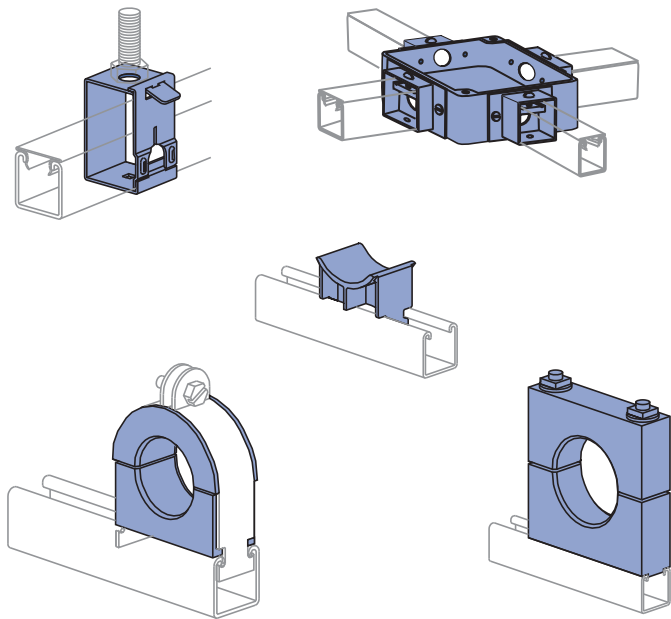




ELECTRICAL FITTINGS



Electrical Fittings.....	122-124
Receptacles.....	124-125
Fixture Hangers.....	125
Accessories and Connectors.....	125-126
Junction Boxes.....	126
In-Channel Joiners.....	127
Swivel Hangers.....	127
Cable Entrance Tubing and Accessories.....	128-130
Electrical Fittings Technical Data.....	131-132

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 384 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 III (GR),
- 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.

LISTINGS

UL File No. - E19459	Channel & Closure Strips
UL File No. - E25629	Fittings
CSA File No. - 013669	All Products



