PSA Threadbar System - Couplers

Installation Guide – June 2026

PSA Threadbar system consists of 500 Grade fully left-hand threaded reinforcing bar and accessories compatible with the left-hand coarse thread. PSA Threadbar Couplers can be used to connect two joining PSA Threadbar Reinforcement Bars within the same concrete pour or connect bars to create reinforcement continuity through construction joints.

PSA Threadbar and PSA Threadbar Coupler come with **left-hand** coarse thread, DO NOT mix and match with any other similar reinforcing bar or couplers and note the **left-hand** thread while installing the components.

The following items are covered by this document:

Threadbar	Nominal Bar Diameter (mm)	Threadbar Coupler	Threadbar Coupler Length (mm)	Threadbar Coupler No-Mid-Stop*	Starter bar	Lock Nut
PTB12	12	PTC12	60	PTC12-NMS	PSB12540	TBLN12
PTB16	16	PTC16	90	PTC16-NMS	PSB16660	TBLN16
PTB20	20	PTC20	105	PTC20-NMS	PSB20850	TBLN20
PTB25	25	PTC25	115	PTC25-NMS	PSB251150	TBLN25
PTB28	28	PTC28	125	PTC28-NMS	PSB281280	TBLN28
PTB32	32	PTC32	140	PTC32-NMS	PSB321450	TBLN32
PTB40	40	PTC40	160	PTC40-NMS	PSB401800	TBLN40

*Only used for Type C connections

For galvanised products, add a G to the above item codes. For example: PTC12G

Installation of a PSA Threadbar Coupler connection:

PSA Threadbar Coupler connection is a solution for achieving full-strength reinforcement bar joints in a wide range of applications. Its installation requires at least one of the bars can be freely rotated to fully engage it into the coupler.

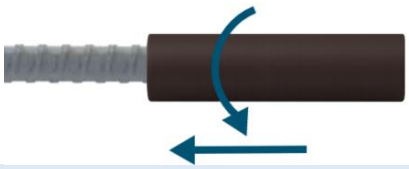
System Components

The connection consists of:

- Two Threadbar reinforcement bars (Bar 1 & Bar 2)
- One PTC Coupler

Installation Sequence

Step 1



If the first bar is not already supplied with a coupler installed, screw the coupler on the bar (Note the left-hand thread). Tighten by wrench to ensure the bar is firmly seated against the middle stop.

If the coupler connection is used in a construction joint and concrete is poured before the second bar is installed, it is important to protect the coupler opening from concrete ingress by applying a nailing plate!

Step 2

Screw the second bar into the coupler by rotating the bar (Note the left-hand thread). Tighten by wrench to ensure the bar is firmly seated against the middle stop.

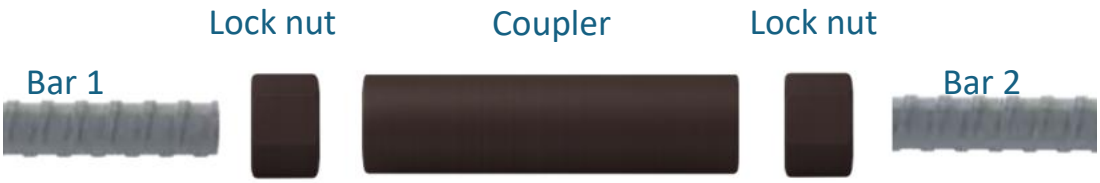
Installation of a PSA Threadbar Coupler connection with Lock nuts:

If specified by the design engineers, the Threadbar Coupler system can be installed using Lock nuts. The installation requires that the second bar (Bar 2) can be freely rotated to fully engage it into the coupler.

System Components

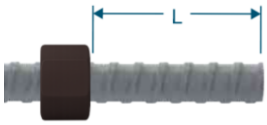
The connection consists of:

- Two Threadbar Reinforcement Bars (Bar 1 & Bar 2)
- One PTC Coupler
- Two Lock nuts



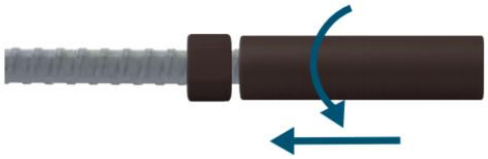
Installation Sequence

Step 1



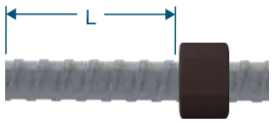
Screw the Lock nut on Bar 1(Note the left-hand thread), ensure the projected length L is greater than the half of the coupler length, follow the product dimensions on page 1.

Step 2



Screw the coupler on the bar (Note the left-hand thread). Tighten by wrench to ensure the bar is firmly seated against the middle stop.

