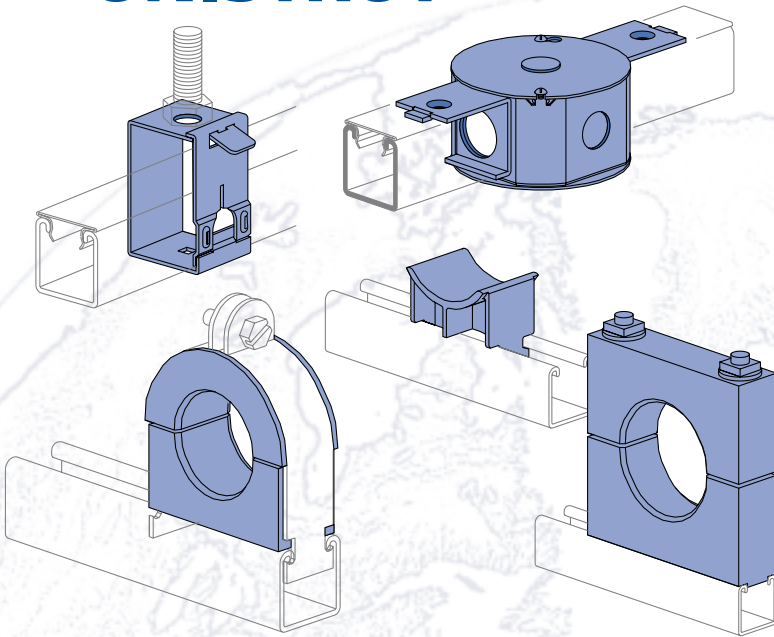




# UNISTRUT®

# ELECTRICAL FITTINGS



- Electrical Fittings ..... 163
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## MATERIAL

Unistrut fittings, unless noted, are made from hot-rolled, pickled and oiled steel plates, strip or coil, and conform to ASTM specifications A575, A576, A635, or A36. The fitting steel also meets the physical requirements of ASTM A1011 SS GR 33. The pickling of the steel produces a smooth surface free from scale.

Maple cable saddles, cable clamps and bus bar clamps are made from kiln-dry maple treated with paraffin to a depth of 1/16" (1.6mm). Special sizes of clamps can be fabricated upon request. Porcelain cable clamps are made by the dry process and white glazed. Cable saddles are fiberglass-reinforced polyester.

## CHANNEL RACEWAYS

The Unistrut Metal Framing System includes an exclusive combination of channel, fittings and hardware listed under new UL classification 5B. This classification covers strut-type channel raceways and fittings for use in accordance with Article 352 of the National Electrical Code, NFPA 70. Included are metal strut-type channel raceways at least .071 inch (1.81mm) thick and metal or non-metal closure strips at least .040 inch (1.02mm) thick.

The Unistrut system requires no welding, drilling or other complex fabrication techniques. This means faster, easier solutions for virtually any electrical support problem.

Unistrut channel offers structural and spanning capabilities not available with conventional surface raceway products

and is available in continuous lengths of up to 20 feet. Just as important, it is part of an integrated system that can be used for raceways, trapeze hangers, cable-tray supports, lighting grids, fluorescent-fixture supports and countless other electrical applications.

## CHANNEL COMPATABILITY

All of the electrical components in this section are intended for use with any of the 1 5/8" wide channel. They are not intended for use with 1 1/4" or 1 3/16" framing systems.

## FINISHES

Components listed in this section are available in: electro-galvanized (EG), conforming to ASTM B633 Type III SC1; Hot-dipped galvanized (HG), conforming to ASTM A123 or A153, Perma-Green II (GR), and plain (PL).

Note: Many Unistrut Metal Framing components, when used with appropriate closures, are UL® listed, and CSA approved.

## DESIGN LOAD

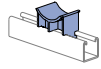
Design load data, where shown, is based on the ultimate strength of the connection with a safety factor of 2.5, unless otherwise noted.

## DIMENSIONS

Imperial dimensions are illustrated in inches. Metric dimensions are shown in parenthesis or as noted. Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.



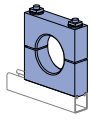
### Electrical Fittings



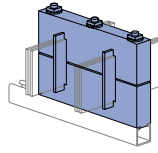
P1753-Pg 163



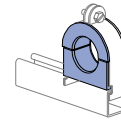
P2649 A-Pg 163



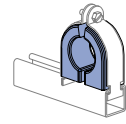
P2645 A-Pg 163



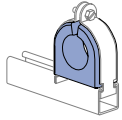
P2647 A-Pg 164



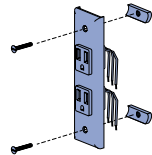
P1690-Pg 164



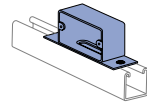
P1787-Pg 165



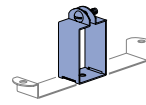
P1787 A-Pg 166



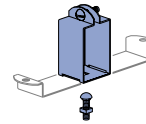
P2557-Pg 167



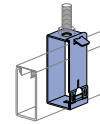
P2567-Pg 167



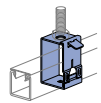
P2537-Pg 168



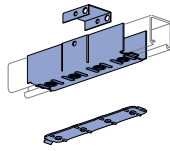
P2539-Pg 168



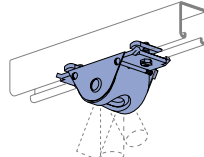
P2755-Pg 168



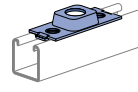
P2855-Pg 168



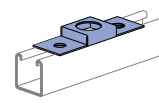
P3922-Pg 169



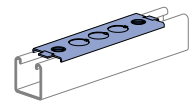
P2534-50-Pg 169



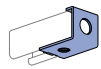
P2535-Pg 170



P2536-Pg 170



P2522-Pg 170



P3521-50-Pg 170



P2521-50-Pg 170



P5521-50-Pg 170



P5021-50-Pg 171



P2521-100-Pg 171



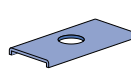
P5021-100-Pg 171



P5521-100-Pg 171



P1180 W-Pg 171



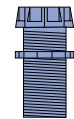
P2541-Pg 172



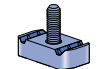
P2552-Pg 172



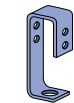
P2540-Pg 172



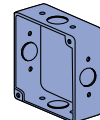
P2603-Pg 172



P3116-125-Pg 172



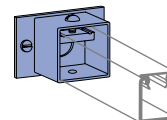
P2602-Pg 173



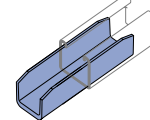
P2801-Pg 173



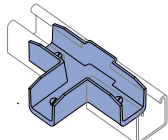
P2802-Pg 173



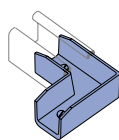
P2803-Pg 173



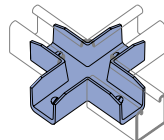
P2900-Pg 174



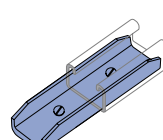
P2901-Pg 174



P2902-Pg 174



P2903-Pg 174



P2904-Pg 174



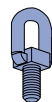
M2037-Pg 175



M2137-Pg 175



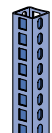
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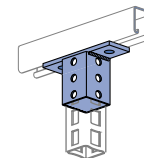
M2350-Pg 175



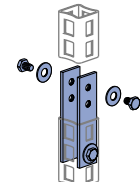
P16F-Pg 176



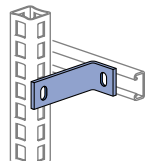
P21H-Pg 176



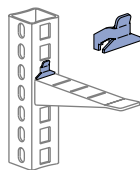
P2820-Pg 178



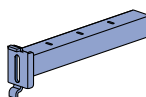
P2822-Pg 178



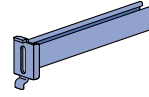
P2823-Pg 178



P2821-Pg 178



P2920-Pg 179

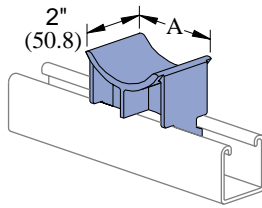


P2928-Pg 179

1 5/8" Channel  
 Telesruct System  
 Nuts & Hardware  
 General Fittings  
 Pipe/Conduit Supports  
 Electrical Fittings  
 Concrete Inserts  
 1 1/4" Framing System  
 1 3/16" Framing System  
 Fiberglass System  
 Special Metals  
 PrimeAngle System  
 Product Index

P1753, P1754

Cable Saddles

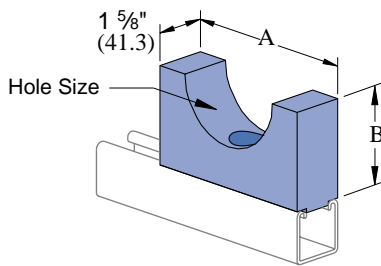


Part Number	"A" In (mm)	Maximum Cable Diameter In (mm)	Wt/100 pcs Lbs (kg)
P1753 FG	2 <sup>13</sup> / <sub>16</sub> 71.4	3 76.2	12 5.4
P1754 FG	3 <sup>3</sup> / <sub>4</sub> 95.3	4 <sup>1</sup> / <sub>2</sub> 114.3	17 7.7
P1753 PO	3 76.2	3 76.2	75 34.0
P1754 PO	4 101.6	4 <sup>1</sup> / <sub>2</sub> 114.3	95 43.1

Material: FG - Fiberglass Reinforced Polyester,  
PO - Dry Process White Glazed Porcelain

P2649A thru P2649H

Maple Cable Saddles

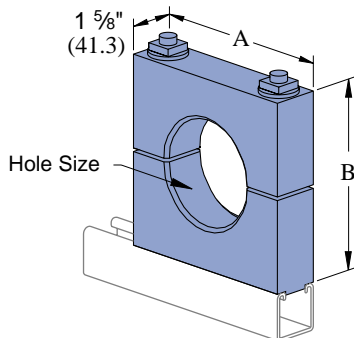


Part Number	Hole Size In (mm)	"A" In (mm)	"B" In (mm)	Wt/100 pcs Lbs (kg)
P2649A	0 - 1 0 - 25.4	3 76.2	1 <sup>1</sup> / <sub>4</sub> 44.5	31 14.1
P2649B	1 - 1 <sup>1</sup> / <sub>2</sub> 25.4 x 38.1	3 <sup>1</sup> / <sub>2</sub> 88.9	2 50.8	38 17.2
P2649C	1 <sup>1</sup> / <sub>2</sub> - 2 38.1 - 50.8	4 101.6	2 <sup>1</sup> / <sub>4</sub> 57.2	47 21.3
P2649D	2 - 2 <sup>1</sup> / <sub>2</sub> 50.8 x 63.5	4 <sup>1</sup> / <sub>2</sub> 114.3	2 <sup>1</sup> / <sub>2</sub> 63.5	57 25.9
P2649E	2 <sup>1</sup> / <sub>2</sub> - 3 63.5 - 76.2	5 127.0	2 <sup>3</sup> / <sub>4</sub> 69.9	68 30.8
P2649F	3 - 3 <sup>1</sup> / <sub>2</sub> 76.2 x 88.9	5 <sup>1</sup> / <sub>2</sub> 139.7	3 76.2	80 36.3
P2649G	3 <sup>1</sup> / <sub>2</sub> - 4 88.9 - 101.6	6 152.4	3 <sup>1</sup> / <sub>4</sub> 82.6	94 42.6
P2649H	over 4 over 101.6			

- 3/8" Flat Head Machine Screw included.
  - Specify hole size when ordering.
  - Order channel nuts as required.
- Material: Maple hardwood paraffin impregnated.

