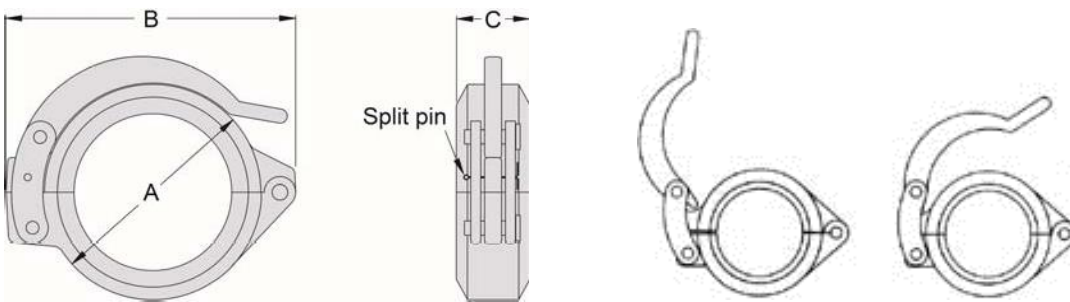


## MODEL G28 HINGED LEVER COUPLING

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 1½" - 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.



Standard gasket: Grade "E" EPDM or Grade "T" Nitrile.  
Standard surface finish: Black electro-deposition coated.



Full warranty terms can be found on [www.shurjoint.com](http://www.shurjoint.com)

| Model G28 Hinged Lever Coupling |           |                              |                     |                      |                                 |            |       |      |        |
|---------------------------------|-----------|------------------------------|---------------------|----------------------|---------------------------------|------------|-------|------|--------|
| Nominal Size                    | Pipe O.D. | Max. Working Pressure (CWP)* | Max. End Load (CWP) | Axial Displacement † | Angular Movement/Deflection** † | Dimensions |       |      | Weight |
|                                 |           |                              |                     |                      |                                 | A          | B     | C    |        |
| in                              | in        | PSI                          | Lbs                 | in                   | Degrees (°)                     | in         | in    | in   | Lbs    |
| mm                              | mm        | Bar                          | kN                  | mm                   |                                 | mm         | mm    | mm   | Kgs    |
| 1½                              | 1.900     | 300                          | 850                 | 0 – 0.06             | 1° - 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             | 1° - 45'                        | 3.43       | 5.08  | 1.85 | 2.4    |
| 50                              | 60.3      | 20                           | 5.71                | 0 – 1.6              |                                 | 87         | 129   | 47   | 1.1    |
| 2½                              | 2.875     | 300                          | 1940                | 0 – 0.06             | 1° - 15'                        | 3.94       | 5.63  | 1.85 | 3.1    |
| 65                              | 73.0      | 20                           | 8.37                | 0 – 1.6              |                                 | 100        | 143   | 47   | 1.4    |
| 76.1 mm                         | 3.000     | 300                          | 2120                | 0 – 0.06             | 1° - 12'                        | 4.06       | 5.67  | 1.85 | 3.1    |
|                                 | 76.1      | 20                           | 9.09                | 0 – 1.6              |                                 | 103        | 144   | 47   | 1.4    |
| 3                               | 3.500     | 300                          | 2880                | 0 – 0.06             | 1° - 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             | 1° - 36'                        | 5.98       | 7.95  | 2.05 | 5.9    |
| 100                             | 114.3     | 20                           | 20.51               | 0 – 3.2              |                                 | 152        | 202   | 52   | 2.7    |
| 139.7 mm                        | 5.500     | 300                          | 7120                | 0 – 0.13             | 1° - 18'                        | 6.97       | 9.80  | 2.05 | 10.8   |
|                                 | 139.7     | 20                           | 30.64               | 0 – 3.2              |                                 | 177        | 249   | 52   | 4.9    |
| 5                               | 5.563     | 300                          | 7280                | 0 – 0.13             | 1° - 18'                        | 7.05       | 10.00 | 2.05 | 10.8   |
| 125                             | 141.3     | 20                           | 31.35               | 0 – 3.2              |                                 | 179        | 254   | 52   | 4.9    |
| 165.1 mm                        | 6.500     | 300                          | 9950                | 0 – 0.13             | 1° - 07'                        | 7.80       | 10.87 | 2.05 | 13.2   |
|                                 | 165.1     | 20                           | 42.80               | 0 – 3.2              |                                 | 198        | 276   | 52   | 6.0    |
| 6                               | 6.625     | 300                          | 10330               | 0 – 0.13             | 1° - 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             | 0° - 50'                        | 10.08      | 13.58 | 2.44 | 15.2   |
| 200                             | 219.1     | 20                           | 75.37               | 0 – 3.2              |                                 | 256        | 345   | 62   | 6.9    |
| 10                              | 10.750    | 300                          | 27210               | 0 – 0.13             | 0° - 40'                        | 12.68      | 17.48 | 2.60 | 36.1   |
| 250                             | 273.0     | 20                           | 117.01              | 0 – 3.2              |                                 | 322        | 444   | 66   | 16.4   |

\* Working pressure is based on roll grooved standard wall carbon steel pipe.

