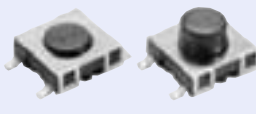
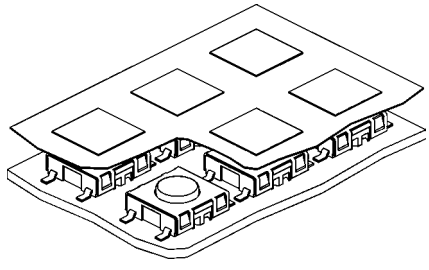
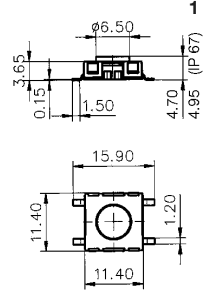
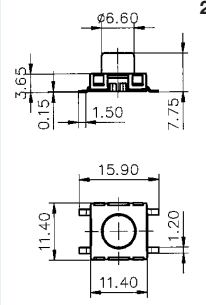
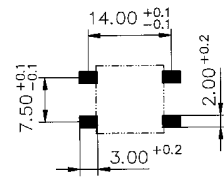

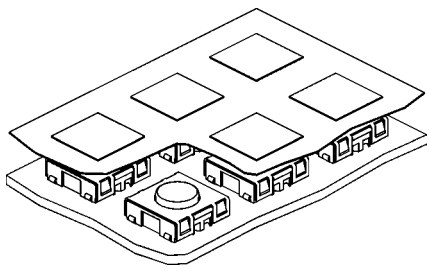
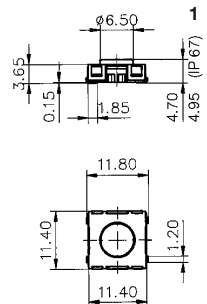
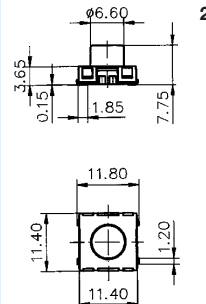
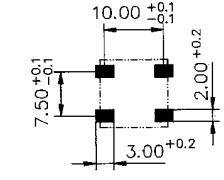

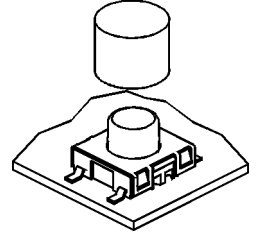
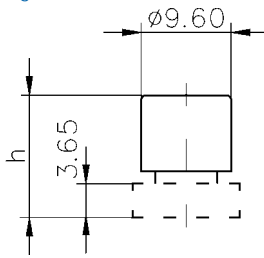
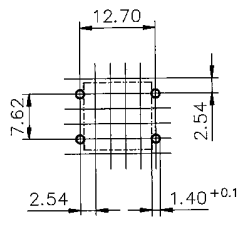
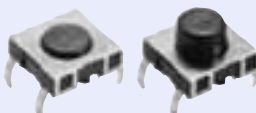
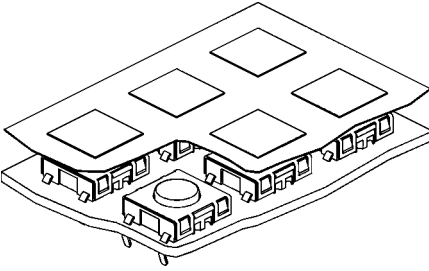
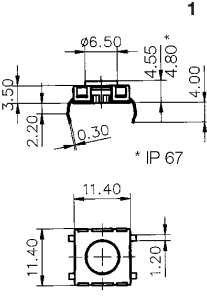
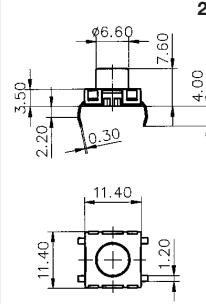
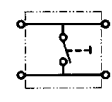

