

FIG. 7003

Hingelok® Coupling



SIZES 1" - 4"



SIZES 5" - 8"

The Fig. 7003 Hingelok Coupling is specially designed for applications requiring a quick connection and/or disconnection of a pipe joint. The Fig. 7003 Hingelok Coupling is ideal for those applications where frequent pipe removal is required for maintenance or any other reason. Fig. 7003 Hingelok Coupling provides for system working pressure ratings up to 300 psi (20.7 bar).

The Fig. 7003 Hingelok Coupling halves are permanently hinged to provide an assembly that eases handling and installation. The two coupling halves are hinged for ease of handling and are secured by a cam-action handle. Sizes 1" to 4" use toggle link plates and sizes 5" to 8" use a toggle bolt to attach the cam-action handle to the housings. The cam-action locking handle permits rapid installation without the need for additional tools and maintains secure closure of the coupling into the pipe grooves. Final assembly of the locking pin to the Hingelok Coupling adds an extra measure of security required in critical pipe joint applications.

MATERIAL SPECIFICATIONS

HOUSING:

Ductile Iron conforming to ASTM A 536, Grade 65-45-12.

COATINGS:

Rust inhibiting paint Color: ORANGE (standard)
Hot Dipped Zinc Galvanized (optional)
Other Colors Available (IE: RAL3000 and RAL9000)
For other Coating requirements contact an Anvil Representative.

HANDLE:

Sizes 1" - 4": Cold Rolled Carbon Steel Handles
Sizes 5" - 8": Cast Ductile Iron Handles

LINKS:

Sizes 1" - 4": Cold Rolled Carbon Steel Links
Sizes 5" - 8": Heat Treated Steel Links

LOCKING PIN:

Locking Pin: Spring Steel

GASKETS: Materials

Properties as designated in accordance with ASTM D 2000

Grade "EP" EPDM (Green and Red color code)

-40°F to 250°F (Service Temperature Range)(-40°C to 121°C)
Recommended for water service, diluted acids, alkalis solutions, oil-free air and many other chemical services.
NOT FOR USE IN PETROLEUM APPLICATIONS.

For hot water applications the use of Gruvlok Extreme Temperature lubricant is recommended. NSF-61 Certified for cold and hot water applications up through 12'.

Grade "E" EPDM (Green color code)

-40°F to 230°F (Service Temperature Range)(-40°C to 110°C)
Recommended for water service, diluted acids, alkalis solutions, oil-free air and many other chemical services.
NOT FOR USE IN PETROLEUM APPLICATIONS.

Grade "T" Nitrile (Orange color code)

-20°F to 180°F (Service Temperature Range)(-29°C to 82°C)
Recommended for petroleum applications. air with oil vapors and vegetable and mineral oils.
NOT FOR USE IN HOT WATER OR HOT AIR.

Grade "O" Fluoro-Elastomer (Blue color code)

Size Range: 1" - 8" (C style only)
20°F to 300°F (Service Temperature Range)(-29°C to 149°C)
Recommended for high temperature resistance to oxidizing acids, petroleum oils, hydraulic fluids, halogenated hydrocarbons and lubricants.

Grade "L" Silicone (Red color code)

Size Range: 1" - 8" (C style only)
-40°F to 350°F (Service Temperature Range)(-40°C to 177°C)
Recommended for dry, hot air and some high temperature chemical services. DO NOT USE GRUVLOK XTREME LUBRICANT WITH GRADE "L" SILICONE GASKET.

GASKET TYPE:

Standard C Style (1" - 8")
Flush Gap (1" - 8")

LUBRICATION:

Standard Gruvlok
Gruvlok Xtreme™ (Do Not use with Grade "L")

