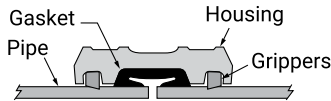


Roughneck® Coupling Fig. 7005



The Fig. 7005 Roughneck Coupling is an effective and reliable way of joining plain-end or beveled end pipe. The Roughneck Coupling is ideal for use in a variety of applications including mining, process piping, manifold piping and oilfield services. The unique gripper action provides a positive pipe joint and allows for working pressure ratings up to 750 PSI (52 bar) for schedule 40 pipe.

For Listings/Approval Details and Limitations, visit our website at www.asc-es.com or contact an ASC Engineered Solutions™ Sales Representative.



Working pressure and end load are based on a properly assembled Roughneck coupling with bolts fully torqued to the above specifications, on plain-end or beveled standard wall steel pipe and Gruvlok Plain-End Fittings.

Roughneck Couplings are designed to be used on plain-end pipe and Gruvlok Plain-End Fittings only. For externally coated pipe applications, contact an ASC Representative.

Not recommended for use on steel pipe with a hardness greater than 150 Brinell, Stainless Steel, plastic, HDPE, cast iron or other brittle pipe.

Not recommended for pipe schedule transitioning.

Suitable for schedule 10 steel pipe, for pressure ratings see Technical Data section of the Gruvlok Catalog.

*Bolt torque ratings shown must be applied at installation.

Material Specifications

Housing

Ductile Iron conforming to ASTM A536, Grade 65-45-12 or Malleable Iron conforming to ASTM A47, Grade 32510.

Bolts

SAE J429, Grade 5, Zinc Electroplated

Heavy Hex Nuts

ASTM A563, Grade A, Zinc Electroplated

Grippers

2"-8" heat treated, electroplated carbon steel.

10"-16" heat treated stainless steel.

Coatings

Rust inhibiting paint

Color: Orange (Standard)

2" - 12" Hot Dipped Zinc Galvanized (Optional)

Other Colors Available

(IE: RAL3000 and RAL9000).

For other Coating requirements contact an ASC Engineered Solutions™ Representative.

Gasket

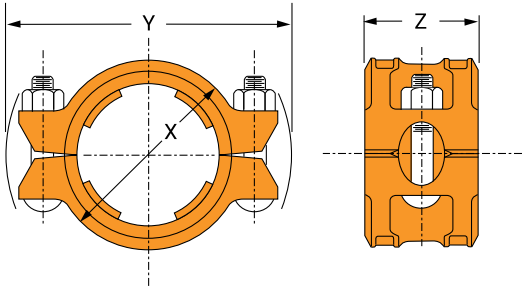
Grade E (EPDM) or

Grade T (Nitrile) Elastomers with properties as designed by ASTM D2000 for each gasket grade.



PROJECT INFORMATION	APPROVAL STAMP
Project:	Approved
Address:	Approved as noted
Contractor:	Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	

Roughneck® Coupling Fig. 7005



Nominal Size	O.D.	Max. Wk. Pressure	Max. End Load	No. of Grippers	Coupling Dimensions			Coupling Bolts		Specified Torque §		Approx. Wt. Ea.
					X	Y	Z	Qty.	Size	Min.	Max.	
In./DN(mm)	In./mm	PSI/bar	Lbs./kN		In./mm	In./mm	In./mm		In./mm	Ft.-Lbs./N-m	Ft.-Lbs./N-m	Lbs./kg
2	2.375	750	3,323	8	3 ³ / ₄	6 ³ / ₈	3 ¹ / ₂	2	5 ⁵ / ₈ x 3 ¹ / ₄	150	190	6.6
50	60.3	51.7	14.78		95	162	89		—	203	257	3.0
2 ¹ / ₂	2.875	600	3,895	8	4 ¹ / ₄	7 ¹ / ₈	3 ¹ / ₂	2	5 ⁵ / ₈ x 3 ¹ / ₄	150	190	7.4
65	73.0	41.4	17.33		108	181	89		—	203	257	3.4
3	3.500	600	5,773	8	4 ⁷ / ₈	8 ¹ / ₈	3 ¹ / ₂	2	3 ³ / ₄ x 4 ¹ / ₂	200	250	10.5
80	88.9	41.4	25.68		124	206	89		—	271	339	4.8
4	4.500	450	7,157	8	6 ³ / ₈	9 ³ / ₈	4 ¹ / ₈	2	3 ³ / ₄ x 4 ¹ / ₂	200	250	16.4
100	114.3	31.0	31.84		162	238	105		—	271	339	7.4
5	5.563	350	8,507	8	7 ¹ / ₂	11 ¹ / ₈	4 ³ / ₈	2	7 ⁷ / ₈ x 5	250	300	23.8
125	141.3	24.1	37.84		191	283	111		—	339	406	10.8
6	6.625	300	10,341	12	8 ³ / ₄	12 ⁷ / ₈	4 ³ / ₈	2	1 x 6	250	300	31.7
150	168.3	20.7	46.00		222	327	111		—	339	406	14.4
8	8.625	300	17,528	12	10 ⁷ / ₈	14 ¹ / ₂	4 ¹ / ₂	4	7 ⁷ / ₈ x 5	250	300	38.6
200	219.1	20.7	77.97		276	368	114		—	339	406	17.5
10	10.750	300	27,229	8	12 ⁵ / ₈	18	5 ³ / ₈	4	1 x 6 ¹ / ₂	500	600	40
250	273.1	20.7	121.12		321	457	137		—	678	814	18.1
12	12.750	250	31,919	12	14 ⁷ / ₈	20 ¹ / ₄	5 ³ / ₈	4	1 x 6 ¹ / ₂	550	700	56
300	323.9	17.2	141.98		378	514	137		—	746	949	25.4
14	14.000	200	30,788	12	16 ³ / ₄	22 ¹ / ₈	6 ¹ / ₄	4	1 x 6 ¹ / ₂	550	700	88
350	355.6	13.8	136.95		425	562	159		—	746	949	39.9
16	16.000	150	30,159	12	18 ³ / ₄	24	6 ¹ / ₄	4	1 x 6 ¹ / ₂	550	700	95
400	406.4	10.3	134.15		476	610	159		—	746	949	43.1