1 5/8" Channel

Telestrut

Nuts & Hardware

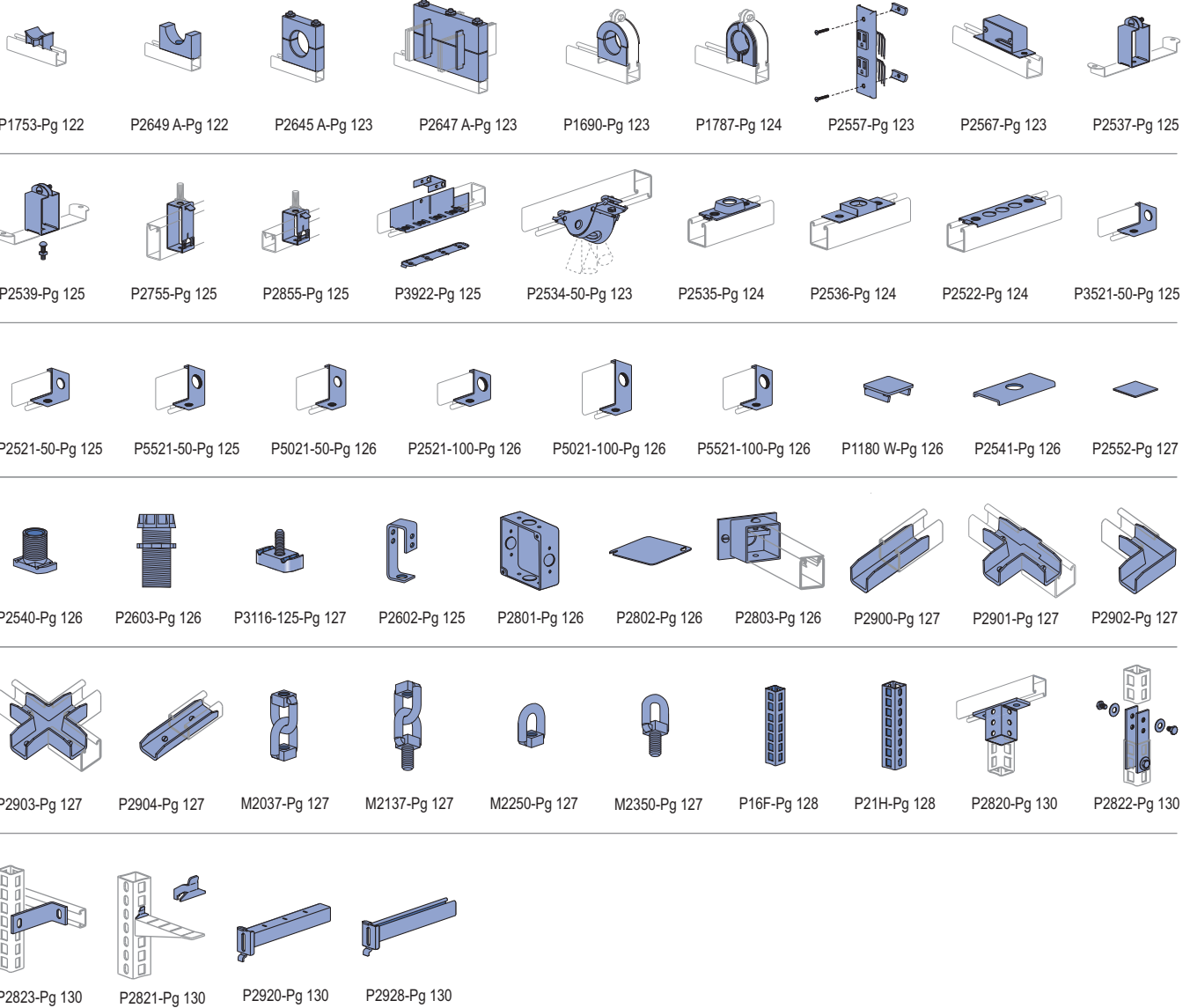
General Fittings

Pipe/Conduit Supports

Electrical Fittings

Concrete Inserts

Electrical Fittings

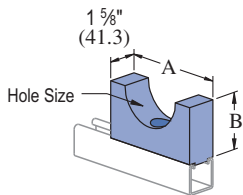


P2649A THRU P2649H

MAPLE CABLE SADDLES

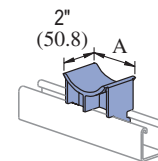
P1753, P1754

CABLE SADDLES



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

Part No.	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 1/4 44.5	31 14.1
P2649B	1 - 1 1/2 25.4 x 38.1	3 1/2 88.9	2 50.8	38 17.2
P2649C	1 1/2 - 2 38.1 - 50.8	4 101.6	2 1/4 57.2	47 21.3
P2649D	2 - 2 1/2 50.8 x 63.5	4 1/2 114.3	2 1/2 63.5	57 25.9
P2649E	2 1/2 - 3 63.5 - 76.2	5 127.0	2 3/4 69.9	68 30.8
P2649F	3 - 3 1/2 76.2 x 88.9	5 1/2 139.7	3 76.2	80 36.3
P2649G	3 1/2 - 4 88.9 - 101.6	6 152.4	3 1/4 82.6	94 42.6
P2649H	over 4 over 101.6			

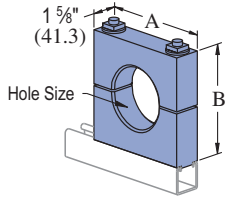


Part Number	"A" In (mm)	Maximum Cable Dia. In (mm)	Wt/100 pcs Lbs (kg)
P1753 FG	2 13/16 71.4	3 76.2	12 5.4
P1754 FG	3 3/4 95.3	4 1/2 114.3	17 7.7
P1753 PO	3 76.2	3 76.2	75 34.0
P1754 PO	4 101.6	4 1/2 114.3	95 43.1

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

P2645A THRU P2645H

MAPLE CABLE CLAMPS



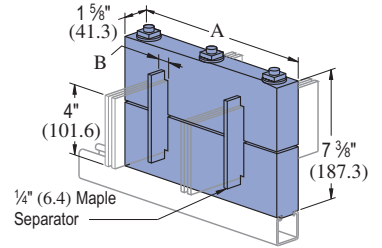
Part No.	Hole Size In (mm)	"A" & "B" Dimensions In (mm)	Wt/100 pcs Lbs (kg)
P2645A	0 - 1 0 - 25.4	3 1/2 88.9	84 38.1
P2645B	1 - 1 1/2 25.4 x 38.1	4 101.6	102 46.3
P2645C	1 1/2 - 2 38.1 - 50.8	4 1/2 114.3	121 54.9
P2645D	2 - 2 1/2 50.8 x 63.5	5 1/2 139.7	165 74.8
P2645E	2 1/2 - 3 63.5 - 76.2	6 152.4	189 85.7
P2645F	3 - 3 1/2 76.2 x 88.9	6 1/2 165.1	215 97.5
P2645G	3 1/2 - 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: Paraffin impregnated maple hardwood.

P2647A THRU P2647F

4" (101.6) BUS BAR MAPLE CLAMPS

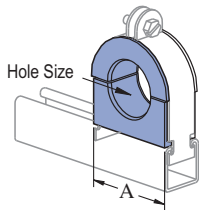
- 1/2" studs, square nuts and washers are included.
 - Channel nuts must be ordered separately.
 - Bus bar maple clamps also available in 1/4" (6.4) x 2" (50.8) and 1/4" (6.4) x 6" (152.4).
- Material: Paraffin impregnated maple hardwood.



Part No.	"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 1/2 73.0	10	6	631 286.2

P1690 THRU P1697

MAPLE CABLE CLAMPS

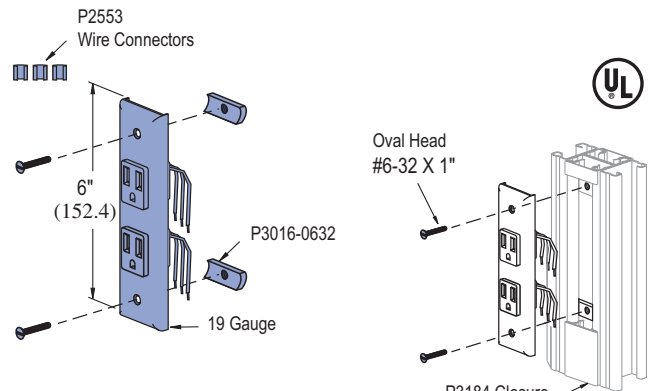


Part No.	Steel Clamp No.	Hole Size In (mm)	"A" In (mm)	Wt/100 pcs Lbs (kg)
P1690	P1113 E	0 - 5/8 0 - 15.9	1 5/16 33.3	24 10.9
P1691	P1115 E	1/2 - 1 12.7 - 25.4	1 15/16 49.2	42 19.1
P1692	P1117 E	3/4 - 1 1/2 19.1 x 38.1	2 3/8 60.3	54 24.5
P1693	P1118 E	1 1/4 - 1 3/4 31.8 x 44.5	2 7/8 73.0	65 29.5
P1694	P1119 E	1 1/2 - 2 1/4 38.1 x 57.2	3 1/2 88.9	84 38.1
P1695	P1120 E	2 - 2 1/2 50.8 x 63.5	4 101.6	107 48.5
P1696	P1121 E	2 1/4 - 3 57.2 - 76.2	4 1/2 114.3	123 55.8
P1697	P1123 E	3 - 4 76.2 - 101.6	5 5/16 141.3	163 73.9

- Use with steel clamp and Everdur hardware. Order clamp separately.
 - Specify hole size when ordering.
- Material: Paraffin impregnated maple hardwood.

