

Checklist Push Button PK2x



Please fill out the checklist as completely as possible and send the PDF document to: info@tsl-escha.com

After checking the conformity of the checklist, you will receive a final article drawing in which the product is clearly described. In addition, you will receive an attractive offer according to your specifications.

We would also be happy to complete the checklist together with you. Call us at +49 (0)2353-66796-0

When selecting colors and pictograms according to EN 14752 and EN 16584-1, the backgrounds must be taken into account. Furthermore, for compliance with EN 14752 and TSI-LOC & PAS, appropriate light and sound signals must be taken into account. If you have any questions about this, please do not hesitate to contact us.

CUSTOMER INFORMATION

Company:

Name:

Address:

Phone:

E-Mail:

Date:

Project:

Quantity:

Quantity 1. year:

Quantity 2. year:

Quantity 3. year:

Notes:

1 APPLICATION AREA

Side entry systems for railway vehicles

Pushbutton for help call device and sanitary cells

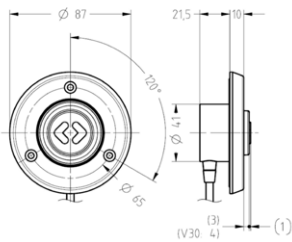
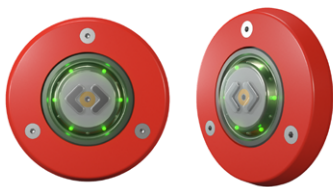
Buses

Other Applications

2 CONSTRUCTION TYPES

Construction Type 1

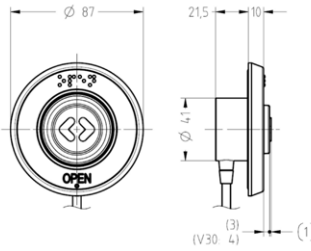
Optional mounting screws:
3x DIN 7984 - M4x20 A2



PK28-FA
Maße ohne Toleranz in mm
Dimensions without tolerance in mm

Construction Type 2

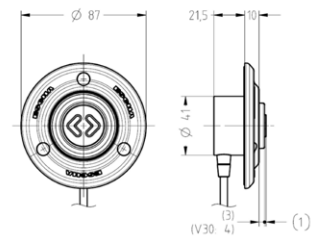
Optional mounting screws:
3x DIN 7984 - M4x20 A2



PK28-FA-M
Maße ohne Toleranz in mm
Dimensions without tolerance in mm

Construction Type 3

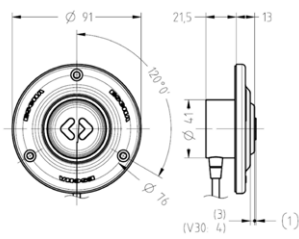
Optional mounting screws:
3x similar DIN 7991 - M4x20 A2



PK23-FA
Maße ohne Toleranz in mm
Dimensions without tolerance in mm

Construction Type 4

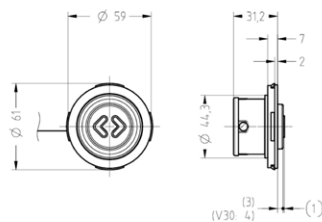
Optional mounting screws:
3x DIN 7984 - M4x20 A2



PK41-FA
Maße ohne Toleranz in mm
Dimensions without tolerance in mm

Construction Type 5

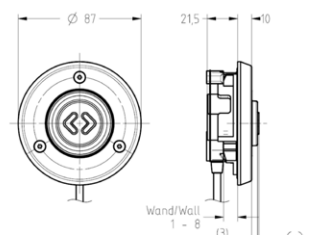
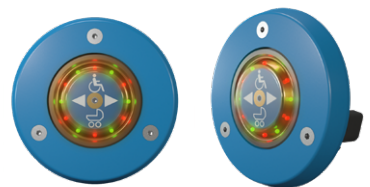
Without mounting screws:



PK28-Z
Maße ohne Toleranz in mm
Dimensions without tolerance in mm

Construction Type 6

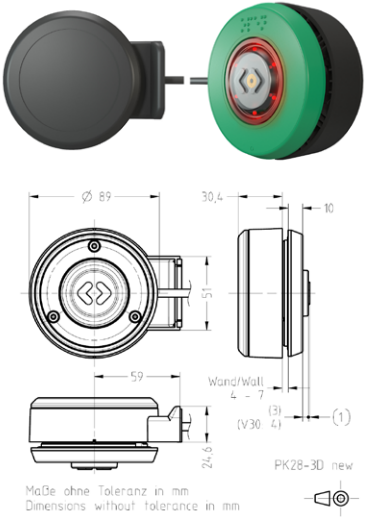
Without mounting screws:



