



P2458 - 18" to 36" Tubular Knee Braces (1-5/8" Series)

Atkore's knee brace fittings provide angled reinforcement for metal framing systems, enhancing stability and load distribution in structural applications. Engineered for straightforward assembly, they ensure precise alignment and are compatible with a wide range of strut profiles.

Features

- Compression Load: 1,500 lbs (6.67 kN)
- Tension Load: 300 lbs (1.33 kN)
- Holes for 1/2" fasteners

Standard Dimensions (Unless Shown Otherwise on Drawing):

- **Hole Diameter:** $\frac{9}{16}$ " (14mm)
- **Hole Spacing (From End):** $\frac{13}{16}$ " (21mm)
- **Hole Spacing (On-Center):** $1\frac{7}{8}$ " (48mm)
- **Width:** $1\frac{5}{8}$ " (41mm)
- **Thickness:**
 - $\frac{1}{4}$ " (6.4mm) with steel meeting or exceeding ASTM A1011 SS GR 33, or
 - 0.220" (5.6mm) with steel meeting or exceeding ASTM A1011 HSLAS GR 45

Note:

- When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

Materials & Finishes - Standard:

- **Base Metal:** Steel conforms to ASTM A1011 SS GR 33, A1011 HSLAS GR 45, A36, A575, A576, or A635.
- **Electrogalvanized (EG):** Conforms to ASTM B633, Type III SC1
- **Unistrut Defender (DF):** Conforms to ASTM A1059
- **Hot Dip Galvanized (HG):** Conforms to ASTM A123 or A153
- **Perma-Green (GR):** Conforms to commercial standards for powder coating
- **Perma-Gold (ZD):** Conforms to ASTM B633, Type II SC1 or SC3
- **Plain (PL):** No finish

Materials & Finishes - Special Metals:

- **Stainless Steel, Type 304 (SS):** Conforms to ASTM A240 or A276, Type 304 *
- **Stainless Steel, Type 316 (ST):** Conforms to ASTM A240 or A276, Type 316 *
- **Aluminum (AL):** Conforms to ASTM B209, Type 1100F or 5052-H32 *

* These materials have different physical properties and performance characteristics. Please contact us for design support.



Catalog Number	Material Type	Surface Finish	Part Weight (lb/ea)	Standard Package Weight (lb)
P2458-30 EG	Steel	Electrogalvanized	2.27	56.75
P2458-18 EG	Steel	Electrogalvanized	1.46	36.4
P2458-30 GR	Steel	Green E-Coat	2.27	56.75
P2458-18 GR	Steel	Green E-Coat	1.46	36.4
P2458-24 GR	Steel	Green E-Coat	1.86	46.575
P2458-36 GR	Steel	Green E-Coat	2.67	66.75
P2458-12 PG	Steel	Pre-Galvanized	1.05	26.25



Catalog Number	Material Type	Surface Finish	Part Weight (lb/ea)	Standard Package Weight (lb)
P2458-24 PL	Steel	Plain/Oil	1.86	46.575
P2458-18 PL	Steel	Plain/Oil	1.46	36.4
P2458-36 PL	Steel	Plain/Oil	2.67	66.75
P2458-30 PL	Steel	Plain/Oil	2.27	56.75

Design Loads:
1. Compression = 1,500 lbs (6.67 kN)
2. Tension = 300 lbs (1.33 kN)
3. Safety factor = 2.5 based on the ultimate strength of the connection