

Series 45 Catalogue

www.eao.com



Expert manufacturers.

EAO creates possibilities. Since 1947.



Founding year: 1947
Number of employees: 600
Headquarters: Olten, Switzerland
Manufacturing Companies: Switzerland,
Germany, North America, China

Sales Companies: 11 Distribution countries: 50

Core markets: Transportation, Automotive, Heavy Duty & Special Vehicles, Machinery EAO AG, a Swiss, family-owned company founded in 1947, has developed into one of the world's leading manufacturers of high-quality industrial switches, complete custom HMI panels and interface systems, and specialised automotive switch systems.

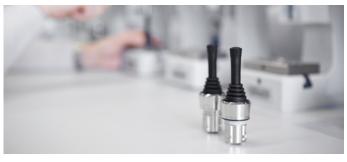
Efficient and modern development processes, effective global supply chains and skilled project and consultation management represent additional services that we offer our customers and business partners around the world.

Your solution-focused expert and partner

We do much more than just manufacture individual control elements. As a solution-focused partner, we provide the option of technically and mechanically customizing existing HMI Components in line with our customers' individual requirements. From simple control elements through to sophisticated HMI Systems, from serial production through to installation – we offer the entire range of HMI services and inspire the confidence of our customers.

Customer-oriented.

More than an expert, a partner.







Being close to customers and able to offer a comprehensive range of services are fundamental to our success and at the core of our corporate policy.

EAO's production sites in Switzerland, Germany, North America and China combine volume production, development, research, and logistics. In addition to these centres of competence, EAO has 11 sales companies around the world at its disposal.

Thanks to this comprehensive network and our 50 distribution companies in the major industrialized countries, EAO is represented wherever interactions between humans and machines play key roles.

Control.

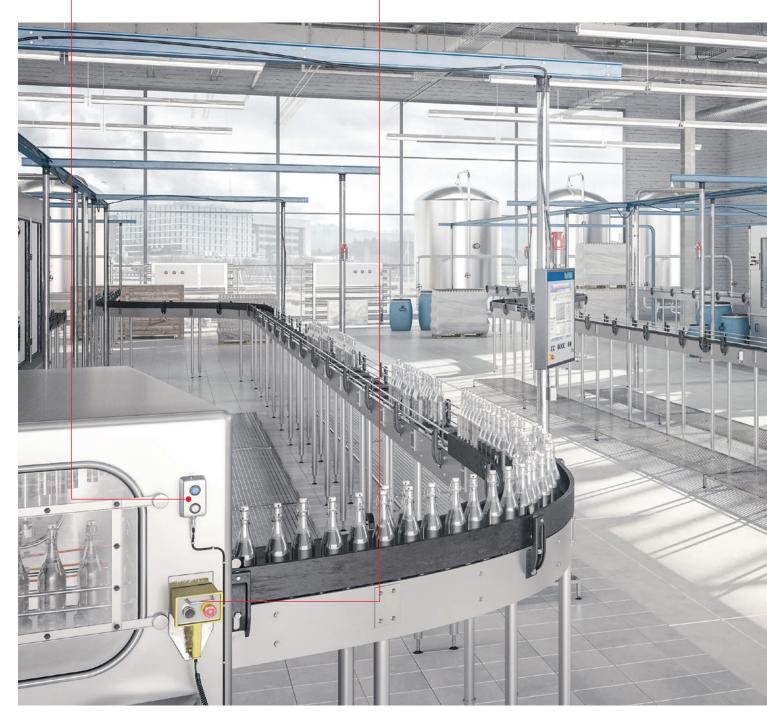
For every application.

Operator Device

Actuators and indicators for controlling specific and basic machine functions.

Handheld Control Unit

 $HMI\ solutions\ for\ mobile\ control\ units.$



Regardless of the industrial demands placed on our HMI Components and Systems, reliability, longevity, intuitive operation and safety are always at the heart of our products and solutions. Our aim is to provide control over these processes and to afford machine operators the greatest possible level of protection at all times.

Main Operator Panel

HMI Components and Systems for main control units for the overall control of machinery.



Series 45.

Modular, aesthetic and robust in use.



Innovative and comprehensive

Series 45

EAO's Series 45 unites an extremely broad range of machine operating functions with outstanding technical properties. Penetration by dust and liquids is prevented even under the most adverse conditions.

Robust industrial control system

Resistant to aggressive cleaning agents, oils, dyes and other chemical substances, the actuators and indicators of the new Series 45 work perfectly each and every time. Our HMIs literally keep their cool in the face of high humidity and extreme fluctuations in temperature. Functionality is preserved even when the control units are subjected to dust or water at high pressures (IP69K). Series 45 is ideal for use in the most adverse conditions.

High level of modularity

Their modular construction ensures that our HMI Components all operate smoothly with each other. They are straightforward to install and can also be integrated easily into decentralised systems.

Full functionality

Every conceivable HMI function can be performed by products from Series 45. Pushbuttons, illuminated pushbuttons, indicators, selector switches, keylock switches, toggle sticks and emergency stop switches are capable of handling all major functions.

Major benefits

- Comprehensive Series
- Easy to use, modular construction and rapid assembly without special tools
- Rugged in use; IP69K front protection and metal models
- Modern design thanks to flush mounting, attractive illumination and metallic or plastic appearance
- Low energy consumption thanks to LEDs
- Long service life (up to 10 million switching cycles)

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45 Numbering structure

Indicator

	45 -	2	T	XX	. X	X	X	0	. 0	0	0
Actuator		_	_		_	- —	_	_			_
T = Indicator											
Function		- —	—			- —	—	—	_	- —	
00 = Full face illumination			_					_			
07 = Front illumination											
Material		_	_			_	_	_			_
1 = Plastic											
2 = Metal									••••		
3 = Metal/plastic					•••••						
4 = Metal/matt									•••••		
Shape of handle or front ring		- —				-					
F = flush		_						_			
0 = raised											
Colour		- —				- —	_		_		
E = red transparent			_			_		_			
F = amber transparent					• • • • • • • • • • • • • • • • • • • •		•••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		
G = yellow transparent				••••••			• • • • • • • • • • • • • • • • • • • •				
H = green transparent											
J = blue transparent			•				•••••	•••••	• • • • • • • • • • • • • • • • • • • •		
K = colourless transparent				•••••••	• • • • • • • • • • • • • • • • • • • •		••••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		•••••
N = white transparent					• • • • • • • • • • • • • • • • • • • •		•••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		

Pushbutton

	45 -	2	1	XX	X	X	Х	0 .	0	0 0
Actuator			_		_	_		_	_	
1 = Pushbutton										
Function			_			_		_	_	
31 = 2 positions, momentary										
34 = 2 positions, maintain, push to release										
Material			_			· —			_	
1 = Plastic										
2 = Metal										
3 = Metal/plastic										
4 = Metal/matt										
Shape of handle or front ring		- —	_		_			_	-	
1 = raised/lens level with front ring								_		
2 = raised/lens raised above front ring										
3 = raised/lens lower than front ring					*******					
4 = raised/lens lower than front ring, with castallations										
F = flush										
Colour		- —	_	—	_			_	_	
1 = black										
2 = red					******					
4 = yellow					******					
5 = green				•••••••						
6 = blue				••••••••	******					
8 = grey				••••••••••••						
9 = white					******					
K = clear transparent					******					
·										

45 Numbering structure

Double pushbutton, Double pushbutton illuminated

	45 -	2	X	ХХ		X	X	0		0	0	0
Actuator		_	_		-					_	_	_
J = Double pushbutton					_				•			
K = Double pushbutton illuminated												
Function			—		-					_		—
31 = 2 positions, momentary												
Material		_	_		-					_	_	_
1 = Plastic												
2 = Metal												
3 = Metal/plastic												
Shape of handle		—	—		-				-			—
5 = 2 lenses level with front ring												
6 = lens level with front ring/ lens level raised above front ring												
Colour		_	_	_	-					_	_	_
T = green/red					_				-			
V = white/black												

Illuminated pushbutton

	45 -	2	2	XX	. X	X	X	0		0 (0	0
Actuator			_		_		_	_	-			_
2 = Illuminated pushbutton												
Function		-			_		_		-			_
31 = 2 positions, momentary									_			_
34 = 2 positions, maintain, push to release												
Material			_		_		_	_	-			_
1 = Plastic												
2 = Metal												
3 = Metal/plastic												
4 = Metal/matt												
Shape of handle or front ring		-					—	—	-			_
1 = raised/lens level with front ring								_	_			_
2 = raised/lens raised above front ring												
4 = raised/lens lower than front ring, with castallations									• • •			
F = flush												
Colour			_		_	- —	_	—	-			_
E = red transparent					_	- —		_	-			_
F = amber transparent												
G = yellow transparent							•	•				
H = green transparent					*****		*******					
J = blue transparent												
K = colourless transparent							•					
N = white transparent												
				•••••••	*****		• • • • • • • • • • • • • • • • • • • •	*******	***			

45 Numbering structure

Emergency stop switch

	45 -	2	X	XX	. 2	X	X	0		0	0	0
Actuator		_	_		-				-	_	_	_
C = Emergency stop switch					_				_			
D = Emergency stop switch, illuminated												
Function		_	_	—	-				-	—	_	—
35 = Key to release									_			
36 = Twist to release												
37 = Pull to release												
Material		_			-				-	—		—
1 = Plastic									-			
Shape of handle or front ring			_		-				-			
8 = Diameter 30 mm		_	_		_				-			
9 = Diameter 40 mm					•••						•••••	
A = Diameter 60 mm												
Colour			_		-				-	—	_	
2 = red		_	_		_				-			

Stop switch

	45	- 2	7	XX	. X	X	Χ	0	0	0	0
Actuator				- —	_	_	_	_	_	_	_
7 = Stop switch											
			_							_	
Function											
36 = Twist to release											
Material					_	_	_	_	_	_	_
1 = Plastic											
Shape of handle or front ring			_		_	_	—	—	—	_	_
9 = Diameter 40 mm											
					_				_		
Colour											
1 = black						_				_	_

45 Numbering structure

Mushroom-head pushbutton

	45 -	2	Χ	XX	. X	X	Х	0	. 0	0	0
Actuator		_	_		_		_	_		_	_
5 = Mushroom-head pushbutton											
6 = Mushroom-head pushbutton, illuminated											
Function		- —					- —	—	-	-	
30 = 2 positions, maintain, pull release											
31 = 2 positions, momentary									•••••		
32 = 3 positions, maintain/momentary, pull release											
Material		- —	_	—			- —	—		-	_
1 = Plastic											
2 = Metal					• · · · ·				•••••		
3 = Metal/plastic									•••••		
Shape of handle or front ring		- —	_		_		- —	_	_		_
8 = Diameter 30mm		_					_			_	
9 = Diameter 40 mm									•••••		• • • • • • • • • • • • • • • • • • • •
A = Diameter 60 mm											
Colour			_				- —	_			_
1 = black		_	_					_		_	_
2 = red											
4 = yellow											
5 = green			•••••		• • • • • • • • • • • • • • • • • • • •				•••••		

Keylock switch

	45 -	2 9	XX	. X X	0 0	. X X X
Actuator						
9 = Keylock switch						
Function	·					
0C = 3 positions, maintain, key remove L/R						
0D = 3 positions, maintain, key remove L	•••••••••••••••••••••••••••••••••••••••					
0F = 3 positions, maintain, key remove L/C/R						
0G = 3 positions, maintain, key remove L/C						
0H = 2 positions, maintain, key remove L/R				*******	***************************************	***************************************
0J = 2 positions, maintain, key remove L						
0K = 2 positions, maintain, key remove L						
0Z = 3 positions, maintain, key remove C						
11 = 3 positions, momentary/maintain, key remove C				*******		
17 = 3 positions, maintain, key remove R		······		*******		*******
22 = 3 positions, maintain/momentary, key remove C				*******		
24 = 3 positions, maintain, key remove C						
25 = 2 positions, maintain, key remove R		····· · •·····				
Material						
1 = Plastic					——	
2 = Metal						
3 = Metal/plastic						
		·····				
4 = Metal/matt						
Shape of handle or front ring						
F = flush						
0 = raised						
		······				*******
Lock System						
1 = RONIS						
Key						
1 = T254						
Angle		-				
1 = 90° (V-Pos)						
3 = 2x45° (V-Pos)				•		
6 = 45° (0-Pos.12 oʻclock)				*******	*******	

45 Numbering structure

Selector switch

	45 -	2	8	XX	. X	X	X 0		0	0 X
Actuator			_		_	_		-		
8 = Selector switch								-		
Function		_	_			_		-		
0S = 3 positions, momentary								_		
0X = 3 positions, momentary L, maintain R										
16 = 3 positions, momentary R, maintain L										
19 = 3 positions, maintain										
28 = 2 positions, maintain			•							
44 = 2 positions, momentary			•••••							
45 = 4 positions, Maintain, (0-Position 15h/18h/21h/12h										
								-		
Material			_			_		-		
1 = Plastic			_			_		-		
2 = Metal					******					
3 = Metal/plastic			•••••		******					
4 = Metal/matt			•	•••••••	******					
			•	•						
Shape of handle or front ring		_	_		_	_		-		
C = short lever		_	_					-		
D = long lever			•							
E = round lever			-	•••••••						
			•	•						
Colour		_	_		_	_		-		
2 = red		_	_		_	_		-		
4 = yellow				•••••••						
5 = green			•					-		
6 = blue			•	···········	******					
9 = white			•							
0 - Willio								-		
Angle		_	_			_		-		
1 = 90° (V-Pos)										
2 = 4x90°			*******	•••••••	******					
3 = 2x45° (V-Pos)								-		
6 = 45° (0-Pos.12 oʻclock)										
			•		• • • • • • • • • • • • • • • • • • • •					

Potentiometer

4	5 - 2	Р	XX	. X	X	X	0	0	0	0
Actuator				_	_	_	_	_		_
P = Potentiometer										
Function					_	_	_	_		_
01 = 100 kOhm										
02 = 10 kOhm				••••						
03 = 1 kOhm				*****			•••••			
04 = 4.7 kOhm				******			•••••			
05 = 470 kOhm				******		********				
06 = 47 kOhm										
Material				_	-	—	_			_
1 = Plastic							_			_
2 = Metal										
Shape of handle or front ring				_	-	—	_			_
E = round lever										
Colour				_	_	—	—			_
1 = black										

45 Numbering structure

Toggle stick

45 - 2 F	XX	. X X	X 0	0 0 0
Actuator				
F = Toggle stick				
Function				
OT = 2 positions, momentary, L/R				
0V = 4 positions, momentary, L/R/U/D				
13 = 2 positions, momentary, L/R, lockable C		***************************************		
14 = 4 positions, momentary, L/R/U/D, lockable C		•••••		
20 = 2 positions, maintain, L/R				
21 = 4 positions, maintain, L/R/U/D		*******		
26 = 2 positions, maintain, L/R, lockable C				
27 = 4 positions, maintain, L/R/U/D, lockable C				
38 = 2 positions, momentary U/D				
40 = 2 positions, momentary, U/D, lockable C		*******		
41 = 2 positions, maintain, U/D				
43 = 2 positions, maintain, U/D, lockable				
Material — — —				
1 = Plastic				
2 = Metal				
3 = Metal/plastic				
Colour				
1 = black				

Toggle switch

45 -	2	N	XX	Χ	0	1	0	0	0	0
Actuator	_	_		—	_	—			_	_
N = Toggle switch										
Funktion	_	_			_		—		_	_
39 = 2 positions, momentary				_		_	_			
42 = 2 positions, maintain										
Material	_	_		_	_	_	_		_	—
1 = Plastic										
2 = Metal	•••••	•••••								
3 = Metal/plastic										

Indicator, IP66, IP67, IP69K



Product can differ from the current configuration.

35.3 31.2 4.2 31.2

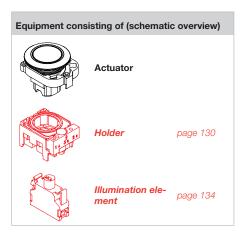
Dimensions [mm]

Mounting depth incl. front plate, see chapter «drawings»

Additional Information

• Front panel thickness 1 ... 6 mm

Mounting cut-outs [mm]

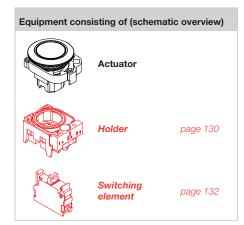


Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

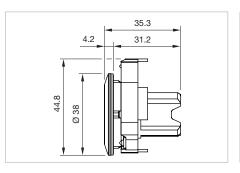
LED colour	Front ring	Lens cap	Part No.	Weight
	Indicator actuator, Front dimension Ø 38	3 mm		
red	Metal sandgrey	Plastic red transparent	45-2T07.4FE0.000	0.048 kg
	Indicator actuator, Front dimension Ø 38	3 mm		
yellow	Metal sandgrey	Plastic yellow transparent	45-2T07.4FG0.000	0.048 kg
Vika				
	Indicator actuator, Front dimension Ø 38	3 mm		
green	Indicator actuator, Front dimension Ø 38 Metal sandgrey	3 mm Plastic green transparent	45-2T07.4FH0.000	0.048 kg
green		Plastic green transparent	45-2T07.4FH0.000	0.048 kg
green	Metal sandgrey	Plastic green transparent	45-2T07.4FH0.000 45-2T07.4FJ0.000	0.048 kg
	Metal sandgrey Indicator actuator, Front dimension Ø 38	Plastic green transparent B mm Plastic blue transparent		

Pushbutton, IP66, IP67, IP69K



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

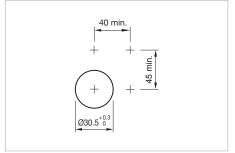
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm]



Product can differ from the current configuration.



Mounting cut-outs [mm]

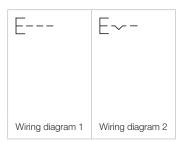
Additional Information

- Mounting depth incl. front plate, see chapter «drawings»
- Front panel thickness 1 ... 6 mm

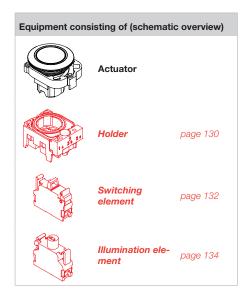
Front ring		Lens	Switching action	Part No.	Wiring dia- gram	Weight
	Pushbutton ad	ctuator, Momentary, F	ront dimension Ø 38 mm			
Metal sandgrey		Plastic black	В	45-2131.4F10.000	1	0.048 kg
	Pushbutton ac		ront dimension Ø 38 mm			
Metal sandgrey						
ivietai sai iugrey		Plastic red	В	45-2131.4F20.000	1	0.048 kg
Wetai Sandgrey	Pushbutton ad		ront dimension Ø 38 mm	45-2131.4F20.000	1	0.048 kg
Metal sandgrey	Pushbutton ac			45-2131.4F20.000 45-2131.4F40.000	1	0.048 kg
		ctuator, Momentary, Fi	ront dimension Ø 38 mm			Ü
		ctuator, Momentary, Fi	ront dimension Ø 38 mm			Ü
Metal sandgrey	Pushbutton ad	Plastic yellow ctuator, Momentary, Find the street of the	ront dimension Ø 38 mm B ront dimension Ø 38 mm	45-2131.4F40.000	1	0.048 kg

Front ring	Lens	Switching action	Part No.	Wiring dia- gram	Weight
	hbutton actuator, Momentary, I		, action	F - 21	, morgine
Metal sandgrey	Plastic white	В	45-2131.4F90.000	1	0.048 kg
Pus	hbutton actuator, Maintain, Fro	nt dimension Ø 38 mm			
Metal sandgrey	Plastic black	С	45-2134.4F10.000	2	0.048 kg
Pus Metal sandgrey	hbutton actuator, Maintain, Fro	nt dimension Ø 38 mm	45-2134.4F40.000	2	0.048 kg
Pus	hbutton actuator, Maintain, Fro	nt dimension Ø 38 mm			l
Metal sandgrey	Plastic green	С	45-2134.4F50.000	2	0.048 kg
	hbutton actuator, Maintain, Fro			1.	
Metal sandgrey	Plastic blue	C	45-2134.4F60.000	2	0.048 kg
Pus	hbutton actuator, Maintain, Fro	nt dimension Ø 38 mm			
Metal sandgrey	Plastic white	C	45-2134.4F90.000	2	0.048 kg

Switching action: B = Momentary, C = Maintain

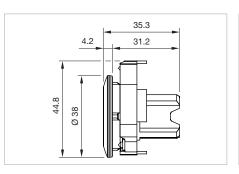


Illuminated pushbutton, IP66, IP67, IP69K



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.

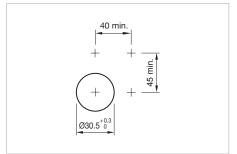


Dimensions [mm]

Mounting cut-outs [mm]



Product can differ from the current configuration.



Additional Information

- Mounting depth incl. front plate, see chapter «drawings»
- Front panel thickness 1 ... 6 mm

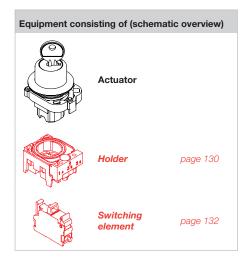
LED colour	Front ring	Lens	Switching action	Part No.	Wiring dia- gram	Weight
	Illuminated pushbutton a	actuator, Momentary, Front (dimension Ø 38 mm			
red	Metal sandgrey	Plastic red transparent	В	45-2231.4FE0.000	1	0.048 kg
yellow	Illuminated pushbutton a	Plastic yellow transparent	dimension Ø 38 mm	45-2231.4FG0.000	1	0.048 kg
	Illuminated pushbutton a	actuator, Momentary, Front (dimension Ø 38 mm			
green	Metal sandgrey	Plastic green transparent	В	45-2231.4FH0.000	1	0.048 kg
	Illuminated pushbutton a	actuator, Momentary, Front (dimension Ø 38 mm			
blue	Metal sandgrey	Plastic blue transparent	В	45-2231.4FJ0.000	1	0.048 kg
	Illuminated pushbutton a	actuator, Momentary, Front (dimension Ø 38 mm			
white	Metal sandgrey	Plastic colourless transparent	В	45-2231.4FK0.000	1	0.048 kg

LED colour	Front ring	Lens	Switching action	Part No.	Wiring dia- gram	Weight
	Illuminated pushbutton	actuator, Maintain, Front din	nension Ø 38 mm			
red	Metal sandgrey	Plastic red transparent	С	45-2234.4FE0.000	2	0.048 kg
yellow	Illuminated pushbutton Metal sandgrey	actuator, Maintain, Front din Plastic yellow transparent	nension Ø 38 mm	45-2234.4FG0.000	2	0.048 kg
44						
	Illuminated pushbutton	actuator, Maintain, Front din	nension Ø 38 mm			
green	Illuminated pushbutton Metal sandgrey	actuator, Maintain, Front din	nension Ø 38 mm	45-2234.4FH0.000	2	0.048 kg
green	Metal sandgrey		С	45-2234.4FH0.000	2	0.048 kg
green	Metal sandgrey	Plastic green transparent	С	45-2234.4FH0.000 45-2234.4FJ0.000	2	0.048 kg
	Metal sandgrey Illuminated pushbutton Metal sandgrey	Plastic green transparent actuator, Maintain, Front din	nension Ø 38 mm			

Switching action: B = Momentary, C = Maintain

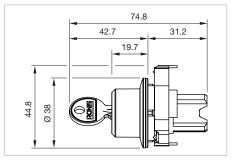
E	E~-
Wiring diagram 1	Wiring diagram 2

Keylock switch 2 and 3 positions, IP66, IP67, IP69K



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

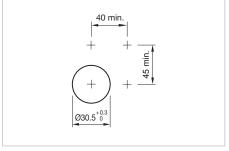
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm]



Product can differ from the current configuration.



Mounting cut-outs [mm]

Additional Information

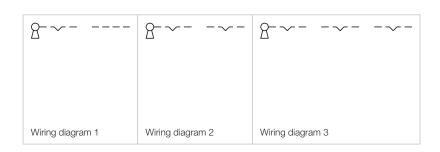
- Mounting depth incl. front plate, see chapter «drawings»
- Front panel thickness 1 ... 6 mm
- The standard lock: RONIS, T254
- Two keys are supplied with each key lock switch

A B A C C A

Switching positions (A = Rest, B = Momentary, C = Maintained)

Front ring	Switching action	Switching angle	Key remove	Part No.	Wiring dia- gram	Weight
	Keylock switch 2 position	•				
Metal sandgrey	A - B	B = 45°	Α	45-290J.4F00.116	1	0.090 kg
	A - C	C = 90°	A + C	45-290H.4F00.111	2	0.090 kg
			А	45-290J.4F00.111	2	0.090 kg
	Keylock switch 3 position	ns, Front dimension Ø 3	3 mm	·	1	
Metal sandgrey	C - A - C	C = 45°	C - A - C	45-290F.4F00.113	3	0.090 kg

Switching action: A = Rest, B = Momentary, C = Maintain



Selector switch actuator 2 positions short lever, IP66, IP67, IP69K

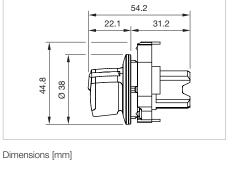


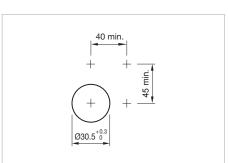
Product can differ from the current configuration.

It is advisable to choose a white illumination Mounting depth incl. front plate, see chapter

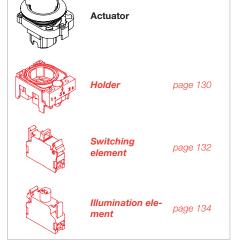
Front panel thickness 1 ... 6 mm Illumination elements are optional

22.1 31.2 44.8





Mounting cut-outs [mm]



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

«drawings»

Switching positions (A = Rest, B = Momentary, C = Maintained)

Lever	Front ring	Switching action	Switching angle	Part No.	Wiring dia- gram	Weight
	Selector switch actuator	· 2 positions, short lever,	Front dimension Ø 38	mm		
Plastic red	Metal sandgrey	A - B	B = 45°	45-2844.4C20.006	1	0.055 kg
•	Selector Switch actuator	Z DOSIDOUS SHOFT IEVER				
	Selector switch actuator	2 nositions short lever	Front dimension Ø 38			
Plastic green	Metal sandgrey	A - B	B = 45°	45-2844.4C50.006	1	0.055 kg
Plastic green	Metal sandgrey Selector switch actuator	A - B	B = 45°	45-2844.4C50.006	1	0.055 kg
Plastic green Plastic white	Metal sandgrey	A - B	B = 45°	45-2844.4C50.006	1	0.055 kg
	Metal sandgrey Selector switch actuator	A - B 2 positions, short lever, A - B	B = 45° Front dimension Ø 38 B = 45°	45-2844.4C50.006 mm 45-2844.4C90.006	1	

Lever	Front ring	Switching action	Switching angle	Part No.	Wiring dia- gram	Weight
Plastic green	Selector switch actuator Metal sandgrey	2 positions, short lever,	Front dimension Ø	38 mm 45-2828.4C50.001	2	0.055 kg
	Selector switch actuator	•				
Plastic white	Metal sandgrey	A - C	C = 90°	45-2828.4C90.001	2	0.055 kg

Switching action: A = Rest, B = Momentary, C = Maintain

F~	F~~-
Wiring diagram 1	Wiring diagram 2

Selector switch 2 positions long lever, IP66, IP67, IP69K



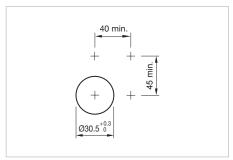
Product can differ from the current configuration.

22.1 31.2 44.8

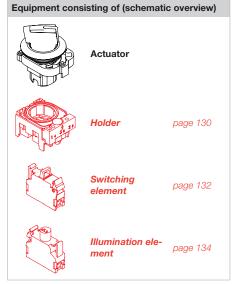
Dimensions [mm]

Additional Information

- It is advisable to choose a white illumination
- Mounting depth incl. front plate, see chapter «drawings»
- Front panel thickness 1 ... 6 mm
- Illumination elements are optional



Mounting cut-outs [mm]



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.





Switching positions (A = Rest, B = Momentary, C = Maintained)

Lever	Front ring	Switching action	Switching angle	Part No.	Wiring dia- gram	Weight
	Selector switch actuator	· 2 positions, long lever, F	Front dimension Ø 38	mm		
Plastic red	Metal sandgrey	A - B	B = 45°	45-2844.4D20.006	1	0.055 kg
_	SOLOOTOR CHUITON COTURNS					
	Salastar switch actuator	O manitiona language				
Plastic green	Metal sandgrey	A - B	B = 45°	45-2844.4D50.006	1	0.055 kg
Plastic green		A - B	B = 45°	45-2844.4D50.006	1	0.055 kg
	Metal sandgrey	A - B	B = 45°	45-2844.4D50.006	1	
Plastic green Plastic white	Metal sandgrey Selector switch actuator	A - B 2 positions, long lever, F A - B	B = 45° Front dimension Ø 38 B = 45°	45-2844.4D50.006 mm 45-2844.4D90.006	1	0.055 kg

Lever	Front ring Selector switch actuator	Switching action 2 positions, long lever, F	Switching angle Front dimension Ø 38 r	Part No.	Wiring dia- gram	Weight
Plastic green	Metal sandgrey	A - C	C = 90°	45-2828.4D50.001	2	0.055 kg
	Selector switch actuator	· · · · · · · · · · · · · · · · · · ·				
Plastic white	Metal sandgrey	A - C	C = 90°	45-2828.4D90.001	2	0.055 kg

Switching action: A = Rest, B = Momentary, C = Maintain

F~	F~~-
Wiring diagram 1	Wiring diagram 2

Selector switch 3 positions short lever, IP66, IP67, IP69K



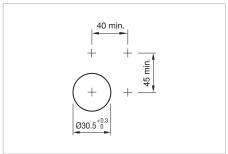
Product can differ from the current configuration.

54.2

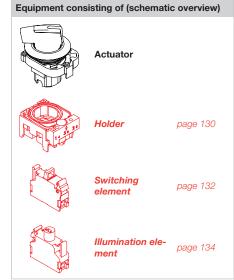
Dimensions [mm]

Additional Information

- It is advisable to choose a white illumination
- Mounting depth incl. front plate, see chapter «drawings»
- Front panel thickness 1 ... 6 mm
- Illumination elements are optional



Mounting cut-outs [mm]



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.



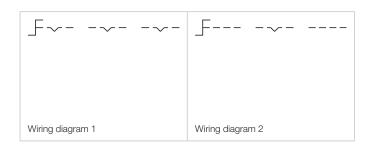


Switching positions (A = Rest, B = Momentary, C = Maintained)

Lever	Front ring	Switching action	Switching angle	Part No.	Wiring dia- gram	Weight
	Selector switch actuator	² 3 positions, short lever,	Front dimension Ø 38	3 mm		
Plastic red	Metal sandgrey	C - A - C	C = 45°	45-2819.4C20.003	1	0.055 kg
1	Selector switch actuator	2 positions short lover	Front dimension Ø 20			
Plastic green	Metal sandgrey	C - A - C	C = 45°	45-2819.4C50.003	1	0.055 kg
Plastic green	Metal sandgrey Selector switch actuator	C-A-C 3 positions, short lever,	C = 45° Front dimension Ø 38	45-2819.4C50.003	1	0.055 kg
Plastic green Plastic white	Metal sandgrey	C - A - C	C = 45°	45-2819.4C50.003	1	0.055 kg
	Metal sandgrey Selector switch actuator	C-A-C 3 positions, short lever,	C = 45° Front dimension Ø 38 C = 45°	45-2819.4C50.003 6 mm 45-2819.4C90.003	1	

Lever	Front ring	Switching action	Switching angle	Part No.	Wiring dia- gram	Weight
	Selector switch actuato	r 3 positions, short lever,	Front dimension Ø 3	8 mm		
Diagtic gross	Metal sandgrey	B - A - B	B = 45°	45-280S.4C50.003	2	0.055 kg
Plastic green	Wietar earlagie)				-	0.000g
Prastic green	,	r 3 positions, short lever,	Front dimension Ø 3	8 mm		gi. ecel.

Switching action: A = Rest, B = Momentary, C = Maintain



Selector switch 3 positions long lever, IP66, IP67, IP69K



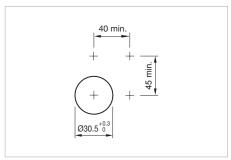
Product can differ from the current configuration.

22.1 31.2 44.8

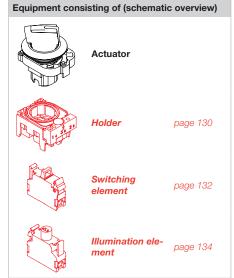
Dimensions [mm]

Additional Information

- It is advisable to choose a white illumination
- Mounting depth incl. front plate, see chapter «drawings»
- Front panel thickness 1 ... 6 mm
- Illumination elements are optional



Mounting cut-outs [mm]



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.

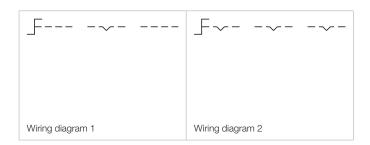


Switching positions (A = Rest, B = Momentary, C = Maintained)

Lever	Front ring	Switching action	Switching angle	Part No.	Wiring dia- gram	Weight
	Selector switch actuator	· 3 positions, long lever, I	Front dimension Ø 38	mm		
Plastic red	Metal sandgrey	C - A - C	C = 45°	45-2819.4D20.003	1	0.055 kg
101	Salastar awitah astusta	O nooitions language	Frant dimension (6.20)			
Plastic green	Metal sandgrey	C - A - C	C = 45°	45-2819.4D50.003	1	0.055 kg
Plastic green	Metal sandgrey Selector switch actuator	C-A-C	C = 45° Front dimension Ø 38	45-2819.4D50.003	1	0.055 kg
Plastic green Plastic white	Metal sandgrey	C - A - C	C = 45°	45-2819.4D50.003	1	0.055 kg
	Metal sandgrey Selector switch actuator	C - A - C 3 positions, long lever, I	C = 45° Front dimension Ø 38 C = 45°	45-2819.4D50.003 mm 45-2819.4D90.003	1	

Lever	Front ring Selector switch actuator	Switching action	Switching angle	Part No.	Wiring dia- gram	Weight
Plastic green	Metal sandgrey	B - A - B	B = 45°	45-280S.4D50.003	2	0.055 kg
	Selector switch actuator	_ · _ · _ ·				
Plastic white	Metal sandgrey	B - A - B	B = 45°	45-280S.4D90.003	2	0.055 kg

Switching action: A = Rest, B = Momentary, C = Maintain



45 Raised design

Indicator full face illumination, IP66, IP67, IP69K



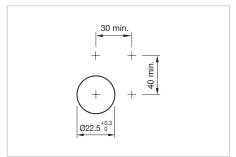
Product can differ from the current configuration.

36.2

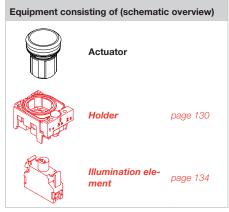
Dimensions [mm]

Mounting depth incl. f

 Mounting depth incl. front plate, see chapter «drawings»



Mounting cut-outs [mm]



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.