FIG. 7003 Hingelok® Coupling

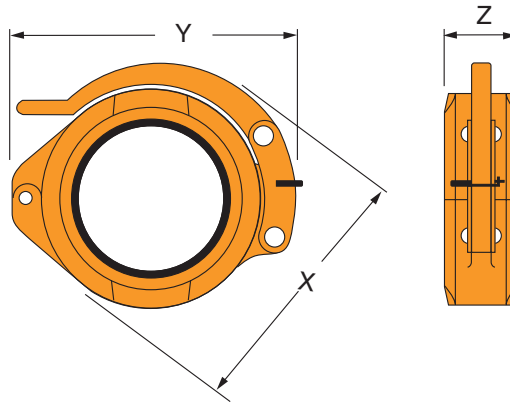


FIGURE 7003 HINGELOK COUPLING

Nominal Size	O.D.	Max. Wk. Pressure	Max. End Load	Range of Pipe End Separation	Deflection from \mathcal{C}		Coupling Dimensions			Approx. Wt. Ea.
					Per Coupling	of Pipe	X	Y	Z	
<i>In./DN(mm)</i>	<i>In./mm</i>	<i>PSI/bar</i>	<i>Lbs./kN</i>	<i>In./mm</i>	<i>Degrees(-Minutes)'</i>	<i>In./ft-mm/m</i>	<i>In./mm</i>	<i>In./mm</i>	<i>In./mm</i>	<i>Lbs./Kg</i>
1*	1.315	300	407	0- $\frac{1}{32}$	1° 22'	0.29	3	4	1 $\frac{3}{4}$	1.4
25	33.4	20.7	1.81	0-0.79		23.8	76	101	44	0.6
1 $\frac{1}{4}$ *	1.660	300	649	0- $\frac{1}{32}$	1° 5'	0.23	3 $\frac{7}{16}$	4 $\frac{7}{16}$	1 $\frac{7}{8}$	1.5
32	42.2	20.7	2.89	0-0.79		18.8	87	113	48	0.7
1 $\frac{1}{2}$	1.900	300	851	0- $\frac{1}{32}$	0° 57'	0.20	3 $\frac{5}{8}$	4 $\frac{1}{4}$	1 $\frac{7}{8}$	1.7
40	48.3	20.7	3.78	0-0.79		16.5	92	108	48	0.8
2	2.375	300	1,329	0- $\frac{1}{32}$	0° 45'	0.16	4 $\frac{1}{4}$	4 $\frac{7}{8}$	1 $\frac{7}{8}$	2.2
50	60.3	20.7	5.91	0-0.79		13.1	108	124	48	1.0
2 $\frac{1}{2}$	2.875	300	1,948	0- $\frac{1}{32}$	0° 37'	0.13	5 $\frac{1}{4}$	5 $\frac{7}{8}$	1 $\frac{7}{8}$	3.2
65	73.0	20.7	8.66	0-0.79		10.9	133	149	48	1.5
3	3.500	300	2,886	0- $\frac{1}{32}$	0° 31'	0.11	5 $\frac{5}{8}$	6 $\frac{1}{2}$	1 $\frac{7}{8}$	3.6
80	88.9	20.7	12.84	0-0.79		8.9	143	165	48	1.6
4	4.500	300	4,771	0- $\frac{3}{32}$	1° 12'	0.25	7	7 $\frac{3}{4}$	2	5.1
100	114.3	20.7	21.22	0-2.38		20.8	178	197	51	2.3
5	5.563	300	7,292	0- $\frac{3}{32}$	0° 58'	0.20	8 $\frac{5}{8}$	9 $\frac{1}{2}$	2 $\frac{1}{8}$	9.5
125	141.3	20.7	32.44	0-2.38		16.8	219	241	54	4.3
6	6.625	300	10,341	0- $\frac{3}{32}$	0° 49'	0.17	9 $\frac{7}{8}$	10 $\frac{7}{8}$	2 $\frac{1}{8}$	11.2
150	168.3	20.7	46.00	0-2.38		14.14	251	276	54	5.1
8	8.625	300	17,528	0- $\frac{3}{32}$	0° 37'	0.13	12	13 $\frac{3}{8}$	2 $\frac{1}{2}$	18.1
200	219.1	20.7	77.97	0-2.38		10.9	305	333	64	8.2

NOTES:

* 1" and 1 $\frac{1}{4}$ " are import products.
 Range of Pipe End Separation and Angular Deflection values are for roll grooved pipe and may be doubled for cut groove pipe. See page 204 for details.
 Refer to page 210 for Misalignment & Deflection Calculations and page 211 for Curve Layout Calculations.

For additional details see "Coupling Data Chart Notes" on page 17.
 See Installation & Assembly directions on page 174.
 Not for use in copper systems.

SPECIAL NOTE:

Fig. 7003 Hingelok Couplings are not designed for eccentric loading and therefore are not recommended for use at the end of concrete pumping booms or vertical risers above 30 feet (9.1 meters). Shockload must be considered and is to be included in the maximum working pressure listed above. Coupling keys, gasket cavity, and pipe grooves must be kept free of all foreign matter. Proper anchoring practice must always be exercised.

CAUTION:

Hammering or banging on the handle or coupling housing could cause serious damage to the locking device and coupling assembly. The result may be an unsuitable pipe joint and unusable coupling assembly.
 When re-using, always check for gasket damage, housing hinge and handle for looseness, distortion, bending or any other damage.