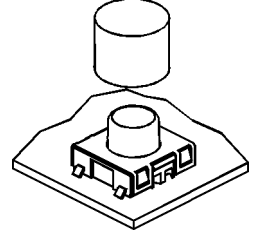
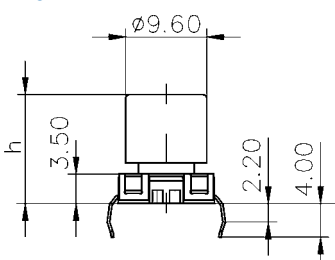
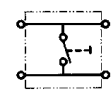
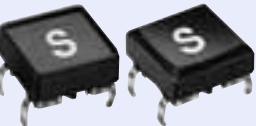
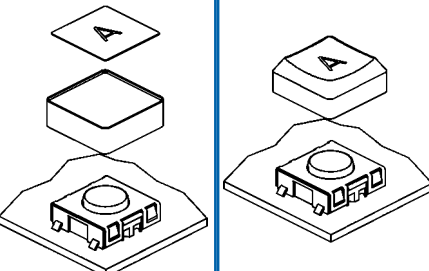
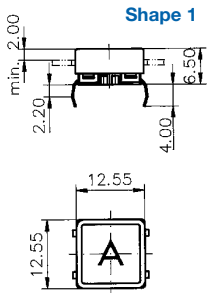
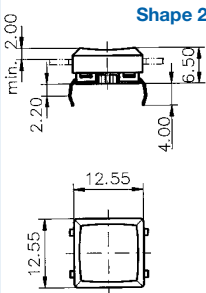
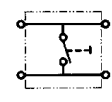


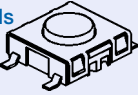
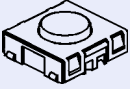
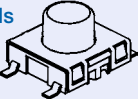
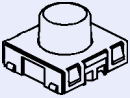
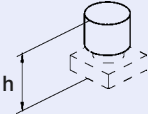
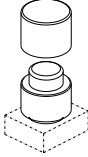
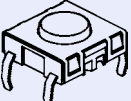
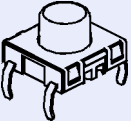
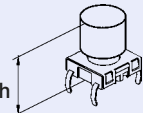
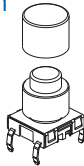
Switches in momentary action SMS, PMS, PMK

Models	Construction	Dimensions		Solder pads
<p>SMS Gullwing-leads</p>  <p>1 2</p>		<p>1</p> 	<p>2</p> 	<p>Solder pads Gullwing</p> 
<p>SMS J-leads</p>  <p>1 2</p>		<p>1</p> 	<p>2</p> 	<p>Solder pads J-leads</p> 
<p>Buttons in variable heights</p> 		<p>Overall height h variable</p> 		
<p>PMS Through hole mounting</p>  <p>1 2</p>		<p>1</p> 	<p>2</p> 	<p>Drilling diagram through hole</p> 
<p>PMS height variable</p> 		<p>Overall height h variable</p> 		<p>Circuit diagram</p> 
<p>PMK</p>  <p>Shape 1 Shape 2</p>		<p>Shape 1</p> 	<p>Shape 2</p> 	

Technical Data SMS, PMS, PMK

1. Mechanical data		SMS	PMS	PMK
Actuating force	IP 40 IP 67	1,8 N ±0,4 N 2,2 N ±0,4 N	1,8 N ±0,4 N 2,2 N ±0,4 N	2,2 N ±0,4 N
Contact travel		0,35 mm ±0,1 mm	0,35 mm ±0,1 mm	0,30 mm ±0,1 mm
(DIN 41640 Teil 19) / End stop strength		> 100 N		
(IEC 512-5 Test 9a, actuating force 5 N) / Lifetime		> 10 ⁶ Operations		
2. Electrical data				
Switching voltage max.		30V AC / 42V DC		
Switching current max.		50 mA		
Lifetime (at rated breaking capacity 0,12 W)		> 10 ⁶ Cycles		
(IEC 512-2, mV-Method) Initial contact resistance, new		< 50 mΩ		
Initial contact resistance after 10 ⁶ cycles		< 150 mΩ		
(IEC 512-2) Insulation resistance		> 10 ⁸ Ω		
Contact bounce time		typ. 0,15 ms		
3. Other data		SMS	PMS	PMK
Solderability (CECC 00802 und IEC 68-2-20)		IR-Reflow		
(IEC 68-2-20 Test Tb, Method 1A) Soldering heat resistance (IEC 68-2-20 Test Tb, Method 2) (CECC 00802 Classification B) (CECC 00802 Classification C)		350 °C / 10s 215 °C / 40s 260 °C / 10s	260 °C / 10s 350 °C / 10s	260 °C / 10s 350 °C / 10s
Ambient temperature		-40 °C...+85 °C		
Storage temperature		-40 °C...+85 °C		
(IEC 68-2-45) Testmedium Cleaning agent proof		Zestron		
(DIN 41640 Teil 84) Flux-proof		—	given	given
Degree of protection		IP 40 / IP 67	IP 40 / IP 67	IP 67
4. Materials		SMS	PMS	PMK
Contact material gold		CuZn – 1,5 μm Ni + 0,5 μm Au		
Terminals		CuZn – 8 μm SnPb		
Socket		Thermoplast PA 4.6		
Actuator		Thermoplast PPS		
Cover plate		X12CrNi17 7		
Sealing membrane		—	VMQ	VMQ
5. Packaging		SMS	PMS	PMK
		taped and reeled		
		loose in boxes	loose in boxes	loose in boxes