LED colour	Housing material	Lens cap	Part No.	Weight
	ndicator actuator, Front dimension Ø 29.4	15 mm		
amber	Plastic	Plastic amber transparency	45-2T00.10F0.000	0.001 kg
	ndicator actuator, Front dimension Ø 29.4			
red	Plastic	Plastic red transparent	45-2T00.10E0.000	0.001 kg
	ndicator actuator, Front dimension Ø 29.4	15 mm		
yellow	Plastic	Plastic yellow transparent	45-2T00.10G0.000	0.001 kg
	ndicator actuator, Front dimension Ø 29.4	15 mm		
green	Plastic	Plastic green transparent	45-2T00.10H0.000	0.001 kg
	ndicator actuator, Front dimension Ø 29.4	15 mm		
blue	Plastic	Plastic blue transparent	45-2T00.10J0.000	0.001 kg
Dine	Plastic	Plastic blue transparent	45-2100.1030.000	0.00

LED colour		Housing material	Lens cap	Part No.	Weight
-			<u> </u>		
	Indicator actuat	or, Front dimension Ø 29.45 m	nm		
white	maioator aotaat	Plastic	Plastic white transparent	45-2T00.10N0.000	0.001 kg
	Indicator actuat	or, Front dimension Ø 29.45 m	ım		
colourless	illuicator actuat	Plastic	Plastic colourless transparent	45-2T00.10K0.000	0.001 kg
			<u> </u>		
3	Indicator catuat	or Front dimension (\$ 20.45 m	200		
amber	indicator actual	or, Front dimension Ø 29.45 m	Plastic amber transparency	45-2T00.20F0.000	0.010 kg
4.1.201			r ladic arribor danoparonoy	10 2100120101000	0.0.0.0
	Indicator actuat	or, Front dimension Ø 29.45 m		45.0700.0050.000	0.0401
red		Metal	Plastic red transparent	45-2T00.20E0.000	0.010 kç
1	Indicator actuat	or, Front dimension Ø 29.45 m	nm		
yellow	Indicator actuat	or, Front dimension Ø 29.45 m	Plastic yellow transparent	45-2T00.20G0.000	0.010 kį
yellow	Indicator actuat			45-2T00.20G0.000	0.010 kg
yellow	Indicator actuat			45-2T00.20G0.000	0.010 kç
yellow		Metal	Plastic yellow transparent	45-2T00.20G0.000	0.010 kg
yellow			Plastic yellow transparent	45-2T00.20G0.000 45-2T00.20H0.000	
		Metal cor, Front dimension Ø 29.45 m	Plastic yellow transparent		
		Metal cor, Front dimension Ø 29.45 m	Plastic yellow transparent		
	Indicator actuat	Metal cor, Front dimension Ø 29.45 m Metal	Plastic yellow transparent Plastic green transparent		
	Indicator actuat	Metal cor, Front dimension Ø 29.45 m	Plastic yellow transparent Plastic green transparent		0.010 kg
green	Indicator actuat	Metal or, Front dimension Ø 29.45 m Metal or, Front dimension Ø 29.45 m	Plastic yellow transparent Plastic green transparent nm	45-2T00.20H0.000	0.010 kg
green	Indicator actuat	Metal or, Front dimension Ø 29.45 m Metal or, Front dimension Ø 29.45 m	Plastic yellow transparent Plastic green transparent nm	45-2T00.20H0.000	0.010 kg
green	Indicator actuat	Metal cor, Front dimension Ø 29.45 m Metal cor, Front dimension Ø 29.45 m Metal	Plastic yellow transparent Plastic green transparent Plastic blue transparent	45-2T00.20H0.000	0.010 kg
green	Indicator actuat	Metal cor, Front dimension Ø 29.45 m Metal cor, Front dimension Ø 29.45 m Metal	Plastic yellow transparent Plastic green transparent Plastic blue transparent Plastic blue transparent	45-2T00.20H0.000 45-2T00.20J0.000	0.010 kg
green	Indicator actuat	Metal cor, Front dimension Ø 29.45 m Metal cor, Front dimension Ø 29.45 m Metal	Plastic yellow transparent Plastic green transparent Plastic blue transparent	45-2T00.20H0.000	0.010 kg
green	Indicator actuat	Metal cor, Front dimension Ø 29.45 m Metal cor, Front dimension Ø 29.45 m Metal	Plastic yellow transparent Plastic green transparent Plastic blue transparent Plastic blue transparent	45-2T00.20H0.000 45-2T00.20J0.000	0.010 kg
green	Indicator actuat	Metal cor, Front dimension Ø 29.45 m Metal cor, Front dimension Ø 29.45 m Metal	Plastic yellow transparent Plastic green transparent Plastic blue transparent Plastic blue transparent	45-2T00.20H0.000 45-2T00.20J0.000	0.010 kg
green	Indicator actuat Indicator actuat	Metal cor, Front dimension Ø 29.45 m Metal cor, Front dimension Ø 29.45 m Metal	Plastic yellow transparent Plastic green transparent Plastic blue transparent Plastic blue transparent Plastic white transparent	45-2T00.20H0.000 45-2T00.20J0.000	0.010 kg

45 Raised design

Indicator front illumination, IP66, IP67, IP69K



Product can differ from the current configuration.

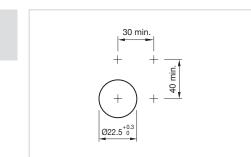
Mounting depth incl. front plate, see chapter

Additional Information

«drawings»

35.3

Dimensions [mm]



Mounting cut-outs [mm]

Actuator Holder page 130 Illumination element page 134

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.

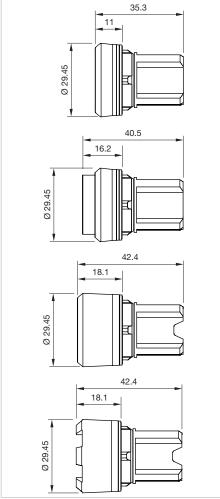
LED colour	Fuent vine	Lana	Haveing material	Part No.	Wainlah
LED colour	Front ring	Lens	Housing material	Part No.	Weight
	Indicator actuator, Front	dimension Ø 29.45 mm			
red	Plastic black	Plastic red transparent	Plastic	45-2T07.10E0.000	0.011 kg
	Indicator actuator, Front		Disakia	45 0707 4000 000	0.0441
yellow	Plastic black	Plastic yellow transparent	Plastic	45-2T07.10G0.000	0.011 kg
green	Indicator actuator, Front Plastic black	dimension Ø 29.45 mm Plastic green transparent	Plastic	45-2T07.10H0.000	0.011 kg
	Indicator actuator, Front	dimension Ø 29.45 mm			
blue	Plastic black	Plastic blue transparent	Plastic	45-2T07.10J0.000	0.011 kg
	Indicator actuator, Front	dimension Ø 29.45 mm			
colourless	Plastic black	Plastic colourless transparent	Plastic	45-2T07.10K0.000	0.011 kg
					1

LED colour	Front ring	Lens	Housing material	Part No.	Weight
		·			
	Indicator actuator, Front of	limension Ø 29.45 mm			
red	Metal sandgrey	Plastic red transparent	Plastic	45-2T07.30E0.000	0.020 kg
		-			
	Indicator actuator, Front of				
yellow	Metal sandgrey	Plastic yellow transparent	Plastic	45-2T07.30G0.000	0.020 kg
	Indicator actuator, Front of	limension Ø 29.45 mm			
green	Metal sandgrey	Plastic green transparent	Plastic	45-2T07.30H0.000	0.020 kg
			·		·
	Indicator actuator, Front of	limension Ø 29.45 mm			
blue	Metal sandgrey	Plastic blue transparent	Plastic	45-2T07.30J0.000	0.020 kg
(0)					
	Indicator actuator, Front of	limension Ø 29.45 mm			
colourless	Metal sandgrey	Plastic colourless transparent	Plastic	45-2T07.30K0.000	0.020 kg

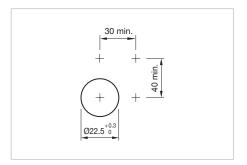
Pushbutton, IP66, IP67, IP69K



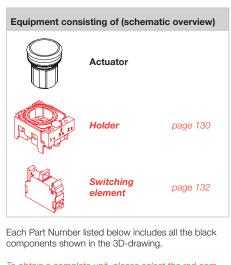
Product can differ from the current configuration.



Dimensions [mm]



Mounting cut-outs [mm]



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

Additional Information

 Mounting depth incl. front plate, see chapter «drawings»

Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
~	, c. c	1	,		1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		1111311
Pu	shbutton actuator,	Momentary, Front	dimension Ø 29.45	mm			
Lens level with front ring	Plastic black	Plastic black	Plastic	В	45-2131.1110.000	1	0.013
Pu	shbutton actuator,	Momentary, Front	dimension Ø 29.45	mm			
_ens level with front ring	Plastic black	Plastic red	Plastic	В	45-2131.1120.000	1	0.013
Pu	shbutton actuator,	Momentary, Front	dimension Ø 29.45	mm			
_ens level with front ring	Plastic black	Plastic yellow	Plastic	В	45-2131.1140.000	1	0.0131
	shbutton actuator, Plastic black	Momentary, Front Plastic green	dimension Ø 29.45	mm	45-2131.1150.000	1	0.013
Lens level with front ring	Plastic black	Plastic green		В	45-2131.1150.000	1	0.013
ens level with front ring	Plastic black	Plastic green	Plastic	В	45-2131.1150.000 45-2131.1160.000	1	
Pusens level with front ring	shbutton actuator, Plastic black	Plastic green Momentary, Front Plastic blue	Plastic dimension Ø 29.45	mm B	45-2131.1160.000		
Purens level with front ring	shbutton actuator, Plastic black	Plastic green Momentary, Front Plastic blue	Plastic dimension Ø 29.45 Plastic	mm B			0.013
Pu: Lens level with front ring Pu: Lens level with front ring	shbutton actuator, Plastic black shbutton actuator, Plastic black	Momentary, Front Plastic blue Momentary, Front Plastic grey	dimension Ø 29.45 Plastic dimension Ø 29.45	mm В	45-2131.1160.000	1	0.0131
Pusterns level with front ring Pusterns level with front ring Pusterns level with front ring Pusterns level with front ring	shbutton actuator, Plastic black shbutton actuator, Plastic black	Momentary, Front Plastic blue Momentary, Front Plastic grey	dimension Ø 29.45 Plastic dimension Ø 29.45 Plastic	mm В	45-2131.1160.000	1	0.013
Purcens level with front ring	shbutton actuator, Plastic black shbutton actuator, Plastic black shbutton actuator, Plastic black	Momentary, Front Plastic blue Momentary, Front Plastic grey Momentary, Front Plastic white	dimension Ø 29.45 Plastic dimension Ø 29.45 Plastic dimension Ø 29.45 Plastic	mm В mm В	45-2131.1160.000 45-2131.1180.000	1	0.0131
Pu: Lens level with front ring Pu: Lens level with front ring Pu: Lens level with front ring Pu: Lens level with front ring	shbutton actuator, Plastic black shbutton actuator, Plastic black shbutton actuator, Plastic black	Momentary, Front Plastic blue Momentary, Front Plastic grey Momentary, Front Plastic white	dimension Ø 29.45 Plastic dimension Ø 29.45 Plastic dimension Ø 29.45	mm В mm В	45-2131.1160.000 45-2131.1180.000	1	0.013 k
Pus Lens level with front ring Pus Lens level with front ring Pus Lens level with front ring Pus Lens level with front ring	shbutton actuator, Plastic black shbutton actuator, Plastic black shbutton actuator, Plastic black shbutton actuator, Plastic black	Momentary, Front Plastic blue Momentary, Front Plastic grey Momentary, Front Plastic white Momentary, Front Plastic colourless	dimension Ø 29.45 Plastic dimension Ø 29.45 Plastic dimension Ø 29.45 Plastic dimension Ø 29.45 Plastic	мт В мт В	45-2131.1160.000 45-2131.1180.000 45-2131.1190.000	1	0.013
Pus Lens level with front ring Pus Lens level with front ring Pus Lens level with front ring Pus Lens level with front ring	shbutton actuator, Plastic black shbutton actuator, Plastic black shbutton actuator, Plastic black shbutton actuator, Plastic black	Momentary, Front Plastic blue Momentary, Front Plastic grey Momentary, Front Plastic white Momentary, Front Plastic colourless	dimension Ø 29.45 Plastic Plastic	мт В мт В	45-2131.1160.000 45-2131.1180.000 45-2131.1190.000	1	0.013

	J						
		_				/iring dia- ram	Weight
Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	≥ 5	Weight
Pus	shbutton actuator. I	Maintain. Front d	limension Ø 29.45 m	ım			
Lens level with front ring	Plastic black	Plastic red	Plastic	C	45-2134.1120.000	2	0.013 kg
			limension Ø 29.45 m				
Lens level with front ring	Plastic black	Plastic yellow	Plastic	С	45-2134.1140.000	2	0.013 kg
Pus	shbutton actuator, I	Maintain, Front d	limension Ø 29.45 m				
Lens level with front ring	Plastic black	Plastic green	Plastic	С	45-2134.1150.000	2	0.013 kg
Lens level with front ring	Plastic black shbutton actuator, I	Plastic blue Maintain, Front d	Plastic	C	45-2134.1160.000	2	0.013 kg
Lens level with front ring	Plastic black	Plastic white	Plastic	С	45-2134.1190.000	2	0.013 kg
Pus	shbutton actuator, I	Momentary, Fron	nt dimension Ø 29.45	5 mm			
Lens level with front ring	Metal sandgrey	Plastic black	Plastic	В	45-2131.3110.000	1	0.021 kg
Pus	shbutton actuator, I	Momentary, Fror	nt dimension Ø 29.45	5 mm			
Lens level with front ring	Metal sandgrey	Plastic red	Plastic	В	45-2131.3120.000	1	0.021 kg
Pus	shbutton actuator. I	Momentary. Fron	nt dimension Ø 29.45	5 mm			1
Lens level with front ring	Metal sandgrey	Plastic yellow	Plastic	В	45-2131.3140.000	1	0.021 kg
		,	nt dimension Ø 29.45		3 2.501181880	<u> </u>	2.321 119
Lens level with front ring	Metal sandgrey	Plastic green	Plastic Plast	В	45-2131.3150.000	1	0.021 kg
Lono level with Horit Hilly	ivietai sailugiey	i iastic green	1 Idolic	D	70-2101.0100.000	'	0.021 Kg

						/iring dia- ram	Weight
Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	≥ 5	Weight
Pu			t dimension Ø 29.45				
Lens level with front ring	Metal sandgrey	Plastic blue	Plastic	В	45-2131.3160.000	1	0.021 k
Pu	shbutton actuator, N	Momentary, Fron	t dimension Ø 29.45	mm			
Lens level with front ring	Metal sandgrey	Plastic grey	Plastic	В	45-2131.3180.000	1	0.021 k
			t dimension Ø 29.45		45 0404 0400 000	4	0.001
Lens level with front ring	Metal sandgrey	Plastic white	Plastic	В	45-2131.3190.000	1	0.021 k
D.	alahustan catuatan B	Mamantana Francis	t dimensis = C 00 45				
Pu Lens level with front ring	shbutton actuator, Metal sandgrey	Momentary, Fron	t dimension Ø 29.45	mm	45-2131.31K0.000	1	0.021 k
Lens level with front ring	Metal sandgrey	Plastic colourless	Plastic	В	45-2131.31K0.000	1	0.021 F
Lens level with front ring	Metal sandgrey	Plastic colourless		В	45-2131.31K0.000 45-2134.3110.000	1	
Pu Lens level with front ring	Metal sandgrey shbutton actuator, Metal sandgrey	Plastic colourless Maintain, Front di Plastic black	Plastic	m			
Pu Lens level with front ring Pu Pu Pu Pu	Metal sandgrey shbutton actuator, Metal sandgrey	Plastic colourless Maintain, Front di Plastic black	Plastic Plastic Plast	m			0.021 k
Pu Lens level with front ring Pu Lens level with front ring Pu Lens level with front ring	Metal sandgrey shbutton actuator, Metal sandgrey shbutton actuator, Metal sandgrey	Maintain, Front di Plastic black Maintain, Front di Plastic red	Plastic mension Ø 29.45 m Plastic	m C	45-2134.3110.000	2	0.021 k
Pu Lens level with front ring Pu Lens level with front ring Pu Lens level with front ring Pu	Metal sandgrey shbutton actuator, Metal sandgrey shbutton actuator, Metal sandgrey	Maintain, Front di Plastic black Maintain, Front di Plastic red	Plastic imension Ø 29.45 m Plastic imension Ø 29.45 m Plastic	т С	45-2134.3110.000	2	0.021 F
Pu Lens level with front ring	Metal sandgrey shbutton actuator, Metal sandgrey shbutton actuator, Metal sandgrey shbutton actuator, Metal sandgrey Metal sandgrey	Maintain, Front di Plastic black Maintain, Front di Plastic red Maintain, Front di Plastic red	imension Ø 29.45 m Plastic imension Ø 29.45 m Plastic imension Ø 29.45 m Plastic	т С С С С С С С С С С С С С С С С С С С	45-2134.3110.000 45-2134.3120.000	2	0.021 k
Pu Lens level with front ring Pu Lens level with front ring	Metal sandgrey shbutton actuator, Metal sandgrey shbutton actuator, Metal sandgrey shbutton actuator, Metal sandgrey Metal sandgrey	Maintain, Front di Plastic black Maintain, Front di Plastic red Maintain, Front di Plastic red	Plastic imension Ø 29.45 m Plastic imension Ø 29.45 m Plastic	т С С С С С С С С С С С С С С С С С С С	45-2134.3110.000 45-2134.3120.000	2	0.021 k 0.021 k 0.021 k
Pu Lens level with front ring Pu Lens level with front ring	shbutton actuator, Metal sandgrey shbutton actuator, Metal sandgrey	Maintain, Front di Plastic black Maintain, Front di Plastic red Maintain, Front di Plastic yellow Maintain, Front di Plastic green	Plastic imension Ø 29.45 m Plastic imension Ø 29.45 m Plastic imension Ø 29.45 m Plastic	m C	45-2134.3110.000 45-2134.3120.000 45-2134.3140.000	2	0.021 k
Pu Lens level with front ring Pu Lens level with front ring	shbutton actuator, Metal sandgrey shbutton actuator, Metal sandgrey	Maintain, Front di Plastic black Maintain, Front di Plastic red Maintain, Front di Plastic yellow Maintain, Front di Plastic green	Plastic imension Ø 29.45 m Plastic imension Ø 29.45 m Plastic imension Ø 29.45 m Plastic	m C	45-2134.3110.000 45-2134.3120.000 45-2134.3140.000	2	0.021 k

	· ·						
						/iring dia- ram	Weight
Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	≥ ₪	Weight
Pus	hbutton actuator. I	Maintain. Front d	limension Ø 29.45 m	nm			
ens level with front ring	Metal sandgrey	Plastic white	Plastic	C	45-2134.3190.000	2	0.021 kg
			nt dimension Ø 29.4				
ens level with front ring	Metal silver	Plastic black	Metal	В	45-2131.2110.000	1	0.048 kg
			nt dimension Ø 29.4				0.0404
ens level with front ring	Metal silver	Plastic red	Metal	В	45-2131.2120.000	1	0.048 kg
ens level with front ring	Metal silver	Plastic yellow	Metal	B	45-2131.2140.000	1	0.048 kg
Lens level with front ring	Metal silver	Plastic green	nt dimension Ø 29.4	В	45-2131.2150.000	1	0.048 kg
Pus	hbutton actuator, I	Momentary, Fror	nt dimension Ø 29.4	5 mm			1
ens level with front ring	Metal silver	Plastic blue	Metal	В	45-2131.2160.000	1	0.048 kç
Pus	hbutton actuator, I	Momentary, Fror	nt dimension Ø 29.4	5 mm			
ens level with front ring	Metal silver	Plastic grey	Metal	В	45-2131.2180.000	1	0.048 kg
Pus	hbutton actuator, I	Momentary, Fror	nt dimension Ø 29.4	5 mm			
ens level with front ring	Metal silver	Plastic white	Metal	В	45-2131.2190.000	1	0.048 kg
			nt dimension Ø 29.4		, ,	<u> </u>	
	Metal silver	Plastic colourless		В	45-2131.21K0.000	1	0.048 %
Lens level with front ring	ivietai Silver	Plastic colouriess	Metal	D	40-2131.21KU.000	1	0.048 kg

Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
Pue	shbutton actuator	Maintain Erant d	limension Ø 29.45 m				
Lens level with front ring	Metal silver	Plastic black	Metal	C	45-2134.2110.000	2	0.048
							0.0.0
Lens level with front ring	Metal silver	Plastic red	limension Ø 29.45 m	C	45-2134.2120.000	2	0.048
			limension Ø 29.45 m				
Lens level with front ring	Metal silver	Plastic yellow	Metal	С	45-2134.2140.000	2	0.048 k
Pus	shbutton actuator.	Maintain, Front d	imension Ø 29.45 m	n			
	Metal silver	Plastic green	Metal	С	45-2134.2150.000	2	0.048
Lens level with front ring	Metal silver		Metal	n	45-2134.2150.000	2	0.048
Lens level with front ring	Metal silver				45-2134.2150.000 45-2134.2160.000	2	
Pus Lens level with front ring	Metal silver shbutton actuator, Metal silver	Maintain, Front d	limension Ø 29.45 m	m			
Pus Lens level with front ring Pus Lens level with front ring	Metal silver shbutton actuator, Metal silver	Maintain, Front d	limension Ø 29.45 m	m			0.048
Pus Lens level with front ring Pus Lens level with front ring Pus Lens level with front ring Pus	Metal silver Shbutton actuator, Metal silver Shbutton actuator, Metal silver	Maintain, Front d Plastic blue Maintain, Front d Plastic white	limension Ø 29.45 m Metal limension Ø 29.45 m	m C	45-2134.2160.000	2	0.048
Pus Lens level with front ring Pus Lens level with front ring Pus Lens level with front ring Pus Lens raised above bezel	Metal silver Shbutton actuator, Metal silver Shbutton actuator, Metal silver Shbutton actuator, Plastic black	Maintain, Front d Plastic blue Maintain, Front d Plastic white Momentary, Front	limension Ø 29.45 m Metal limension Ø 29.45 m Metal	m	45-2134.2160.000 45-2134.2190.000	2	0.048
Pus Lens level with front ring Pus Lens level with front ring Pus Lens raised above bezel Pus	Metal silver Shbutton actuator, Metal silver Shbutton actuator, Metal silver Shbutton actuator, Plastic black	Maintain, Front d Plastic blue Maintain, Front d Plastic white Momentary, Front	limension Ø 29.45 m Metal limension Ø 29.45 m Metal At dimension Ø 29.45	m	45-2134.2160.000 45-2134.2190.000	2	0.048
Pus Lens level with front ring Pus Lens level with front ring Pus Lens raised above bezel Pus Lens raised above bezel	Shbutton actuator, Metal silver Shbutton actuator, Metal silver Shbutton actuator, Plastic black Shbutton actuator, Plastic black	Maintain, Front d Plastic blue Maintain, Front d Plastic white Momentary, Front Plastic black Momentary, Front Plastic red	limension Ø 29.45 m Metal limension Ø 29.45 m Metal At dimension Ø 29.45 Plastic	m	45-2134.2160.000 45-2134.2190.000 45-2131.1210.000	2	0.048 F
Pus Lens level with front ring Pus Lens level with front ring Pus Lens raised above bezel Pus Lens raised above bezel	Shbutton actuator, Metal silver Shbutton actuator, Metal silver Shbutton actuator, Plastic black Shbutton actuator, Plastic black	Maintain, Front d Plastic blue Maintain, Front d Plastic white Momentary, Front Plastic black Momentary, Front Plastic red	limension Ø 29.45 m Metal limension Ø 29.45 m Metal At dimension Ø 29.45 Plastic	m	45-2134.2160.000 45-2134.2190.000 45-2131.1210.000	2	0.048 F

Dwa di cat attichi da	Frank visa	Lama	Haveing material	Cuitabina astion	Doub No.	Wiring dia- gram	Mainle
Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	> 50	Weight
			t dimension Ø 29.45		T		
ens raised above bezel	Plastic black	Plastic green	Plastic	В	45-2131.1250.000	1	0.013 k
Puel	hbutton actuator N	Momentary Fron	nt dimension Ø 29.45	imm			
ens raised above bezel	Plastic black	Plastic blue	Plastic	В	45-2131.1260.000	1	0.013 k
ens raised above bezei	Plastic black	Plastic blue	Plastic	Б	45-2131.1200.000		0.013 K
Pusl ens raised above bezel	hbutton actuator, N	Momentary, Fron	nt dimension Ø 29.45	5 mm	45-2131.1290.000	1	0.013 k
Pusl	hbutton actuator, N	Momentary, Fron	nt dimension Ø 29.45	5 mm			
ens raised above bezel	Metal sandgrey	Plastic black	Plastic	В	45-2131.3210.000	1	0.021 k
En la faised above bezer							
Pusl			at dimension Ø 29.45	5 mm	45-2131.3220.000	1	0.021 k
Pusi ens raised above bezel	hbutton actuator, N Metal sandgrey	Momentary, Fron	nt dimension Ø 29.45	В		1	0.021 k
Pusi Lens raised above bezel	hbutton actuator, N Metal sandgrey	Momentary, Fron	nt dimension Ø 29.45	В		1	
Pusi Lens raised above bezel Pusi Lens raised above bezel	hbutton actuator, N Metal sandgrey hbutton actuator, N Metal sandgrey	Momentary, From Plastic red Momentary, From Plastic yellow	Plastic Plastic At dimension Ø 29.45 Plastic	6 mm	45-2131.3220.000		
Pusi ens raised above bezel Pusi ens raised above bezel Pusi	hbutton actuator, N Metal sandgrey hbutton actuator, N Metal sandgrey	Momentary, From Plastic red Momentary, From Plastic yellow	Plastic Plastic at dimension Ø 29.45	6 mm	45-2131.3220.000		0.021 k
Pusi Lens raised above bezel Pusi Lens raised above bezel Pusi Lens raised above bezel Pusi Lens raised above bezel	hbutton actuator, N Metal sandgrey hbutton actuator, N Metal sandgrey hbutton actuator, N Metal sandgrey	Momentary, From Plastic red Momentary, From Plastic yellow Momentary, From Plastic green	Plastic Plastic Plastic At dimension Ø 29.45 Plastic Plastic	6 mm 6 mm 8	45-2131.3220.000 45-2131.3240.000	1	0.021 k
Pusi Lens raised above bezel Pusi Lens raised above bezel Pusi Lens raised above bezel Pusi Lens raised above bezel	hbutton actuator, Metal sandgrey hbutton actuator, Metal sandgrey hbutton actuator, Metal sandgrey hbutton actuator, Metal sandgrey hbutton actuator, Metal sandgrey	Momentary, From Plastic red Momentary, From Plastic yellow Momentary, From Plastic green Momentary, From Plastic blue	nt dimension Ø 29.45 Plastic nt dimension Ø 29.45 Plastic nt dimension Ø 29.45 Plastic nt dimension Ø 29.45 Plastic	6 mm B 6 mm B	45-2131.3220.000 45-2131.3240.000	1	0.021 k
Pusi Lens raised above bezel Pusi Lens raised above bezel Pusi Lens raised above bezel Pusi Lens raised above bezel	hbutton actuator, Metal sandgrey hbutton actuator, Metal sandgrey hbutton actuator, Metal sandgrey hbutton actuator, Metal sandgrey hbutton actuator, Metal sandgrey	Momentary, From Plastic red Momentary, From Plastic yellow Momentary, From Plastic green Momentary, From Plastic blue	Plastic Plastic At dimension Ø 29.45 At dimension Ø 29.45 Plastic At dimension Ø 29.45 Plastic	6 mm B 6 mm B	45-2131.3220.000 45-2131.3240.000	1	0.021 k

Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
			nt dimension Ø 29.45		, rait noi		, word
Lens raised above bezel	Metal silver	Plastic black	Metal Metal	В	45-2131.2210.000	1	0.021 k
			nt dimension Ø 29.45				
ens raised above bezel	Metal silver	Plastic red	Metal	В	45-2131.2220.000	1	0.048
Pusl Lens raised above bezel	hbutton actuator, Metal silver	Momentary, From	nt dimension Ø 29.45	i mm B	45-2131.2240.000	1	0.048
Pus	hbutton actuator,	Momentary, Fron	nt dimension Ø 29.45	i mm			
ens raised above bezel	Metal silver	Plastic green			T	-	0 040 1
Let is falsed above bezer	IVIETAI SIIVEI	Plastic green	Metal	В	45-2131.2250.000	1	0.046 r
Pusl			nt dimension Ø 29.45		45-2131.2250.000 45-2131.2260.000	1	
Pusl Lens raised above bezel	hbutton actuator, Metal silver	Momentary, From	nt dimension Ø 29.45	i mm B			
Pusi	hbutton actuator, Metal silver	Momentary, From	nt dimension Ø 29.45	i mm B			0.048 k
Pusi Lens raised above bezel Pusi Pusi Pusi	hbutton actuator, Metal silver hbutton actuator, Metal silver	Momentary, From Plastic blue Momentary, From Plastic white	nt dimension Ø 29.45 Metal nt dimension Ø 29.45	i mm B	45-2131.2260.000	1	0.048 k
Pusl Lens raised above bezel Pusl Lens raised above bezel Pusl	hbutton actuator, Metal silver hbutton actuator, Metal silver	Momentary, From Plastic blue Momentary, From Plastic white	Metal Metal Metal Metal Metal Metal	i mm B	45-2131.2260.000	1	0.048 F
Pusi Lens raised above bezel Pusi Lens raised above bezel Pusi Lens raised above bezel	hbutton actuator, Metal silver hbutton actuator, Metal silver hbutton actuator, Metal silver	Momentary, From Plastic blue Momentary, From Plastic white Maintain, Front description of the Plastic red	nt dimension Ø 29.45 Metal At dimension Ø 29.45 Metal	6 mm 6 mm 7 m C	45-2131.2260.000 45-2131.2290.000	1	0.048 F
Pusl Lens raised above bezel Pusl Lens raised above bezel Pusl Lens raised above bezel Pusl Lens raised above bezel	hbutton actuator, Metal silver hbutton actuator, Metal silver hbutton actuator, Metal silver	Momentary, From Plastic blue Momentary, From Plastic white Maintain, Front description of the Plastic red	Metal Metal Metal Metal Metal Metal Metal Metal	6 mm 6 mm 7 m C	45-2131.2260.000 45-2131.2290.000	1	0.048 k
Pusi Lens raised above bezel Pusi Lens raised above bezel Pusi Lens raised above bezel Pusi Lens raised above bezel	hbutton actuator, Metal silver hbutton actuator, Metal silver hbutton actuator, Metal silver hbutton actuator, Plastic black	Momentary, From Plastic blue Momentary, From Plastic white Maintain, Front d Plastic red Momentary, From Plastic black	nt dimension Ø 29.45 Metal At dimension Ø 29.45 Metal Metal Metal	is mm is mm	45-2131.2260.000 45-2131.2290.000	1 1 2	0.048 k 0.048 k 0.048 k

	J						
						/iring dia- ram	Weight
Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	≥ 5	Weight
Pus	hbutton actuator M	Momentary Fron	nt dimension Ø 29.4	5 mm			
ens lower than front ring	Plastic black	Plastic yellow	Plastic	В	45-2131.1340.000	1	0.013 kg
	r latite black	Triadic yellow	1 Actio		10 210 1110 101000	<u> </u>	0.010119
			nt dimension Ø 29.4				
ens lower than front ring	Plastic black	Plastic green	Plastic	В	45-2131.1350.000	1	0.013 kg
Pus	hbutton actuator, N	Momentary, Fron	nt dimension Ø 29.4	5 mm			
ens lower than front ring	Plastic black	Plastic blue	Plastic	В	45-2131.1360.000	1	0.013 kg
ens lower than front ring Pusl	Plastic black hbutton actuator, N	Plastic white Momentary, From	Plastic nt dimension Ø 29.44	В 5 mm	45-2131.1390.000	1	0.013 kg
ens lower than front ring	Metal sandgrey	Plastic black	Plastic	В	45-2131.3310.000	1	0.021 kg
Pus	hbutton actuator, N	Momentary, Fron	nt dimension Ø 29.4	5 mm			
ens lower than front ring	Metal sandgrey	Plastic red	Plastic	В	45-2131.3320.000	1	0.021 kg
Pus	hbutton actuator, N	Momentary, Fror	nt dimension Ø 29.4	5 mm			
ens lower than front ring	Metal sandgrey	Plastic yellow	Plastic	В	45-2131.3340.000	1	0.021 kg
Pus	hbutton actuator, N	Momentary, Fron	nt dimension Ø 29.4	5 mm			
ens lower than front ring	Metal sandgrey	Plastic green	Plastic	В	45-2131.3350.000	1	0.021 kg
		-	nt dimension Ø 29.4		1		11119
Lens lower than front ring	Metal sandgrey	Plastic blue	Plastic	В	45-2131.3360.000	1	0.021 kg
_ono lower than nontring	ividiai sallugidy	I lastic blue	1 Idolic		70-2101.0000.000	'	0.02 I KG

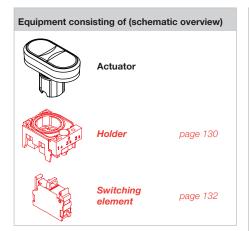
Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
Pushl	button actuator, N	Momentary, Fron	t dimension Ø 29.45	mm			
Lens lower than front ring	Metal sandgrey	Plastic white	Plastic	В	45-2131.3390.000	1	0.021
Pushl	button actuator, N	Momentary, Fron	nt dimension Ø 29.45	mm			
Lens lower than front ring	Metal silver	Plastic black	Metal	В	45-2131.2310.000	1	0.048 k
Pushl	button actuator, N	Momentary, Fron	it dimension Ø 29.45	mm			
Lens lower than front ring	Metal silver	Plastic red	Metal	В	45-2131.2320.000	1	0.048 k
Pushi	button actuator N	Momentary Fron	rt dimension Ø 29.45	mm			
i usiii	button actuator, i	violiteitaly, i foli	it difficition & 23.43				
	Metal silver	Plastic yellow	Metal	В	45-2131.2340.000	1	0.048 k
Lens lower than front ring Pushl	Metal silver	Plastic yellow Momentary, Fron	Metal	mm			
Lens lower than front ring Pushl	Metal silver	Plastic yellow	Metal	В	45-2131.2340.000 45-2131.2350.000	1	
Pushl Lens lower than front ring	Metal silver button actuator, N Metal silver	Plastic yellow Momentary, Fron Plastic green	Metal	mm B			
Pushl	Metal silver button actuator, N Metal silver	Plastic yellow Momentary, Fron Plastic green	Metal It dimension Ø 29.45 Metal	mm B			0.0481
Pushl Lens lower than front ring Pushl Lens lower than front ring	Metal silver button actuator, N Metal silver button actuator, N Metal silver	Momentary, Fron Plastic green Momentary, Fron Plastic blue	Metal At dimension Ø 29.45 Metal At dimension Ø 29.45 Metal	тт В	45-2131.2350.000	1	0.048 k
Pushl Lens lower than front ring Pushl Lens lower than front ring Pushl Lens lower than front ring Pushl	Metal silver button actuator, N Metal silver button actuator, N Metal silver	Momentary, Fron Plastic green Momentary, Fron Plastic blue	Metal At dimension Ø 29.45 At dimension Ø 29.45 Metal	тт В	45-2131.2350.000 45-2131.2360.000	1	0.048 F
Pushl Lens lower than front ring Pushl Lens lower than front ring Pushl Lens lower than front ring Pushl	Metal silver button actuator, N Metal silver button actuator, N Metal silver	Momentary, From Plastic green Momentary, From Plastic blue	Metal At dimension Ø 29.45 Metal At dimension Ø 29.45 Metal	тт В тт В	45-2131.2350.000	1	0.048 F
Pushl Lens lower than front ring	Metal silver button actuator, N Metal silver button actuator, N Metal silver button actuator, N Metal silver	Momentary, From Plastic green Momentary, From Plastic blue Momentary, From Plastic blue	Metal At dimension Ø 29.45 At dimension Ø 29.45 Metal	тт В тт В	45-2131.2350.000 45-2131.2360.000	1	0.048
Pushl Lens lower than front ring Pushl Lens lower than front ring, with	Metal silver button actuator, N Metal silver button actuator, N Metal silver button actuator, N Metal silver	Momentary, From Plastic green Momentary, From Plastic blue Momentary, From Plastic blue	Metal At dimension Ø 29.45 At dimension Ø 29.45 Metal At dimension Ø 29.45 Metal	тт В тт В	45-2131.2350.000 45-2131.2360.000	1	0.048 F
Pushl Lens lower than front ring Pushl Lens lover than front ring, with castellation	button actuator, Metal silver button actuator, Metal silver button actuator, Metal silver button actuator, Metal silver button actuator, Metal silver	Momentary, From Plastic green Momentary, From Plastic blue Momentary, From Plastic white Momentary, From Plastic white	Metal Metal Metal Metal At dimension Ø 29.45 Metal Metal Metal At dimension Ø 29.45 Metal Metal	мм В мм В мм В мм В мм В мм В мм В	45-2131.2350.000 45-2131.2360.000 45-2131.2390.000	1	0.048 F 0.048 F 0.048 F
Pushl Lens lower than front ring Pushl Lens lover than front ring, with castellation	button actuator, Metal silver button actuator, Metal silver button actuator, Metal silver button actuator, Metal silver button actuator, Metal silver	Momentary, From Plastic green Momentary, From Plastic blue Momentary, From Plastic white Momentary, From Plastic white	Metal At dimension Ø 29.45 At dimension Ø 29.45 Metal At dimension Ø 29.45 Metal	мм В мм В мм В мм В мм В мм В мм В	45-2131.2350.000 45-2131.2360.000 45-2131.2390.000	1	0.048

Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
Pushb		Momentary, Fron	nt dimension Ø 29.45				
Lens lover than front ring, with castellation	Plastic black	Plastic yellow	Plastic	В	45-2131.1440.000	1	0.013 kg
Lens lover than front ring, with castellation	Plastic black	Plastic green	Plastic	В	45-2131.1450.000	1	0.013 kg
	Plastic black	Plastic green	Plastic	В	45-2131.1450.000	1	0.013 kg
Pushb	utton actuator, N	∕lomentary, Fron	nt dimension Ø 29.45	i mm			
Lens lover than front ring, with castellation	Plastic black	Plastic blue	Plastic	В	45-2131.1460.000	1	0.013 kg
Pushb	utton actuator, N	√lomentary, Fron	nt dimension Ø 29.45	i mm	ı		ı
Lens lover than front ring, with castellation	Plastic black	Plastic white	Plastic	В	45-2131.1490.000	1	0.013 kg

Switching action: B = Momentary, C = Maintain

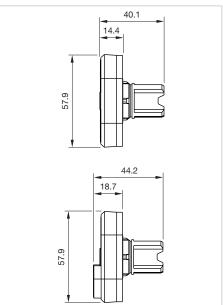
E	E~-
Wiring diagram 1	Wiring diagram 2

Double pushbutton, IP66, IP67, IP69K



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

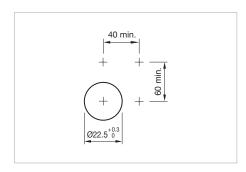
To obtain a complete unit, please select the red components from the pages shown.





