

SPECIFICATION SHEET

Multi-Stage Duplex (MSD) Pump

MODEL MSD-200*

for Reverse Osmosis Desalination



| HYDRAULIC DESIGN | |
|------------------|---|
| PUMP | Horizontal multi-stage centrifugal pump with bolted stage construction. |

| OPERATING PARAMETERS | |
|-----------------------------|---|
| LIQUID | Seawater, brackish water, and fresh water |
| OPERATING TEMPERATURE | 0.6 - 70.0° C |
| MAXIMUM STORAGE TEMPERATURE | 85° C |
| PUMP OPERATING FLOW RANGE* | 100-280 m ³ /h |
| MAXIMUM PRESSURE | 83 bar |
| FILTRATION REQUIREMENT | 20 microns |

*Range may vary.

| PERFORMANCE | |
|-----------------|---|
| PEAK EFFICIENCY | Contact FEDCO for specific performance data |

| MATERIALS | |
|---------------------------|---|
| SHAFT | Duplex 2205 one-piece construction machined from bar stock S31803 ASTM A276/479 (Super Duplex SS optional S32750 ASTM A276/479) |
| STAGE BOLTING | 316 SS S31600 A193/A320/F593 |
| INLET/DISCHARGE | Duplex 2205 S31803 ASTM A890 (Super Duplex SS optional S32750 ASTM A890) |
| IMPELLERS/DIFFUSERS | Duplex 2205 S31803 ASTM A890 (Super Duplex SS optional S32750 ASTM A890) |
| MOTOR ADAPTER | Anodized 713 aluminum casting A07130 ASTM ZC81A |
| MOTOR COUPLING | Flexible disc coupling - FNC treated Carbon Steel S45C ASTM 1045 |
| COUPLING GUARD | 316L S31603 ASTM 276/479 |
| PUMP LEVELING FOOT | Powder coated carbon steel A36 ASTM A570/A |
| BEARING DRAIN LINE TUBING | Duplex 2205 SA789-11a ASTM A789-10 |
| MECHANICAL SEAL | 316 Carbon silicon carbide Buna N FITS ISO DIN/ANSI TYPE 2100 |
| BASEPLATE | Painted carbon steel A36 (optional) ASTM A570/A |

| OPTIONS | |
|---|--|
| Inlet placement available in 90° increments | |
| High inlet pressure available | |

| OUTLINE | |
|------------|--|
| OUTLINE | Each MSD model is custom designed to specific customer requirements. |
| DIMENSIONS | Contact FEDCO for specific outline dimensions |

| FITTINGS | |
|-------------|--|
| PIPE JOINTS | Grooved-style couplings Feed Inlet 6" Feed Outlet 6" |

| DRIVE | |
|-------|--|
| MOTOR | Available per customer specific requirements NEMA FRAME STANDARD, IEC AVAILABLE |

| BEARINGS | |
|-------------|--|
| THRUST | FEDCO Water Bearing™ Product Lubricated |
| COOLING | Product provides cooling to all bearings |
| LUBRICATION | Product lubricated (no user lubrication required) |

| TESTING AND INSPECTION | |
|---|----------|
| PERFORMANCE TEST **Hydraulic Institute (HI) Hydrostatic and Centrifugal Pump Testing Standards | Standard |
| HYDROSTATIC TEST **Hydraulic Institute (HI) Hydrostatic and Centrifugal Pump Testing Standards | Standard |
| VISUAL/DIMENSION CHECK | Optional |
| SOUND TEST (75-85 dBA Nominal) | Optional |
| VIBRATION TEST (7mm/sec RMS (0.276"/sec)) | Optional |
| WITNESS TEST | Optional |
| CERTIFIED TEST DATA | Optional |
| MATERIAL CERTIFICATES | Optional |

| SHIPPING | |
|-----------------------------|--|
| PROTECTIVE COVERS | Standard |
| EXPORT CRATING | Standard |
| ADDITIONAL SHIPPING OPTIONS | Available per customer requirements |
| ESTIMATED UNIT WEIGHT | Contact FEDCO for specific design weight |



NOTE: All numeric values are based on performance norms. Specific performance data is included with each individual unit. FEDCO reserves the right to make specification changes at any time without prior notice. email: sales@fedco-usa.com

**General Code Groups, Associations, Laboratories, and Approval Bodies include the American Society for Testing and Materials (ASTM), the International Organization for Standardization (ISO), and the NSF International. Please contact your FEDCO representative for any additional information.