

## HL Brackets: HL, HLA, HLT, HLW, HLZ, NHL, NHLW

GLOBAL MODEL (OF RESISTOR)	BRACKET TYPE
HL015, HL020, HL025, HL026, HL050, HLA020, HLA025, HLA026, HLA050, HLT015, HLT020, HLT025, HLT026, HLT050, HLW10, HLW15, HLW20, HLZ033, HLZ090, NHL015, NHL020, NHL025, NHL026, NHL050, NHLW10, NHLW15, NHLW20	101, 203, 301
HL011, HL012, HLA012, HLW06, HLW12, NHL011, NHL012, NHLW06, NHLW12	101, 204, 301
HL051, HL060, HL065, HL100, HLA051, HLA060, HLA065, HLA100, HLT051, HLT060, HLT065, HLT100, HLZ099, HLZ105, HLZ110, HLZ165, NHL051, NHL060, NHL065, NHL100	102, 206, 303
HL080, HL120, HL130, HL160, HL175, HL225, HLA080, HLA120, HLA130, HLA160, HLA175, HLA225, HLT080, HLT120, HLT130, HLT160, HLT175, HLT225, HLZ140, HLZ220, HLZ240, HLZ275, HLZ300, HLZ375, NHL080, NHL120, NHL130, NHL160, NHL175, NHL225	103, 205, 303

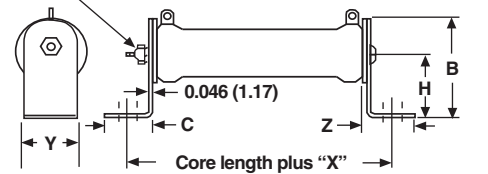
### Notes

- Each bracket assembly contains all of the hardware needed to mount one component
- Bracket type 100 and 300 series include resistor size in global part number (see next page)
- Bracket type 200 series does not include resistor size in global part number (see next page)

### DIMENSIONS in inches (millimeters)

#### Horizontal Thru-Bolt

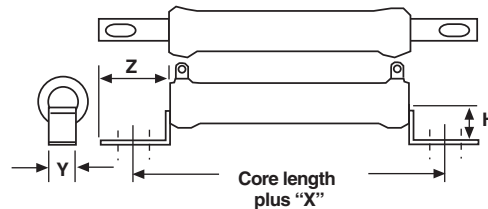
(Threaded rod supplied as standard on HL050 thru HL225 sizes.)



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**  
Available  
**GREEN**  
(5-2008)  
Available

BRACKET TYPE	X	Y	Z	H	MOUNTING SLOT	C	B
101	1.063 (26.99)	0.500 (12.70)	0.859 (21.83)	1.000 (25.40)	0.219 x 0.438 (5.56 x 11.11)	0.750 (19.05)	1.375 (34.93)
102	1.063 (26.99)	0.750 (19.05)	0.859 (21.83)	1.250 (31.75)	0.219 x 0.438 (5.56 x 11.11)	0.750 (19.05)	1.750 (44.45)
103	1.063 (26.99)	1.250 (31.75)	1.000 (25.40)	1.500 (38.10)	0.281 x 0.563 (7.14 x 14.29)	0.875 (22.23)	2.125 (53.98)

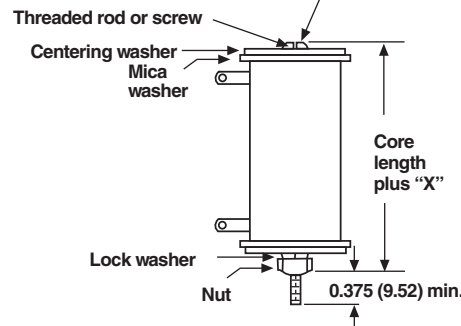
#### Push-In



BRACKET TYPE	X	H	Y	Z	HOLE (DIA.)
203	0.625 (15.88)	0.672 (17.07)	0.250 (6.35)	0.469 (11.91)	0.161 (4.09)
204	0.375 (9.53)	0.281 (7.14)	0.250 (6.35)	0.344 (8.73)	0.144 (3.66)
205	0.813 (20.64)	1.391 (35.32)	0.500 (12.70)	0.688 (17.46)	0.196 x 0.260 (4.98 x 6.60)
206	0.719 (18.26)	0.969 (24.61)	0.375 (9.53)	0.625 (15.88)	0.196 x 0.260 (4.98 x 6.60)

#### Vertical Thru-Bolt

(Threaded rod supplied as standard on HL050 thru HL225 sizes.)



