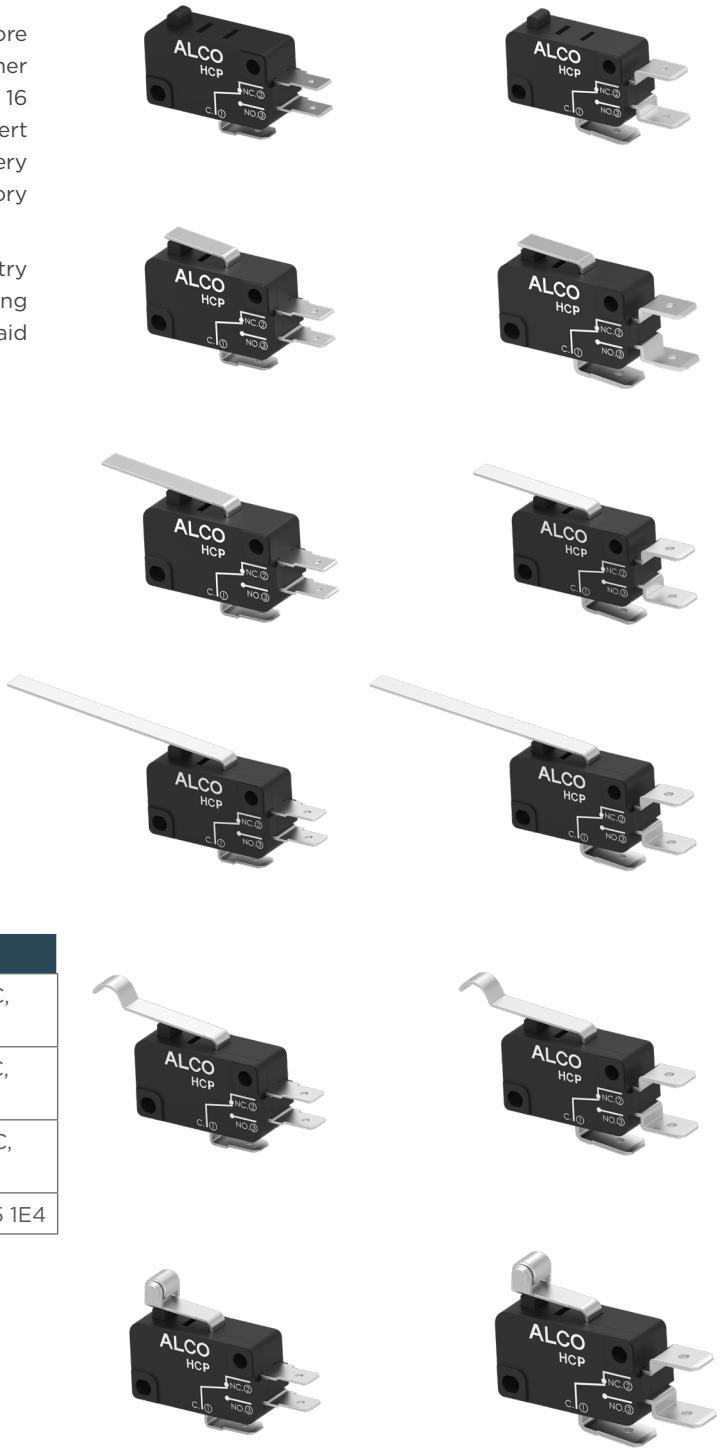
HIGH CURRENT SNAP ACTION SERIES (HCP)

ALCOSWITCH

INTRODUCTION

TE Connectivity (TE)'s Alcoswitch HCP series offers more flexibility through various combinations of lever styles in a higher current rated switch. The new current rating options include 10, 16 ,20 and 26 amp versions. These switches are designed to convert a mechanical action in an electrical one. This makes them very suitable for applications such as home appliances and factory automation as well as other domestic and industrial uses.

TE's Alcoswitch snap action switches are designed to industry standard sizes, making them extremely suitable for use in existing designs. They are available with various contact styles to aid flexibility.