Product can differ from the current configuration.

Dimensions [mm]



Mounting cut-outs [mm]

Additional Information

 Mounting depth incl. front plate, see chapter «drawings»

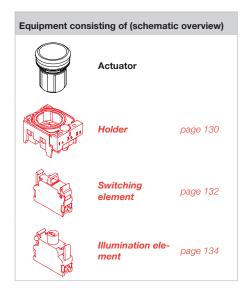
Product attribute	Front ring	Lens	Switching action	Part No.	Wiring dia- gram	Weight
Double pushb	utton actuator, momo	entary, Front dimens	sion 57.7 x 29.8 mm			
2 lenses, level with front ring	Plastic black	Plastic green-red	В	45-2J31.16T0.000	1	0.026 kg
· · · · · · · · · · · · · · · · · · ·	utton actuator, mome			45-2.131.16V0.000	1	0 026 kg
· · · · · · · · · · · · · · · · · · ·	utton actuator, momo	entary, Front dimens	sion 57.7 x 29.8 mm	45-2J31.16V0.000	1	0.026 kį
2 lenses, level with front ring	•	Plastic white-black	В	45-2J31.16V0.000	1	0.026 kį

Product attribute	Front ring	Lens	Switching action	Part No.	Wiring dia- yram	Weight
		omentary, Front dime	· · ·		> 0)	weight
2 lenses, level with/raised above front ring	Plastic black	Plastic white-black	В	45-2J31.15V0.000	1	0.026 kg
Double pushl	outton actuator, m	omentary, Front dime	ension 57.7 x 29.8 m	n		
2 lenses, level with front ring	Metal sandgrey	Plastic green-red	В	45-2J31.36T0.000	1	0.043 kg
<u> </u>		omentary, Front dime				
2 lenses, level with front ring	Metal sandgrey	Plastic white-black	В	45-2J31.36V0.000	1	0.043 kg
P lenses, level with/raised above front ring	Metal sandgrey	omentary, Front dime	В	45-2J31.35T0.000	1	0.043 kg
lenses, level with front ring	Metal silver	Plastic green-red	В	45-2J31.26T0.000	1	0.068 kg
Double push	outton actuator, m	omentary, Front dime	ension 57.7 x 29.8 mi	m		
2 lenses, level with front ring	Metal silver	Plastic white-black	В	45-2J31.26V0.000	1	0.068 kg
Double pushl	outton actuator, m	omentary, Front dime	ension 57.7 x 29.8 m	n		
2 lenses, level with/raised above front ring	Metal silver	Plastic green-red	В	45-2J31.25T0.000	1	0.068 kg
Double pushi	outton actuator. m	omentary, Front dime	ension 57.7 x 29.8 m	m		
2 lenses, level with/raised above front ring	Metal silver	Plastic white-black	В	45-2J31.25V0.000	1	0.068 k

Switching action: B = Momentary

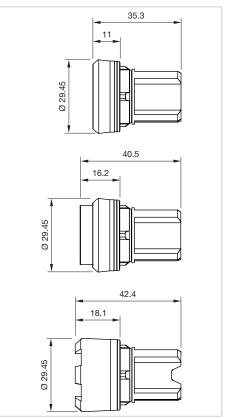
E--Wiring diagram 1

Illuminated pushbutton, IP66, IP67, IP69K



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

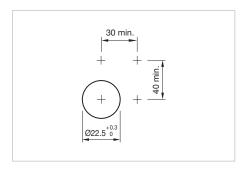
To obtain a complete unit, please select the red components from the pages shown.





Product can differ from the current configuration.

Dimensions [mm]



Mounting cut-outs [mm]

Additional Information

 Mounting depth incl. front plate, see chapter «drawings»

Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
		den estreten Mene	outous Frank discour	oion <i>(</i> 3 00 45 mm			
	luminated pushbut Plastic black	Plastic amber transpa- rency	Plastic	B 29.45 mm	45-2231.11F0.000	1	0.011 k
Lens level with front ring	Plastic black	Plastic amber transparency	-	В	45-2231.11F0.000	1	0.011 k

						Wiring dia- gram	
roduct attribute	Front ring	Lens	Housing material	Switching action	Part No.	≥ 5	Weight
	lluminated nushl	button actuator, Mome	ntary Front dime	ension Ø 29 45 mn	1		
ens level with front ring	Plastic black	Plastic yellow trans-	Plastic	В	45-2231.11G0.000	1	0.011 k
		parent					
		button actuator, Mome	,			1.	
ens level with front ring	Plastic black	Plastic green transparent	Plastic	В	45-2231.11H0.000	1	0.011 k
	lluminated pushl	button actuator, Mome	entary, Front dime		1		
ens level with front ring	Plastic black	Plastic blue transparent	Plastic	В	45-2231.11J0.000	1	0.011 k
>	lluminated push	button actuator, Mome	entary. Front dime	ension Ø 29.45 mn	1		
	Plastic black	Plastic white transparent		В	45-2231.11N0.000	1	0.011 k
ens level with front ring	Plastic Diack	Tradic write transparent	Flastic		45-2231.11NO.000		
		button actuator, Mome Plastic colourless transparent				1	
ens level with front ring	Iluminated pushl Plastic black	button actuator, Mome	entary, Front dime	ension Ø 29.45 m n	1		0.011 k
ens level with front ring	Iluminated pushl Plastic black	button actuator, Mome Plastic colourless transparent	entary, Front dime	ension Ø 29.45 m n	1		
ens level with front ring	Iluminated pushling Plastic black Iluminated pushling Plastic black	button actuator, Mome Plastic colourless transparent	entary, Front dime	ension Ø 29.45 mm ion Ø 29.45 mm C	1 45-2231.11K0.000	2	0.011 k
ens level with front ring ens level with front ring ens level with front ring	Iluminated pushling Plastic black Iluminated pushling Plastic black	button actuator, Mome Plastic colourless transparent button actuator, Mainta Plastic red transparent	entary, Front dime	ension Ø 29.45 mn B ion Ø 29.45 mm	1 45-2231.11K0.000	1	0.011
ens level with front ring ens level with front ring ens level with front ring lilens level with front ring	Plastic black Plastic blac	button actuator, Mome Plastic colourless transparent button actuator, Mainta Plastic red transparent button actuator, Mainta Plastic yellow transparent button actuator, Mainta	entary, Front dimension, Front dimension	ension Ø 29.45 mm ion Ø 29.45 mm C ion Ø 29.45 mm	45-2231.11K0.000 45-2234.11E0.000	2	0.011 k
ens level with front ring ens level with front ring ens level with front ring lilens level with front ring	Iluminated pushl Plastic black Iluminated pushl Plastic black Iluminated pushl Plastic black	button actuator, Mome Plastic colourless transparent button actuator, Mainta Plastic red transparent button actuator, Mainta Plastic yellow transparent	entary, Front dimension, Front dimension	ension Ø 29.45 mm ion Ø 29.45 mm C ion Ø 29.45 mm	45-2231.11K0.000 45-2234.11E0.000	2	0.011 F
ens level with front ring	Illuminated pushle Plastic black Illuminated pushle Plastic black Illuminated pushle Plastic black	button actuator, Mome Plastic colourless transparent button actuator, Mainta Plastic red transparent button actuator, Mainta Plastic yellow transparent button actuator, Mainta Plastic green transparent	entary, Front dimense Plastic ain, Front dimense Plastic ain, Front dimense Plastic	ion Ø 29.45 mm C ion Ø 29.45 mm C ion Ø 29.45 mm	45-2231.11K0.000 45-2234.11E0.000	2	0.011 F
Lens level with front ring Lens level with front ring Lens level with front ring Lens level with front ring	Illuminated pushle Plastic black Illuminated pushle Plastic black Illuminated pushle Plastic black	button actuator, Mome Plastic colourless transparent button actuator, Mainta Plastic red transparent button actuator, Mainta Plastic yellow transparent button actuator, Mainta	entary, Front dimense Plastic ain, Front dimense Plastic ain, Front dimense Plastic	ion Ø 29.45 mm C ion Ø 29.45 mm C ion Ø 29.45 mm	45-2231.11K0.000 45-2234.11E0.000	2	0.011

						Wiring dia- gram	
Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	≥ 5	Weigh
		utton octuptou Mainte	oin Front dimension	(i 00 45			
_ens level with front ring	Plastic black	Plastic white transparent		C 29.45 mm	45-2234.11N0.000	2	0.0111
Let is level with front fing	T lastic black	T lastic write transparent	i lastic		43-2204.11110.000		0.0111
	U	diamanda Mainda	sin Frank dissansi	<i>(</i> 2 00 45			
		itton actuator, Maint		1	45 0004 441/0 000	0	0.0111
_ens level with front ring	Plastic black	Plastic colourless trans- parent	Plastic	С	45-2234.11K0.000	2	0.011 k
	lluminated pushbu	itton actuator, Mome	entary, Front dimen	sion Ø 29.45 mm			
ens level with front ring	Metal sandgrey	Plastic amber transpa- rency	Plastic	В	45-2231.31F0.000	1	0.020
	lluminated nuchbu	itton actuator, Mome	entary Front dimen	sion <i>(</i> 3 29 45 mm			
ens level with front ring	Metal sandgrey	Plastic red transparent	Plastic	B 29.43 IIIII	45-2231.31E0.000	1	0.020
Lens level with front ring	ivietai sariugrey	Flastic red transparent	Flastic	D	45-2231.31E0.000	'	0.0201
Lens level with front ring	Iluminated pushbu	Plastic yellow transparent	entary, Front dimen	sion Ø 29.45 mm	45-2231.31G0.000	1	0.020
Lens level with front ring	Metal sandgrey	Plastic yellow trans-	Plastic	В	45-2231.31G0.000	1	0.020
Lens level with front ring Lens level with front ring	Metal sandgrey Illuminated pushbu Metal sandgrey Illuminated pushbu	Plastic yellow transparent atton actuator, Mome	entary, Front dimen	sion Ø 29.45 mm	45-2231.31G0.000 45-2231.31H0.000		0.020
Lens level with front ring Lens level with front ring	Metal sandgrey Illuminated pushbu Metal sandgrey	Plastic yellow transparent Itton actuator, Mome	Plastic Plastic Plastic	sion Ø 29.45 mm	45-2231.31G0.000 45-2231.31H0.000		0.020
Lens level with front ring Lens level with front ring Lens level with front ring	Metal sandgrey Illuminated pushbu Metal sandgrey Illuminated pushbu Metal sandgrey	Plastic yellow transparent atton actuator, Mome	Plastic Plastic Plastic Plastic Plastic Plastic	sion Ø 29.45 mm B sion Ø 29.45 mm	45-2231.31G0.000 45-2231.31H0.000 45-2231.31J0.000	1	
Lens level with front ring Lens level with front ring Lens level with front ring	Metal sandgrey Illuminated pushbu Metal sandgrey Illuminated pushbu Metal sandgrey	Plastic yellow transparent Itton actuator, Momentum Plastic green transparent Itton actuator, Momentum Plastic blue transparent	Plastic Plastic Plastic Plastic Plastic Plastic Pattern dimen	sion Ø 29.45 mm B sion Ø 29.45 mm	45-2231.31G0.000 45-2231.31H0.000 45-2231.31J0.000	1	0.020
Lens level with front ring Lens level with front ring Lens level with front ring	Illuminated pushbut Metal sandgrey Illuminated pushbut Metal sandgrey Illuminated pushbut Metal sandgrey	Plastic yellow transparent Itton actuator, Mome Plastic green transparent Itton actuator, Mome Plastic blue transparent	Plastic Plastic Plastic Plastic Plastic Plastic Pattern dimen	sion Ø 29.45 mm sion Ø 29.45 mm B	45-2231.31G0.000 45-2231.31H0.000 45-2231.31J0.000	1	0.020
Lens level with front ring Lens level with front ring	Illuminated pushbu Metal sandgrey Illuminated pushbu Metal sandgrey Illuminated pushbu Metal sandgrey	Plastic yellow transparent atton actuator, Momentum Plastic green transparent Plastic blue transparent atton actuator, Momentum Plastic blue transparent Plastic white transparent	Plastic Plastic Plastic Plastic Plastic Plastic Plastic Plastic	sion Ø 29.45 mm B sion Ø 29.45 mm B	45-2231.31G0.000 45-2231.31H0.000 45-2231.31J0.000	1	0.020
Lens level with front ring	Illuminated pushbu Metal sandgrey Illuminated pushbu Metal sandgrey Illuminated pushbu Metal sandgrey	Plastic yellow transparent Itton actuator, Mome Plastic green transparent Itton actuator, Mome Plastic blue transparent	Plastic Plastic Plastic Plastic Plastic Plastic Plastic Plastic	sion Ø 29.45 mm B sion Ø 29.45 mm B	45-2231.31G0.000 45-2231.31H0.000 45-2231.31J0.000	1	0.020

Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
	-		· ·		Tarrio.		Weight
		ton actuator, Mainta			45 0004 0450 000		0.0001
ens level with front ring	Metal sandgrey	Plastic red transparent	Plastic	C	45-2234.31E0.000	2	0.020 kç
		.		Ø 00 45			
	-	ton actuator, Mainta					
ens level with front ring	Metal sandgrey	Plastic yellow trans- parent	Plastic	C	45-2234.31G0.000	2	0.020 k
Lens level with front ring	Iluminated pushbut Metal sandgrey	ton actuator, Mainta		n Ø 29.45 mm	45-2234.31H0.000	2	0.020 k
Tello level with Hour Hill	ivietai sailugiey	i idolic green transpatent	i iastic		7J-22J4.3 I TU.UUU		0.020 K
T I	lluminated pushbut	ton actuator, Mainta	ain, Front dimensio	n Ø 29.45 mm			
ens level with front ring	Metal sandgrey	Plastic blue transparent	Plastic	С	45-2234.31J0.000	2	0.020 kg
			1				
	Iluminated pushbut Metal sandgrey	ton actuator, Mainta		n Ø 29.45 mm C	45-2234.31N0.000	2	0.020 kį
Lens level with front ring	Metal sandgrey		Plastic	С	45-2234.31N0.000 45-2234.31K0.000	2	
Lens level with front ring	Metal sandgrey Iluminated pushbut Metal sandgrey	Plastic white transparent ton actuator, Mainta Plastic colourless transparent	Plastic ain, Front dimensio Plastic	n Ø 29.45 mm	45-2234.31K0.000		
ens level with front ring	Metal sandgrey Iluminated pushbut Metal sandgrey	Plastic white transparent ton actuator, Mainta Plastic colourless trans-	Plastic ain, Front dimensio Plastic	n Ø 29.45 mm	45-2234.31K0.000		
Lens level with front ring	Metal sandgrey Iluminated pushbut Metal sandgrey	Plastic white transparent ton actuator, Mainta Plastic colourless transparent	Plastic ain, Front dimensio Plastic	n Ø 29.45 mm	45-2234.31K0.000		0.020 kg
Lens level with front ring Lens level with front ring Lens level with front ring	Metal sandgrey Illuminated pushbut Metal sandgrey Illuminated pushbut Metal silver	Plastic white transparent ton actuator, Mainta Plastic colourless transparent ton actuator, Mome	Plastic ain, Front dimensio Plastic Phastic Phastic Metal	n Ø 29.45 mm C sion Ø 29.45 mm	45-2234.31K0.000	2	0.020 kį
Lens level with front ring Lens level with front ring Lens level with front ring	Metal sandgrey Illuminated pushbut Metal sandgrey Illuminated pushbut Metal silver	ton actuator, Maintal Plastic colourless transparent ton actuator, Momental Plastic amber transparency	Plastic ain, Front dimensio Plastic Phastic Phastic Metal	n Ø 29.45 mm C sion Ø 29.45 mm	45-2234.31K0.000	2	0.020 kç 0.020 kç 0.032 kç
Lens level with front ring Lens level with front ring Lens level with front ring	Metal sandgrey Iluminated pushbut Metal sandgrey Iluminated pushbut Metal silver Metal silver	ton actuator, Maintal Plastic colourless transparent ton actuator, Momentum actuator, Mo	Plastic ain, Front dimensio Plastic entary, Front dimen Metal	n Ø 29.45 mm C sion Ø 29.45 mm B	45-2234.31K0.000	2	0.020 kg
Lens level with front ring Lens level with front ring Lens level with front ring Lens level with front ring	Metal sandgrey Illuminated pushbut Metal sandgrey Illuminated pushbut Metal silver Illuminated pushbut Metal silver	ton actuator, Maintal Plastic colourless transparent ton actuator, Mome Plastic amber transparency ton actuator, Mome Plastic amber transparency	Plastic pin, Front dimension Plastic Plastic Phatry, Front dimen Metal Phatry, Front dimen Metal	n Ø 29.45 mm C sion Ø 29.45 mm B	45-2234.31K0.000 45-2231.21F0.000 45-2231.21E0.000	2	0.020 kg
Lens level with front ring Lens level with front ring Lens level with front ring Lens level with front ring	Metal sandgrey Illuminated pushbut Metal sandgrey Illuminated pushbut Metal silver Illuminated pushbut Metal silver	ton actuator, Maintal Plastic colourless transparent ton actuator, Momentum actuator, Mo	Plastic pin, Front dimension Plastic Plastic Phatry, Front dimen Metal Phatry, Front dimen Metal	n Ø 29.45 mm C sion Ø 29.45 mm B	45-2234.31K0.000 45-2231.21F0.000 45-2231.21E0.000	2	0.020 kg

Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- yram	Weight
	Front ring	button actuator, Mome	Housing material	Switching action		> 0/	weigin
Lens level with front ring	Metal silver	Plastic green transparent		В	45-2231.21H0.000	1	0.032 k
	lluminated nuch	button actuator, Mome	antary Front dime	nsion (i 20 45 mm			
ens level with front ring	Metal silver	Plastic blue transparent	Metal	В	45-2231.21J0.000	1	0.032 k
	lluminated push	button actuator, Mome	entary, Front dime	nsion Ø 29.45 mn	1		
_ens level with front ring	Metal silver	Plastic white transparent	Metal	В	45-2231.21N0.000	1	0.032 k
		button actuator, Mome	entary, Front dime		ı		
ens level with front ring	Metal silver	Plastic colourless trans-	Metal	В	45-2231.21K0.000	1	0.032 k
Letis level with front ring	Wetai Silvei	parent					
	lluminated push	parent button actuator, Mainta			45.0004.0450.000		0.000
		parent	ain, Front dimens	ion Ø 29.45 mm	45-2234.21E0.000	2	0.032
Lens level with front ring	Iluminated push Metal silver	parent button actuator, Mainta	Metal	С	45-2234.21E0.000	2	0.0321
Lens level with front ring	Iluminated push Metal silver	button actuator, Mainta Plastic red transparent button actuator, Mainta Plastic yellow trans-	Metal	С	45-2234.21E0.000 45-2234.21G0.000	2	
Lens level with front ring Lens level with front ring	Iluminated push Metal silver Iluminated push	button actuator, Mainta Plastic red transparent button actuator, Mainta	Metal ain, Front dimens Metal	ion Ø 29.45 mm			
Lens level with front ring	Iluminated push Metal silver Iluminated push	button actuator, Maintal Plastic red transparent button actuator, Maintal Plastic yellow transparent	ain, Front dimens Metal	ion Ø 29.45 mm			0.032 k
Lens level with front ring	Iluminated push Metal silver Iluminated push Metal silver	button actuator, Mainta Plastic red transparent button actuator, Mainta Plastic yellow transparent Plastic yellow transparent	metal ain, Front dimens Metal ain, Front dimens Metal	ion Ø 29.45 mm C ion Ø 29.45 mm	45-2234.21G0.000	2	0.032
Lens level with front ring	Iluminated push Metal silver Iluminated push Metal silver	button actuator, Maintal Plastic red transparent button actuator, Maintal Plastic yellow transparent button actuator, Maintal Plastic green transparent	metal ain, Front dimens Metal ain, Front dimens Metal	ion Ø 29.45 mm C ion Ø 29.45 mm	45-2234.21G0.000	2	0.032 F
Lens level with front ring Lens level with front ring	Illuminated push Metal silver Illuminated push Metal silver Illuminated push Metal silver	button actuator, Maintal Plastic red transparent button actuator, Maintal Plastic yellow transparent button actuator, Maintal Plastic green transparent button actuator, Maintal Plastic blue transparent	metal ain, Front dimens Metal ain, Front dimens Metal ain, Front dimens Metal	ion Ø 29.45 mm C ion Ø 29.45 mm C	45-2234.21G0.000 45-2234.21H0.000	2	0.032 F
Lens level with front ring	Illuminated push Metal silver Illuminated push Metal silver Illuminated push Metal silver	button actuator, Mainta Plastic red transparent button actuator, Mainta Plastic yellow transparent button actuator, Mainta Plastic green transparent button actuator, Mainta	metal ain, Front dimens Metal ain, Front dimens Metal ain, Front dimens Metal	ion Ø 29.45 mm C ion Ø 29.45 mm C	45-2234.21G0.000 45-2234.21H0.000	2	0.032 H 0.032 H 0.032 H

						Viring dia- ram	Weight
Product attribute	Front ring	Lens button actuator, Mainta	Housing material	Switching action	Part No.	> 6	weight
ens level with front ring	Metal silver	Plastic colourless trans-	Metal	C	45-2234.21K0.000	2	0.032 kg
		parent					
	lluminated pushl	button actuator, Mome	entary, Front dime	nsion Ø 29.45 mn	n		
ens raised above bezel	Plastic black	Plastic red transparent	Plastic	В	45-2231.12E0.000	1	0.011 kç
		button actuator, Mome					0.014
ens raised above bezel	Plastic black	Plastic yellow trans- parent	Plastic	В	45-2231.12G0.000	1	0.011 k
	lluminated pushl	button actuator, Mome	entary, Front dime	nsion Ø 29.45 mn	n		
				_			0 0 4 4 1
ens raised above bezel	Plastic black	Plastic green transparent	Plastic	В	45-2231.12H0.000	1	0.011 k
		Plastic green transparent button actuator, Mome				1	
Lens raised above bezel	Iluminated pushl Plastic black	button actuator, Mome Plastic blue transparent button actuator, Mome	entary, Front dime	nsion Ø 29.45 mn	n 45-2231.12J0.000	1	0.011 kį
ens raised above bezel	Iluminated pushl Plastic black	button actuator, Mome Plastic blue transparent	entary, Front dime	nsion Ø 29.45 mn	1 45-2231.12J0.000		0.011 kg
Lens raised above bezel	Illuminated pushl Plastic black Illuminated pushl Plastic black	button actuator, Mome Plastic blue transparent button actuator, Mome Plastic colourless transparent button actuator, Mome	entary, Front dime	nsion Ø 29.45 mn nsion Ø 29.45 mn B	1 45-2231.12J0.000 1 45-2231.12K0.000	1	0.011 kg
ens raised above bezel ens raised above bezel	Iluminated pushl Plastic black Iluminated pushl Plastic black	button actuator, Mome Plastic blue transparent button actuator, Mome Plastic colourless transparent	entary, Front dime	nsion Ø 29.45 mn B nsion Ø 29.45 mn	1 45-2231.12J0.000 1 45-2231.12K0.000	1	0.011 kg
Lens raised above bezel Lens raised above bezel Lens raised above bezel Lens raised above bezel	Illuminated pushl Plastic black Illuminated pushl Plastic black Illuminated pushl Metal sandgrey	button actuator, Mome Plastic blue transparent button actuator, Mome Plastic colourless transparent button actuator, Mome Plastic red transparent	entary, Front dime	nsion Ø 29.45 mn B nsion Ø 29.45 mn B nsion Ø 29.45 mn	1 45-2231.12J0.000 10 45-2231.12K0.000 11 45-2231.32E0.000	1	0.011 kg
Lens raised above bezel Lens raised above bezel Lens raised above bezel Lens raised above bezel	Illuminated pushl Plastic black Illuminated pushl Plastic black Illuminated pushl Metal sandgrey	button actuator, Mome Plastic blue transparent button actuator, Mome Plastic colourless transparent button actuator, Mome Plastic red transparent	entary, Front dime	nsion Ø 29.45 mn B nsion Ø 29.45 mn B nsion Ø 29.45 mn	1 45-2231.12J0.000 10 45-2231.12K0.000 11 45-2231.32E0.000	1	0.011 kg
Lens raised above bezel Lens raised above bezel Lens raised above bezel Lens raised above bezel Lens raised above bezel	Illuminated pushl Plastic black Illuminated pushl Plastic black Illuminated pushl Metal sandgrey Illuminated pushl Metal sandgrey	button actuator, Mome Plastic blue transparent button actuator, Mome Plastic colourless transparent button actuator, Mome Plastic red transparent button actuator, Mome Plastic yellow transparent	entary, Front dime Plastic entary, Front dime Plastic entary, Front dime Plastic entary, Front dime	nsion Ø 29.45 mn B	1 45-2231.12J0.000 10 45-2231.12K0.000 11 45-2231.32E0.000 11 45-2231.32G0.000	1 1	0.011 kg 0.011 kg 0.011 kg 0.020 kg
Lens raised above bezel Lens raised above bezel Lens raised above bezel Lens raised above bezel Lens raised above bezel	Illuminated pushl Plastic black Illuminated pushl Plastic black Illuminated pushl Metal sandgrey Illuminated pushl Metal sandgrey	button actuator, Mome Plastic blue transparent button actuator, Mome Plastic colourless transparent button actuator, Mome Plastic red transparent button actuator, Mome	entary, Front dime	nsion Ø 29.45 mn B	1 45-2231.12J0.000 10 45-2231.12K0.000 11 45-2231.32E0.000 11 45-2231.32G0.000	1 1	0.011 kg

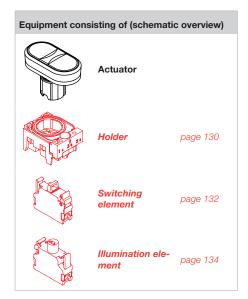
Product attribute	Eront ring	Lens	Housing material	Switching action	Part No.	Wiring dia- _I ram	Weight
	Front ring		Housing material	Switching action		> 69	weight
_ens raised above bezel	Metal sandgrey	button actuator, Mome	Plastic	B 29.45 IIII	45-2231.32J0.000	1	0.020 k
Solid raided above bozer	Words our lagrey	Tradio Sido da Ispaiorit	T laddo		10 220 1102001000	<u> </u>	0.0201
		button actuator, Mome					
_ens raised above bezel	Metal sandgrey	Plastic colourless trans- parent	Plastic	В	45-2231.32K0.000	1	0.020 k
	lluminated push	button actuator, Mome	entary, Front dime	ension Ø 29.45 mm	1		
Lens raised above bezel	Metal silver	Plastic red transparent	Metal	В	45-2231.22E0.000	1	0.032 k
			N A - + - I	В	45 0004 0000 000	- 4	0 000 1
Lens raised above bezel	Metal silver	Plastic amber transpa- rency	Metal	В	45-2231.22F0.000	1	0.032 r
		1				1	0.032 F
		rency				1	
Lens raised above bezel	Iluminated push Metal silver	button actuator, Mome	entary, Front dime	ension Ø 29.45 m n	1 45-2231.22G0.000		
Lens raised above bezel	Iluminated push Metal silver	button actuator, Mome Plastic yellow transparent	entary, Front dime	ension Ø 29.45 m n	1 45-2231.22G0.000		0.032 k
Lens raised above bezel	Iluminated push Metal silver Iluminated push Metal silver	button actuator, Mome Plastic yellow transparent button actuator, Mome	entary, Front dime Metal	ension Ø 29.45 mm	45-2231.22G0.000 45-2231.22H0.000	1	0.032 k
Lens raised above bezel	Iluminated push Metal silver Iluminated push Metal silver	button actuator, Mome Plastic yellow transparent button actuator, Mome Plastic green transparent	entary, Front dime Metal	ension Ø 29.45 mm	45-2231.22G0.000 45-2231.22H0.000	1	0.032 k
Lens raised above bezel Lens raised above bezel Lens raised above bezel Lens raised above bezel	Illuminated push Metal silver Illuminated push Metal silver Illuminated push Metal silver	button actuator, Mome Plastic yellow transparent button actuator, Mome Plastic green transparent button actuator, Mome Plastic blue transparent	entary, Front dime	ension Ø 29.45 mm ension Ø 29.45 mm B	45-2231.22G0.000 45-2231.22H0.000 45-2231.22J0.000	1	0.032 k
Lens raised above bezel Lens raised above bezel Lens raised above bezel Lens raised above bezel	Illuminated push Metal silver Illuminated push Metal silver Illuminated push Metal silver	button actuator, Mome Plastic yellow transparent button actuator, Mome Plastic green transparent button actuator, Mome	entary, Front dime	ension Ø 29.45 mm ension Ø 29.45 mm B	45-2231.22G0.000 45-2231.22H0.000 45-2231.22J0.000	1	0.032 F

Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
	luminated pushbut	on actuator, Mome	ntary, Front dimens	sion Ø 29.45 mm			
Lens raised above bezel	Metal silver	Plastic white transparent	Metal	В	45-2231.22N0.000	1	0.032 kg
	luminated pushbut	on actuator, Mome	ntary, Front dimens	sion Ø 29.45 mm			
Lens lover than front ring, with castellation	Plastic black	Plastic blue transparent	Plastic	В	45-2231.14J0.000	1	0.011 kg

Switching action: B = Momentary, C = Maintain

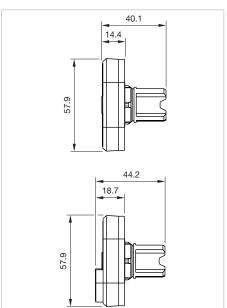
E	E~-
Wiring diagram 1	Wiring diagram 2

Illuminated double pushbutton, IP66, IP67, IP69K



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

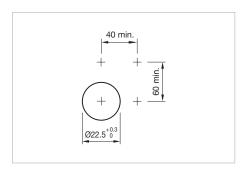
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm]



Product can differ from the current configuration.



Mounting cut-outs [mm]

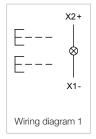
Additional Information

- Mounting depth incl. front plate, see chapter «drawings»
- With illuminative centre window

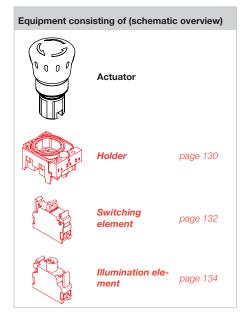
Product attribute	Front ring	Lens	Switching action	Part No.	Compo- nent layout	Wiring dia- gram	Weight
Illuminated do	uble pushbutton act	uator, Momentary, F	ront dimension	57.7 x 29.8 mm			
2 lenses, level with front ring	Plastic black	Plastic green-red	В	45-2K31.16T0.000	4	1	0.025 kg
Illuminated do	uble pushbutton act	uator, Momentary, F	ront dimension	57.7 x 29.8 mm			
Illuminated do 2 lenses, level with front ring	uble pushbutton act	uator, Momentary, F	ront dimension	57.7 x 29.8 mm 45-2K31.16V0.000	4	1	0.025 kç
2 lenses, level with front ring	•	Plastic white-black	В	45-2K31.16V0.000	4	1	0.025 kį

Product attribute	Front ring	Lens	Switching action	Part No.	Bauteile- Layout	Wiring dia- gram	Weight
Illuminated dou	uble pushbutton act	uator, Momentary, F	ront dimension	57.7 x 29.8 mm			
2 lenses, level with/raised above front ring	Plastic black	Plastic white-black	В	45-2K31.15V0.000	4	1	0.025 kg
Illuminated dou 2 lenses, level with front ring	which is a substant of the sub	ruator, Momentary, F	ront dimension	57.7 x 29.8 mm 45-2K31.36T0.000	4	1	0.043 kg
Illuminated dou	uble pushbutton act	uator, Momentary, F	ront dimension	57.7 x 29.8 mm			
	uble pushbutton act	cuator, Momentary, F Plastic white-black	ront dimension	57.7 x 29.8 mm 45-2K31.36V0.000	4	1	0.043 kg
2 lenses, level with front ring	Metal sandgrey		В	45-2K31.36V0.000	4	1	0.043 kg
2 lenses, level with front ring	Metal sandgrey	Plastic white-black	В	45-2K31.36V0.000	4	1	0.043 kg
2 lenses, level with front ring Illuminated dou 2 lenses, level with/raised above front ring	Metal sandgrey uble pushbutton act Metal sandgrey	Plastic white-black	ront dimension	45-2K31.36V0.000 57.7 x 29.8 mm 45-2K31.35T0.000			

Switching action: B = Momentary The component layouts you will find from page 144

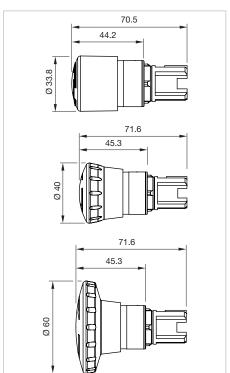


Emergency-stop switch foolproof, EN IEC 60947-5-5, IP66, IP67, IP69K



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

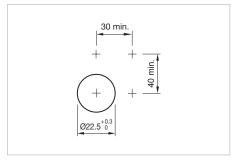
To obtain a complete unit, please select the red components from the pages shown.





Product can differ from the current configuration.

Dimensions [mm]



Mounting cut-outs [mm]

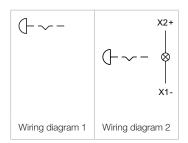
Additional Information

- Mounting depth incl. front plate, see chapter «drawings»
- The standard lock: RONIS, T254
- Two keys are supplied with each key lock switch

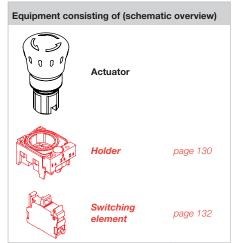
Product attribute	Front ring	Lens	Switching action	Part No.	Wiring dia- gram	Weight
Eme		· · · ·	I IEC 60947-5-5, Front dim	ension Ø 33.8 mm		
Eme twist to release	ergency-stop switch a	actuator, foolproof EN	I IEC 60947-5-5, Front dim	ension Ø 33.8 mm 45-2C36.1820.000	1	0.046 k
twist to release	Plastic black	Plastic red		45-2C36.1820.000	1	0.046 kg

Dun dunch nahiribush	Frank vin a	Lana	Curidahina adi'	Don't No.	Viring dia- Jram	Weight
Product attribute	Front ring	Lens	Switching action IEC 60947-5-5, Front din	Part No.	> 6)	weight
wist to release, illuminable	Metall silber	Plastic red	C	45-2D36.2820.000	2	0.046 kg
Eme	ergency-stop switc	n actuator, foolproof EN	IEC 60947-5-5, Front din	nension Ø 40 mm		
wist to release	Plastic black	Plastic red	С	45-2C36.1920.000	1	0.046 kg
Eme	ergency-stop switch	n actuator, foolproof EN	IEC 60947-5-5, Front din	nension Ø 40 mm		
	ergency-stop switch	n actuator, foolproof EN	IEC 60947-5-5, Front din	nension Ø 40 mm 45-2D36.1920.000	2	0.046 kg
wist to release, illuminable	Plastic black	Plastic red	•	45-2D36.1920.000	2	
wist to release, illuminable Eme	Plastic black ergency-stop switch Plastic black	Plastic red n actuator, foolproof EN Plastic red	C IEC 60947-5-5, Front din	45-2D36.1920.000 nension Ø 60 mm 45-2C36.1A20.000		
Eme	Plastic black ergency-stop switch Plastic black	Plastic red n actuator, foolproof EN Plastic red	C IEC 60947-5-5, Front din	45-2D36.1920.000 nension Ø 60 mm 45-2C36.1A20.000		0.056 kį
Emetwist to release Emetwist to release Emetwist to release, illuminable	Plastic black Prgency-stop switch Plastic black Prgency-stop switch Plastic black	Plastic red Plastic red Plastic red Plastic red Plastic red	C IEC 60947-5-5, Front din C IEC 60947-5-5, Front din	45-2D36.1920.000 nension Ø 60 mm 45-2C36.1A20.000 nension Ø 60 mm 45-2D36.1A20.000	1	0.046 kg

Switching action: C = Maintain

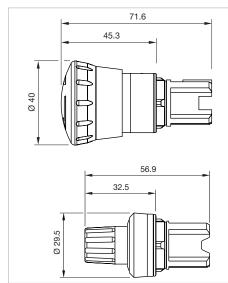


Stop switch actuator, foolproof, IP66, IP67, IP69K



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

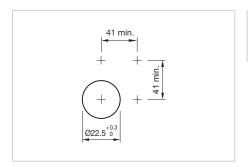
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm]



Product can differ from the current configuration.



