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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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Technical Data HDT, HDS

1. Mechanical data

Actuating force	IP 40	1,5 N ±0,3 N
	IP 65	2,5 N ±0,5 N
	washproof	2,5 N ±0,3 N
Contact travel	NO	1,2 mm ±0,2 mm
	NC	1,3 mm ±0,2 mm
End contact travel		2,5 mm ±0,1 mm
(DIN 41640 T. 19) / End stop strength		> 100 N
(IEC 512-5 Test 9a) / Lifetime		> 5 x 10 ⁵ Operations

2. Electrical data

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

3. Other data

	PCB-mounting	SMT-mounting
Solderability	CECC 00802 and IEC 68-2-20	
Soldering heat resistance	IEC 68-2-20 Test Tb, Methode 1A	
	IEC 68-2-20 Test Tb, Methode 2	
	CECC 00802 Classification B	
	CECC 00802 Classification C	
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	IP65	
Degree of protection	IP40 / IP65	

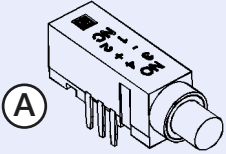
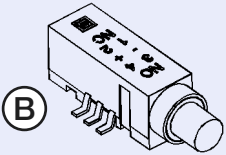
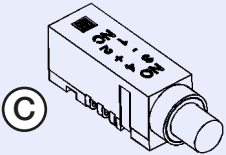
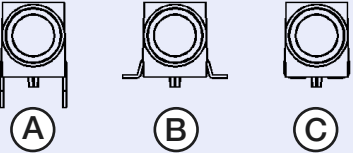
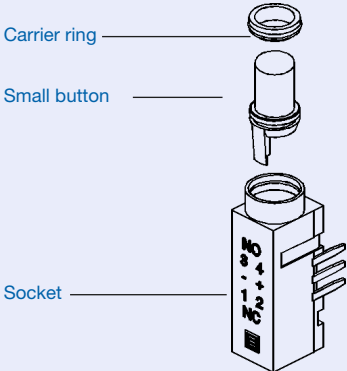
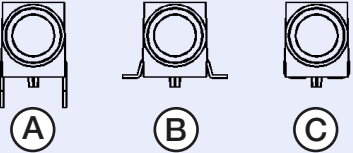
4. Materials

Socket, cover, contact unit, carrier ring	Thermoplast PA 4.6
Button non illuminated	Thermoplast PA 4.6
Button illuminated	Thermoplast PES
Sealing ring	Silicon tempered
Terminals	CuZn, 3 μm Ag, hot tinned
Contacts	CuBe2 HM, 5 μm Ag

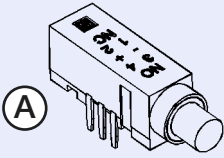
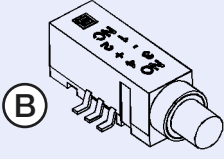
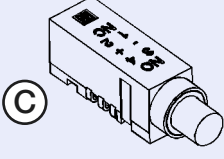
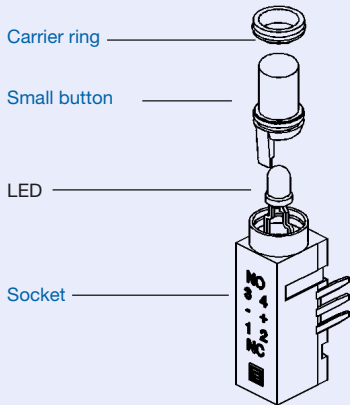

