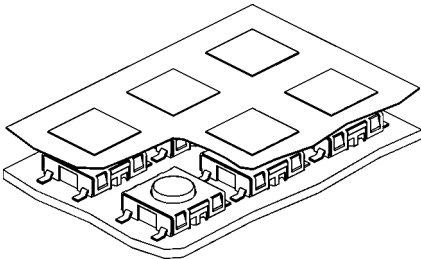
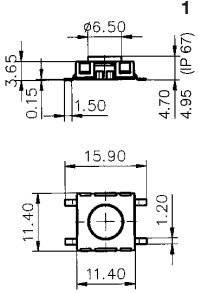
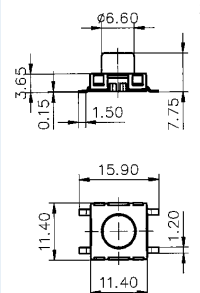
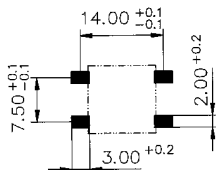
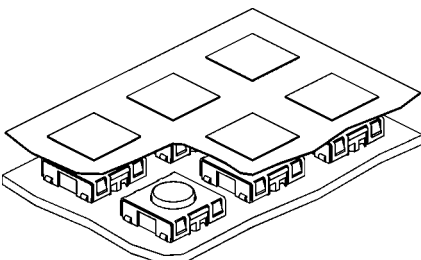
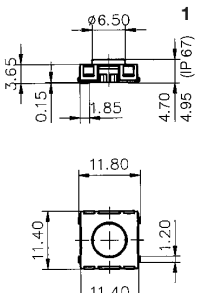
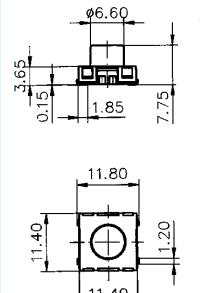
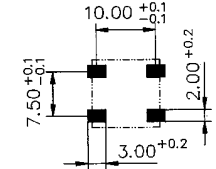
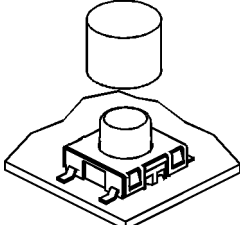
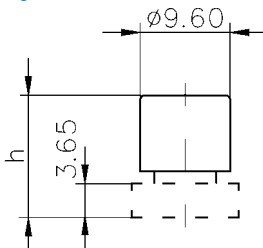
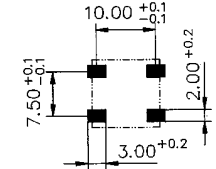
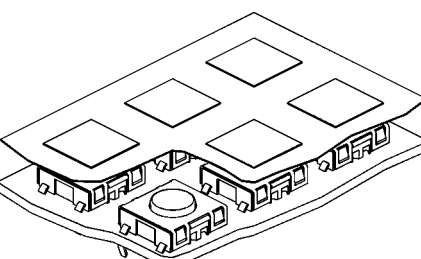
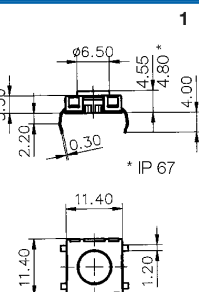
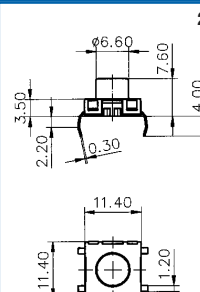
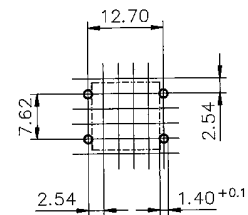
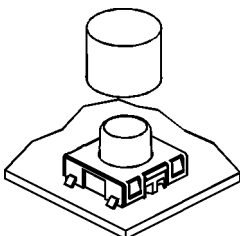
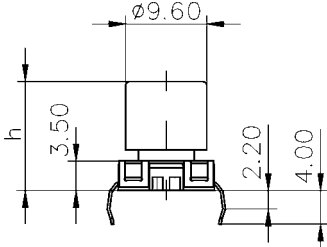
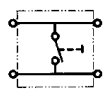
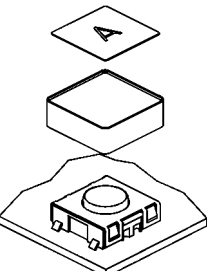
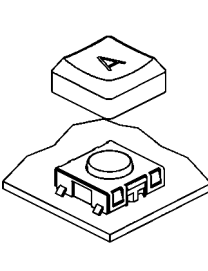
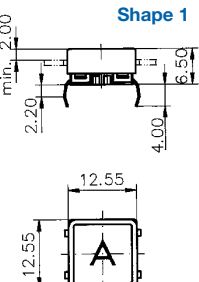
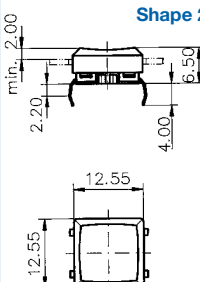