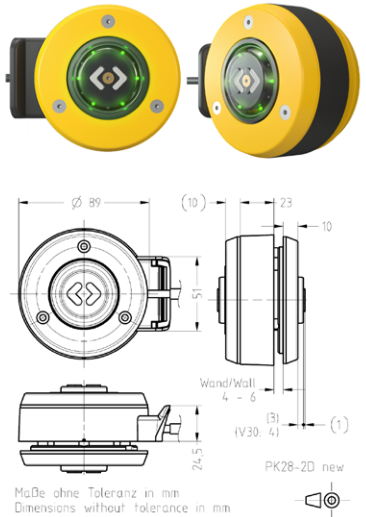
PK28-5
Maße ohne Toleranz in mm
Dimensions without tolerance in mm

2 CONSTRUCTION TYPES

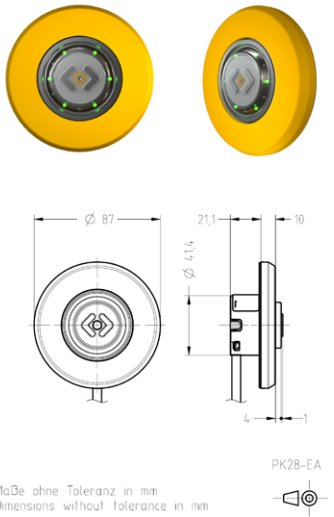
Construction Type 7
Including mounting material



Construction Type 8
Including mounting material



Construction Type 9
Including mounting material

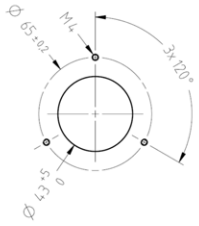


3 MOUNTING SCREWS (When selecting the Construction Type 1 to 4)

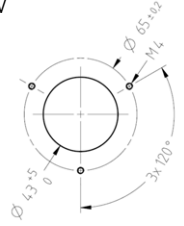
With Without

4 SCREW ALIGNMENT (When selecting the Construction Type 1 to 6)

Alignment „A“



Alignment „V“

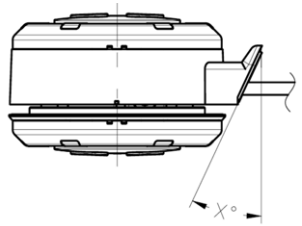


5 CABLE OUTLET

Bottom Left Right

6 VARIABLE ADAPTATION TO THE DOOR PROFILE (When selecting the Construction Type 7 and 8)

Angle 0° Angle 6° Angle 10° Angle 15° Angle 25°



7 GLASS THICKNESS (Construction Type 7 and 8)














Construction Type 7: Glass thickness 4-7 mm
Construction Type 8: Glass thickness 4-6 mm

Construction Type 7: Glass thickness 8-13 mm

Glass thickness mm

8 MOUNTING RING

The mounting ring is made of plastic.

 RAL 1023	 RAL 2000	 RAL 2003	 RAL 2004	 RAL 3020	 RAL 5017	 RAL 6024
 RAL 7035	 RAL 7042	 RAL 7043	 RAL 9004	 RAL 9017	 RAL 9016	

RAL-Ton oder Farbton auf Anfrage

9 TOUCH SURFACE COATING TO PROTECT AGAINST GRAFFITI REMOVER













Without

With

Note: The graffiti remover protection offers increased protection of the touch surface against our tested graffiti cleaning chemicals. Please follow the cleaning instructions in the PK52 instructions for use and installation. A list of tested cleaning chemicals can be found on our Website www.tsl-escha.com

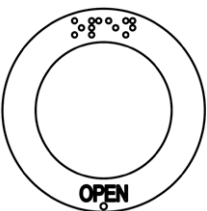
10 INSERT RING

When selecting the Construction Type 2, 7 or 8

 RAL 1023	 RAL 2000	 RAL 2004	 RAL 3003	 RAL 3020	 RAL 5017	 RAL 6024
 RAL 7035	 RAL 7042	 RAL 7043	 RAL 9004 RAL 9017	 RAL 9016		