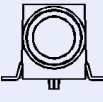

5. LED data

see page 38	0925.9730	0925.9731	0925.9732
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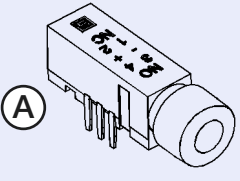
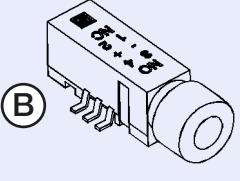
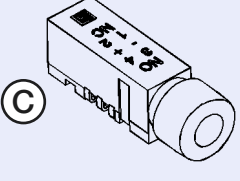
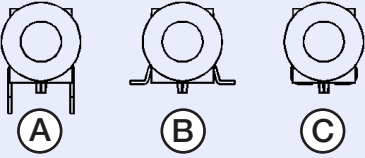
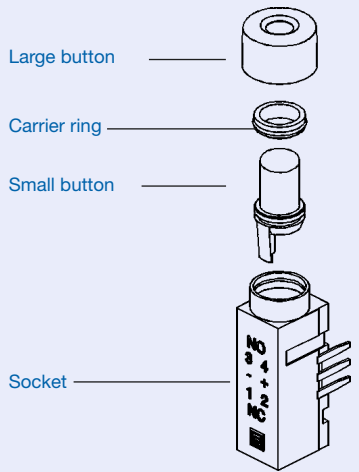
HDT with small button — non-illuminated

Models	Degree of protection	Variations		Part Number			
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	NO 2-pole		1241.1 X 02.	X 0.	0 0		
	NC 1-pole		1241.1 X 03.	X 0.	0 0		
	NC 2-pole		1241.1 X 04.	X 0.	0 0		
	NC/NO 1pole		1241.1 X 05.	X 0.	0 0		
	 <p data-bbox="161 1525 204 1563">A</p> <p data-bbox="304 1525 347 1563">B</p> <p data-bbox="440 1525 483 1563">C</p>  <p data-bbox="44 1704 161 1731">Carrier ring</p> <p data-bbox="44 1765 161 1792">Small button</p> <p data-bbox="44 1962 113 1989">Socket</p>	IP 65	Switching functions	NO 1-pole	1241.1 X 11.	X 0.	0 0
		NO 2-pole		1241.1 X 12.	X 0.	0 0	
		NC 1-pole		1241.1 X 13.	X 0.	0 0	
		NC 2-pole		1241.1 X 14.	X 0.	0 0	
		NC/NO 1pole		1241.1 X 15.	X 0.	0 0	
 <p data-bbox="161 1525 204 1563">A</p> <p data-bbox="304 1525 347 1563">B</p> <p data-bbox="440 1525 483 1563">C</p>				Terminal types	A Through hole	7	
				B SMD / Gullwing	8		
				C SMD / J-Lead	9		
				Color of small button	red	3	
				green	5		
	grey			6			
	black			7			
				non-illuminated	0		
				No large button		0	

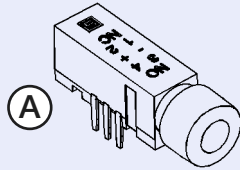
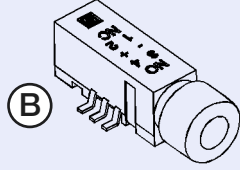
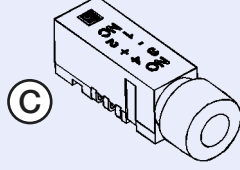
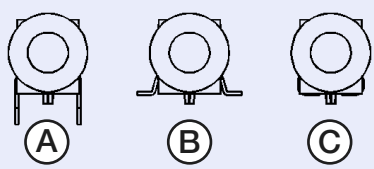
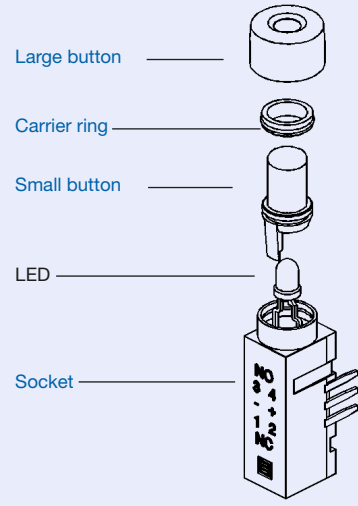
HDT with small button — illuminated

Models	Degree of protection	Variations		Part Number
<p>Momentary action</p>  <p>(A)</p>  <p>(B)</p>  <p>(C)</p> 	IP 40	Switching functions	NO 1-pole	1241.1 X 21.9. X. 0
			NO 2-pole	1241.1 X 22.9. X. 0
			NC 1-pole	1241.1 X 23.9. X. 0
			NC 2-pole	1241.1 X 24.9. X. 0
			NC/NO 1pole	1241.1 X 25.9. X. 0
	IP 65	Switching functions	NO 1-pole	1241.1 X 31.9. X. 0
			NO 2-pole	1241.1 X 32.9. X. 0
			NC 1-pole	1241.1 X 33.9. X. 0
			NC 2-pole	1241.1 X 34.9. X. 0
			NC/NO 1pole	1241.1 X 35.9. X. 0
 <p>(A)</p>  <p>(B)</p>  <p>(C)</p>	Terminal types	(A) Through hole	7	
	(B) SMD / Gullwing	8		
	(C) SMD / J-Lead	9		
	Small button	transparent	9	
	Color of LED	red	1	
		green	2	
		yellow	3	
		blue	4	
	No large button		0	

