

DATA SWITCHES – MOMENTARY (HDT, SDK) ACTION

BENEFITS

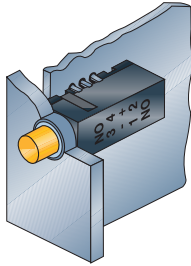
- High life time with maximum quality materials
- Extremely good illumination (HDT)
- Various contact materials for every field of application
- Tested to degree of protection IP 40 and IP 65 (HDT)

		HDT	SDK
Electrical data			
Switching voltage max.	[V]	50 DC/60 AC	50 DC/125 AC
Switching current max.		200 mA	silver 2A AC / 1.2A DC gold 80mA/ AC DC
Lifetime (at rated breaking capacity)		2×10^5	$> 10^5$
Initial contact resistance, new	[mΩ]	<30	silver <10 / gold <20
Initial contact resistance, after lifetime	[mΩ]	<50	
Insulation resistance	[Ω]	$> 10^{10}$	$> 10^9$
Contact bounce time	[ms]	typ. 0.5	
Mechanical data			
Actuating force	IP 40 [N]	1.5 ± 0.3	3 – 5
	IP 65 [N]	2.5 ± 0.5	
Contact travel	NO [mm]	1.2 ± 0.2	2.4 ± 0.3
End contact travel	[mm]	2.5 ± 0.1	3.3 ± 0.4
End stop strength	[N]	>100	>100
Lifetime	[operations]	$> 5 \times 10^5$	$> 2 \times 10^5$
Other data			
Degree of protection		IP 40 / IP 65	IP 40
Soldering method		Wave Soldering	Wave Soldering
Soldering heat resistance [°C/s]		248,5/1	248,5/1
Ambient temperature	[°C]	-40 – +85	-40 – +85
Storage temperature	[°C]	-40 – +85	-40 – +85
Cleaning agent proof		Zestron	
Flux proof		given	
Materials			
Socket, cover, contact unit, carrier ring		Thermoplast PA 4.6	Thermoplast PC
Button non-illuminated		Thermoplast PA 4.6	Thermoplast PC
Button illuminated		Thermoplast PES	
Sealing ring		Silicon tempered	
Terminals		CuZn, 3 μm Ag, hot tinned	
Contacts		CuBe2 HM, 5 μm Ag	gold (2 μ Au on hard silver)

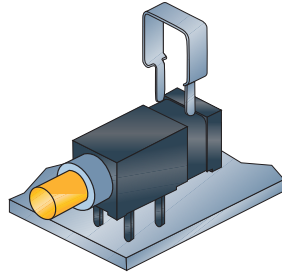
LED, see page 29

DIMENSIONS SWITCHES—MOMENTARY (HDT, SDK) ACTION

CONSTRUCTION

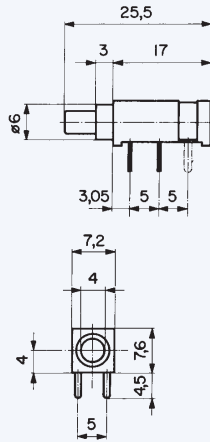
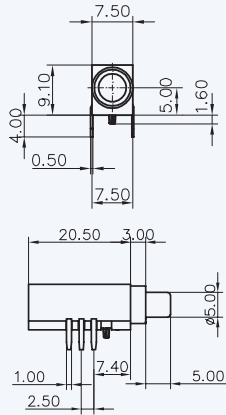


HDT Through hole

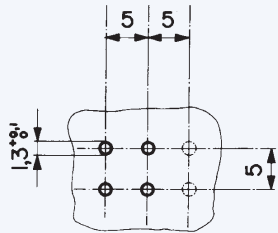
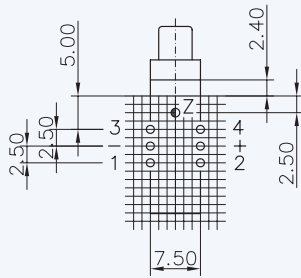


