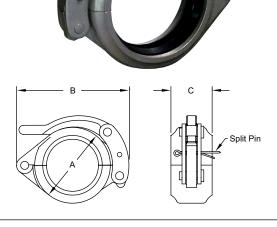
## SS-28

#### Stainless Steel Hinged Lever Coupling



| Job Name:        |  |
|------------------|--|
| Job Location:    |  |
| Engineer:        |  |
| Contractor:      |  |
| Tag:             |  |
| PO#:             |  |
| Rep:             |  |
| Wholesale Dist.: |  |



The Model SS-28 Hinged Grooved Coupling is designed for quick connect and disconnect services. The housing segments are hinged with a lever handle for easy assembly. Use of the split pin can prevent the accidental opening of the coupling. The Model SS-28 can be used in a wide variety of applications with standard roll-or cut grooved pipe. Housings  $1\frac{1}{2}$  4" (40 mm – 100 mm) feature a smooth outer surface, housings 5"-12" (125 mm – 300 mm) feature a cross-ribbed design for added strength. Standard gasket: Grade "E" EPDM or Grade "T" Nitrile. Available standard in CF8 (304) or CF8M (316).

#### **DIMENSIONS**

| NOMINAL   | PIPE O.D. | MAX. WORKING     | MAX END LOAD | AXIAL          | DIMENSIONS |       |      | DEFLECTION |        |
|-----------|-----------|------------------|--------------|----------------|------------|-------|------|------------|--------|
| SIZE      | PIPE O.D. | PRESSURE (CWP)** | (CWP)        | DISPLACEMENT † | Α          | В     | С    | DEGREE†    | 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              | 1700         | 0 - 0.06       | 2.95       | 4.65  | 1.85 | 3º - 48′   | 2.2    |
| 40        | 48.3      | 20               | 7.56         | 0 - 1.6        | 75         | 118   | 47   |            | 1.0    |
| 2         | 2.375     | 300              | 2657         | 0 - 0.06       | 3.39       | 4.76  | 1.89 | 3º - 31'   | 2.4    |
| 50        | 60.3      | 20               | 11.82        | 0 - 1.6        | 86         | 121   | 48   |            | 1.1    |
| 2-1/2*    | 2.875     | 300              | 3893         | 0 - 0.06       | 3.62       | 5.91  | 1.89 | 2º - 30'   | 3.1    |
| 65        | 73.0      | 20               | 17.32        | 0 - 1.6        | 92         | 150   | 48   |            | 1.4    |
| 761*      | 3.000     | 300              | 4239         | 0 - 0.06       | 3.62       | 5.91  | 1.89 | 2º - 24'   | 3.1    |
| 76.1 mm*  | 76.1      | 20               | 18.86        | 0 - 1.6        | 92         | 150   | 48   |            | 1.4    |
| 3         | 3.500     | 300              | 5770         | 0 - 0.06       | 4.69       | 6.42  | 1.89 | 2º - 24′   | 4.0    |
| 80        | 88.9      | 20               | 25.67        | 0 - 1.6        | 119        | 163   | 48   |            | 1.8    |
| 4         | 4.500     | 300              | 9538         | 0 - 0.13       | 6.50       | 8.07  | 2.05 | 3º - 12'   | 5.9    |
| 100       | 114.3     | 20               | 42.43        | 0 - 3.2        | 165        | 205   | 52   |            | 2.7    |
| 170.7*    | 5.500     | 200              | 9500         | 0 - 0.13       | 7.44       | 9.96  | 2.05 | 2º - 37'   | 10.8   |
| 139.7 mm* | 139.7     | 14               | 42.25        | 0 - 3.2        | 189        | 253   | 52   |            | 4.9    |
| 5         | 5.563     | 200              | 9717         | 0 - 0.13       | 7.44       | 9.96  | 2.05 | 2º - 36'   | 10.8   |
| 125       | 141.3     | 14               | 43.23        | 0 - 3.2        | 189        | 253   | 52   |            | 4.9    |
| 1051      | 6.500     | 200              | 13267        | 0 - 0.13       | 8.39       | 10.94 | 2.05 | 2º - 14'   | 12.8   |
| 165.1 mm* | 165.1     | 14               | 59.01        | 0 - 3.2        | 213        | 278   | 52   |            | 5.8    |
| 6         | 6.625     | 200              | 13782        | 0 - 0.13       | 8.50       | 11.06 | 2.05 | 00 101     | 12.8   |
| 150       | 168.3     | 14               | 61.31        | 0 - 3.2        | 216        | 281   | 52   | 2º - 10'   | 5.8    |

