



FC-47

SAFE OPERATING PARAMETERS

Minimum temperature: minus 40 degrees F/C

Maximum temperature: plus 40 degrees C

U.L. maximum working pressure: 350 psi for LPG, 400 psi for NH₃

Maximum allowable pressure for LPG: 25 bar

Maximum hydrostatic test pressure: 2000 psi

Maximum rotational speed: 1000 RPM

Maximum permissible load: Varies with speed and swivel configuration**

Ball bearing type: Radial contact, sealed both sides.

Ball bearing grease: Beacon 325

Fluid compatibility: LN type swivels compatible with LP-GAS/Natural Gas. N type swivels compatible with Anhydrous Ammonia. FC type swivels compatible with B, C, D, F, G, and J fluids covered under Gaskets and Seals (JMLU2) category, in U.L. Standard 157. FC type swivels are not recommended for J fluids. J fluids include LP-GAS. CR type swivels including loading arms compatible with J fluids **only**.

Applicable U.L. Standard: UL 567 for threaded type swivels. Victaulic FC type swivels are UL Recognized Components for Refined Fuels.

Pressure Equipment Directive, PED (97/23 EC): LPG swivels up to 1-inch pipe size are SEP. 1-1/4 and 1-1/2 inch pipe sizes are Category 1 for LPG and are CE marked.

Machinery Directive, 98/37/EC: LPG SMAC-series swivels for hose-reel use up to 1-1/2 inch pipe size.

ATEX Directive, 94/9/EC: All swivels categorized as II 3 G T6

Date U.L. Listed: 1992

Materials:

Casing and bearing holder for SMAC-series swivels: Ductile Iron, ASTM A536. European Standard EN1563; material designation EN-GJS-450-10

Seal type: Three-piece mechanical seal

**Ball bearing is rated for 5000 pound static load. Dynamic loading varies with the application. As the swivel speed increases, the maximum ball bearing load decreases. Eccentric movement of hose reel hub assembly will accentuate the dynamic loading. Likewise, heavy counterbalances due to moment arm consideration can create a ball bearing overload condition. Care must be exercised in the design of any equipment a FULL-CIRCLE swivel is attached to, minimizing a ball bearing overload condition. Review literature sheet LA-1 for a guideline to loading arm use. Use proper engineering practice to determine ball bearing load due to counterbalance weight or eccentric movement. Use of a flex-connector on the swivel inlet is recommended.

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