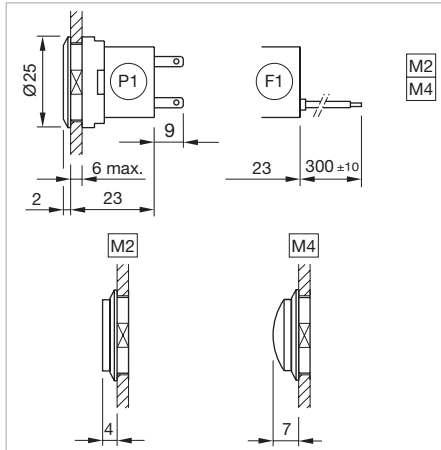


84 Flush design

Pushbutton actuator with halo illumination standard, IP 67

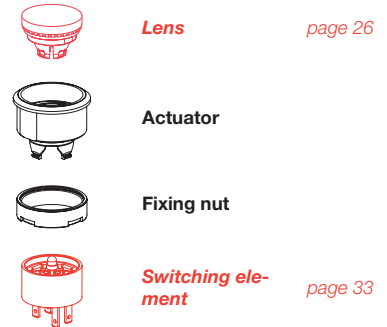


Product can differ from the current configuration.



Dimensions [mm]
 F1 = Flat ribbon cable,
 P1 = Plug-in terminal 2.8 x 0.8 mm,
 M2 = Lens raised above bezel,
 M4 = Lens convexe raised above bezel

Equipment consisting of (schematic overview)

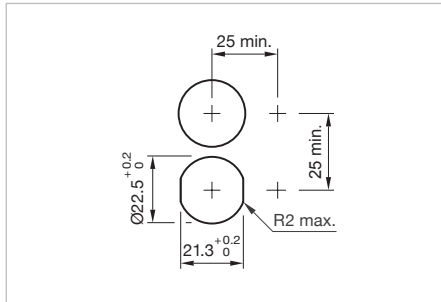


Each Part Number listed below includes all the black components shown in the 3D-drawing.


To obtain a complete unit, please select the red components from the pages shown.

Additional Information

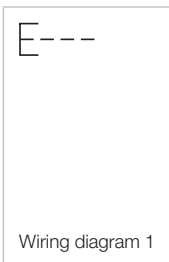
- Front bezel illuminated
- Accessories for halo illumination: Essential lenses Part No. 84-7202.x00A and 84-7205.x00A



Mounting cut-outs [mm]

Front ring	Switching action	Part No.	Wiring diagram	Weight
				
Pushbutton actuator with halo illumination standard, Front dimension Ø 25 mm				
Plastic colourless translucent	B	84-1091.7	1	0.006 kg







Switching action: B = Momentary



Wiring diagram 1

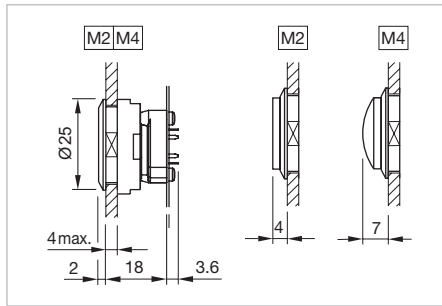
Pushbutton with halo illumination PCB standard, IP 67

Equipment consisting of (schematic overview)

-  **Lens** page 26
-  **Actuator**
-  **Fixing nut**
-  **Mounting flange** page 37
-  **LED** page 39
-  **Switching element** page 34

Each Part Number listed below includes all the black components shown in the 3D-drawing.

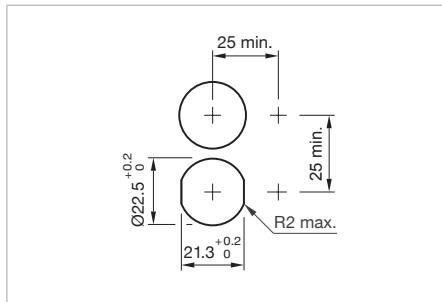
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm]
 M2 = Lens raised above bezel,
 M4 = Lens convex raised above bezel




Product can differ from the current configuration.



