

MCKARLEN

MSCE Series



DOUBLE SUCTION CENTRIFUGAL PUMP



GENERAL INFORMATION

Discharge Flange	DN 65-DN 600
Capacity	up to 6000 m ³ /h
Head	up to 180 m
Working Temperature	From -200C to +1100C*
Casing Pressure (Pmax)	16 bar - 25 bar*

(Pmax: Suction Pressure + Shut off Head)

(*) Depending on the type of liquid, operating temperature and pressure. The pump material changes. Please contact our company for detailed information.

Transferable Liquids

- Clean or slightly contaminated low viscosity liquids without solid & fibrous particles.

Shaft Sealing

- Single, double, cortex type mechanical seal or soft packing is used depending on the type of fluid and operating conditions.

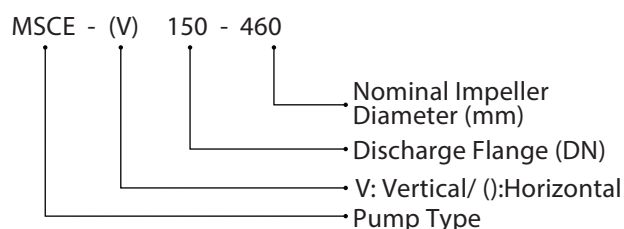
APPLICATIONS

Water Treatment and Pressurization	Power Plants
Heating, Ventilating and Air Conditioning	Oil Industry
Agricultural Irrigation and Drainage	Chemical Industry
Food and Beverage Industry	Mining
Iron and Steel Industry	Marine
Building System	Fire Fighting

Design Features

- Suction and discharge flanges are on the same axis line. The double-suction design reduces axial forces by directing flow into both sides of the impeller. The double-volute design, available on most models, reduces the radial load and minimizes noise and vibration.
- Suction and discharge flanges are PN 16 according to EN 1092-2 (DIN2501).
- Seal box is cooled with water. Seals are easily dismountable, which makes replacing and fitting up additional seals easy.
- Split-case pumps could manufacturing horizontal or vertical.
- The impellers are dynamically balanced according to ISO 1940 class 6.3.
- Direction of rotation is clockwise when viewed from the motor in standard manufacture. In this case, the suction flange is on the right side. If required, the direction of rotation can be adjusted counter-clockwise. In this case, the suction flange is on the left side. Replaceable case wear rings protect the pump casing and reducing maintenance costs.
- Bronze shaft sleeves protect the shaft and help with fixation of the impeller.
- In horizontal installation, ball bearing with grease lubrication is used as standard. In the case of vertical installation, the bearing with fluid lubrication is used on the lower side and the ball bearing with grease lubrication is used on the upper side.

Pump Code



MATERIAL OPTIONS

Part List	0.6025	0.7040	0.7043	1.0619	1.4308	1.4309	1.4408	1.4409	1.4500	1.4517	1.4469	1.4317	1.4008	2.1050.01	2.0975.01	2.1096.01	1.4021	1.4021+QT	1.4301	1.4404	1.4460	1.4462
Volute Casing	●	○	○	○	○	○	○	○	○	○	○	○	○	○								
Impeller	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○					○	
Shaft																	●	○	○	○		○
Bearing Housing	●	○	○	○	○	○	○	○														
Wear Ring	○	○	○	○	○	○	○	○	○	○	○	○	○	●	○	○						
Shaft Wear Bushing																	●	○	○	○		○
Mech. Seal (*)	EN 12756 / DIN 24250																					

● Standard Manufacturing

○ Optional

(*) Options: Different brand and type seal can be use can according to customer request.

