


**Description**

The HDT (horizontal push button switch in momentary action) is designed for PCB mounting, especially for the plug-in technique. The switch can be used for the conventional through-hole mounting. The leads are tin-coated for all versions.

The illuminated version comes in the LED colours red, green and yellow and the key cap is always transparent. All versions are obtainable in two different key cap sizes.

The contact system is based on silver sliding contacts, resulting in a self-cleaning process. The switch has two pole version with normally open functions.

Changes that contribute to technical improvement are subject to alternations

				1996	Datum	Name	<b>HDT</b>  <b>NO 2pole, IP65, illuminated</b>  <b>Data sheet / Specifications</b>
				Bearb	10.09.	Weisen	
				Gepr.	04.12.07	Weisen.	
				Vert.			
e	9427	09.11.07	Weisen.	EDV-Datenblatt			 <b>H 105. 9296.201</b>  Blatt 1 von 4    Index: e
d	8828	04.05.04	Weisen.	nicht manuell ändern			
c	8513	27.08.02	Weisen.				
b	8349	14.11.01	Weisen.				
a	8016	03.02.00	Weisen.				
-	7301	10.09.96	Weisen.				
Zu	Änd.	Datum	Name				

## Technical data

### 1. Mechanical data

Actuating force	IP65	2,5N ± 0,5N
Contact travel	NO	1,2mm ± 0,2mm
End contact travel		2,5mm ± 0,1mm
End Stop strength (DIN41640 Teil19)		>100N
Lifetime (IEC 512-5 Test 9a)		>5x10 <sup>5</sup> Operations

### 2. Electrical data

Switching voltage max.		50V DC / 60V AC
Switching current max.		200 mA
Lifetime (rated interrupting capacity 1,2W).		> 2x10 <sup>5</sup> cycles
Initial contact resistance, new (IEC 512-2, mV-Methode)		< 30mΩ
Initial contact resistance, after 2x10 <sup>5</sup> cycles		< 50mΩ
Insulation resistance (IEC 512-2)		> 10 <sup>10</sup> Ω
Contact bounce time		Typ. 0,5ms

### 3. Other data

Ambient temperature		-40°C...+85°C
Storage temperature		-40°C...+85°C
Cleaning agent proof (gem. IEC 68-2-45)		Zestron
Flux proof (gem. DIN 41640 Teil84) IP65		given
Degree of protection		IP65


### 4. Materials

Socket, cover, contact unit, carrier ring		Thermoplast PA 4.6
Button illuminated		Thermoplast PES
Sealing ring		Silikon tempered
Terminals		CuZn, 3µm Ag, hot tinned
Contacts		CuBe HM, 5µmAg