Mounting cut-outs [mm]

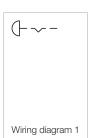
Additional Information

 Mounting depth incl. front plate, see chapter «drawings»

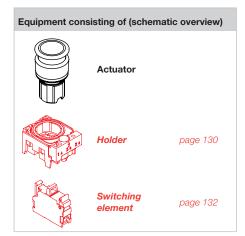
Product attribute	Front ring	Lens	Switching action	Lever	Part No.	Wiring dia- gram	Weight
	Stop switch actu	ator, foolproof, Fro	ont dimension Ø 40 mn	1			
twist to release	Plastic black	Plastic black	С	_	45-2736.1910.000	1	0.036 kg
	Stop switch actu	ator, foolproof, Fro	ont dimension Ø 40 mn	1			

Product attribute	Front ring	Lens	Switching action	Lever	Part No.	Wiring dia- gram	Weight
		proof, Front dim	nension Ø 29.5 m				
twist to release, can be latched after pressing by rotating to the right	Plastic black	_	С	Plastic black	45-2729.1010.000	1	0.018 kg
Stop switch	n actuator, fool	proof, Front dim	nension Ø 29.5 m	m			
twist to release, can be latched after pressing by rotating to the right	Plastic black	-	С	Plastic red	45-2729.1020.000	1	0.018 kg

Switching action: C = Maintain

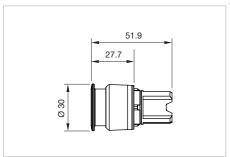


Mushroom-head pushbutton Ø 30 mm, IP66, IP67, IP69K



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.

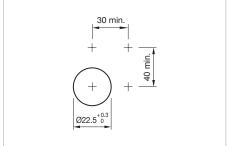


Dimensions [mm]

Mounting cut-outs [mm]



Product can differ from the current configuration.



Additional Information

Mounting depth incl. front plate, see chapter «drawings»

Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
	Mushroom-head pushb	outton actuator, Maintain,	Front dimension Ø 30 r	mm		
Plastic black	Plastic black	Plastic	С	45-2530.1810.000	2	0.020 kg
Plastic black	Mushroom-head pushb	putton actuator, Maintain,	Front dimension Ø 30 r	mm 45-2530.1820.000	2	0.020 kạ
	Mushroom-head pushb	outton actuator, Maintain,	Front dimension Ø 30 r	mm		
Plastic black	Mushroom-head pushb	outton actuator, Maintain,	Front dimension Ø 30 r	mm 45-2530.1840.000	2	0.020 kg
Plastic black	Plastic yellow		С	45-2530.1840.000 80 mm	2	0.020 kį
	Plastic yellow	Plastic	С	45-2530.1840.000	2	0.020 kg
Plastic black Plastic black	Plastic yellow Mushroom-head pushb Plastic black	Plastic	ry, Front dimension Ø 3	45-2530.1840.000 80 mm 45-2531.1810.000		

	G					
					liring dia- ram	Weight
Front ring	Lens	Housing material	Switching action	Part No.	≥ 5	Weight
	Mushroom hood pushh	witten actuator Memontary	v. Front dimension Ø 3	20 mm		
DI#- - -	-	outton actuator, Momentar	-			0.0001
Plastic black	Plastic yellow	Plastic	В	45-2531.1840.000	1	0.020 kg
	Mushroom-head pushb	outton actuator, Momentar	y, Front dimension Ø 3	30 mm		
Plastic black	Plastic green	Plastic	В	45-2531.1850.000	1	0.020 kg
	Mushroom-head pushb	outton actuator, Maintain, l	Front dimension Ø 30 r	nm		
Metal sandgrey	Plastic black	Plastic	С	45-2530.3810.000	2	0.034 kg
Metal sandgrey	Mushroom-head pushb Plastic red	putton actuator, Maintain, I	Front dimension Ø 30 r	45-2530.3820.000	2	0.034 kg
	Mushroom-head pushb	outton actuator, Momentar	y, Front dimension Ø 3	30 mm		
Metal sandgrey	Plastic black	Plastic	В	45-2531.3810.000	1	0.034 kg
	Mushroom-head pushb	outton actuator, Momentar	y, Front dimension Ø 3	60 mm		
Metal sandgrey	Plastic red	Plastic	В	45-2531.3820.000	1	0.034 kg
	Mushroom-head pushb	outton actuator, Momentar	y, Front dimension Ø 3	0 mm		
Metal sandgrey	Plastic yellow	Plastic	В	45-2531.3840.000	1	0.034 kg
	Mushroom-head pushb	outton actuator, Momentar	y, Front dimension Ø 3	90 mm		
Netal sandgrey	Plastic green	Plastic	В	45-2531.3850.000	1	0.034 kg
	<u> </u>		Funct disconnict (C. 20 o			
		outton actuator, Maintain, I				0.0501
Metal silver	Plastic black	Metal	С	45-2530.2810.000	2	0.052 kg

Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
	Mushroom-head pushb	utton actuator, Maintain, I	Front dimension Ø 30 n	nm		
Metal silver	Plastic red	Metal	С	45-2530.2820.000	2	0.052 kg
Metal silver	Plastic black	Metal	В	45-2531.2810.000	1	0.052 kg
ivietal silver	Plastic black	Metal	В	45-2531.2810.000	I	U.U52 KÇ
		utton actuator, Momentar	-			T
Metal silver	Plastic red	Metal	В	45-2531.2820.000	1	0.052 kg
	Mushroom-head pushb	utton actuator, Momentar	y, Front dimension Ø 3	0 mm		
Metal silver	Plastic yellow	Metal	В	45-2531.2840.000	1	0.052 kg
	Mushroom-head pushb	utton actuator, Momentar	y, Front dimension Ø 3	0 mm		
Metal silver	Plastic green	Metal	В	45-2531.2850.000	1	0.052 kg

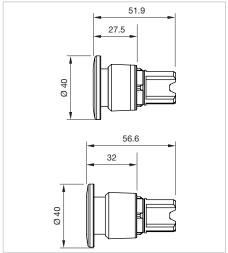
Switching action: B = Momentary, C = Maintain

E	E~-
Wiring diagram 1	Wiring diagram 2

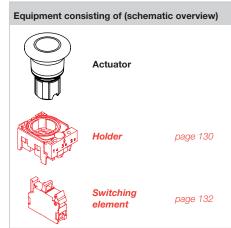
Mushroom-head pushbutton Ø 40 mm, IP66, IP67, IP69K



Product can differ from the current configuration.



Dimensions [mm]

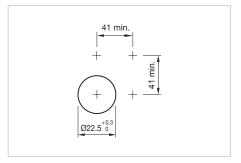


Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

Additional Information

 Mounting depth incl. front plate, see chapter «drawings»



Mounting cut-outs [mm]

Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
	Mushroom-head pushb	utton actuator, Maintain, I	Front dimension Ø 40 r	nm		
Plastic black	Plastic black	Plastic	С	45-2530.1910.000	2	0.022 kg
Plastic black	Plastic red	Plastic	С	45-2530.1920.000	2	0.020 kg
Plastic black		utton actuator, Maintain, F			2	0.020 kg
	Mushroom-head pushb	utton actuator, Maintain, I	Front dimension Ø 40 r	nm		
Plastic black	Mushroom-head pushb	utton actuator, Maintain, I	Front dimension Ø 40 r	nm 45-2530.1940.000	2	0.020 kg
Plastic black	Plastic yellow	· · · · · · · · · · · · · · · · · · ·	С	45-2530.1940.000	2	0.020 kg

Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
		putton actuator, Momentar				Weight
Plastic black	Plastic black	Plastic	В	45-2531.1910.000	1	0.020 kg
	Mushroom-head pushb	outton actuator, Momentar	y, Front dimension Ø 4	90 mm		
Plastic black	Plastic red	Plastic	В	45-2531.1920.000	1	0.020 kg
Plastic black	Mushroom-head pushb Plastic yellow	putton actuator, Momentary Plastic	y, Front dimension Ø 4	45-2531.1940.000	1	0.020 k
	Mushroom-head pushb	outton actuator, Momentar	y, Front dimension Ø 4	0 mm		
Plastic black	Plastic green	Plastic	В	45-2531.1950.000	1	0.020 kg
Metal sandgrey	Mushroom-head pushb	putton actuator, Maintain, F	Front dimension Ø 40 r	mm 45-2530.3910.000	2	0.034 kç
	Mushroom-head pushb	outton actuator, Maintain, F	Front dimension Ø 40 r	nm		
Metal sandgrey	Mushroom-head pushb	putton actuator, Maintain, F	Front dimension Ø 40 r	mm 45-2530.3920.000	2	0.034 k
	Plastic red Mushroom-head pushb	Plastic	y, Front dimension Ø 4	45-2530.3920.000		
	Plastic red	Plastic	С	45-2530.3920.000	2	
	Plastic red Mushroom-head pushb Plastic black	Plastic Putton actuator, Momentar	y, Front dimension Ø 4	45-2530.3920.000 40 mm 45-2531.3910.000		
Metal sandgrey Metal sandgrey Metal sandgrey	Plastic red Mushroom-head pushb Plastic black	Plastic	y, Front dimension Ø 4	45-2530.3920.000 40 mm 45-2531.3910.000		0.034 kg
Metal sandgrey	Mushroom-head pushb Plastic black Mushroom-head pushb Plastic red	Plastic Putton actuator, Momentary Plastic Putton actuator, Momentary Plastic	y, Front dimension Ø 4 B y, Front dimension Ø 4	45-2530.3920.000 40 mm 45-2531.3910.000 45-2531.3920.000	1	0.034 kg
Metal sandgrey	Mushroom-head pushb Plastic black Mushroom-head pushb Plastic red	Plastic Putton actuator, Momentary Plastic putton actuator, Momentary	y, Front dimension Ø 4 B y, Front dimension Ø 4	45-2530.3920.000 40 mm 45-2531.3910.000 45-2531.3920.000	1	0.034 k

					g dia	
ront ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
	Mushroom-head pushbu	utton actuator, Momentar	y, Front dimension Ø 4	0 mm		
Metal sandgrey	Plastic green	Plastic	В	45-2531.3950.000	1	0.034 kç
	Mushroom-head pushbi	utton actuator, Maintain, I	Front dimension Ø 40 r	nm		
Metal silver	Plastic black	Metal	C	45-2530.2910.000	2	0.052 kg
	Mushroom-head pushbu	utton actuator, Maintain, I	Front dimension Ø 40 r	nm		
Metal silver	Plastic red	Metal	С	45-2530.2920.000	2	0.052 kg
Metal silver	Mushroom-head pushbu	utton actuator, Maintain, I	Front dimension Ø 40 r	nm 45-2530.2940.000	2	0.052 kg
			·	·	'	
	Mushroom-head pushbu	utton actuator, Momentar	y, Front dimension Ø 4	0 mm		
Metal silver	Mushroom-head pushbu	utton actuator, Momentar	y, Front dimension Ø 4	0 mm 45-2531.2910.000	1	0.052 kç
Metal silver	Plastic black		В	45-2531.2910.000	1	0.052 kç
	Plastic black	Metal	В	45-2531.2910.000	1	
Metal silver Metal silver	Mushroom-head pushbu	Metal utton actuator, Momentar	y, Front dimension Ø 4	45-2531.2910.000 0 mm 45-2531.2920.000		0.052 kg
Metal silver	Mushroom-head pushbu	Metal utton actuator, Momentar Metal	y, Front dimension Ø 4	45-2531.2910.000 0 mm 45-2531.2920.000		0.052 kg
Metal silver	Mushroom-head pushbu Plastic red Mushroom-head pushbu Plastic yellow	Metal utton actuator, Momentar Metal utton actuator, Momentar Metal	y, Front dimension Ø 4 B y, Front dimension Ø 4	0 mm 45-2531.2910.000 0 mm 45-2531.2920.000 45-2531.2940.000	1	0.052 kg
Metal silver Metal silver	Mushroom-head pushbu Plastic red Mushroom-head pushbu Plastic yellow Mushroom-head pushbu	Metal utton actuator, Momentar Metal utton actuator, Momentar Metal	y, Front dimension Ø 4 y, Front dimension Ø 4 B y, Front dimension Ø 4	0 mm 45-2531.2910.000 0 mm 45-2531.2920.000 0 mm	1	0.052 kg
Metal silver	Mushroom-head pushbu Plastic red Mushroom-head pushbu Plastic yellow	Metal utton actuator, Momentar Metal utton actuator, Momentar Metal	y, Front dimension Ø 4 B y, Front dimension Ø 4	0 mm 45-2531.2910.000 0 mm 45-2531.2920.000 45-2531.2940.000	1	0.052 kç
Metal silver Metal silver	Mushroom-head pushbu Plastic red Mushroom-head pushbu Plastic yellow Mushroom-head pushbu Plastic green	Metal utton actuator, Momentar Metal utton actuator, Momentar Metal	y, Front dimension Ø 4 y, Front dimension Ø 4 B y, Front dimension Ø 4	0 mm 45-2531.2910.000 0 mm 45-2531.2940.000 0 mm 45-2531.2950.000	1	0.052 kg

Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
	Mushroom-head push	button actuator, momentar	y/maintain, Front dir	nension Ø 40 mm		
Metal silver	Plastic red	Metal	B/C	45-2532.2920.000	3	0.052 kg
	Mushroom-head push	button actuator, momentar	y/momentary, Front	dimension Ø 40 mm		
Metal silver	Plastic black	Metal	B/B	45-2533.2910.000	4	0.052 kg
	Mushroom-head push	button actuator, momentar	y/momentary, Front	dimension Ø 40 mm	'	,
Metal silver	Plastic red	Metal	B/B	45-2533.2920.000	4	0.052 kg

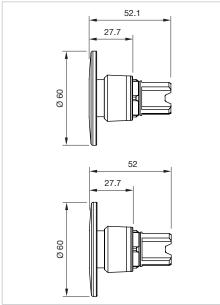
 $Switching \ action: \ B = Momentary, \ C = Maintain, \ B/B = Momentary/Momentary, \ B/C = Momentary/Maintain$

E	E~-	E	- E~-		
Wiring diagram 1	Wiring diagram 2	Wiring diagram 3	Wiring diagram 4		

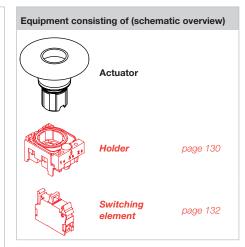
Mushroom-head pushbutton Ø 60 mm, IP66, IP67, IP69K



Product can differ from the current configuration.





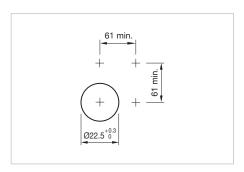


Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

Additional Information

 Mounting depth incl. front plate, see chapter «drawings»



Mounting cut-outs [mm]

Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
	Mushroom-head pushb	outton actuator, Maintain, F	Front dimension Ø 60 n	nm		
Plastic black	Plastic black	Plastic	С	45-2530.1A10.000	2	0.022 kg
Plastic black	Plastic red	Plastic	С	45-2530.1A20.000	2	0.020 kg
	Mushroom-head pushb	outton actuator, Momentar	y, Front dimension Ø 6	0 mm		
Plastic black	Mushroom-head pushb	putton actuator, Momentar	y, Front dimension Ø 6	0 mm 45-2531.1A10.000	1	0.020 kg
Plastic black	Plastic black		В	45-2531.1A10.000	1	0.020 kç

Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
TO IL TING		putton actuator, Momentar			7 0,	weight
Plastic black	Plastic yellow	Plastic	В	45-2531.1A40.000	1	0.020 kg
	Mushroom-head pushb	outton actuator, Momentar	y, Front dimension Ø 6	60 mm		
Plastic black	Plastic green	Plastic	В	45-2531.1A50.000	1	0.020 k
Matal silver	Mushroom-head pushb	outton actuator, Maintain, I		mm 45-2530.2A10.000	2	0.0521/
Metal silver	Plastic black	Metal	С	45-2530.2A10.000	2	0.052 kg
		outton actuator, Maintain, l				
Metal silver	Plastic red	Metal	С	45-2530.2A20.000	2	0.052 k
Metal silver Metal silver	Plastic red		С	45-2530.2A20.000	2	
	Plastic red Mushroom-head pushb Plastic black	Metal putton actuator, Momentar	y, Front dimension Ø 6	45-2530.2A20.000 60 mm 45-2531.2A10.000		0.052 κς
Metal silver	Mushroom-head pushb Plastic black Mushroom-head pushb Plastic red	Metal Putton actuator, Momentar Metal Dutton actuator, Momentar	y, Front dimension Ø 6	45-2530.2A20.000 60 mm 45-2531.2A10.000 45-2531.2A20.000	1	0.052 kį
Metal silver Metal silver	Mushroom-head pushb Plastic black Mushroom-head pushb Plastic red	Metal Putton actuator, Momentar Metal Putton actuator, Momentar Metal	y, Front dimension Ø 6	45-2530.2A20.000 60 mm 45-2531.2A10.000 45-2531.2A20.000	1	0.052 kg
Metal silver	Mushroom-head pushb Plastic black Mushroom-head pushb Plastic red Mushroom-head pushb Plastic yellow	outton actuator, Momentar Metal outton actuator, Momentar Metal outton actuator, Momentar Metal	y, Front dimension Ø 6 y, Front dimension Ø 6 B y, Front dimension Ø 6	60 mm 45-2531.2A10.000 60 mm 45-2531.2A20.000 60 mm 45-2531.2A40.000	1	0.052 kg 0.052 kg 0.052 kg
Metal silver Metal silver	Mushroom-head pushb Plastic black Mushroom-head pushb Plastic red Mushroom-head pushb Plastic yellow	Metal Putton actuator, Momentar Metal Putton actuator, Momentar Metal	y, Front dimension Ø 6 y, Front dimension Ø 6 B y, Front dimension Ø 6	60 mm 45-2531.2A10.000 60 mm 45-2531.2A20.000 60 mm 45-2531.2A40.000	1	0.052 kg

E--- E ←
Wiring diagram 1 Wiring diagram 2

Mushroom-head pushbutton Ø 30 mm, illuminated, IP66, IP67, IP69K



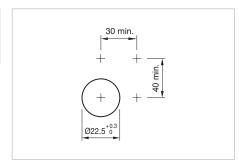
Product can differ from the current configuration.

51.9

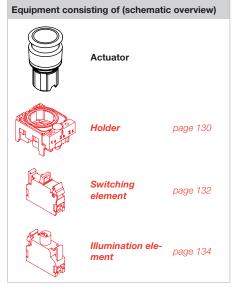
Dimensions [mm]

Additional Information

 Mounting depth incl. front plate, see chapter «drawings»



Mounting cut-outs [mm]



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.

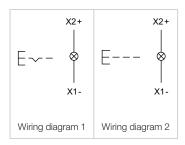
Mushroom-head pushbutton actuator, Maintain, Front dimension Ø 30 mm Plastic black Plastic red transparent Plastic C 45-26			
Plastic black Plastic red transparent Plastic C 45-26			
	2630.18E0.000	1	0.027 kg
Mushroom-head pushbutton actuator, Maintain, Front dimension Ø 30 mm			
Plastic black Plastic yellow transparent Plastic C 45-26	2630.18G0.000	1	0.027 kg
Mushroom-head pushbutton actuator, Maintain, Front dimension Ø 30 mm Plastic black Plastic green transparent Plastic C 45-26	2630.18H0.000	1	0.027 kg
Mushroom-head pushbutton actuator, Maintain, Front dimension Ø 30 mm			
Plastic black Plastic blue transparent Plastic C 45-26	2630.18J0.000	1	0.027 kg
Mushroom-head pushbutton actuator, Maintain, Front dimension Ø 30 mm			

Front vin a	Land	Haveing makerial	Suitabing asting	Dort No.	Wiring dia- gram	Weight
Front ring	Lens Mushroom-head pushbutton	Housing material	Switching action Front dimension Ø 3	Part No.	> 6)	weight
Plastic black	Plastic red transparent	Plastic	В	45-2631.18E0.000	2	0.033 k
	Mushroom-head pushbutton	actuator, Momentary	, Front dimension Ø 3	80 mm		
Plastic black	Plastic yellow transparent	Plastic	В	45-2631.18G0.000	2	0.033 k
Plastic black	Mushroom-head pushbutton Plastic green transparent	Plastic	В	45-2631.18H0.000	2	0.033 k
Plastic black	Mushroom-head pushbutton Plastic blue transparent	Plastic	, Front dimension Ø 3	45-2631.18J0.000	2	0.033 k
						<u> </u>
Plastic black	Mushroom-head pushbutton Plastic colourless transparent	actuator, Momentary Plastic	, Front dimension Ø 3	80 mm 45-2631.18K0.000	2	0.033 k
Plastic black	Plastic colourless transparent	Plastic	В	45-2631.18K0.000	2	0.033 k
Plastic black Plastic black		Plastic	В	45-2631.18K0.000	2	0.033 kg
Plastic black	Mushroom-head pushbutton Plastic white transparent Mushroom-head pushbutton	Plastic actuator, Momentary Plastic actuator, Maintain, F	B, Front dimension Ø 3	45-2631.18K0.000 60 mm 45-2631.18N0.000	2	0.033 kį
Plastic black	Plastic colourless transparent Mushroom-head pushbutton Plastic white transparent	Plastic actuator, Momentary Plastic	, Front dimension Ø 3	45-2631.18K0.000 80 mm 45-2631.18N0.000		0.033 k
Plastic black Metal sandgrey	Mushroom-head pushbutton Plastic white transparent Mushroom-head pushbutton Plastic red transparent Mushroom-head pushbutton	actuator, Momentary Plastic actuator, Maintain, Financial Plastic actuator, Maintain, Financial Plastic	Front dimension Ø 3 ront dimension Ø 30 r	45-2631.18K0.000 60 mm 45-2631.18N0.000 mm 45-2630.38E0.000	2	0.033 kg
0	Mushroom-head pushbutton Plastic white transparent Mushroom-head pushbutton Plastic red transparent	actuator, Momentary Plastic actuator, Maintain, Fi	Front dimension Ø 3	45-2631.18K0.000 80 mm 45-2631.18N0.000	2	0.033 k
Plastic black Metal sandgrey	Mushroom-head pushbutton Plastic white transparent Mushroom-head pushbutton Plastic red transparent Mushroom-head pushbutton	actuator, Momentary Plastic actuator, Maintain, Fi Plastic actuator, Maintain, Fi Plastic	Front dimension Ø 30 ront dimension Ø 30 ront dimension Ø 30 r	45-2631.18K0.000 45-2631.18K0.000 45-2631.18N0.000 45-2630.38E0.000	2	0.033 k

	3					
					Wiring dia- gram	Weight
Front ring	Lens	Housing material	Switching action	Part No.	≥ p	Weight
	Mushroom-head pushbutton	actuator Momentary	Front dimension Ø 3	0 mm		
Motal aandaray		Plastic	B	45-2631.38H0.000	2	0.026 kg
Metal sandgrey	Plastic red transparent	Plastic	В	45-2631.38H0.000	2	0.026 kg
W.	Mushroom-head pushbutton	actuator, Momentary	, Front dimension Ø 3	0 mm		
Metal sandgrey	Plastic colourless transparent	Plastic	В	45-2631.38K0.000	2	0.026 kg
	Mushroom-head pushbutton	_				
Metal sandgrey	Plastic white transparent	Plastic	В	45-2631.38N0.000	2	0.026 kg
Metal silver	Mushroom-head pushbutton Plastic amber transparency	actuator, Maintain, F	ront dimension Ø 30 n	45-2630.28F0.000	1	0.052 kg
	Mushroom-head pushbutton	actuator, Maintain, F	ront dimension Ø 30 n	nm		
Metal silver	Plastic red transparent	Metal	С	45-2630.28E0.000	1	0.052 kg
	Mushroom-head pushbutton	actuator, Maintain, F	ront dimension Ø 30 n	nm		
Metal silver	Plastic yellow transparent	Metal	C	45-2630,28G0,000	1	0.052 kg
	Mushroom-head pushbutton		ront dimension Ø 30 n	nm		
Metal silver	Plastic green transparent	Metal	С	45-2630.28H0.000	1	0.052 kg
	Mushroom-head pushbutton	actuator, Maintain, F	ront dimension Ø 30 n	nm		
Metal silver	Plastic blue transparent	Metal	С	45-2630.28J0.000	1	0.052 kg
Motel eilus	Mushroom-head pushbutton				-	0.0501
Metal silver	Plastic colourless transparent	Metal	С	45-2630.28K0.000	1	0.052 kg

Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
OF STREET	Mushroom-head pushbutto	n actuator, Momentary	√, Front dimension Ø 3	0 mm		
Metal silver	Plastic yellow transparent	Metal	В	45-2631.28G0.000	2	0.041 kg
	Mushroom-head pushbutto	n actuator, Momentary	y, Front dimension Ø 3	0 mm		
Metal silver	Plastic green transparent	Metal	В	45-2631.28H0.000	2	0.041 kg
OFF	Mushroom-head pushbutto	n actuator, Momentary	, Front dimension Ø 3	0 mm	1	

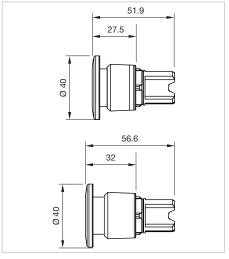
Switching action: B = Momentary, C = Maintain



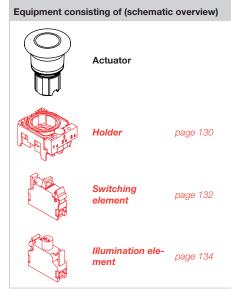
Mushroom-head pushbutton Ø 40 mm, illuminated, IP66, IP67, IP69K



Product can differ from the current configuration.



Dimensions [mm]



Each Part Number listed below includes all the black

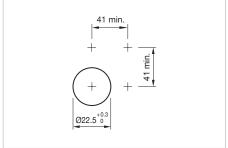
ponents from the pages shown.

components shown in the 3D-drawing.

To obtain a complete unit, please select the red com-

Additional Information

 Mounting depth incl. front plate, see chapter «drawings»



Mounting cut-outs [mm]

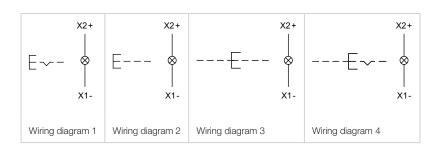
Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
	Mushroom-head pushbutto	n actuator, Maintain, I	Front dimension Ø 40 r	mm		
Plastic black	Plastic red transparent	Plastic	С	45-2630.19E0.000	1	0.028 kg
Plantia black	Mushroom-head pushbutto				1	0.000 1/0
Plastic black	Mushroom-head pushbutto Plastic yellow transparent	n actuator, Maintain, I Plastic	Front dimension Ø 40 r	45-2630.19G0.000	1	0.028 kg
	Plastic yellow transparent Mushroom-head pushbutto	Plastic n actuator, Maintain, I	C Front dimension Ø 40 r	45-2630.19G0.000		
	Plastic yellow transparent	Plastic	С	45-2630.19G0.000	1	0.028 kg
Plastic black Plastic black	Plastic yellow transparent Mushroom-head pushbutto	Plastic n actuator, Maintain, I Plastic	C Front dimension Ø 40 r □	45-2630.19G0.000 mm 45-2630.19H0.000		

Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
	Mushroom-head pushbutton					Tiolgin
Plastic black	Plastic colourless transparent	Plastic	С	45-2630.19K0.000	1	0.028 k
	Mushroom-head pushbutton	actuator, Momentary	r, Front dimension Ø ₄	40 mm		
Plastic black	Plastic yellow transparent	Plastic	В	45-2631.19G0.000	2	0.019 k
Plastic black	Mushroom-head pushbutton Plastic green transparent	Plastic	В	45-2631.19H0.000	2	0.019 k
	Mushroom-head pushbutton	· · · · · ·				
Plastic black	Plastic colourless transparent	Plastic	В	45-2631.19K0.000	2	0.019 kç
	Mushroom-head pushbutton	actuator, Momentary	, Front dimension Ø 4	40 mm		
	Mushroom-head pushbutton Plastic white transparent	actuator, Momentary Plastic	7, Front dimension Ø 4	40 mm 45-2631.19N0.000	2	
Plastic black	Mushroom-head pushbutton	actuator, Momentary Plastic	7, Front dimension Ø 4	40 mm 45-2631.19N0.000		0.019 k
Plastic black Metal sandgrey	Mushroom-head pushbutton Plastic white transparent Mushroom-head pushbutton Plastic red transparent Mushroom-head pushbutton	actuator, Momentary Plastic actuator, Maintain, F Plastic actuator, Maintain, F	ront dimension Ø 40 ront d	40 mm 45-2631.19N0.000 mm 45-2630.39E0.000	2	0.019 kg
Plastic black Metal sandgrey	Mushroom-head pushbutton Plastic white transparent Mushroom-head pushbutton Plastic red transparent	actuator, Momentary Plastic actuator, Maintain, F	ront dimension Ø 40	40 mm 45-2631.19N0.000 mm 45-2630.39E0.000	2	0.019 k
Plastic black Metal sandgrey	Mushroom-head pushbutton Plastic white transparent Mushroom-head pushbutton Plastic red transparent Mushroom-head pushbutton	actuator, Momentary Plastic actuator, Maintain, F Plastic actuator, Maintain, F Plastic	ront dimension Ø 40 c	40 mm 45-2631.19N0.000 mm 45-2630.39E0.000	2	0.019 kg
Plastic black	Mushroom-head pushbutton Plastic white transparent Mushroom-head pushbutton Plastic red transparent Mushroom-head pushbutton Plastic yellow transparent	actuator, Momentary Plastic actuator, Maintain, F Plastic actuator, Maintain, F Plastic	ront dimension Ø 40 c	40 mm 45-2631.19N0.000 mm 45-2630.39E0.000	2	0.019 k
Plastic black Metal sandgrey Metal sandgrey	Mushroom-head pushbutton Plastic white transparent Mushroom-head pushbutton Plastic red transparent Mushroom-head pushbutton Plastic yellow transparent Mushroom-head pushbutton	actuator, Momentary Plastic actuator, Maintain, F Plastic actuator, Maintain, F Plastic actuator, Momentary Plastic	ront dimension Ø 40 pront dime	40 mm 45-2631.19N0.000 mm 45-2630.39E0.000 45-2630.39G0.000 40 mm 45-2631.39G0.000	1	0.019 k

				Wiring dia- gram	Weight
Lens	Housing material	Switching action	Part No.	≥ ₽	Weight
Mushroom-head pushbutto	n actuator, Momentar	y, Front dimension Ø 4	0 mm		
				2	0.028 kg
		y, Front dimension Ø 4	0 mm		
Plastic white transparent	Plastic	В	45-2631.39N0.000	2	0.028 kg
Mushroom-head pushbutto	n actuator, Maintain, F		nm		
Plastic red transparent	Metal	С	45-2630.29E0.000	1	0.035 kg
Mushroom-head pushbutto	n actuator, Maintain, F	Front dimension Ø 40 n	nm 45-2630.29F0.000	1	0.053 kg
Mushroom-head pushbutto	n actuator, Maintain, F	Front dimension Ø 40 n	nm		
Plastic yellow transparent	Metal	С	45-2630.29G0.000	1	0.053 kg
		С	45-2630.29G0.000	1	0.053 kg
Plastic yellow transparent Mushroom-head pushbuttor Plastic green transparent		С	45-2630.29G0.000	1	0.053 kg
Mushroom-head pushbutto	n actuator, Maintain, F Metal	C Front dimension Ø 40 n	45-2630.29G0.000 nm 45-2630.29H0.000	1	
Mushroom-head pushbutto	n actuator, Maintain, F Metal	C Front dimension Ø 40 n	45-2630.29G0.000 nm 45-2630.29H0.000	1	
Mushroom-head pushbutton Plastic green transparent Mushroom-head pushbutton Plastic blue transparent	n actuator, Maintain, F Metal n actuator, Maintain, F	C Front dimension Ø 40 n C Front dimension Ø 40 n	nm 45-2630.29H0.000 45-2630.29H0.000 nm 45-2630.29J0.000		0.053 kg
Mushroom-head pushbutton Plastic green transparent Mushroom-head pushbutton Plastic blue transparent Mushroom-head pushbutton	n actuator, Maintain, F Metal n actuator, Maintain, F Metal	Front dimension Ø 40 n C Front dimension Ø 40 n C	mm 45-2630.29H0.000 45-2630.29H0.000 45-2630.29J0.000	1	0.053 kg
Mushroom-head pushbutton Plastic green transparent Mushroom-head pushbutton Plastic blue transparent Mushroom-head pushbutton Plastic colourless transparent	n actuator, Maintain, F Metal n actuator, Maintain, F Metal n actuator, Maintain, F	Front dimension Ø 40 n C Front dimension Ø 40 n C Front dimension Ø 40 n	nm 45-2630.29K0.000 45-2630.29H0.000 45-2630.29J0.000		0.053 kg
Mushroom-head pushbutton Plastic green transparent Mushroom-head pushbutton Plastic blue transparent Mushroom-head pushbutton	n actuator, Maintain, F Metal n actuator, Maintain, F Metal n actuator, Maintain, F	Front dimension Ø 40 n C Front dimension Ø 40 n C Front dimension Ø 40 n	nm 45-2630.29K0.000 45-2630.29H0.000 45-2630.29J0.000	1	0.053 kg
	Mushroom-head pushbutton Plastic colourless transparent Mushroom-head pushbutton Plastic white transparent Mushroom-head pushbutton Plastic red transparent Mushroom-head pushbutton Plastic amber transparency	Mushroom-head pushbutton actuator, Momentary Plastic colourless transparent Plastic Mushroom-head pushbutton actuator, Momentary Plastic Mushroom-head pushbutton actuator, Maintain, F Plastic red transparent Mushroom-head pushbutton actuator, Maintain, F Metal Mushroom-head pushbutton actuator, Maintain, F Plastic amber transparency	Mushroom-head pushbutton actuator, Momentary, Front dimension Ø 4 Plastic colourless transparent Plastic Mushroom-head pushbutton actuator, Momentary, Front dimension Ø 4 Plastic white transparent Plastic Mushroom-head pushbutton actuator, Maintain, Front dimension Ø 40 r Plastic red transparent Metal C Mushroom-head pushbutton actuator, Maintain, Front dimension Ø 40 r Mushroom-head pushbutton actuator, Maintain, Front dimension Ø 40 r	Mushroom-head pushbutton actuator, Momentary, Front dimension Ø 40 mm Plastic colourless transparent Plastic B 45-2631.39K0.000 Mushroom-head pushbutton actuator, Momentary, Front dimension Ø 40 mm Plastic white transparent Plastic B 45-2631.39N0.000 Mushroom-head pushbutton actuator, Maintain, Front dimension Ø 40 mm Plastic red transparent Metal C 45-2630.29E0.000 Mushroom-head pushbutton actuator, Maintain, Front dimension Ø 40 mm Plastic amber transparency Metal C 45-2630.29F0.000	Mushroom-head pushbutton actuator, Momentary, Front dimension Ø 40 mm Plastic colourless transparent Plastic B 45-2631.39K0.000 2 Mushroom-head pushbutton actuator, Momentary, Front dimension Ø 40 mm Plastic white transparent Plastic B 45-2631.39N0.000 2 Mushroom-head pushbutton actuator, Maintain, Front dimension Ø 40 mm Plastic red transparent Metal C 45-2630.29E0.000 1 Mushroom-head pushbutton actuator, Maintain, Front dimension Ø 40 mm Plastic amber transparency Metal C 45-2630.29F0.000 1

Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
	Mushroom-head pushbutto	n actuator, Momenta	ry, Front dimension Ø 4	10 mm	1	
Metal silver	Plastic yellow transparent	Metal	В	45-2631.29G0.000	2	0.042 kg
	Mushroom-head pushbutto	n actuator, Momenta	ry, Front dimension Ø 4	10 mm		
Metal silver	Plastic green transparent	Metal	В	45-2631.29H0.000	2	0.042 kg
Metal silver	Mushroom-head pushbutto Plastic white transparent	n actuator, Momental	ry, Front dimension Ø 4	45-2631.29N0.000	2	0.042 kg
	Mushroom-head pushbutto	n actuator, momenta	ry/maintain, Front dime	ension Ø 40 mm		
Metal silver	Plastic red transparent	Metal	B/C	45-2632.29E0.000	3	0.051 kg
	Mushroom-head pushbutto	n actuator, momenta	ry/maintain, Front dime	ension Ø 40 mm		
Metal silver	Plastic green transparent	Metal	B/C	45-2632.29H0.000	3	0.051 kg
	Mushroom-head pushbutto	n actuator, momental	ry/momentary, Front di	mension Ø 40 mm		
Metal silver	Plastic red transparent	Metal	B/B	45-2633.29E0.000	4	0.051 kg
	Mushroom-head pushbutto	n actuator, momenta	rv/momentary. Front di	mension Ø 40 mm		
Metal silver	Plastic white transparent	Metal	B/B	45-2633.29N0.000	4	0.051 kg
	·					

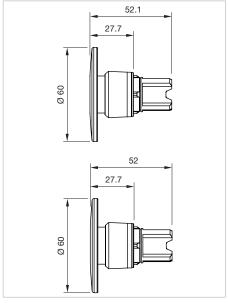
 $Switching\ action:\ B=Momentary,\ C=Maintain,\ B/B=Momentary/Momentary,\ B/C=Momentary/Maintain$



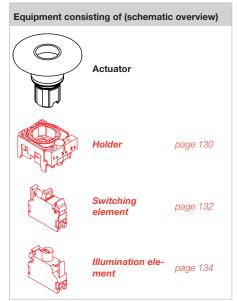
Mushroom-head pushbutton Ø 60 mm, illuminated, IP66, IP67, IP69K



Product can differ from the current configuration.



