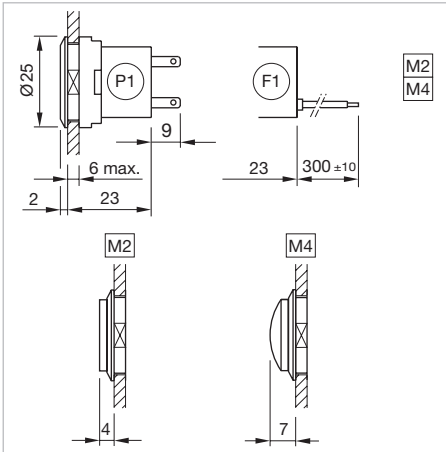


84 Flush design

Indicator 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)

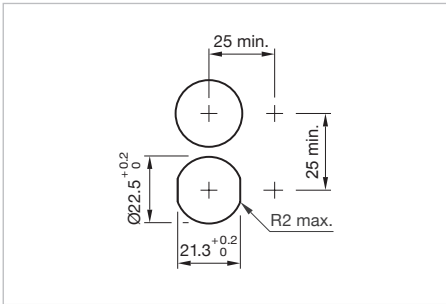
	Lens	page 26
	Actuator	
	Fixing nut	
	Illumination element	page 31

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	Part No.	Weight
Indicator actuator with halo illumination standard, Front dimension Ø 25 mm		
Plastic colourless translucent	84-0090.7	0.006 kg


Indicator with halo illumination PCB standard, IP 67


Equipment consisting of (schematic overview)


**Lens**
page 26

**Actuator**

**Fixing nut**

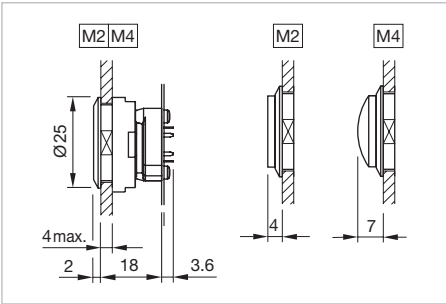
**Mounting flange**
page 37

**LED**
page 39

**Illumination element**
page 36

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

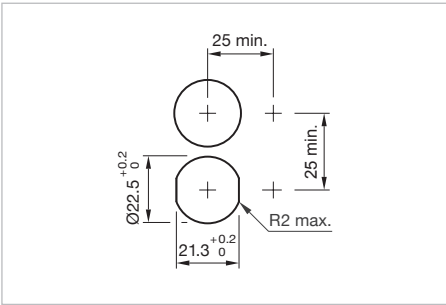
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm]
M2 = Lens raised above bezel,
M4 = Lens convexe 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		Part No.	Weight
 Indicator actuator with halo illumination PCB standard, Front dimension Ø 25 mm			
Plastic colourless translucent		84-0090.7	0.006 kg



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
<div></div> 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 metall 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 metall 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

