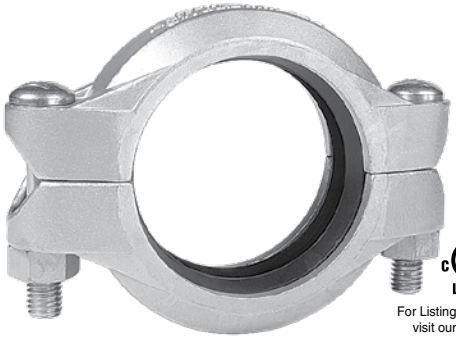
FIG. 405

Stainless Steel Flexible Coupling



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For Listings/Approval Details and Limitations, visit our website at www.anvilintl.com or contact an Anvil® Sales Representative.

The Figure 405 Flexible Coupling is a Stainless Steel coupling made of ASTM A-743/A743M cast stainless steel which is the cast equivalent to 316 Stainless Steel. It is designed for installation on Stainless Steel schedule 5, 10, and 40 pipe and fittings. The stainless steel material is suitable for a variety of aggressive corrosive environments. The Figure 405 flexible coupling can accommodate some angular, rotational and axial pipe movement. It is capable of pressures up to 750 psi (41.4 bar) depending on pipe size and wall thickness.

MATERIAL SPECIFICATIONS

STAINLESS STEEL BOLTS:
Stainless steel bolts are metric track head bolts conforming to ASTM A 193M Class 2, Type 316 Grade B8M. Bolts are coated with an anti-galling agent.

STAINLESS STEEL NUTS:
Class 2 stainless steel nuts are heavy hex nuts conforming to ASTM A 194M, Type 316, Grade 8M.

STAINLESS STEEL HOUSING:
Type 316L, ASTM A 743/A 743M – Standard specification for castings, iron-chromium, iron-chromium-nickel, corrosion resistant; for general application Grade CR-8M. Tensile strength, minimum 70,000 psi (4826.3 bar). Yield strength, minimum 30,000 psi (2068.4 bar). Elongation in 2" (50mm) minimum 30%.

GASKETS: Materials
Properties as designated in accordance with ASTM D 2000

☐ **Grade "E" EPDM** (Green color code)
-30°F to 230°F (Service Temperature Range)(-34°C to 110°C)
Recommended for water service, diluted acids, alkalies solutions, oil-free air and many other chemical services.
NOT FOR USE IN PETROLEUM APPLICATIONS.

☐ **Grade "EN" EPDM** (Green and Yellow color code)
NSF-61 approved for cold and hot portable water up to 180°F (82°C).

☐ **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)
20°F to 300°F (Service Temperature Range)(-7°C to 149°C)
Recommended for high temperature resistance to oxidizing acids, petroleum oils, hydraulic fluids, halogenated hydrocarbons and lubricants.