Dimensions [mm]



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

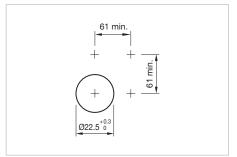
components shown in the 3D-drawing.

To obtain a complete unit, please select the red com-

ponents from the pages shown.

Additional Information

 Mounting depth incl. front plate, see chapter «drawings»

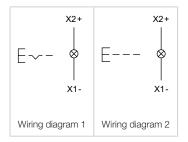


Mounting cut-outs [mm]

Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
	Mushroom-head pushbuttor					
Metal silver	Plastic red transparent	Metal	C	45-2630.2AE0.000	1	0.057 kg
	Mushroom-head pushbuttor	n actuator, Maintain, Fro	ont dimension Ø 60 m	m		
Metal silver	Mushroom-head pushbuttor Plastic yellow transparent	n actuator, Maintain, Fro	ont dimension Ø 60 m	m 45-2630.2AG0.000	1	0.057 kg
Metal silver	-	Metal	С	45-2630.2AG0.000	1	0.057 kg

Front ring	Lens	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
	Mushroom-head pushbutton	actuator, Maintain, I	Front dimension Ø 60 n	nm		
Metal silver	Plastic blue transparent	Metal	С	45-2630.2AJ0.000	1	0.057 kg
	Mushroom-head pushbutton	actuator, Maintain, I	Front dimension Ø 60 n	nm		
Metal silver	Plastic colourless transparent	Metal	С	45-2630.2AK0.000	1	0.057 kg
				45-2631.2AF0.000	2	0.045 kg
OFF			. Fund dimension 60		2	0.045 kg
Metal silver	Mushroom-head pushbutton		•	0 mm		0.045 kg
Metal silver	Mushroom-head pushbutton Plastic yellow transparent Mushroom-head pushbutton	Metal	В	0 mm 45-2631.2AG0.000	2	
Metal silver Metal silver	Plastic yellow transparent	Metal	В	0 mm 45-2631.2AG0.000		0.045 kg
	Plastic yellow transparent Mushroom-head pushbutton	Metal actuator, Momentar Metal	y, Front dimension Ø 6	0 mm 45-2631.2AG0.000 0 mm 45-2631.2AH0.000	2	0.045 kç

Switching action: B = Momentary, C = Maintain



Keylock switch 2 positions, IP66, IP67, IP69K



Product can differ from the current configuration.

74.8 49.4 26.4

Dimensions [mm]

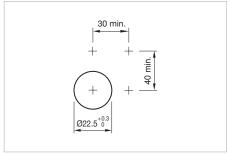
Actuator Holder page 130 Switching element page 132

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

- Mounting depth incl. front plate, see chapter «drawings»
- The standard lock: RONIS, T254
- Two keys are supplied with each key lock switch



Mounting cut-outs [mm]



Front ring	Housing material	Switching action	Switching angle	Key remove	Part No.	Wiring dia- gram	Weight
		tuator 2 positions,					
Plastic black	Plastic	A - B	B = 45°	А	45-290K.1000.116	1	0.046 k
		A - C	C = 90°	A	45-290J.1000.111	2	0.046 k
		A - C	C = 90°	A + C	45-290H.1000.111	2	0.046 k
		A - C	C = 90°	А	45-2925.1000.111	2	0.046 k
	Keylock switch an	A-C			45-2925.1000.111	2	0.046 1
						Ι.	0.0044
Metal sandgrey	Plastic	A - B	B = 45°	A	45-290K.3000.116	1	0.061 k
		A - C	C = 90°	A	45-290J.3000.111	2	0.061 k
		A - C	C = 90°	A + C	45-290H.3000.111	2	0.061 k
		A - C	C = 90°	Α	45-2925,3000,111	2	0.061 k

Front ring	Housing material	Switching action	Switching angle	Key remove	Part No.	Wiring dia- gram	Weight
	Keylock switch a	ctuator 2 positions,	Front dimension Ø	29.45 mm			
Metal silver	Keylock switch ad	etuator 2 positions,	Front dimension Ø	29.45 mm	45-290K.2000.116	1	0.080 kg
	-	-			45-290K.2000.116 45-290J.2000.111	1 2	0.080 kg
	-	A - B	B = 45°	А		1 2 2	

8-~	8-~~-
Wiring diagram 1	Wiring diagram 2

Keylock switch 3 positions, IP66, IP67, IP69K



Product can differ from the current configuration.

74.8 49.4 26.4

Dimensions [mm]

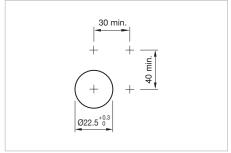
Equipment consisting of (schematic overview) Actuator Holder page 130 Switching page 132 element

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

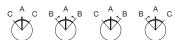
To obtain a complete unit, please select the red components from the pages shown.

Additional Information

- Mounting depth incl. front plate, see chapter «drawings»
- The standard lock: RONIS, T254
- Two keys are supplied with each key lock switch



Mounting cut-outs [mm]



Front ring	Switching action	Switching angle	Key remove	Part No.	Wiring dia- gram	Weight
	Keylock switch actuator	3 positions, Front dime	nsion Ø 29.45 mm			
Plastic black	C - A - C	C = 45°	А	45-2924.1000.113	1	0.060 kg
		C = 45°	C + A + C	45-290F.1000.113	1	0.060 k
		C = 45°	C	45-290D.1000.113	1	0.060 k
		C = 45°	C	45-2917.1000.113	1	0.060 k
		C = 45°	C+C	45-290C.1000.113	1	0.060 k
		C = 45°	C + A	45-290G.1000.113	1	0.060 k
	B - A - B	B = 45°	A	45-290Z.1000.113	2	0.060 kg
	C - A - B	C = 45°, B = 45°	А	45-2922.1000.113	3	0.060 k
		C = 45°, B = 45°	С	45-290A.1000.113	3	0.060 k
		C = 45°, B = 45°	C + A	45-290E.1000.113	3	0.060 k
	B - A - C	B = 45°, C = 45°	A	45-2911.1000.113	4	0.060 k
		B = 45°, C = 45°	С	45-290W.1000.113	4	0.060 k
		B = 45°, C = 45°				

Front ring	Switching action	Switching angle	Key remove	Part No.	Wiring dia- gram	Weight
	Keylock switch actuator	3 positions, Front dimer	nsion Ø 29.45 mm	, ,	J	
Metal sandgrey	C - A - C	C = 45°	A	45-2924.3000.113	1	0.061 k
		C = 45°	C + A + C	45-290F.3000.113	1	0.061 I
		C = 45°	C	45-290D.3000.113	1	0.061 k
		C = 45°	C	45-2917.3000.113	1	0.061
		C = 45°	C+C	45-290C.3000.113	1	0.061 I
		C = 45°	C + A	45-290G.3000.113	1	0.061
	B - A - B	B = 45°	А	45-290Z.3000.113	2	0.061
	C - A - B	C = 45°, B = 45°	А	45-2922.3000.113	3	0.061
	B - A - C	B = 45°, C = 45°	А	45-2911.3000.113	4	0.061
Metal silver	Keylock switch actuator	3 positions, Front dimer	nsion Ø 29.45 mm	45-2924.2000.113	1	0.080
		C = 45°	C + A + C	45-290F.2000.113	1	0.080 l
		C = 45°	C	45-290D.2000.113	1	0.080 l
		C = 45°	C	45-2917.2000.113	1	0.080 I
		C = 45°	C + C	45-290C.2000.113	1	0.080 I
		C = 45°	C + A	45-290G.2000.113	1	0.080 I
	B - A - B	B = 45°	А	45-290Z.2000.113	2	0.080 I
	C - A - B	C = 45°, B = 45°	А	45-2922.2000.113	3	0.080 I
		C = 45°, B = 45°	С	45-290A.2000.113	3	0.080 l
		C = 45°, B = 45°	C + A	45-290E.2000.113	3	0.080 l
	B - A - C	B = 45°, C = 45°	A	45-2911.2000.113	4	0.080 k
		B = 45°, C = 45°	A + C	45-2910.2000.113	4	0.080 l

8	8	8	8
Wiring diagram 1	Wiring diagram 2	Wiring diagram 3	Wiring diagram 4

Selector switch actuator 2 positions round lever, IP66, IP67, IP69K



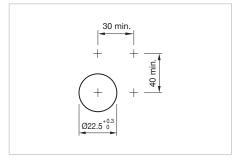
Product can differ from the current configuration.

28.8

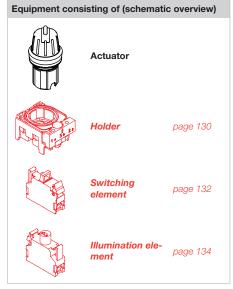
Dimensions [mm]

Additional Information

 Mounting depth incl. front plate, see chapter «drawings»



Mounting cut-outs [mm]



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

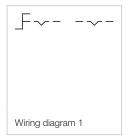
To obtain a complete unit, please select the red components from the pages shown.



Switching positions (A = Rest, B = Momentary, C = Maintained)

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring dia- gram	Weight
	Selector switch a	actuator 2 positions, l	round lever, Front (dimension Ø 29.4	5 mm		
Plastic red	Plastic black	Plastic	A - C	C = 90°	45-2828.1E20.001	1	0.023 kg
Plastic white	Plastic black	Plastic	A - C	C = 90°	45-2828.1E90.001	1	0.023 kg
	Selector switch a	actuator 2 positions,	round lever, Front (dimension Ø 29.4	5 mm		
Plastic red	Metal sandgrey	Plastic	A - C	C = 90°	45-2828.3E20.001	1	0.023 kg
	Selector switch a	actuator 2 positions,	round lever. Front (dimension Ø 29.4	5 mm		
Plastic white	Metal sandgrey	Plastic	A - C	C = 90°	45-2828.3E90.001	1	0.023 kg

Switching action: A = Rest, C = Maintain



Selector switch actuator 2 positions short lever, IP66, IP67, IP69K



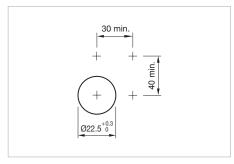
Product can differ from the current configuration.

54.2

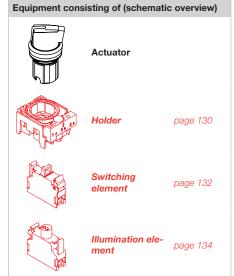
Dimensions [mm]

Additional Information Mounting depth incl. fr «drawings»

- Mounting depth incl. front plate, see chapter «drawings»
- External diameter of the short lever 32.3 mm



Mounting cut-outs [mm]



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.



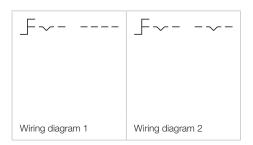


Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring dia- gram	Weight
	Selector switch	actuator 2 positions,	short lever, Front d	imension Ø 29.45	5 mm		
Plastic red	Plastic black	Plastic	A - B	B = 45°	45-2844.1C20.006	1	0.022 kg
	Selector switch	actuator 2 positions,	short lever, Front of	imension Ø 29.45	mm		
Plastic yellow	Selector switch Plastic black	actuator 2 positions, Plastic	A - B	B = 45°	5 mm 45-2844.1C40.006	1	0.022 kg
Plastic yellow	Plastic black	-	A - B	B = 45°	45-2844.1C40.006	1	0.022 kg
Plastic yellow Plastic green	Plastic black	Plastic	A - B	B = 45°	45-2844.1C40.006	1	
	Plastic black Selector switch Plastic black	Plastic actuator 2 positions,	short lever, Front d	B = 45° limension Ø 29.45 B = 45°	45-2844.1C40.006 5 mm 45-2844.1C50.006		0.022 kg

						iring dia- am	Weight
Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	≥ ₽	Weight
I	Selector switch a	ctuator 2 positions,	short lever Front o	limension Ø 29 45	imm		
Plastic white	Plastic black	Plastic	A - B	B = 45°	45-2844.1C90.006	1	0.022 k
	Soloctor quitch o	etueter 2 positions	abort lover. Front o	limension (*) 20.45	·		
Plastic red	Metal sandgrey	ctuator 2 positions,	A-B	B = 45°	45-2844.3C20.006	1	0.029 k
	Selector switch a	ctuator 2 positions,	short lever, Front c	limension Ø 29.45	i mm		
Plastic yellow	Metal sandgrey	Plastic	A - B	B = 45°	45-2844.3C40.006	1	0.029 k
	Selector switch a	ctuator 2 positions,	short lever, Front of	ilmension Ø 29.45	mm		
	Metal sandgrey Selector switch a	ctuator 2 positions, Plastic ctuator 2 positions,	A - B	B = 45°	45-2844.3C50.006	1	
	Metal sandgrey Selector switch ac Metal sandgrey	ctuator 2 positions,	short lever, Front o	B = 45° limension Ø 29.45 B = 45°	45-2844.3C50.006 5 mm 45-2844.3C60.006		
Plastic blue	Metal sandgrey Selector switch ac Metal sandgrey	Plastic ctuator 2 positions,	short lever, Front o	B = 45° limension Ø 29.45 B = 45°	45-2844.3C50.006 5 mm 45-2844.3C60.006		0.029 k
Plastic green Plastic blue Plastic white Plastic red	Selector switch and Metal sandgrey Selector switch and Metal sandgrey Metal sandgrey	ctuator 2 positions, Plastic	short lever, Front c A - B short lever, Front c	B = 45°	45-2844.3C50.006 6 mm 45-2844.3C60.006 6 mm 45-2844.3C90.006	1	0.029 k 0.029 k 0.029 k
Plastic blue Plastic white	Selector switch and Metal sandgrey Selector switch and Metal sandgrey Selector switch and Metal sandgrey Selector switch and Metal silver	ctuator 2 positions, Plastic ctuator 2 positions, Plastic ctuator 2 positions,	short lever, Front of A - B short lever, Front of A - B short lever, Front of A - B	B = 45°	45-2844.3C50.006 5 mm 45-2844.3C60.006 6 mm 45-2844.3C90.006	1	0.029 k
Plastic blue Plastic white	Selector switch and Metal sandgrey Selector switch and Metal sandgrey Selector switch and Metal sandgrey Selector switch and Metal silver	ctuator 2 positions, Plastic ctuator 2 positions, Plastic ctuator 2 positions, Metal	short lever, Front of A - B short lever, Front of A - B short lever, Front of A - B	B = 45°	45-2844.3C50.006 5 mm 45-2844.3C60.006 6 mm 45-2844.3C90.006	1	0.029 k
Plastic blue Plastic white Plastic red	Selector switch and Metal sandgrey Selector switch and Metal sandgrey Selector switch and Metal silver Selector switch and Metal silver	ctuator 2 positions, Plastic ctuator 2 positions, Plastic ctuator 2 positions, Metal	short lever, Front of A - B short lever, Front of A - B short lever, Front of A - B short lever, Front of A - B	B = 45°	45-2844.3C50.006 5 mm 45-2844.3C90.006 6 mm 45-2844.2C20.006 6 mm 45-2844.2C40.006	1	0.029 k

Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plestic white Metal sherr Metal A - B B = 45° 45-2844,2090.006 1 0.04 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plestic black Plestic A - C C = 90° 45-2828.1020.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plestic yellow Plestic black Plestic A - C C = 90° 45-2828.1040.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plestic green Plestic black Plestic A - C C = 90° 45-2828.1050.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plestic black Plestic A - C C = 90° 45-2828.1050.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plestic black Plestic A - C C = 90° 45-2828.1050.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plestic white Plestic black Plestic A - C C = 90° 45-2828.1050.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plestic red Metal sandgrey Plestic A - C C = 90° 45-2828.1050.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm		•						
Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Pleatic white							/iring dia- ram	
Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm	.ever	Front ring	Housing material	Switching action	Switching angle	Part No.	≥ ₪	Weight
Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm								
Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic red Plastic black Plastic A - C C = 90° 45-2828.1C20.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic green Plastic black Plastic A - C C = 90° 45-2828.1C40.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic green Plastic black Plastic A - C C = 90° 45-2828.1C50.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic blue Plastic black Plastic A - C C = 90° 45-2828.1C50.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm			-					
Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm	Plastic blue	Metal silver	Metal	A - B	B = 45°	45-2844.2C60.006	1	0.044 kg
Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm		Selector switch a	actuator 2 positions,	short lever, Front o	limension Ø 29.45	i mm		
Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic plack Plastic black Plastic A - C C = 90° 45-2828.1C40.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic blue Plastic black Plastic A - C C = 90° 45-2828.1C60.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm	Plastic white		-				1	0.044 kg
Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic yellow Plastic black Plastic A - C C = 90° 45-2828.1C40.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic green Plastic black Plastic A - C C = 90° 45-2828.1C50.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic black Plastic A - C C = 90° 45-2828.1C60.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic white Plastic black Plastic A - C C = 90° 45-2828.1C60.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm		Selector switch a	actuator 2 positions,	short lever, Front o	limension Ø 29.45	i mm		
Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic black Plastic Dack Plastic A - C C = 90° 45-2828.1C50.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic blue Plastic black Plastic A - C C = 90° 45-2828.1C50.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic blue Plastic black Plastic A - C C = 90° 45-2828.1C60.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic white Plastic black Plastic A - C C = 90° 45-2828.1C90.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic red Metal sandgrey Plastic A - C C = 90° 45-2828.3C20.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm	Plastic red	Plastic black	Plastic	A - C	C = 90°	45-2828.1C20.001	2	0.022 kg
Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic black Plastic	Plastic yellow	Plastic black	Plastic	A - C	C = 90°	45-2828.1C40.001	2	0.022 kg
Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic blue Plastic black Plastic A - C C = 90° 45-2828.1C60.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic white Plastic black Plastic A - C C = 90° 45-2828.1C90.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic red Metal sandgrey Plastic A - C C = 90° 45-2828.3C20.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm	Dia atia awa an		-				0	0.0001
Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic black Plastic A - C C = 90° 45-2828.1C60.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic red Metal sandgrey Plastic A - C C = 90° 45-2828.3C20.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm	Plastic green	Plastic black	Plastic	A - C	C = 90°	45-2828.1C50.001	2	0.022 kg
Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic white Plastic black Plastic A - C C = 90° 45-2828.1C90.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic red Metal sandgrey Plastic A - C C = 90° 45-2828.3C20.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm			actuator 2 positions,		limension Ø 29.45	5 mm		
Plastic white Plastic black Plastic A - C C = 90° 45-2828.1C90.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic red Metal sandgrey Plastic A - C C = 90° 45-2828.3C20.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm	Plastic blue	Plastic black	Plastic	A - C	C = 90°	45-2828.1C60.001	2	0.022 kg
Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm Plastic red Metal sandgrey Plastic A - C C = 90° 45-2828.3C20.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm		Selector switch a	actuator 2 positions,	short lever, Front c	limension Ø 29.45	5 mm		
Plastic red Metal sandgrey Plastic A - C C = 90° 45-2828.3C20.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm	Plastic white	Plastic black	Plastic	A - C	C = 90°	45-2828.1C90.001	2	0.022 kg
Plastic red Metal sandgrey Plastic A - C C = 90° 45-2828.3C20.001 2 0.02 Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm		Selector switch a	actuator 2 positions,	short lever, Front o	limension Ø 29.45	5 mm		
Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm	Plastic red						2	0.029 kg
								1.0
Plastic yellow Metal sandgrey Plastic $A - C$ $C = 90^{\circ}$ 45-2828.3C40.001 2 0.02	DI "						0	0.0001
	Plastic yellow	Metal sandgrey	Plastic	A - C	C = 90°	45-2828.3C40.001	2	0.029 kg

						dia-	
.ever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring c	Weight
		•					
	Selector switch a	actuator 2 positions,	short lever, Front o	limension Ø 29.45	mm		
Plastic green	Metal sandgrey	Plastic	A - C	C = 90°	45-2828.3C50.001	2	0.029 k
	Selector switch a	actuator 2 positions,	short lever, Front o	limension Ø 29.45	i mm		
Plastic blue	Metal sandgrey	Plastic	A - C	C = 90°	45-2828.3C60.001	2	0.029 k
	Salactor switch	actuator 2 positions,	short lever Front o	limension (7 20 45	imm		
Plastic red	Metal silver	Metal	A - C	C = 90°	45-2828.2C20.001	2	0.044 k
	Selector switch a	actuator 2 positions,	short lever, Front o	limension Ø 29.45	i mm		
Plastic ambergris	Metal silver	Metal	A - C	C = 90°	45-2828.2C30.001	2	0.044 kç
	Selector switch a	actuator 2 positions,	short lever, Front c	limension Ø 29.45	i mm		
Plastic green	Metal silver	Metal	A - C	C = 90°	45-2828.2C50.001	2	0.044 kç
	Selector switch a	actuator 2 positions,	short lever, Front c	limension Ø 29.45	i mm		
Plastic white	Metal silver	Metal	A - C	C = 90°	45-2828.2C90.001	2	0.044 k

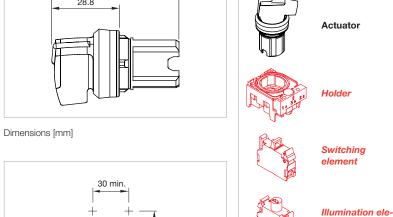


Selector switch 2 positions long lever, IP66, IP67, IP69K



Product can differ from the current configuration.

54.2 28.8



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

Equipment consisting of (schematic overview)

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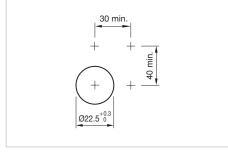
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page 134

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

Additional Information

- Mounting depth incl. front plate, see chapter «drawings»
- External diameter of the long lever 44.8 mm

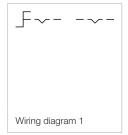


Mounting cut-outs [mm]

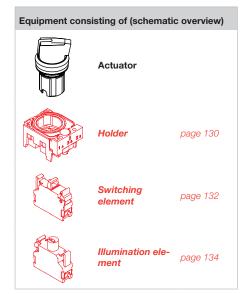


Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring dia- gram	Weight
	Selector switch a	actuator 2 positions,	long lever, Front di	mension Ø 29.45	mm		
Plastic red	Plastic black	Plastic	A - C	C = 90°	45-2828.1D20.001	1	0.022 kg
1		actuator 2 positions,					
Plastic white	Selector switch a	actuator 2 positions,	long lever, Front di	mension Ø 29.45	mm 45-2828.1D90.001	1	0.022 kg
Plastic white	Plastic black		A - C	C = 90°	45-2828.1D90.001	1	0.022 kg
	Plastic black	Plastic	A - C	C = 90°	45-2828.1D90.001	1	
Plastic white Plastic red	Plastic black Selector switch a Metal sandgrey	Plastic	A - C long lever, Front di A - C	C = 90° mension Ø 29.45 C = 90°	45-2828.1D90.001 mm 45-2828.3D20.001	1	0.022 kg

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wirir	Weight
ever	Frontring	nousing material	Switching action	Switching angle	Part No.	 > 0 /	weight
	Selector switch	actuator 2 positions,	long lever, Front dim	ension Ø 29.45	mm		
Plastic red	Metal silver	Metal	A - C	C = 90°	45-2828.2D20.001	1	0.022 kç
	Selector switch	actuator 2 positions,	long lever, Front dim	nension Ø 29.45	mm		
Plastic yellow	Metal silver	Metal	A - C	C = 90°	45-2828.2D40.001	1	0.052 kg
	Selector switch	actuator 2 positions,		nension Ø 29.45	mm		
Plastic green	Metal silver	Metal	A - C	C = 90°	45-2828.2D50.001	1	0.052 kg
Plastic blue	Metal silver	Metal	A - C	C = 90°	45-2828.2D60.001	1	0.052 kg
P		Metal Actuator 2 positions, Metal		1		1	
P	Selector switch Metal silver	actuator 2 positions,	long lever, Front dim	nension Ø 29.45	mm 45-2828.2D90.001		
Plastic white	Selector switch Metal silver	actuator 2 positions, Metal	long lever, Front dim	nension Ø 29.45	mm 45-2828.2D90.001		0.052 kç
Plastic blue Plastic white Plastic yellow	Selector switch Metal silver Selector switch Metal silver	actuator 2 positions, Metal actuator 2 positions,	long lever, Front dim A - C long lever, Front dim A - B	nension Ø 29.45 C = 90° nension Ø 29.45 B = 45°	mm 45-2828.2D90.001	1	0.052 kg
Plastic white Plastic yellow	Selector switch Metal silver Selector switch Metal silver	actuator 2 positions, Metal actuator 2 positions, Metal	long lever, Front dim A - C long lever, Front dim A - B	nension Ø 29.45 C = 90° nension Ø 29.45 B = 45°	mm 45-2828.2D90.001	1	0.052 kg
Plastic white Plastic yellow	Selector switch Metal silver Selector switch Metal silver Selector switch Metal silver	actuator 2 positions, Metal actuator 2 positions, Metal actuator 2 positions, Metal	long lever, Front dim A - C long lever, Front dim A - B long lever, Front dim A - B	nension Ø 29.45 C = 90° nension Ø 29.45 B = 45° nension Ø 29.45 B = 45°	mm 45-2844.2D40.006 mm 45-2844.2D50.006	2	0.052 kg
Plastic white Plastic yellow Plastic green	Selector switch Metal silver Selector switch Metal silver Selector switch Metal silver	actuator 2 positions, Metal actuator 2 positions, Metal actuator 2 positions,	long lever, Front dim A - C long lever, Front dim A - B long lever, Front dim A - B	nension Ø 29.45 C = 90° nension Ø 29.45 B = 45° nension Ø 29.45 B = 45°	mm 45-2844.2D40.006 mm 45-2844.2D50.006	2	0.052 kç
Plastic white	Selector switch Metal silver Selector switch Metal silver Selector switch Metal silver Selector switch Metal silver	actuator 2 positions, Metal actuator 2 positions, Metal actuator 2 positions, Metal actuator 2 positions, Metal	long lever, Front dim A - C long lever, Front dim A - B long lever, Front dim A - B	ension Ø 29.45 C = 90° ension Ø 29.45 B = 45° ension Ø 29.45 B = 45°	mm 45-2844.2D40.006 mm 45-2844.2D60.006	2	0.052 kg
Plastic white Plastic yellow Plastic green	Selector switch Metal silver Selector switch Metal silver Selector switch Metal silver Selector switch Metal silver	actuator 2 positions, Metal actuator 2 positions, Metal actuator 2 positions, Metal actuator 2 positions,	long lever, Front dim A - C long lever, Front dim A - B long lever, Front dim A - B	ension Ø 29.45 C = 90° ension Ø 29.45 B = 45° ension Ø 29.45 B = 45°	mm 45-2844.2D40.006 mm 45-2844.2D60.006	2	0.052 k

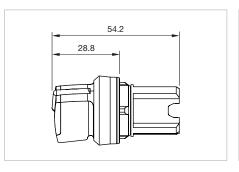


Selector switch 3 positions short lever, IP66, IP67, IP69K



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

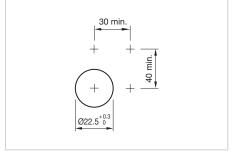
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm]



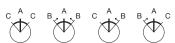
Product can differ from the current configuration.



Mounting cut-outs [mm]

Additional Information

- Mounting depth incl. front plate, see chapter «drawings»
- External diameter of the short lever 32.3 mm



Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring dia- gram	Weight
	Selector switch	actuator 3 positions,		imension Ø 29.45	mm		
Plastic red	Plastic black	Plastic	C - A - C	C = 45°	45-2819.1C20.003	1	0.022 kg
Plastic yellow	Plastic black	Plastic	C - A - C	C = 45°	45-2819.1C40.003	1	0.022 kg
Plastic yellow		Plastic				1	0.022 kg
Plastic yellow Plastic green						1	0.022 kg
	Selector switch a	actuator 3 positions,	short lever, Front d	imension Ø 29.45 C = 45°	mm 45-2819.1C50.003	1	

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring dia gram	Weight
M							
•		actuator 3 positions,			mm		
Plastic white	Plastic black	Plastic	C - A - C	C = 45°	45-2819.1C90.003	1	0.022 kg
	Salactor switch	actuator 3 positions,	short lever Front d	limension Ø 29 45	mm		
Plastic red	Plastic black	Plastic	B-A-B	B = 45°	45-280S.1C20.003	2	0.022 kg
	1. 18818 8.1881	1 0000				-	0.022
	Selector switch	actuator 3 positions,	short lever, Front d	limension Ø 29.45	mm		
Plastic yellow	Plastic black	Plastic	B - A - B	B = 45°	45-280S.1C40.003	2	0.022 kg
	Selector switch	actuator 3 positions,	short lever, Front d	limension Ø 29.45	mm		
Plastic green	Plastic black	Plastic	B - A - B	B = 45°	45-280S.1C50.003	2	0.022 kg
	Selector switch	actuator 3 positions,	short lever, Front d	limension Ø 29.45	mm		
Plastic blue	Selector switch a	actuator 3 positions, Plastic	short lever, Front d	limension Ø 29.45	mm 45-280S.1C60.003	2	0.022 kg
Plastic blue	Plastic black	Plastic	B - A - B	B = 45°	45-280S.1C60.003	2	0.022 kg
	Plastic black Selector switch	Plastic actuator 3 positions,	B-A-B	B = 45°	45-280S.1C60.003		
Plastic blue Plastic white	Plastic black Selector switch	Plastic actuator 3 positions, Plastic	short lever, Front d	B = 45° limension Ø 29.45 B = 45°	45-280S.1C60.003 mm 45-280S.1C90.003	2	
Plastic white	Selector switch	Plastic actuator 3 positions, Plastic actuator 3 positions,	short lever, Front d	B = 45°	mm 45-280S.1C60.003	2	0.022 kg
Plastic white	Plastic black Selector switch	Plastic actuator 3 positions, Plastic	short lever, Front d	B = 45° limension Ø 29.45 B = 45°	45-280S.1C60.003 mm 45-280S.1C90.003		0.022 kg 0.022 kg
	Selector switch a Plastic black Selector switch a Plastic black	Plastic actuator 3 positions, Plastic actuator 3 positions,	short lever, Front do	B = 45°	mm 45-280S.1C60.003	2	0.022 kg
Plastic white Plastic red	Selector switch a Plastic black Selector switch a Plastic black	Plastic actuator 3 positions, Plastic actuator 3 positions, Plastic	short lever, Front do	B = 45°	mm 45-280S.1C60.003	2	0.022 kç
Plastic white Plastic red	Selector switch a Plastic black Selector switch a Plastic black Selector switch a Plastic black	Plastic actuator 3 positions, Plastic actuator 3 positions, Plastic actuator 3 positions, Plastic	short lever, Front d short lever, Front d C - A - B short lever, Front d C - A - B	B = 45°	mm 45-280S.1C60.003 mm 45-280S.1C90.003 mm 45-2816.1C20.003	3	0.022 kg
Plastic white Plastic red Plastic yellow	Selector switch a Plastic black Selector switch a Plastic black Selector switch a Plastic black Selector switch a Plastic black	actuator 3 positions, Plastic actuator 3 positions, Plastic actuator 3 positions, Plastic	short lever, Front of B-A-B short lever, Front of C-A-B short lever, Front of C-A-B	B = 45°	mm 45-2816.1C20.003 mm 45-2816.1C40.003	3	0.022 kg
Plastic white	Selector switch a Plastic black Selector switch a Plastic black Selector switch a Plastic black Selector switch a Plastic black	actuator 3 positions, Plastic actuator 3 positions, Plastic actuator 3 positions, Plastic actuator 3 positions, Plastic	short lever, Front of B-A-B short lever, Front of C-A-B short lever, Front of C-A-B	B = 45°	mm 45-2816.1C50.003 mm 45-2816.1C20.003	3	0.022 kg
Plastic white Plastic red Plastic yellow	Selector switch a Plastic black Selector switch a Plastic black Selector switch a Plastic black Selector switch a Plastic black	actuator 3 positions, Plastic actuator 3 positions, Plastic actuator 3 positions, Plastic	short lever, Front of B-A-B short lever, Front of C-A-B short lever, Front of C-A-B	B = 45°	mm 45-2816.1C50.003 mm 45-2816.1C20.003	3	0.022 kg

1						ing	
Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring dia- gram	Weight
	Selector switch a	ctuator 3 positions,	short lever, Front o	dimension Ø 29.45	i mm		
Plastic white	Plastic black	Plastic	C - A - B	C = 45°, B = 45°	45-2816.1C90.003	3	0.022 k
	Selector switch a	nctuator 3 positions,	short lever. Front o	dimension Ø 29.45	5 mm		
Plastic red	Plastic black	Plastic	B - A - C	B = 45°, C = 45°	45-280X.1C20.003	4	0.022 k
	Salastar quitab s	actuator 2 positions	ohort lover. Event o	Jimonojon (f. 20.45	: mm		
Plastic yellow	Plastic black	retuator 3 positions,	B - A - C	B = 45°, C = 45°	45-280X.1C40.003	4	0.022 k
				Jin			
Plastic green	Plastic black	retuator 3 positions,	B - A - C	B = 45°, C = 45°	45-280X.1C50.003	4	0.022 k
Plastic blue	Selector switch a	nctuator 3 positions,	short lever, Front o	dimension Ø 29.45	5 mm 45-280X.1C60.003	4	0.022 k
j)	Calantan avritalia		-hd-l				
•	Selector switch a	ectuator 3 positions,	snort lever, Front of	dimension Ø 29.45	5 mm		
Plastic white	Plastic black	Plastic	B - A - C	B = 45°, C = 45°	5 mm 45-280X.1C90.003	4	0.022 k
	Plastic black		B - A - C	B = 45°, C = 45°	45-280X.1C90.003	1	
	Selector switch a	Plastic	short lever, Front o	B = 45°, C = 45° dimension Ø 29.45 C = 45°	45-280X.1C90.003 5 mm 45-2819.3C20.003		0.022 k
Plastic red	Selector switch a	Plastic Plastic Plastic	short lever, Front o	B = 45°, C = 45° dimension Ø 29.45 C = 45°	45-280X.1C90.003 5 mm 45-2819.3C20.003		0.022 k
Plastic red	Selector switch a Metal sandgrey Selector switch a Metal sandgrey	Plastic nctuator 3 positions, Plastic	short lever, Front of C - A - C short lever, Front of C - A - C	B = 45°, C = 45° dimension Ø 29.45 C = 45° dimension Ø 29.45 C = 45°	45-280X.1C90.003 6 mm 45-2819.3C20.003 6 mm 45-2819.3C40.003	1	0.022 k
Plastic red Plastic yellow	Selector switch a Metal sandgrey Selector switch a Metal sandgrey	Plastic Plastic Plastic Plastic Plastic	short lever, Front of C - A - C short lever, Front of C - A - C	B = 45°, C = 45° dimension Ø 29.45 C = 45° dimension Ø 29.45 C = 45°	45-280X.1C90.003 6 mm 45-2819.3C20.003 6 mm 45-2819.3C40.003	1	0.022 k
Plastic white Plastic red Plastic yellow Plastic green	Selector switch a Metal sandgrey Selector switch a Metal sandgrey Selector switch a Metal sandgrey	Plastic nctuator 3 positions, Plastic nctuator 3 positions, Plastic nctuator 3 positions, Plastic	short lever, Front of C - A - C short lever, Front of C - A - C short lever, Front of C - A - C	B = 45°, C = 45° dimension Ø 29.45 C = 45° C = 45° dimension Ø 29.45 C = 45° C = 45°	45-280X.1C90.003 6 mm 45-2819.3C20.003 6 mm 45-2819.3C40.003	1	0.022 k
Plastic red Plastic yellow	Selector switch a Metal sandgrey Selector switch a Metal sandgrey Selector switch a Metal sandgrey	Plastic nctuator 3 positions, Plastic nctuator 3 positions, Plastic	short lever, Front of C - A - C short lever, Front of C - A - C short lever, Front of C - A - C	B = 45°, C = 45° dimension Ø 29.45 C = 45° C = 45° dimension Ø 29.45 C = 45° C = 45°	45-280X.1C90.003 6 mm 45-2819.3C20.003 6 mm 45-2819.3C40.003	1	

