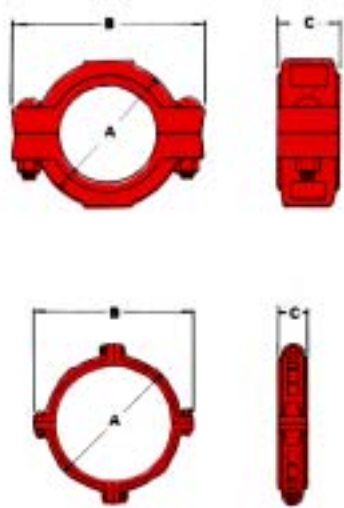


HIGH-STRENGTH DUCTILE IRON HOUSING CLAMPS INTO PIPE GROOVES PROVIDING LOCK-RIGHT CONNECTION.

UNITED SEALING GASKETS BRIDGE PIPE ENDS WITH PRESSURE AND VACUUM TIGHT JOINT.

ALL UNITED COUPLINGS AND FITTINGS ARE DESIGNED FOR USE WITH THE INDUSTRY'S STANDARD PIPE GROOVING DIMENSIONS. NO SPECIALS-- FITS GROOVED CAST IRON PIPE AVAILABLE FROM YOUR LOCAL SUPPLIER.

OVAL-NECK TRACK BOLT IS KEYED TO PREVENT TURNING--REQUIRES ONLY ONE WRENCH FOR COMPLETE INSTALLATION.



PIPE SIZE	PIPE O.D.	DIMENSION - INCHES			Bolts/Nuts No. Size x Lgth.	Weight Each Lbs.
		A	B	C		
3"	3.96	5 5/8	7 3/4	2 1/8	2 -- 1/2 x 2 3/4	5
4"	4.80	6 3/8	8 3/8	2 1/8	2 -- 5/8 x 3	7
6"	6.90	8 1/2	10 3/4	2 1/8	2 -- 5/8 x 3	10
8"	9.05	11 1/8	13 5/8	2 1/2	2 -- 3/4 x 4 1/2	16
10"	11.10	13 1/4	15 3/4	2 5/8	2 -- 3/4 x 4 1/2	21
12"	13.20	15 1/2	18 3/8	2 3/4	2 -- 7/8 x 5	30
14"	15.30	17 1/4	20 3/8	2 3/4	4 -- 7/8 x 3 1/2	35
16"	17.40	19 7/8	23 3/8	3 3/8	4 -- 7/8 x 3 1/2	54
18"	19.50	22	25 1/2	3 3/8	4 -- 1 x 3 1/2	62
20"	21.60	24 3/8	28	3 1/2	4 -- 1 x 3 1/2	75
24"	25.80	28 1/2	32 1/4	3 1/2	4 -- 1 x 3 1/2	84



an introduction to AWWA

UNITED Grooved Fittings & Couplings

FEATURES OF THE UNITED GROOVED SYSTEM

The United grooved system is the simple, most efficient and economical technique for joining and installing pipe. It uses modern materials and proven interconnection methods to deliver a lead-tight, maintenance free system.

Simple, Fast Installation. The United system is comprised of fewer components--just a gasket, housing/clamps and bolts. A single wrench is all that is required for a lifelong installation. It saves time and component costs.

Installation Flexibility. The United "adjustable" seal accommodates angular deflection in any direction. Additional flexibility is exhibited by the housing/clamp that literally floats in the pipe groove. Together, the system provides a leak-free installation--even with straight pipe where minor variations in ground contours and simple curves exist.

Accommodates Heat & Cold Variation. The United system handles moderate expansion and contraction caused by temperature variations, longitudinal and settlement forces.

Always Remains Modular. Unlike welded joints and others that are virtually impossible to disconnect, the United system provides a union at every joint. This means by simple dismantling two couplings, maintenance of valves, rotation of pipe to redistribute internal abrasion and salvage of pipes, fittings and couplings can be accomplished. They remain modular.

Force Locked Joints. United joints are power locked mechanically, securely, safely. Each coupling locks the pipe ends together longitudinally by gasket pressures internally by coupling mass and pressure--housing clamps engage the full circumference of both pipe groove and shoulders. Each joint meets the full pressure rating of the pipe itself.

Less Product to Purchase, Fewer Items At The Site. Compare the grooved method versus the flanged method.

Every United gasket is designed with wedge-shaped feet to provide a pressure-tight seal under vacuum or pressure.

UNITED MAXI-SEAL GASKET
heavy duty, for high pressure service.

Natural slope of wedge-shaped feet.

1. Stretching UNITED gasket over the pipe ends places the wedge-shaped feet in positive contact and provides ideal sealing tension.

2. The UNITED coupling automatically seals the gasket on the pipe ends firmly, properly, never compressed nor distorted. This assures long gasket life.

3. Line pressure enhances the seal internally on the gasket feet. The greater the pressure, the stronger the seal.

Note: Pressure caused by suction and vacuum also creates a seal, and a higher atmospheric pressure compresses the walls for even tighter seals.

You'll agree that the United system has less components, is easier to install requires fewer items and tools are your plant and at the site. Saves steps, saves money, saves labor and delivers greater installation flexibility and maintainability.

Grooved Fittings & Couplings are manufactured in accordance with AWWA C606 standard material specifications.

Housing: Ductile Iron, ASTM A536. Grade 65-45-12.

Bolts and Nuts: Dual Neck Track Bolts
ASTM-183/ANSI B18.10.
Heavy Hex Nuts. ASTM A-194/ANSI B18.22

Gaskets: EPDM Compound. Recommended for water and waste water.
Temperature Range: -30°F to 230°F.

PLEASE CALL OR WRITE TO:

NAPAC, Inc.

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Worcester, MA 01608

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