reinforced thermoplastic
Weight	
Net	0,5 kg
Ambient temperature	-20 ... 55 °C
Degree of protection	IP67
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	1
Number of NO contacts	1
Connection	
3 x	M20 x 1.5
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

Thermal rated current I_{th}	4 A
Utilization category according to EN 60947-5-1	
AC-15	4A 230V
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	250 V
Rated impulse withstand voltage U_{imp}	2,5 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 mm²

Reliability values according to EN ISO 13849-1

	Monitoring of guard locking and the safety guard position
$B10_D$	3×10^6
	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-GNT

Mechanical values and environment

Overtravel A B C D E	7 mm

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

ACCESSORIES

Actuator

Actuators for safety switches NP/GP/TP

059226
BETAETIGER-P-G

Actuators made of stainless steel
Two stainless safety screws per actuator

070046
BETAETIGER-P-GT

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

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

074570
BETAETIGER-P-GN

Actuators made of stainless steel
Two stainless safety screws per actuator



074576
BETAETIGER-P-GNT

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

Bent actuator for safety switches NP/GP/TP



059227
BETAETIGER-P-W

Actuators made of stainless steel
Two stainless safety screws per actuator



070038
BETAETIGER-P-WT

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

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



074571
BETAETIGER-P-WN

Actuators made of stainless steel
Two stainless safety screws per actuator



074577
BETAETIGER-P-WNT

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

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

059440
RADIUSBETAETIGER-P-LR

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

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



074573
RADIUSBETAETIGER-P-LRN

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

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

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

Bolt

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



073535
RIEGEL 0 NP/TP OHNE RASTUNG

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

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 BTC-T/GP... without escape release for safety switches GP and TP



106301
BTC-T/GP-S-TH-00-X

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

Bolt TP-GFK for safety switches TP and GP



096616
RIEGEL TP-GFK

Fiber glass reinforced plastic bolt For doors hinged on the left or right Can be locked in open position with padlocks
Actuator included

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



084432
RIEGEL TP-C

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



084430
RIEGEL TP-A

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

Connection material

Cable glands M20x1.5, cable Ø 6-12 mm



086233
EKPM20/06 086233

Function expansion

Built-in LED, light shines to front



095510
EINBAULEUCHTE LED-F M20X1,5

Built-in LED, light shines to side



087423
EINBAULEUCHTE LED M20X1,5

Emergency unlocking for safety switches CTP/TP/STP



099877
NOTENTSPERRUNG TP/STP

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



105329
FE-GRIFF

Handle for wire front release



099795
AY-HDL-099795

Suitable for all wire front releases

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



086237
EINFUEHRTRICHTER-P

LED set



093752
TP LED SET

LED set

Latch spring for increased retention force

076501
RASTFEDER NP/TP

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



084177
SCHLOSS TP
VERSCHIEDENSCHLIESSEND

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



086236
SCHLOSS TP GLEICHSCHLIESSEND

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



109212
SCHLOSS TP
GLEICHSCHLIESSEND C2293

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

Lockout bar NP/GP/TP



096105
SPERREINSATZ TP

Prevents unintentional closing of the door
Can be secured with padlocks

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

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

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

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



097747
AE-B-A1-02,0-F-097747

Can be used as escape release or emergency unlocking
automatic return
Sheath length 2 m (rope length 6 m)



111233
AE-B-A1-03,0-F-111233

Can be used as escape release or emergency unlocking
automatic return
Sheath length 3 m (rope length 6 m)



124770
AE-B-A1-06,0-F-124770

Can be used as escape release or emergency unlocking
automatic return
Rope length 6 m (without sheath)



125582
AE-B-A1-06,0-125582

Can be used as escape release or emergency unlocking
No automatic return
Rope length 6 m (without sheath)

Mounting accessories

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

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



093456
EMP-SB

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

Safety screws for actuators, M5 x 10

073455
M5X10-NIRO/V100 NZ/TZ

Safety screws M5 x 10
Packaging unit 100 pieces

Safety screws for actuators, M5 x 25

073457
M5X25/V100

Safety screws M5 x 25
Packaging unit 100 pieces

Safety screws for safety switches M4 x 14, large head

086232
M4X14-NIRO/V100

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

Switch bracket TP/STP GFK

096613
SCHALTERAUFNAHME TP/STP GFK

Switch bracket made of fiber glass reinforced plastic
For left or right hinged doors

Switch bracket for bolt NP/TP



073539
SCHALTERAUFNAHME TP

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

Contacts

EUCHNER GmbH + Co. KG
Kohlhammerstraße 16
70771 Leinfelden-Echterdingen
+49 711 7597-0
+49 711 753316
info(at)euchner.de