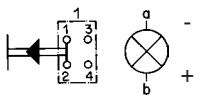
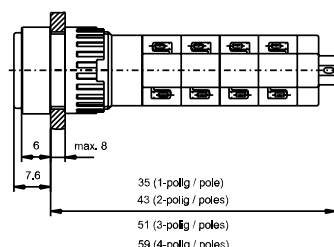
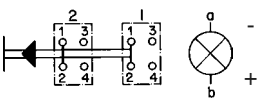
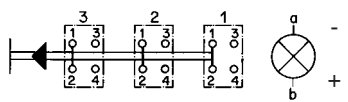
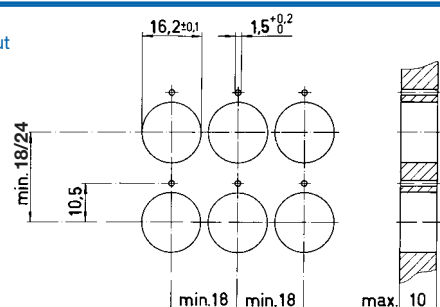
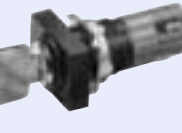
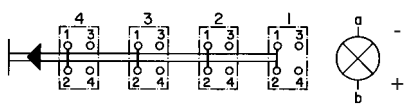
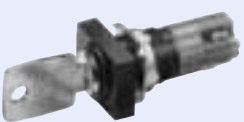
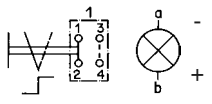
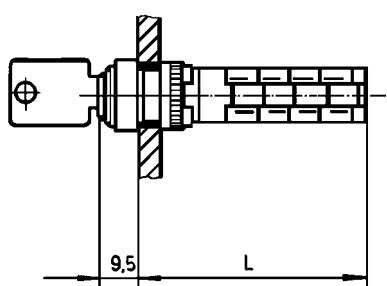
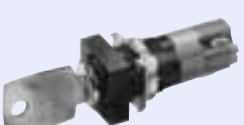
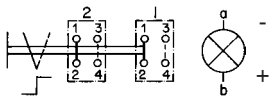
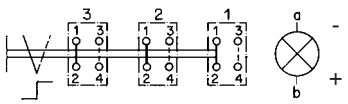
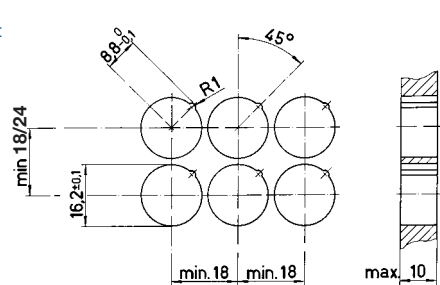
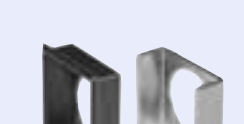
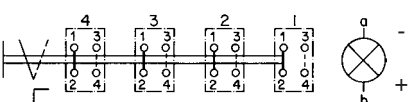
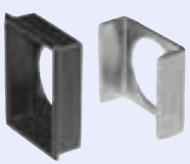
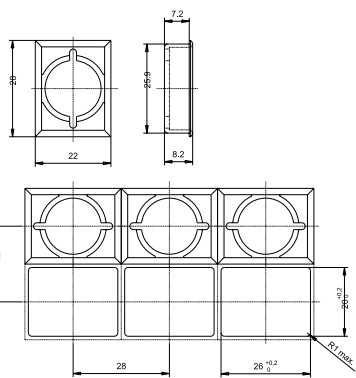
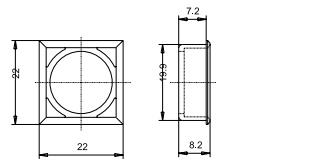
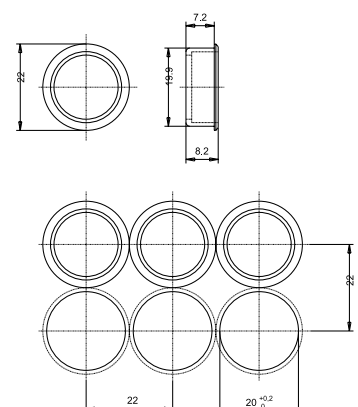
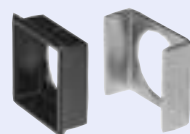


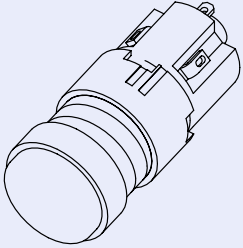
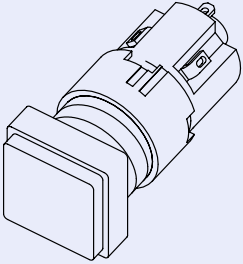
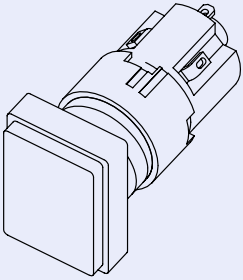
Illuminated pushbutton EMF, Keyswitch EMS