Step 3



Screw the Lock nut on Bar 2(Note the left-hand thread), ensure the projected length L is greater than the half of the coupler length, follow the product dimensions on page 1.

Step 4

Screw the second bar into the coupler by rotating the bar (Note the left-hand thread). Tighten by wrench to ensure the bar is firmly seated against the middle stop.

Step 5

Tighten the lock nuts against the coupler on both sides using a wrench (Note the left-hand thread).

Installation of a PSA Type C Threadbar Coupler connection:

The system is intended for reinforcement bar applications in which neither bar can be freely rotated during installation. This condition typically occurs when Bar 1 is already cast-in and Bar 2 is bent or when large -diameter bars are used, making unrestricted rotation impractical due to their weight and geometry.

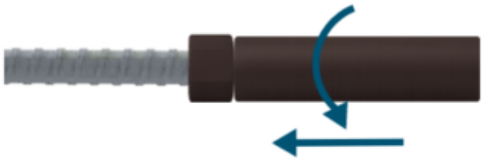
System Components

The connection consists of:

- Two Threadbar reinforcement bars (Bar 1 & Bar 2)
- One PTC-NMS Coupler (No-Mid-Stop Threadbar Coupler)
- Two Lock nuts

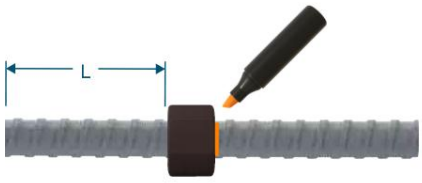
Installation Sequence

Step 1



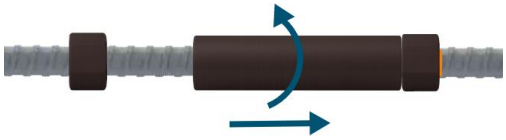
Screw the lock nut followed by the **No-Mid-Stop Coupler** onto bar 1 (Note the left-hand thread). The bar end should be flush with the open end of the coupler

Step 2



Screw the lock nut on Bar 2 (Note the left-hand thread), ensure the projected length L is equal to the half of the coupler length, follow the product dimensions on page 1. Mark the lock nut location.

Step 3



Locate the second bar centrally against the open end of the coupler and rotate the coupler on the second bar (Note the left-hand thread), continue till the coupler is firmly secure against the lock nut on Bar 2. Ensure the lock nuts position by checking the mark on the bar.

Step 4

Tighten both lock nuts against the coupler using a wrench (Note the left-hand thread).

psa.com.au

| MELBOUNRE

PSA Victoria (Head Office)
T: (03) 9764 0031
E: vic@psa.com.au (General enquiries)
E: vic@psabraces.com.au (Brace hire)
1257 Ferntree Gully Rd, Scoresby VIC 3179

| BRISBANE

PSA Queensland
T: (07) 3279 4555
E: qld@psa.com.au (General enquiries)
E: qld@psabraces.com.au (Brace hire)
136 Mica St, Carole Park QLD 4300

| SYDNEY

PSA New South Wales
T: (02) 9756 2756
E: nsw@psa.com.au (General enquiries)
E: nsw@psabraces.com.au (Brace hire)
13–15 Penelope Cres, Arndell Park NSW 2148

| PERTH

PSA Western Australia
T: (08) 9439 6405
E: wa@psa.com.au (General enquiries)
E: wa@psabraces.com.au (Brace hire)
9 Yeates Rd, Kwinana Beach WA 6167

| TOWNSVILLE

PSA Queensland
T: 0408 339 836
E: qld@psa.com.au (General enquiries)
E: qld@psabraces.com.au (Brace hire)
27–31 Taryn Street, Mount St John QLD 4818

| ADELAIDE

PSA South Australia
T: 0409 041 099
E: SA@psa.com.au (General enquiries)
E: SA@psabraces.com.au (Brace hire)
U1/17 Ceafield Rd, Para Hills West SA 5096

For technical questions please contact technical@psa.com.au

© Copyright 2026 Plastic Solutions Australia (PSA). All information contained in this document is provided in good faith and is accurate to the best of PSA's knowledge as of the date of publication. However, this information is subject to change without prior notice. The technical data, drawings, and recommendations provided herein are based on current knowledge and industry practices. PSA makes no representations or warranties, express or implied, regarding the suitability, accuracy, or completeness of the information for any specific application. It is the responsibility of appropriately qualified and competent professionals to assess the suitability of the information and interpret it accurately in the context of the specific project requirements and relevant local regulations. PSA shall not be liable for any direct, indirect, or consequential damages arising from the use or reliance on this information. PSA reserves the right to modify product designs, specifications, and details as part of its policy of continuous improvement and development.