P2557

DUPLEX GROUNDED RECEPTACLE

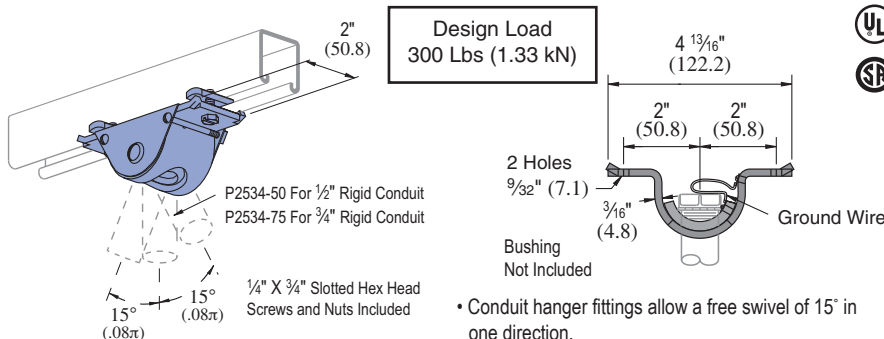


- Finish: White powder coat.
- 125 V, 15 amp receptacle, NEMA configuration 5-15R, cover plate.
 - #6 screws, nuts and wire connectors included.
 - Leads are 14 gauge 105°C plastic covered.
 - Ground wire is green 16 gauge.

Wt/100 pcs: 38 Lbs (17.2 kg)

P2534-50, P2534-75

CONDUIT SWING FITTING



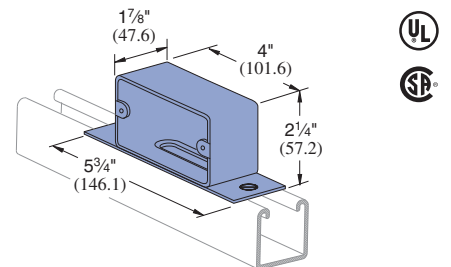
Design Load
300 Lbs (1.33 kN)

- 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.

Wt/100 pcs: 96 Lbs (43.5 kg)

P2567

OUTLET BOX



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

Wt/100 pcs: 88 Lbs (47.8 kg)



P1787 THRU P1795

PORCE-A-CLAMP™

1 5/8" Channel

Telestrut

Nuts & Hardware

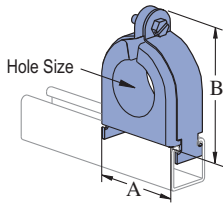
General Fittings

Pipe/Conduit Supports

Electrical Fittings

Concrete Inserts

Unipier®



Patents Pending
Strap Material: Electro-galvanized Steel (EG) or Stainless Steel (SS)
Use With: All 1 5/8" channel

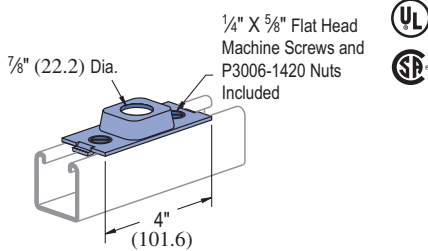
Porce-A-Clamp™

- 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.
- Temperature Rating -50°F to +275°F (-45°C to +135°C)

Part Number	Hole Size In (mm)	"A" In (mm)	"B" In (mm)	Wt/100 pcs Lbs (kg)
P1787A	3/8 9.5	1.36 34.5	1.82 46.2	25 11.3
P1787B	1/2 12.7			
P1787C	5/8 15.9			
P1788	3/4 19.1	1.86 47.2	2.34 59.4	37 16.8
P1788A	7/8 22.2			
P1788B	1 25.4			
P1788C	1 1/8 28.6			
P1789	1 1/4 31.8	2.36 59.9	2.86 72.6	58 26.3
P1789A	1 3/8 34.9			
P1789B	1 1/2 38.1			
P1789C	1 5/8 41.3	2.86 72.6	3.50 88.9	76 34.5
P1790	1 3/4 44.5			
P1790A	1 7/8 47.6			
P1790B	2 50.8	3.36 83.5	4.05 102.9	90 40.8
P1790C	2 1/8 54.0			
P1791	2 1/4 57.2	3.36 83.5	4.05 102.9	90 40.8
P1791A	2 3/8 60.3			

Part Number	Hole Size In (mm)	"A" In (mm)	"B" In (mm)	Wt/100 pcs Lbs (kg)
P1791B	2 1/2 63.5	3.36 85.3	4.05 102.9	90 40.8
P1791C	2 5/8 66.7			
P1792	2 3/4 69.9	3.86 98.0	4.75 120.7	109 49.4
P1792A	2 7/8 73.0			
P1792B	3 76.2			
P1792C	3 1/8 79.4			
P1793	3 1/4 82.6	4.36 110.7	5.125 130.2	130 59.0
P1793A	3 3/8 85.7			
P1793B	3 1/2 88.9			
P1793C	3 5/8 92.1	4.86 123.4	5.54 140.7	160 72.6
P1794	3 3/4 95.3			
P1794A	3 7/8 98.4			
P1794B	4 101.6			
P1794C	4 1/8 104.8	5.24 133.1	5.92 150.4	160 72.6
P1795	4 1/4 108.0			
P1795A	4 3/8 111.1			
P1795B	4 1/2 114.3			

P2535 CONDUIT HANGER CONNECTION FOR 1/2" CONDUIT

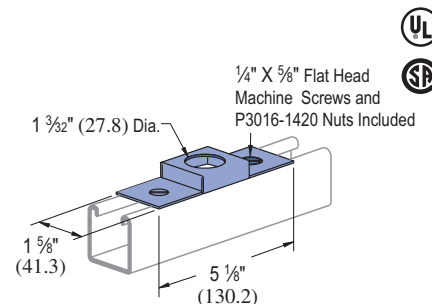


Design Load
400 Lbs (1.78 kN)

Material: 12 gauge (2.7).