### 5. Packaging

in boxes á 100

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## 6. LED Data

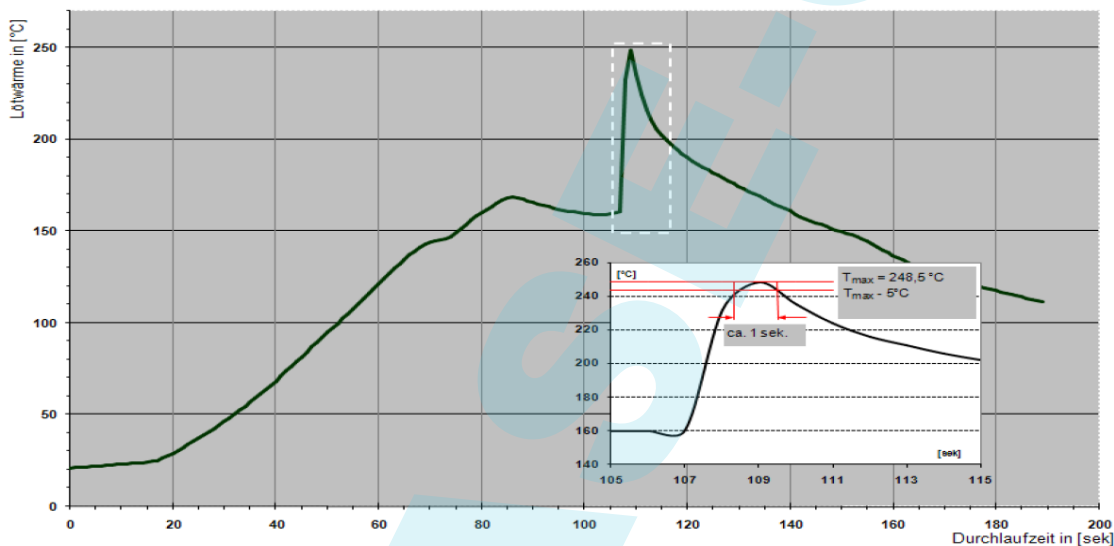
### 6.1 Maximum ratings

Part number		0925.9730	0925.9731	0925.9732	0925.9864
Light colour		red	green	yellow	blue
Forward current, DC	$I_F$ max.	40mA	40mA	40mA	20mA
Power dissipation	$P_{tot}$ max.	130mW	130mW	130mW	100mW

### 6.2 Characteristics (typ.at $T_U = 25^\circ\text{C}$ )

Forward voltage at $I_F = 10\text{mA}$ , $U_F$ typ.		2,0 (<2,6) mA	2,0 (<2,6) mA	2,0 (<2,6) mA	3,5 (<4,2) mA
Luminous intensity at $I_F = 10\text{mA}$ , $I_V$ typ.		11,2-28mcd	18-45mcd	11,2-28mcd	16-32mcd
Viewing angle	$\varphi$ typ.	50°	50°	50°	50°
Peak wave length	$\lambda_{peak}$ typ.	635nm	565nm	586nm	428nm
Peverse voltage	$U_R$ typ.	5V	5V	5V	5V

## Suggested Soldering Profile




Wellenlötanlage : Ersa EMS 3300  
 Durchlaufgeschwindigkeit : 1 m / min  
 Lötmitel : Sn100C von Nihon Superior (Balver-Lot)  
 Flussmittel : AW30 Fa. Otto

obere Zone :	280 °C	300 °C	
untere Zone:	450 °C	500 °C	560 °C

Temperatureinstellung Heizstationen

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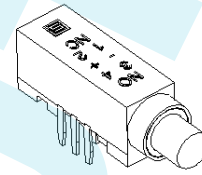
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### HDT with small button transparent - illuminated

1241.1732.9.X.0

Colour of LED

- 1 = red
- 2 = green
- 3 = yellow
- 4 = blue



### HDT with large button transparent - illuminated

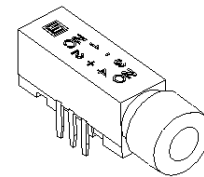
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Colour of LED

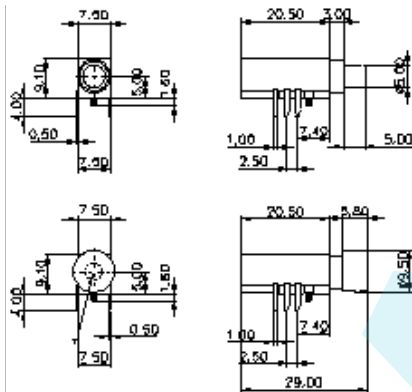
- 1 = red
- 2 = green
- 3 = yellow
- 4 = blue

Colour of large button

- 3 = red
- 5 = green
- 6 = grey
- 7 = black
- 9 = transparent



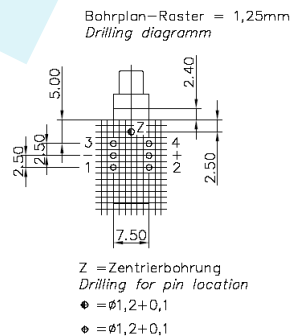
#### Dimensions



\* Indication area illuminated version

#### Drilling diagram

Solder-pad

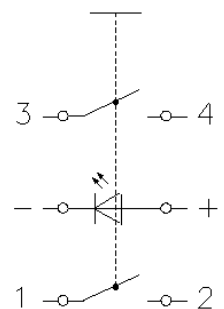


Small button:  
Cut out  $\varnothing 8\text{mm}$

Large button:  
Cut out  $\varnothing 10\text{mm}$

#### Circuit diagram

NO



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