P2645A thru P2645H

Maple Cable Clamps



Part Number	Hole Size In (mm)	"A" & "B" Dimensions In (mm)	Wt/100 pcs Lbs (kg)
P2645A	0 - 1 0 - 25.4	3 <sup>1</sup> / <sub>2</sub> 88.9	84 38.1
P2645B	1 - 1 <sup>1</sup> / <sub>2</sub> 25.4 x 38.1	4 101.6	102 46.3
P2645C	1 <sup>1</sup> / <sub>2</sub> - 2 38.1 - 50.8	4 <sup>1</sup> / <sub>2</sub> 114.3	121 54.9
P2645D	2 - 2 <sup>1</sup> / <sub>2</sub> 50.8 x 63.5	5 <sup>1</sup> / <sub>2</sub> 139.7	165 74.8
P2645E	2 <sup>1</sup> / <sub>2</sub> - 3 63.5 - 76.2	6 152.4	189 85.7
P2645F	3 - 3 <sup>1</sup> / <sub>2</sub> 76.2 x 88.9	6 <sup>1</sup> / <sub>2</sub> 165.1	215 97.5
P2645G	3 <sup>1</sup> / <sub>2</sub> - 4 88.9 - 101.6	7 177.8	243 110.2
P2645H	over 4 over 101.6		

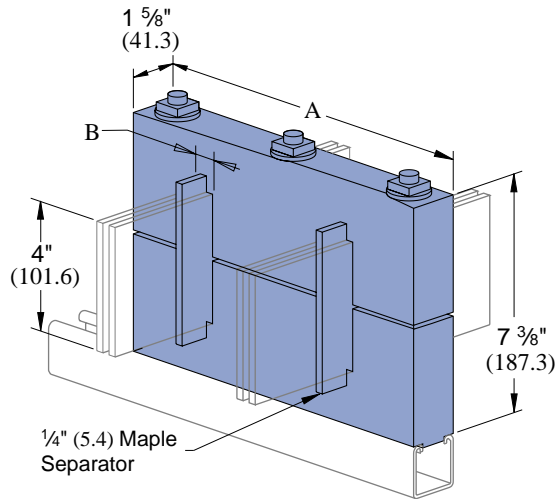
- 3/8" studs, square nuts and washers included.
  - Specify hole size when ordering.
  - Order channel nuts as required.
- Material: Maple hardwood paraffin impregnated.

15/8" Channel  
Telestrut System  
Nuts & Hardware  
General Fittings  
Pine/Conduit Supports  
Electrical Fittings  
Concrete Inserts  
1 1/2" Framing System  
1 3/8" Framing System  
Fiberglass System  
Special Metals  
PrimeAngle System  
Product Index



P2647A thru P2647F

4" (101.6) Bus Bar Maple Clamps



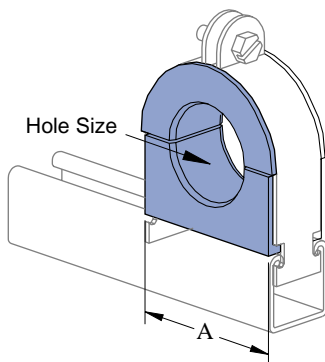
- 1/2" studs, square nuts and washers are included.
- Channel nuts must be ordered separately.
- Bus bar maple clamps also available in 1/4" (6.4) x 2" (50.8) and 1/4" (6.4) x 6" (152.4).

Part Number	"A" In (mm)	"B" In (mm)	No. Bus Separators	No. Bars Per Leg	Wt/100 pcs Lbs (kg)
P2647A	8 1/2 215.9	9/32 7.1	0	1	421 191.0
P2647B	9 1/2 241.3	13/16 20.6	2	2	465 210.9
P2647C	10 1/2 266.7	1 5/16 33.3	4	3	509 230.9
P2647D	11 1/2 292.1	1 13/16 46.0	6	4	553 250.8
P2647E	12 1/2 317.5	2 3/8 60.3	8	5	597 270.8
P2647F	13 1/2 342.9	2 7/8 73.0	10	6	631 286.2

Material: Paraffin impregnated maple hardwood.

P1690 thru P1697

Maple Cable Clamps



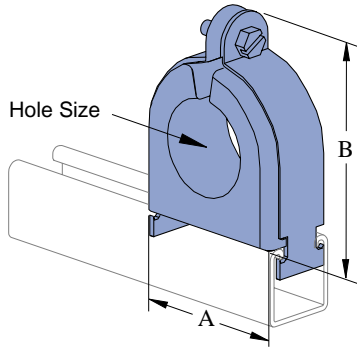
- Use with steel clamp and Everdur hardware. Order clamp separately.
- Specify hole size when ordering.

Part Number	Order Steel Clamp Number	Hole Size In (mm)	"A" In (mm)	Wt/100 pcs Lbs (kg)
P1690	P1113 E	0 - 5/8 0 - 15.9	1 1/2 38.1	24 10.9
P1691	P1115 E	1/2 - 1 12.7 - 25.4	2 1/8 54.0	42 19.1
P1692	P1117 E	3/4 - 1 1/2 19.1 x 38.1	2 5/8 66.7	54 24.5
P1693	P1118 E	1 1/4 - 1 3/4 31.8 x 44.5	3 76.2	65 29.5
P1694	P1119 E	1 1/2 - 2 1/4 38.1 x 57.2	3 5/8 92.1	84 38.1
P1695	P1120 E	2 - 2 1/2 50.8 x 63.5	4 1/8 104.8	107 48.5
P1696	P1121 E	2 1/4 - 3 57.2 - 76.2	4 5/8 117.5	123 55.8
P1697	P1123 E	3 - 4 76.2 - 101.6	5 3/4 146.1	163 73.9

Material: Paraffin impregnated maple hardwood.

P1787 thru P1795

Porce-A-Clamp™



Patents Pending

Strap Material: Electro-galvanized Steel (EG) or Stainless Steel (SS)

Use With: All 1½" channel

Porce-A-Clamp™

- Non-Breakable TPE Material.
- U.V. Resistant.
- U.L. Listed.
- Optional Stainless Steel Clamps.
- Tapered Flange to Protect Cable.
- Dielectric Strength 640 Volts Per Mil.
- One Piece Insulator.
- Replaces Porcelain & Maple Cable Clamp.
- For use in accordance with National Electrical Code ANSI/NFPA 70.
- Includes Pipe Strap.

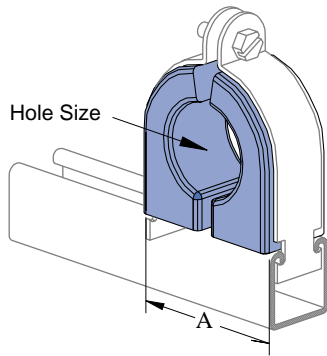
Part Number	Hole Size In (mm)	"A" In (mm)	"B" In (mm)	Wt/100 pcs Lbs (kg)
P1787A	¾ 9.5	1.36 34.5	1.82 46.2	25 11.3
P1787B	½ 12.7			
P1787C	⅝ 15.9			
P1788	¾ 19.1	1.86 47.2	2.34 59.4	37 16.8
P1788A	⅞ 22.2			
P1788B	1 25.4			
P1788C	1⅛ 28.6			
P1789	1¼ 31.8	2.36 59.9	2.86 72.6	58 16.8
P1789A	1⅜ 34.9			
P1789B	1½ 38.1			
P1789C	1⅝ 41.3			
P1790	1¾ 44.5	2.86 72.6	3.50 88.9	76 34.5
P1790A	1⅞ 47.6			
P1790B	2 50.8			
P1790C	2⅛ 54.0			
P1791	2¼ 57.2	3.36 85.3	4.05 102.9	90 40.8
P1791A	2⅝ 60.3			

Part Number	Hole Size In (mm)	"A" In (mm)	"B" In (mm)	Wt/100 pcs Lbs (kg)
P1791B	2½ 63.5			
P1791C	2⅝ 66.7			
P1792	2¾ 69.9	3.86 98.0	4.75 120.7	109 49.4
P1792A	2⅞ 73.0			
P1792B	3 76.2			
P1792C	3⅛ 79.4			
P1793	3¼ 82.6	4.36 110.7	5.125 130.2	130 59.0
P1793A	3⅝ 85.7			
P1793B	3½ 88.9			
P1793C	3⅝ 92.1			
P1794	3¾ 95.3	4.86 124.2	5.54 140.7	160 72.6
P1794A	3⅞ 98.4			
P1794B	4 101.6			
P1794C	4⅛ 104.8			
P1795	4¼ 108.0	5.24 133.1	5.92 150.4	160 72.6
P1795A	4⅝ 111.1			
P1795B	4½ 114.3			



**P1787A thru P1795B**

**Porcelain Cable Clamps**



- Use with steel clamp and Everdur hardware.
- Order clamp separately.

Material: Dry process porcelain white glaze (specified by PO suffix).

