

# GG90 SERIES

## 90 degree rotary couplings

### INTRODUCTION

Holmbury's GG90 Series 90 degree rotary couplings are designed for use on hydraulics lines that may be subject to torsional stress to allow rotation of hydraulic pipes and hoses. Using a rotary coupling in the hydraulic line stops the hose twisting, limiting stress and increasing hose lifespan.

### CONSTRUCTION

- Carbon steel with trivalent plating
- Fitted with Nitrile seals
- Also available in AISI 316 stainless steel (See SR90 Series)

### FEATURES

- Reduces torsional forces
- Can also be used in applications that are required to rotate but not under pressure, such as hose reels
- Spindle is carried on a roller bearing and has a low friction shaft seal that can rotate at maximum pressure with low torque

### SPECIFICATIONS

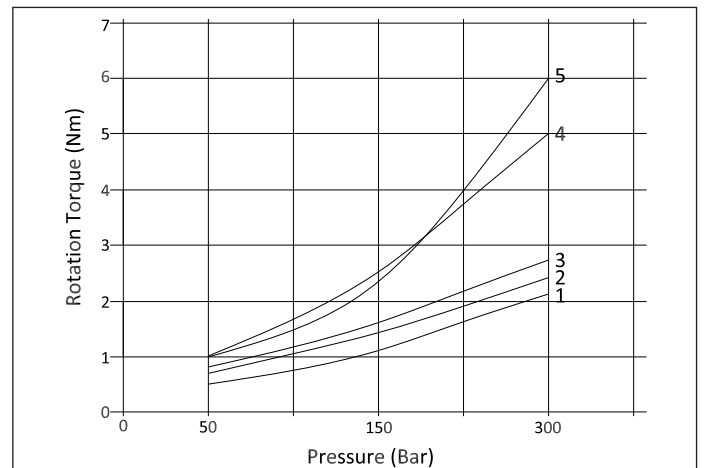
- Operating temperatures (with Nitrile seals): -40°C (-40°F) to 106°C (223°F)

### APPLICATIONS

- Designed for usage in general hydraulic systems, machine tools, test equipment, agricultural, and mobile hydraulics



