

# MSS Series SWRO Feed Pump Specifications\*

## GENERAL

<b>Type</b>	Centrifugal, Multistage
<b>Style</b>	Horizontal
<b>Construction</b>	Barrel-flanged joints
<b>Drive</b>	Direct by motor (2800 to 3900 RPM)
<b>Shaft Seal</b>	Mechanical - ceramic/graphite, 316 SS body and spring, rated to 7 bar (high pressure seal optional)
<b>Coupling</b>	Sleeve manufactured by FEDCO (permits axial movement to unload motor thrust bearing)
<b>Shaft Alignment</b>	Maintained by machined fits
<b>Motor</b>	TEFC, C-face, foot mounted, inverter rated
<b>Pipe Joints</b>	Victaulic Style 77

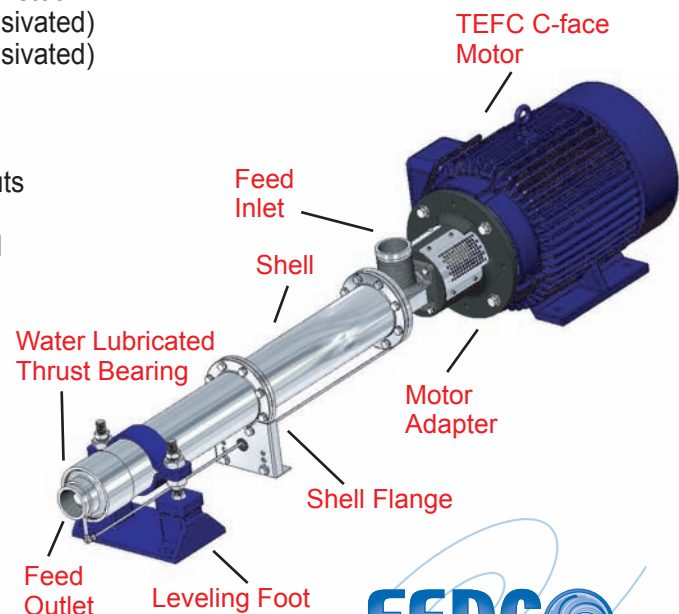
## BEARINGS

<b>Radial Thrust</b>	Sleeve (one per stage) - duplex SS alloy 2205 journal against non-metallic bushing Balance disc type, integral with pump shell, duplex SS against composite balance disc - no thrust transmitted to motor. Shaft placed in tension for improved reliability.
<b>Cooling</b>	Pumpage provides cooling to all bearings.
<b>Lubricant</b>	Pumpage (seawater) (no user lubrication required).

## MATERIALS

<b>Inlet Housing</b>	Duplex SS alloy 2205
<b>Outlet Housing</b>	Duplex SS alloy 2205
<b>Pump Shell</b>	Duplex SS alloy 2205
<b>External Tubing</b>	316 SS
<b>Shell Bolting</b>	316 SS
<b>Misc. Retainers</b>	316 SS
<b>Shaft</b>	Duplex SS alloy 2205 or better, one-piece construction, machined from bar stock
<b>Impellers</b>	316L SS (electropolished & passivated)
<b>Diffusers</b>	316L SS (electropolished & passivated)
<b>Wear Rings</b>	Non-metallic against 316L SS
<b>Motor Adapter</b>	Anodized Aluminum casting
<b>Pump Leveling Foot</b>	Power-coated carbon steel base with 316SS bolting and nuts
<b>Motor Coupling</b>	316 SS
<b>Coupling Guard</b>	316 SS, built to OSHA standard

<b>Alloy 2205 (nominal)</b>	
Chromium	22.3%
Nickel	5.5%
Molybdenum	3.0%
Nitrogen	0.2%



## INSTALLATION AND OPERATION

- No pulsation dampening equipment required.
- Can operate with low inlet pressure.
- Flanged shell allows simple internal inspection and overhaul.
- Pump leveling foot aids in shaft alignment.
- Low vibration and smooth operation minimize noise.
- May be bolted to membrane skid.



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