APPLICATIONS

- Industry common size
- Home appliances
- White goods
- Automation and process control
- Security
- Electronic equipment

FEATURES

- Quick connect / Solder terminals
- Highly reliable with long operating life.

APPROVALS

Model Name	UL, cUL	ENEC
HCP-10	10RA 125/250VAC µT85 5E4	10(4)A 125/250VAC, µ40T125 1E4
HCP-16	16RA 125/250VAC µT85 5E4	16(4)A 125/250VAC, µ40T125 1E4
HCP-20H	20RA 125/250VAC µT85 2E4	20(4)A 125/250VAC, µ40T125 1E4
HCP-26Q	None	26A 125/250VAC, µT85 1E4

PRODUCT SPECIFICATION

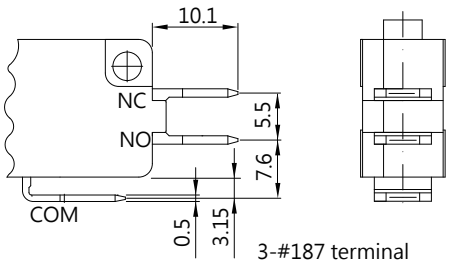
Contact resistance (Initial)	Max. 300 mΩ Measured by ohm meter - open voltage < 1VDC, driver current -100 mA
Insulation resistance (at 500 VDC / minute)	Min. 100 MΩ
Dielectric strength	Min. 500VAC (50-60HZ)/minute between Live parts. Min. 1500VAC (50-60HZ)/minute between Live parts and dead metal parts
Mechanical life	Min. 10,000,000 Operations
Electrical life	Min. 10,000 Operations
Mechanical operating frequency	120 operations per minute
Vibration	10~55Hz, displacement 0.75 mm (p-p)
Insulation resistance	100MΩ @500 VDC, 100mA, 1 minute
Operating temperature	-40°C to 125°C (with no icing)

ELECTRICAL RATINGS

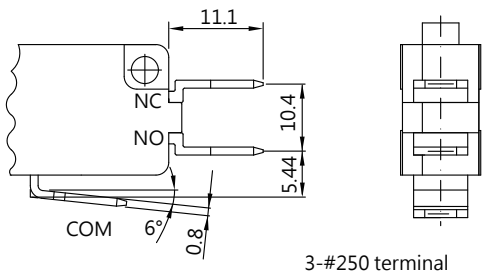
Current rating	Refer. TE smart part number table	
Rated operational voltage	125 V	250 V

TERMINAL STYLES

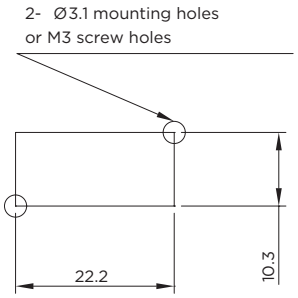
D TYPE
187 Series, straight (0.5t)



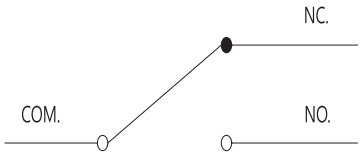
E TYPE
250 Series, dog-leg (0.8t)



MOUNTING HOLE SHAPE



CONTACT CONFIGURATION

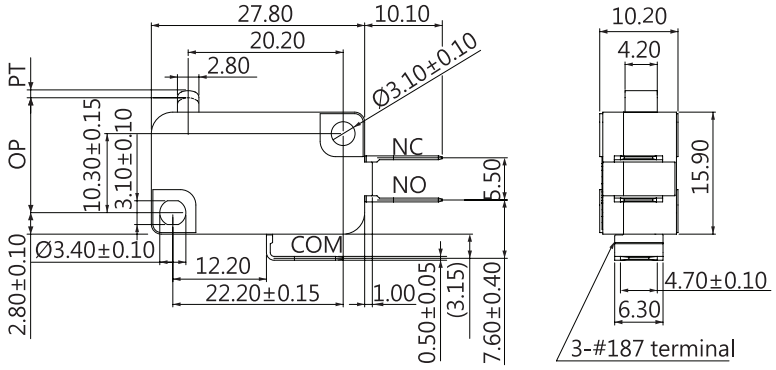


Notes:

