

ONGA OCS SERIES PUMP



Code	Description	V-Ø-Hz	kw
OCS4010	OCS401-Centrifugal Pump SS	230-1-50	0.9
OCS4030	OCS403-Centrifugal Pump SS	230-1-50	1.1
OCS4050	OCS405-Centrifugal Pump SS	230-1-50	2.0

RAINBOW POOL PRODUCTS PTY LTD

OPERATING INSTRUCTIONS

Pump Protection

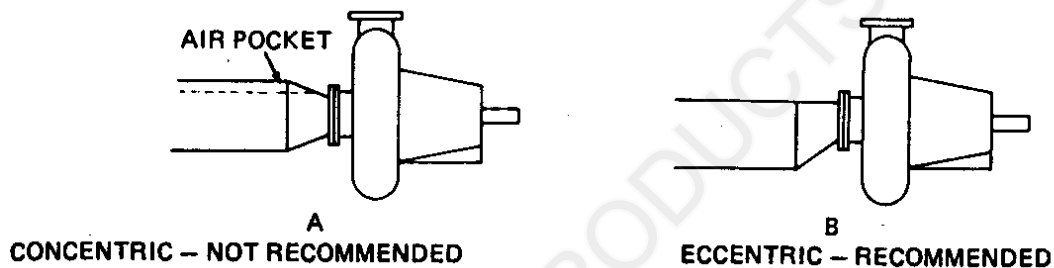
Warranty on these pumps is void unless they are housed correctly and protected from weather, floods, chemicals, dust, vermin, insects etc. Housings should be weather-proof and well vented so that motor heat can flow through. To obtain best possible performance, pumps should be installed as close to the water source as possible.

Suction and Discharge Pipes

Suction should be laid so that it rises evenly from water source to pump. This makes priming easier and avoids airlocks.

Pipes should be the same size or larger than the pump inlet threads. If piping is longer than 15m (50 ft) then a pipe friction table should be consulted to obtain the correct sized piping.

If using larger pipes, please ensure eccentric reducers/expansion couplings are used and installed correctly (see fig 1)



All pipe joints must be sealed to ensure they are airtight and a foot or check valve must be used in the suction pipe. If using a check valve make sure that it is installed in the correct direction.

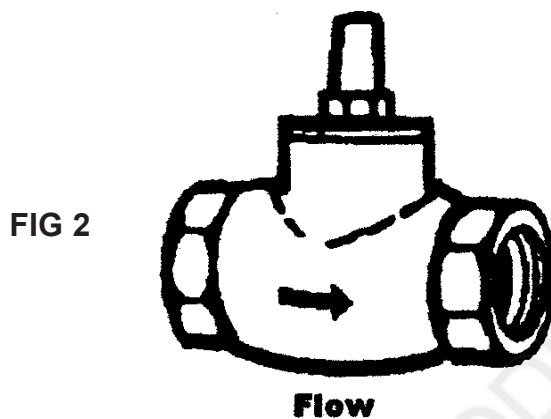
Priming

To prime the OCS400 series, remove priming plug and fill pump and suction pipe with liquid, replace priming plug and start pump. The OCS500, 650 & 800 series are primed via the discharge outlet, fill pump and suction pipe with liquid and start pump. If the unit pumps a small amount of liquid then stops discharging, then turn the pump off, check suction pipe for possible leaks and repeat priming procedure until pump operates satisfactorily.

Suction Limit

The maximum practical and recommended limit is within 6 metres (20feet), depending on the installation. If pump fails to operate check vertical suction lift and friction losses.