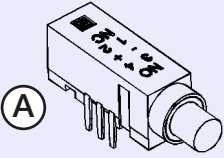
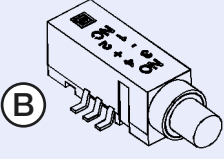
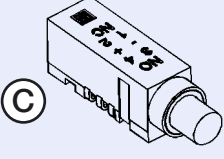
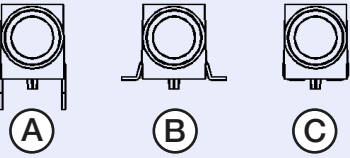
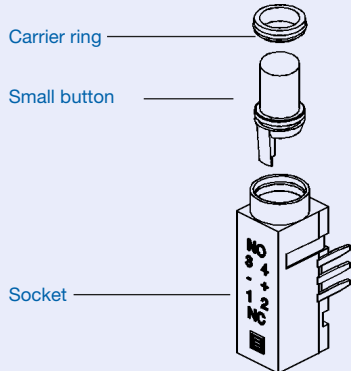
HDT with large button — non-illuminated

Models	Degree of protection	Variations	Part Number	
Momentary action   	IP 40	Switching functions	NO 1-pole	1241.2 X 01. X .0. X
			NO 2-pole	1241.2 X 02. X .0. X
			NC 1-pole	1241.2 X 03. X .0. X
			NC 2-pole	1241.2 X 04. X .0. X
			NC/NO 1pole	1241.2 X 05. X .0. X
	IP 65	Switching functions	NO 1-pole	1241.2 X 11. X .0. X
			NO 2-pole	1241.2 X 12. X .0. X
			NC 1-pole	1241.2 X 13. X .0. X
			NC 2-pole	1241.2 X 14. X .0. X
			NC/NO 1pole	1241.2 X 15. X .0. X
 	Terminal types	A Through hole	0	
		B SMD / Gullwing	1	
		C SMD / J-Lead	2	
	Color of small button	red	3	
		green	5	
		grey	6	
		black	7	
	non-illuminated		0	
	Color of large button	red	3	
		green	5	
grey		6		
black		7		

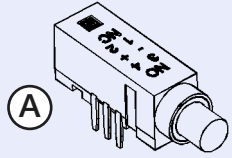
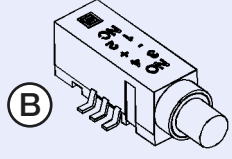
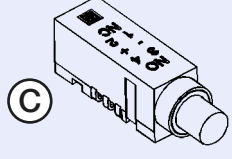
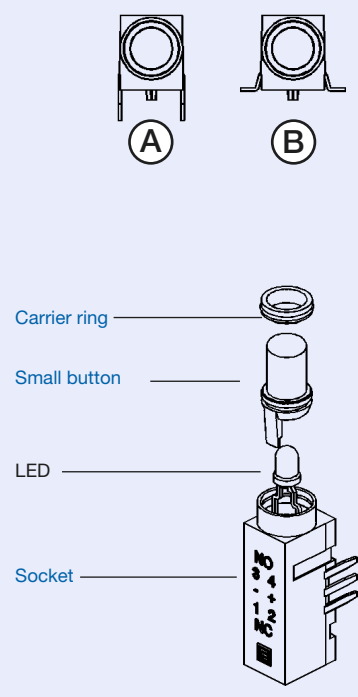
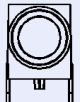
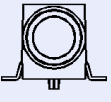