Part Number	Order Steel Clamp Number	Hole Size In (mm)	"A" In (mm)	Wt/100 pcs Lbs (kg)
P1787A PO		$\frac{3}{8}$ 9.5		51 23.1
P1787B PO	P1113E	$\frac{1}{2}$ 12.7	$1\frac{1}{8}$ 47.6	47 21.3
P1787C PO		$\frac{3}{8}$ 15.9		46 20.9
P1788 PO		$\frac{3}{4}$ 19.1		85 38.6
P1788A PO		$\frac{7}{8}$ 22.2		84 38.1
P1788B PO	P1115E	1 25.4	$2\frac{3}{8}$ 60.3	83 37.6
P1788C PO		$1\frac{1}{8}$ 28.6		76 34.5
P1789 PO		$1\frac{1}{4}$ 31.8		116 52.6
P1789A PO		$1\frac{3}{8}$ 34.9		115 52.2
P1789B PO	P1117E	$1\frac{1}{2}$ 38.1	$2\frac{1}{8}$ 73.0	108 49.0
P1789C PO		$1\frac{5}{8}$ 41.3		100 45.4
P1790 PO		$1\frac{3}{4}$ 44.5		229 103.9
P1790A PO		$1\frac{7}{8}$ 47.6		224 101.6
P1790B PO	P1119E	2 50.8	4 101.6	204 92.5
P1790C PO		$2\frac{1}{8}$ 54.0		184 83.5
P1791 PO		$2\frac{1}{4}$ 57.2		255 115.7
P1791A PO		$2\frac{3}{8}$ 60.3		255 115.7
P1791B PO	P1120E	$2\frac{1}{2}$ 63.5	$4\frac{1}{2}$ 114.3	250 113.4
P1791C PO		$2\frac{5}{8}$ 66.7		245 111.1

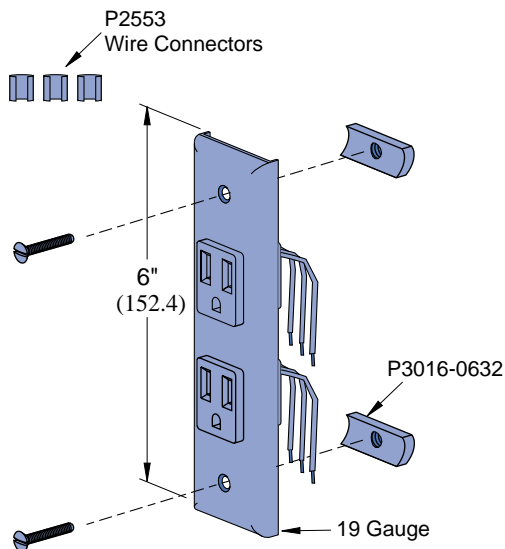
Part Number	Order Steel Clamp Number	Hole Size In (mm)	"A" In (mm)	Wt/100 pcs Lbs (kg)
P1792 PO		$2\frac{3}{4}$ 69.9		322 146.1
P1792A PO	P1121E	$2\frac{7}{8}$ 73.0	$5\frac{1}{8}$ 130.2	301 136.5
P1792B PO		3 76.2		301 136.5
P1792C PO		$3\frac{1}{8}$ 79.4		296 134.3
P1793 PO		$3\frac{1}{4}$ 82.6		460 208.7
P1793A PO		$3\frac{3}{8}$ 85.7		440 199.6
P1793B PO	P1123E	$3\frac{1}{2}$ 88.9	$6\frac{1}{8}$ 155.6	433 196.4
P1793C PO		$3\frac{5}{8}$ 92.1		423 191.9
P1794 PO		$3\frac{3}{4}$ 95.3		698 316.6
P1794A PO		$3\frac{7}{8}$ 98.4	$7\frac{1}{4}$ 184.2	678 307.5
P1794B PO	P1124E	4 101.6		648 293.9
P1794C PO		$4\frac{1}{8}$ 104.8		638 289.4
P1795 PO		$4\frac{1}{4}$ 108.0		648 293.9
P1795A PO	P1124E	$4\frac{3}{8}$ 111.1	$7\frac{1}{4}$ 184.2	598 271.2
P1795B PO		$4\frac{1}{2}$ 114.3		588 266.7

1 5/8" Channel  
 Telestrut System  
 Nuts & Hardware  
 General Fittings  
 Pipe/Conduit Supports  
 Electrical Fittings  
 Concrete Inserts  
 1 1/4" Framing System  
 1 3/8" Framing System  
 Fiberglass System  
 Special Metals  
 PrimeAngle System  
 Product Index

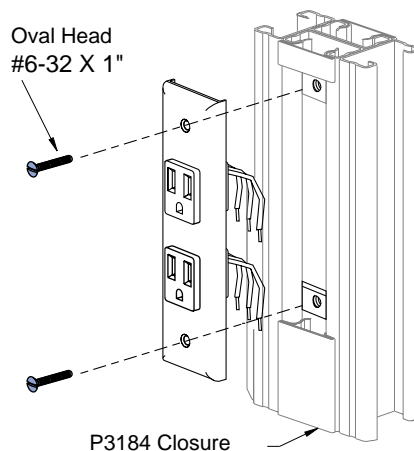
P2557

Duplex Grounded Receptacle

Wt/100 pcs: 38 Lbs (17.2 kg)



- 125 V, 15 amp receptacle, NEMA configuration 5-15R, cover plate.
- #6 screws, nuts and wire connectors included.
- Leads are 14 gauge 105°C plastic covered.
- Ground wire is green 16 gauge.

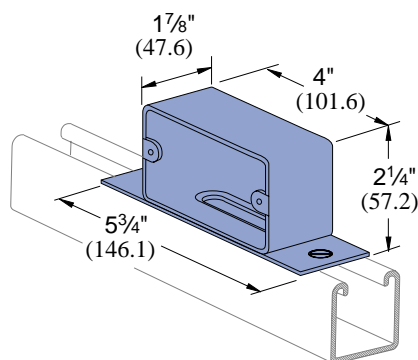


Finish: White powder coat.

P2567

Outlet Box

Wt/100 pcs: 88 Lbs (47.8 kg)

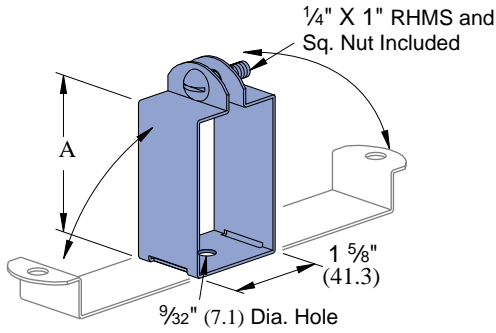


Material: 14 Gauge (.075)  
 Assembly: 1 Box, 2 Screws, 2 Channel Nuts



### P2537, P5537

#### Fluorescent Fixture Hangers



- Hanger provides more than 1/2" (12.7) space between channel and fixtures.

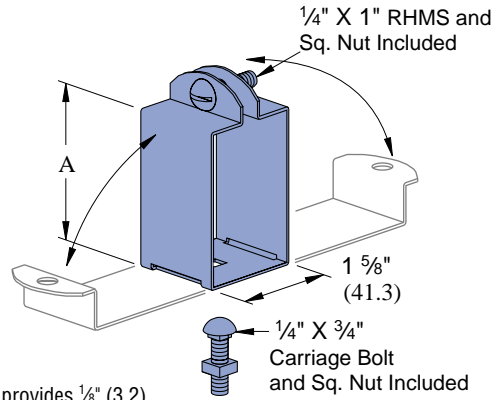
Materials: 18 gauge (1.2).

Design Load  
120 Lbs (54.4 kg)

Part Number	Use With Channel	"A" In (mm)	Wt/100 pcs Lbs (kg)
P2537	P1000		
	P1100	2 7/16	19
	P3000	61.9	8.6
P5537	P5500	3 1/4	22
		82.6	10.0

### P2539, P3539, P5539

#### Fluorescent Fixture Hangers



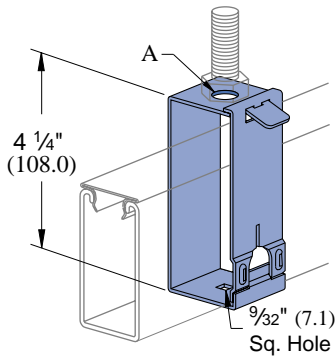
- Hanger provides 1/8" (3.2) space between channel and fixtures.

Materials: 18 gauge (1.2).

Design Load  
120 Lbs (54.4 kg)

Part Number	Use With Channel	"A" In (mm)	Wt/100 pcs Lbs (kg)
P2539	P1000		
	P1100	1 3/4	17
		44.5	7.7
P3539	P3000	1 1/2	15
		38.1	6.8
P5539	P5500	2 9/16	18
		65.1	8.2

### P2755, P2756, P2757 Raceway Hangers

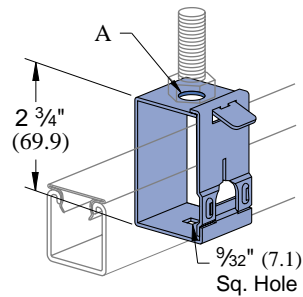


Use with Channels:  
P1001, P1101, P2001, P5000, & P5500.  
Material: 14 gauge (1.9).

Design Load  
120 Lbs (54.4 kg)

Part Number	"A" In (mm)	Wt/100 pcs Lbs (kg)
P2755	9/16	44
	14.3	20.0
P2756	7/8	44
	22.2	20.0
P2757	1 3/32	44
	10.3	20.0

### P2855, P2856, P2857 Raceway Hangers



Use with Channels:  
P1000, P1100, P3000, P3300  
Material: 14 gauge (1.9).

Design Load  
120 Lbs (54.4 kg)

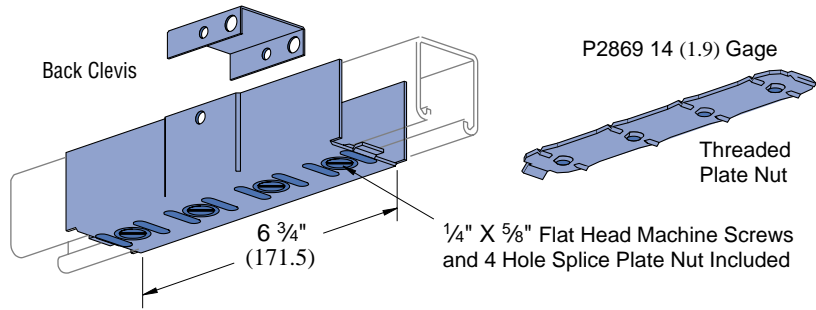
Part Number	"A" In (mm)	Wt/100 pcs Lbs (kg)
P2855	9/16	32
	14.3	14.5
P2856	7/8	32
	22.2	14.5
P2857	1 3/32	32
	10.3	14.5

1 5/8" Channel  
 Telestrut System  
 Nuts & Hardware  
 General Fittings  
 Pipe/Conduit Supports  
 Electrical Fittings  
 Concrete Inserts  
 1 1/4" Framing System  
 1 3/16" Framing System  
 Fiberglass System  
 Special Metals  
 PrimeAngle System  
 Product Index