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

FIG. 405

Stainless Steel Flexible Coupling

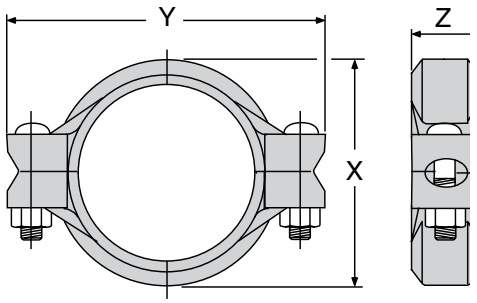

FIGURE 405 STAINLESS STEEL FLEXIBLE COUPLING

Nominal Size	O.D.	Max. Working Pressure†	Max. End Load†	Max. End Gap*‡	Deflection from ℄		Coupling Dimensions			Coupling Bolts		Approx. Wt. Ea.
					Per Coupling	of Pipe	X	Y	Z	Qty.	Size**	
In./DN(mm)	*In./mm*	*PSI/bar*	*Lbs./kN*	*In./mm*	*Degrees(°)-Minutes(')*	*In./ft-mm/m*	*In./mm*	*In./mm*	*In./mm*		*In./mm*	*Lbs./kg*
1 *25*	1.315 *33.4*	750 *51.7*	1.019 *4.5*	0.13 *3.3*	5° 26'	0.90 *95.1*	2.20 *56.0*	3.82 *97.0*	1.81 *46.0*	2	3/8 x 2 1/4 *M10 x 57*	1.5 *0.6*
1 1/4 *32*	1.660 *42.4*	750 *51.7*	1.623 *7.2*	0.13 *3.3*	4° 19'	0.90 *75.0*	2.56 *65.0*	4.19 *106.4*	1.81 *46.0*	2	3/8 x 2 1/4 *M10 x 57*	1.5 *0.7*
1 1/2 *40*	1.900 *48.3*	750 *51.7*	2.127 *9.5*	0.13 *3.3*	3° 46'	0.79 *65.8*	2.75 *69.9*	4.44 *112.8*	1.81 *46.0*	2	3/8 x 2 1/4 *M10 x 57*	1.6 *0.7*
2 *50*	2.375 *60.3*	500 *34.5*	2.215 *9.9*	0.13 *3.3*	3° 1'	0.63 *52.5*	3.25 *82.6*	4.88 *124.0*	1.88 *47.8*	2	3/8 x 2 1/4 *M10 x 57*	1.7 *0.8*
2 1/2 *65*	2.875 *73.0*	500 *34.5*	3.246 *14.4*	0.13 *3.3*	2° 29'	0.52 *43.3*	3.69 *93.7*	5.50 *139.7*	1.88 *47.8*	2	3/8 x 2 1/4 *M10 x 57*	2.0 *0.9*
76.1mm *65◗*	3.000 *76.1*	500 *34.5*	3.534 *15.7*	0.13 *3.3*	2° 23'	0.50 *41.7*	4.00 *101.6*	5.75 *146.10*	1.88 *47.8*	2	– *M12 x 76*	3.1 *1.4*
3 *80*	3.500 *88.9*	500 *34.5*	4.810 *21.4*	0.13 *3.3*	2° 3'	0.43 *35.8*	4.38 *111.3*	6.50 *165.1*	1.88 *47.8*	2	1/2 x 3 *M12 x 76*	3.1 *1.4*
4 *100*	4.500 *114.3*	500 *34.5*	7.952 *35.3*	0.25 *6.4*	3° 11'	0.67 *55.8*	5.69 *144.5*	7.75 *196.9*	2.06 *52.3*	2	1/2 x 3 *M12 x 76*	4.0 *1.8*
139.7mm *125◗*	5.500 *139.7*	450 *31.0*	10.691 *47.6*	0.25 *6.4*	2° 36'	0.55 *45.5*	6.81 *173.0*	9.75 *247.7*	2.06 *52.3*	2	– *M16 x 83*	7.2 *3.3*
5 *125*	5.563 *141.3*	450 *31.0*	10.933 *48.7*	0.25 *6.4*	2° 35'	0.54 *45.0*	6.88 *174.8*	9.75 *247.7*	2.06 *52.3*	2	5/8 x 3 1/4 *M16 x 83*	7.1 *3.2*
6 *150*	6.625 *168.3*	450 *31.0*	15.512 *69.0*	0.25 *6.4*	2° 10'	0.45 *37.5*	7.94 *201.7*	10.69 *271.5*	2.06 *52.3*	2	5/8 x 3 1/4 *M16 x 83*	7.1 *3.2*
8 *200*	8.625 *219.1*	450 *31.0*	29.261 *117*	0.25 *6.4*	1° 40'	0.35 *29.2*	10.19 *258.8*	13.56 *344.4*	2.50 *63.5*	2	3/4 x 4 3/4 *M20 x 121*	14.5 *6.6*

NOTE:

Values for roll grooved pipe will be half that of cut grooved.

* Maximum available gap between pipe ends. Minimum gap = 0.

† Maximum Pressure and End Load are total from all loads based on standard weight stainless steel pipe. Pressure ratings and end loads may differ for other pipe materials and/or wall thicknesses. Contact an Anvil Sales Representative for details.

‡ Max End Gap and Deflection is for cut grooved standard weight stainless steel pipe.

** Contact an Anvil Sales Representative for availability of inch bolt sizes vs. metric bolt sizes.

◗ Sizes are available to JIS standards. Contact an Anvil Sales Representative for details.

For information on larger sizes, contact an Anvil Sales Representative.

Refer to pressure ratings for Schedule 5, 10, and 40 pipe.