

Multi-Stage Duplex (MSD™) Pump

Operating Parameters

Model *	MSD-650	
Liquid	Seawater, Brackish water, Fresh Water	
Pump Operating Ambient Temp	33 - 158 °F	0.6 - 70.0 °C
Maximum Storage Temp	185 °F	85.0 °C
Pump Operating Flow Range**	1431-4007 gpm	325-910 m³/h
Maximum Operating Pressure	1200 psi	83 bar
Maximum Inlet Pressure	150 psi	10.3 bar
Nominal Vibration	≤7.1mm/sec RMS	≤0.28"/sec RMS
Nominal Sound	<85 bBA	
Filtration Requirement	20 microns	

* Subject to international patent applications

** Range may vary

Performance

Peak Efficiency	Contact FEDCO for specific performance data
-----------------	---

Materials

Shaft	Super Duplex SS S32750 ASTM A276/479
Stage Bolting	316 SS S31600 ASTM A193/A320/F593
Inlet/ Discharge	Super Duplex SS S32760 ASTM A995 6A
Impellers/ Diffusers	Super Duplex SS S32760 ASTM A995 6A
Motor Coupling	Flexible Disc-FNC Treated Carbon Steel S45C ASTM 1045
Coupling Guard	Carbon Steel - A36 Painted ASTM A1018
Bearing Drain Line	Super Duplex SS S32750 ASTM A-789
Mechanical Seal	316 Carbon Silicon Carbide Buna N FITS ISO DIN/ANSI TYPE 2100
O-Rings	Buna N®
Baseplate	Carbon Steel - A36 Painted ASTM A570/A
Crating/Packaging	Export-Wood

Outline

Each MSD model is custom designed to specific customer requirements.

Packaging/ Crating

Protective Covers	Standard
Export Crating	Standard
Additional Shipping Options	Available per customer requirements
Unit Weight (Dry)	Contact FEDCO for design weight

Hydraulic Design

Pump	Horizontal multi-stage centrifugal pump with barrel flanged joint construction.
------	---

Fittings

Pipe Joints	Feed Inlet 10" Cut Groove Feed Outlet 10" Cut Groove
-------------	---

Drive

Motor	Available per customer specific requirements NEMA Frame Standard, IEC Available
-------	--

Bearings

Thrust	FEDCO Water Bearing™ Product Lubricated
Cooling	Product fluid
Lubrication	Product fluid

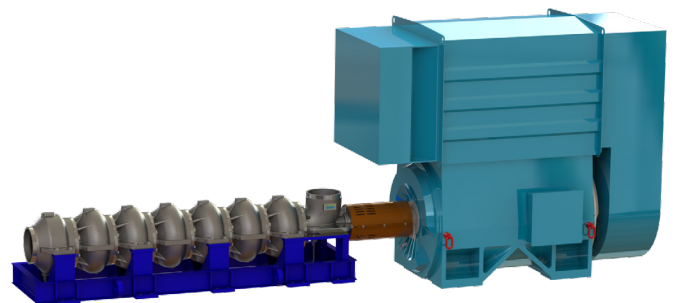
Monitoring Equipment

Water bearing monitoring system with enclosure Connected to client's PLC NEMA 4/4X/12/13 rating, 304 SS, UL rated	Standard
---	----------

Testing and Inspection

Performance Test * Hydraulic Institute (HI) Hydrostatic & Centrifugal Pump Testing Standards	Standard
Hydrostatic Test * Hydraulic Institute (HI) Hydrostatic & Centrifugal Pump Testing Standards	Standard
Visual/ Dimension Check	Optional
Sound Test	Optional
Vibration Test	Optional
Witness Test	Optional
Certified Test Data	Optional
Material Certificates	Optional

* 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.



LENNTECH
WATER TREATMENT SOLUTIONS

info@lennotech.com Tel. +31-152-610-900

www.lennotech.com Fax. +31-152-616-289

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

The information, date and drawings in this proposal are strictly confidential and for the use of the Fluid Equipment Development Company, LLC ("FEDCO") and its intended recipient(s) only. The information is not to be disclosed or distributed to any other party(ies) without expressed prior written permission of FEDCO.