### ROTATIONAL TORQUE



### ORDER CODES

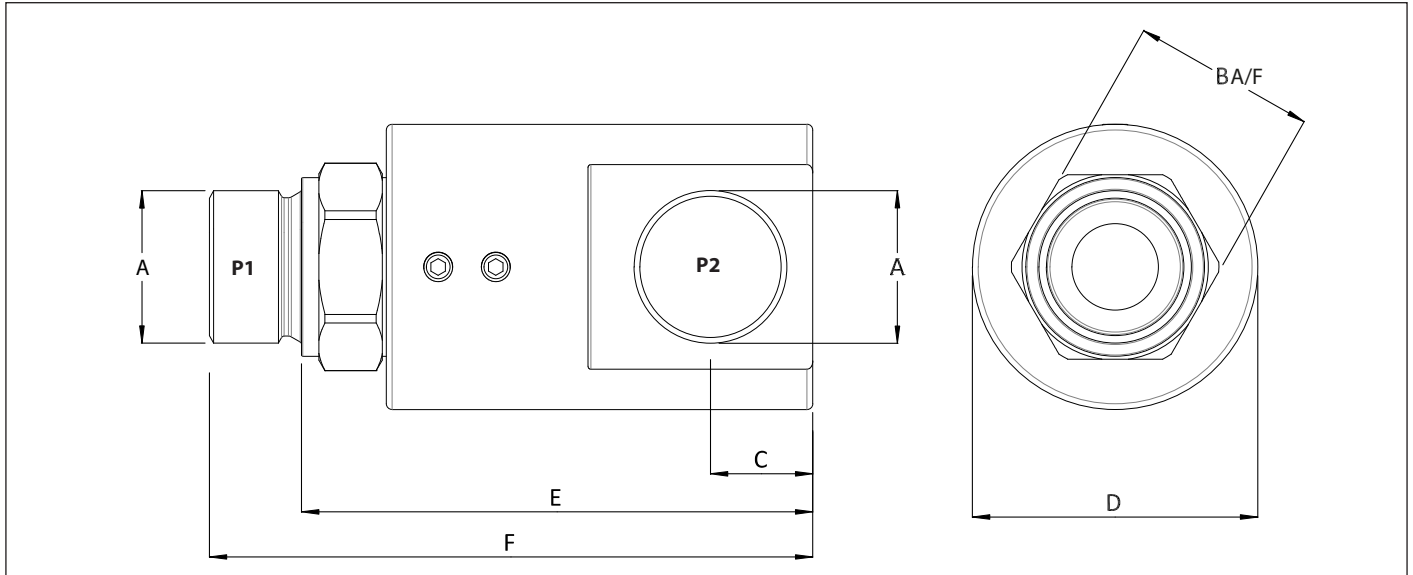
**GG90 - 19 - 12 G M - 12 G**

|                          |                     |   |  |
|--------------------------|---------------------|---|--|
| <b>Series</b><br>GG90    |                     | <b>Thread Type (Female Only)</b><br>G = BSPP<br>N = NPT |  |
| <b>Body Size</b>         |                     | <b>Thread Size (P2)</b>                                 |  |
| 06 - 1/4"    25 - 1"     |                     | 04 - 1/4"    16 - 1"                                    |  |
| 10 - 3/8"    32 - 1 1/4" |                     | 06 - 3/8"    20 - 1 1/4"                                |  |
| 12 - 1/2"    40 - 1 1/2" |                     | 08 - 1/2"    24 - 1 1/2"                                |  |
| 19 - 3/4"    50 - 2"     |                     | 12 - 3/4"    32 - 2"                                    |  |
| <b>Thread Size (P1)</b>  | <b>Thread Type</b>  | <b>Thread Type (Male Only)</b>                          |  |
| 04 - 1/4"    16 - 1"     | G = BSPP<br>N = NPT |   |  |
| 06 - 3/8"    20 - 1 1/4" |                     |   |  |
| 08 - 1/2"    24 - 1 1/2" |                     |   |  |
| 12 - 3/4"    32 - 2"     |                     |   |  |

Contact Holmbury for special requests on thread types/sizes not listed



## DRAWING



## DIMENSIONS

| Size    | Thread Size (A) | B                    | C    | ØD   | E     | F     | Maximum Working Pressure | Maximum Flow Rate | Maximum Rotational Speed* |
|---------|-----------------|----------------------|------|------|-------|-------|--------------------------|-------------------|---------------------------|
|         |                 | Dimensions in mm     |      |      |       |       | Bar                      | L/Min             | RPM                       |
|         |                 | Dimensions in Inches |      |      |       |       | Psi                      |                   |                           |
| GG90-06 | 1/4"            | 19                   | 11.3 | 33   | 57.5  | 71    | 400                      | 25                | 500                       |
|         |                 | 0.7                  | 0.4  | 1.3  | 2.3   | 2.8   | 5800                     |                   |                           |
| GG90-10 | 3/8"            | 24                   | 13.5 | 37.7 | 65.7  | 77.5  | 400                      | 45                | 400                       |
|         |                 | 0.9                  | 0.5  | 1.5  | 2.6   | 3.1   | 5800                     |                   |                           |
| GG90-12 | 1/2"            | 27                   | 16.3 | 39.5 | 77.5  | 91.4  | 360                      | 80                | 370                       |
|         |                 | 1.1                  | 0.6  | 1.6  | 3.1   | 3.6   | 5220                     |                   |                           |
| GG90-19 | 3/4"            | 34                   | 19   | 55.9 | 81    | 100   | 310                      | 120               | 280                       |
|         |                 | 1.3                  | 0.7  | 2.2  | 3.2   | 3.9   | 4495                     |                   |                           |
| GG90-25 | 1"              | 41.2                 | 22.8 | 59.5 | 101   | 120   | 280                      | 150               | 230                       |
|         |                 | 1.6                  | 0.9  | 2.3  | 4.0   | 4.7   | 4060                     |                   |                           |
| GG90-32 | 1 1/4"          | 50                   | 32   | 64.5 | 84.1  | 120   | 250                      | 200               | 200                       |
|         |                 | 2.0                  | 1.3  | 2.5  | 3.3   | 4.7   | 3625                     |                   |                           |
| GG90-40 | 1 1/2"          | 55                   | 39   | 76   | 114.5 | 137.5 | 210                      | 250               | 170                       |
|         |                 | 2.2                  | 1.5  | 3.0  | 4.5   | 5.4   | 3045                     |                   |                           |
| GG90-50 | 2"              | 70                   | 43.5 | 86   | 123.4 | 149   | 180                      | 300               | 140                       |
|         |                 | 2.8                  | 1.7  | 3.4  | 4.9   | 5.9   | 2610                     |                   |                           |

\*Note: The maximum rotational speed quoted is for zero pressure and hydraulic oils

PSI= Bar x14.5 Inches= mm/25.4