						/iring dia- ram	Weight
ever	Front ring	Housing material	Switching action	Switching angle	Part No.	S 5	Weight
	Selector switch a	ctuator 3 positions,	short lever, Front d	mension Ø 29.45	mm		
Plastic white	Metal sandgrey	Plastic	C - A - C	C = 45°	45-2819.3C90.003	1	0.022 k
	Selector switch a	ctuator 3 positions,	short lever. Front d	mension Ø 29.45	mm		
lastic red	Metal sandgrey	Plastic	B - A - B	B = 45°	45-280S.3C20.003	2	0.022 k
	Selector switch a	ctuator 3 positions,	short lever. Front d	mension Ø 29.45	mm		
lastic yellow	Metal sandgrey	Plastic	B - A - B	B = 45°	45-280S.3C40.003	2	0.022 k
	Selector switch a	ctuator 3 positions,	short lever, Front d	mension Ø 29.45	mm		
lastic green	Metal sandgrey	Plastic	B - A - B	B = 45°	45-280S.3C50.003	2	0.022 k
	Selector switch a	ctuator 3 positions,	short lever, Front d	mension Ø 29.45	mm		
Plastic blue	Selector switch a Metal sandgrey	ctuator 3 positions,	short lever, Front d	mension Ø 29.45	mm 45-280S.3C60.003	2	0.022 kį
Plastic blue	Metal sandgrey	-	B - A - B	B = 45°	45-280S.3C60.003	2	0.022 kg
	Metal sandgrey	Plastic	B - A - B	B = 45°	45-280S.3C60.003	2	
Plastic white	Selector switch a Metal sandgrey	Plastic ctuator 3 positions,	short lever, Front di	B = 45° mension Ø 29.45 B = 45°	45-280S.3C60.003 mm 45-280S.3C90.003		0.022 kį
Plastic white	Selector switch a Metal sandgrey Selector switch a Metal sandgrey	ctuator 3 positions, Plastic ctuator 3 positions,	short lever, Front display short lever, Front display contact the short lever con	B = 45° Mension Ø 29.45 B = 45° Mension Ø 29.45 C = 45°, B = 45°	mm 45-280S.3C60.003 mm 45-280S.3C90.003	2	0.022 kį
lastic white	Selector switch a Metal sandgrey Selector switch a Metal sandgrey	ctuator 3 positions, Plastic ctuator 3 positions, Plastic	short lever, Front display short lever, Front display contact the short lever con	B = 45° Mension Ø 29.45 B = 45° Mension Ø 29.45 C = 45°, B = 45°	mm 45-280S.3C60.003 mm 45-280S.3C90.003	2	0.022 kg
lastic white	Selector switch a Metal sandgrey Selector switch a Metal sandgrey Selector switch a Metal sandgrey	ctuator 3 positions, Plastic ctuator 3 positions, Plastic ctuator 3 positions, Plastic	short lever, Front display a short lever, Fro	B = 45°	mm 45-2816.3C20.003 mm 45-2816.3C20.003	3	0.022 kg
Plastic white Plastic red Plastic yellow	Selector switch a Metal sandgrey Selector switch a Metal sandgrey Selector switch a Metal sandgrey Selector switch a	ctuator 3 positions, Plastic ctuator 3 positions, Plastic ctuator 3 positions, Plastic ctuator 3 positions,	short lever, Front display short lever, Front di	B = 45°	mm 45-2816.3C20.003 mm 45-2816.3C40.003	3	0.022 kg 0.022 kg 0.022 kg
Plastic white Plastic red Plastic yellow	Selector switch a Metal sandgrey Selector switch a Metal sandgrey Selector switch a Metal sandgrey Selector switch a Metal sandgrey	ctuator 3 positions, Plastic ctuator 3 positions, Plastic ctuator 3 positions, Plastic ctuator 3 positions, Plastic	short lever, Front display a short lever, Fro	B = 45°	mm 45-2816.3C40.003 mm 45-2816.3C20.003 mm 45-2816.3C40.003	3	0.022 kg
Plastic blue Plastic white Plastic red Plastic yellow Plastic green	Selector switch a Metal sandgrey Selector switch a Metal sandgrey Selector switch a Metal sandgrey Selector switch a Metal sandgrey	ctuator 3 positions, Plastic ctuator 3 positions, Plastic ctuator 3 positions, Plastic ctuator 3 positions,	short lever, Front display a short lever, Fro	B = 45°	mm 45-2816.3C40.003 mm 45-2816.3C20.003 mm 45-2816.3C40.003	3	0.022 kg

						9 0	
Lavan	Frank vina	Haveing material	Conitabina astion	Cuitabina anala	Doub No.	Wiring dia- gram	\A/a:ada4
Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	> 0	Weight
					_		
		ctuator 3 positions,					
Plastic white	Metal sandgrey	Plastic	C - A - B	C = 45°, B = 45°	45-2816.3C90.003	3	0.022 k
	Selector switch a	ctuator 3 positions,	short lever, Front of	dimension Ø 29.45	5 mm		
Plastic red	Metal sandgrey	Plastic	B - A - C	B = 45°, C = 45°	45-280X.3C20.003	4	0.022 k
	Calactay avvitale	atuatau 2 maaitiana	obout lovey Front o	Jimanajan (j. 20. 4)			
DI		ctuator 3 positions,					0.0001
Plastic yellow	Metal sandgrey	Plastic	B - A - C	B = 45°, C = 45°	45-280X.3C40.003	4	0.022 k
Plastic green	Selector switch a	Plastic	B-A-C	B = 45°, C = 45°	45-280X.3C50.003	4	0.022 k
		ctuator 3 positions,					0.0001
Plastic blue	Metal sandgrey	Plastic	B - A - C	$B = 45^{\circ}, C = 45^{\circ}$	45-280X.3C60.003	1 /	
				B = 40 , O = 40	43-200X.3C00.003	4	0.022 k
The state and the		ctuator 3 positions,	short lever, Front o	dimension Ø 29.45	5 mm		
Plastic white	Selector switch a	ctuator 3 positions,		,		4	
Plastic white	Metal sandgrey	•	short lever, Front o	dimension Ø 29.45	5 mm 45-280X.3C90.003		
	Metal sandgrey	Plastic	short lever, Front o	dimension Ø 29.45	5 mm 45-280X.3C90.003		0.022 k
	Metal sandgrey Selector switch a Metal silver	Plastic ctuator 3 positions,	short lever, Front of B - A - C short lever, Front of C - A - C	dimension Ø 29.45 B = 45°, C = 45° dimension Ø 29.45 C = 45°	5 mm 45-280X.3C90.003 5 mm 45-2819.2C20.003	4	0.022 k
Plastic red	Metal sandgrey Selector switch a Metal silver	Plastic ctuator 3 positions, Metal	short lever, Front of B - A - C short lever, Front of C - A - C	dimension Ø 29.45 B = 45°, C = 45° dimension Ø 29.45 C = 45°	5 mm 45-280X.3C90.003 5 mm 45-2819.2C20.003	4	0.022 k
Plastic red	Selector switch a Metal silver Selector switch a Metal silver	Plastic ctuator 3 positions, Metal ctuator 3 positions, Metal	short lever, Front of B-A-C short lever, Front of C-A-C short lever, Front of C-A-C	dimension Ø 29.48 B = 45°, C = 45° dimension Ø 29.48 C = 45° dimension Ø 29.48 C = 45°	5 mm 45-280X.3C90.003 5 mm 45-2819.2C20.003 6 mm 45-2819.2C40.003	1	0.022 k
Plastic red Plastic yellow	Selector switch a Metal silver Selector switch a Metal silver	Plastic ctuator 3 positions, Metal ctuator 3 positions,	short lever, Front of B-A-C short lever, Front of C-A-C short lever, Front of C-A-C	dimension Ø 29.48 B = 45°, C = 45° dimension Ø 29.48 C = 45° dimension Ø 29.48 C = 45°	5 mm 45-280X.3C90.003 5 mm 45-2819.2C20.003 6 mm 45-2819.2C40.003	1	0.022 k
Plastic red Plastic yellow	Selector switch a Metal silver Selector switch a Metal silver Selector switch a Metal silver	Plastic ctuator 3 positions, Metal ctuator 3 positions, Metal ctuator 3 positions, Metal	short lever, Front of B-A-C short lever, Front of C-A-C short lever, Front of C-A-C short lever, Front of C-A-C	dimension Ø 29.45 B = 45°, C = 45° dimension Ø 29.45 C = 45° dimension Ø 29.45 C = 45°	5 mm 45-280X.3C90.003 5 mm 45-2819.2C20.003 6 mm 45-2819.2C40.003	1	0.022 k
Plastic white Plastic red Plastic yellow Plastic green	Selector switch a Metal silver Selector switch a Metal silver Selector switch a Metal silver	Plastic ctuator 3 positions, Metal ctuator 3 positions, Metal	short lever, Front of B-A-C short lever, Front of C-A-C short lever, Front of C-A-C short lever, Front of C-A-C	dimension Ø 29.45 B = 45°, C = 45° dimension Ø 29.45 C = 45° dimension Ø 29.45 C = 45°	5 mm 45-280X.3C90.003 5 mm 45-2819.2C20.003 6 mm 45-2819.2C40.003	1	0.022 k

						ng dia-	
.ever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring o	Weight
	Selector switch	actuator 3 positions,			mm		
Plastic red	Metal silver	Metal	B - A - B	B = 45°	45-280S.2C20.003	2	0.022 kg
	Selector switch	actuator 3 positions,	short lever. Front d	imension Ø 29.45	mm		
Plastic ambergris	Metal silver	Metal	B - A - B	B = 45°	45-280S.2C30.003	2	0.022 kg
	Selector switch	actuator 3 positions,	short lever, Front d	imension Ø 29.45	mm		
Plastic yellow	Metal silver	Metal	B - A - B	B = 45°	45-280S.2C40.003	2	0.022 kg
Plastic green	Selector switch Metal silver	actuator 3 positions,	short lever, Front d	limension Ø 29.45	mm 45-280S.2C50.003	2	0.022 kg
	Selector switch	actuator 3 positions,	short lever, Front d	imension Ø 29.45	mm		
Plastic blue	Selector switch Metal silver	actuator 3 positions,	short lever, Front d	imension Ø 29.45	mm 45-280S.2C60.003	2	0.022 kç
Plastic blue	Metal silver		B - A - B	B = 45°	45-280S.2C60.003	2	0.022 kį
	Metal silver	Metal	B - A - B	B = 45°	45-280S.2C60.003	2	0.022 kg
	Metal silver Selector switch Metal silver	Metal actuator 3 positions,	short lever, Front d	B = 45° limension Ø 29.45 B = 45°	45-280S.2C60.003 mm 45-280S.2C90.003		,
Plastic white	Metal silver Selector switch Metal silver	Metal Actuator 3 positions, Metal	short lever, Front d	B = 45° limension Ø 29.45 B = 45°	45-280S.2C60.003 mm 45-280S.2C90.003		0.022 kg
Plastic white	Selector switch Metal silver Selector switch Metal silver	actuator 3 positions, Metal actuator 3 positions, Metal	short lever, Front d B - A - B short lever, Front d C - A - B	B = 45°	45-280S.2C60.003 mm 45-280S.2C90.003	2	0.022 kį
Plastic white	Selector switch Metal silver Selector switch Metal silver	actuator 3 positions, Metal actuator 3 positions,	short lever, Front d B - A - B short lever, Front d C - A - B	B = 45°	45-280S.2C60.003 mm 45-280S.2C90.003	2	0.022 kg
Plastic white	Selector switch Metal silver Selector switch Metal silver	actuator 3 positions, Metal actuator 3 positions, Metal actuator 3 positions,	short lever, Front d Short lever, Front d C-A-B short lever, Front d	B = 45°	45-280S.2C60.003 mm 45-280S.2C90.003 mm 45-2816.2C20.003	3	0.022 kg
Plastic white Plastic red	Selector switch Metal silver Selector switch Metal silver Selector switch Metal silver	actuator 3 positions, Metal actuator 3 positions, Metal actuator 3 positions,	short lever, Front d B-A-B short lever, Front d C-A-B short lever, Front d C-A-B	B = 45°	45-280S.2C60.003 mm 45-280S.2C90.003 mm 45-2816.2C20.003	3	0.022 kį
Plastic blue Plastic white Plastic red Plastic green	Selector switch Metal silver Selector switch Metal silver Selector switch Metal silver	actuator 3 positions, Metal actuator 3 positions, Metal actuator 3 positions, Metal	short lever, Front d B-A-B short lever, Front d C-A-B short lever, Front d C-A-B	B = 45°	45-280S.2C60.003 mm 45-280S.2C90.003 mm 45-2816.2C20.003	3	0.022 kg

F~~-	F~-	F~~-	F~-
Wiring diagram 1	Wiring diagram 2	Wiring diagram 3	Wiring diagram 4

Selector switch 3 positions long lever, IP66, IP67, IP69K



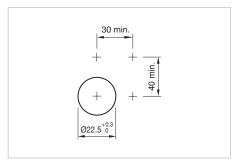
Product can differ from the current configuration.

54.2

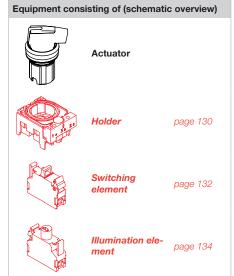
Dimensions [mm]

Additional InformationMounting depth incl. fr

- Mounting depth incl. front plate, see chapter «drawings»
- External diameter of the long lever 44.8 mm

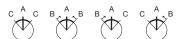


Mounting cut-outs [mm]



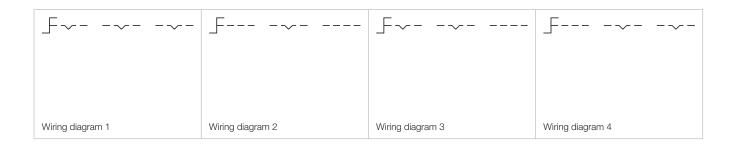
Each Part Number listed below includes all the black components shown in the 3D-drawing.

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



Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring dia- gram	Weight
	Selector switch	actuator 3 positions,	long lever, Front di	imension Ø 29.45	mm		
Plastic red	Metal silver	Metal	C - A - C	C = 45°	45-2819.2D20.003	1	0.022 kg
DI#	Metal silver	Metal	C - A - C	C = 45°	45 0040 0550 000		
Plastic green	Ivietai Siivei				45-2819.2D50.003	1	0.022 kg
Plastic green			long lever Front di	12 17		1	0.022 kg
Plastic white		actuator 3 positions,	long lever, Front di	12 17		1	0.022 kg
	Selector switch Metal silver	actuator 3 positions,	C - A - C	mension Ø 29.45	mm 45-2819.2D90.003	1	

Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic white Metal silver Metal B - A - B B = 45° 45-280S.2D90.003 Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic red Metal silver Metal C - A - B C = 45°, B = 45° 45-2816.2D20.003 Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic white Metal silver Metal C - A - B C = 45°, B = 45° 45-2816.2D90.003 Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic red Metal silver Metal B - A - C B = 45°, C = 45° 45-280X.2D20.003						`		
Plastic green Metal silver Metal B - A - B B = 45° 45-280S.2D50.003 Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic white Metal silver Metal B - A - B B = 45° 45-280S.2D90.003 Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic red Metal silver Metal C - A - B C = 45°, B = 45° 45-2816.2D20.003 Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic white Metal silver Metal C - A - B C = 45°, B = 45° 45-2816.2D90.003 Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic red Metal silver Metal B - A - C B = 45°, C = 45° 45-280X.2D20.003		Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring dia- gram	Weight
Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic white Metal silver Metal B - A - B B = 45° 45-280S.2D90.003 Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic red Metal silver Metal C - A - B C = 45°, B = 45° 45-2816.2D20.003 Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic white Metal silver Metal C - A - B C = 45°, B = 45° 45-2816.2D90.003 Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic red Metal silver Metal B - A - C B = 45°, C = 45° 45-280X.2D20.003		Selector switch	actuator 3 positions,	long lever, Front di	imension Ø 29.45	mm		
Plastic white Metal silver Metal B - A - B B = 45° 45-280S.2D90.003 Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic red Metal silver Metal C - A - B C = 45°, B = 45° 45-2816.2D20.003 Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic white Metal silver Metal C - A - B C = 45°, B = 45° 45-2816.2D90.003 Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic red Metal silver Metal B - A - C B = 45°, C = 45° 45-280X.2D20.003	green	Metal silver	Metal	B - A - B	B = 45°	45-280S.2D50.003	2	0.022 k
Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic white Metal silver Metal C - A - B C = 45°, B = 45° 45-2816.2D20.003 Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic red Metal silver Metal B - A - C B = 45°, C = 45° 45-280X.2D20.003	white		-	_		45-280S.2D90.003	2	0.022 k
Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic white Metal silver Metal C - A - B C = 45°, B = 45° 45-2816.2D90.003 Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic red Metal silver Metal B - A - C B = 45°, C = 45° 45-280X.2D20.003	red		-				3	0.022 k
Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic red Metal silver Metal B - A - C B = 45°, C = 45° 45-280X.2D20.003			-					
Plastic red Metal silver Metal B - A - C B = 45°, C = 45° 45-280X.2D20.003	white				,		3	0.022 k
	red						4	0.022 k
Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm Plastic white Metal silver Metal B - A - C B = 45°, C = 45° 45-280X.2D90.003	white		· · · · · · · · · · · · · · · · · · ·			mm 45-280X,2D90.003	4	0.022 k



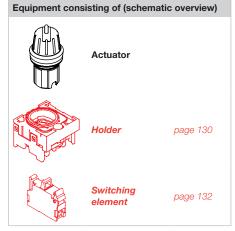
Selector switch actuator 4 positions round lever, IP66, IP67, IP69K



Product can differ from the current configuration.

54.2

Dimensions [mm]

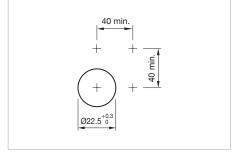


Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

Additional Information

- Use only with holder for 4 elements
- Mounting depth incl. front plate, see chapter «drawings»



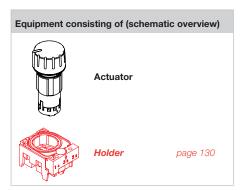
Mounting cut-outs [mm]

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring dia- gram	Weight
	Selector switch a	actuator 4 positions,	round lever, Front o	dimension Ø 29.4	5 mm		
Plastic white	Plastic black	Plastic	С	C = 90°	45-2845.1E90.002	1	0.023 kg
	Selector switch a	actuator 4 positions,	round lever, Front of	dimension Ø 29.4	5 mm		
Plastic white	Selector switch a	actuator 4 positions,	round lever, Front o	dimension Ø 29.45	5 mm 45-2845.3E90.002	1	0.023 kg
Plastic white	Metal sandgrey	•	С	C = 90°	45-2845.3E90.002	1	0.023 kg

Switching action: C = Maintain

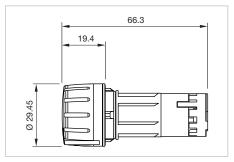


Potentiometer, IP66, IP67, IP69K



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

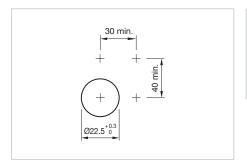
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm]



Product can differ from the current configuration.



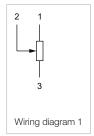
Mounting cut-outs [mm]

Additional Information

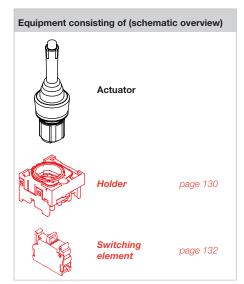
- Power 0.5 W
- Slewing range 275° ±2°
- Mounting depth incl. front plate, see chapter «drawings»

Product attribute	Front ring	Housing material	Part No.	Compo- nent layout	Wiring dia- gram	Weight
Potentiomet	er, Front dimension Ø	29.45 mm				
Resistor 1 kOhm / linear, series E3	Plastic black	Plastic	45-2P03.1E10.000	1	1	0.03 kg
Resistor 4.7 kOhm / linear, series E3	Plastic black	Plastic	45-2P04.1E10.000	1	1	0.03 kg
Resistor 10 kOhm / linear, series E3	Plastic black	Plastic	45-2P02.1E10.000	1	1	0.03 kç
Resistor 47 kOhm / linear, series E3	Plastic black	Plastic	45-2P06.1E10.000	1	1	0.03 kg
Resistor 100 kOhm / linear, series E3	Plastic black	Plastic	45-2P01.1E10.000	1	1	0.03 kç
Resistor 470 kOhm / linear, series E3	Plastic black	Plastic	45-2P05.1E10.000	1	1	0.03 kç
Potentiomet Resistor 1 kOhm / linear, series E3	er, Front dimension Ø Metal silver	29.45 mm	45-2P03.2E10.000	1	1	0.03 kg
Resistor 4.7 kOhm / linear, series E3	Metal silver	Metal	45-2P04.2E10.000	1	1	0.03 kg
Resistor 10 kOhm / linear, series E3	Metal silver	Metal	45-2P02.2E10.000	1	1	0.03 kg
Resistor 47 kOhm / linear, series E3	Metal silver	Metal	45-2P06.2E10.000	1	1	0.03 kç
Resistor 100 kOhm / linear, series E3	Metal silver	Metal	45-2P01.2E10.000	1	1	0.03 kg
Resistor 470 kOhm / linear, series E3	Metal silver	Metal	45-2P05.2E10.000	1	1	0.03 kg

The component layouts you will find from Page 144

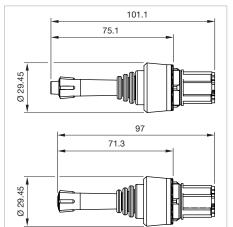


Toggle stick, IP 65, IP 67



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

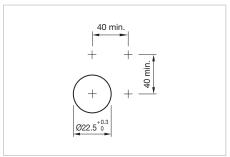
To obtain a complete unit, please select the red components from the pages shown.





Product can differ from the current configuration.

Dimensions [mm]



Mounting depth incl. front plate, see chapter «drawings»

Use only with holder for 4 elements

Additional Information

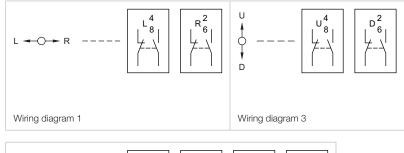
Mounting cut-outs [mm]

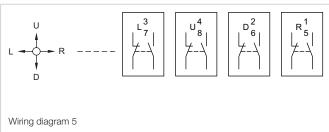
Product attribute	Front ring	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
Toggle s	stick, Front dimensior	n Ø 29.45 mm				
2 positions (L-R), lockable	Plastic black	Plastic	В	45-2F13.1010.000	1	0.035 kg
2 positions (U-D), lockable	Plastic black	Plastic	В	45-2F40.1010.000	3	0.035 kg
4-positions, lockable	Plastic black	Plastic	В	45-2F14.1010.000	5	0.035 kg
Toggle s 2 positions (L-R), lockable	stick, Front dimensior Metal sandgrey	n Ø 29.45 mm Plastic	В	45-2F13.3010.000	1	0.042 kg
	•		B B	45-2F13.3010.000 45-2F40.3010.000	1 3	0.042 kg 0.042 kg
2 positions (L-R), lockable	Metal sandgrey	Plastic			ļ.,	0.042 kg
2 positions (L-R), lockable 2 positions (U-D), lockable 4-positions, lockable Toggle s	Metal sandgrey Metal sandgrey Metal sandgrey Metal sandgrey	Plastic Plastic Plastic Plastic	B B	45-2F40.3010.000 45-2F14.3010.000	3 5	0.042 kg
2 positions (L-R), lockable 2 positions (U-D), lockable 4-positions, lockable Toggle s 2 positions (L-R), lockable	Metal sandgrey Metal sandgrey Metal sandgrey Metal sandgrey Metal sandgrey Metal sandgrey	Plastic Plastic Plastic Plastic Metal	B B	45-2F40.3010.000 45-2F14.3010.000 45-2F13.2010.000	3 5	0.042 kg 0.042 kg
2 positions (L-R), lockable 2 positions (U-D), lockable 4-positions, lockable Toggle s	Metal sandgrey Metal sandgrey Metal sandgrey Metal sandgrey	Plastic Plastic Plastic Plastic	B B	45-2F40.3010.000 45-2F14.3010.000	3 5	0.042 kg

45 Raised design

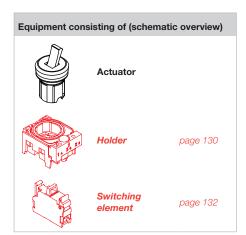
Product attribute	Front ring	Housing material	Switching action	Part No.	Wiring dia- gram	Weight
Togg	gle stick, Front dimension	o (i) 20 45 mm				
2 positions (L-R)	Plastic black	Plastic	В	45-2F0T.1010.000	1	0.035 kg
2 positions (U-D)	Plastic black	Plastic	В	45-2F38.1010.000	3	0.035 kg
4 positions	Plastic black	Plastic	В	45-2F0V.1010.000	5	0.035 kg
2 positions (L-R)	gle stick, Front dimension Metal sandgrey	Plastic	В	45-2F0T.3010.000	1	0.042 kg
2 positions (U-D)	Metal sandgrey	Plastic	В	45-2F38.3010.000	3	
4					0	0.042 kg
4 positions	Metal sandgrey	Plastic	В	45-2F0V.3010.000	5	0.042 kg
Togg	Metal sandgrey gle stick, Front dimension Metal silver		В	45-2F0V.3010.000 45-2F0T.2010.000	-	0.042 kg
	gle stick, Front dimension	n Ø 29.45 mm			5	

Switching action: B = Momentary



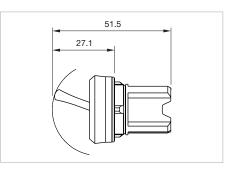


Toggle switches, IP66, IP67, IP69K



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

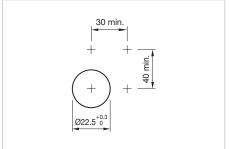
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm]



Product can differ from the current configuration.



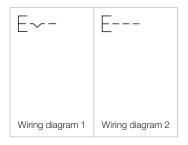
Mounting cut-outs [mm]

Additional Information

Mounting depth incl. front plate, see chapter «drawings»

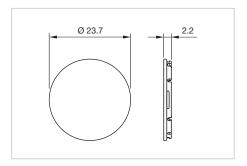
Product attribute	Lever	Front ring	Switching action	Part No.	Wiring dia- gram	Weight
To	oggle switch actuator	, Front dimension Ø 29.45	5 mm			
reset from above	Plastic black	Plastic black	С	45-2N42.1010.000	1	0.015 kg
	Plastic black	Plastic black	В	45-2N39.1010.000	2	0.015 kg
				·		
To	oggle switch actuator	, Front dimension Ø 29.4	5 mm			
	oggle switch actuator	, Front dimension Ø 29.45 Metal sandgrey	5 mm	45-2N42.3010.000	1	0.020 kg
reset from above				45-2N42.3010.000 45-2N39.3010.000	1 2	,
reset from above	Plastic black Plastic black	Metal sandgrey	В		1 2	
reset from above	Plastic black Plastic black	Metal sandgrey Metal sandgrey	В		1 2	0.020 kg

Switching action: B = Momentary, C = Maintain



Front

Lens plastic round flat

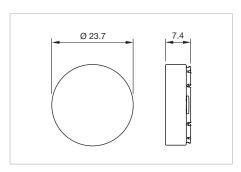


Dimensions [mm]

Dimension		Lens	Part No.	Weight
				'
Ø 23.7 mm	ens	Plastic black	45-553.0100	0.001 kg
	ens			
Ø 23.7 mm		Plastic red	45-553.0200	0.001 kg
	ens			
Ø 23.7 mm		Plastic yellow	45-553.0400	0.001 kg
	ens			
ð 23.7 mm		Plastic green	45-553.0500	0.001 kg
	ens			
Ø 23.7 mm		Plastic blue	45-553.0600	0.001 kg
Ø 23.7 mm	ens	Plastic white	45-553.0900	0.001 kg
220.7 11111		1 ROOG WING	000.0000	0.001 Ng
L	ens	Plastic red transparent		0.001 kg

Lens	Part No.	Weight
Plastic amber transparent	45-553.0F00	0.001 kg
Plastic yellow transparent	45-553.0G00	0.001 kg
Plastic green transparent	45-553.0H00	0.001 kg
Plastic blue transparent	45-553.0J00	0.001 kg
Plastic white transparent	45-553.0K00	0.001 kg
Plastic white transparent	45-553.0K00	0.001 kg
	Plastic amber transparent Plastic yellow transparent Plastic green transparent	Plastic amber transparent 45-553.0F00 Plastic yellow transparent 45-553.0G00 Plastic green transparent 45-553.0H00

Lens plastic round encreased



Dimensions [mm]

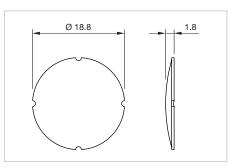
Dimension	Lens	Part No.	Weight
Lens			
Ø 23.7 mm	Plastic black	45-552.0100	0.002 kg

Dimension		Lens	Part No.	Weight
	Lens			
Ø 23.7 mm	Lelis	Plastic red	45-552.0200	0.002 kg
	Lens			
Ø 23.7 mm	Lens	Plastic yellow	45-552.0400	0.002 kg
	Lens	ı	l	
ð 23.7 mm		Plastic green	45-552.0500	0.002 kg
Ø 23.7 mm	Lens	Plastic red transparent	45-552.0E00	0.002 kg
	Lens			
Ø 23.7 mm		Plastic yellow transparent	45-552.0G00	0.002 kg
0	Lens			
Ø 23.7 mm		Plastic green transparent	45-552.0H00	0.002 kg
	Lens			
Ø 23.7 mm		Plastic blue transparent	45-552.0J00	0.002 kg
	Lone	l	l	
0.00.7 mm	Lens	Plactic colourless transporent	45-552.0K00	0.000 1/5
Ø 23.7 mm		Plastic colourless transparent	45-552.UK00	0.002 kg

Marking plate

Additional Information

- For pushbutton illuminated
- Markable, see «Marking»
- To change the text plate, the push cap is removed with a screwdriver and then snapped back



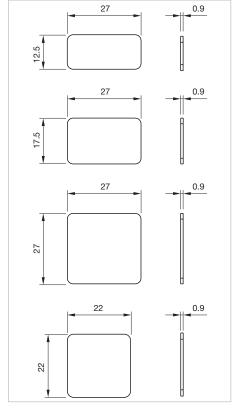
Dimensions [mm]

Marking plate illumination	Marking plate	Part No.	Weight
Marking plate			
illuminative	white translucent	45-563.0K00	0.001 kg

Legend plate

Additional Information

Markable, see «Marking»



Dimensions [mm]

Product attribute	Dimension	Material	Colour	Part No.	Weight
Legend	olate				
For sticking or snapping in place	27 x 12.5 mm	Plastic	black	45-573.1102	0.001 kg
For sticking or snapping in place	27 x 12.5 mm	Plastic	red	45-573.1202	0.001 kg
For sticking or snapping in place	27 x 12.5 mm	Plastic	silver	45-573.1A02	0.001 kg
For sticking or snapping in place	27 x 17.5 mm	Plastic	black	45-573.1103	0.001 kg
For sticking or snapping in place	27 x 17.5 mm	Plastic	silver	45-573.1A03	0.001 kg
Legend For sticking or snapping in place	plate 27 × 27 mm	Plastic	black	45-573.1105	0.001 kg
For sticking or snapping in place	27 x 27 mm	Plastic	silver	45-573.1A05	0.001 kg
		Fiasic	Silver	45-575.TAU5	0.001 kg
Legend		1			
For sticking or snapping in place	22 x 22 mm	Plastic	silver	45-573.1A04	0.001 kg
For sticking	22 x 22 mm	Plastic	black	45-573.1104	0.001 kg

Emergency-stop legend

Additional Information

• Front panel thickness 3 mm max.

Product attribute	Dimension	Mounting cut-out	Marking	Colour	Part No.	Weight
Todact attribute	Dimension	Woulding Cut-out	Warking	Coloui	Fait No.	Weight
	-	d				
	Emergency-stop I	Ø 22.5 mm	without marking	yellow	45-50K.1407	0.005 kg
	Ø 43 X T IIIIII	Ø 22.3 IIIII	Without marking	yellow	43-30K.1407	0.003 kg
	Emergency-stop I					
-	Ø 75 x 1 mm	Ø 22.5 mm	without marking	yellow	45-50K.1408	0.010 kg
	Emergency-stop l	egend				
self-adhesive	Ø 75 x 1 mm	Ø 23 mm	without marking	yellow	45-50J.1400	0.004 kg
AH-104						
	Emanganay atan I	amand				
self-adhesive	Emergency-stop I	Ø 23 mm	NOT - HALT	yellow	45-50J.140Q	0.004 kg
John danioonvo	S 70 X T IIIII	D 20 11111	THO I TIME!	yonovv	10 00011 10 0	0.00 T Ng
Margaret 27						
O						
	Emergency-stop l	egend				
self-adhesive	Ø 75 x 1 mm	Ø 23 mm	EMERGENCY STOP	yellow	45-50J.140S	0.004 kg
104-TOH						
20						
self-adhesive	Emergency-stop I	Ø 23 mm	NOT - AUS	yellow	45-50J.140P	0.004 kg
Sell-adi lesive	Ø 75 X T TIIIT	9 20 111111	NOT - A00	yellow	45-300.1401	0.004 Kg
THE THEORY						
Q 2						
	Emergency-stop l	egend				
self-adhesive	Ø 75 x 1 mm	Ø 23 mm	ARRET D'URGENCE	yellow	45-50J.140T	0.004 kg
ENERGE.						
The state of the s						
	-	d				
	Emergency-stop I		EMEDOENIZA		45 50 1 4 40 1/	0.0041
self-adhesive	Ø 75 x 1 mm	Ø 23 mm	EMERGENZA	yellow	45-50J.140V	0.004 kg
Nods too						
	Emergency-stop l	egend				
self-adhesive	Ø 75 x 1 mm	Ø 23 mm	NODSTOP	yellow	45-50J.140W	0.004 kg

Product attribute	Dimension	Mounting cut-out	Marking	Colour	Part No.	Weight
	Emergency-stop l	legend				
elf-adhesive	Ø 75 x 1 mm	Ø 23 mm	紧急停止	yellow	45-50J.140X	0.004 kg
Constant of the Constant of th	Emergency-stop l	egend				
elf-adhesive	Ø 75 x 1 mm	Ø 23 mm	NOT-HALT EMERGENCY STOP EMERGENZA EMERGENCIA	yellow	45-50J.140Z	0.004 kg
	Emergency-stop l	egend				
self-adhesive	150 x 38 mm	Ø 23 mm	without marking	yellow	45-561.1400	0.004 kg
5. 5.	Emergency-stop l	egend				
self-adhesive	150 x 38 mm	Ø 23 mm	NOT - AUS	yellow	45-561.140P	0.004 kg
	Emergency-stop l	egend				
self-adhesive	150 x 38 mm	Ø 23 mm	without marking	yellow	45-562.1400	0.004 kg

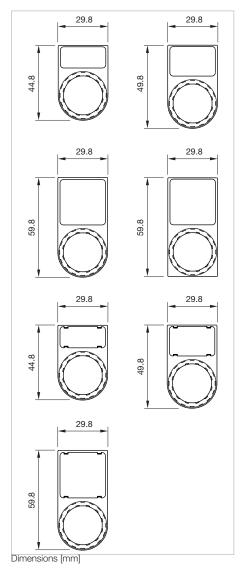
Legend plate for potentiometer

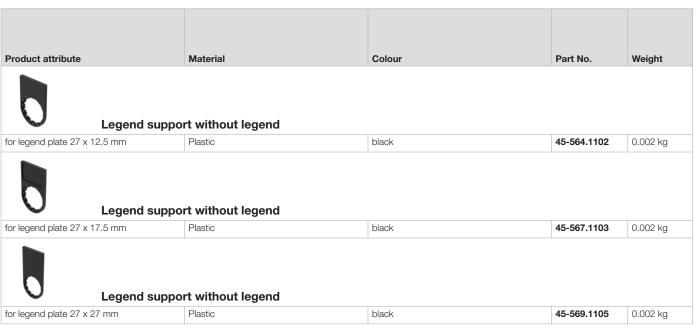
Dimension	Material	Colour	Part No.	Weight
Legend	plate for potentiometer			
Ø 40 mm	Plastic	black	45-538.1100	0.001 kg

Legend support without legend

Additional Information

• For sticking or snapping in place



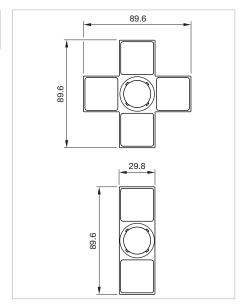


Product attribute	Material	Colour	Part No.	Weight
Legend supp	oort without legend			
for legend plate 27 x 27 mm	Plastic	black	45-570.1105	0.002 kg
	Plastic	black	45-564.1110	0.002 kg
Legend supplifor legend plate 27 x 12.5 mm	port without legend	black	45-564.1110	0.002 kg
	port without legend		4	Ta 222 t
for legend plate 27 x 17.5 mm	Plastic	black	45-567.1111	0.002 kg
Legend supp	port without legend			
for legend plate 27 x 27 mm	Plastic	black	45-569.1112	0.002 kg

Legend support without legend for toggle stick

Additional Information

For sticking or snapping in place



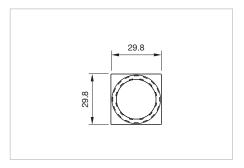
Dimensions [mm]

Product attribute	Material	Colour	Part No.	Weight
	support without legend for t	oggle stick		
Legena	ouppoit without logolia for t			
for legend plate 27 x 27 mm	Plastic	black	45-571.1105	0.002 kg
for legend plate 27 x 27 mm		black	45-571.1105	0.002 kg

Single frame, IP66, IP67, IP69K

Additional Information

For design square



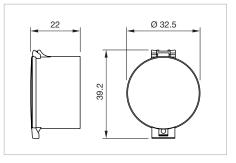
Dimensions [mm]

Dimension	Material	Colour	Part No.	Weight			
Single frame for design square							
29.8 x 29.8 mm	Plastic	black	45-558.0000	0.001 kg			

Protective cover, IP66, IP67

Additional Information

- Hinged, with means for sealing
- Please note that bigger minimum distances are necessary.