P3922 thru P3926

Splice Fittings



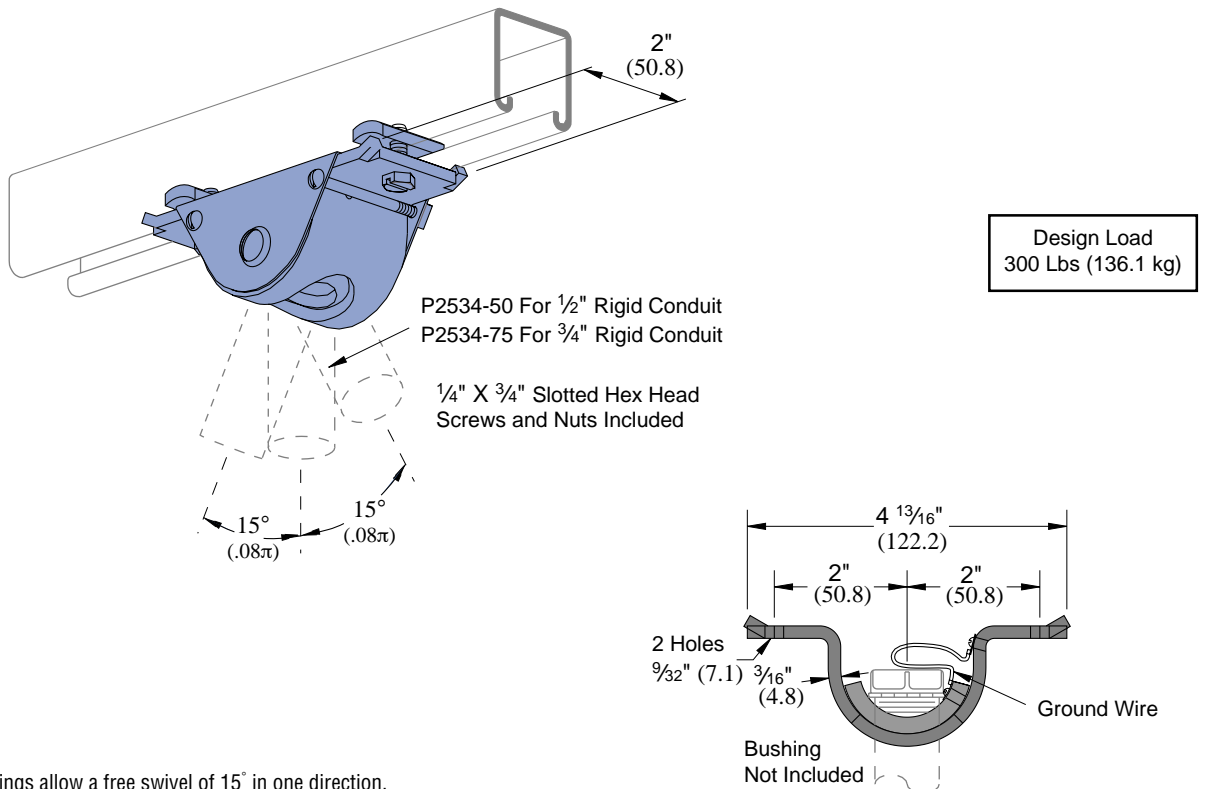
Assembly Number	Use With Channel	"A" In (mm)	Clevis Number	Back Clevis Number	Plate Nut Number	Wt/100 pcs Lbs (kg)
P3922	P1000	1 5/8	P2377	P2517	P2869	100
	P1100	41.3				45.4
P3923	P3000	1 3/8	P3377	P2517	P2869	97
		34.9				44.0
P3924	P4000	1 3/16	P5377	P2517	P2869	80
		20.6				36.3
P3925	P5500	1 5/8	P2377	P5517	P2869	103
		41.3				46.7
P3926	P5000	1 5/8	P2377	P5017	P2869	106
		41.3				48.1

Material: 16 gauge (1.6).

P2534-50, P2534-75

Conduit Swing Fitting

Wt/100 pcs: 96 Lbs (43.5 kg)

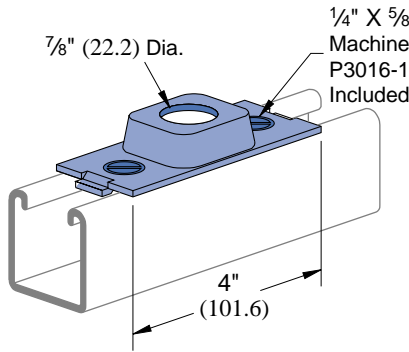


- Conduit hanger fittings allow a free swivel of 15° in one direction.
- Fitting may be mounted to the slot side of the Unistrut channel or to the back.



**P2535 Conduit Hanger Connection**

For 1/2" Conduit  
Wt/100 pcs: 28 Lbs (12.7 kg)

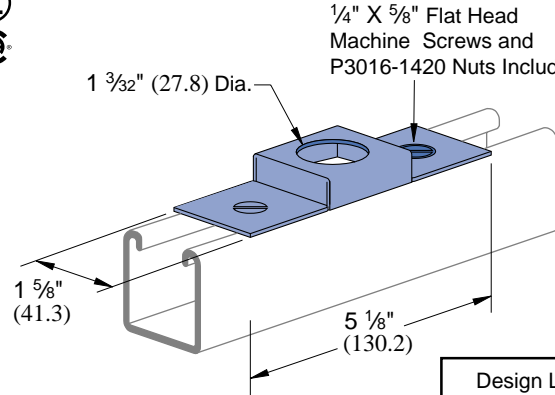


Design Load  
400 Lbs (181.4 kg)

Material: 12 gauge (2.7).

**P2536 Conduit Hanger Connection**

For 3/4" Conduit  
Wt/100 pcs: 36 Lbs (16.3 kg)

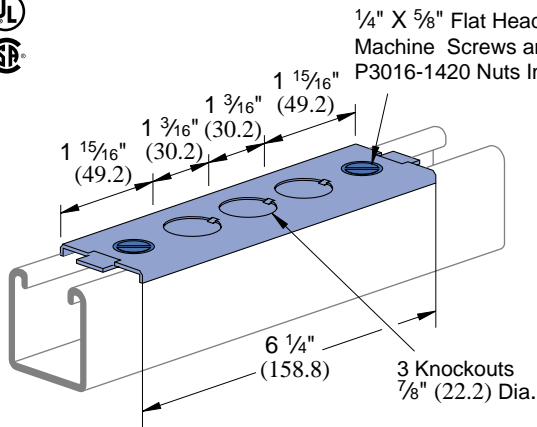


Design Load  
200 Lbs (90.7 kg)

Material: 16 gauge (1.5)

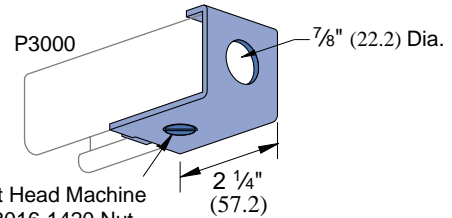
**P2522 Outlet Box Connection**

Wt/100 pcs: 35 Lbs (15.9 kg)



**P3521-50 End Connectors**

For 1/2" Conduit  
Wt/100 pcs: 27 Lbs (12.2 kg)

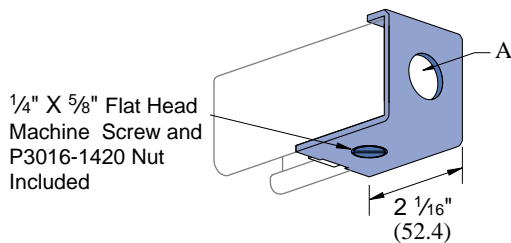


1/4" X 5/8" Flat Head Machine Screw and P3016-1420 Nut Included

Material: 12 gauge (2.7).

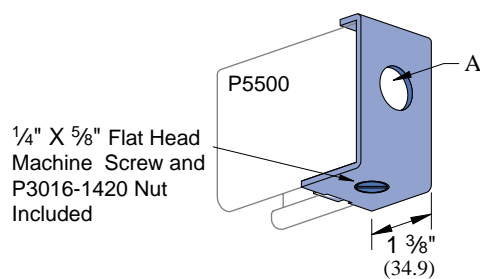
**P2521-50, P2521-75 End Connectors**

For 1/2" and 3/4" Conduit



**P5521-50, P5521-75 End Connectors**

For 1/2" and 3/4" Conduit



1/4" X 5/8" Flat Head Machine Screw and P3016-1420 Nut Included

Use with channels:  
P1000 and P1100.

Material: 12 gauge (2.7)

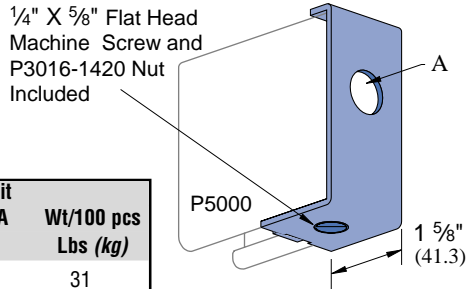
Part Number	Conduit Size A In	Wt/100 pcs Lbs (kg)
P2521-50	1/2	27 12.2
P2521-75	3/4	26 11.8

Material: 12 gauge (2.7).

Part Number	Conduit Size A In	Wt/100 pcs Lbs (kg)
P5521-50	1/2	27 12.2
P5521-75	3/4	26 11.8

15/8" Channel  
 Telesruct System  
 Nuts & Hardware  
 General Fittings  
 Pipe/Conduit Supports  
 Electrical Fittings  
 Concrete Inserts  
 1 1/4" Framing System  
 1 3/16" Framing System  
 Fiberglass System  
 Special Metals  
 PrimeAngle System  
 Product Index

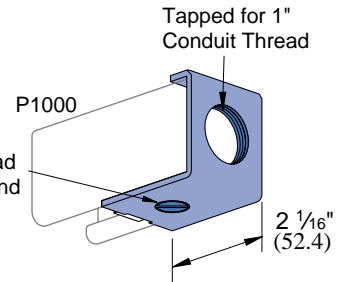
**P5021-50, P5021-75 End Connector**  
For 1/2" and 3/4" Conduit



Part Number	Conduit Size In	Wt/100 pcs Lbs (kg)
P5021-50	1/2	31 14.1
P5021-75	3/4	30 13.6

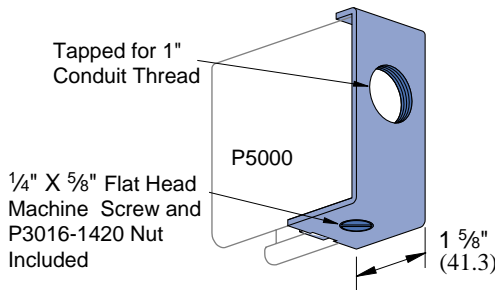
Material: 12 gauge (2.7).

**P2521-100 End Connector**  
For 1" Conduit  
Wt/100 pcs: 24 Lbs (10.9 kg)



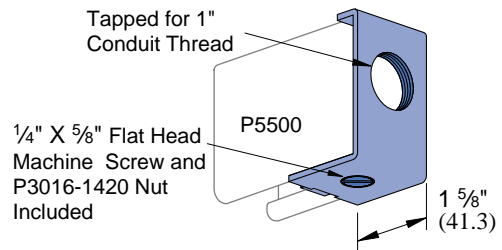
Material: 12 gauge (2.7).