BRACKET TYPE	X (APPROXIMATE)	THREAD
301	0.438 (11.11)	8-32
303	0.500 (12.70)	10-32

Material categorization: For definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

GLOBAL PART NUMBER INFORMATION									
Global Part Numbering example (bracket type 100 and 300 series): BRACKET101033E29 (RoHS bracket type 101 for HLZ033)									
<div style="display: flex; justify-content: space-around; align-items: center;"> <span style="border: 1px solid black; padding: 2px;">BRACKET</span> <span style="border: 1px solid black; padding: 2px;">1</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">1</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">3</span> <span style="border: 1px solid black; padding: 2px;">3</span> <span style="border: 1px solid black; padding: 2px;">E</span> <span style="border: 1px solid black; padding: 2px;">2</span> <span style="border: 1px solid black; padding: 2px;">9</span> </div>									
BRACKET TYPE	RESISTOR SIZE			PACKAGING CODE					
101 102 103 301 303	3 digits following resistor family in GLOBAL MODEL			E29 = RoHS Compliant BLANK = Non-RoHS Compliant (B29) <sup>(1)</sup>					

**Note**

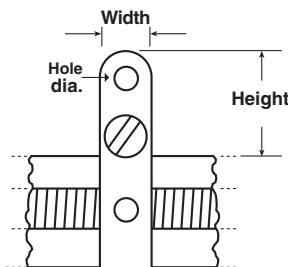
<sup>(1)</sup> Brackets ordered with no packaging code (or B29 packaging code) may not be RoHS/Green compliant

GLOBAL PART NUMBER INFORMATION						
Global Part Numbering example (bracket types 200 series): BRACKET203E29 (RoHS bracket type 203)						
<div style="display: flex; justify-content: space-around; align-items: center;"> <span style="border: 1px solid black; padding: 2px;">BRACKET</span> <span style="border: 1px solid black; padding: 2px;">2</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">3</span> <span style="border: 1px solid black; padding: 2px;">E</span> <span style="border: 1px solid black; padding: 2px;">2</span> <span style="border: 1px solid black; padding: 2px;">9</span> </div>						
BRACKET TYPE	PACKAGING CODE					
203 204 205 206	E29 = RoHS Compliant BLANK = Non-RoHS Compliant (B29) <sup>(1)</sup>					

**Note**

<sup>(1)</sup> Brackets ordered with no packaging code (or B29 packaging code) may not be RoHS/Green compliant

## HLA SLIDERS - DIMENSIONS in inches (millimeters)



GLOBAL PART NUMBER <sup>(2)</sup> (RoHS COMPLIANT)	GLOBAL MODEL (OF RESISTOR)	SLIDER MODEL NUMBER	DIMENSIONS		
			WIDTH	HEIGHT	HOLE DIAMETER
75008602E29	HLA012	70	0.188 (4.76)	0.516 (13.10)	0.125 (3.18)
21054401E29	HLA020, HLA026	71	0.250 (6.35)	0.594 (15.08)	0.156 (3.96)
75008603E29	HLA025, HLA050	72	0.250 (6.35)	0.719 (18.26)	0.141 (3.58)
75008604E29	HLA051, HLA060, HLA065, HLA100	73	0.250 (6.35)	0.781 (19.84)	0.141 (3.58)
75008605E29	HLA080, HLA120, HLA130, HLA160, HLA175, HLA225	74	0.313 (7.94)	0.781 (19.84)	0.170 (4.32)

**Note**

<sup>(2)</sup> Order HLA Slider with Global Part Number