Rear side

Illumination element, IP 40

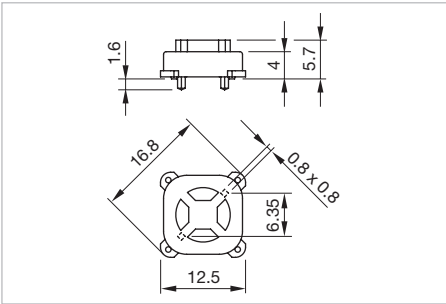
Additional Information

- 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	Terminal	Part No.	Wiring diagram	Weight
 Illumination element							
IP 40	Single-LED red	12 VDC ±10 %	10 mA	Plug 2.8 x 0.8 mm	84-8001.2320	1	0.005 kg
	Single-LED orange	12 VDC ±10 %	10 mA	Plug 2.8 x 0.8 mm	84-8001.3320	1	0.005 kg
	Single-LED yellow	12 VDC ±10 %	10 mA	Plug 2.8 x 0.8 mm	84-8001.4320	1	0.005 kg
	Single-LED green	12 VDC ±10 %	10 mA	Plug 2.8 x 0.8 mm	84-8001.5320	1	0.005 kg
	Single-LED blue	12 VDC ±10 %	10 mA	Plug 2.8 x 0.8 mm	84-8001.6320	1	0.005 kg
	Single-LED white	12 VDC ±10 %	10 mA	Plug 2.8 x 0.8 mm	84-8001.9320	1	0.005 kg
	Single-LED red	24 VDC ±10 %	10 mA	Plug 2.8 x 0.8 mm	84-8001.2620	1	0.005 kg
	Single-LED orange	24 VDC ±10 %	10 mA	Plug 2.8 x 0.8 mm	84-8001.3620	1	0.005 kg
	Single-LED yellow	24 VDC ±10 %	10 mA	Plug 2.8 x 0.8 mm	84-8001.4620	1	0.005 kg
	Single-LED green	24 VDC ±10 %	10 mA	Plug 2.8 x 0.8 mm	84-8001.5620	1	0.005 kg
	Single-LED blue	24 VDC ±10 %	10 mA	Plug 2.8 x 0.8 mm	84-8001.6620	1	0.005 kg
	Single-LED white	24 VDC ±10 %	10 mA	Plug 2.8 x 0.8 mm	84-8001.9620	1	0.005 kg
 Illumination element							
IP 40	Single-LED red	12 VDC ±10 %	10 mA	Flat ribbon cable	84-8001.2340	1	0.010 kg
	Single-LED orange	12 VDC ±10 %	10 mA	Flat ribbon cable	84-8001.3340	1	0.010 kg
	Single-LED yellow	12 VDC ±10 %	10 mA	Flat ribbon cable	84-8001.4340	1	0.010 kg
	Single-LED green	12 VDC ±10 %	10 mA	Flat ribbon cable	84-8001.5340	1	0.010 kg
	Single-LED blue	12 VDC ±10 %	10 mA	Flat ribbon cable	84-8001.6340	1	0.010 kg
	Single-LED white	12 VDC ±10 %	10 mA	Flat ribbon cable	84-8001.9340	1	0.010 kg
	Single-LED red	24 VDC ±10 %	10 mA	Flat ribbon cable	84-8001.2640	1	0.010 kg
	Single-LED orange	24 VDC ±10 %	10 mA	Flat ribbon cable	84-8001.3640	1	0.010 kg
	Single-LED yellow	24 VDC ±10 %	10 mA	Flat ribbon cable	84-8001.4640	1	0.010 kg
	Single-LED green	24 VDC ±10 %	10 mA	Flat ribbon cable	84-8001.5640	1	0.010 kg
	Single-LED blue	24 VDC ±10 %	10 mA	Flat ribbon cable	84-8001.6640	1	0.010 kg
	Single-LED white	24 VDC ±10 %	10 mA	Flat ribbon cable	84-8001.9640	1	0.010 kg

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

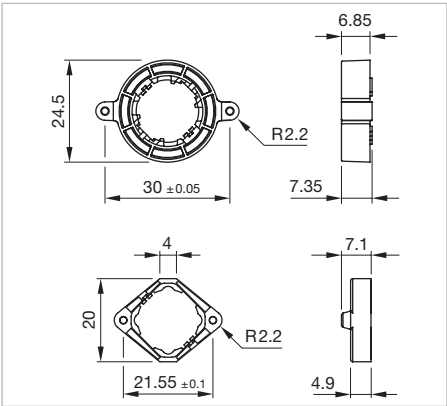


Dimensions [mm]



Terminal	Part No.	Component layout	Weight
 Illumination element PCB mounting			
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
 Mounting flange		
Halo illumination (illuminated multi-color bezel)	84-960.0	0.001 kg
 Mounting flange		
Standard version	92-960.0	0.001 kg


Illumination**Single-LED, T1 Bi-Pin****Additional Information**

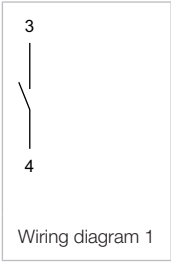
- The customer has to decide what series resistor shall be used to the LED
- Luminosity and wave length scattering caused by LED manufacturing processes may cause slight variations in the illumination

LED colour	Forward voltage typ.	Lumi. intensity	Dom. wavelength	Part No.	Weight
 Single-LED					
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**

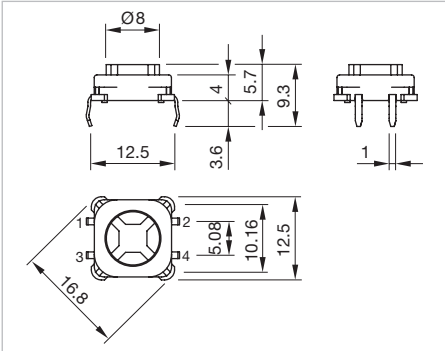
- The customer has to decide what series resistor shall be used to the LED
- Luminosity and wave length scattering caused by LED manufacturing processes may cause slight variations in the illumination

LED colour	Forward voltage typ.	Lumi. intensity	Dom. wavelength	Part No.	Weight
 Bi-colour-LED					
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




Switching element PCB illuminative

- 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]

Contacts	Terminal	Switching action	Part No.	Component layout	Wiring diagram	Weight
 Switching element PCB mounting illuminative						
1 NO	PCB	B	92-851.342	3	1	0.001 kg

Contacts: NO = Normally open
Switching action: B = Momentary
The component layouts you will find from page 49

