

GENERAL INFORMATION

PUSH-IN COUPLER

PRODUCT DESCRIPTION

Push-In Couplers have one end that does not require turning threaded rod elements during installation which can be ideal for applications such as mounting prefabricated hardware and hanger assemblies.

GENERAL APPLICATIONS AND USES

- Rod Hangers and Supports
- Prefabrication Connections
- Trapeze Assemblies
- Threaded Rod Extensions
- Cast-In Insert and Anchors
- Distribution Systems / Utility Lines
- Replacement for Rod Coupling Nuts

FEATURES AND BENEFITS

- + Push-In thread does not require turning threaded rod elements during installation
- + Cinch nut mechanism designed to eliminate thread misalignment
- + Threaded rod compatibility accepts burred or oiled rods and commonly available standard UNC threaded rods
- + Separate thread-in and push-in connection ends designed for attaching existing anchor points to pre-fabrication assemblies
- + Hex nut side enables installation with a wrench for threaded end
- + Couplers compatible with 3/8"-16 or 1/2"-13 UNC threads (threaded rods and bolts)

GUIDE SPECIFICATIONS

CSI Divisions: 03 16 00 - Concrete Anchors, 05 05 23 - Metal Fastenings. Coupler shall be Push-In Coupler as supplied by DEWALT, Towson, MD. Anchors shall be installed in accordance with published instructions and the Authority Having Jurisdiction.

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**PUSH-IN COUPLER
(INTERNALLY THREADED)**

ANCHOR MATERIALS

- Zinc Plated Carbon Steel

ROD/ANCHOR SIZE RANGE (TYP.)

- 3/8" to 3/8" (UNC)
- 1/2" to 1/2" (UNC)

INSERT VERSIONS

- Single Push-In Thread

SUITABLE BASE MATERIALS

- Steel Connections

MATERIAL SPECIFICATIONS

Push-In Coupler

Anchor Component	Component Material
Coupler Body	Carbon steel
Zinc Plating	ASTM B633 (Fe/Zn5) Min. plating requirements for mild service condition

Material Properties for Common Threaded Rods

Description	Steel Specification (ASTM)	Threaded Rod Diameter (inch)	Minimum Yield Strength, f_y (ksi)	Minimum Ultimate Strength, f_u (ksi)
Standard Carbon Steel	A36	3/8 or 1/2	36.0	58.0
High Strength Carbon Steel	A193, Grade B7	3/8 or 1/2	105.0	125.0

Couplers may be considered for use in conjunction with all grades of continuously threaded carbon steels (all-thread or threaded bolts) that comply with code reference standards and that have thread characteristics comparable with ANSI B1.1 UNC Coarse Thread Series.

INSTALLATION SPECIFICATIONS

Installation Specifications for Push-In Coupler

Nominal Size	Internal Thread Diameter Size	Approximate Push-In Rod Length	Approximate Outside Diameter	Approximate Length	Hex Nut Size
3/8"	3/8"-16 (both ends)	7/8"	1/2"	1-9/16"	1/2"
1/2"	1/2"-13 (both ends)	1"	21/32"	1-13/16"	3/4"

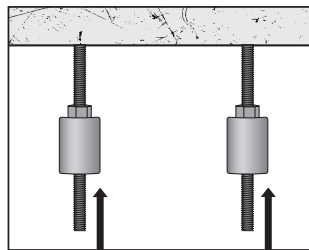
INSTALLATION INSTRUCTIONS

Installation Instructions for Push-In Coupler

HEX NUT SIDE UP / PUSH-IN SIDE DOWN:

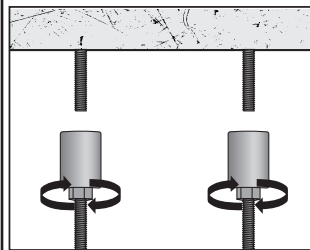


Step 1
Thread couplers onto hanging rod

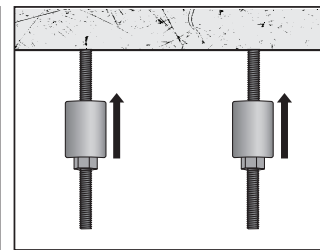


Step 2
Push assembly into couplers

PUSH-IN SIDE UP / HEX NUT SIDE DOWN:



Step 1
Thread couplers onto assembly



Step 2
Push couplers with assembly attached into hanging rod

REFERENCE DATA (ASD)

Ultimate and Allowable Load Capacities for Push-In Thread Couplers^{1,2}

Threaded Rod/Anchor Diameter in.	Tension	
	Ultimate lbs. (kN)	Allowable lbs. (kN)
3/8	12,375 (55.1)	4,125 (18.4)
1/2	18,000 (80.1)	6,000 (26.7)

1. Allowable load capacities are calculated using an applied safety factor of 3.0
2. The tabulated allowable load capacities must be checked against the steel strength of the corresponding steel threaded insert, the lowest load level controls.

Allowable Loads Based on Steel Strength for Common Threaded rods^{1,2}

Rod Diameter in.	Tension, lbs.			
	ASTM A36, ASTM F1554 Grade 36 $F_y = 58$ ksi	ASTM A307 $F_y = 60$ ksi	ISO 898 Class 5.8 $F_y = 72.5$ ksi	ASTM A193 Grade B7 $F_u = 125$ ksi
3/8	2,115	2,185	2,640	4,555
1/2	3,755	3,885	4,700	8,100

For St: 1 inch = 25.4 mm; 1 lbf = 0.0044 kN, 1 ksi = 6.894 MPa.

1. Allowable load used in the design must be the lesser of internally threaded coupler values and tabulated steel threaded insert values.
2. Allowable loads for steel strength are calculated using allowable tension equal to $0.33 \times F_u \times A_{nom}$.

ORDERING INFORMATION

Push-In Thread Couplers

Cat. No.	Description	Internal Thread Diameter	Pack Qty.
PFM3613038	3/8"-16 Coupler Push-In	3/8" to 3/8"	20
PFM3613012	1/2"-13 Coupler Push-In	1/2" to 1/2"	20