SDK

DIMENSIONS



DRILLING DIAGRAM/ SOLDER PADS

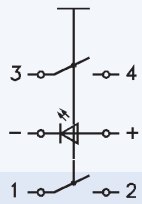


Drilling diagram = 1.25 mm

Drilling for pin location $\phi = \phi 1.2 + 0.1$

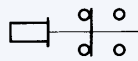
Cut out $\phi 8$ mm

CIRCUIT DIAGRAM



fixed contact 1 pole

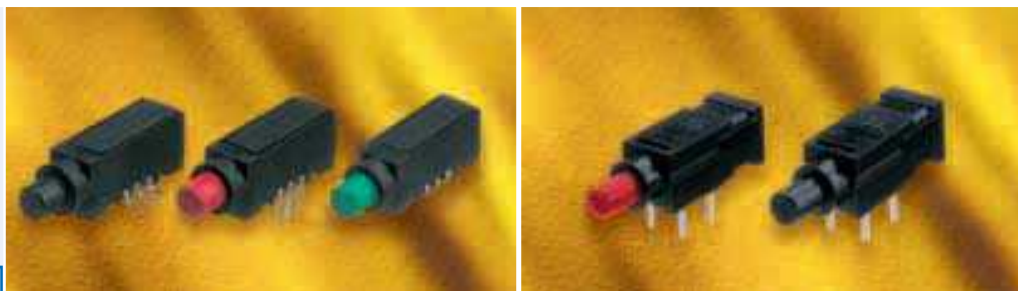
NO



PRINTMOUNT
MEDIUM STROKE



**OVERVIEW HDT SWITCHES—MOMENTARY ACTION WITH SMALL BUTTON
AND SDK SWITCHES—MOMENTARY ACTION—NON-ILLUMINATED**



In addition to the versions with the small button, further versions with a large button and switching functions are available on request for HDT.

HDT	HDT	SDK	SDK
-----	-----	-----	-----

FEATURES

Illumination	non-illuminated	non-illuminated	non-illuminated	non-illuminated
Degree of protection	IP 40	IP 65	IP 40	IP 40
Contact material			Ag	Au

PART NUMBER *

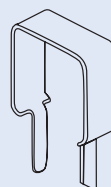
Switching functions	HDT		HDT		SDK	SDK
HDT NO 1-pole	1241.1	x 01. x 00	1241.1	x 11. x 00		
HDT NO 2-pole	1241.1	x 02. x 00	1241.1	x 12. x 00		
	x	x	x	x		
	x	x	x	x		
NC/NO					0041.040	x
						0041.041
Terminal types						
A Through hole	7		7			
Colour of small button						
red		3		3	2	2
green		5		5		
black		7		7	1	1
Addition						
Clamp for SDK					0701.0049	0701.0049

Terminal types:

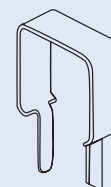
A Through hole



SDK Clamp



SDK Clamp



* X in the Part No. must be replaced by the desired version

OVERVIEW HDT SWITCHES—MOMENTARY ACTION WITH SMALL BUTTON—ILLUMINATED



In addition to the versions with the small button, further versions with a large button and switching functions are available on request for HDT.

HDT

HDT

PRINTMOUNT
MEDIUM STROKE

FEATURES

Illumination	illuminated	illuminated
Degree of protection	IP 40	IP 65

PART NUMBER *

Switching functions		
HDT NO 1-pole	1241.1 x 21.9 x 0	1241.1 x 31.9 x 0
HDT NO 2-pole	1241.1 x 22.9 x 0	1241.1 x 32.9 x 0
Terminal types		
A Through hole	7	7
Colour of LED		
red		1
green		2
blue		4
Colour of small button		
with illumination	transparent	transparent

Terminal types:

A Through hole



* X in the Part No. must be replaced by the desired version

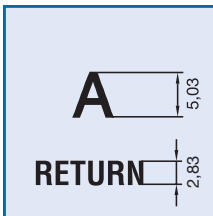


LETTERING

Depending on the application and font, there are various lettering possibilities. The following standards can be used for key letterings:

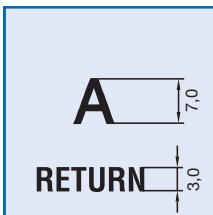
ORDER INDEX LETTERING

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	



MCS 18, LETTER HEIGHTS AND FONTS

- Single characters, Univers 65
- Legends max. 6 characters in line, Univers 65
- Insert label and front foil anthracite, RAL 7016
- Characters and symbols light grey, RAL 7035



SSM 27, LETTER HEIGHTS AND FONTS

- Single characters, Univers 65
- Legends max. 6 characters in line, Akzident-Grotesk condensed bold type
- Front foil anthracite, RAL 7016
- Characters and symbols light grey, RAL 7035



LIGHTING TECHNOLOGY

TECHNICAL DATA LEDs

1. Maximum ratings				
Part number		0925.9730	0925.9731	0925.9732
Light colour		red	green	yellow
Forward current, DC	I_f max. [mA]	40	40	40
Power dissipation	P_{tot} max. [mW]	130	130	130
2. Characteristics (typ. at $T_U = 25\text{ °C}$)				
Forward voltage	at $I_f = 10\text{ mA}$, U_f typ. [mA]	2.0 (< 2.6)	2.0 (< 2.6)	2.0 (< 2.6)
Luminous intensity	at $I_f = 10\text{ mA}$, I_v typ. [mcd]	11.2 - 28	18 - 45	11.2 - 28
Viewing angle	ftyp. [Degree]	50	50	50
Peak wave length	λ_{peak} typ. [nm]	635	565	586
Reverse voltage	U_R typ. [V]	5	5	5