

AURORA® ISO-3601

END SUCTION CENTRIFUGAL PUMPS



Aurora ISO
End Suction Centrifugal
Pumps



FEATURED HIGHLIGHTS

- Compact close coupled design.
- Superior hydraulic design and manufacturing methods for significantly higher efficiencies and reduced maintenance.
- High efficiency double curvature impeller vanes.
- 50 to 200mm discharge.
- Cast iron or stainless steel construction.
- AS2129 Table "E" flanges as standard with optional drillings available.
- Back-pullout design does not require the disconnection and removal of suction and discharge lines for maintenance.
- Choice of high quality WEG TEFC IP55 motors with sealed for life (11kW and under) or regreasable (15kW and over) motor bearings.
- Taper mounted and keyed impeller.
- Horizontal or vertical pump discharge mounting.

The Southern Cross ISO end suction pumps are non- self priming, single stage, centrifugal volute pumps with axial suction port, radial discharge port and horizontal shaft. Starline ISO pumps are suitable for all applications in commercial pool.

Below table and charts feature all stainless steel pumps with 1450RPM motors.

ORDERING INFORMATION

Part	Model	Motor Power Rating (kw)	RPM	Voltage (VAC)	Input Power (P1, kW)	Output Power (P2, kW)	Max Current (A)
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Starline Iso

MUFC45S	80X50-200	2.2	1450	400-415	2.54	2.2	4.5
MUFC46S	80X50-200	3	1450	400-415	2.91	2.55	5
MUFD47S	100X65-200	4	1450	400-415	4.51	4	7.8
MUFE48S	125X80-200	5.5	1450	400-415	6.17	5.5	10.2
MUFF49S	125X100-200	7.5	1450	400-415	8.25	7.47	13.5
MUGF49S	125X100-250	7.5	1450	400-415	8.29	7.5	13.6
MUGG51S	150X125-250	11	1450	400-415	12.05	11	20.7
MUGG52S	150X125-250	15	1450	400-415	16.34	15	28.1
MUGG53S	150X125-250	18.5	1450	400-415	19.81	18.5	34.4
MUHH54S	200X150-315	22	1450	400-415	23.48	22	38.4
MUHH55S	200X150-315	30	1450	400-415	31.98	30	54.9
MUHJ57S	250X200-315	37	1450	400-415	39.53	37	63.7

*All models available with impeller trims to match best efficiency point with duty point. Contact Pentair for optional engineered solutions.

