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# **RECOMMENDED ENGINEERING SPECIFICATION FOR ASSUREFLEX®**

# **BRAIDED METAL PUMP CONNECTOR For fire protection systems**

## PART 1 GENERAL

1.01 SECTION INCLUDES

1. PumpSaver braided metal pump connector(s). Provide appropriate model braided metal pump connector(s) to connect to mating piping:
	1. Model FPSMP 150# carbon steel plate flanges
	2. Model FPSMN carbon steel male NPT ends
	3. Model FPSVG carbon steel grooved pipe ends
	4. Model FPSWN carbon steel weld
	5. Model FPSVGXF carbon steel groove end x flange end
	6. Model FPSVGCI Carbon Steel concentric reducing groove end

1.02 MANUFACTURER

A. AssureFlex® braided metal pump connector shall be manufactured by Flex-Hose Co. or pre-approved equal.

PART 2 PRODUCTS

2.01 Braided metal pump connector(s)

## The hose shall be 321/304L annular corrugated stainless steel (manufactured in the USA).

1. The braid shall be 304 stainless steel (manufactured in the USA).
2. The stainless steel ring ferrule or band shall be of not less than 0.048” thick material.
3. The hose, braid and ferrule shall be integrally seal-welded using a 100% circumferential TIG weld.
4. The hose shall have the first “lip” removed (on flanged models) to insure there are no sharp edges.
5. All end fittings shall be must be attached using 100% circumferential weld.
6. Braided stainless steel pump connectors must be suitable for operating temperatures up to 850 degrees F (455° C).
7. The rated working pressure of the hose must have a 4:1 safety factor.
8. Each braided metal hose pump connector is to be individually leak tested by the manufacturer using air-under-water and/or hydrostatically to 1.5 times rated working pressure prior to shipment.
9. Model FPSMP shall be supplied with flat-face carbon steel plate flanges with drilling and outside diameter to 150# ANSI.

## Model FPSMN shall be supplied with carbon steel schedule 40 male NPT ends.

## Model FPSVG shall be supplied with carbon steel schedule 40 groove pipe ends.

## Model FPSWN shall be supplied with carbon steel schedule 40 beveled weld ends.

1. Model FPSVGXF shall be supplied with carbon steel schedule 40 grooved end on one end and a 150# carbon steel plate flange on the other end.
2. Model FPSVGCI shall be supplied with carbon steel schedule 40 groove ends, one end to include schedule 40 concentric reducer.
3. Flanged end pump connectors shall be prepared for shipment using cut-to-length spacers, securely positioned between the flanges to prevent axial compression damage during shipment and to maintain the manufactured length.
4. Connectors shall be third party listed by UL (Underwriters Laboratories) for use in fire protection systems in both United States and Canada
5. All standard models that are UL listed must be rated for 300 PSI ½”-3” and 175 PSI for sizes 4”-12” nominal hose inside diameter.
6. High Pressure models UL listed for 300 PSI 4”-6” nominal hose inside diameters to be used for where pressure indicates.
7. For the Canadian market they must be standard B51 certified, inspected and tested by the Technical Standards and Safety Authority of Canada
	1. WARRANTY

AssureFlex® model braided metal pump connector(s) must have a 3-year full product replacement warranty when installed in accordance with all specifications and installation instructions as described by Flex-Hose Co.