

Customer: _____ Date: _____

Job/Project: _____

Quantity: _____ Ref/Tag: _

Style 1104 Rubber Expansion Joint Shown with 4" ID x 18" F/F (DN100mm x 457mm) - 150-Ib Drilling | 1104-0004-3.16 **Control Unit** 7/8" thk. GR/B [22.2mm] Section Detail **Retaining Ring** (segmented) Mating Flange Rod Ø5/8" x 29" typ. Cover (by others) [15.9mm x 737mm] Rubber Grommet Reinforcement 18" [457mm] -Tube Unfilled Arch Filled Arch (reduce movements by 50%, increase spring rates by 400%) Nuts Pure Gum Neoprene Butvl Nitrile EPDM Viton® (Buna-N) (FKM) Tube . . U Cover ° F [∘ C] Tire Cord: ° F [∘ C] ° F [° C] ° F [⁰ C] ° F [° C] ° F [∘ C] Polyester 180 [82] 225 [107] 250 [121] 210 [99] 250 [121] 250 [121] Ø4" ID Kevlar[®] 180 [82] 225 [107] 300 [149] 210 [99] 350 [177] 400 [204] [101.6mm] Maximum Temperature rating based on lowest temperature material selected. EPDM or Butyl w/Polyester Tire Cord rated 300°F (149°C) for Air Service up to 25 psig (1.7 barg) Ø3/4" [19mm] (8 holes) **Bill of Materials** Ø7 1/2" BC MATERIAL ITEM FINISH Ø13 3/8" Max OD [190.5mm] **Retaining Ring** Carbon Steel Hot Dipped Galvanized [338mm] Ø9" OD **Stainless Steel** Plain [228.6mm] *Gusset Gusset **Carbon Steel** Hot Dipped Galvanized 9/16" thk. [14mm] **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 Steel** Plain Metal Reinforcement **High Tensile Steel Rubber Embedded** Textile Reinforcement Tire Cord **RFL** Coating SPRING RATE PRESSURE **MOVEMENT** (non-concurrent) WEIGHT Ext. Angular Ext. Lateral Vacuum **RBJ** with Comp. Lateral Torsional Comp. Angular Torsional Pressure Control ft-lb/deg Rings deg. lb/in lb/in ft-lb/deg Unit in [mm] in [mm] in [mm] deg. lb/in psig in-Hg [N/mm] [N/mm] [N/mm] [N-m/deg] [N-m/deg] lbs [kg] lbs [kg] [barg] [barg] 178 [31] 0.48 [0.65] 225 [15.5] 12.5 [5.7] 7 [178] 3 1/2 [89] 4 [102] 88 14.4 138 [24] 148 [25] 1.2 [1.6] 15 [-0.5] 35 [15.9] 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.

© 2016 General Rubber Corporation, All Rights Reserved