Switches in momentary action SMS, PMS

Models SMS	Variations				Part Number	
Gullwing-leads 	Degree of protection	IP 40		1241.1600. XX		
		IP 67		1241.1606. XX		
J-leads 		IP 40		1241.1601. XX		
		IP 67		1241.1607. XX		
Gullwing-leads 		IP 40		1241.1612. XX		
		IP 67		1241.1618. XX		
J-leads 		IP 40		1241.1613. XX		
		IP 67		1241.1619. XX		
Packaging	loose in boxes				11	
	taped and reeled				23	
Button in variable heights for long actuators (must be ordered separately) 	Overall height h 	8,50 mm	(yellow)	0862.8101		
		9,25 mm	(orange)	0862.8102		
		10,00 mm	(red)	0862.8103		
		10,75 mm	(blue)	0862.8104		
		11,50 mm	(green)	0862.8105		
		12,25 mm	(grey)	0862.8106		
		13,00 mm	(black)	0862.8107		
		13,75 mm	(white)	0862.8108		
		¹ additional key cap				
¹ Starting with 14,50 mm, additional (second) key caps for midsizes (h +6mm) are necessary. Order separately.						
Models PMS	Variations				Part Number	
Short actuator 	Degree of protection	IP 40		1241.1602		
		IP 67		1241.1608		
Long actuator 		IP 40		1241.1614		
		IP 67		1241.1620		
Height variable 	Degree of protection	IP 40		1241.1624. XX		
		IP 67		1241.1625. XX		
Overall height h 	(yellow)	8,35 mm =	1	² 14,35 mm =	11	
	(orange)	9,10 mm =	2	15,10 mm =	21	
	(red)	9,85 mm =	3	15,85 mm =	31	
	(blue)	10,60 mm =	4	16,60 mm =	41	
	(green)	11,35 mm =	5	17,35 mm =	51	
	(grey)	12,10 mm =	6	18,10 mm =	61	
	(black)	12,85 mm =	7	18,85 mm =	71	
	(white)	13,60 mm =	8	19,60 mm =	81	
² Starting with 14,35 mm the heights were realized with an additional (second) keycap.						

PMK and key caps for SMS, Illumination key caps

Models PMK		Variations	Part Number			
Shape 1 	Degree of protection	with legend	1241.1629.X.XXX			
		without legend	1241.1629.X.XXX			
Shape 2 		with legend	1241.1633.X.XXX			
		without legend	1241.1633.X.XXX			
Shape 1 	for IP 67 with short actuator	with legend	0865.9541.X.XXX			
		without legend	0865.9541.X.XXX			
Shape 2 		with legend	0865.9542.X.XXX			
		without legend	0862.800 X			
SMS Tastkappe Key cap		Color of key cap				
Shape 1 Insert plate Key cap Base module		red	3			
		green	5			
		grey	6			
		black	7			
		white	8			
PMK Shape 2 Key cap Base module		Legend of key cap/insert plate (Type height/type face see page 39)				
		A = 001	P = 016	4 = 031	↓ = 046	EIN = 061
		B = 002	Q = 017	5 = 032	→ = 047	AUS = 062
		C = 003	R = 018	6 = 033	← = 048	AUF = 063
		D = 004	S = 019	7 = 034	↓ = 049	AB = 064
		E = 005	T = 020	8 = 035	↑ = 050	ON = 065
		F = 006	U = 021	9 = 036	% = 051	OFF = 066
		G = 007	V = 022	+ = 037	√ = 052	UP = 067
		H = 008	W = 023	- = 038	CTRL = 053	DOWN = 068
		I = 009	X = 024	. = 039	RETURN = 054	HIGH = 069
		J = 010	Y = 025	x = 040	SHIFT = 055	LOW = 070
		K = 011	Z = 026	÷ = 041	LOCK = 056	ON/OFF = 071
		L = 012	0 = 027	* = 042	STOP = 057	START = 072
		M = 013	1 = 028	= = 043	ENTER = 058	
		N = 014	2 = 029	# = 044	BACK = 059	
		O = 015	3 = 030	↔ = 045	LINE = 060	
Base module		yellow	= 091	grey	= 096	
		orange	= 092	black	= 097	
		red	= 093	white	= 098	
		blue	= 094	anthracite	= 099	
		green	= 095			
Illumination key cap 		In Preparation				
Color of key cap		transparent		0859.9335		

Auftragsbezogene Fertigung / Order specific production