



GRINNELL Figure 780 Grooved Snap Couplings 1-1/4 thru 8 Inch (DN32 thru DN200)

General Description

The GRINNELL Figure 780 Grooved Snap Couplings are designed for quickly connecting and disconnecting cut or rolled grooved piping systems. By utilizing a hinged lever mechanism, grooved piping segments are joined quickly and securely without nuts and bolts. Coupling housing segments are locked in place by securing the lever handle with a split pin. Coupling sizes 5 thru 8 inch (DN125 thru DN200) feature a cross-ribbed housing design for extra strength.

NOTICE

Never remove any piping component nor correct or modify any piping deficiencies without first de-pressurizing and draining the system. Failure to do so may result in serious personal injury, property damage, and/or impaired device performance.

It is the designer's responsibility to select products suitable for the intended service and to ensure that pressure ratings and performance data are not exceeded. Material and gasket selection should be verified for compatibility with the specific application. Always read and understand the installation instructions.

The products described herein must be installed and maintained in compliance with this document, as well as with the applicable standards of the Approval agency, in addition to the standards of any other authorities having jurisdiction. Failure to do so may result in serious personal injury or impair the performance of these devices.

The owner is responsible for maintaining their mechanical system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.

Snap couplings are not recommended for services where excessive shock-loads are present.

Snap couplings are factory assembled to tight safety tolerances. Therefore, some people may have difficulty opening and closing the couplings by hand. Using a leverage pipe can help open or close couplings more easily. A leverage pipe can be fabricated from an appropriate length of 1/2 or 3/4 inch Schedule 40 pipe.

This coupling provides a unique two-step closing feature that partially locks then closes the coupling, helping to minimize the opportunity for personal injury. Pushing the lever handle initially snaps the housing segments together. Continuing to push the lever handle then smoothly locks the coupling into position.

Technical Data

Sizes

1-1/4 thru 8 inch (DN32 thru DN200)

Maximum Pressure

300 psi (20,7 bar)

Housing and Lever Handle

Ductile Iron conforming to ASTM A536, Grade 65-45-12

Finish

- Black, electro-deposition coated (Standard)
- Hot-dipped Galvanized (Optional)

Toggle Links

Plated Carbon Steel conforming to ANSI C1010 or C1020

Hinge Pin

Case-hardened Carbon Steel conforming to ANSI C1212

Rivet

Carbon Steel conforming to ANSI C1010

Split Pin

Carbon Steel Wire Rod conforming to ASTM A421



For warranty terms and conditions, visit www.grinnell.com

Gasket Materials

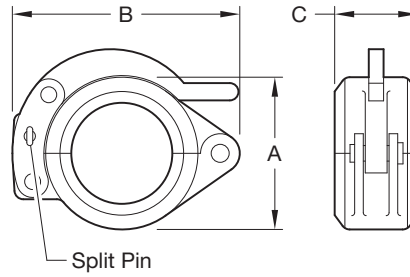
- Grade "E" EPDM, Green color code, -30°F (-34°C) to +230°F (+110°C)
- Grade "T" Nitrile, Orange color code, -20°F (-29°C) to +180°F (+82°C)

Refer to Technical Data Sheet G610 for more gasket information.

Ordering Procedure

GRINNELL Mechanical Products are available globally through a network of distribution centers. Visit www.grinnell.com for the nearest distributor.

When placing an order, indicate the full product name. Specify Figure 780, quantity, size (ANSI inch size or pipe O.D.), finish, and gasket materials.



Nominal Pipe Size		Max. Working Pressure ⁽¹⁾⁽²⁾ , psi bar	Max. End Load ⁽²⁾ , Lbs. kN	Max. End Gap, Inches mm	Nominal Dimensions			Deflection		Approx. Weight, Lbs. kg
ANSI Inches DN	O.D. Inches mm				A Inches mm	B Inches mm	C Inches mm	Degrees per Coupling	Inches/Foot mm/m	
1-1/4 32	1.660 42,4	300 20,7	650 2,9	0.06 1,6	3.28 83,2	5.14 130,5	1.75 44,5	3°6'	0.65 54,3	1.6 0,7
1-1/2 40	1.900 48,3	300 20,7	851 3,8	0.06 1,6	2.95 75,0	4.65 118,0	1.85 47,0	3°48'	0.80 66,4	2.2 1,0
2 50	2.375 60,3	300 20,7	1,329 5,9	0.06 1,6	3.39 86,0	4.76 121,0	1.89 48,0	3°31'	0.74 61,5	2.4 1,1
2-1/2 65	2.875 73,0	300 20,7	1,947 8,7	0.06 1,6	3.62 92,0	5.91 150,0	1.89 48,0	2°30'	0.52 43,7	3.1 1,4
– 65	3.000 76,1	300 20,7	2,121 9,4	0.06 1,6	3.62 92,0	5.91 150,0	1.89 48,0	2°24'	0.50 41,9	3.1 1,4
3 80	3.500 88,9	300 20,7	2,886 12,8	0.06 1,6	4.69 119,0	6.42 163,0	1.89 48,0	2°24'	0.50 41,9	4.0 1,8
4 100	4.500 114,3	300 20,7	4,771 21,2	0.13 3,2	6.50 165,0	8.07 205,0	2.05 52,0	3°12'	0.67 55,9	5.9 2,7
– 125	5.500 139,7	300 20,7	7,127 31,7	0.13 3,2	7.44 189,0	9.96 253,0	2.05 52,0	2°37'	0.55 45,7	10.8 4,9
5 125	5.565 141,3	300 20,7	7,289 32,4	0.13 3,2	7.44 189,0	9.96 253,0	2.05 52,0	2°36'	0.54 45,4	10.8 4,9
– 150	6.500 165,1	300 20,7	9,955 44,3	0.13 3,2	8.39 213,0	10.94 278,0	2.05 52,0	2°14'	0.47 39,0	12.8 5,8
6 150	6.625 168,3	300 20,7	10,341 46,0	0.13 3,2	8.50 216,0	11.06 281,0	2.05 52,0	2°10'	0.45 37,8	12.8 5,8
8 200	8.625 219,1	300 20,7	17,528 78,0	0.13 3,2	10.95 278,0	14.02 356,0	2.44 62,0	1°40'	0.35 29,1	20.5 9,3

Notes:

1. Pressure ratings listed are cold water pressure or maximum working pressure within the service temperature range of the gasket used in the coupling.
2. Maximum working pressures and end loads listed are total of internal and external pressures and loads based on Schedule 40 steel pipe grooved in accordance with Standard Cut Groove or Roll Groove Specifications.

FIGURE 1
FIGURE 780 GROOVED SNAP COUPLINGS
NOMINAL DIMENSIONS