DESCRIPTIONS

■ DIN

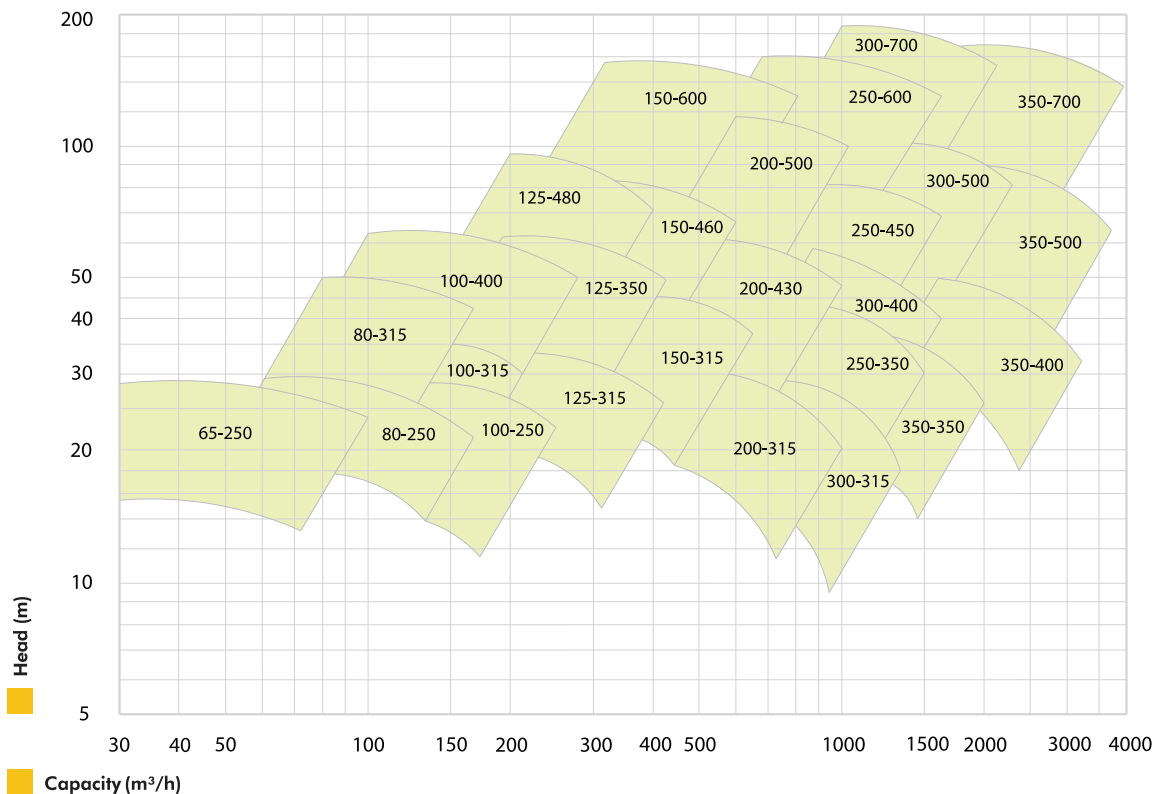
■ EN

■ AISI/SAE/ASTM

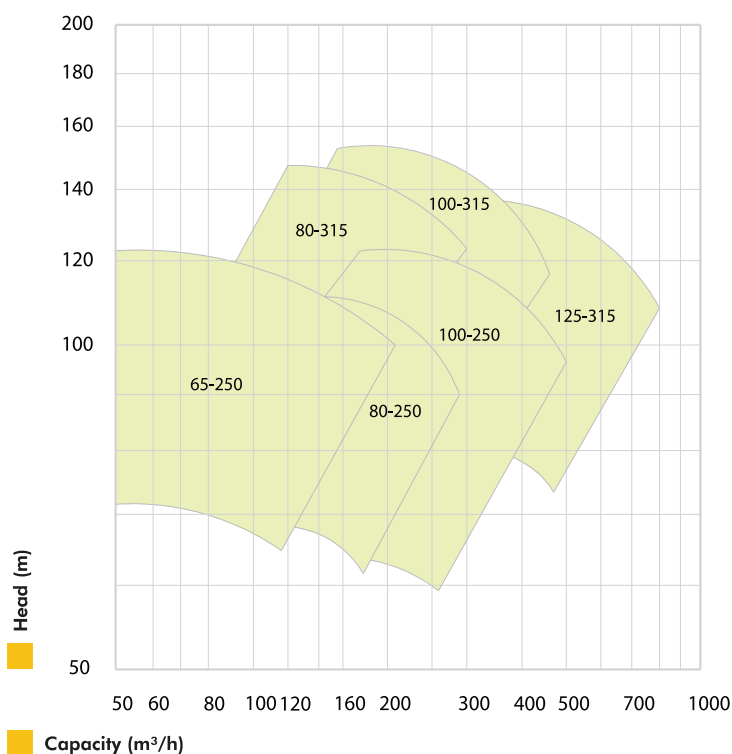
Cast Iron	0.6025	EN-GJL-250 (GG 25)	A 48 Class 40-B
Ductile Iron Casting	0.7040	EN-GJS-400-18-LT (GGG 40)	A 536 60-40-18
Ductile Iron Casting	0.7043	EN-GJS-400-18-LT (GGG 40.3)	A 536 60-40-18
Steel Casting	1.0619	GP 240 GHGS-C25	A 216 WCB
Chrome Nickel Steel Casting	1.4308	G-XS Cr Ni 19-10	A 351 CF8
Chrome Nickel Steel Casting (Low Carbon)	1.4309	G-X2 Cr Ni 19-11	A 351 CF3
Chrome Nickel Molybdenum Steel Casting	1.4408	G-XS Cr Ni Mo 19-11-2	A 351 CF8M
Chrome Nickel Molybdenum Steel Casting (L.C)	1.4409	G-X2 Cr Ni Mo 19-11-2	A 351 CF3M
Austenitic Steel Casting	1.4500	G-X7 Cr Ni Mo Cu Nb 25-20	A 351 CN7M
Austenitic - Ferritic Steel Casting (Duplex)	1.4517	G-X2 Cr Ni Mo Cu N 25-6-3-3	A 890 CD4MCuN