Models	Contact diagram	Length L	Dimensions / drilling diagram
		35	
		43	
		51	Cut-out 
		59	
		35	
		43	
		51	Cut-out 
		59	
In one section must be same potential			
Accessories flush mounting bezel			
	rectangular  mounting hole		round  mounting hole
			

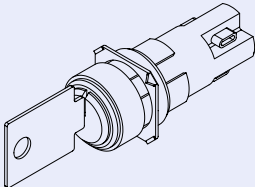
Technical Data EMF, EMS

1. Mechanical data	EMF	EMS
Degree of protection	IP 40 / IP 67	IP 40
Actuating force	> 1,5 N	
Contact travel	3,2 mm	
(DIN 41640 T. 19) / End stop strength	> 100 N	
(IEC 512-5 Test 9a, actuating force 5 N) Lifetime	> 2 x 10 ⁶ Operations	ca. 2 x 10 ⁶ Operations
Vibration resistance	IEC 68-2-6 Test Fc Details on request	
2. Electrical data	EMF	EMS
Switching voltage max.	250 V AC	250 V DC 250 V AC (cos φ 0,7)
Switching current max.	5 A	0,2 A 5 A
Lifetime (at rated breaking capacity 0,12 W)	5 A / 250 V AC > 5 x 10 ⁴ Bet. 4 A / 250 V AC > 6 x 10 ⁴ Bet. 2 A / 250 V AC > 2 x 10 ⁵ Bet. 1 A / 250 V AC > 4 x 10 ⁵ Bet.	
(IEC 512-2, mV-Method) Initial contact resistance, new	< 10 mΩ	
(IEC 341-1) Insulation resistance	> 10 ⁴ MΩ 500 V DC	
Test voltage	> 4.000 V, 50 Hz, 1 min. between housing and terminals	
3. Other data	EMF	EMS
IEC 68-2-20, Test Ta, Method 2 Solderability	350 °C, 2 s,	
IEC 68-2-20, Test Tb, Method 2 Soldering heat resistance	350 °C, 10 s,	
Ambient temperature	-40 °C...+55 °C (with lamp) -40 °C...+85 °C (without lamp)	-30 °C...+80 °C
Storage temperature	-40 °C...+85 °C	
(IEC 529, DIN 40050) Class of protection	II/IEC 536	
4. Materials	EMF	EMS
Contact material	silver / nickel, gold-plated	hard silver, 5 μm
Solder terminals	wire: max. 2 x 0,8 mm ² stranded wire: max. 0,75 mm ²	wire: max. 4 x 0,75 mm ² stranded wire: max. 2x 1 mm ²

Illuminated push-button EMF

Models	Actuator form	Type	Variations	Part Number
	round 18 mm	momentary action	NC/NO 1 pole	0041.2321
			NC/NO 2 pole	0041.2322
			NC/NO 3 pole	0041.2323
			NC/NO 4 pole	0041.2324
		latching action	NC/NO 1 pole	0041.2371
			NC/NO 2 pole	0041.2372
			NC/NO 3 pole	0041.2373
			NC/NO 4 pole	0041.2374
	square 18 x 18 mm	momentary action	NC/NO 1 pole	0041.2311
			NC/NO 2 pole	0041.2312
			NC/NO 3 pole	0041.2313
			NC/NO 4 pole	0041.2314
		latching action	NC/NO 1 pole	0041.2361
			NC/NO 2 pole	0041.2362
			NC/NO 3 pole	0041.2363
			NC/NO 4 pole	0041.2364
	rectangular 18 x 24 mm	momentary action	NC/NO 1 pole	0041.2301
			NC/NO 2 pole	0041.2302
			NC/NO 3 pole	0041.2303
			NC/NO 4 pole	0041.2304
		latching action	NC/NO 1 pole	0041.2351
			NC/NO 2 pole	0041.2352
			NC/NO 3 pole	0041.2353
			NC/NO 4 pole	0041.2354

Keyswitch EMS, key lock plastic

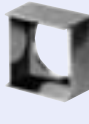
Models	Housing	Key pull off position	Variations	Part Number	
	round 18mm	Pos 1 / OFF (Impulse)	NC/NO 1 pole	0041.2861	
			NC/NO 2 pole	0041.2862	
		Pos 1 / OFF	NC/NO 1 pole	0041.2871	
			NC/NO 2 pole	0041.2872	
		Pos 1+2 / ON + OFF	NC/NO 1 pole	0041.2881	
			NC/NO 2 pole	0041.2882	
		square 18 x 18mm	Pos 1 / OFF (Impulse)	NC/NO 1 pole	0041.2831
				NC/NO 2 pole	0041.2831
			Pos 1 / OFF	NC/NO 1 pole	0041.2841
	NC/NO 2 pole			0041.2842	
	Pos 1+2 / ON + OFF		NC/NO 1 pole	0041.2851	
			NC/NO 2 pole	0041.2852	
	rectangular 18 x 24mm		Pos 1 / OFF (Impulse)	NC/NO 1 pole	0041.2801
				NC/NO 2 pole	0041.2802
			Pos 1 / OFF	NC/NO 1 pole	0041.2811
		NC/NO 2 pole		0041.2812	
		Pos 1+2 / ON + OFF	NC/NO 1 pole	0041.2821	
			NC/NO 2 pole	0041.2822	
Further contact levels on request					