Please ensure there is a foot valve fitted to the suction pipe if the pump is located above the liquid source. Should the liquid be level with or above the pump, we recommend the fitting of a check-valve to the suction pipe. Make sure the valve is installed correctly. (see fig 2)



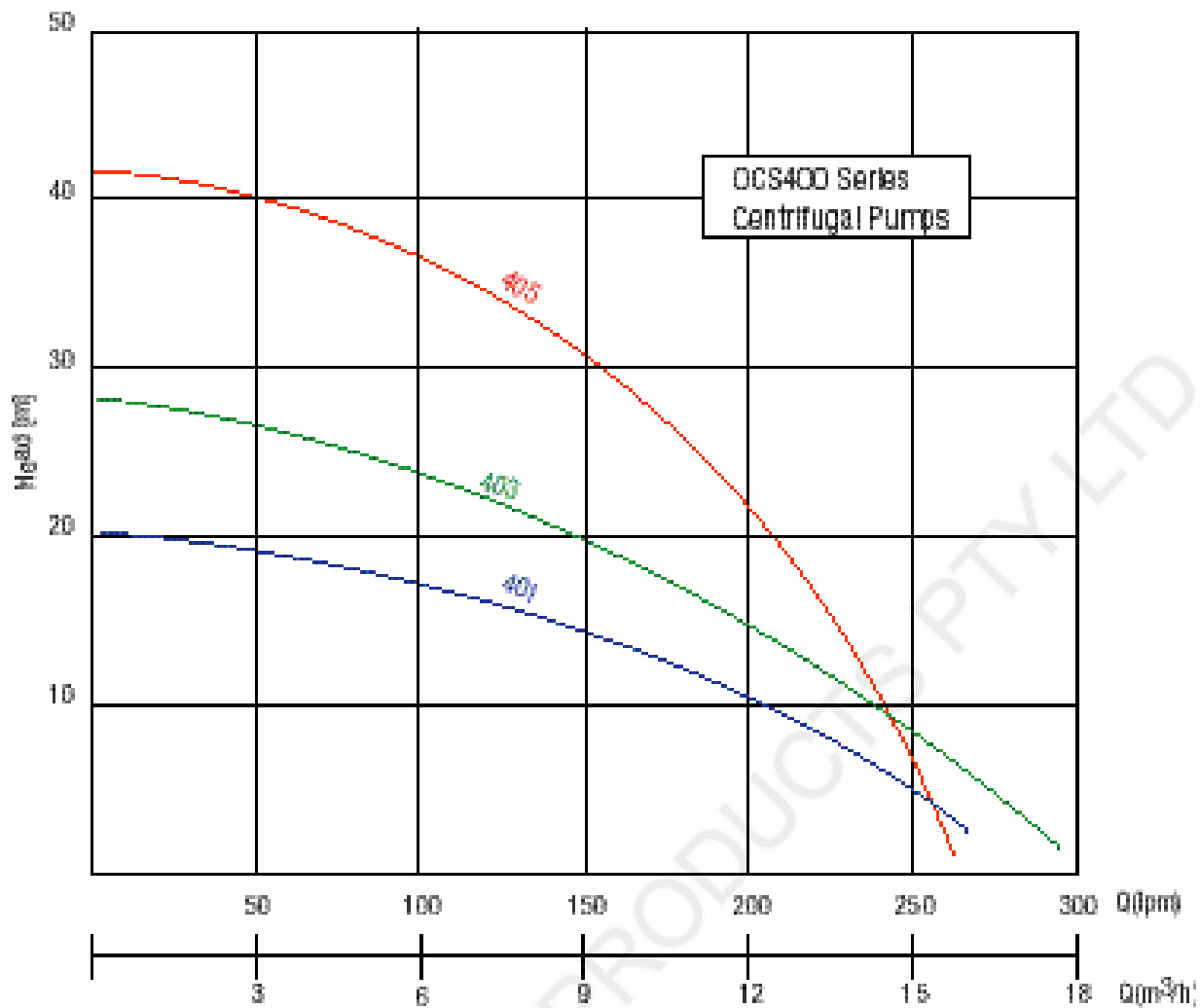
Electrical

All OCS400 series single phase pumps are supplied with a 2 m. long power lead with standard side entry 3 pin plug. All single phase motors are fitted with thermal overload protection with automatic reset after the pump motor cools down. Three phase pumps must be fitted with external motor protection by the user. If thermal overload continues to trip there is a service problem with the pump which should be corrected before major damage can occur. These include fouled impeller, jammed pump, blown fuse, float switch not operating, motor burnt out.