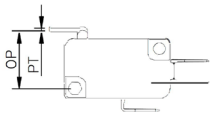
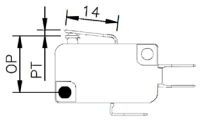
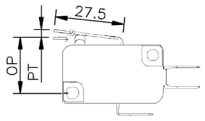
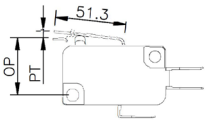
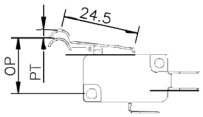
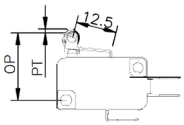
1. Dimensions in millimetres unless otherwise specified
2. Dimensions shown for reference purposes only. Specifications subject to change.

DIMENSIONS (UNIT: mm)

Unless otherwise specified, a tolerance of ±0.4mm applies to all dimensions.



OPERATING CHARACTERISTICS

Switch Type	Part Suffix	Operating Force Max. OF (gf)				Operating Position OP (mm)	Pre-Travel Max. PT Max. (mm)	Over-Travel Min. OT Min. (mm)	Movement Differential Max. MD Max. (mm)
		L	S	H	Q				
HCP□□DTD0□04		150	200		350	14.7 ±0.5	1.9	1.0	0.4
HCP□□DTD1□04		150	190	290	340	15.3 ±0.5	2.8	1.0	0.5
HCP□□DTD2□04		90	110	160	185	15.3 ±1.1	5.9	1.2	1.0
HCP□□DTD3□04		50	65	95	110	15.3 ±2.4	9.3	-	2.1
HCP□□DTD4□04		90	120	175	205	18.7 ±1.3	5.5	1.9	1.1
HCP□□DTD5□04		170	220	310	375	20.7 ±0.6	2.7	1.1	0.45

Notes:

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PRODUCT CODE STRUCTURE

Typical product code

HCP _ _ _ _ _ _

Series

HCP	HCP Series

Current Rating

10	10A @ 125/250VAC
16	16A @ 125/250VAC
20	20A @ 125/250VAC
26	26A @ 125/250VAC

Function

DT	SPDT

Terminal Type

D	.187 terminal
E	.250 terminal

Compliance

04	RoHS Compliant

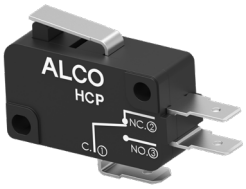
Operating Force

L	Light
S	Standard
H	Heavy
Q	Heaviest

Lever Type

0	No lever
1	Small lever
2	Normal lever
3	Extended lever
4	Simulated roller
5	Short roller

NO LEVER



SMALL LEVER

NORMAL LEVER

EXTENDED LEVER

SIMULATED ROLLER

SHORT ROLLER

PRODUCT INFORMATION

Sl No.	TE Smart Number	Description	TE Part Number
1	HCP10DTD0S04	HCP Series 10A, Standard Force, 0.187 Terminal, No Lever	2439028-1
2	HCP10DTE0S04	HCP Series 10A, Standard Force, 0.250 Terminal, No Lever	2439028-2
3	HCP10DTD0L04	HCP Series 10A, Light Force, 0.187 Terminal, No Lever	2439028-3
4	HCP10DTE0L04	HCP Series 10A, Light Force, 0.250 Terminal, No Lever	2439028-4
5	HCP10DTD1S04	HCP Series 10A, Standard Force, 0.187 Terminal, Small Lever	2439028-5
6	HCP10DTE1S04	HCP Series 10A, Standard Force, 0.250 Terminal, Small Lever	2439028-6
7	HCP10DTD1L04	HCP Series 10A, Light Force, 0.187 Terminal, Small Lever	2439028-7
8	HCP10DTE1L04	HCP Series 10A, Light Force, 0.250 Terminal, Small Lever	2439028-8
9	HCP10DTD2S04	HCP Series 10A, Standard Force, 0.187 Terminal, Normal Lever	2439028-9
10	HCP10DTE2S04	HCP Series 10A, Standard Force, 0.250 Terminal, Normal Lever	1-2439028-0
11	HCP10DTD2L04	HCP Series 10A, Light Force, 0.187 Terminal, Normal Lever	1-2439028-1
12	HCP10DTE2L04	HCP Series 10A, Light Force, 0.250 Terminal, Normal Lever	1-2439028-2
13	HCP10DTD3S04	HCP Series 10A, Standard Force, 0.187 Terminal, Extended Lever	1-2439028-3
14	HCP10DTE3S04	HCP Series 10A, Standard Force, 0.250 Terminal, Extended Lever	1-2439028-4
15	HCP10DTD3L04	HCP Series 10A, Light Force, 0.187 Terminal, Extended Lever	1-2439028-5
16	HCP10DTE3L04	HCP Series 10A, Light Force, 0.250 Terminal, Extended Lever	1-2439028-6
17	HCP10DTD4S04	HCP Series 10A, Standard Force, 0.187 Terminal, Simulated Roller	1-2439028-7
18	HCP10DTE4S04	HCP Series 10A, Standard Force, 0.250 Terminal, Simulated Roller	1-2439028-8
19	HCP10DTD4L04	HCP Series 10A, Light Force, 0.187 Terminal, Simulated Roller	1-2439028-9
20	HCP10DTE4L04	HCP Series 10A, Light Force, 0.250 Terminal, Simulated Roller	2-2439028-0
21	HCP10DTD5S04	HCP Series 10A, Standard Force, 0.187 Terminal, Short Roller	2-2439028-1
22	HCP10DTE5S04	HCP Series 10A, Standard Force, 0.250 Terminal, Short Roller	2-2439028-2
23	HCP10DTD5L04	HCP Series 10A, Light Force, 0.187 Terminal, Short Roller	2-2439028-3
24	HCP10DTE5L04	HCP Series 10A, Light Force, 0.250 Terminal, Short Roller	2-2439028-4
25	HCP16DTD0S04	HCP Series 16A, Standard Force, 0.187 Terminal, No Lever	2435260-1
26	HCP16DTE0S04	HCP Series 16A, Standard Force, 0.250 Terminal, No Lever	2435260-2
27	HCP16DTD0L04	HCP Series 16A, Light Force, 0.187 Terminal, No Lever	2435260-3
28	HCP16DTE0L04	HCP Series 16A, Light Force, 0.250 Terminal, No Lever	2435260-4
29	HCP16DTD1S04	HCP Series 16A, Standard Force, 0.187 Terminal, Small Lever	2435260-5
30	HCP16DTE1S04	HCP Series 16A, Standard Force, 0.250 Terminal, Small Lever	2435260-6
31	HCP16DTD1L04	HCP Series 16A, Light Force, 0.187 Terminal, Small Lever	2435260-7
32	HCP16DTE1L04	HCP Series 16A, Light Force, 0.250 Terminal, Small Lever	2435260-8
33	HCP16DTD2S04	HCP Series 16A, Standard Force, 0.187 Terminal, Normal Lever	2435260-9
34	HCP16DTE2S04	HCP Series 16A, Standard Force, 0.250 Terminal, Normal Lever	1-2435260-0
35	HCP16DTD2L04	HCP Series 16A, Light Force, 0.187 Terminal, Normal Lever	1-2435260-1
36	HCP16DTE2L04	HCP Series 16A, Light Force, 0.250 Terminal, Normal Lever	1-2435260-2
37	HCP16DTD3S04	HCP Series 16A, Standard Force, 0.187 Terminal, Extended Lever	1-2435260-3
38	HCP16DTE3S04	HCP Series 16A, Standard Force, 0.250 Terminal, Extended Lever	1-2435260-4
39	HCP16DTD3L04	HCP Series 16A, Light Force, 0.187 Terminal, Extended Lever	1-2435260-5
40	HCP16DTE3L04	HCP Series 16A, Light Force, 0.250 Terminal, Extended Lever	1-2435260-6