Accessories EMF

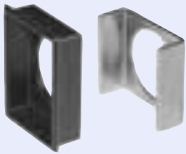
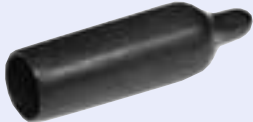
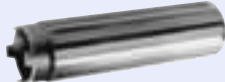
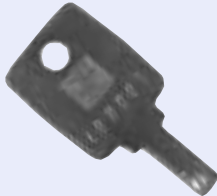
Models	Color	Part Number	Part Number	Part Number
Lenses   		 Ø 18 mm	 18x18 mm	 18x24 mm
	clear glass	0854.0621	0854.0601	0854.0581
	clear red	0854.0622	0854.0602	0854.0582
	clear green	0854.0623	0854.0603	0854.0583
	clear yellow	0854.0624	0854.0604	0854.0584
	clear blue	0854.0625	0854.0605	0854.0585
	pearl	0854.0631	0854.0611	0854.0591
	diffuse red	0854.0632	0854.0612	0854.0592
	diffuse green	0854.0633	0854.0613	0854.0593
	diffuse yellow	0854.0634	0854.0614	0854.0594
	diffuse blue	0854.0635	0854.0615	0854.0595
	black*	0854.0636	0854.0616	0854.0596
	white / pearl			
		0854.0873	0854.0872	0854.0871
		0854.1802	0854.1602	0854.1402
Legend plate insert             		0854.1803	0854.1603	0854.1403
		0854.1804	0854.1604	0854.1404
		0854.1805	0854.1605	0854.1405
		0854.1806	0854.1606	0854.1406
		0854.1807	0854.1607	0854.1407
		0854.1808	0854.1608	0854.1408
		0854.1809	0854.1609	0854.1409
		0854.1810	0854.1610	0854.1410
		0854.1811	0854.1611	0854.1411
		0854.1812	0854.1612	0854.1412
		0854.1813	0854.1613	0854.1413

The white/translucent legend plate with black inscriptions use only with clear glass lenses.
 Other legends available on request.
 *Not recommended for illuminated switches.

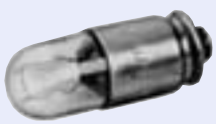
Accessories EMF

Models	Housing	Spacing inline mounting	Part Number	
Protection shield 	Rectangular single mounting	25 mm x 20 mm	0886.0010	
		Rectangular single / in-mounting	25 mm x 20 mm	0886.0011
		Square	20 mm x 20 mm	0886.0012
		Round	20 mm x 20 mm	0886.0013
Splash guards 	Rectangular single mounting	24 mm x 30 mm	0886.0002	
		Square	24 mm x 24 mm	0886.0001
Protection cap 	Rectangular	24 mm x 30 mm	0886.0004	
		Square	24 mm x 24 mm	0886.0003
Blanking plate 	Rectangular	24 mm x 18 mm	0886.0005	
		Square	18 mm x 18 mm	0886.0006
		Round	18 mm x 18 mm	0886.0007

Accessories EMF

Models	Housing	Part Number
Flush mounting bezel 	Rectangular single mounting	0886.0017
	Square	0886.0018
	Round	0886.0019
Anti-twisting plate 	General	0886.0030
Insulating boot 	General	0859.0081
Lamp extractor 	General	0853.0621
Mounting key 	General	0853.0622
	General	0886.0020

Accessories EMS

Models	Voltage	Consumption	Brightness	Lifetime AC	Lifetime DC	Part Number
T 1¼ Midget groove Incandescent lamp 	6,3V	200mA	0,4 MSCP	50.000h	25.000h	0913.4001
	14V	80mA	0,2 MSCP	15.000h	7.000h	0913.4002
	28V	40mA	0,2 MSCP	10.000h	5.000h	0913.4003
	48V	25mA	0,2 MSCP	5.000h	2.000h	0913.4004
	60V	20mA	0,3 MSCP	1.000h	1.000h	0913.4005
Incandescent lamps with lower power consumption on request. The use of incandescent lamps > 60V is limited by different standards. Check with testing agency.						
	Voltage	color	Operating current	Power dissip.	Lumin. intensity	Part Number
LED T 1¼ Midget groove  Base contact = +polarity	6V	red	30 mA	250mW	7 mcd	0925.0104
	6V	green	30 mA	250mW	30 mcd	0925.0105
	6V	yellow	30 mA	250mW	22 mcd	0925.0106
	12V	red	15 mA	250mW	7 mcd	0925.0107
	12V	green	15 mA	250mW	30 mcd	0925.0108
	12V	yellow	15 mA	250mW	22 mcd	0925.0109
	28V	red	10 mA	250mW	7 mcd	0925.0110
	28V	green	10 mA	250mW	30 mcd	0925.0111
	28V	yellow	10 mA	250mW	22 mcd	0925.0112