Mounting cut-outs [mm]

Additional Information


- Front bezel illuminated
- Accessories for halo illumination: Essential lenses Part No. 84-7202.x00A and 84-7205.x00A

Front ring	Switching action	Part No.	Wiring diagram	Weight
				
Pushbutton actuator with halo illumination PCB standard, Front dimension Ø 25 mm				
Plastic colourless translucent	B	84-1091.7	1	0.006 kg

Switching action: B = Momentary





84 Accessories

Product attribute	Dimension	Lens	Mounting type	Part No.	Weight
flat	Ø 19.7 mm	Aluminium gold anodized	level with bezel	84-7201.400	0.003 kg
		Aluminium olive-green anodized	level with bezel	84-7201.500	0.003 kg
		Aluminium blue anodized	level with bezel	84-7201.600	0.003 kg
		Aluminium natural anodized	level with bezel	84-7201.800	0.003 kg
		Aluminium black anodized	raised above bezel	84-7205.000	0.003 kg
		Aluminium red anodized	raised above bezel	84-7205.200	0.003 kg
		Aluminium gold anodized	raised above bezel	84-7205.400	0.003 kg
		Aluminium olive-green anodized	raised above bezel	84-7205.500	0.003 kg
		Aluminium blue anodized	raised above bezel	84-7205.600	0.003 kg
		Aluminium natural anodized	raised above bezel	84-7205.800	0.003 kg
 Lens metal					
convex (domed)	Ø 19.7 mm	Aluminium black anodized	level with bezel	84-7202.000	0.003 kg
		Aluminium red anodized	level with bezel	84-7202.200	0.003 kg
		Aluminium gold anodized	level with bezel	84-7202.400	0.003 kg
		Aluminium olive-green anodized	level with bezel	84-7202.500	0.003 kg
		Aluminium blue anodized	level with bezel	84-7202.600	0.003 kg
		Aluminium natural anodized	level with bezel	84-7202.800	0.003 kg

Lens for halo illumination



Additional Information

- Lens profile flat or convex (domed)
- The colour of anodized aluminium parts can vary due to technical production reasons

Product attribute	Dimension	Lens	Mounting type	Part No.	Weight
 Lens metal for halo illumination					
flat	Ø 19.7 mm	Aluminium black anodized	raised above bezel	84-7205.000A	0.003 kg
		Aluminium red anodized	raised above bezel	84-7205.200A	0.003 kg
		Aluminium gold anodized	raised above bezel	84-7205.400A	0.003 kg
		Aluminium olive-green anodized	raised above bezel	84-7205.500A	0.003 kg
		Aluminium blue anodized	raised above bezel	84-7205.600A	0.003 kg
		Aluminium natural anodized	raised above bezel	84-7205.800A	0.003 kg
 Lens metal for halo illumination					
convex (domed)	Ø 19.7 mm	Aluminium black anodized	raised above bezel	84-7202.000A	0.004 kg
		Aluminium red anodized	raised above bezel	84-7202.200A	0.004 kg
		Aluminium gold anodized	raised above bezel	84-7202.400A	0.004 kg
		Aluminium olive-green anodized	raised above bezel	84-7202.500B	0.004 kg
		Aluminium blue anodized	raised above bezel	84-7202.600A	0.004 kg
		Aluminium natural anodized	raised above bezel	84-7202.800A	0.004 kg

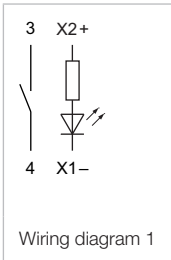
Switching element with illumination
Additional Information

- LED and built-in resistor included
- Standard version: Cable length 300 mm with insulated ferrule, plug-in terminal 2.8 x 0.8 mm
- Other options on request: Customisation of cable and connectors, rear side fully sealed (IP 67)
- Protection degree (rear side): IP 40, upgrade to IP 67 with plug Part No. 84-900 possible. With applications where strong vibrations occur, the plugs may become loose
- Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination

Protection degree	LED colour	Operating voltage	Operation current	Contacts	Terminal	Part No.	Wiring diagram	Weight
 <p>Switching element with illumination</p>								
IP 40	Single-LED red	12 VDC ±10 %	10 mA	1 NO	Plug 2.8 x 0.8 mm	84-8511.2320	1	0.006 kg
	Single-LED orange	12 VDC ±10 %	10 mA	1 NO	Plug 2.8 x 0.8 mm	84-8511.3320	1	0.006 kg
	Single-LED yellow	12 VDC ±10 %	10 mA	1 NO	Plug 2.8 x 0.8 mm	84-8511.4320	1	0.006 kg
	Single-LED green	12 VDC ±10 %	10 mA	1 NO	Plug 2.8 x 0.8 mm	84-8511.5320	1	0.006 kg
	Single-LED blue	12 VDC ±10 %	10 mA	1 NO	Plug 2.8 x 0.8 mm	84-8511.6320	1	0.006 kg
	Single-LED white	12 VDC ±10 %	10 mA	1 NO	Plug 2.8 x 0.8 mm	84-8511.9320	1	0.006 kg
	Single-LED red	24 VDC ±10 %	10 mA	1 NO	Plug 2.8 x 0.8 mm	84-8511.2620	1	0.006 kg
	Single-LED orange	24 VDC ±10 %	10 mA	1 NO	Plug 2.8 x 0.8 mm	84-8511.3620	1	0.006 kg
	Single-LED yellow	24 VDC ±10 %	10 mA	1 NO	Plug 2.8 x 0.8 mm	84-8511.4620	1	0.006 kg
	Single-LED green	24 VDC ±10 %	10 mA	1 NO	Plug 2.8 x 0.8 mm	84-8511.5620	1	0.006 kg
	Single-LED blue	24 VDC ±10 %	10 mA	1 NO	Plug 2.8 x 0.8 mm	84-8511.6620	1	0.006 kg
	Single-LED white	24 VDC ±10 %	10 mA	1 NO	Plug 2.8 x 0.8 mm	84-8511.9620	1	0.006 kg
	 <p>Switching element with illumination</p>							
IP 40	Single-LED red	12 VDC ±10 %	10 mA	1 NO	Flat ribbon cable	84-8511.2340	1	0.015 kg
	Single-LED orange	12 VDC ±10 %	10 mA	1 NO	Flat ribbon cable	84-8511.3340	1	0.015 kg
	Single-LED yellow	12 VDC ±10 %	10 mA	1 NO	Flat ribbon cable	84-8511.4340	1	0.015 kg
	Single-LED green	12 VDC ±10 %	10 mA	1 NO	Flat ribbon cable	84-8511.5340	1	0.015 kg
	Single-LED blue	12 VDC ±10 %	10 mA	1 NO	Flat ribbon cable	84-8511.6340	1	0.015 kg
	Single-LED white	12 VDC ±10 %	10 mA	1 NO	Flat ribbon cable	84-8511.9340	1	0.015 kg
	Single-LED red	24 VDC ±10 %	10 mA	1 NO	Flat ribbon cable	84-8511.2640	1	0.015 kg
	Single-LED orange	24 VDC ±10 %	10 mA	1 NO	Flat ribbon cable	84-8511.3640	1	0.015 kg
	Single-LED yellow	24 VDC ±10 %	10 mA	1 NO	Flat ribbon cable	84-8511.4640	1	0.015 kg
	Single-LED green	24 VDC ±10 %	10 mA	1 NO	Flat ribbon cable	84-8511.5640	1	0.015 kg
	Single-LED blue	24 VDC ±10 %	10 mA	1 NO	Flat ribbon cable	84-8511.6640	1	0.015 kg
	Single-LED white	24 VDC ±10 %	10 mA	1 NO	Flat ribbon cable	84-8511.9640	1	0.015 kg


Contacts: NO = Normally open

84 Accessories

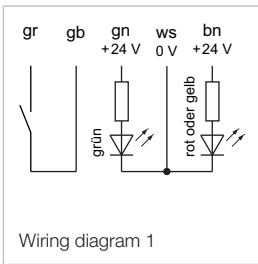


Switching element bi-colour

- Additional Information**
- LED and built-in resistor included
 - Protection degree IP 67, rear side fully sealed. The switching element cannot be disconnected from the actuator any longer
 - Best illumination level will be reached with aluminium lens with spot, Part No. 84-7215.x00 and 84-7211.x00
 - Standard version: Cable length 300 mm with insulated ferrule
 - Other options on request: Customisation of cable and connectors
 - Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination

Protection degree	LED colour	Operating voltage	Operation current	Contacts	Terminal	Part No.	Wiring diagram	Weight
 <p>Switching element with bi-colour illumination</p>								
IP 67	Bi-colour LED red/green	24 VDC ±10 %	20 mA	1 NO	Flat ribbon cable	84-8515.8640	1	0.015 kg
	Bi-colour LED yellow/green	24 VDC ±10 %	20 mA	1 NO	Flat ribbon cable	84-8515.7640	1	0.015 kg

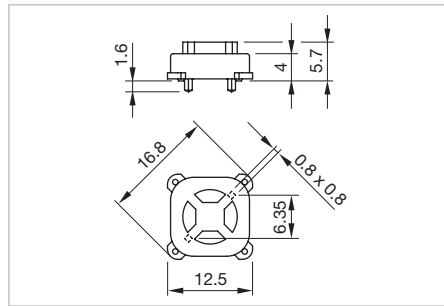
Contacts: NO = Normally open




Illumination element PCB

Additional Information

- The customer has to decide what series resistor shall be used to the LED
- LED and mounting flange to be ordered separately

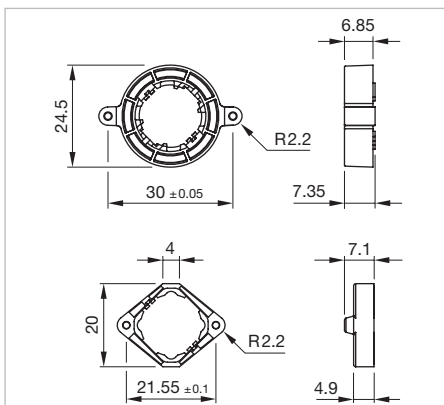


Dimensions [mm]



Terminal	Part No.	Component layout	Weight
 <p>Illumination element PCB mounting</p>			
PCB	92-800.042	4	0.001 kg

The component layouts you will find from page 49

Mounting flange



Dimensions [mm]


Product attribute	Part No.	Weight
 <p>Mounting flange</p>		
Halo illumination (illuminated multi-color bezel)	84-960.0	0.001 kg
 <p>Mounting flange</p>		
Standard version	92-960.0	0.001 kg

Illumination

Single-LED, T1 Bi-Pin

Additional Information


- The customer has to decide what series resistor shall be used to the LED
- Luminosity and wave length scattering caused by LED manufacturing processes may cause slight variations in the illumination

LED colour	Forward voltage typ.	Lumi. intensity	Dom. wavelength	Part No.	Weight
 <p>Single-LED</p>					
Single-LED red	2.1 VDC @ 20 mA	200 mcd	625 nm	10-2602.3202L	0.001 kg
Single-LED orange	2.1 VDC @ 20 mA	220 mcd	590 nm	10-2602.3203L	0.001 kg
Single-LED yellow	3.3 VDC @ 20 mA	500 mcd	570 nm	10-2602.3204L	0.001 kg
Single-LED green	3.5 VDC @ 20 mA	250 mcd	525 nm	10-2602.3205L	0.001 kg
Single-LED blue	3.5 VDC @ 20 mA	450 mcd	470 nm	10-2602.3206L	0.001 kg
Single-LED white	3.3 VDC @ 20 mA	600 mcd	x=0.29/y=0.31 nm	10-2602.3209L	0.001 kg

Bi-colour-LED, T1 Bi-Pin

Additional Information

- The customer has to decide what series resistor shall be used to the LED
- Luminosity and wave length scattering caused by LED manufacturing processes may cause slight variations in the illumination

LED colour	Forward voltage typ.	Lumi. intensity	Dom. wavelength	Part No.	Weight
 <p>Bi-colour-LED</p>					
Bi-colour LED red/green	2.0/3.2 VDC @ 20 mA	380/650 mcd	628/525 nm	10-2603.320AL	0.001 kg
Bi-colour LED yellow/green	2.0/3.2 VDC @ 20 mA	480/380 mcd	588/525 nm	10-2603.320CL	0.001 kg