**P5021-100 End Connector**  
For 1" Conduit  
Wt/100 pcs: 28 Lbs (12.7 kg)



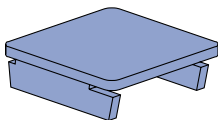
Material: 12 gauge (2.7).

**P5521-100 End Connector**  
For 1" Conduit  
Wt/100 pcs: 24 Lbs (10.9 kg)



Material: 12 gauge (2.7).

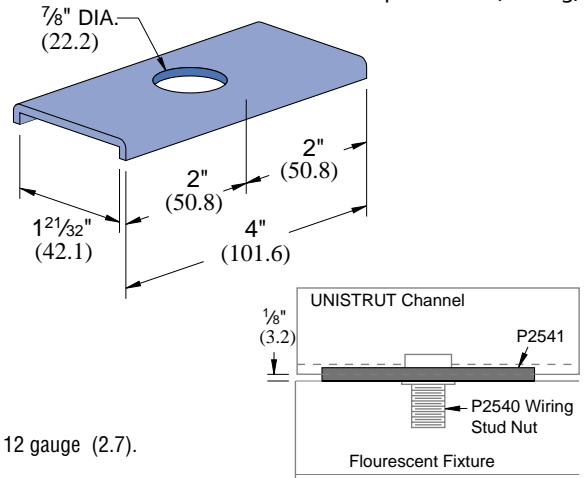
**P1180W thru P5580 End Caps**



Part Number	Use With	Wt/100 pcs Lbs (kg)
P1180W	P1100	12 5.4
P1280W	P1000	11 5.0
P2280W	P2000	11 5.0
P3280W	P3000	8 3.6
P4280W	P4000	5 2.3
P5280W	P5000	22 10.0
P5580W	P5500	18 8.2

Material: 14 gauge (1.9)

**P2541 Spacer Clevis**  
Wt/100 pcs: 24 Lbs (10.9 kg)

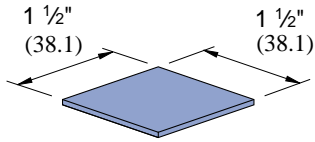


Material: 12 gauge (2.7).

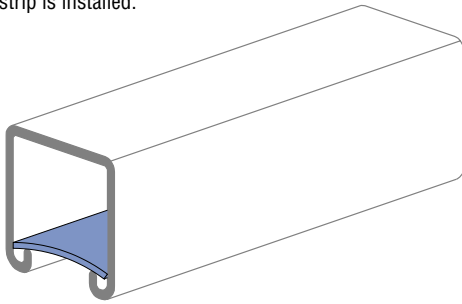


**P2552 Polypropylene Wire Retainer**

Wt/100 pcs: .30 Lbs (.1 kg)



Retainer may be easily pushed into channel to support wires until closure strip is installed.



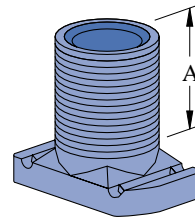
**P2540, P2540A**

**Wiring Stud Nut**

1/2" American Standard Straight Pipe Thread



Stamped Ident. No.  
P2540 – 121961  
P2540A – 121960



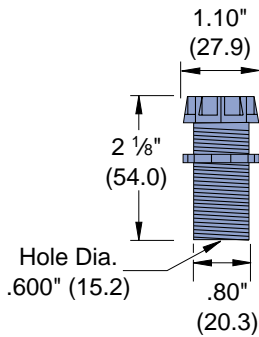
Design Load  
320 Lbs (145.1 kg)

Material: Sintered metal.

Part Number	"A" In (mm)	Wt/100 pcs Lbs (kg)
P2540	1 5/8 28.6	10.0 4.5
P2540A	5/8 15.9	8 3.6

**P2603 Fixture Wiring Nipple**

Wt/100 pcs: 14 Lbs (6.4 kg)

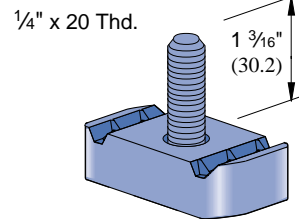


Assembly: 1/2" x 2" rigid conduit nipple  
Bushing Locknut

**P3116-125**

**Fixture Stud Nut**

Wt/100 pcs: 11 Lbs (5.0 kg)

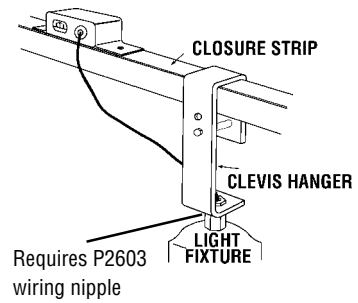
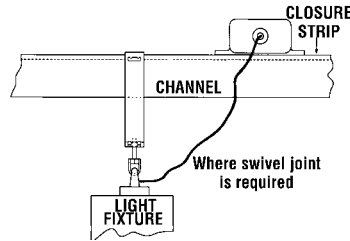
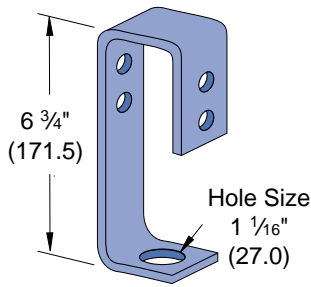


1 5/8" Channel  
Telestrut System  
Nuts & Hardware  
General Fittings  
Pipe/Conduit Supports  
Electrical Fittings  
Concrete Inserts  
1 1/4" Framing System  
1 3/16" Framing System  
Fiberglass System  
Special Metals  
PrimeAngle System  
Product Index

**P2602**

**Mercury Vapor Fixture Hanger**

Wt/100 pcs: 154 Lbs (69.9 kg)

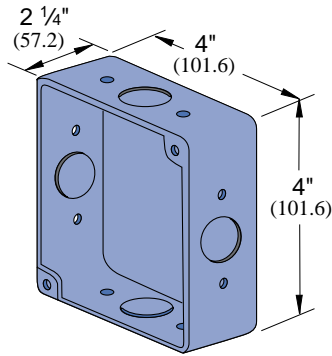


Use with 1 5/8" Channel  
Finish: Electro-galvanized  
Stock Size: 1/4"  
NOTE: Supports fixture in slot up or down system.

**P2801**

**Junction Box**

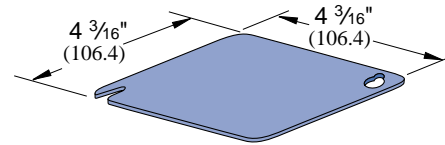
Wt/100 pcs: 113 Lbs (51.4 kg)



**P2802**

**Junction Box Cover**

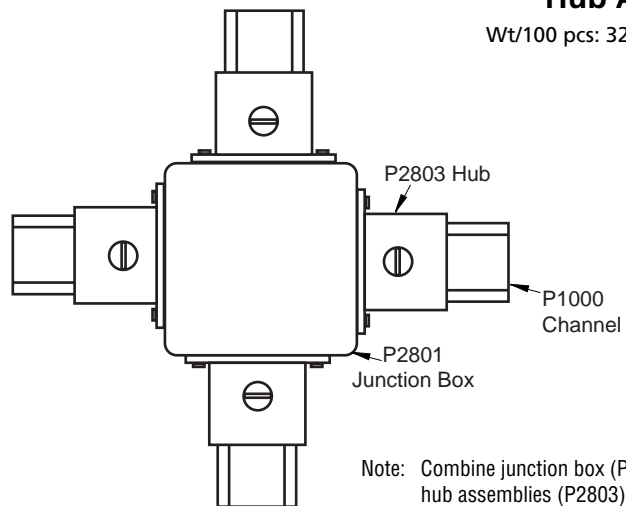
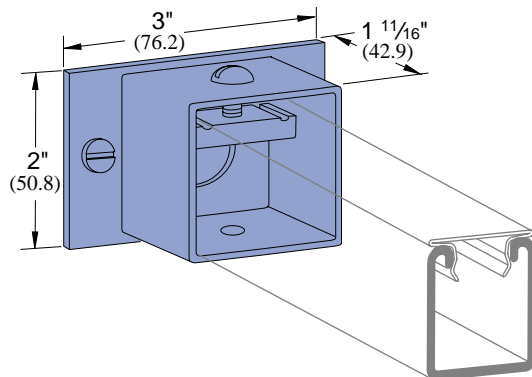
Wt/100 pcs: 30 Lbs (13.6kg)



**P2803**

**Hub Assembly**

Wt/100 pcs: 32 Lbs (14.5 kg)

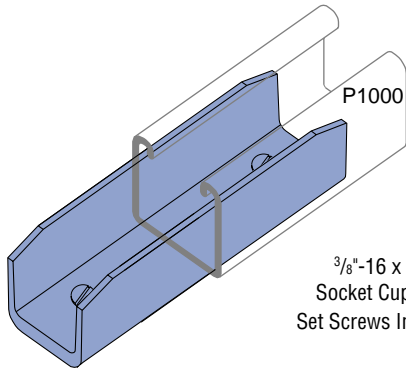


Note: Combine junction box (P2801) and hub assemblies (P2803) to make 1, 2, 3, or 4 way junction box.



**P2900**

Wt/100 pcs: 20 Lbs (9.1 kg)

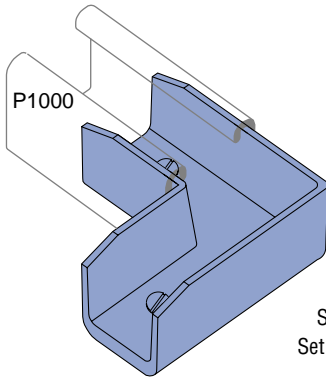


3/8"-16 x 1/4"  
Socket Cup Point  
Set Screws Included

Material: Cast aluminum.

**P2902**

Wt/100 pcs: 27 Lbs (12.2 kg)

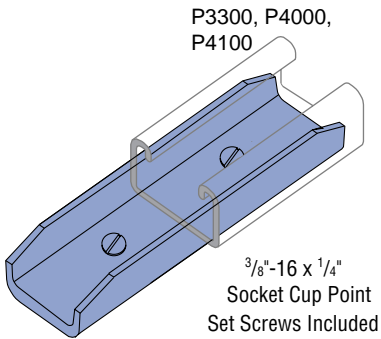


3/8"-16 x 1/4"  
Socket Cup Point  
Set Screws Included

Material: Cast aluminum.

