

SPECIFICATION SHEET

Single Stage Duplex (SSD) Pump

MODEL SSD-500*

for Reverse Osmosis Desalination



HYDRAULIC DESIGN	
PUMP	Single stage, high pressure, end suction, centrifugal (horizontal)

OPERATING PARAMETERS	
LIQUID	Seawater
OPERATING TEMPERATURE	0.6 - 70.0° C
MAXIMUM STORAGE TEMPERATURE	85° C
PUMP OPERATING FLOW RANGE*	250-650 m ³ /h
MAXIMUM PRESSURE	38 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)
CASING	Duplex 2205 S31803 ASTM A890 (Super Duplex SS optional S32750 ASTM A890)
IMPELLERS/DIFFUSERS	Duplex 2205 S31803 ASTM A276/479 (Super Duplex SS optional S32750 ASTM A276/479)
IMPELLER WEAR RING	Graphite
O-ring	Bunna N
MOTOR COUPLING	Flexible disc coupling - Carbon Steel S45C ASTM 1045
COUPLING GUARD	High-impact polyethylene
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 (Pump)	Painted carbon steel ASTM A36
BASEPLATE (Pump and motor assembly)	Painted carbon steel ASTM A36

INSTRUMENTATION	
FLOW METER	4-20mA / 0-10V analog output
VIBRATION SENSORS (Optional)	4-20mA output / 0.0-1 in/sec pk measured

SHIPPING	
PROTECTIVE	Standard
EXPORT	Standard
ADDITIONAL	Available per customer requirements
ESTIMATED	980 kg

FITTINGS	
PIPE JOINTS	Grooved-style couplings (Flanges optional) Inlet/Outlet 6"/6"
EYE BOLTS	Standard

DRIVE	
MOTOR	Available per customer specific requirements NEMA FRAME STANDARD, IEC AVAILABLE
VARIABLE FREQUENCY DRIVE	Available per customer specific requirements

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 (4.5mm/sec RMS (0.177"/sec))	Optional
WITNESS TEST	Optional
CERTIFIED TEST DATA	Optional
MATERIAL CERTIFICATES	Optional



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. Please contact your FEDCO representative for information. 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.