Wt/100 pcs: 28 Lbs (12.7 kg)

P2536 CONDUIT HANGER CONNECTION FOR 3/4" CONDUIT

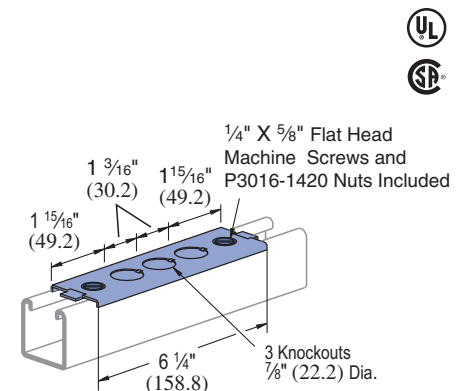


Design Load
200 Lbs (0.89 kN)

Material: 16 gauge (1.5)

Wt/100 pcs: 36 Lbs (16.3 kg)

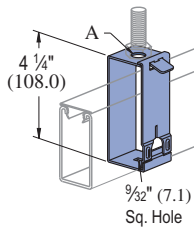
P2522 OUTLET BOX CONNECTION



Wt/100 pcs: 35 Lbs (15.9 kg)

P2755, P2756, P2757

RACEWAY HANGERS



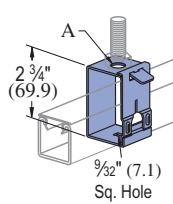
Design Load
120 Lbs (0.53 kN)

Part No.	"A" In (mm)	Wt/100 pcs Lbs (kg)
P2755	9/16 14.3	44 20.0
P2756	7/8 22.2	44 20.0
P2757	1 1/32 10.3	44 20.0

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

P2855, P2856, P2857

RACEWAY HANGERS



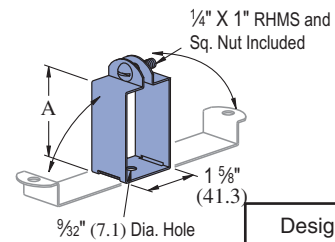
Design Load
120 Lbs (0.53 kN)

Part No.	"A" In (mm)	Wt/100 pcs Lbs (kg)
P2855	9/16 14.3	32 14.5
P2856	7/8 22.2	32 14.5
P2857	1 3/32 10.3	32 14.5

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

P2537, P5537

FLUORESCENT FIXTURE HANGERS

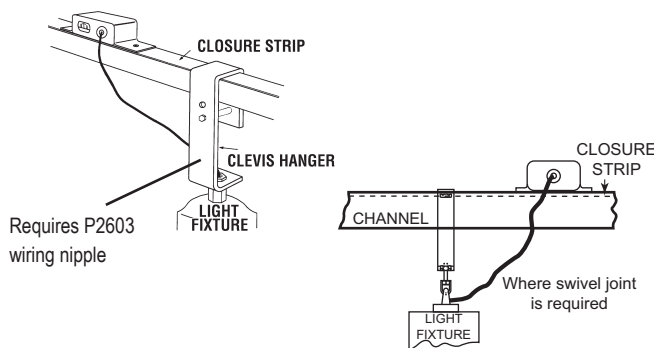
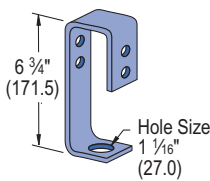


Design Load
120 Lbs (0.53 kN)

• Hanger provides more than 1/2" (12.7) space between channel and fixtures.
Materials: 18 gauge (1.2).

P2602

MERCURY VAPOR FIXTURE HANGER



Requires P2603 wiring nipple

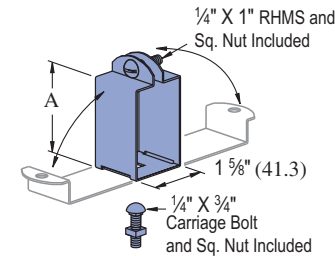
Wt/100 pcs: 154 Lbs (69.9 kg)

Use with 1 1/2" Channel
Finish: Electro-galvanized
Stock Size: 1/4"
NOTE: Supports fixture in slot up or down system.

Part No.	Use w/Channel	"A" In (mm)	Wt/100 pcs Lbs (kg)
P2537	P1000		
	P1100	27/16 61.9	19 8.6
	P3000		
P5537	P5500	3 1/4 82.6	22 10.0

P2539, P3539, P5539

FLUORESCENT FIXTURE HANGERS

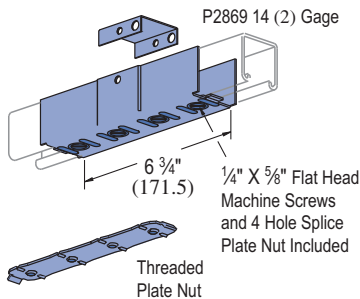


• Hanger provides 1/8" (3.2) space between channel and fixtures.
Materials: 18 gauge (1.2).

Part No.	Use w/Channel	"A" In (mm)	Wt/100 pcs Lbs (kg)
P2539	P1000	1 1/4 44.5	17 7.7
	P1100	1 1/2 38.1	15 6.8
P3539	P3000	1 1/2 38.1	15 6.8
P5539	P5500	2 5/16 65.1	18 8.2

P3922 THRU P3926

SPLICE FITTINGS

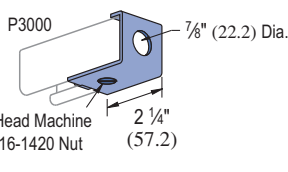


Assy. No.	Use W/ Channel	"A" In (mm)	Clevis No.	Back Clevis No.	Plate Nut No.	Wt/100 pcs Lbs (kg)
P3922	P1000	1 5/8 41.3	P2377	P2517	P2869	100 45.4
	P1100					
P3923	P3000	1 3/8 34.9	P3377	P2517	P2869	97 44.0
P3924	P4000	1 1/16 20.6	P5377	P2517	P2869	80 36.3
P3925	P5500	1 1/8 41.3	P2377	P5517	P2869	103 46.7
P3926	P5000	1 5/8 41.3	P2377	P5017	P2869	106 48.1

Material: 16 gauge (1.6).