**Pump model consists of suction size X discharge size - nominal impeller diameter.

COMMERCIAL

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FILTERS

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HEATERS &
HEAT PUMPS

LIGHTING

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WATER
FEATURES

CHEMICAL
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& SANITIZERS

WHITE
GOODS

MAINTENANCE
& SAFETY

LIFTS & DECK
EQUIPMENT

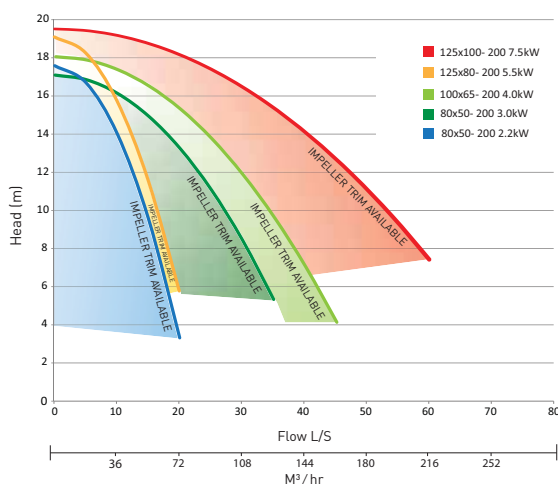
OTHER

AURORA® ISO

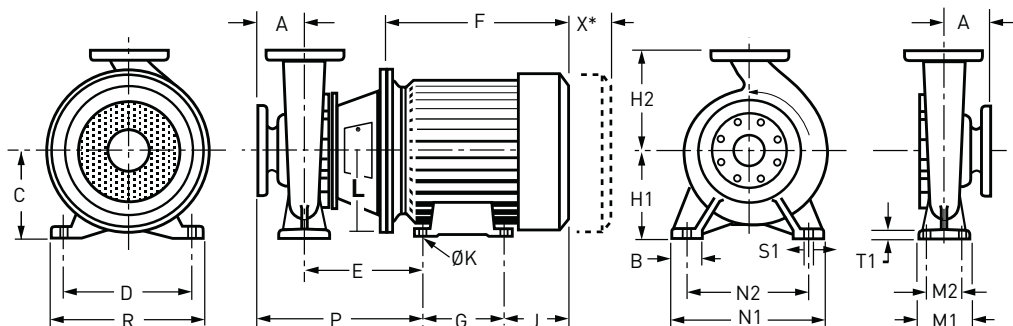
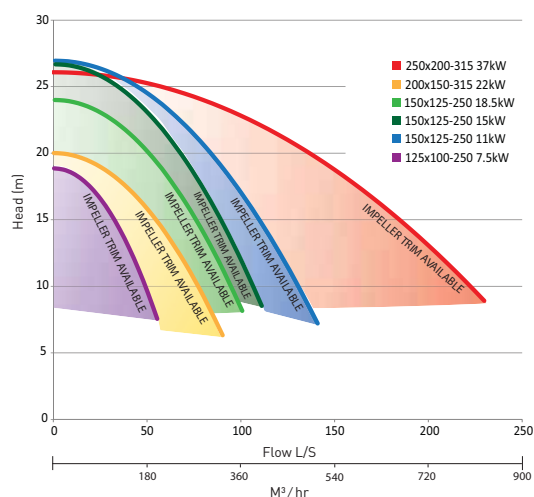
END SUCTION CENTRIFUGAL PUMPS

DIMENSIONS AND PERFORMANCE*

1450RPM 2.2 - 7.5 kW



1450RPM 7.5 - 37 kW



Pump Model	80X50-200 2.2KW	80X50-200 3KW	100X65-200 4KW	125X80-200 5.5KW	125X100-200 7.5KW	125X100-250 7.5KW	150X125-250 11KW	150X125-250 15KW	150X125-250 18.5KW	200X150-315 22KW	200X150-315 30KW	250X200-315 37KW
A (mm)	100	100	100	125	125	140	140	140	140	160	160	180
B (mm)	50	50	65	65	80	80	80	80	80	100	100	100
C (mm)	100	100	100	132	132	132	160	160	180	180	200	225
D (mm)	160	160	160	216	216	216	254	254	279	279	318	356
E (mm)	225	225	229	274	275	295	349	349	362	461	473	489
F (mm)	325	325	325	390	430	430	505	560	575	615	643	660
G (mm)	140	140	140	140	178	178	210	254	241	279	305	286
H1 (mm)	160	160	180	180	200	225	250	250	250	315	315	315
H2 (mm)	200	200	225	250	280	280	355	355	355	400	400	450
J (mm)	122	122	122	161	163	163	187	198	213	215	205	225
K (mm)	12	12	12	12	12	12	15	15	15	15	19	19
L (mm)	125	125	125	150	150	150	175	175	175	175	200	225
M1 (mm)	100	100	125	125	160	160	160	160	160	210	210	210
M2 (mm)	70	70	95	95	120	120	120	120	120	150	150	150
N1 (mm)	265	265	320	345	360	400	400	400	400	540	540	540
N2 (mm)	212	212	250	280	280	315	315	315	315	450	450	450
P (mm)	325	325	329	399	400	435	489	489	502	621	633	669
R (mm)	205	205	205	270	270	270	320	320	355	355	395	435
ST1 (mm)	14	14	14	14	18	18	18	18	18	22	22	22
T1 (mm)	13	13	15	16	17	18	19	19	19	20	20	25
GAP X* (mm)	100	100	140	140	140	140	140	140	140	180	180	180
Weight (kg)	80	84	92	132	151	177	241	262	300	463	543	597

