# HEAVY DUTY FLEXIBLE COUPLING Model 101H





Designed for use in a variety of general piping applications of moderate or high pressure services.

Working pressure is usually dictated by the wall thickness and rating fo the pipe being used.

Features flexibility that can deal with misalignment, distortion, thermal stress, vibration and noise and also resists seismic tremors.



### Available Sizes

• 1-1/4" through 12"

### **Pipe Material**

• Carbon steel, Schedule 10, Schedule 40.

#### Maximum Working Pressure

• Up to 500 psi

#### Function

- Joins carbon steel pipe.
- Provides a rigid pipe joint designed to restrict axial or angular movement.

#### **CERTIFICATIONS/LISTINGS**

Underwriters Laboratories, Underwriters Laboratories Canada, Factory Mutual.

#### **SPECIFICATIONS - MATERIAL**

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

#### **Housing Coating:**

Standard: Orange Available: Galvanized

#### Gasket:

Standard: Pre-Lubricated Grade E EPDM (Type A)

ARGCO's products are listed by Underwriters Laboratories UL Canada and Approved by Factory Mutual for wet and dry (oil free air) sprinkler services within the rated working pressure.

#### **Bolts and Nuts:**

Standard: Carbon Steel oval neck track bolts meeting ASTM A449 and ISO 898-1. Carbon steel hex nuts meet ASTM A563 Grade B.

Nuts and Bolts are zinc electroplated per ASTM B633 NZ/FE5, finish Type III.

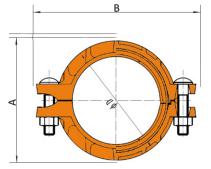
Available: Stainless Steel. Meets ASTM F593, Group 2 (316 stainless steel), condition CW.

Hex nuts meets ASTM F594, Group 2 (316 stainless steel), condition CW, with galling-resistant coating.

System No.	Location	Spec Section	Paragraph	
Submitted By	Date	Approved	Date	

## **HEAVY DUTY FLEXIBLE COUPLING**

# Model 101H





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ARGCO Grooved Couplings are suitable for fire protection systems, water supply systems, and other process systems of higher working pressure.



					Angular Movement		Dimensions			
ltem #	Nominal Size	Maximum Working Pressure	Maximum End Load Ibs.	Axial Displacement	per coupling degrees	per pipe	A inches	B inches	C inches	Bolt inches mm
	in/mm	psi		in/mm	•	in/ft	mm	mm	mm	
7010601	1-1/4"	500	656	0.0625	2° - 10'	0.46	2.50	4.23	1.77	3/8" x1-3/4"
	32		050	1.6		38	63.5	107.5	45	M10x45
7010602	1-1/2"	500	852	0.0625	1° - 54'	0.40	2.72	4.49	1.77	3/8" x1-3/4"
	40			1.6		33	69	114	45	M10x45
7010603	2"	500	2212	0.0625	1° - 31'	0.32	3.27	4.88	1.81	3/8" x 2-1/8"
	50			1.6		27	83	124	46	M10x55
7010604	2-1/2"	500	3240	0.0625	1° - 15'	0.26	3.94	5.71	1.85	1/2" x 2-5/8"
	65			1.6		26	100	145	47	M12x65
7010605	3"	500	4808	0.0625	1° - 02'	0.22	4.57	6.38	1.85	1/2" x 2-5/8"
	80			1.6		18	116	152	51	M12x65
7010606	4"	500	7948	0.125	1° - 36'	0.34	5.67	7.64	2.01	1/2" x 2-3/4"
	100			3.2		28	144	194	50	M12x70
7010607	5"	500	11874	0.125	1° - 18'	0.28	6.73	9.06	2.05	5/8" x 3-1/4"
	125			3.2		23	171	230	52	M16x85
7010608	6"	500	14920	0.125	1° - 07'	0.24	7.80	10.24	2.09	5/8" x 3-1/4"
	150			3.2		20	198	260	53	M16x85
7010609	8"	500	28465	0.125	0° - 51'	0.18	10.43	13.23	2.48	3/4" x 4-1/4"
	200			3.2		15	265	336	63	M20x110
7010610	10"	500	43502	0.125	0° - 41'	0.15	12.48	15.87	2.60	7/8" x4-1/2"
	250			3.2		12	317	403	66	M22x140
7010611	12"	500	61718	0.125	0° - 35'	0.12	14.76	18.23	2.60	7/8" x4-1/2"
	300			3.2		10	375	463	66	M22x140

Note: Allowable Axial Displacement figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation purposes these figures should be reduced by: 50% for 3/2", 25% for 4" and larger to compensate for jobsite conditions. • Working Pressure and End Load are total, from all internal and external loads, based on standard weight (ANSI) steel pipe, standard roll or cut grooved in accordance with ARGCO specifications.

• When assembling ARGCO couplings onto end caps, take additional care to make certain the end cap is fully seated against the gasket end stop.

#### The NFPA 13 defines a flexible coupling as;

"a listed coupling or fitting that allows axial displacement, rotation, and at least 1 degree of angular movement of the pipe without inducing harm on the pipe. For pipe diameters of 8 in. and larger, the angular movement shall be permitted to be less than 1 degree but not less than 0.5 degrees." (NFPA 13- 2007 3.5.4)

For sprinkler systems, NFPA 13 specifies the use of flexible couplings to protect the system against damage from earthquakes and sets some specific examples of how and where they should be used. Designers and installers should design their fire protection systems in compliance with this standard.

System No.		Spec Section		
Submitted By		Approved		