P3521-50

END CONNECTORS FOR 1/2" CONDUIT



Material: 12 gauge (3).

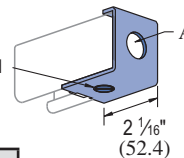
Wt/100 pcs: 27 Lbs (12.2 kg)

P5251-50, P2521-75

END CONNECTORS FOR 1/2" & 3/4" CONDUIT



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



Part No.	Conduit Size In	Wt/100 pcs Lbs (kg)
P2521-50	1/2	27 12.2
P2521-75	3/4	26 11.8

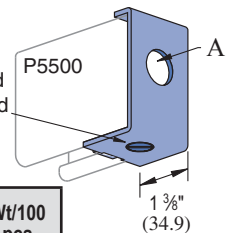
Use with channels:
P1000 and P1100.
Material:
12 gauge (3)

P5521-50, P5521-75

END CONNECTORS FOR 1/2" & 3/4" CONDUIT



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



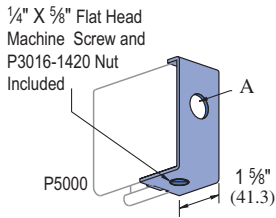
Part No.	Conduit Size In	Wt/100 pcs Lbs (kg)
P5521-50	1/2	27 12.2
P5521-75	3/4	26 11.8

Material:
12 gauge (3).



1 5/8" Channel
 Telestrut
 Nuts & Hardware
 General Fittings
 Pipe/Conduit Supports
 Electrical Fittings
 Concrete Inserts
 Unipier®

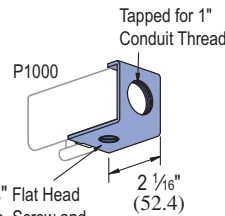
P5021-50, P5021-75 END CONNECTOR FOR 1/2" & 3/4" CONDUIT



Part No.	Conduit Size A 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

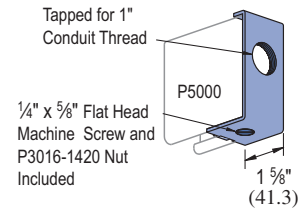


1/4" x 5/8" Flat Head Machine Screw and P3016-1420 Nut Included

Material: 12 gauge (2.7).

Wt/100 pcs: 24 Lbs (10.9 kg)

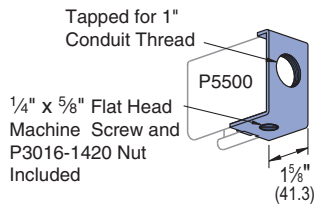
P5021-100 END CONNECTOR FOR 1" CONDUIT



Material: 12 gauge (2.7).

Wt/100 pcs: 28 Lbs (12.7 kg)

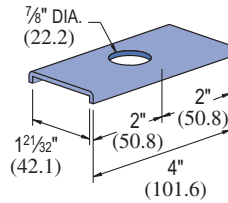
P5521-100 END CONNECTOR FOR 1" CONDUIT



Material: 12 gauge (2.7).

Wt/100 pcs: 24 Lbs (10.9 kg)

P2541



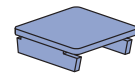
Material: 12 gauge (2.7).

Wt/100 pcs: 24 Lbs (10.9 kg)

SPACER CLEVIS



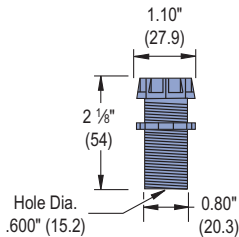
P1180W THRU P5580 END CAPS



Material: 14 gauge (1.9)

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)

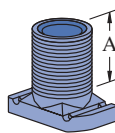
P2603 FIXTURE WIRING NIPPLE



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

Wt/100 pcs: 14 Lbs (6.4 kg)

P2540, P2540A



Stamped Ident. No.
 P2540 - 121961
 P2540A - 121960
 Material: Sintered metal.

1/2" American Standard Straight Pipe Thread

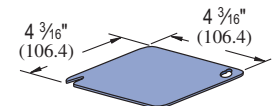
Part No.	"A" In (mm)	Wt/100 pcs Lbs (kg)
P2540	1 5/64 27.4	10.0 4.5
P2540A	5/8 15.9	8 3.6

Design Load
 320 Lbs (1.42 kN)

WIRING STUD NUT

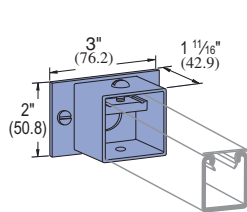


P2802 JUNCTION BOX COVER

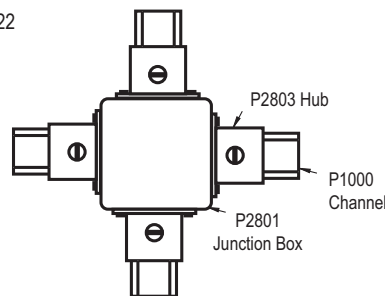


Wt/100 pcs: 30 Lbs (13.6 kg)

P2803



Stamp ID No. 122022

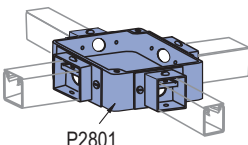


Note: Combine junction box (P2801) and hub assemblies (P2803) to make 1, 2, 3, or 4 way junction box.