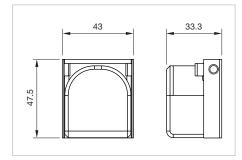
Dimensions [mm]

Material	Colour	Optics	Part No.	Weight			
Protective c	DVer black	opaque	45-555.1100	0.012 kg			
Protective cover							
Plastic	colourless	transparent	45-555.1K00	0.012 kg			

Protective cap

Product attribute	Front protection	Material	Colour	Optics	Part No.	Weight		
Protective of	ap for pushbutto	on						
for lens raised above bezel	IP66, IP67	Silicone	colourless	transparent	45-544.1K00	0.008 kg		
for lens flush	IP66, IP67	Silicone	colourless	transparent	45-545.1K00	0.008 kg		
Protective cap for twin pushbutton								
for lens raised above bezel	IP66, IP67	Silicone	colourless	transparent	45-547.1K00	0.011 kg		
for lens flush	IP66, IP67	Silicone	colourless	transparent	45-548.1K00	0.011 kg		
	ap for Emergeno		solo viloso	tvananavant	45 540 4V00	0.015 kg		
for lens raised above bezel	IP66, IP67	Silicone	colourless	transparent	45-542.1K00	0.015 kg		
	Protective cap for Mushroom-head pushbutton							
for Mushroom-head pushbutton Ø 40	IP66, IP67	Silicone	colourless	transparent	45-543.1K00	0.006 kg		
Protective cap for selector switch								
for lever switch, short lever	IP66, IP67	Silicone	colourless	transparent	45-546.1K00	0.006 kg		
Protective o								
for keylock switch	IP66, IP67	Silicone	colourless	transparent	45-50F.1100	0.006 kg		
.s. Asylook owiton	50, 11 01	500110		a a loparont	.5 55111100	2.000 Ng		

Cover, IP66, IP67, IP69K



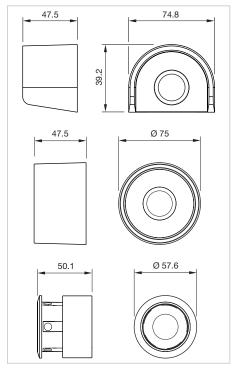
Dimensions [mm]

Product attribute	Material	Colour	Optics	Part No.	Weight
Cover for locking device					
For pushbuttons, selector switches with round or short lever	Metall/Kunststoff	silver/colourless	transparent	45-529.2100	0.043 kg

E-stop protective shroud

Additional Information

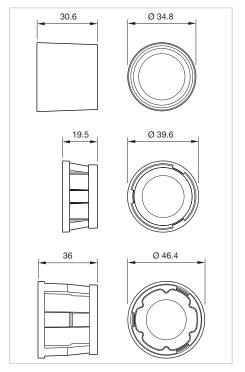
The protection shroud is not suitable for a proper use of emergency-stop. It can obstruct a sponta-neous operation of the emergency-stop



Dimensions [mm]

Product attribute	Material	Colour	Part No.	Weight
E-stop protective shrough	I			
non-illuminative	Plastic	yellow	45-549.1400	0.052 kg
E-stop protective shrough	ı			
non-illuminative	Plastic	grey	45-549.1800	0.052 kg
E-stop protective shrough	ı			
non-illuminative	Plastic	yellow	45-550.1400	0.044 kg
E-stop protective shrough	1			
for Emergency stop switch Ø 40 mm, for 5 padlocks	Metal	yellow	45-539.2400	0.162 kg
for Emergency stop switch Ø 40 mm, for 5 padlocks E-stop protective shrouce		yellow	45-539.2400	0.162 kg

Protective shroud, IP66, IP67, IP69K



Dimensions [mm]

Product attribute	Material	Colour	Part No.	Weight
Protective shro				
for pushbutton, selector switch	Plastic	black	45-50N.1100	0.010 kg
Protective shre	oud			
Protective shro	oud Metal	silver	45-50Q.2100	0.020 kg
	Metal	silver	45-50Q.2100	0.020 kg

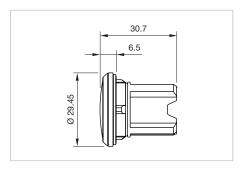
Sun collar

Product attribute	Material	Colour	Part No.	Weight
Sun collar				
for pushbutton illuminated	Plastic	black	45-560.1100	0.010 kg

Blind plug, IP66, IP67, IP69K

Additional Information

• Use with plastic or metal holder



Dimensions [mm]

Mounting cut-out		Material	Colour	Part No.	Weight
Wounting Cut-out		Waterial	Coloui	rait No.	Weight
	Blind plug				
Ø 22.5 mm		Plastic	black	45-506.1100	0.010 kg
	Blind plug				
Ø 22.5 mm	Blind plug	Metal sandgrey	silver	45-506.3A00	0.008 kg
Ø 22.5 mm	Blind plug Blind plug	Metal sandgrey	silver	45-506.3A00	0.008 kg

Locking device, IP66, IP67, IP69K

Product attribute		Dimension	Mat	terial	Colour	Part No.	Weight
Locking device							, ,
or pushbutton with lens raised		47 x 43.1 x 25.1 r	mm Met	al	silver	45-531.2100	0.047 kg
Locking device							
for pushbutton with lens flat		47 x 43.1 x 25.1 r		al	silver	45-532.2100	0.047 kg
or mushroom-head pushbutton Ø 30 mm or	Ø 40 mm	47 x 43.1 x 25.1 r	mm Met	al	silver	45-530.2100	0.047 kg
for selector switch in position left		47 x 47.1 x 21.1 r	mm Met	al	silver	45-534.2100	0.047 kg
Locking device							
for selector switch in position center		47 x 47.1 x 21.1 r	mm Met	al	silver	45-533.2100	0.047 kg
Locking device							
for selector switch in position right	47 x 47.	1 x 21.1 mm	Metal		silver	45-536.2100	0.047 kg
Locking device							
for selector switch in position center and right	47 x 47.	1 x 21.1 mm	Metal		silver	45-535.2100	0.047 kg
Locking device							
for selector switch in position center and left		1 x 21.1 mm	Metal		silver	45-537.2100	0.047 kg

Spare key

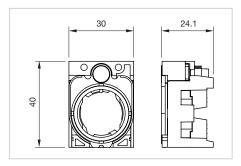
Additional Information

• For standard lock RONIS T254

Product attribute	Part No.	Weight
Spare key		
2 spare keys	45-522.0900	0.007 kg

Rear side

Holder for 3 elements

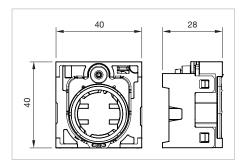


Dimensions [mm]

Product attribute Holder for 3 elements	Material	Part No.	Compo- nent layout	Weight
for all buttons except selector switch 4 positions and toggle stick	Plastic	45-2300.1000.000	2	0.028 kg
Holder for 3 elements				
for all buttons except selector switch 4 positions and toggle stick	Metal	45-2300.2000.000	2	0.046 kg

The component layouts you will find from Page 145

Holder for 4 elements

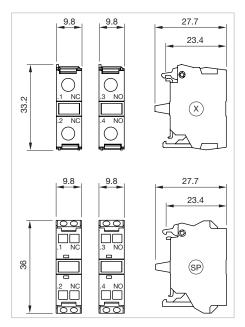


Dimensions [mm]

Product attribute	Material	Part No.	Compo- nent layout	Weight
Holder for 4 elements for selector switch 4 positions and toggle stick	Plastic	45-2400.1000.000	3	0.028 kg
Holder for 4 elements				
for selector switch 4 positions and toggle stick	Metal	45-2400.2000.000	3	0.046 kg

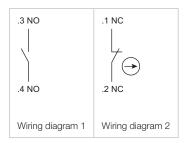
The component layouts you will find from Page 145

Switching element front mounting

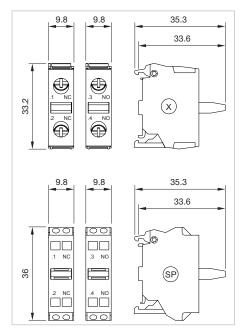


Dimensions [mm] X = Screw terminal, SP = Spring-type terminal

Switching current	Contacts	Contact material	Terminal	Part No.	Wiring dia- gram	Weight
	Switching element					
10 A	1 NO	Silver	Screw	45-311.1Z10	1	0.010 kg
10 A	1 NC	Silver	Screw	45-312.1 Z 10	2	0.010 kg
	Switching element					
10 A	1 NO	Silver	Spring-type terminal	45-311.1 Z 40	1	0.010 kg
10 A	1 NC	Silver	Spring-type terminal	45-312.1 Z 40	2	0.010 kg

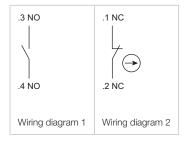


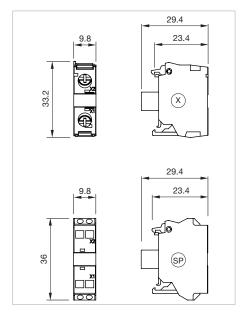
Switching element base mounting



Dimensions [mm] X = Screw terminal, SP = Spring-type terminal

Switching current	Contacts	Contact material	Terminal	Part No.	Wiring dia- gram Meight
Switching current	Contacts	Contact material	Terminal	Part NO.	> 0/ Weight
	Switching element				
10 A	1 NO	Silver	Screw	45-311.2Z10	1 0.010 kg
10 A	Switching element	Silver	Screw	45-312.2 Z 10	2 0.010 kg
10 A	1 NC	Silver	Screw	45-312.2 Z 10	2 0.010 kg
	Switching element				
10 A	Switching element	Silver	Spring-type terminal	45-311.2 Z 40	1 0.010 kg
10 A		Silver	Spring-type terminal	45-311.2 Z 40	1 0.010 kg





Dimensions [mm] X = Screw terminal, SP = Spring-type terminal

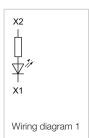
					Wiring dia- gram	
LED colour	Operating voltage	Lumi. intensityt	Terminal	Part No.	Wi	Weight
	Illumination element					
red	6-24 VAC/DC	4501120 mcd	Screw	45-320.1E11	1	0.009 kg
amber	6-24 VAC/DC	4501120 mcd	Screw	45-320.1F11	1	0.009 kg
yellow	6-24 VAC/DC	9001400 mcd	Screw	45-320.1G11	1	0.009 kg
green	6-24 VAC/DC	9001400 mcd	Screw	45-320.1H11	1	0.009 kg
blue	6-24 VAC/DC	280710 mcd	Screw	45-320.1J11	1	0.009 kg
white	6-24 VAC/DC	9001400 mcd	Screw	45-320.1N11	1	0.009 kg
red	24-240 VAC/DC	4501120 mcd	Screw	45-320.1E12	1	0.010 kg
amber	24-240 VAC/DC	4501120 mcd	Screw	45-320.1F12	1	0.010 kg
yellow	24-240 VAC/DC	9001400 mcd	Screw	45-320.1G12	1	0.010 kg
green	24-240 VAC/DC	9001400 mcd	Screw	45-320.1H12	1	0.010 kg
blue	24-240 VAC/DC	280710 mcd	Screw	45-320.1J12	1	0.010 kg
white	24-240 VAC/DC	9001400 mcd	Screw	45-320.1N12	1	0.010 kg
red	24 VAC/DC	4501120 mcd	Screw	45-320.1E16	1	0.009 kg
amber	24 VAC/DC	4501120 mcd	Screw	45-320.1F16	1	0.009 kg
yellow	24 VAC/DC	9001400 mcd	Screw	45-320.1G16	1	0.009 kg
green	24 VAC/DC	9001400 mcd	Screw	45-320.1H16	1	0.009 kg
blue	24 VAC/DC	280710 mcd	Screw	45-320.1J16	1	0.009 kg
white	24 VAC/DC	9001400 mcd	Screw	45-320.1N16	1	0.009 kg
red	110 VAC	4501120 mcd	Screw	45-320.1E17	1	0.010 kg
amber	110 VAC	4501120 mcd	Screw	45-320.1F17	1	0.010 kg
yellow	110 VAC	9001400 mcd	Screw	45-320.1G17	1	0.010 kg
green	110 VAC	9001400 mcd	Screw	45-320.1H17	1	0.010 kg
blue	110 VAC	280710 mcd	Screw	45-320.1J17	1	0.010 kg
white	110 VAC	9001400 mcd	Screw	45-320.1N17	1	0.010 kg

LED colour	Operating voltage	Lumi. intensity	Terminal	Part No.	Wiring dia- gram	Weight
red	230 VAC	4501120 mcd	Screw	45-320.1E18	1	0.010 kg
amber	230 VAC	4501120 mcd	Screw	45-320.1F18	1	0.010 kg
yellow	230 VAC	9001400 mcd	Screw	45-320.1G18	1	0.010 kg
green	230 VAC	9001400 mcd	Screw	45-320.1H18	1	0.010 kg
blue	230 VAC	280710 mcd	Screw	45-320.1J18	1	0.010 kg
white	230 VAC	9001400 mcd	Screw	45-320.1N18	1	0.010 kg

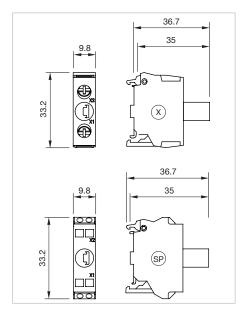


Illumination element

red	6-24 VAC/DC	4501120 mcd	Spring-type terminal	45-320.1E41	1	0.009 kg
amber	6-24 VAC/DC	4501120 mcd	Spring-type terminal	45-320.1F41	1	0.009 kg
yellow	6-24 VAC/DC	9001400 mcd	Spring-type terminal	45-320.1G41	1	0.009 kg
green	6-24 VAC/DC	9001400 mcd	Spring-type terminal	45-320.1H41	1	0.009 kg
blue	6-24 VAC/DC	280710 mcd	Spring-type terminal	45-320.1J41	1	0.009 kg
white	6-24 VAC/DC	9001400 mcd	Spring-type terminal	45-320.1N41	1	0.009 kg
red	24-240 VAC/DC	4501120 mcd	Spring-type terminal	45-320.1E42	1	0.010 kg
amber	24-240 VAC/DC	4501120 mcd	Spring-type terminal	45-320.1F42	1	0.010 kg
yellow	24-240 VAC/DC	9001400 mcd	Spring-type terminal	45-320.1G42	1	0.010 kg
green	24-240 VAC/DC	9001400 mcd	Spring-type terminal	45-320.1H42	1	0.010 kg
olue	24-240 VAC/DC	280710 mcd	Spring-type terminal	45-320.1J42	1	0.010 kg
white	24-240 VAC/DC	9001400 mcd	Spring-type terminal	45-320.1N42	1	0.010 kg
red	24 VAC/DC	4501120 mcd	Spring-type terminal	45-320.1E46	1	0.009 kg
amber	24 VAC/DC	4501120 mcd	Spring-type terminal	45-320.1F46	1	0.009 kg
yellow	24 VAC/DC	9001400 mcd	Spring-type terminal	45-320.1G46	1	0.009 kg
green	24 VAC/DC	9001400 mcd	Spring-type terminal	45-320.1H46	1	0.009 kg
blue	24 VAC/DC	280710 mcd	Spring-type terminal	45-320.1J46	1	0.009 kg
white	24 VAC/DC	9001400 mcd	Spring-type terminal	45-320.1N46	1	0.009 kg
red	110 VAC	4501120 mcd	Spring-type terminal	45-320.1E47	1	0.010 kg
amber	110 VAC	4501120 mcd	Spring-type terminal	45-320.1F47	1	0.010 kg
yellow	110 VAC	9001400 mcd	Spring-type terminal	45-320.1G47	1	0.010 kg
green	110 VAC	9001400 mcd	Spring-type terminal	45-320.1H47	1	0.010 kg
blue	110 VAC	280710 mcd	Spring-type terminal	45-320.1J47	1	0.010 kg
white	110 VAC	9001400 mcd	Spring-type terminal	45-320.1N47	1	0.010 kg
red	230 VAC	4501120 mcd	Spring-type terminal	45-320.1E48	1	0.010 kg
amber	230 VAC	4501120 mcd	Spring-type terminal	45-320.1F48	1	0.010 kg
yellow	230 VAC	9001400 mcd	Spring-type terminal	45-320.1G48	1	0.010 kg
green	230 VAC	9001400 mcd	Spring-type terminal	45-320.1H48	1	0.010 kg
blue	230 VAC	280710 mcd	Spring-type terminal	45-320.1J48	1	0.010 kg
white	230 VAC	9001400 mcd	Spring-type terminal	45-320.1N48	1	0.010 kg



Illumination element base mounting



Dimensions [mm] X = Screw terminal, SP = Spring-type terminal

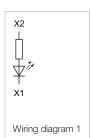
					Wiring dia- gram	
LED colour	Operating voltage	Lumi. intensity	Terminal	Part No.	Wiring	Weight
	Illumination element					
red	6-24 VAC/DC	4501120 mcd	Screw	45-320.2E11	1	0.009 kg
amber	6-24 VAC/DC	4501120 mcd	Screw	45-320.2F11	1	0.009 kg
yellow	6-24 VAC/DC	9001400 mcd	Screw	45-320.2G11	1	0.009 kg
green	6-24 VAC/DC	9001400 mcd	Screw	45-320.2H11	1	0.009 kg
blue	6-24 VAC/DC	280710 mcd	Screw	45-320.2J11	1	0.009 kg
white	6-24 VAC/DC	9001400 mcd	Screw	45-320.2N11	1	0.009 kg
red	24-240 VAC/DC	9001400 mcd	Screw	45-320.2E12	1	0.009 kg
amber	24-240 VAC/DC	4501120 mcd	Screw	45-320.2F12	1	0.009 kg
yellow	24-240 VAC/DC	9001400 mcd	Screw	45-320.2G12	1	0.009 kg
green	24-240 VAC/DC	9001400 mcd	Screw	45-320.2H12	1	0.009 kg
olue	24-240 VAC/DC	280710 mcd	Screw	45-320.2J12	1	0.009 kg
white	24-240 VAC/DC	9001400 mcd	Screw	45-320.2N12	1	0.009 kg
red	24 VAC/DC	4501120 mcd	Screw	45-320.2E16	1	0.009 kg
amber	24 VAC/DC	4501120 mcd	Screw	45-320.2F16	1	0.009 kg
yellow	24 VAC/DC	9001400 mcd	Screw	45-320.2G16	1	0.009 kg
green	24 VAC/DC	9001400 mcd	Screw	45-320.2H16	1	0.009 kg
olue	24 VAC/DC	280710 mcd	Screw	45-320.2J16	1	0.009 kg
white	24 VAC/DC	9001400 mcd	Screw	45-320.2N16	1	0.009 kg
red	110 VAC	4501120 mcd	Screw	45-320.2E17	1	0.009 kg
amber	110 VAC	4501120 mcd	Screw	45-320.2F17	1	0.009 kg
yellow	110 VAC	9001400 mcd	Screw	45-320.2G17	1	0.009 kg
green	110 VAC	9001400 mcd	Screw	45-320.2H17	1	0.009 kg
olue	110 VAC	280710 mcd	Screw	45-320.2J17	1	0.009 kg
white	110 VAC	9001400 mcd	Screw	45-320.2N17	1	0.009 kg

LED colour	Operating voltage	Lichtstärke	Terminal	Part No.	Wiring dia- gram	Weight
red	230 VAC	4501120 mcd	Screw	45-320.2E18	1	0.009 kg
amber	230 VAC	4501120 mcd	Screw	45-320.2F18	1	0.009 kg
yellow	230 VAC	9001400 mcd	Screw	45-320.2G18	1	0.009 kg
green	230 VAC	9001400 mcd	Screw	45-320.2H18	1	0.009 kg
blue	230 VAC	280710 mcd	Screw	45-320.2J18	1	0.009 kg
white	230 VAC	9001400 mcd	Screw	45-320.2N18	1	0.009 kg

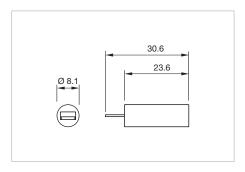


Illumination element

	manimation element					
red	6-24 VAC/DC	4501120 mcd	Spring-type terminal	45-320.2E41	1	0.009 kg
amber	6-24 VAC/DC	4501120 mcd	Spring-type terminal	45-320.2F41	1	0.009 kg
yellow	6-24 VAC/DC	9001400 mcd	Spring-type terminal	45-320.2G41	1	0.009 kg
green	6-24 VAC/DC	9001400 mcd	Spring-type terminal	45-320.2H41	1	0.009 kg
blue	6-24 VAC/DC	280710 mcd	Spring-type terminal	45-320.2J41	1	0.009 kg
white	6-24 VAC/DC	9001400 mcd	Spring-type terminal	45-320.2N41	1	0.009 kg
red	24-240 VAC/DC	4501120 mcd	Spring-type terminal	45-320.2E42	1	0.009 kg
amber	24-240 VAC/DC	4501120 mcd	Spring-type terminal	45-320.2F42	1	0.009 kg
yellow	24-240 VAC/DC	9001400 mcd	Spring-type terminal	45-320.2G42	1	0.009 kg
green	24-240 VAC/DC	9001400 mcd	Spring-type terminal	45-320.2H42	1	0.009 kg
blue	24-240 VAC/DC	280710 mcd	Spring-type terminal	45-320.2J42	1	0.009 kg
white	24-240 VAC/DC	9001400 mcd	Spring-type terminal	45-320.2N42	1	0.009 kg
red	24 VAC/DC	4501120 mcd	Spring-type terminal	45-320.2E46	1	0.009 kg
amber	24 VAC/DC	4501120 mcd	Spring-type terminal	45-320.2F46	1	0.009 kg
yellow	24 VAC/DC	9001400 mcd	Spring-type terminal	45-320.2G46	1	0.009 kg
green	24 VAC/DC	9001400 mcd	Spring-type terminal	45-320.2H46	1	0.009 kg
olue	24 VAC/DC	280710 mcd	Spring-type terminal	45-320.2J46	1	0.009 kg
white	24 VAC/DC	9001400 mcd	Spring-type terminal	45-320.2N46	1	0.009 kg
red	110 VAC	4501120 mcd	Spring-type terminal	45-320.2E47	1	0.009 kg
amber	110 VAC	4501120 mcd	Spring-type terminal	45-320.2F47	1	0.009 kg
yellow	110 VAC	9001400 mcd	Spring-type terminal	45-320.2G47	1	0.009 kg
green	110 VAC	9001400 mcd	Spring-type terminal	45-320.2H47	1	0.009 kg
olue	110 VAC	280710 mcd	Spring-type terminal	45-320.2J47	1	0.009 kg
white	110 VAC	9001400 mcd	Spring-type terminal	45-320.2N47	1	0.009 kg
red	230 VAC	4501120 mcd	Spring-type terminal	45-320.2E48	1	0.009 kg
amber	230 VAC	4501120 mcd	Spring-type terminal	45-320.2F48	1	0.009 kg
yellow	230 VAC	9001400 mcd	Spring-type terminal	45-320.2G48	1	0.009 kg
green	230 VAC	9001400 mcd	Spring-type terminal	45-320.2H48	1	0.009 kg
olue	230 VAC	280710 mcd	Spring-type terminal	45-320.2J48	1	0.009 kg
white	230 VAC	9001400 mcd	Spring-type terminal	45-320.2N48	1	0.009 kg

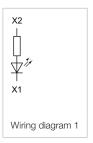


Illumination element PCB mounting

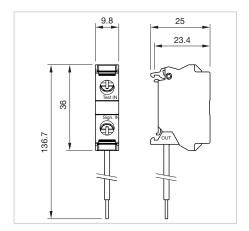


Dimensions [mm] X = Screw terminal, SP = Spring-type terminal

LED colour	Operating voltage	Terminal	Part No.	Wiring dia- gram	Weight
red	5 VDC	PCB terminal	45-320.3E60	1	0.009 kg
amber	5 VDC	PCB terminal	45-320.3F60	1	0.009 kg
yellow	5 VDC	PCB terminal	45-320.3G60	1	0.009 kg
green	5 VDC	PCB terminal	45-320.3H60	1	0.009 kg
blue	5 VDC	PCB terminal	45-320.3J60	1	0.009 kg
white	5 VDC	PCB terminal	45-320.3N60	1	0.009 kg



Test module

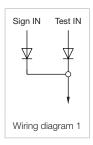


Dimensions [mm]

X = Screw terminal,

SP = Spring-type terminal

Product attribute	Operating voltage	Terminal	Part No.	Wiring dia- gram	Weight
	e front mounting		45 000 4445		0.044
front plate mounting	12-240 VAC/DC	Screw	45-330.1115	1	0.011 kg
Test modul	e base mounting				
base mounting	12-240 VAC/DC	Screw	45-330.2115	1	0.011 kg



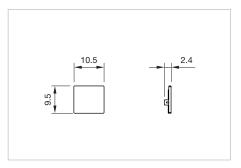
Extension plungers



Legend plate for switching elements

Additional Information

- Without inscription
- In support of the dust resistance



Dimensions [mm]

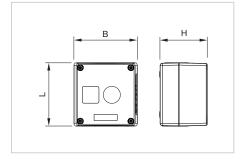
Product attribute	Dimension	Material	Colour	Part No.	Weight
Leger	nd plate				
for snapping in place	10.5 x 9.5 mm	Plastic	white	45-523.1900	0.001 kg

Mounting

Enclosure, IP66, IP67, IP69K

Additional Information

Openings for cable gland M16 or M20



Dimensions [mm]

Product attribute	Dimension	Material	Colour	Part No.	Weight
Enclosure					
mounting hole Ø 22.3 mm	L 85 x B 85 x H 64 mm	Plastic	grey	45-430.1801	0.251 kg
Enclosure					
mounting hole Ø 22.3 mm	L 85 x B 85 x H 64 mm	Plastic	yellow	45-410.1401	0.248 kg
mounting hole Ø 22.3 mm, for base mounting, top nd bottom 1 x M20	L 89.4 x B 85 x H 64 mm	Metal	yellow	45-410.2403	0.478 kg
Enclosure					
mounting hole Ø 22.3 mm, for base mounting, top and bottom 1 x M20	L 89.4 x B 85 x H 64 mm	Metal	grey	45-430.2803	0.479 kg
Enclosure				,	
mounting hole Ø 22.3 mm, with protective shroud	L 85 x B 85 x H 64 mm	Plastic	yellow	45-420.1401	0.287 kg
Enclosure					
mounting hole Ø 22.3 mm, with protective shroud, or base mounting, top and bottom 1 x M20	L 89.4 x B 85 x H 64 mm	Metal	grey	45-420.2803	0.568 kg

Enclosure 2 mounting holes Ø 22.3 mm 2 mounting holes Ø 22.3 mm, for base mounting, top and bottom 1 x M20 Enclosure 3 mounting holes Ø 22.3 mm 3 mounting holes Ø 22.3 mm, for base mounting, top and bottom 1 x M20 Enclosure 4 mounting holes Ø 22.3 mm L 15: Enclosure 4 mounting holes Ø 22.3 mm L 19: 4 mounting holes Ø 22.3 mm L 19:	x B 85 x H 64 mm	Plastic	grey grey	45-440.1801 45-440.2803 45-450.1801	0.299 kg 0.299 kg 0.364 kg 0.683 kg
Enclosure 2 mounting holes Ø 22.3 mm 2 mounting holes Ø 22.3 mm, for base mounting, op and bottom 1 x M20 Enclosure 3 mounting holes Ø 22.3 mm 3 mounting holes Ø 22.3 mm 4 mounting holes Ø 22.3 mm 5 Enclosure	x B 85 x H 64 mm	Plastic Metal Plastic	grey grey	45-440.1801 45-440.2803 45-450.1801	0.299 kg 0.299 kg 0.364 kg
2 mounting holes Ø 22.3 mm 2 mounting holes Ø 22.3 mm, for base mounting, top and bottom 1 x M20 Enclosure 3 mounting holes Ø 22.3 mm 3 mounting holes Ø 22.3 mm, for base mounting, top and bottom 1 x M20 Enclosure 4 mounting holes Ø 22.3 mm 4 mounting holes Ø 22.3 mm L 15:	x B 85 x H 64 mm N	Metal	grey	45-440.2803 45-450.1801	0.299 kg
2 mounting holes Ø 22.3 mm, for base mounting, top and bottom 1 x M20 Enclosure 3 mounting holes Ø 22.3 mm 3 mounting holes Ø 22.3 mm, for base mounting, top and bottom 1 x M20 Enclosure 4 mounting holes Ø 22.3 mm 4 mounting holes Ø 22.3 mm L 19:	x B 85 x H 64 mm N	Metal	grey	45-440.2803 45-450.1801	0.299 kg
Enclosure 3 mounting holes Ø 22.3 mm 3 mounting holes Ø 22.3 mm, for base mounting, top and bottom 1 x M20 Enclosure 4 mounting holes Ø 22.3 mm 4 mounting holes Ø 22.3 mm L 19	x B 85 x H 64 mm F	Plastic	grey	45-450.1801	0.364 kg
3 mounting holes Ø 22.3 mm L 15. 3 mounting holes Ø 22.3 mm, for base mounting, top and bottom 1 x M20 Enclosure 4 mounting holes Ø 22.3 mm L 19. 4 mounting holes Ø 22.3 mm, for base mounting, L 19.			3 -,		
Enclosure 4 mounting holes Ø 22.3 mm L 19	Y D 00 X 11 04 111111	IVICIAI	groy	-10 -700.2000	0.000 kg
Enclosure 4 mounting holes Ø 22.3 mm 4 mounting holes Ø 22.3 mm, for base mounting, L 19	X D 65 X H 64 IIIII	Metal	grey	45-450.2603	0.663 Kg
Enclosure 4 mounting holes Ø 22.3 mm L 19.4 mounting holes Ø 22.3 mm, for base mounting, L 19.5 L 19					
	x B 85 x H 64 mm F	Plastic	grey	45-460.1802	0.436 kg
	x B 85 x H 64 mm	Metal	grey	45-460.2804	0.799 kg
Enclosure 6 mounting holes Ø 22.3 mm L 28	1		,	,	0.600 kg
	v B 85 v H 64 mm	Plactic	grey	45-470 1802	
and bottom 1 x M20			9 7		0.602 kg 1.081 kg

Cable gland, IP66, IP67, IP69K

Thread	Material	Colour	Part No.	Weight
Cable gland				
M20	Plastic	black	45-507.1100	0.016 kg
M25	Plastic	black	45-509.1100	0.022 kg

Connection piece, IP 68

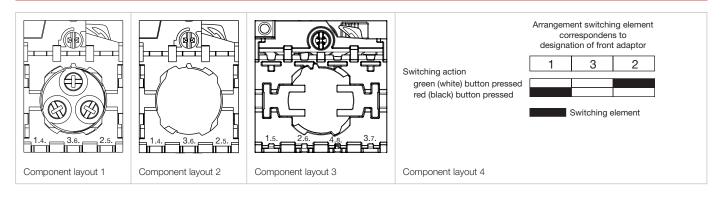
Product attribute	Thread	Material	Colour	Part No.	Weight
Connection piece					
for connecting 2 enclosures, with hexagonal nut	M20/M20	Plastic	black	45-50C.1900	0.050 kg
Connection piece					
for connecting 2 enclosures, with hexagonal nut	M20/M25	Plastic	black	45-50D.1900	0.055 kg
for connecting 2 enclosures, with hexagonal nut	M25/M25	Plastic	black	45-50E.1900	0.060 kg
Connection piece for connecting 2 enclosures, with hexagonal nut	M25/M25	Plastic	black	45-50E.1900	0.060 kg
Connection piece					
for connecting 2 enclosures, with hexagonal nut	M20/M20	Metal	silver	45-50C.2900	0.055 kg
Connection piece					
for connecting 2 enclosures, with hexagonal nut	M20/M25	Metal	silver	45-50D.2900	0.075 kg
Connection piece					
for connecting 2 enclosures, with hexagonal nut	M25/M25	Metal	silver	45-50E.2900	0.077 kg

Enclosure cover monitoring

Product attribute	Material	Colour	Part No.	Weight
Enclosure cove	er monitoring			
with extension plungers	Plastic	black	45-50G.0900	0.007 kg

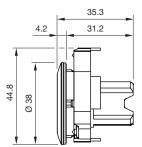
45 Drawings

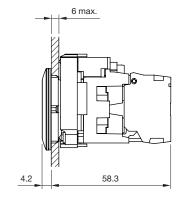
Drawings



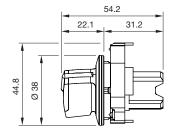
Dimensions incl. mounting depth of 3 or 4 elements

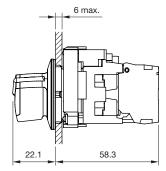
Indicator, Pushbutton, Illuminated pushbutton (flush design)



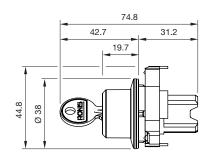


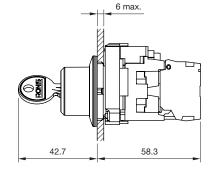
Selector switch short lever (flush design)



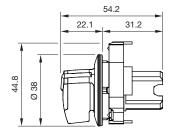


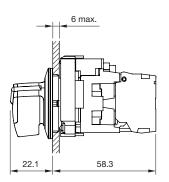
Keylock switch (flush design)



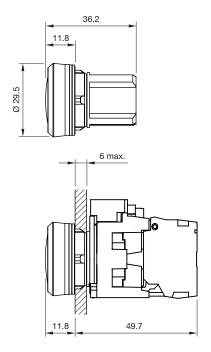


Selector switch long lever (flush design)

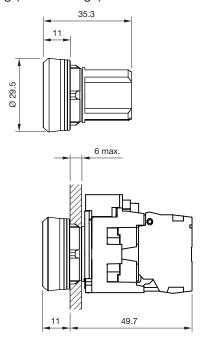




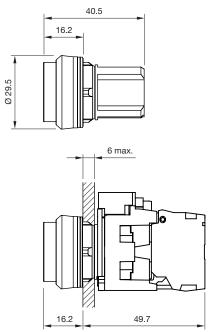
Indicator full face illumination (raised design)



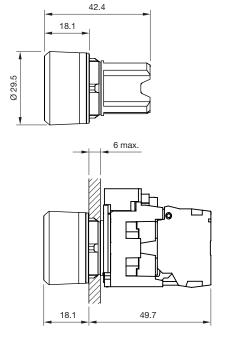
Indicator front illumination, Pushbutton, Illuminated pushbutton, Lens level with front ring (raised design)



Pushbutton, Illuminated pushbutton, lens raised above front ring (raised design)

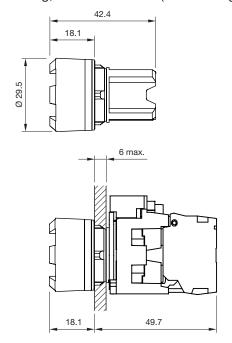


Pushbutton, lens lower than front ring (raised design)

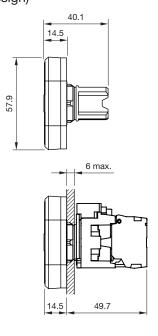


45 Drawings

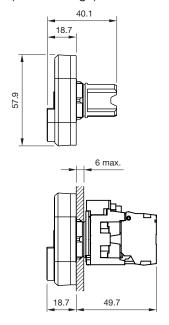
Pushbutton, Illuminated pushbutton, lens lower than front ring, with castellation (raised design)



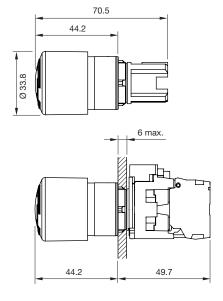
Double pushbutton, Lens level with front ring (raised design)



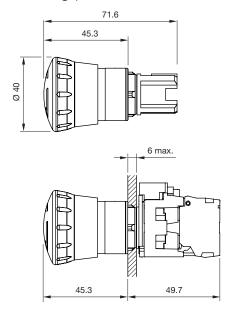
Double pushbutton, level with/raised above front ring (raised design)



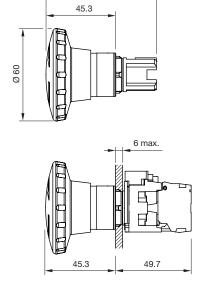
Emergency stop switch Ø 33.8 mm (raised design)



Emergency stop switch, Stop switch \varnothing 40 mm (raised design)

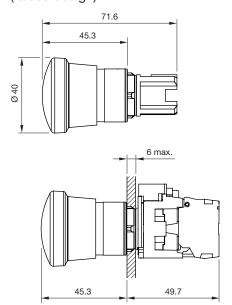


Emergency stop switch Ø 60 mm (raised design)

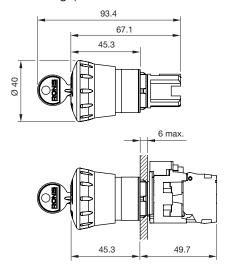


71.6

Emergency stop switch, Stop switch \emptyset 40 mm (raised design)

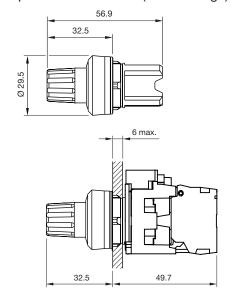


Emergency stop switch with key \emptyset 40 mm (raised design)