**P2904**

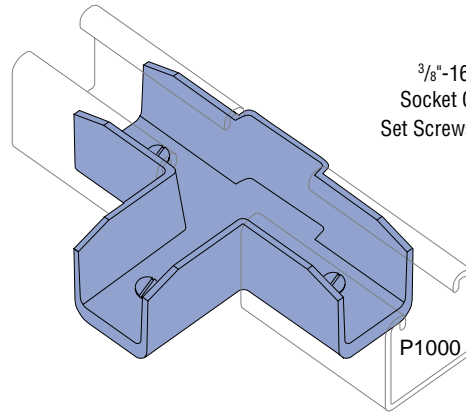
Wt/100 pcs: 12 Lbs (5.4kg)



3/8"-16 x 1/4"  
Socket Cup Point  
Set Screws Included

**P2901**

Wt/100 pcs: 35 Lbs (15.9 kg)

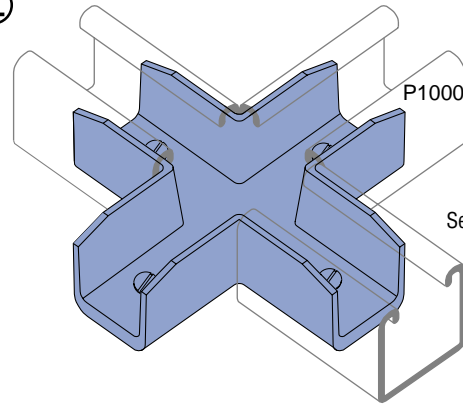


3/8"-16 x 1/4"  
Socket Cup Point  
Set Screws Included

Material: Cast aluminum.

**P2903**

Wt/100 pcs: 45 Lbs (20.4 kg)

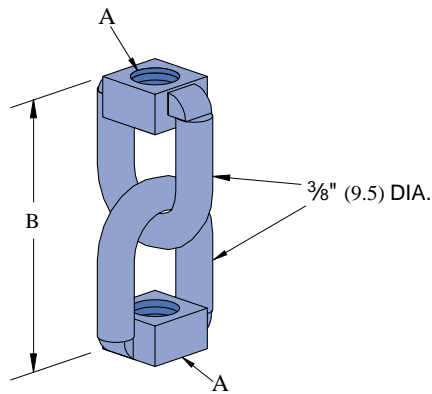


3/8"-16 x 1/4"  
Socket Cup Point  
Set Screws Included

Material: Cast aluminum.

M2037, M2050

Swivel Hangers

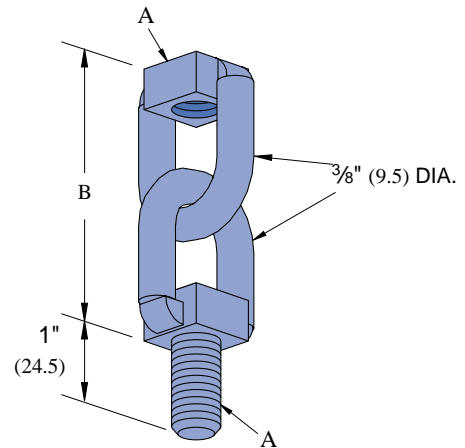


Design Load  
600 Lbs (271.8 kg)

Part Number	"A" In	"B" In (mm)	Wt/100 pcs Lbs (kg)
M2037	3/8" - 16	2 <sup>31</sup> / <sub>32</sub> 75.4	23 10.4
M2050	1/2" - 13	2 <sup>3</sup> / <sub>4</sub> 69.9	32 14.5

M2137, M2150

Swivel Hangers



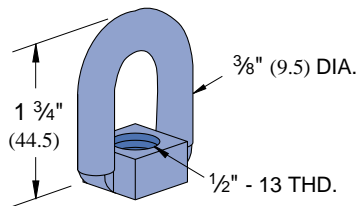
Design Load  
600 Lbs (271.8 kg)

Part Number	"A" In	"B" In (mm)	Wt/100 pcs Lbs (kg)
M2137	3/8" - 16	2 <sup>29</sup> / <sub>32</sub> 73.8	27 12.2
M2150	1/2" - 13	2 <sup>3</sup> / <sub>4</sub> 69.9	45 20.4

M2250

Swivel Hanger

Wt/100 pcs: 18 Lbs (8.2 kg)

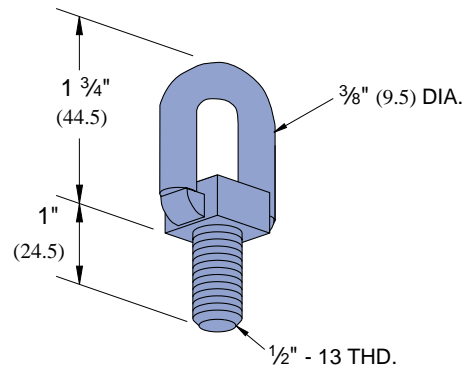


Design Load  
600 Lbs (271.8 kg)

M2350

Swivel Hanger

Wt/100 pcs: 20 Lbs (9.1 kg)

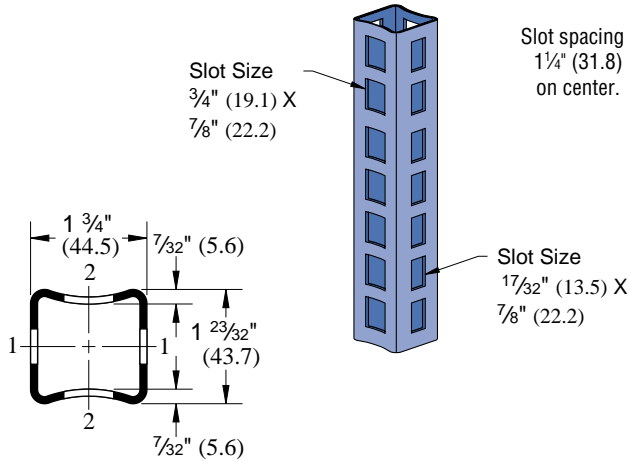


Design Load  
600 Lbs (271.8 kg)



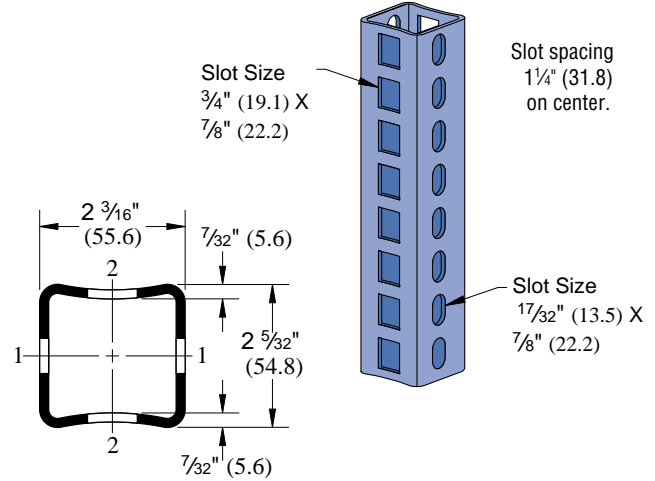
**P16F**

Wt/100 Ft: 178 Lbs (260 kg/100 m)  
 Allowable Moment 4,800 In-Lbs (540 N•m)  
 12 Gauge Nominal Thickness .105" (2.7mm)



**P21H**

Wt/100 Ft: 297 Lbs (440 kg/100 m)  
 Allowable Moment 11,370 In-Lbs (540 N•m)  
 12 Gauge Nominal Thickness .105" (2.7mm)



Tubing Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

Tubing Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

**COLUMN LOADING – P16F**

Unbraced Height In	Max. Allowable Load	Max. Allowable Load
	Column Loaded at C.G. Lbs	Column Loaded at Slot Face Lbs
24	9,600	3,300
36	9,000	3,100
48	8,300	2,900
60	7,500	2,700
72	6,600	2,400
84	5,600	2,200
96	4,500	1,900
108	3,600	1,600
120	2,900	1,400
144	2,000	1,100

**COLUMN LOADING –P21F**

Unbraced Height In	Max. Allowable Load	Max. Allowable Load
	Column Loaded at C.G. Lbs	Column Loaded at Slot Face Lbs
24	17,700	6,200
36	16,900	6,000
48	16,000	5,700
60	15,000	5,400
72	13,900	5,100
84	12,600	4,700
96	11,300	4,300
108	9,900	3,900
120	8,300	3,500
144	5,800	2,800
168	4,230	2,300

**COLUMN LOADING – P16F (METRIC)**

Unbraced Height mm	Max. Allowable Load	Max. Allowable Load
	Column Loaded at C.G. kg	Column Loaded at Slot Face kg
610	4,354	1,497
914	4,082	1,406
1,219	3,765	1,315
1,524	3,402	1,225
1,829	2,994	1,089
2,134	2,540	998
2,438	2,041	862
2,743	1,633	726
3,048	1,315	635
3,658	907	499

**COLUMN LOADING –P21F (METRIC)**

Unbraced Height mm	Max. Allowable Load	Max. Allowable Load
	Column Loaded at C.G. kg	Column Loaded at Slot Face kg
610	8,029	2,812
914	7,666	2,722
1,219	7,257	2,585
1,524	6,804	2,449
1,829	6,305	2,313
2,134	5,715	2,132
2,438	5,126	1,950
2,743	4,491	1,769
3,048	3,765	1,588
3,658	2,631	1,270
4,267	1,919	1,043

1 5/8" Channel  
 Telesruct System  
 Nuts & Hardware  
 General Fittings  
 Pipe/Conduit Supports  
 Electrical Fittings  
 Concrete Inserts  
 1 1/4" Framing System  
 1 3/16" Framing System  
 Fiberglass System  
 Special Metals  
 PrimeAngle System  
 Product Index



**BEAM LOADING – P16F**

Span In	Max Allowable Uniform Load Lbs	Defl. at Uniform Load In	Uniform Loading at Deflection		
			Span/180 Lbs	Span/240 Lbs	Span/360 Lbs
24	1,600	0.06	1,600	1,600	1,600
36	1,070	0.13	1,070	1,070	820
48	800	0.23	800	690	460
60	640	0.36	590	440	290
72	530	0.52	410	310	200
84	460	0.71	300	220	150
96	400	0.93	230	170	110
108	360	1.18	180	140	90
120	320	1.45	150	110	70
144	270	2.09	100	80	50
168	230	2.85	70	60	40

**BEAM LOADING – P21F**

Span In	Max Allowable Uniform Load Lbs	Defl. at Uniform Load In	Uniform Loading at Deflection		
			Span/180 Lbs	Span/240 Lbs	Span/360 Lbs
24	3,790	0.05	3,790	3,790	3,790
36	2,530	0.11	2,530	2,530	2,380
48	1,900	0.19	1,900	1,900	1,340
60	1,520	0.29	1,520	1,280	860
72	1,260	0.42	1,190	890	590
84	1,080	0.58	870	660	440
96	950	0.76	670	500	330
108	840	0.96	530	400	260
120	760	1.18	430	320	210
144	630	1.70	300	220	150
168	540	2.31	220	160	110

**BEAM LOADING – P16F (METRIC)**

Span mm	Max Allowable Uniform Load kg	Defl. at Uniform Load mm	Uniform Loading at Deflection		
			Span/180 kg	Span/240 kg	Span/360 kg
600	737	1	737	737	737
750	590	2	590	590	550
1,000	442	4	442	442	309
1,250	354	6	354	297	198
1,500	295	9	275	206	138
1,750	253	12	202	152	101
2,000	221	16	155	116	77
2,500	177	25	99	74	50
3,000	148	36	69	52	34
3,500	126	49	51	38	25
4,000	111	64	39	29	19

**BEAM LOADING – P21F (METRIC)**

Span mm	Max Allowable Uniform Load kg	Defl. at Uniform Load mm	Uniform Loading at Deflection		
			Span/180 kg	Span/240 kg	Span/360 kg
600	1747	1	1747	1747	1747
750	1397	2	1397	1397	1397
1,000	1048	3	1048	1048	902
1,250	838	5	838	838	578
1,500	699	7	699	602	401
1,750	599	10	589	442	295
2,000	524	13	451	338	226
2,500	419	20	289	217	144
3,000	349	29	201	150	100
3,500	299	40	147	111	74
4,000	262	52	113	85	56

Notes:

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.