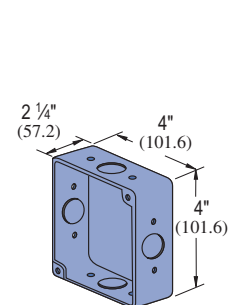
Wt/100 pcs: 32 Lbs (14.5 kg)

HUB ASSEMBLY

P2801 JUNCTION BOX

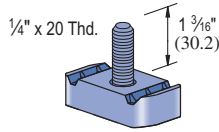


P2801



Wt/100 pcs: 113 Lbs (51.4 kg)

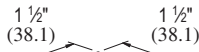
P3116-125
FIXTURE STUD NUT



Wt/100 pcs: 11 Lbs (5.0 kg)

P2552

POLYPROPYLENE WIRE RETAINER

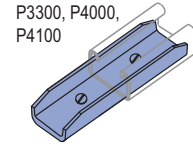


Retainer may be easily pushed into channel to support wires until closure strip is installed.

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



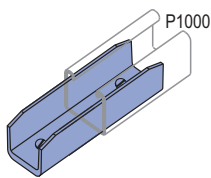
P2904



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

Wt/100 pcs: 12 Lbs (5.4kg)

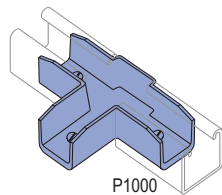
P2900



3/8"-16 x 1/4"
Socket Cup Point
Set Screws Included
Material: Cast aluminum.

Wt/100 pcs: 20 Lbs (9.1 kg)

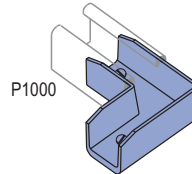
P2901



3/8"-16 x 1/4"
Socket Cup Point
Set Screws Included
Material: Cast aluminum.

Wt/100 pcs: 35 Lbs (15.9 kg)

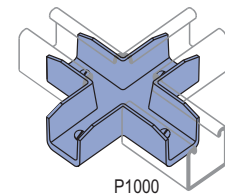
P2902



3/8"-16 x 1/4"
Socket Cup Point
Set Screws Included
Material: Cast aluminum.

Wt/100 pcs: 27 Lbs (12.2 kg)

P2903

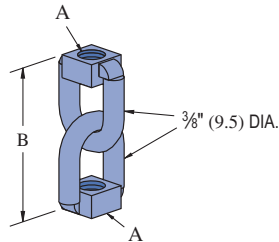


3/8"-16 x 1/4"
Socket Cup Point
Set Screws Included
Material: Cast aluminum.

Wt/100 pcs: 45 Lbs (20.4 kg)

M2037, M2050

SWIVEL HANGERS

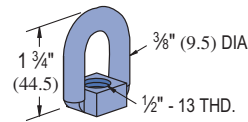


Design Load
600 Lbs (2.67 kN)

Part No.	"A" In	"B" In (mm)	Wt/100 pcs Lbs (kg)
M2037	3/8" - 16	2 ³¹ / ₃₂ 75.4	23 10.4
M2050	1/2" - 13	2 ³ / ₄ 69.9	32 14.5

M2250

SWIVEL HANGER

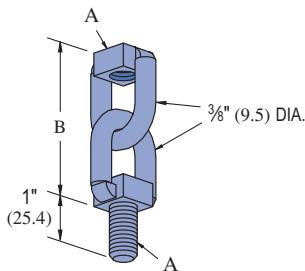


Design Load
600 Lbs (2.67 kN)

Wt/100 pcs: 18 Lbs (8.2 kg)

M2137, M2150

SWIVEL HANGERS

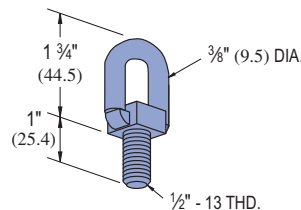


Design Load
600 Lbs (2.67 kN)

Part No.	"A" In	"B" In (mm)	Wt/100 pcs Lbs (kg)
M2137	3/8" - 16	2 ²⁹ / ₃₂ 74	27 12.2
M2150	1/2" - 13	2 ³ / ₄ 69.9	45 20.4

M2350

SWIVEL HANGER



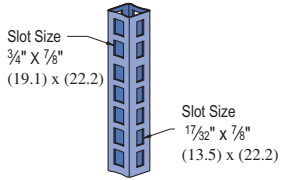
Design Load
600 Lbs (2.67 kN)

Wt/100 pcs: 20 Lbs (9.1 kg)

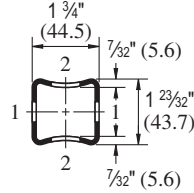


1 5/8" Channel
Telestrut
Nuts & Hardware
General Fittings
Pipe/Conduit Supports
Electrical Fittings
Concrete Inserts

P16F



Slot spacing
1 1/4" (31.8)
on center.



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

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)

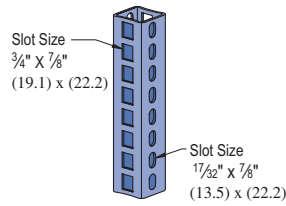
P16F - COLUMN LOADING

Unbraced Height In	Max. Allowable Load Column Loaded at C.G. Lbs	Max. Allowable Load 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

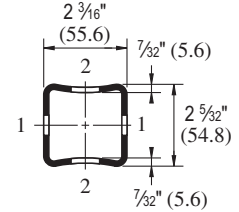
P16F - COLUMN LOADING (METRIC)

Unbraced Height mm	Max. Allowable Load Column Loaded at C.G. kN	Max. Allowable Load Column Loaded at Slot Face kN
610	42.7	14.7
914	40.0	13.8
1,219	36.9	12.9
1,524	33.4	12.0
1,829	29.4	10.7
2,134	24.9	9.8
2,438	20.0	8.5
2,743	16.0	7.1
3,048	12.9	6.2
3,658	8.9	4.9

P21H



Slot spacing
1 1/4" (31.8)
on center.



