

SOUTHERN CROSS SEMA X SERIES

8, 10 & 12 INCH WATER TIGHT SUBMERSIBLE ELECTRIC MOTORS

EFFICIENT REWINDABLE SUBMERSIBLE ELECTRIC MOTORS FOR BOREHOLE AND SUBMERSIBLE PUMPING APPLICATIONS



FEATURES

- Standard 415 Volt, 50Hz three phase.
- Rewindable design for easy, cost effective maintenance and repair.
- Denatured polypropylene coil conductor material for excellent leak resistant performance.
- Three barrier copper conductor protection for complete insulation from internal cooling fluid.
- Stainless steel slinger and slinger guide prevent sand entry and double rubber seals prevent the ingress of water and contaminants into the motor.
- High quality 6 shoe (8 inch models) and 8 shoe (10 and 12 inch models) Kingsbury design thrust bearings.
- Baked epoxy coating on rotor core for water and rust resistance.
- Reliable water lubricated carbon bearings.
- Rotor balancing rings ensure excellent dynamic balance for rotating elements.

APPLICATIONS

Domestic Water Supplies
Agriculture
Stock Watering
Irrigation

OPERATING PARAMETERS

Temperature -30°C to +25°C
Min. Flow 0.15m/sec
pH Level 6.5-8 (X-I & X-II Motors)
2-12 (X-III Motors)
Axial Thrust 44100N

TECHNICAL SPECIFICATIONS

Output 37-225kW
Mounting Flange NEMA Standard
Shaft NEMA Splined (8")
NEMA Keyed (10" & 12")
IP Rating IP68
Insulation Class Y
Cable Length 5m

TECHNICAL SPECIFICATIONS

Motor Size	Power		Thrust N	Efficiency %	FLA A	LRA A	Nominal Speed RPM	Lead Wire mm ²	Cable Dia. mm	L mm	D mm	Weight kg
	kW	HP										
8"	37	50	44100	84.4	69.9	400	2850	8	9.2	1250	191	185
8"	45	60	44100	87	80.3	533	2850	8	9.2	1350	191	210
8"	55	75	44100	86.8	105.7	740	2850	14	11.0	1480	191	235
8"	75	100	44100	86.6	137.8	938	2850	14	11.0	1680	191	270
8"	90	125	44100	84.6	190.9	1114	2850	14	11.0	1680	191	270
8"	110	150	44100	83.3	238.9	1354	2850	22	13.5	1780	191	300
10"	132	175	44100	85.8	235.6	1380	2850	30	15.0	1770	216.5	370
10"	150	200	44100	87	264.7	1610	2850	30	15.0	2020	216.5	430
10"	185	250	44100	85.4	335.9	1610	2850	30	15.0	2020	216.5	430
12"	220	300	44100	88.6	396.2	2950	2850	60	19.5	2000	267.5	660

CONSTRUCTION MATERIAL OPTIONS

Component	Model			
	XI	XII	XIII	XE
Motor Shell	Epoxy Coated Carbon Steel	316 Stainless Steel	316 Stainless Steel	Available in a range of materials
End Caps	Epoxy Coated Cast Iron	Epoxy Coated Cast Iron	316 Stainless Steel	Available in a range of materials
Shaft	420 Stainless Steel	420 Stainless Steel	316 Stainless Steel	Available in a range of materials.

X-E ENGINEERED MOTORS

Southern Cross SEMA X-E motors are engineered to order submersible electric motors which can be designed and manufactured to meet the most demanding specification or application. Incorporating the highest quality components and assembled to the finest tolerances, X-E motors represent the pinnacle in submersible motor design.

Utilizing Pentair Southern Cross' considerable experience in the submersible pumping industry, we can develop an engineered solution which can incorporate an extensive range of options and modifications.

Material Options

316 Stainless Steel
Duplex (SAF2205)
Super Duplex
NAB (Nickel Aluminium Bronze)
Copper Nickel
Monel K500
Other exotic materials available.

Motor Modifications

Alternative voltages and frequencies
Alternative pump mounts and shaft sizes.
Motor/pump coupling.
Alternative shaft sizes.
Alternative mechanical seal faces.
Motor centralisers.

Motor Protection

Motor derating for cooling in high temperature applications.
Protective paint and coatings.
Temperature monitoring (RTDs) including remote monitoring options.
Increased down thrust bearings.
External cooling options.
Cooling shroud design.
Anti fouling and cathodic protection.



PENTAIR SOUTHERN CROSS

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