AURORA® 340 SERIES (US VERSION)

COMMERCIAL SINGLE STAGE END SUCTION PUMPS



FEATURED HIGHLIGHTS

- Computer machine components
- Precision-cast, dynamically balanced, enclosed impeller
- Oil seals and Neoprene rotating slingers protect bearings
- Mechanical seal
- Heavy-duty power frame
- Hydrostatic tested pumps
- Bronze fitted pump standard
- Back pull-out design simplifies disassembly
- Conveniently located lubrication fittings
- Epoxy coating options
- ODP and TEFC motor options
- Case wearing rings prevent wear
- NSF Std 50 options available

ECONOMICAL WATER HANDLING SOLUTIONS

Today, pump installations demand a high standard for efficiency. The Aurora 340 Series pump meets this demand and exceeds the expectations of aquatic designers, and municipal and commercial pool management. Conceived from 90 years of design expertise the Aurora 340 Series pump is quiet, smooth running and provides a long reliable service life. Flexibility makes the 340 Series pump the answer for your custom aquatic features. Interchangeable standards and options help to easily configure any 340 Series pump. Capacities can be customized to 2500 GPM, heads up to 100 feet and temperature ranges to 106°F. This single-stage end suction pump is the work horse of an energy-efficient aquatic facility. Let Pentair Commercial Aquatics™ customize a 340 Series pump for your water feature or pool.

ORDERING INFORMATION

Please contact us for applications sizing, pricing, and availability.

DESIGN DETAILS

Pump Part	Standard Fitted	Bronze Fitted	All-Iron	All-Bronze
Casing	Cast Iron ASTM A48	Cast Iron ASTM A48	Cast Iron ASTM A48	Bronze ASTM B62
Case Wearing Ring	Bronze ASTM B62	Bronze ASTM B62	Cast Iron ASTM A48	Bronze ASTM B62
Impeller	Cast Iron ASTM A48	Bronze ASTM B584	Cast Iron ASTM A48	Bronze ASTM B584
Motor Bracket	Cast Iron ASTM A48	Cast Iron ASTM A48	Cast Iron ASTM A48	Cast Iron ASTM A48
Shaft	Steel AISI C1045	Steel AISI C1045	Steel AISI C1045	Steel AISI C1045
Power Frame	Cast Iron ASTM A48	Cast Iron ASTM A48	Cast Iron ASTM A48	Cast Iron ASTM A48
Mechanical Seal	303 Stainless steel metal parts, "Buna-N" elastomer parts, Ni-Resist seat and carbon washer			303 Stainless steel metal parts, viton, elastomer, ceramic seat and carbon washer
Stuffing Box	Cast Iron ASTM A48	Cast Iron ASTM A48	Cast Iron ASTM A48	Bronze ASTM B62