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

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)

P21H - COLUMN LOADING

Unbraced Height In	Max. Allowable Load Column Loaded at C.G. Lbs	Max. Allowable Load 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

P21H - COLUMN LOADING (METRIC)

Unbraced Height mm	Max. Allowable Load Column Loaded at C.G. kN	Max. Allowable Load Column Loaded at Slot Face kN
610	78.7	27.6
914	75.2	26.7
1,219	71.2	25.4
1,524	66.7	24.0
1,829	61.8	22.7
2,134	56.0	20.9
2,438	50.3	19.1
2,743	44.0	17.3
3,048	36.9	15.6
3,658	25.8	12.5
4,267	18.8	10.2

P16F - BEAM LOADING

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

P21H - BEAM LOADING

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

P16F - BEAM LOADING (METRIC)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection		
			Span/180 kN	Span/240 kN	Span/360 kN
600	7.2	1	7.2	7.2	7.2
750	5.8	2	5.8	5.8	5.4
1,000	4.3	4	4.3	4.3	3.0
1,250	3.5	6	3.5	2.9	1.9
1,500	2.9	9	2.7	2.0	1.4
1,750	2.5	12	2.0	1.5	1.0
2,000	2.2	16	1.5	1.1	0.8
2,500	1.7	25	1.0	0.7	0.5
3,000	1.5	36	0.7	0.5	0.3
3,500	1.2	49	0.5	0.4	0.2
4,000	1.1	64	0.4	0.3	0.2

P21H - BEAM LOADING (METRIC)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection		
			Span/180 kN	Span/240 kN	Span/360 kN
600	17.1	1	17.1	17.1	17.1
750	13.7	2	13.7	13.7	13.7
1,000	10.3	3	10.3	10.3	8.8
1,250	8.2	5	8.2	8.2	5.7
1,500	6.9	7	6.9	5.9	3.9
1,750	5.9	10	5.8	4.3	2.9
2,000	5.1	13	4.4	3.3	2.2
2,500	4.1	20	2.8	2.1	1.4
3,000	3.4	29	2.0	1.5	1.0
3,500	2.9	40	1.4	1.1	0.7
4,000	2.6	52	1.1	0.8	0.5

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.

P16F - ELEMENTS OF SECTION

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

P21H - ELEMENTS OF SECTION

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



1 1/2" Channel

Telestrut

Nuts & Hardware

General Fittings

Pipe/Conduit Supports

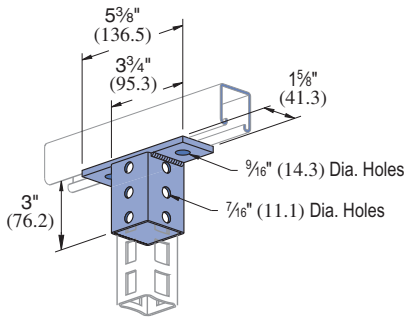
Electrical Fittings

Concrete Inserts

Unipier®

P2820, P2940

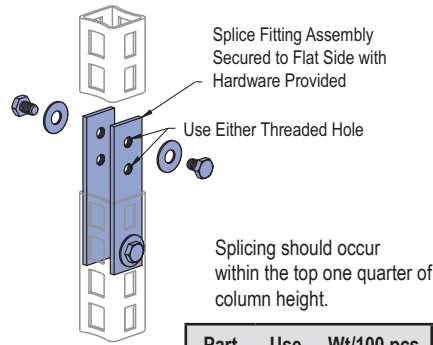
CHANNEL/TUBE CONNECTORS



Part No.	Use With	Wt/100 pcs Lbs (kg)
P2820	P16F	116 (2.6)
P2940	P21H	148 (67.1)

P2822, P2932

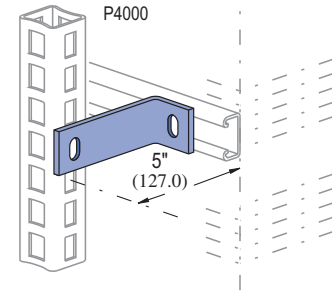
SPLICE FITTINGS



Part No.	Use With	Wt/100 pcs Lbs (kg)
P2822	P16F	97 (44.0)
P2932	P21H	122 (55.3)

P2823

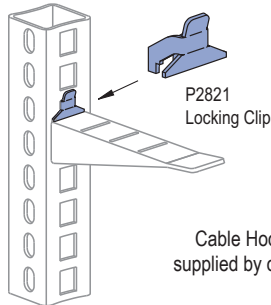
90° RACK FITTING



Wt/100 pcs: 66 Lbs (29.9 kg)

P2821

LOCKING CLIP

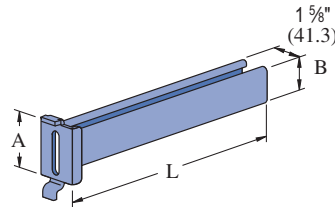


Exclusive Cable Hook
Locking Clip prevents Cable Hook removal.

Wt/100 pcs: 3 Lbs (1.4 kg)

P2928, P2929 AND P2930

CABLE BRACKETS



Material: 12 gauge steel.

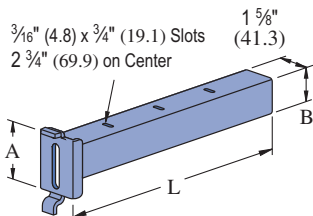
Use with P16F or P21H.

