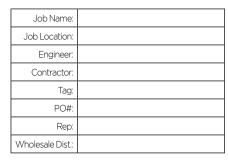
# **G28**Hinged Lever Coupling







B Split pin

The Model G28 Hinged Grooved Coupling is designed for quick connect and disconnect services. The housing segments are hinged with a lever handle for easy assembly. The use of the split pin can secure and prevent the accidental opening of the coupling.

The Model G28 can be used in a wide variety of applications with standard rolled or cut grooved pipe. Housings 1-1/2" - 4" (40 mm – 100 mm) feature a smooth outer surface, housings 5" - 10" (125 mm – 250 mm) feature a cross-ribbed design for added strength.

# **DIMENSIONS**

NOMINAL	DIDE O C	MAX. WORKING	MAX. END LOAD	AXIAL	ANGULAR MOVEMENT /	DIMENSIONS			
SIZE	PIPE O.D.	PRESSURE (CWP)**	(CWP)	DISPLACEMENT †	DEFLECTION**†	Α	В	С	WEIGHT
in	in	PSI	lb	in	(°)	in	in	in	lb
mm	mm	Bar	kN	mm		mm	mm	mm	kg
1-1/2	1.900	300	850	0 - 0.06	1º - 54'	2.95	4.65	1.85	2.2
40	48.3	20	3.66	0 - 1.6		75	118	47	1.0
2	2.375	300	1320	0 - 0.06	1º - 45'	3.43	5.08	1.85	2.4
50	60.3	20	5.71	0 - 1.6	1- 45	87	129	47	1.1
2-1/2	2.875	300	1940	0 - 0.06	1º - 15′	3.94	5.63	1.85	3.1
65	73.0	20	8.37	0 - 1.6		100	143	47	1.4
701	3.000	300	2120	0 - 0.06	1º - 12'	4.06	5.67	1.85	3.1
76.1 mm	76.1	20	9.09	0 - 1.6		103	144	47	1.4
3	3.500	300	2880	0 - 0.06	1º - 12'	4.69	6.46	1.85	4.0
80	88.9	20	12.41	0 - 1.6		119	164	47	1.7
4	4.500	300	4760	0 - 0.13	1º - 36'	5.98	7.95	2.05	5.9
100	114.3	20	20.51	0 - 3.2		152	202	52	2.7
170 7	5.500	300	7120	0 - 0.13	1º - 18'	6.97	9.80	2.05	10.8
139.7 mm	139.7	20	30.64	0 - 3.2		177	249	52	4.9
5	5.563	300	7280	0 - 0.13	1º - 18'	7.05	10.00	2.05	10.8
125	141.3	20	31.35	0 - 3.2		179	254	52	4.9
1051	6.500	300	9950	0 - 0.13	1º - 07'	7.80	10.87	2.05	13.2
165.1 mm	165.1	20	42.80	0 - 3.2		198	276	52	6.0
6	6.625	300	10330	0 - 0.13	1º - 05'	8.11	11.02	2.05	13.2
150	168.3	20	44.47	0 - 3.2		206	280	52	6.0
8	8.625	300	17510	0 - 0.13	00 501	10.08	13.58	2.44	15.2
200	219.1	20	75.37	0 - 3.2	0º - 50′	256	345	62	6.9
10	10.750	300	27210	0 - 0.13	00 401	12.68	17.48	2.60	36.1
250	273.0	20	117.01	0 - 3.2	0º - 40′	322	444	66	16.4

<sup>\*</sup> Working pressure is based on roll grooved standard wall carbon steel pipe

#### **WARNING**

Lever handle couplings are not recommended for services where excessive shock-loads are present, as often occur in some concrete pumping applications. When the Model G28 is used in concrete pumping applications, sound support and bracing practices should always be in effect. All couplings and components should be regularly inspected to ensure they are in good working condition and that the pipe grooves, coupling keys, and gasket are free of any concrete or foreign material.

For concrete pumping applications we recommend the Shurjoint Model S58 shoulder coupling and Shurjoint Model S10 abrasion resistant 90° elbow.



<sup>†</sup> Allowable Axial Displacement and Angular Movement (deflection) 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 3/4" - 3-1/2"; 25% for 4" and larger to compensate for jobsite conditions.

<sup>\*\*</sup> Deflection or angular movement given is the maximum value that a coupling allows. When using the given maximum angles for a curved layout, proper bracing should be used to counter pressure thrust that will occur when the system is pressurized. Flexible couplings can be used for angular movement and or thermal expansion, though please note individual coupling(s) cannot be used to their maximums for both types of movement within a system at the same time.

# MATERIAL SPECIFICATIONS HOUSING:

 Ductile Iron to ASTM A536, Gr. 65-45-12 and or ASTM A395 Gr.65-45-15, min. tensile strength 65,000 psi (448 MPa).