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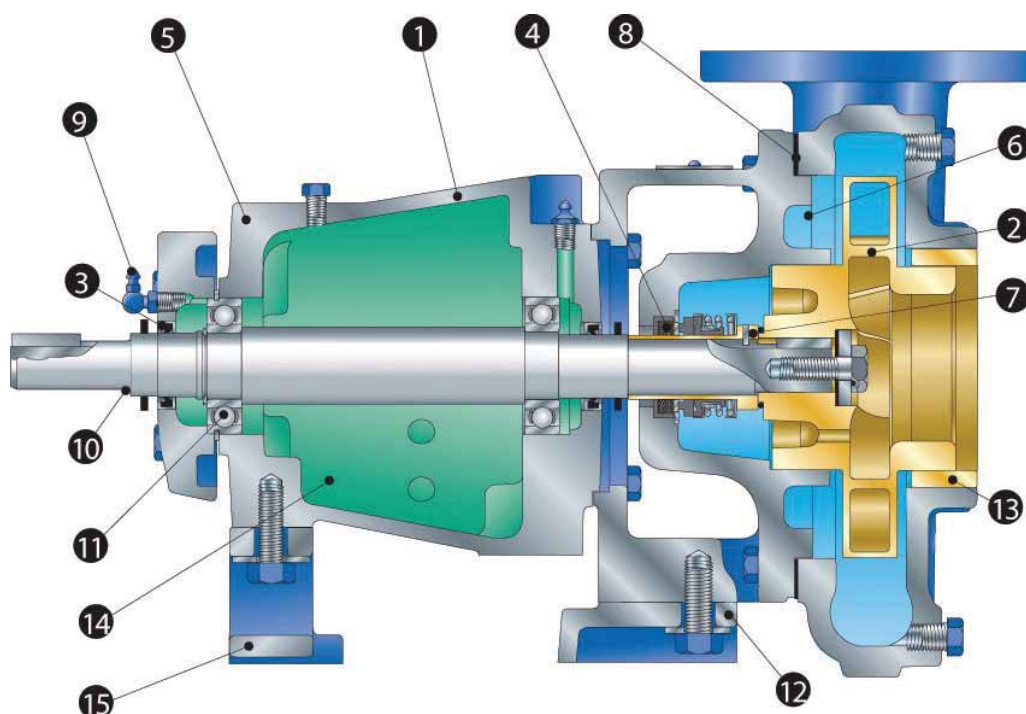
MAINTENANCE
& SAFETY

LIFTS & DECK
EQUIPMENT

OTHER

AURORA® 340 SERIES (CONT'D) (US VERSION)

COMMERCIAL SINGLE STAGE END SUCTION PUMPS



DESIGN HIGHLIGHTS

1. Computer machined major components with 360-degree register fit to assure concentricity of all pump parts.
2. Precision-cast, dynamically-balanced, enclosed impeller is keyed to the shaft extension and secured by a capscrew and washer. Gaskets are used to prevent leakage to shaft end.
3. Oil seals and non-sparking Neoprene rotating slingers protect both bearings during pump operation and washdown.
4. Mechanical seal has hot water carbon against Ni-Resist face for optimum hot water performance. Long life is also assured with 303 stainless steel metal parts and «Buna-N» elastomer.
5. Power frame provides heavy duty maximum interchangeability for flexible coupled applications.
6. Hydrostatic test of pumps at factory guarantees casting and seal integrity.
7. Bronze shaft sleeve prevents shaft wear, is slip fit over the shaft, key locked and extends the full length of the seal box to eliminate corrosion of the shaft by the pumped liquid. This cancels the requirement for high cost, special stainless steel or alloy shafts.
8. Back pull-out design simplifies disassembly. The suction and discharge piping is not disturbed at disassembly.
9. Lubrication fittings are conveniently located for quick accessibility and provides positive bearing lubrication. Oil lubrication optionally available.
10. Carbon steel shaft designed for minimum deflection. Not to exceed .002» at sealing faces at maximum load.
11. Bearings selected for 3-year minimum life at maximum load. Average bearing life 5x minimum. Grease lube standard.
12. Close coupled motors in smaller frame sizes are supported off of the motor bracket for maximum rigidity.
13. Case wearing ring prevents wear on casing and is easily and inexpensively replaced. Impeller rings are available. Front case wearing rings are standard on all models and size pumps. Front impeller wearing rings are optional on all models and size pumps. Rear impeller wearing rings are optional only on 2» discharge and larger model 340 Series pumps.
14. Large capacity oil reservoir is provided on power frame model 344 pumps for optional oil lube.
15. Rear support foot provides support and simplifies coupling alignment. All supports are slotted to simplify back pull-out of power frame.