Onga PTY LTD recommends that an earth leakage or residual current protection device be fitted to all installations.

Pump should not be connected to other than the rated voltage.

OCS400 Series Performance Curves



TECHNICAL DATA - OCS400 SERIES

MOTOR

Insulation Class: B Protection Class: IP55 Continuous duty.

Single phase version: 220V~240V - 50 Hz - 2 pole

Permanent split capacitor.

Standard power: 0.9 kW~2.0 kW

Overload protection fitted to all single phase motors.

GENERAL

No solids or suspended fibres

Effective working temperature 80° C

MATERIAL OF CONSTRUCTION

Volute Casing, Impeller, Baffle AISI304 AISI316 (OCS4031)

Motor Shaft AISI420 AISI316 (OCS4031)

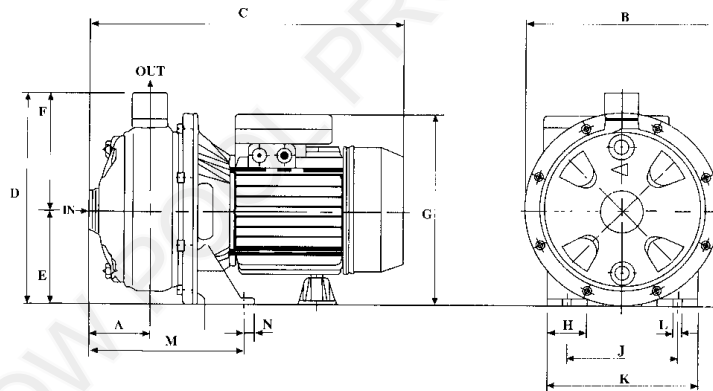
MECHANICAL SEAL

Stationary Face Ceramic

Rotating Face Resin Impregnated Carbon Graphite

Spring Stainless Steel

DIMENSIONS



Pump Type	Dimensions (mm)													Weight (Kg)
	A	B	C	D	E	F	G	H	J	K	L	M	N	
OCS401	52	214	350	230	106	124	236	39	120	158	10	147	13	12
OCS403	52	214	350	230	106	124	236	39	120	158	10	147	13	12
OCS405	52	236	392	254	122	132	278	39	140	180	10	147	13	21

Specifications								
Model	Motor					Port / Flange BSP F		Impeller Diam. mm
	Volts	Phase	kW	HP	Run Amps	Suction	Discharge	
OCS401	220 - 240	1	0.9	1.2	5.4	1¼"	1"	132
OCS403	220 - 240	1	1.1	1.5	7.3	1¼"	1"	155
OCS405	220 - 240	1	2	2.7	11.2	1¼"	1"	179

TECHNICAL DATA - OCS500 SERIES

MOTOR

Insulation Class: B Protection Class: IP55 Continuous duty.