HDT with large button — illuminated

Models	Degree of protection	Variations		Part Number			
Momentary action  	IP 40	Switching functions	NO 1-pole	1241.2 X 21.9.	X	X	X
			NO 2-pole	1241.2 X 22.9.	X	X	X
			NC 1-pole	1241.2 X 23.9.	X	X	X
			NC 2-pole	1241.2 X 24.9.	X	X	X
			NC/NO 1pole	1241.2 X 25.9.	X	X	X
	IP 65	Switching functions	NO 1-pole	1241.2 X 31.9.	X	X	X
			NO 2-pole	1241.2 X 32.9.	X	X	X
			NC 1-pole	1241.2 X 33.9.	X	X	X
			NC 2-pole	1241.2 X 34.9.	X	X	X
			Öffner/Schließer 1-polig NC/NO 1pole	1241.2 X 35.9.	X	X	X
 	Terminal types		A Through hole B SMD / Gullwing C SMD / J-Lead	0	1	2	
	Small button		transparent	9			
	Color of LED		red	1			
			green	2			
			yellow	3			
			blue	4			
	Color of large button		red	3			
			green	5			
			grey	6			
			black	7			
		transparent	9				

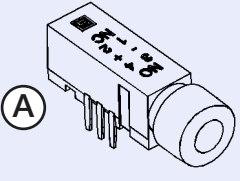
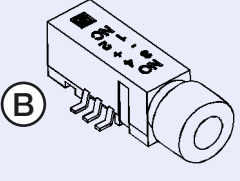
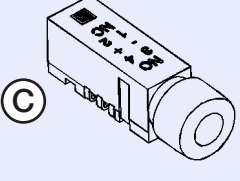
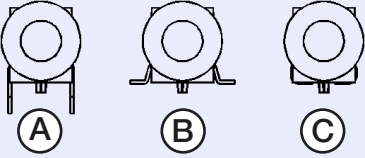
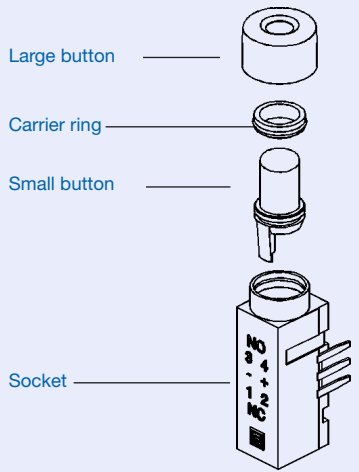
HDS with small button — non-illuminated

Models	Degree of protection	Variations	Part Number
<p>Latching action</p>  <p>(A)</p>  <p>(B)</p>  <p>(C)</p>  <p>(A) (B) (C)</p>  <p>Carrier ring</p> <p>Small button</p> <p>Socket</p>	IP 40	<p>Switching functions</p> <p>NO 1-pole</p> <hr/> <p>NO 2-pole</p> <hr/> <p>NC 1-pole</p> <hr/> <p>NC/NO 1pole</p>	<p>1241.1 X 41. X .0.0</p> <hr/> <p>1241.1 X 42. X .0.0</p> <hr/> <p>1241.1 X 43. X .0.0</p> <hr/> <p>1241.1 X 45. X .0.0</p>
	IP 65	<p>Switching functions</p> <p>NO 1-pole</p> <hr/> <p>NO 2-pole</p> <hr/> <p>NC 1-pole</p> <hr/> <p>NC/NO 1pole</p>	<p>1241.1 X 51. X .0.0</p> <hr/> <p>1241.1 X 52. X .0.0</p> <hr/> <p>1241.1 X 53. X .0.0</p> <hr/> <p>1241.1 X 55. X .0.0</p>
	Terminal types	<p>(A) Through hole</p> <p>(B) SMD / Gullwing</p> <p>(C) SMD / J-Lead</p>	<p>7</p> <hr/> <p>8</p> <hr/> <p>9</p>
	Color of small button	<p>red</p> <hr/> <p>green</p> <hr/> <p>grey</p> <hr/> <p>black</p>	<p>3</p> <hr/> <p>5</p> <hr/> <p>6</p> <hr/> <p>7</p>
	non-illuminated		0
	No large button		0