**ELEMENTS OF SECTION – P16F**

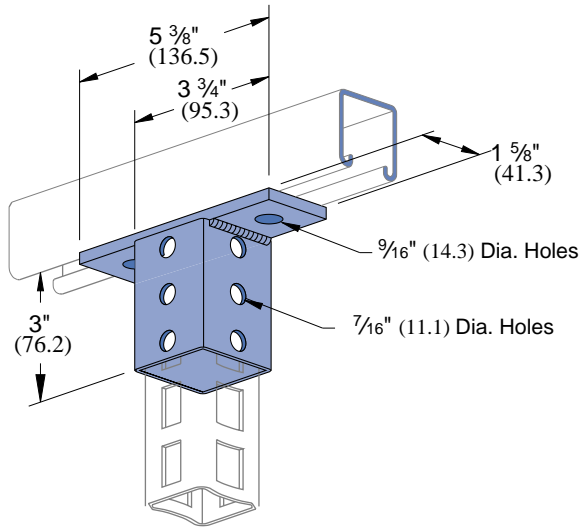
Parameter	P16F	P16F (metric)
Area of Section	0.416 In <sup>2</sup>	2.68 cm <sup>2</sup>
Axis 1-1		
Moment of Inertia (I)	0.168 In <sup>4</sup>	7.0 cm <sup>4</sup>
Section Modulus (S)	0.192 In <sup>3</sup>	3.1 cm <sup>3</sup>
Radius of Gyration (r)	0.650 In	1.7 cm
Axis 2-2		
Moment of Inertia (I)	0.210 In <sup>4</sup>	8.7 cm <sup>4</sup>
Section Modulus (S)	0.240 In <sup>3</sup>	3.9 cm <sup>3</sup>
Radius of Gyration (r)	0.725 In	1.8 cm

**ELEMENTS OF SECTION – P21H**

Parameter	P21H	P21H (metric)
Area of Section	0.749 In <sup>2</sup>	4.83 cm <sup>2</sup>
Axis 1-1		
Moment of Inertia (I)	0.490 In <sup>4</sup>	20.4 cm <sup>4</sup>
Section Modulus (S)	0.455 In <sup>3</sup>	7.5 cm <sup>3</sup>
Radius of Gyration (r)	0.820 In	2.1 cm
Axis 2-2		
Moment of Inertia (I)	0.590 In <sup>4</sup>	24.6 cm <sup>4</sup>
Section Modulus (S)	0.540 In <sup>3</sup>	8.8 cm <sup>3</sup>
Radius of Gyration (r)	0.900 In	2.3 cm



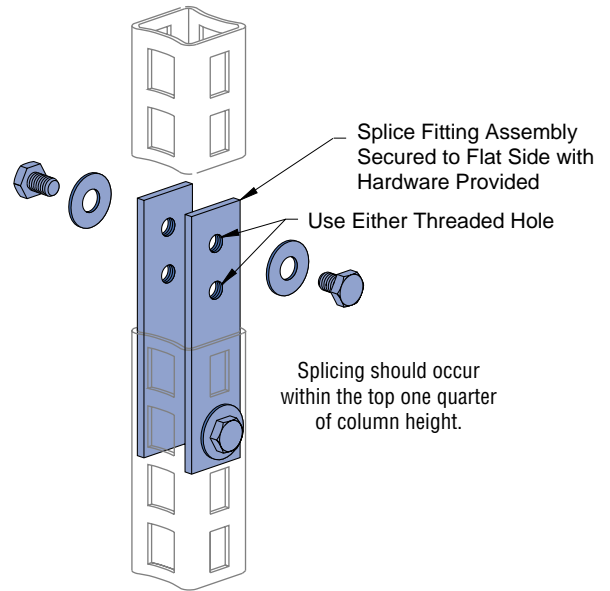
### P2820, P2940 Channel/Tube Connectors



Part Number	Use With	Wt/100 pcs Lbs (kg)
P2820	P16F	116 2.6
P2940	P21H	148 67.1

### P2822, P2932

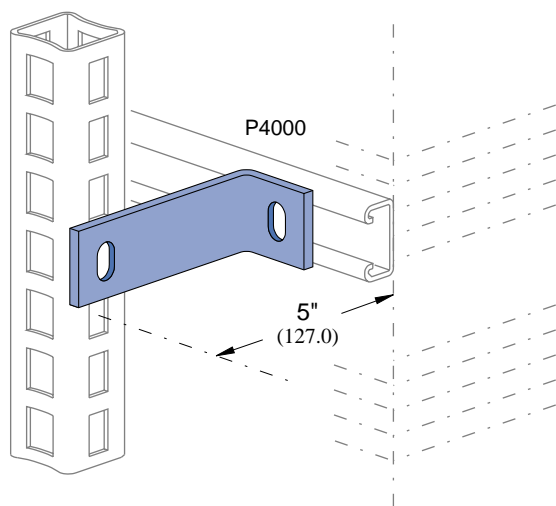
### Splice Fittings



Part Number	Use With	Wt/100 pcs Lbs (kg)
P2822	P16F	97 44.0
P2932	P21H	122 55.3

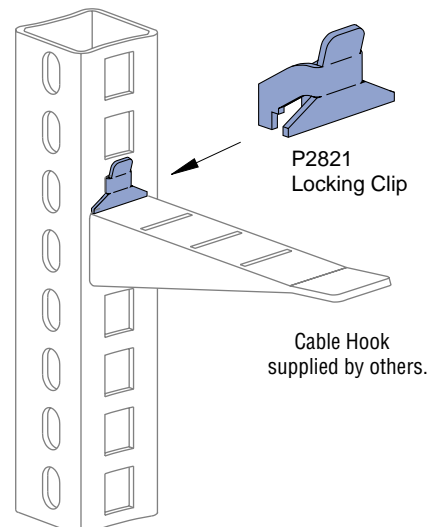
### P2823

### 90° Rack Fitting Wt/100 pcs: 66 Lbs (29.9 kg)



### P2821

### Locking Clip Wt/100 pcs: 3 Lbs (1.4 kg)

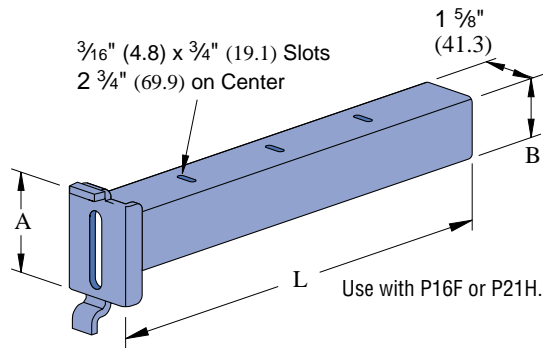


Exclusive Cable Hook Locking Clip prevents Cable Hook removal.

1 5/8" Channel  
 Telestrut System  
 Nuts & Hardware  
 General Fittings  
 Pipe/Conduit Supports  
 Electrical Fittings  
 Concrete Inserts  
 1 1/4" Framing System  
 1 3/16" Framing System  
 Fiberglass System  
 Special Metals  
 PrimeAngle System  
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P2920 thru P2924

Cable Brackets



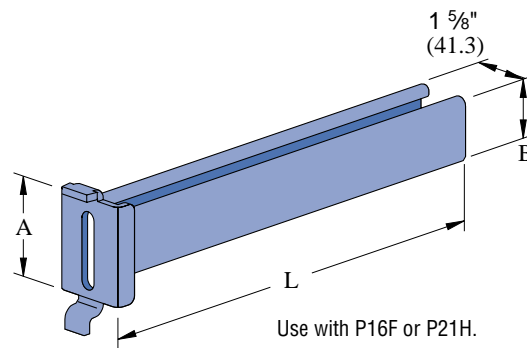
Material: 12 gauge steel.

Part Number	"L"	"A"	"B"	Wt/100 pcs Lbs (kg)	Uniform Design Load Lbs (kg)
P2920	5½ 139.7	3½ 88.9	7⁄8 22.2	90 40.8	500 2.2
P2921	8¼ 209.6	3½ 88.9	7⁄8 22.2	120 54.4	325 1.4
P2922	11 279.4	3½ 88.9	1 5⁄8 41.3	300 136.1	275 1.2
P2923	13¾ 349.3	3½ 88.9	1 5⁄8 41.3	340 154.2	220 1.0
P2924	19¼ 489.0	3½ 88.9	1 5⁄8 41.3	430 195.0	160 0.7

Safety factor of 3.

P2928, P2929 and P2930

Cable Brackets



Material: 12 gauge steel.

Part Number	"L"	"A"	"B"	Wt/100 pcs Lbs (kg)	Uniform Design Load Lbs (kg)
P2928	6 152.4	3½ 88.9	7⁄8 22.2	92 41.7	500 2.2
P2929	12 304.8	3½ 88.9	1 5⁄8 41.3	320 145.1	250 1.1
P2930	18 457.2	3½ 88.9	1 5⁄8 41.3	420 190.5	170 0.8

Safety factor of 3.



**U.L. Listed**

Unistrut channel is listed by Underwriters' Laboratories as a surface metal raceway. Snap-in closure strip is used to complete the raceway. Accessory parts listed by Underwriters are noted on drawings.

The following tables represent maximum number of conductors when raceway is not employed with fixtures or where the clearance between fixtures and raceway is greater than 1/2" (12.7). In all cases the snap-in cover is required to complete raceway enclosure.