† 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 ¾" – 3½"; 25% for 4" and larger to compensate for jobsite conditions.

\*\* 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.

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.

### 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.

Unit: psi / Bar

| Model G28 on Carbon Steel Pipe |             |           |              |           |        |
|--------------------------------|-------------|-----------|--------------|-----------|--------|
| Nom. Size<br>in / mm           | Cut-Grooved |           | Roll-Grooved |           |        |
|                                | XS          | STD       | STD          | Sch. 10   | Sch. 7 |
| 1½<br>40                       | 300<br>20   | 300<br>20 | 300<br>20    | 300<br>20 | NR     |
| 2<br>50                        | 300<br>20   | 300<br>20 | 300<br>20    | 300<br>20 | NR     |
| 2½<br>65                       | 300<br>20   | 300<br>20 | 300<br>20    | 300<br>20 | NR     |
| 3<br>80                        | 300<br>20   | 300<br>20 | 300<br>20    | 300<br>20 | NR     |
| 4<br>100                       | 300<br>20   | 300<br>20 | 300<br>20    | 300<br>20 | NR     |
| 5<br>125                       | 300<br>20   | 300<br>20 | 300<br>20    | 300<br>20 | NR     |
| 6<br>150                       | 300<br>20   | 300<br>20 | 300<br>20    | 300<br>20 | NR     |
| 8<br>200                       | 300<br>20   | 300<br>20 | 300<br>20    | 250<br>17 | NR     |
| 10<br>250                      | 300<br>20   | 300<br>20 | 300<br>20    | 250<br>17 | NR     |

Unit: psi / Bar

| Model G28 on Stainless Steel Pipe |             |           |              |           |         |
|-----------------------------------|-------------|-----------|--------------|-----------|---------|
| Nom. Size<br>in / mm              | Cut-Grooved |           | Roll-Grooved |           |         |
|                                   | Sch. 80S    | Sch. 40S  | Sch. 40S     | Sch. 10S  | Sch. 5S |
| 1½<br>40                          | 300<br>20   | 300<br>20 | 300<br>20    | 300<br>20 | NR      |
| 2<br>50                           | 300<br>20   | 300<br>20 | 300<br>20    | 300<br>20 | NR      |
| 2½<br>65                          | 300<br>20   | 300<br>20 | 300<br>20    | 300<br>20 | NR      |
| 3<br>80                           | 300<br>20   | 300<br>20 | 300<br>20    | 300<br>20 | NR      |
| 4<br>100                          | 300<br>20   | 300<br>20 | 300<br>20    | 175<br>12 | NR      |
| 5<br>125                          | 300<br>20   | 300<br>20 | 250<br>17    | 150<br>10 | NR      |
| 6<br>150                          | 300<br>20   | 300<br>20 | 250<br>17    | 150<br>10 | NR      |
| 8<br>200                          | 300<br>20   | 300<br>20 | 200<br>14    | NR        | NR      |
| 10<br>250                         | 300<br>20   | 300<br>20 | 200<br>14    | NR        | NR      |

### 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 |
|---------------------|---------------------------|
| ½" x 6"             | 1½" ~4"                   |
| ¾" x 8"             | 5" ~ 8"                   |



(You can easily make your expansion pipe simply by cutting sch. 40 ½" or ¾" pipe to a proper length)



### 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.

## 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).

- Other options: Grade "O" - Fluoroelastomer.  
Grade "L" - Silicone.

For additional details contact **Shurjoint**.

### • Surface Finish:

Standard finish is black electro-deposition coated

- Hot dipped zinc galvanized (Option).

### • 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). 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).**

### • 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:

Casehardened carbon steel to ANSI C-1212.

### • Rivet:

Carbon steel to AISI C-1010.

### • Split Pin:

Carbon steel wire rod to ASTM A421.

#### 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 1½ 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.