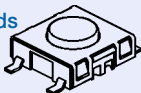
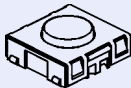
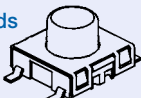
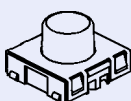
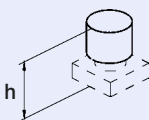
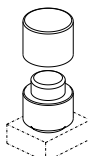
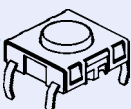
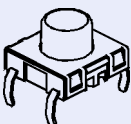
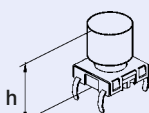
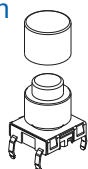
Switches in momentary action SMS, PMS, PMK

Models	Construction	Dimensions		Solder pads
SMS Gullwing-leads  12		1 	2 	Solder pads Gullwing 
SMS J-leads  12		1 	2 	Solder pads J-leads 
Buttons in variable heights 		Overall height h variable 		
PMS Through hole mounting  12		1 	2 	Drilling diagram through hole 
PMS height variable 		Overall height h variable 		Circuit diagram 
PMK Shape 1  Shape 2 	 	Shape 1 	Shape 2 	

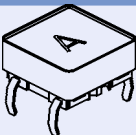
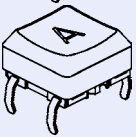
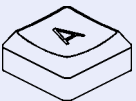
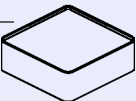
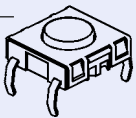
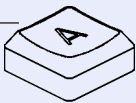
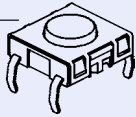
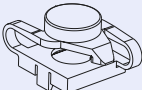
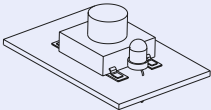
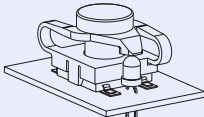
Technical Data SMS, PMS, PMK

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.		50mA		
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 – 1,5µm Ni + 0,5µm Au		
Terminals		CuZn – 8µm 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  J-leads  Gullwing-leads  J-leads  Button in variable heights for long actuators (must be ordered separately) 	Degree of protection	IP 40			1241.1600.	XX	
		IP 67			1241.1606.	XX	
		IP 40			1241.1601.	XX	
		IP 67			1241.1607.	XX	
		IP 40			1241.1612.	XX	
		IP 67			1241.1618.	XX	
		IP 40			1241.1613.	XX	
		IP 67			1241.1619.	XX	
	Packaging	loose in boxes				11	
		taped and reeled				23	
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				0862.8226		
	¹ Starting with 14,50 mm, additional (second) key caps for midsizes (h +6mm) are necessary. Order separately.						
PMS							
Short actuator  Long actuator 	Degree of protection	IP 40			1241.1602		
		IP 67			1241.1608		
		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  Shape 2  Shape 1  Shape 2 	Degree of protection	with legend		1241.1629.X.XXX			
		without legend		1241.1629.X.XXX			
		with legend		1241.1633.X.XXX			
		without legend		1241.1633.X.XXX			
	for IP 67 with short actuator	with legend		0865.9541.X.XXX			
		without legend		0865.9541.X.XXX			
		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		
	Legend of key cap/insert plate (Type height/ type face see page 39)						
PMK Shape 2 Key cap  Base module 	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							
Color of insert plate without legend shape 1				yellow = 091 grey = 096			
				orange = 092 black = 097			
				red = 093 white = 098			
				blue = 094 anthracite = 099			
				green = 095			
Illumination key cap		In Preparation				0859.9335	
  		Color of key cap transparent					
Auftragsbezogene Fertigung / Order specific production							