Austenitic - Ferritic Steel Casting (S.D.)	1.4469	G-X2 Cr Ni Mo N 26-7-4	A 890 CE3MN
Martensilic Stainless Steel Casting	1.4317	G-X4 Cr Ni 13-4	A 352 CA6NM
Martensilic Stainless Steel Casting	1.4008	G-X7CrNi Mo 12-1	A 217 CA15
Bronze Casting (Tinned)	2.1050.01	G-Cu Sn 10	B 427 C90700
Bronze Casting (Nickel Alloy)	2.0975.01	G-Cu Al10 Ni	B 148 C95500
Bronze Casting (Leaded)	2.1096.01	G-Cu Sn 5 Zn Pb	B 584 C83600
Chromium Steel	1.4021	X20 CrI3	A 276 Type 420
Chrome Steel (Heat Treatment)	1.4021	X20 CrI3	A 276 Type 420+QT
Chrome Nickel Steel	1.4301	X5 Cr Ni 18-10	A 276 Type 304
Chrome Nickel Molybdenum Steel (L.C)	1.4404	X2 Cr Ni Mo 17-12-2	A 276 Type 316L
Duplex (Austenitic-Ferritic) Steel	1.4460	X3 Cr Ni Mo N 27-5-2	AISI 329
Duplex (Austenitic-Ferritic) Steel	1.4462	X2 Cr Ni Mo N 22-5-3	UNS S32205

SELECTION CHARTS

1450 rpm (50 Hz)