Part Number	"L" In (mm)	"A" In (mm)	"B" In (mm)	Wt/100 pcs Lbs (kg)	Uniform Design Load Lbs (kN)
P2928	6 152.4	3 1/2 88.9	7/8 22.2	92 41.7	500 2.22
P2929	12 304.8	3 1/2 88.9	1" 41.3	320 145.1	250 1.11
P2930	18 457.2	3 1/2 88.9	1" 41.3	420 190.5	170 0.76

Safety factor of 3.

P2920 THRU P2924

CABLE BRACKETS



Use with P16F or P21H.

Material: 12 gauge steel.

Part Number	"L" In (mm)	"A" In (mm)	"B" In (mm)	Wt/100 pcs Lbs (kg)	Uniform Design Load Lbs (kN)
P2920	5 1/2 139.7	3 1/2 88.9	7/8 22.2	90 40.8	500 2.22
P2921	8 1/4 209.6	3 1/2 88.9	7/8 22.2	120 54.4	325 1.45
P2922	11 279.4	3 1/2 88.9	1" 41.3	300 136.1	275 1.22
P2923	13 3/4 349.3	3 1/2 88.9	1" 41.3	340 154.2	220 0.98
P2924	19 1/4 489.0	3 1/2 88.9	1" 41.3	430 195.0	160 0.71

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"	0.975 629	0.390 252	0.244 157
P3000 & KO	1 5/8" x 1 1/8"	1.677 1,082	0.671 433	0.419 270
P1000 & KO, P1100 & KO	1 5/8" x 1 1/2"	2.028 1,308	0.811 523	0.507 327
P5500 & KO	1 5/8" x 2 1/16"	3.169 2,045	1.268 818	0.792 511
P5000 & KO	1 5/8" x 3 1/4"	4.308 2,779	1.723 1,112	1.077 695

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

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

Also UL Listed

P1001, P1101, P3001, P3301, P5001 & P5501

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 1/2" (3.2).

Maximum number of wires for types T, THN, 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
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.



1 5/8" Channel

Telestrut

Nuts & Hardware

General Fittings

Pipe/Conduit Supports

Electrical Fittings

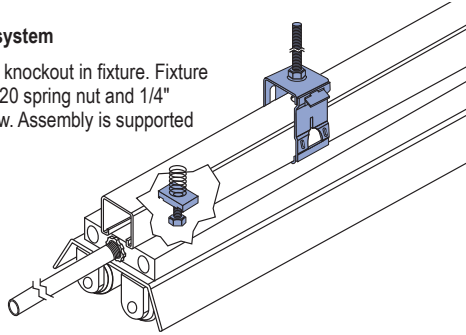
Concrete Inserts

Unipier®

FLUORESCENT FIXTURES - SUPPORT APPLICATIONS

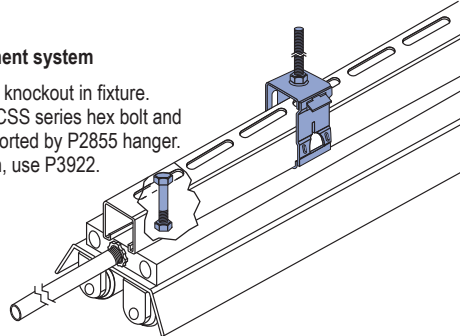
Spring-Nut attachment system

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

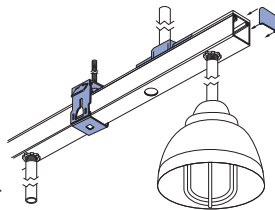
Conduit connects through knockout in fixture. Fixture is supported by HCSS series hex bolt and hex nut. Raceway is supported by P2855 hanger. To splice a continuous run, use P3922.



HIGH-BAY FIXTURE RACEWAY APPLICATIONS

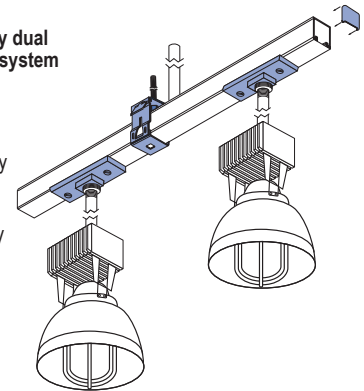
H.I.D. Knockout mounted system

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.

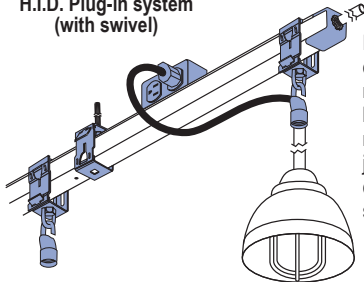


High-Bay dual mounted system

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



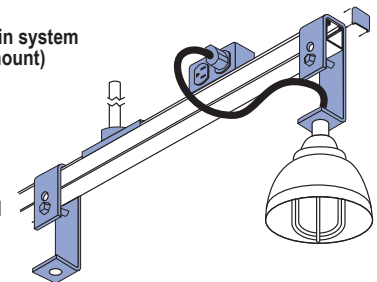
H.I.D. Plug-in system (with swivel)



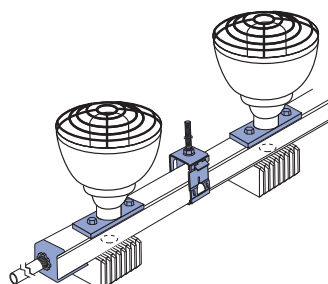
Fixtures, supported by P2855 hangers and M2250 eyelets, plug into receptacle mounted in P2763 outlet box. P2855 hangers also support raceway. P2521-75 end connector joins conduit to raceway. P1280W end caps (not shown) and P3184 closure strip complete assembly.

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.

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 - In (mm)								
	8' (2.4m)	10' (3m)	12' (3.7m)	14' (4.3m)	16' (4.9m)	18' (5.5m)	20' (6.1m)	22' (6.7m)	24' (7.3m)
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