#### **SURFACE FINISH:**

- Standard finish is black electro-deposition coated
- Epoxy Coatings in RAL3000 red or other colors (optional)

#### **RUBBER GASKET:**

# Grade "E" EPDM (Color code: Green stripe)

- Good for cold & hot water up to +230°F (+110°C). Also good for services for water with acid, water with chlorine, deionized water, seawater and waste water, dilute acids, oil-free air and many chemicals.
- Not recommended for petroleum oils, minerals oils, solvents and aromatic hydrocarbons.
- Maximum Temperature Range: -30°F (-34°C) to +230°F (+110°C).
   \*EPDM gaskets for water services are not recommended for steam services.
- (Option) Grade "T" Nitrile (Color code: Orange stripe)
- Recommended for petroleum products, air with oil vapors, vegetable and mineral oils
- Hot dip zinc galvanized (Optional). Temperature range: -20°F to +180°F (-29°C to +82°C)
- Do not use for HOT WATER above +150°F (+66°C) or HOT DRY AIR above +140°F (+60°C).

#### OTHER OPTIONS

Grade "O" - Fluoroelastomer

# Grade "L" - Silicone

- For dry systems we recommend the use of the Shurjoint GapSeal gasket.
- · For additional details contact Shurjoint.

# **LOCKING LEVER HANDLE:**

 Ductile Iron to ASTM A536 Gr. 65-45-12, Min. tensile strength 65,000 psi (448 MPa)

#### **TOGGLE LINKS:**

• Plated carbon steel plate to ANSI C-1010 or C-1020

#### **HINGE PIN:**

• Case hardened carbon steel to ANSI C-1212.

#### RIVET:

• Carbon steel to AISI C-1010.

### **SPLIT PIN:**

· Carbon steel wire rod to ASTM A421.

#### **PERFORMANCE DATA**

The following tables show the maximum working pressures (CWP) of Shurjoint Model G28 Hinged Lever Coupling used on both carbon steel and stainless steel pipes. Shurjoint ductile iron couplings can be used in conjunction with stainless steel pipe in non-corrosive environment as the flow media does not come in direct contact with the coupling housings but rather only the gasket.

# **CARBON STEEL PIPE**

NOM. SIZE	CUT-GR	OOVED	ROLL-GROOVED		
NOM. SIZE	xs	STD	STD	SCH. 10	
in	psi	psi	psi	psi	
mm	Bar	Bar	Bar	Bar	
1-1/2	300	300	300	300	
40	20	20	20	20	
2	300	300	300	300	
50	20	20	20	20	
2-1/2	300	300	300	300	
65	20	20	20	20	
3	300	300	300	300	
80	20	20	20	20	
4	300	300	300	300	
100	20	20	20	20	
5	300	300	300	300	
125	20	20	20	20	
6	300	300	300	300	
150	20	20	20	20	
8	300	300	300	250	
200	20	20	20	17	
10	300	300	300	250	
250	20	20	20	17	

# **STAINLESS STEEL PIPE**

NOM. SIZE	CUT-GR	OOVED	ROLL-GROOVED			
NOM. SIZE	SCH. 80S	SCH. 40S	SCH. 40S	SCH. 10S	SCH. 5S	
in	psi	psi	psi	psi	psi	
mm	Bar	Bar	Bar	Bar	Bar	
1-1/2	300	300	300	300	NR	
40	20	20	20	20		
2	300	300	300	300	NR	
50	20	20	20	20		
2-1/2	300	300	300	300	NR	
65	20	20	20	20		
3	300	300	300	300	NR	
80	20	20	20	20		
4	300	300	300	175	NR	
100	20	20	20	12		
5	300	300	250	150	NR	
125	20	20	17	10		
6	300	300	250	150	NR	
150	20	20	17	10		
8	300	300	200	NR	NR	
200	20	20	14			
10	300	300	200	NR	NR	
250	20	20	14			



# **G28**Hinged Lever Coupling

#### **EXPANSION PIPE**

For safety reasons; lever handles are closed when shipped and may be difficult to open. The use of expansion pipes may be used to assist in closing and opening of the coupling.



EXPANSION PIPE SIZE	APPLICABLE COUPLING SIZES
1/2" x 6"	1-1/2" ~4"
3/4" x 8"	5" ~ 8"

(You can easily make your expansion pipe simply by cutting sch. 40 1/2" or 3/4" pipe to a proper length)

#### **GENERAL NOTES**

- Maximum Working Pressure (CWP) listed is the maximum cold water pressure for general piping services tested to ASTM F1476 and or AWWA C606
  methods. Figures listed are based on roll- or cut-grooved standard wall carbon steel pipe. For other pipe schedules or pipe materials, contact Shurjoint
  for additional information.
- Max. End Load is calculated based on the maximum working pressure (CWP).
- Listed and or Approved Pressures are pressure ratings for fire protection systems, tested and approved by various approval bodies. Please always refer to the latest approval data posted on the Shurjoint website.
- Field Joint Test: For one time only the system may be tested hydrostatically at 1.5 times the maximum working pressure listed (AWWA C606 5.2.3).
- · Warning: Piping systems must always be depressurized and drained before attempting disassembly and or removal of any components.
- The 10 Year Limited Warranty applies to manufacturing defects only and does not cover severe service/temperature applications or wear parts.
- · Shurjoint reserves the right to change specifications, designs and or standard without notice and without incurring any obligations.