

Customer: \_\_\_\_\_ Date: \_\_\_\_\_

Job/Project: \_\_\_\_\_

## Quantity: \_\_\_\_\_ Ref/Tag: \_ Style 1103 Rubber Expansion Joint Shown with 2 1/2" ID x 14" F/F (DN63mm x 356mm) - 150-lb Drilling 1103-0002.5-3.16 **Control Unit** 7/8" thk. GR/B [22.2mm] Section Detail **Retaining Ring** (segmented) Rubber Rod Ø5/8" x 24" typ. Mating Cover Grommet Flange [15.9mm x 610mm] (by others) Reinforcement Tube Unfilled Arch 14" [356mm] Filled Arch Nuts (reduce movements by 50%, increase spring rates by 400%) Pure Gum Neoprene Nitrile EPDM Butvl Viton® Ø2 1/2" (Buna-N) (FKM) ID Tube . . U [63.5mm] Cover Tire Cord: ° F [∘ C] ° F [° C] ° F [∘ C] ° F [⁰ C] ° F [° C] ° F [∘ C] Ø5 1/2" BC Polyester 180 [82] 225 [107] 250 [121] 210 [99] 250 [121] 250 [121] [139.7mm] Kevlar<sup>®</sup> 180 [82] 225 [107] 300 [149] 210 [99] 350 [177] 400 [204] Maximum Temperature rating based on lowest temperature material selected. EPDM or Ø7" OD Butyl w/Polyester Tire Cord rated 300°F (149°C) for Air Service up to 25 psig (1.7 barg) [177.8mm] Ø10 7/8" Max OD **Bill of Materials** Ø3/4" [19mm] [274mm] \*Gusset (4 holes) MATERIAL ITEM FINISH 3/8" thk. [10mm] **Retaining Ring** Carbon Steel Hot Dipped Galvanized **Stainless Steel** Plain Gusset **Carbon Steel** Hot Dipped Galvanized **Stainless Steel** Plain Rods ASTM A193 B7 Alloy Steel Hot Dipped Galvanized ASTM A193 B8M 316 SS Plain Nuts ASTM A194 2H Steel Hot Dipped Galvanized ASTM A194 8M 316 SS Plain **Spherical Washers Stainless Stee** Plain Metal Reinforcement **High Tensile Steel Rubber Embedded** Textile Reinforcement Tire Cord **RFL** Coating SPRING RATE PRESSURE **MOVEMENT** (non-concurrent) WEIGHT Ext. Angular Lateral Vacuum **RBJ** with Comp. Lateral Torsional Comp. Ext. Angular Torsional Pressure Control ft-lb/deg deg. lb/in lb/in lb/in ft-lb/deg psig Rings Unit in [mm] in [mm] in [mm] deg. in-Hg [N/mm] [N/mm] [N/mm] [N-m/deg] [N-m/deg] lbs [kg] lbs [kg] [barg] [barg] 99 140 [24] 160 [28] 0.16 [0.22] 0.5 [0.68] 225 [15.5] 10.3 [4.7] 5 1/4 [133] 2 5/8 [67] 3 [76] 11.4 113 [19] 15 [-0.5] 19 [8.6] Inner Nuts (GR/W) Spherical Washer (GR-SW/B) Spherical Washer (GR-SW/SW) **Optional Control Units** No Control Units Outer Washer / Integral Ring (INT-W/W) Integral Ring, Spherical Washer Integral Ring (INT-W/B) (INT-SW/SW) Grommet Inner Bare (GR/B) (shown above)

\*No. of Rods: 2 Rods / 225 psig

\*Gusset thickness and pressure listed above are for carbon steel gussets and ASTM A193 B7 rods. Contact General Rubber for stainless steel pressures and thicknesses. Contact General Rubber Corporation for full product specifications, Warnings and installation instructions.