Note:

For additional details see "Coupling Data Chart Notes" in the Introduction Section of the Gruvlok Catalog.

§ – For additional Bolt Torque information, see the Technical Data Section of the Gruvlok Catalog.

See Installation & Assembly directions on next page.

Not for use in copper or PVC systems.



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Fig. 7005 Roughneck® Coupling



Read and understand all instructions before use.

WARNING

Ensure system is drained and depressurized before installation or service.

Use appropriate personal protective equipment.



Failure to follow these instructions could result in serious personal injury and/or property damage.

1 Pipe Preparation

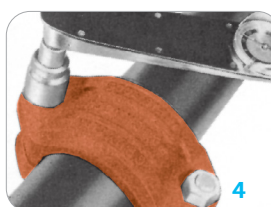
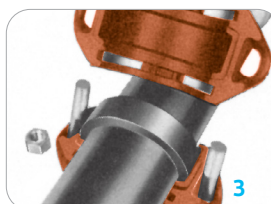
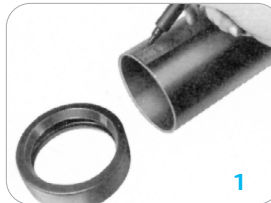
Make certain the pipe ends are free of indentations, projections, weld splatter, or other imperfections which could prevent proper sealing of the gasket.

2 Pipe Marking

Mark each pipe at a distance from the pipe end according to the pipe run size. See Image 1 and the chart.

3 Check & Lubricate Gasket

Check the gasket color code to verify that the gasket grade is properly suited for the intended service. Apply a thin coating of Gruvlok Lubricant to the gasket lips and the exterior surface of the gasket and slip the gasket over one pipe. See Image 2. Make sure the gasket does not overhang the pipe end.



Pipe Run Size

Pipe Size	Distance from Pipe End Mark	Bolt Torque	
		Min.	Max.
In./DN(mm)	In./mm	Ft.-Lbs./N-m	Ft.-Lbs./N-m
2-2½ 50-65	1 25.4	150 203	190 257
3-4 80-100	1 25.4	200 271	250 339
5-8 125-200	1¼ 31.8	250 339	300 406
10 250	1¾ 44.5	500 678	600 814
12 300	1¾ 44.5	550 746	700 949
14-16 350-400	1¾ 44.5	550 746	700 949

4 Pipe Alignment

Align the second pipe and while holding the pipe in the butted position slide the gasket back over the second pipe end. The gasket should be equally spaced between the lines scribed on each pipe.

5 Housing

Place each half of the Roughneck coupling over the gasket, making sure that the tongue on one housing half is aligned with the recess on the other housing half. See Image 3.

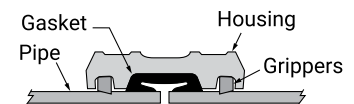
6 Tighten Nuts

Tighten the nuts alternately and uniformly until the required bolt torque is reached. See Image 4 and chart for bolt torque.

7 Reinstallation

Reinstallation after a disassembly will require that the threads on the bolt and in the nut are clean and lubricated with a light oil.

Note: Torque requirements must be met and housing halves must be assembled with equal gaps between bolt pads.



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Roughneck Couplings are designed to be used on plain-end pipe and Gruvlok Plain-End Fittings only. For externally coated pipe applications, contact an Anvil International Representative.

Not recommended for use on steel pipe with a hardness greater than 150 Brinell, plastic, HDPE, cast iron or other brittle pipe.

Re-Installation: The 7005 roughneck coupling may be re-installed following a quick visual inspection of the gripper and pipe ends. Any damage on the gripper and or pipe ends may compromise the integrity of the joint and it is advised that the coupling and or individual gripper be replaced and the pipe end cut back to where they are free from damage.

*Bolt torque ratings shown must be applied at installation.



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