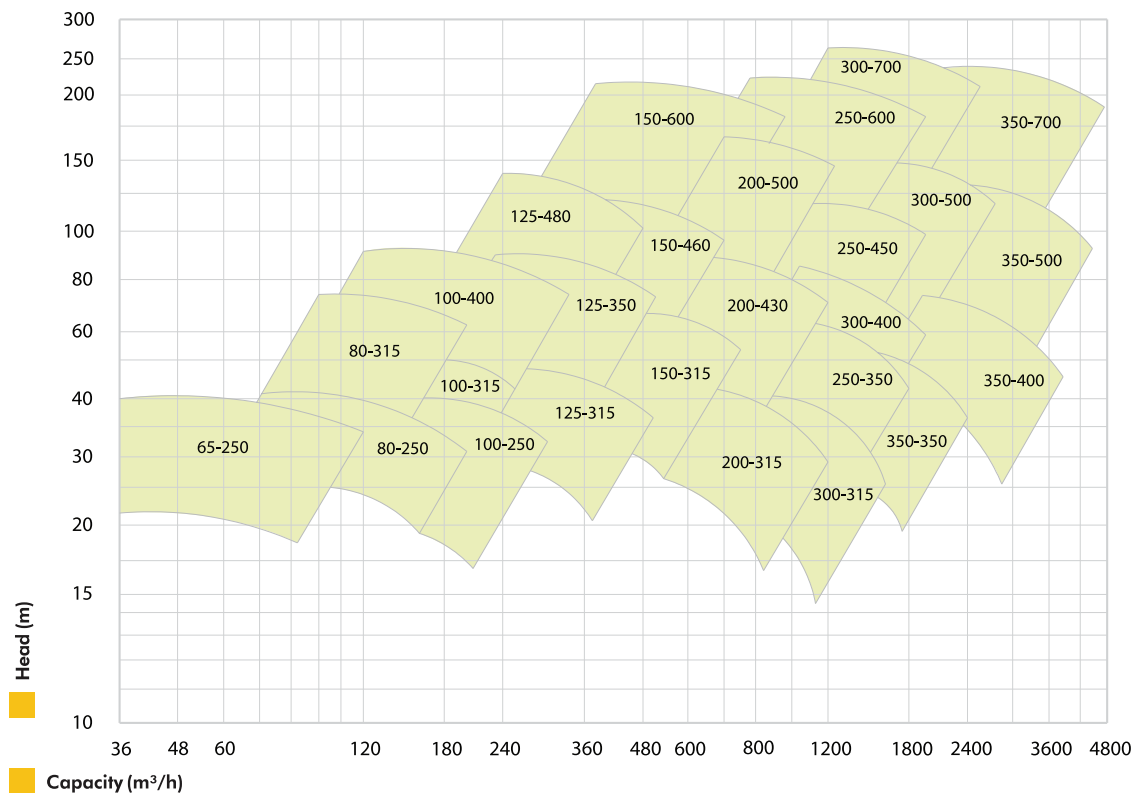
2900 rpm (50 Hz)



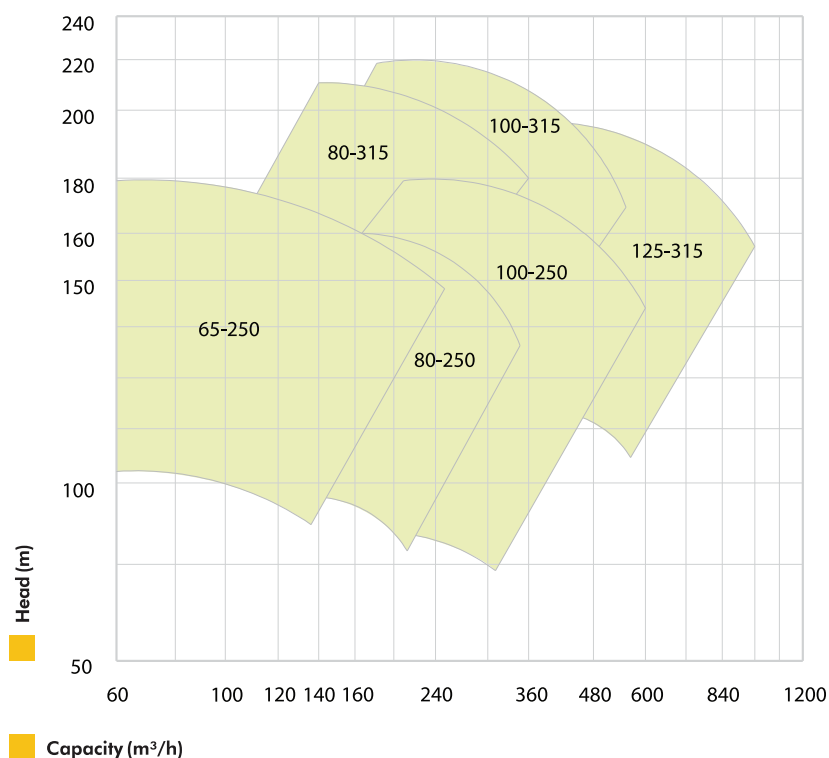
For detail curves, use our selection program.

SELECTION CHARTS

1750 rpm (60 Hz)



3500 rpm (60 Hz)



For detail curves, use our selection program.