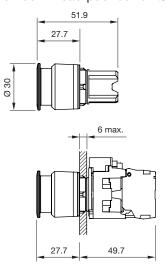


45 Drawings

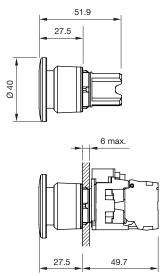
Stop switch Ø 29.5 mm (raised design)



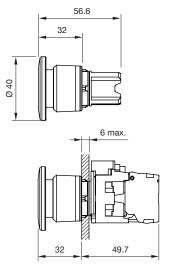
Mushroom-head pushbutton Ø 30 mm (raised design)



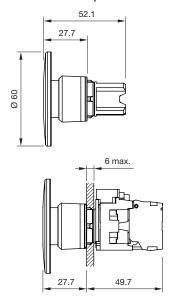
Mushroom-head pushbutton Momentary, Maintain, \varnothing 40 mm (raised design)



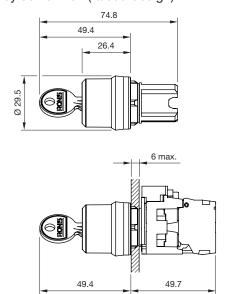
Mushroom-head pushbutton Momentary/Maintain, Momentary/Momentary, Ø 40 mm (raised design)



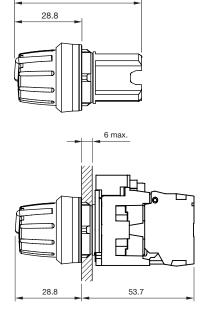
Mushroom-head pushbutton \emptyset 60 mm (raised design)



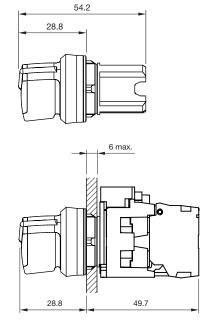
Keylock switch (raised design)



Selector switch, round lever (raised design)

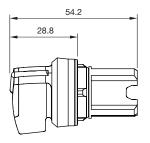


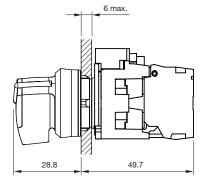
Selector switch, short lever (raised design)



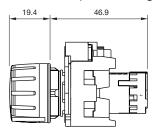
45 Drawings

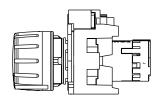
Selector switch, long lever (raised design)



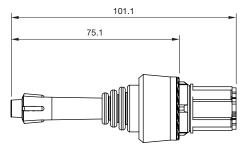


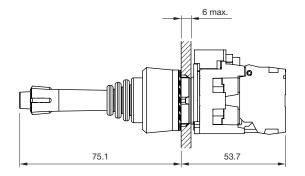
Potentiometer (raised design)



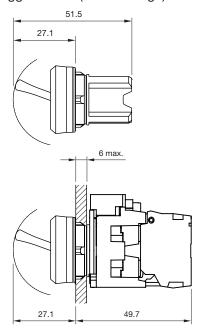


Toggle stick (raised design)





Toggle switch (raised design)



Indicator actuator

Material

Actuator element

Plastic

Front ring

Plastic or metal

Actuator housing

Plastic or metal

Mechanical characteristics

Vibration resistance

according to IEC 60068-2-6 2 ... 500 Hz: 5 g

Shock resistance

according to IEC 60068-2-27 Sinusoidal half-wave 50 g /11 ms

Environmental conditions

Operating temperature

-25 °C ... +70 °C

Storage temperature

-40 °C ... +80 °C

Protection degree

IP66, IP67, IP69K

Environmental category

during operation according to IEC 60721: 3K6, 3C3, 3S2, 3M6

Pushbutton actuator

Material

Actuator element

Plastic

Front ring

Plastic or metal

Actuator housing

Plastic or metal

Mechanical characteristics

Operating frequency

Lens flat/level with front bezel:

- Momentary max. 3 600/h
- Maintain max. 1 800/h

Lens flat/raised above front ring:

- Momentary max. 3 600/h
- Maintain max. 1 800/h

Lens flat/lower than front ring:

- Momentary max. 3 600/h

Lens flat/lower than front ring, with castellation:

- Momentary max. 3 600/h

Mechanical lifetime

Lens flat/level with front bezel:

- Momentary 10 000 000 switching cycles
- Maintain 500 000 switching cycles

Lens flat/raised above front ring:

- Momentary 10 000 000 switching cycles
- Maintain 500 000 switching cycles

Lens flat/lower than front ring:

- Momentary 10 000 000 switching cycles

Lens flat/lower than front ring, with castellation:

- Momentary 10 000 000 switching cycles

Vibration resistance

according to IEC 60068-2-6 20 ... 500 Hz: 5 g

Shock resistance

according to IEC 60068-2-27 Sinusoidal half-wave 50 g /11 ms

Environmental conditions

Operating temperature

-25 °C ... +70 °C

Storage temperature

-40 °C ... +80 °C

Protection degree

IP66, IP67, IP69K

Environmental category

45 Technical data

Double pushbutton actuator, Double pushbutton actuator illuminated

Material

Actuator element

Plastic

Front ring

Plastic or metal

Actuator housing

Plastic or metal

Mechanical characteristics

Operating frequency

max. 3 600/h

Mechanical lifetime

2 000 000 switching cycles

Vibration resistance

according to IEC 60068-2-6 10 ... 500 Hz: 5 g

Shock resistance

according to IEC 60068-2-27 Sinusoidal half-wave 50 g /11 ms

Environmental conditions

Operating temperature

-25 °C ... +70 °C

Storage temperature

-40 °C ... +80 °C

Protection degree

IP66, IP67, IP69K

Environmental category

during operation according to IEC 60721: 3K6, 3C3, 3S2, 3M6, 2B2

Illuminated pushbuton actuator

Material

Actuator element

Plastic

Front ring

Plastic or metal

Actuator housing

Plastic or metal

Mechanical characteristics

Operating frequency

Lens flat/level with front bezel:

- Momentary max. 3 600/h
- Maintain max. 1 800/h

Lens flat/raised above front ring:

- Momentary max. 3 600/h

Lens flat/lower than front ring, with castellation:

- Momentary max. 3 600/h

Mechanical lifetime

Lens flat/level with front bezel:

- Momentary 3 000 000 switching cycles
- Maintain 500 000 switching cycles

Lens flat/raised above front ring:

- Momentary 3 000 000 switching cycles

Lens flat/lower than front ring, with castellation:

- Momentary 3 000 000 switching cycles

Vibration resistance

according to IEC 60068-2-6 20 ... 500 Hz: 5 g

Shock resistance

according to IEC 60068-2-27 Sinusoidal half-wave 50 g /11 ms

Environmental conditions

Operating temperature

−25 °C ... +70 °C

Storage temperature

–40 °C ... +80 °C

Protection degree

IP66, IP67, IP69K

Environmental category

Emergency stop switch actuator

Material

Actuator element

Plastic red

Actuator housing

Plastic or metal

Mechanical characteristics

Type of unlocking device

Twist to release, pull release or key to release

Operating frequency

max. 600/h

Mechanical lifetime

300 000 switching cycles

Vibration resistance

according to IEC 60068-2-6 2 ... 500 Hz: 5 g

Shock resistance

according to IEC 60068-2-27 Sinusoidal half-wave 50 g /11 ms

Environmental conditions

Operating temperature

−25 °C ... +70 °C

Storage temperature

–40 °C ... +80 °C

Protection degree

IP66, IP67, IP69K

Environmental category

during operation according to IEC 60721: 3K6, 3C3, 3S2, 3M6

Stop switch actuator

Material

Actuator element

Plastic red

Actuator housing

Plastic or metal

Mechanical characteristics

Type of unlocking device

Twist to release

Operating frequency

max. 600/h

Mechanical lifetime

300 000 switching cycles

Vibration resistance

according to IEC 60068-2-6 2 ... 500 Hz: 5 g

Shock resistance

according to IEC 60068-2-27 Sinusoidal half-wave 50 g /11 ms

Environmental conditions

Operating temperature

-25 °C ... +70 °C

Storage temperature

-40 °C ... +80 °C

Protection degree

IP66, IP67, IP69K

Environmental category

45 Technical data

Mushroom-head pushbuton actuator

Material

Actuator element

Plastic

Actuator housing

Plastic or metal

Mechanical characteristics

Type of unlocking device

Pull release

Operating frequency

- Momentary max. 3 600/h

- Maintain max. 1 800/h

Mechanical lifetime

- Momentary 10 000 000 switching cycles

- Maintain 500 000 switching cycles

Vibration resistance

according to IEC 60068-2-6 20 ... 500 Hz: 5 g Shock resistance

according to IEC 60068-2-27 Sinusoidal half-wave 50 g /11 ms

Environmental conditions

Operating temperature

−25 °C ... +70 °C

Storage temperature

–40 °C ... +80 °C

Protection degree

IP66, IP67, IP69K

Environmental category

during operation according to IEC 60721: 3K6, 3C3, 3S2, 3M6

Keylock switch actuator

Material

Actuator element

Metal

Front ring

Plastic or metal

Actuator housing

Plastic or metal

Mechanical characteristics

Operating frequency

max. 1800/h

Mechanical lifetime

1 000 000 switching cycles

Vibration resistance

according to IEC 60068-2-6 10 ... 500 Hz: 5 g **Shock resistance**

according to IEC 60068-2-27 Sinusoidal half-wave 50 g /11 ms

Environmental conditions

Operating temperature

−25 °C ... +70 °C

Storage temperature

-40 °C ... +80 °C

Protection degree

IP66, IP67, IP69K

Environmental category

during operation according to IEC 60721:

3K6, 3C3, 3S2, 3M6

Selector switch actuator

Material

Actuator element

Round lever, plastic, illuminable Short lever, plastic, illuminable Long lever, plastic, illuminable

Front ring

Plastic or metal

Actuator housing

Plastic or metal

Mechanical characteristics

Operating frequency

max. 1800/h

Mechanical lifetime

1 000 000 switching cycles

Vibration resistance

according to IEC 60068-2-6 10 ... 500 Hz: 5 g

Shock resistance

according to IEC 60068-2-27 Sinusoidal half-wave 50 g /11 ms

Environmental conditions

Operating temperature

-25 °C ... +70 °C

Storage temperature

-40 °C ... +80 °C

Protection degree

IP66, IP67, IP69K

Environmental category

during operation according to IEC 60721: 3K6, 3C3, 3S2, 3M6

Potentiometer

Material

Actuator element

Round lever, plastic

Front ring

Plastic or metal

Actuator housing

Plastic or metal

Mechanical characteristics

Terminals

Screw terminal

- Solid 2 x (1.0 ... 1.5 mm²)
- With end sleeves 2 x (0.5 ... 0.75 mm²)
- Finely stranded
- Without end sleeves 2 x (0.5 ... 0.75 mm²)
- With end sleeves 2 x (0.5 ... 1.5 mm²)
- For AWG cables for auxiliary contacts 2 x (18 \dots 14)

Tightening torque

0.8 ... 1 Nm

Operating frequency

max. 1 800/h

Mechanical lifetime

25 000 switching cycles

Vibration resistance

according to IEC 60068-2-6 10 ... 500 Hz: 5 g

Shock resistance

according to IEC 60068-2-27 Sinusoidal half-wave 50 g /11 ms

Slewing range

275° ±2°

Electrical characteristics

Active power consumption

0.5 W

Insulation voltage

Rated value 500 V

45 Technical data

Environmental conditions

Operating temperature

-25 °C ... +70 °C

Storage temperature

-40 °C ... +80 °C

Protection degree

IP66, IP67, IP69K

Environmental category

during operation according to IEC 60721: 3K6, 3C3, 3S2, 3M6

Toggle stick actuator

Material

Actuator element

Plastic

Front ring

Plastic or metal

Actuator housing

Plastic or metal

Mechanical characteristics

Operating frequency

3 600/h

Mechanical lifetime

Momentary: 250 000 switching cycles

Vibration resistance

according to IEC 60068-2-6 10 ... 500 Hz: 5 g

Shock resistance

according to IEC 60068-2-27 Sinusoidal half-wave 50 g /11 ms

Environmental conditions

Operating temperature

−25 °C ... +70 °C

Storage temperature

-40 °C ... +80 °C

Protection degree

IP65, IP67

Environmental category

Toggle switch actuator

Material

Actuator element

Plastic

Front ring

Plastic or metal

Actuator housing

Plastic or metal

Mechanical characteristics

Operating frequency

max. 1 800/h

Mechanical lifetime

1 000 000 switching cycles

Vibration resistance

according to IEC 60068-2-6 10 ... 500 Hz: 5 g

Shock resistance

according to IEC 60068-2-27 Sinusoidal half-wave 50 g /11 ms

Environmental conditions

Operating temperature

-25 °C ... +70 °C

Storage temperature

-40 °C ... +80 °C

Protection degree

IP66, IP67, IP69K

Environmental category

during operation according to IEC 60721: 3K6, 3C3, 3S2, 3M6

Slow-make switching element

Switching system

The double-break, slow-make switching element is equipped with normally open or normally closed contact. The normally closed contact has forced opening. Slow-make contacts with forced action are ideal for high switch ratings. Up to six switching elements can be snapped to each holder.

The NC contact opens automatically upon disconnection of the actuator. On delivery, the contact is open (= safe state). Activation (= NC contacts on the non-actuated commanding device are closed) takes place upon first-time actuation after the contact block is snapped onto the actuator.

Material

Material of contact

Silver alloy

Housing

Plastic

Mechanical characteristics

Terminals

Screw terminal

- Solid 2 x (1.0 ... 1.5 mm²)
- With end sleeves 2 x (0.5 ... 0.75 mm²)
- Finely stranded
- Without end sleeves 2 x (0.5 ... 0.75 mm²)
- With end sleeves 2 x (0.5 ... 1.5 mm²)
- For AWG cables for auxiliary contacts 2 x (18 ... 14)

Spring-type terminal (SP)

- Solid 2 x (0.25 ... 1.5 mm²)
- Finely stranded
- Without end sleeves 2 x (0.5 ... 1.5 mm²)
- With end sleeves 2 x (0.5 ... 0.75 mm²)
- For AWG cables for auxiliary contacts 2 x (24 ... 16)

Tightening torque

Screw terminal, spring-type terminal 0.8 ... 0.9 Nm

Operating frequency

max. 3 600/h

45 Technical data

Mechanical lifetime

10 000 000 switching cycles

Vibration resistance

according to IEC 60068-2-6 2 ... 500 Hz: 5 g

Shock resistance

according to IEC 60068-2-27 Sinusoidal half-wave 50 g /11 ms

Electrical characteristics

Standards

The switches comply with the "Standards for low-voltage switching devices" EN IEC 60947-5-1

Thermal current

10 A

Insulation voltage

Rated value 500 V

Pollution degree

3

Surge voltage resistance

Rated value 6 kV

Contact reliability

One contact failure per 100 million switching operations (17 V, 5 mA)

One contact failure per 10 million switching operations (5 V, 1 mA)

Operating voltage

at AC

- Rated value 5 ... 500 V

at DC

- Rated value 5 ... 500 V

Operating current

at AC-12 Voltage 24 V 230 V 500 V Current 10 A 10 A 10 A

at AC-15

Voltage 24V 230 V 400 V 500 V Current 6 A 6 A 3 A 1.4 A

at DC-12

Voltage 24 V 48 V 110 V 230 V 400 V 500 V Current 10 A 5 A 2.5 A 1 A 0.3 A 0.2 A

at DC-13

Voltage 24 V 48 V 110 V 230 V 400 V 500 V Current 3 A 1.5 A 0.7 A 0.3 A 0.1 A 0.07 A

Environmental conditions

Operating temperature

-25 °C ... +70 °C

Storage temperature

-40 °C ... +80 °C

Protection degree

Housing IP40 Terminal IP20

Environmental category

during operation according to IEC 60721:

3K6, 3C3, 3S2, 3M6

Approvals

Approbations

CCC CSA

UL

Illumination element

Material

Housing

Plastic

Mechanical characteristics

Terminals

Screw terminal

- Solid 2 x (1.0 ... 1.5 mm²)
- With end sleeves 2 x (0.5 ... 0.75 mm²)
- Finely stranded
- Without end sleeves 2 x (0.5 ... 0.75 mm²)
- With end sleeves 2 x (0.5 ... 1.5 mm²)
- For AWG cables for auxiliary contacts 2 x (18 ... 14)

Spring-type terminal (SP)

- Solid 2 x (0.25 ... 1.5 mm²)
- Finely stranded
- Without end sleeves 2 x (0.5 ... 1.5 mm²)
- With end sleeves 2 x (0.5 ... 0.75 mm²)
- For AWG cables for auxiliary contacts 2 x (24 ... 16)

Tightening torque

Screw terminal, spring-type terminal 0.8 ... 0.9 Nm

Shock resistance

according to IEC 60068-2-27 Sinusoidal half-wave 50 g /11 ms $\,$

Vibration resistance

according to IEC 60068-2-6 2 ... 500 Hz: 5 g

Electrical characteristics

Standards

The switches comply with the "Standards for low-voltage switching devices" EN IEC 60947-5-1

EAO reserves the right to alter specifications without further notice.

Electrical life

100 000 h

Insulation voltage

Rated value 320 V

Surge voltage resistance

Rated value 4 kV

Environmental conditions

Operating temperature

-25 °C ... +70 °C

Storage temperature

-40 °C ... +80 °C

Protection degree

Terminal IP20

Environmental category

during operation according to IEC 60721: 3K6, 3C3, 3S2, 3M6

Approvals

Approbations

CCC CSA UL

Declaration of conformity

CE



Inscription marking plates and legend plates

Labels can be inserted for identification pusposes in illuminated pushbuttons and pushbuttons with a flat lens. This marking plates are made of translucent plastic with a black inscription, which can be fitted in any 90° angle.

Standard texts for marking plates

Example	Start	Part No. 45-563.0K00.T00029
---------	-------	-----------------------------

Standard texts German		Standard texts English	
Ein	Part No. 45-563.0K00.T00001	On	Part No. 45-563.0K00.T00020
Aus	Part No. 45-563.0K00.T00002	Off	Part No. 45-563.0K00.T00021
Auf	Part No. 45-563.0K00.T00003	Up	Part No. 45-563.0K00.T00022
Ab	Part No. 45-563.0K00.T00004	Down	Part No. 45-563.0K00.T00023
Vor	Part No. 45-563.0K00.T00005	Forward	Part No. 45-563.0K00.T00024
Zurück	Part No. 45-563.0K00.T00006	Right	Part No. 45-563.0K00.T00026
Rechts	Part No. 45-563.0K00.T00007	Left	Part No. 45-563.0K00.T00027
Links	Part No. 45-563.0K00.T00008	Stop	Part No. 45-563.0K00.T00028
Halt	Part No. 45-563.0K00.T00009	Start	Part No. 45-563.0K00.T00029
Zu	Part No. 45-563.0K00.T00010	Reset	Part No. 45-563.0K00.T00030
Schnell	Part No. 45-563.0K00.T00011	Test	Part No. 45-563.0K00.T00031
Langsam	Part No. 45-563.0K00.T00012	Open	Part No. 45-563.0K00.T00032
Betrieb	Part No. 45-563.0K00.T00013	Close	Part No. 45-563.0K00.T00033
Störung	Part No. 45-563.0K00.T00014	Running	Part No. 45-563.0K00.T00035
Einrichten	Part No. 45-563.0K00.T00018	Fast	Part No. 45-563.0K00.T00044
		Slow	Part No. 45-563.0K00.T00045

Symbols for marking plates

Graphic symbols are according to ISO 7000 or IEC 60417.

O Part No. 45-563.0K00.S00001	Part No. 45-563.0K00.S00012 Decrease, Minus	Part No. 45-563.0K00.S00023 Unlock
Part No. 45-563.0K00.S00002	Part No. 45-563.0K00.S00013 Electric motor	Part No. 45-563.0K00.S00024 Setting
Part No. 45-563.0K00.S00003	Part No. 45-563.0K00.S00014 Horn	Part No. 45-563.0K00.S00025 On-Off momentary contact type
Part No. 45-563.0K00.S00004	Part No. 45-563.0K00.S00015 Water tap	Part No. 45-563.0K00.S00026 Manual operating
Part No. 45-563.0K00.S00005 Arrow direction to right	Part No. 45-563.0K00.S00016 Pump	Part No. 45-563.0K00.S00027 Automatic cycle
Part No. 45-563.0K00.S00006 Arrow direction up	Part No. 45-563.0K00.S00017 Coolant pump	Part No. 45-563.0K00.S00028 Suction
Part No. 45-563.0K00.S00007 Clockwise rotation	Part No. 45-563.0K00.S00018 Lock, tighten	Part No. 45-563.0K00.S00029 Blowing
Part No. 45-563.0K00.S00008 Counterclockwise rotation	Part No. 45-563.0K00.S00019 Unlock, unclamp	
Part No. 45-563.0K00.S00009 Rapid traverse	Part No. 45-563.0K00.S00020 Brake	
Part No. 45-563.0K00.S00010 Feed	Part No. 45-563.0K00.S00021 Release brake	
Part No. 45-563.0K00.S00011 Increase, Plus	Part No. 45-563.0K00.S00022 Interlock	

Customized inscription for marking plates

All dimensions in mm

Height of letters	Number of lines	Number of letters per line (target value)		
h		b1	b2	b3
4	1	10	-	_
3	2	_	8	-
	3	10	_	6







The gap between two words results in each case a letter less.

45 Marking

Standard texts for legend plates black, 27 x 12.5 mm

Example

Reset

Part No. 45-573.1102.T00030

Standard text	s German	Standard tex	ts English	Standard tex	ts French
Ein	Part No. 45-573.1102.T00001	On	Part No. 45-573.1102.T00020	Marche	Part No. 45-573.1102.T00048
Aus	Part No. 45-573.1102.T00002	Off	Part No. 45-573.1102.T00021	Arrêt	Part No. 45-573.1102.T00049
Auf	Part No. 45-573.1102.T00003	Up	Part No. 45-573.1102.T00022	Montée	Part No. 45-573.1102.T00050
Ab	Part No. 45-573.1102.T00004	Down	Part No. 45-573.1102.T00023	Descente	Part No. 45-573.1102.T00051
Vor	Part No. 45-573.1102.T00005	Forward	Part No. 45-573.1102.T00024	Avant	Part No. 45-573.1102.T00052
Zurück	Part No. 45-573.1102.T00006	Reverse	Part No. 45-573.1102.T00025	Retour	Part No. 45-573.1102.T00053
Rechts	Part No. 45-573.1102.T00007	Right	Part No. 45-573.1102.T00026	Droite	Part No. 45-573.1102.T00054
Links	Part No. 45-573.1102.T00008	Left	Part No. 45-573.1102.T00027	Gauche	Part No. 45-573.1102.T00055
Halt	Part No. 45-573.1102.T00009	Stop	Part No. 45-573.1102.T00028	Ouvert	Part No. 45-573.1102.T00056
Zu	Part No. 45-573.1102.T00010	Start	Part No. 45-573.1102.T00029	Fermé	Part No. 45-573.1102.T00057
Betrieb	Part No. 45-573.1102.T00013	Reset	Part No. 45-573.1102.T00030	Rapide	Part No. 45-573.1102.T00058
Störung	Part No. 45-573.1102.T00014	Test	Part No. 45-573.1102.T00031	En Service	Part No. 45-573.1102.T00059
Hand Auto	Part No. 45-573.1102.T00015	Open	Part No. 45-573.1102.T00032	Defaut	Part No. 45-573.1102.T00060
Hand O Auto	Part No. 45-573.1102.T00017	Close	Part No. 45-573.1102.T00033	Reglage	Part No. 45-573.1102.T00061
		Jog	Part No. 45-573.1102.T00034	Arrêt d`urgence	Part No. 45-573.1102.T00062
		Running	Part No. 45-573.1102.T00035	Hors service	Part No. 45-573.1102.T00063
		Fault	Part No. 45-573.1102.T00036	Sous tension	Part No. 45-573.1102.T00064
		Run	Part No. 45-573.1102.T00037	Manu Auto	Part No. 45-573.1102.T00065
		Stop Start	Part No. 45-573.1102.T00038	Marche Arrêt	Part No. 45-573.1102.T00066
		Off On	Part No. 45-573.1102.T00039	Rearmement	Part No. 45-573.1102.T00067
		Power off	Part No. 45-573.1102.T00040		
		Power on	Part No. 45-573.1102.T00041		
		Man O Auto	Part No. 45-573.1102.T00042		
		Man Auto	Part No. 45-573.1102.T00043		

Symbols for legend plates black, 27 x 12.5 mm

\circ	Part No. 45-573.1102.S00001	1 2	Part No. 45-573.1102.S00007
	Part No. 45-573.1102.S00002	*	Part No. 45-573.1102.S00009 Arrow/Direction up
0	Part No. 45-573.1102.S00005		

Standard texts for legend plates silver, 27 x 12.5 mm

Example Reset	Part No. 45-573.1A02.T00030
---------------	-----------------------------

Standard texts German		Standard tex	ts English
Ein	Part No. 45-573.1A02.T00001	On	Part No. 45-573.1A02.T00020
Aus	Part No. 45-573.1A02.T00002	Off	Part No. 45-573.1A02.T00021
Auf	Part No. 45-573.1A02.T00003	Up	Part No. 45-573.1A02.T00022
Ab	Part No. 45-573.1A02.T00004	Down	Part No. 45-573.1A02.T00023
Vor	Part No. 45-573.1A02.T00005	Stop	Part No. 45-573.1A02.T00028
Zurück	Part No. 45-573.1A02.T00006	Start	Part No. 45-573.1A02.T00029
Rechts	Part No. 45-573.1A02.T00007	Reset	Part No. 45-573.1A02.T00030
Links	Part No. 45-573.1A02.T00008	Test	Part No. 45-573.1A02.T00031
Halt	Part No. 45-573.1A02.T00009	Open	Part No. 45-573.1A02.T00032
Zu	Part No. 45-573.1A02.T00010	Close	Part No. 45-573.1A02.T00033
Schnell	Part No. 45-573.1A02.T00011	Man O Auto	Part No. 45-573.1A02.T00042
Langsam	Part No. 45-573.1A02.T00012	Man Auto	Part No. 45-573.1A02.T00043
Betrieb	Part No. 45-573.1A02.T00013	Running	Part No. 45-573.1A02.T00035
Störung	Part No. 45-573.1A02.T00014	Fault	Part No. 45-573.1A02.T00036
Hand Auto	Part No. 45-573.1A02.T00015	Fast	Part No. 45-573.1A02.T00044
Stop Start	Part No. 45-573.1A02.T00016	Slow	Part No. 45-573.1A02.T00045
Hand O Auto	Part No. 45-573.1A02.T00017		

Symbols for legend plates silver, 27 x 12.5 mm

0	Part No. 45-573.1A02.S00001		Part No. 45-573.1A02.S00006
	Part No. 45-573.1A02.S00002	1 🔾 2	Part No. 45-573.1A02.S00007
	Part No. 45-573.1A02.S00003	-	Part No. 45-573.1A02.S00008 Arrow/Direction right
	Part No. 45-573.1A02.S00004	*	Part No. 45-573.1A02.S00009 Arrow/Direction up
0	Part No. 45-573.1A02.S00005		



Standard texts for legend plates black, 27 x 17.5 mm

Example	Stop	Part No. 45-573.1103.T00028
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Standard texts German		Standard texts English		Standard texts French	
Ein	Part No. 45-573.1103.T00001	On	Part No. 45-573.1103.T00020	Marche	Part No. 45-573.1103.T00048
Aus	Part No. 45-573.1103.T00002	Off	Part No. 45-573.1103.T00021	Arrêt	Part No. 45-573.1103.T00049
Auf	Part No. 45-573.1103.T00003	Up	Part No. 45-573.1103.T00022	Droite	Part No. 45-573.1103.T00054
Ab	Part No. 45-573.1103.T00004	Down	Part No. 45-573.1103.T00023	Gauche	Part No. 45-573.1103.T00055
Vor	Part No. 45-573.1103.T00005	Forward	Part No. 45-573.1103.T00024	En Service	Part No. 45-573.1103.T00059
Zurück	Part No. 45-573.1103.T00006	Reverse	Part No. 45-573.1103.T00025	Defaut	Part No. 45-573.1103.T00060
Halt	Part No. 45-573.1103.T00009	Right	Part No. 45-573.1103.T00026	Sous tension	Part No. 45-573.1103.T00064
Zu	Part No. 45-573.1103.T00010	Stop	Part No. 45-573.1103.T00028	Manu Auto	Part No. 45-573.1103.T00065
Betrieb	Part No. 45-573.1103.T00011	Start	Part No. 45-573.1103.T00029	Marche Arrêt	Part No. 45-573.1103.T00066
Störung	Part No. 45-573.1103.T00014	Open	Part No. 45-573.1103.T00032	Rearmement	Part No. 45-573.0K00.T00067
Hand Auto	Part No. 45-573.1103.T00015	Close	Part No. 45-573.1103.T00033		
		Running	Part No. 45-573.1103.T00035		
		Fault	Part No. 45-573.1103.T00036		
		Stop Start	Part No. 45-573.1103.T00038		
		Man Auto	Part No. 45-573.1103.T00043		

Symbols for legend plates black, 27 x 12.5 mm

\circ	Part No. 45-573.1103.S00001	→	Part No. 45-573.1103.S00008 Arrow/Direction right
	Part No. 45-573.1103.S00002	*	Part No. 45-573.1103.S00009 Arrow/Direction up
0	Part No. 45-573.1103.S00005		

Standard texts for legend plates silver, 27 x 17.5 mm

Example Stop	Part No. 45-573.1A03.T00028
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Standard texts German		Standard texts English		
Ein	Part No. 45-573.1A03.T00001	On	Part No. 45-573.1A03.T00020	
Aus	Part No. 45-573.1A03.T00002	Off	Part No. 45-573.1A03.T00021	
Auf	Part No. 45-573.1A03.T00003	Stop	Part No. 45-573.1A03.T00028	
Ab	Part No. 45-573.1A03.T00004	Start	Part No. 45-573.1A03.T00029	
Vor	Part No. 45-573.1A03.T00005	Reset	Part No. 45-573.1A03.T00030	
Zurück	Part No. 45-573.1A03.T00006	Fault	Part No. 45-573.1A03.T00036	
Rechts	Part No. 45-573.1A03.T00007	Man O Auto	Part No. 45-573.1A03.T00043	
Halt	Part No. 45-573.1A03.T00009			
Zu	Part No. 45-573.1A03.T00010			
Betrieb	Part No. 45-573.1A03.T00013			
Störung	Part No. 45-573.1A03.T00014			
Hand Auto	Part No. 45-573.1A03.T00015			
Hand O Auto	Part No. 45-573.1A03.T00017			

Symbols for legend plates silver, 27 x 17.5 mm

	Part No. 45-573.1A02.S00001	1 🔾 2	Part No. 45-573.1A02.S00007
	Part No. 45-573.1A02.S00002	→	Part No. 45-573.1A02.S00008 Arrow/Direction right
0	Part No. 45-573.1A02.S00005	*	Part No. 45-573.1A02.S00009 Arrow/Direction up

45 Marking

Standard texts for legend plates black, 27 x 27 mm

Example Stop

Part No. 45-573.1103.T00028

Standard texts German		Standard tex	cts English	Standard text	Standard texts French		
Ein	Part No. 45-573.1105.T00001	On	Part No. 45-573.1105.T00020	Marche	Part No. 45-573.1105.T00048		
Aus	Part No. 45-573.1105.T00002	Off	Part No. 45-573.1105.T00021	Arrêt	Part No. 45-573.1105.T00049		
Auf	Part No. 45-573.1105.T00003	Up	Part No. 45-573.1105.T00022	Montée	Part No. 45-573.1105.T00050		
Ab	Part No. 45-573.1105.T00004	Down	Part No. 45-573.1105.T00023	Descente	Part No. 45-573.1105.T00051		
Vor	Part No. 45-573.1105.T00005	Forward	Part No. 45-573.1105.T00024	En Service	Part No. 45-573.1105.T00059		
Zurück	Part No. 45-573.1105.T00006	Reverse	Part No. 45-573.1105.T00025	Defaut	Part No. 45-573.1105.T00060		
Rechts	Part No. 45-573.1105.T00007	Stop	Part No. 45-573.1105.T00028	Sous tension	Part No. 45-573.1105.T00064		
Links	Part No. 45-573.1105.T00008	Start	Part No. 45-573.1105.T00029	Manu Auto	Part No. 45-573.1105.T00065		
Halt	Part No. 45-573.1105.T00009	Stop Start	Part No. 45-573.1105.T00038	Marche Arrêt	Part No. 45-573.1105.T00066		
Zu	Part No. 45-573.1105.T00010	EMERGENCY STOP	Part No. 45-573.1105.T00046				
Betrieb	Part No. 45-573.1105.T00013						
Störung	Part No. 45-573.1105.T00014						
Hand Auto	Part No. 45-573.1105.T00015						

Symbols for legend plates black, 27 x 27 mm

Graphic symbols are according to ISO 7000 or IEC 60417.



Part No. 45-573.1105.S00003



Part No. 45-573.1105.S00008 Arrow/Direction right

Customized inscription for legend plates

All dimensionen in mm

Size of legend plates	Height of letters	Number of lines		
27 x 12.5	4	1		
	3.5	2		
	2.5	3		
27 x 17.5	4	1 – 2		
	3	3		
27 x 27	4	1 – 5		

Up to 11 characters per line are possible.

Suppressor circuits

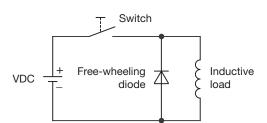
When switching inductive loads such as relays, DC motors, and DC solenoids, it is always important to absorb surges (e.g. with a diode) to protect the contacts. When these inductive loads are switched off, a counter emf can severely damage switch contacts and greatly shorten lifetime.

Fig. 1 shows an inductive load with a free-wheeling diode connected in parallel. This free-wheeling diode provides a path for the inductor current to flow when the current is interrupted by the switch. Without this free-wheeling diode, the voltage across the coil will be limited only by dielectric breakdown voltages of the circuit or parasitic elements of the coil. This voltage can be kilovolts in amplitude even when nominal circuit voltages are low (e. g. 12 VDC) see Fig. 2.

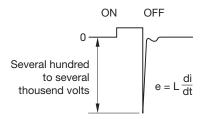
The free-wheeling diode should be chosen so that the reverse breakdown voltage is greater than the voltage driving the inductive load. The DC blocking voltage (VR) of the free-wheeling diode can be found in the datasheet of a diode. The forward current should be equal or greater than the maximum current flowing through the load.

To get an efficient protection, the free-wheeling diode must be connected as close as possible to the inductive load!

Switching with inductive load Fig. 1



Counter EMF over load without free-wheeling diode Fig. 2



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Part No.

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45-2131.1110.000 39	45-2134.1190.000 40	45-2234.31G0.000 54	45-2630.19H0.000 78	45-280S.3C50.003 100	45-2828.2D90.001 95
45-2131.1120.000 39	45-2134.2110.000 43	45-2234.31H0.000 54	45-2630.19J0.000 78	45-280S.3C60.003 100	45-2828.3C20.001 92
45-2131.1140.000 39	45-2134.2120.000 43	45-2234.31J0.000 54	45-2630.19K0.000 79	45-280S.3C90.003 100	45-2828.3C40.001 92
45-2131.1150.000 39	45-2134.2140.000 43	45-2234.31K0.000 54	45-2630.28E0.000 76	45-280S.4C20.003 30	45-2828.3C50.001 93
45-2131.1160.000 39	45-2134.2150.000 43	45-2234.31N0.000 54	45-2630.28F0.000 76	45-280S.4C50.003 31	45-2828.3C60.001 93
45-2131.1180.000 39	45-2134.2160.000 43	45-2234.4FE0.000 24	45-2630.28G0.000 76	45-280S.4C90.003 31	45-2828.3C90.001 93
45-2131.1190.000 39	45-2134.2190.000 43	45-2234.4FG0.000 24	45-2630.28H0.000 76	45-280S.4D20.003 32	45-2828.3D20.001 94
45-2131.11K0.000 39	45-2134.2220.000 45	45-2234.4FH0.000 24	45-2630.28J0.000 76	45-280S.4D50.003 33	45-2828.3D90.001 94
45-2131.1210.000 43	45-2134.3110.000 41	45-2234.4FJ0.000 24	45-2630.28K0.000 76	45-280S.4D90.003 33	45-2828.3E20.001 88
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45-2N39.3010		45-320.1G18.		45-320.2J12 .		45-535.2100 .			
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45-2N42.2010		45-320.1G42.		45-320.2J17 .		45-537.2100.			
45-2N42.3010		45-320.1G46.		45-320.2J18 .		45-538.1100 .			
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45-2P02.1E10		45-320.1H11.		45-320.2J46 .		45-542.1K00.			
45-2P02.2E10		45-320.1H12.		45-320.2J47 .		45-543.1K00.			
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Наши преимущества:

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- Оперативные сроки поставки под заказ (от 5 рабочих дней);
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- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
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«JONHON» (основан в 1970 г.)

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