RAL-Ton oder Farbton auf Anfrage

11 BRAILLE-LABELING/PRINTING



without Braille

Braille open

Braille stop

Braille on request

without printing

Printing open

Printing stop

Printing on request

color printing

white

black

12 TOUCH SURFACE



flat

raised



tactile arrows open



tactile arrows close

13 PICTOGRAPHS¹⁾

 B08 RAL 6024/RAL 9006	 B09 RAL 5017/RAL 9006	 B10 RAL 1023/RAL 9017	 B17 RAL 9006/RAL 5017	 B20 RAL 7042/RAL 9017	 B22 RAL 3020/RAL 9016	 B38 RAL 6024/RAL 9016
 B45 RAL 6024/RAL 9016	 B41 RAL 1023/RAL 9017	 B25 RAL 9006/RAL 9004	 B42 RAL 6024/RAL 9004	 B56 RAL 9004/RAL 9016	 B66 RAL 1023/RAL 9004	 B70 RAL 3020/RAL 9004
 B71 RAL 5017/RAL 7042	 B73 RAL 6024/RAL 9016	 B82 RAL 5017/RAL 9004	 B116 RAL 3020/RAL 9016	 B117 RAL 5017/RAL 9016	 B05 RAL 5017/RAL 9006	 B07 RAL 3020/RAL 9006
 B15 RAL 3003/RAL 9006	 B24 RAL 6024/RAL 9016	 B31 RAL 6024/RAL 9016	 B49 RAL 7042/RAL 9016	 B54 RAL 3020/RAL 9006	 B67 RAL 1023/RAL 9017	 B110 RAL 5017/RAL 9016
 B32 RAL 3020/RAL 9016	 B39 RAL 3020/RAL 9016	 B46 RAL 3020/RAL 9016	 B55 RAL 6024/RAL 9006	 B57 RAL 5017/RAL 9006	 B114 RAL 6024/RAL 9016	 B29 RAL 9006/RAL 9004
 B43 RAL 3020/RAL 9004	 B13 RAL 1023/RAL 9017	 B16 RAL 3020/RAL 9006	 B40 RAL 6024/RAL 9006	 B51 RAL 5017/RAL 9006	 B78 RAL 3020/RAL 9016	 B81 RAL 6024/RAL 9017

1) First RAL specification background/second RAL specification symbol

13 PICTOGRAPHS¹⁾

 B103 RAL 9016/RAL 9017	 B109 RAL 9016/RAL 5017	 B14 RAL 1023/9017	 B21 RAL 1023/9017	 B52 RAL 5017/9016	 B89 RAL 9006//9004	 B75 RAL 5017/9016
 B100 RAL 5022/RAL 9003	 B02 RAL 5017/RAL 9016	 B04 RAL 9006/RAL 5017	 B47 RAL 1023/RAL 9017	 B72 RAL 5017/RAL 7042	 B76 RAL 5022/RAL 9003	 B77 RAL 9006/RAL 9017
 B104 RAL 9016/RAL 9017	 B115 RAL 9016/RAL 7016	 B107 RAL 9016/RAL 7016	 B86 RAL 3020/9016	 B01 RAL 9006/RAL 5017	 B18 RAL 1023/RAL 9017	 B23 RAL 5017/RAL 9016
 B106 RAL 9016/RAL 7016	 B112 RAL 9016/RAL 7043	 B91 RAL 5017/RAL 9016	 B92 RAL 1023/RAL 9017	 B111 RAL 9016/RAL 7016	 B11 RAL 1023/RAL 9017	 B88 RAL 5017/RAL 9016
 B12 RAL 3020/RAL 9016	 B113 RAL 3020/RAL 9017	 B33 RAL 6024/RAL 9006	 B34 RAL 3020/RAL 9006	 B35 RAL 6024/RAL 9006	 B36 RAL 6024/RAL 9016	 B37 RAL 3020/RAL 9016
 B79 RAL 1023/RAL 9004	 B102 RAL 3020/RAL 9016	 B87 RAL 3020/RAL 9016	 B19 RAL 9006/RAL 6024	 B30 RAL 7035/RAL 6024	 B69 RAL 9006/RAL 9017	 B94 RAL 3020/RAL 9004
 B96 RAL 9006/RAL 1023	 B97 RAL 9006/RAL 3020	 B93 RAL 9006/RAL 9004	 B03 Goldfarbend/ gold colored	 B50 RAL 1023	 B80 RAL 9006	 B85 RAL 3020
 B95 RAL 5017	 B105 RAL 9016	 B108 RAL 9017	 B119 RAL 5017/RAL 9016			

Touch surface and pictograph on request

14 NOMINAL VOLTAGE

24 VDC

36 VDC

72 VDC

110 VDC

VDC

15 QUICK CONFIGURATION: LIGHT AND TONE SIGNALS

Functionality via pin assignment

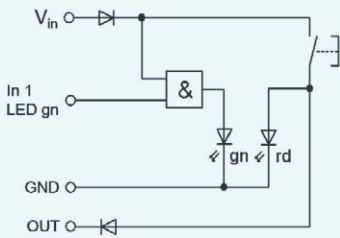
If the pushbutton is pressed applies:

LED: duration of operation with 1 sec. minimum pulse

OUT: Duration of operation with 0.5 sec. minimum pulse

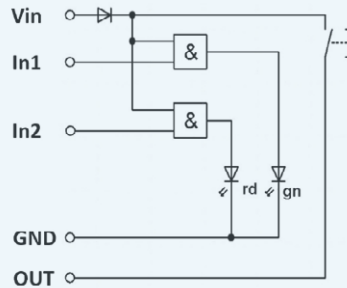
Change color and position

(first color is off when actuated) for rail vehicles according to EN 14752



4pole

Add red light signal

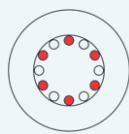


5pole

Delete selection

Not pressed

Pressed

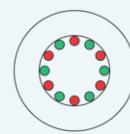
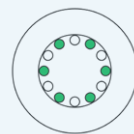


L1

L2

Not pressed

Pressed



L1

L3

Delete selection

Orientation tone
3,8 kHz 0,05 Sek. 0,5 Hz

Confirmation tone
3,5 kHz 0,5 Sek. 1-time

Orientation and
confirmation tone

without
tone



16 INDIVIDUAL SELECTION OF FUNCTIONS

Light Signal	Display	Light Signal	Display
L0		L3 6 green LEDs 6 red LEDs	
L1 6 green LEDs		L5 12 red LEDs	
L2 6 red LEDs		L6 12 green LEDs	

Tone Signal A	Frequency	Duration	Interval	Description
A0	-	-	-	without tone
A1	3,5 kHz	0,5 Sec.	1 Hz	Confirmation tone
A2	3,8 kHz	0,05 Sec.	0,5 Hz	Orientation tone
AX	kHz	Sec.	Hz	

Circuit diagrams see page 7

red LEDs exchanged for yellow LEDs (L2, L3, L5)

Function 1			not pressed						pressed					
Vin	In1		LED-Light Signal				Tone Signal		LED-Light Signal				Tone Signal	
1	0		L0	L1	L2	L3	A0	A1	L0	L1	L2	L3	A0	A1
			L5	L6			A2	AX	L5	L6			A2	AX

Function 2			not pressed						pressed					
Vin	In1		LED-Light Signal				Tone Signal		LED-Light Signal				Tone Signal	
1	1		L0	L1	L2	L3	A0	A1	L0	L1	L2	L3	A0	A1
			L5	L6			A2	AX	L5	L6			A2	AX

From function 3 a 5-wire connection is necessary

Function 3				not pressed						pressed					
Vin	In1	In2		LED-Light Signal				Tone Signal		LED-Light Signal				Tone Signal	
1	0	1		L0	L1	L2	L3	A0	A1	L0	L1	L2	L3	A0	A1
				L5	L6			A2	AX	L5	L6			A2	AX

Function 4				not pressed						pressed					
Vin	In1	In2		LED-Light Signal				Tone Signal		LED-Light Signal				Tone Signal	
1	1	1		L0	L1	L2	L3	A0	A1	L0	L1	L2	L3	A0	A1
				L5	L6			A2	AX	L5	L6			A2	AX

17 CONNECTION CABLES

65) TE Mini-Universal MATE-N-LOK TE 794895-1 6pole (IP56/IP57)		23) ESCHA Ø8 Snap (max. 30 VDC) SP6 6pole (IP68)	
61) ESCHA M12 (max. 60 VDC) WAS4, 5pole (IP68)		E3) TE SUPERSEAL 1.5MM TE 282107-1 5polig (IP67)	
64) TE Mini-Universal MATE-N-LOK, TE 794805-1 4pole (IP56/IP57)		01) TE FASTIN-FASTON 250 TE 180901-0, 6,3 x 0,8 mm 4pole	
66) TE SUPERSEAL 1.5MM TE 282106-1 4pole (IP67)		00) TE CIRCULAR MATE-N-LOK, TE 925075, Ø 2,1 mm 4pole	
71) TE DEUTSCH DTM DTM04-4P 4pole (IP68)		02) TE FASTIN-FASTON 110 TE 626057-0, 2,8 x 0,8 mm 4pole	
60) ESCHA M8/Ø8 Snap (max. 60 VDC) SSFP4 4pole (IP68)		8S) TE ULTRAFast 250 2-520184-2, 6,3 x 0,8 mm	
8A) with wire-end sleeve		Customer specific	

PIN ASSIGNMENT

PIN 1:	Vin
PIN 2:	In1
PIN 3:	GND
PIN 4:	OUT
PIN 5:	In2
PIN 6:	In3/OUT2

18 CONNECTION LINE

(ACCORDING TO EN 45545-2 AND UN/ECE R118)

L = ca. 160 mm

L = mm (minimum length 160 mm)