Sl No.	TE Smart Number	Description	TE Part Number
41	HCP16DTD4S04	HCP Series 16A, Standard Force, 0.187 Terminal, Simulated Roller	1-2435260-7
42	HCP16DTE4S04	HCP Series 16A, Standard Force, 0.250 Terminal, Simulated Roller	1-2435260-8
43	HCP16DTD4L04	HCP Series 16A, Light Force, 0.187 Terminal, Simulated Roller	1-2435260-9
44	HCP16DTE4L04	HCP Series 16A, Light Force, 0.250 Terminal, Simulated Roller	2-2435260-0
45	HCP16DTD5S04	HCP Series 16A, Standard Force, 0.187 Terminal, Short Roller	2-2435260-1
46	HCP16DTE5S04	HCP Series 16A, Standard Force, 0.250 Terminal, Short Roller	2-2435260-2
47	HCP16DTD5L04	HCP Series 16A, Light Force, 0.187 Terminal, Short Roller	2-2435260-3
48	HCP16DTE5L04	HCP Series 16A, Light Force, 0.250 Terminal, Short Roller	2-2435260-4
49	HCP20DTD0H04	HCP Series 20A, Heavy Force, 0.187 Terminal, No Lever	2435261-1
50	HCP20DTE0H04	HCP Series 20A, Heavy Force, 0.250 Terminal, No Lever	2435261-2
51	HCP20DTD1H04	HCP Series 20A, Heavy Force, 0.187 Terminal, Small Lever	2435261-3
52	HCP20DTE1H04	HCP Series 20A, Heavy Force, 0.250 Terminal, Small Lever	2435261-4
53	HCP20DTD2H04	HCP Series 20A, Heavy Force, 0.187 Terminal, Normal Lever	2435261-5
54	HCP20DTE2H04	HCP Series 20A, Heavy Force, 0.250 Terminal, Normal Lever	2435261-6
55	HCP20DTD3H04	HCP Series 20A, Heavy Force, 0.187 Terminal, Extended Lever	2435261-7
56	HCP20DTE3H04	HCP Series 20A, Heavy Force, 0.250 Terminal, Extended Lever	2435261-8
57	HCP20DTD4H04	HCP Series 20A, Heavy Force, 0.187 Terminal, Simulated Roller	2435261-9
58	HCP20DTE4H04	HCP Series 20A, Heavy Force, 0.250 Terminal, Simulated Roller	1-2435261-0
59	HCP20DTD5H04	HCP Series 20A, Heavy Force, 0.187 Terminal, Short Roller	1-2435261-1
60	HCP20DTE5H04	HCP Series 20A, Heavy Force, 0.250 Terminal, Short Roller	1-2435261-2
61	HCP26DTD0Q04	HCP Series 26A, Heaviest Force, 0.187 Terminal, No Lever	2435262-1
62	HCP26DTE0Q04	HCP Series 26A, Heaviest Force, 0.250 Terminal, No Lever	2435262-2
63	HCP26DTD1Q04	HCP Series 26A, Heaviest Force, 0.187 Terminal, Small Lever	2435262-3
64	HCP26DTE1Q04	HCP Series 26A, Heaviest Force, 0.250 Terminal, Small Lever	2435262-4
65	HCP26DTD2Q04	HCP Series 26A, Heaviest Force, 0.187 Terminal, NormalLever	2435262-5
66	HCP26DTE2Q04	HCP Series 26A, Heaviest Force, 0.250 Terminal, Normal Lever	2435262-6
67	HCP26DTD3Q04	HCP Series 26A, Heaviest Force, 0.187 Terminal, Extended Lever	2435262-7
68	HCP26DTE3Q04	HCP Series 26A, Heaviest Force, 0.250 Terminal, Extended Lever	2435262-8
69	HCP26DTD4Q04	HCP Series 26A, Heaviest Force, 0.187 Terminal, Simulated Roller	2435262-9
70	HCP26DTE4Q04	HCP Series 26A, Heaviest Force, 0.250 Terminal, Simulated Roller	1-2435262-0
71	HCP26DTD5Q04	HCP Series 26A, Heaviest Force, 0.187 Terminal, Short Roller	1-2435262-1
72	HCP26DTE5Q04	HCP Series 26A, Heaviest Force, 0.250 Terminal, Short Roller	1-2435262-2

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06/23 ED