<sup>\*\*</sup>The working pressure shown is based on roll-grooved Sch. 40S 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 SS-28 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.



<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"/DN20 - 3-1/2"/DN90; 25% for 4"/DN100 and larger to compensate for jobsite conditions.

## **SS-28**

Stainless Steel Hinged Lever Coupling

# MATERIAL SPECIFICATIONS HOUSING:

- Type 304 Stainless steel to ASTM A351 CF8 or A743 Gr. CF8
- Type 316 to ASTM A743 CF8M
- Type 316L to ASTM A743 CF3M
- Type 316Ti to ASTM A240
- Duplex 2205 to ASTM A890 4A
- Super Duplex 2507 to ASTM A890 5A.
- Duplex 254SMO to ASTM A351 CK3McuN

#### **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 unless couplings or components are accessible for frequent gasket replacement.

#### (Option) Grade "T" Nitrile (Color code: Orange stripe)

- Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Also good for water services under +150°F (+66°C)
- 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 additional details contact Shurjoint.

#### **LOCKING LEVER HANDLE:**

- Type 304 Stainless steel to ASTM A351 CF8 or A743 Gr. CF8
- Type 316 to ASTM A743 CF8M

#### **TOGGLE LINKS:**

• Type 316 Stainless steel

#### **HINGE PIN:**

• Type 316 Stainless steel

#### **RIVET:**

· Type 316 Stainless steel

#### **SPLIT PIN:**

· Carbon steel wire rod to ASTM A421.

#### **PERFORMANCE DATA**

The following tables show maximum cold working pressures (CWP) of Shurjoint stainless steel couplings used on stainless steel pipes. In general it is more difficult to achieve defined groove corners on stainless steel pipe than on carbon steel pipe. Always select the correct roll set for the pipe being grooved and process grooves as defined as possible. Contact your roll-groove tool manufacturer for recommendations.

| CUT-GROOVED |          | ROLL-GROOVED |          |         |  |
|-------------|----------|--------------|----------|---------|--|
| NOM. SIZE   | SCH. 40S | SCH. 40S     | SCH. 10S | SCH. 5S |  |
| in          | psi      | psi          | psi      | psi     |  |
| mm          | Bar      | Bar          | Bar      | Bar     |  |
| 1-1/2       | 300      | 300          | 300      | 200     |  |
| 40          | 20       | 20           | 20       | 14      |  |
| 2           | 300      | 300          | 300      | 200     |  |
| 50          | 20       | 20           | 20       | 14      |  |
| 2-1/2       | 300      | 300          | 300      | 200     |  |
| 65          | 20       | 20           | 20       | 14      |  |
| 3           | 300      | 300          | 300      | 200     |  |
| 80          | 20       | 20           | 20       | 14      |  |
| 4           | 300      | 300          | 300      | 200     |  |
| 100         | 20       | 20           | 20       | 14      |  |
| 5           | 200      | 200          | 200      | 125     |  |
| 125         | 14       | 14           | 14       | 9       |  |
| 6           | 200      | 200          | 200      | 125     |  |
| 150         | 14       | 14           | 14       | 9       |  |

Proof test pressure: 1.5 times the listed working pressure. Burst pressure: 3 times the listed working pressure.





# **SS-28**Stainless Steel Hinged Lever Coupling

#### **EXPANSION PIPE**

Lever handles are factory assembled pretty tight for safety sake. The use of an expansion pipe will be of help for an easy opening or closing. Expansion pipes are available upon request.



| 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).
- 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.