**P3300**

Gauge	Number and Conductor Size (AWG)				
	14	12	10	8	6
THWN, THHN	40	30	19	9	6
XHHW	26	21	16	7	5
T, TW	26	20	15	7	4
THW	17	14	11	6	4
RH	15	12	7	4	3
RHH, RHW	10	9	7	4	2

**P1000, & -KO, P1100 & -KO**

Gauge	Number and Conductor Size (AWG)				
	14	12	10	8	6
THWN, THHN	88	66	42	20	14
XHHW	58	46	35	16	12
T, TW	57	44	34	16	9
THW	37	30	24	12	9
RH	33	27	16	9	6
RHH, RHW	23	20	16	9	6

Channel Part Number	Channel Size and Inside Area			
	Size	Area	40% Area	25% Area
P3300 & KO	1 5/8" x 7/8"	0.975	0.390	0.244
		629	252	157
P3000 & KO	1 5/8" x 1 1/8"	1.677	0.671	0.419
		1,082	433	270
P1000 & KO, P1100 & KO	1 5/8" x 1 1/8"	2.028	0.811	0.507
		1,308	523	327
P5500 & KO	1 5/8" x 2 1/16"	3.169	1.268	0.792
		2,045	818	511
P5000 & KO	1 5/8" x 3 1/4"	4.308	1.723	1.077

**P3000, & -KO**

Gauge	Number and Conductor Size (AWG)				
	14	12	10	8	6
THWN, THHN	72	54	34	17	12
XHHW	48	37	29	13	10
T, TW	46	36	28	13	7
THW	30	25	20	10	7
RH	27	22	13	7	5
RHH, RHW	19	16	13	7	5

**P5500, & -KO**

Gauge	Number and Conductor Size (AWG)				
	14	12	10	8	6
THWN, THHN	141	105	66	33	23
XHHW	93	73	57	27	19
T, TW	91	58	55	26	15
THW	59	49	39	20	15
RH	53	44	26	14	10
RHH, RHW	37	32	26	14	10

**P5000, & -KO**

Gauge	Number and Conductor Size (AWG)				
	14	12	10	8	6
THWN, THHN	193	105	91	45	32
XHHW	128	101	78	37	27
T, TW	125	98	75	35	20
THW	81	67	54	28	20
RH	73	60	36	19	13
RHH, RHW	51	44	36	19	13

Note: Raceways with external joiners shall use a 40% wire fill calculation to determine the number of conductors permitted.

Raceways with internal joiners shall use a 25% wire fill calculation to determine the number of conductors permitted

**C.S.A. APPROVED**

Suitable for number of wires in Column A when installed to support and supply electric discharge type lighting fixtures when raceway wiring is suitable for at least 75° C except wire suitable for 60° C may be used when clearance between fixtures and raceways is at least 1/2" (12.7). Also suitable for number of wires in column B when installed to support electric

discharge type lighting fixtures when raceway wiring is suitable for at least 75° C and clearance between fixtures and raceway is at least 1/8" (3.2).

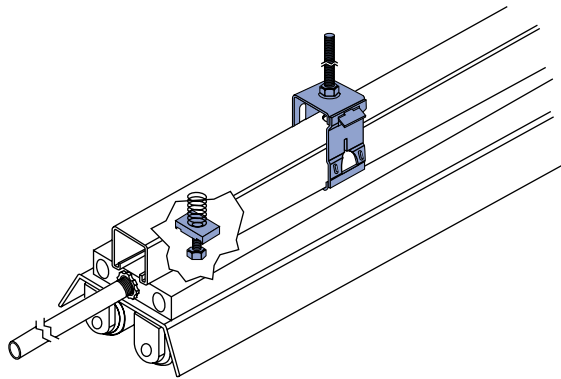
Maximum number of wires for types T, THHN, THW, THWN, TW, R, RH, RHH, RHW or XHHW

Raceway Wire Size AWG	P1000, & -KO P1100, & -KO		P3000, & -KO		P3300		P5000 & -KO		P5500, & -KO	
	A	B	A	B	A	B	A	B	A	B
14	6	10	5	10	4	6	10	10	10	10
12	6	10	4	10	3	6	10	10	10	10
10	5	8	4	6	-	-	8	10	8	10
8	4	6	3	4	-	-	6	9	6	8
6	2	3	2	2	-	-	4	6	4	6

Unistrut channels are also certified by Canadian Standards Association.

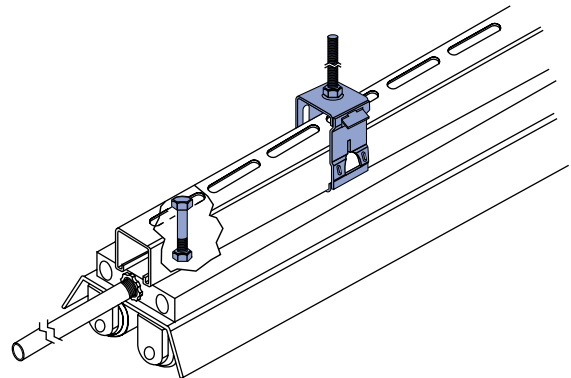
Fluorescent Fixtures - Support Applications

Spring-Nut attachment system



Conduit connects through knockout in fixture. Fixture is supported by P1006-1420 spring nut and 1/4" round head machine screw. Assembly is supported by P2855 hinged hanger.

Slotted channel attachment system



Conduit connects through knockout in fixture. Fixture is supported by HCSS series hex bolt and hex nut. Raceway is supported by P2855 hanger. To splice a continuous run, use P3922.

Recommended Support Spacing for Fixtures

Deflections are based on continuity of span and use of 4 ft. fixtures weighing approximately 30 lbs. each. Do not use joiner fittings between supporting hangers. When using knock-out or slotted channels deflections will be increased approximately 5%. With fixtures spaced 2' - 0" apart, deflection is 60-70% of table. When spaced 4' - 0" apart, deflection is 50-60% of table.

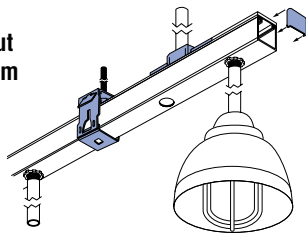
Deflection Table

Channel	Distance Between Supports								
	8' (2.4m) In (mm)	10' (3m) In (mm)	12' (3.7m) In (mm)	14' (4.3m) In (mm)	16' (4.9m) In (mm)	18' (5.5m) In (mm)	20' (6.1m) In (mm)	22' (6.7m) In (mm)	24' (7.3m) In (mm)
P3300	0.187 4.7								
P3000	0.100 2.5	0.250 6.4	0.500 12.7						
P1100	0.088 2.2	0.250 6.4	0.437 11.1	0.875 22.2					
P1000		0.180 4.6	0.312 7.9	0.625 15.9	1.000 25.4	1.625 41.3			
P5500				0.250 6.4	0.500 12.7	0.812 20.6	1.620 41.1		
P5000					0.310 7.9	0.625 15.9	1.000 25.4	1.800 45.7	2.500 63.5
P1001					0.310 7.9	0.625 15.9	1.000 25.4	1.800 45.7	2.500 63.5
P5001						0.200 5.1	0.250 6.4	0.400 10.2	0.500 12.7



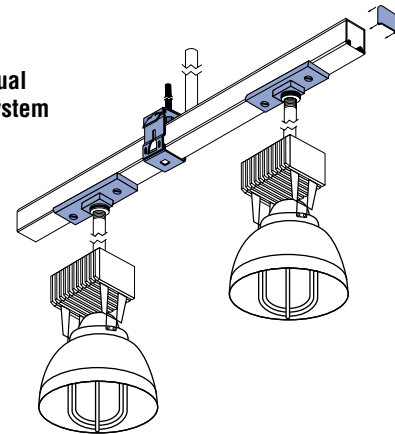
**High-Bay Fixture Raceway Applications**

**H.I.D. Knockout mounted system**



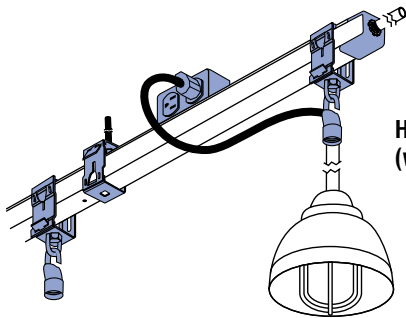
Fixture attached to and wired from raceway by 1/2" nipple assembly of desired length at channel knockout. P1280W end cap, P3184 closure strip, P2535 conduit connector, and P2855 channel hanger complete assembly. For splicing channels into continuous raceway runs, use joiner fitting P3922.

**High-Bay dual mounted system**



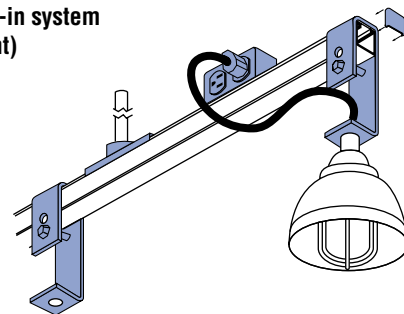
Fixtures are connected to and wired from raceway by conduit connector fitting P2536. Raceway is supported by P2855 hanger. P1280W endcaps and P3184 closure strip complete the assembly. Conduit connected to raceway through channel knockout.

**H.I.D. Plug-in system (with swivel)**



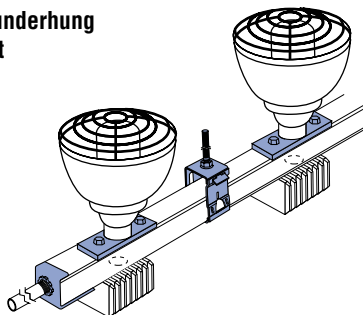
Fixtures, supported by P2855 hangers and M2250 eyelets, plug into receptacle mounted in P2763 outlet box. P2855 hangers also support raceway. P2521-75 end connector joins conduit to raceway. P1280W end caps (not shown) and P3184 closure strip complete assembly.

**H.I.D. Plug-in system (rigid mount)**



Fixtures are supported by P2602 clevis hangers. Cover plate on P2761 outlet box provides access to receptacle box. Raceway is supported and wired by top mounted P2535 conduit connectors. P1280W end caps and P3184 closure strip complete assembly.

**Uplighting with underhung or remote ballast**



Fixtures attached to and wired from P2535 conduit fittings mounted to slot side of channel. Raceway can be wired by P2521 as shown or, conduit can enter through available knockout. Ballasts in P2521 are connected at the knockout by fixture adapter. In remote ballast installations, follow manufacturers instructions. P2855 hinged hangers support both types of installations. P3184 closure strip and P1280W end caps complete assembly. For continuous raceways, use joiner fitting P3922. P2521-75 end connector joins conduit to raceway.

15/8" Channel  
Telestrut System  
Nuts & Hardware  
General Fittings  
Pipe/Conduit Supports  
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Concrete Inserts  
1 1/4" Framing System  
1 3/16" Framing System  
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Special Metals  
PrimeAngle System  
Product Index