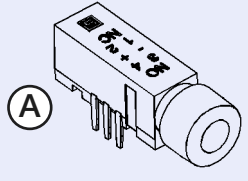
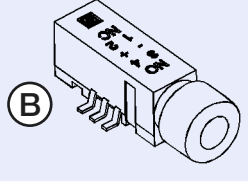
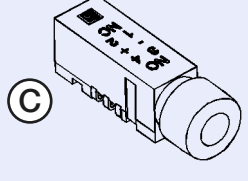
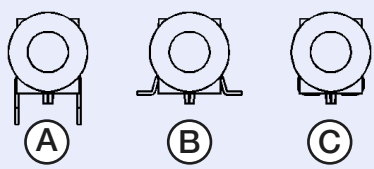
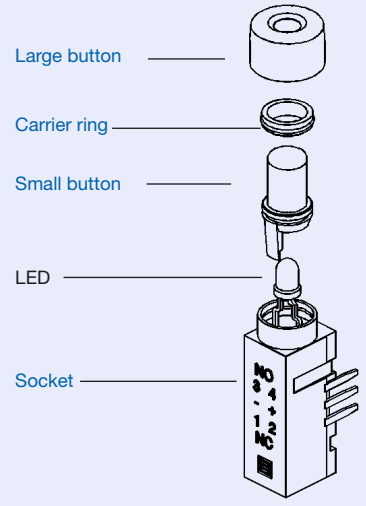
HDS with small button — illuminated

Models	Degree of protection	Variations		Part Number
<p>Latching action</p>  <p>(A)</p>  <p>(B)</p>  <p>(C)</p>  <p>Carrier ring Small button LED Socket</p>	IP 40	Switching functions	NO 1-pole	1241.1 X 61.9. X.0
			NO 2-pole	1241.1 X 62.9. X.0
			NC 1-pole	1241.1 X 63.9. X.0
			NC/NO 1pole	1241.1 X 65.9. X.0
	IP 65	Switching functions	NO 1-pole	1241.1 X 71.9. X.0
			NO 2-pole	1241.1 X 72.9. X.0
			NC 1-pole	1241.1 X 73.9. X.0
			NC/NO 1pole	1241.1 X 75.9. X.0
	 <p>(A)</p>  <p>(B)</p>  <p>(C)</p>	Terminal types	(A) Through hole	7
			(B) SMD / Gullwing	8
			(C) SMD / J-Lead	9
			Small button	transparent
		Color of LED	red	1
			green	2
			yellow	3
			blue	4
		No large button		0

HDS with large button — non-illuminated

Models	Degree of protection	Variations	Part Number
<p>Latching action</p>   	IP 40	Switching functions NO 1-pole	1241.2 X 41. X .0. X
		NO 2-pole	1241.2 X 42. X .0. X
		NC 1-pole	1241.2 X 43. X .0. X
		NC/NO 1pole	1241.2 X 45. X .0. X
	IP 65	Switching functions NO 1-pole	1241.2 X 51. X .0. X
		NO 2-pole	1241.2 X 52. X .0. X
		NC 1-pole	1241.2 X 53. X .0. X
		NC/NO 1pole	1241.2 X 55. X .0. X
 	Terminal types	(A) Through hole (B) SMD / Gullwing (C) SMD / J-Lead	0 1 2
	Color of small button	red	3
		green	5
		grey	6
		black	7
	non-illuminated		0
	Color of large button	red	3
		green	5
		grey	6
		black	7

HDS with large button — illuminated

Models	Degree of protection	Variations		Part Number			
<p>Latching action</p>   	IP 40	Switching functions	NO 1-pole	1241.2 X 61.9.	X	X	
			NO 2-pole	1241.2 X 62.9.	X	X	
			NC 1-pole	1241.2 X 63.9.	X	X	
			NC/NO 1pole	1241.2 X 65.9.	X	X	
	IP 65	Switching functions	NO 1-pole	1241.2 X 71.9.	X	X	
			NO 2-pole	1241.2 X 72.9.	X	X	
			NC 1-pole	1241.2 X 73.9.	X	X	
			NC/NO 1pole	1241.2 X 75.9.	X	X	
	 	Terminal types		A Through hole B SMD / Gullwing C SMD / J-Lead	0 1 2		
		Small button	transparent		9		
		Color of LED	red		1		
			green		2		
yellow				3			
blue				4			
Color of large button		red		3			
		green		5			
		grey		6			
		black		7			
	transparent		9				