Three phase: 400V ~ 415V - 50Hz - 2 pole

Standard power: 4.0kw

GENERAL

No solids or suspended fibres

Effective working temperature 80° C

MATERIAL OF CONSTRUCTION

Valuted Casing, Impeller, Baffle AISI304

Motor Shaft AISI420

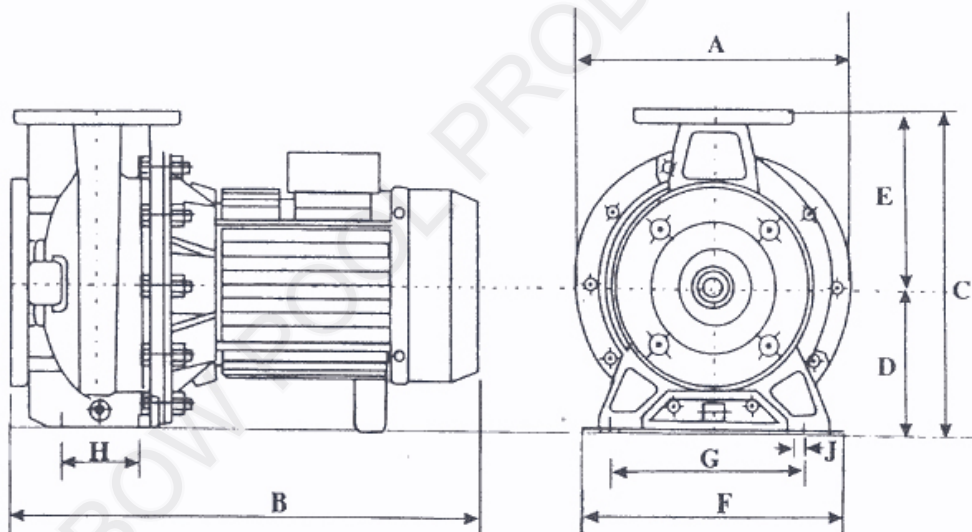
MECHANICAL SEAL

Stationary Face Ceramic

Rotating Face Resin Impregnated Carbon Graphite

Spring Stainless Steel

DIMENTIONS



Pump Type	Dimensions (mm)									Weight (Kg)
	A	B	C	D	E	F	G	H	I	
OCS5053	295	492	340	160	180	492	190	70	15	46

Specifications										
Model	Motor					Pump				
	Volts	Phase	KW	HP	Run Amps	Nominal Casing Bore		Port/Flange BSP F		Impeller Dia. mm
						Suction	Discharge	Suction	Discharge	
OCS505	415	3	4.0	5.5	7.4	50mm	32mm	2"	1 1/4"	175

TECHNICAL DATA - OCS800 SERIES

MOTOR

Insulation Class: B Protection Class: IP55 Continuous duty.

Three phase: 400V ~ 415V - 50Hz - 2 pole

Standard power: 5.5 kw ~ 7.5 kw

GENERAL

No solids or suspended fibres

Effective working temperature 80° C

MATERIAL OF CONSTRUCTION

Valuted Casing, Impeller, Baffle AISI304

Motor Shaft AISI420

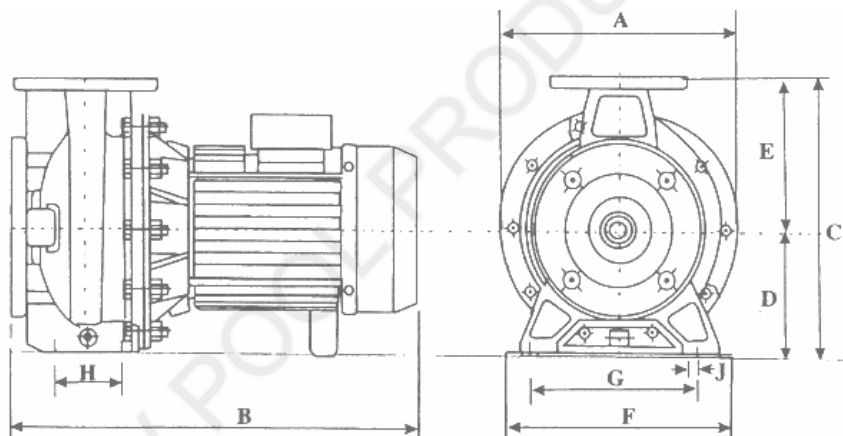
MECHANICAL SEAL

Stationary Face Ceramic

Rotating Face Resin Impregnated Carbon Graphite

Spring Stainless Steel

DIMENTIONS



Pump Type	Dimensions (mm)									Weight (Kg)
	A	B	C	D	E	F	G	H	I	
OCS8043	244	554	340	160	180	265	212	70	15	60
OCS8053	244	554	340	160	180	265	212	70	15	68

Specifications										
Model	Motor					Pump				
	Volts	Phase	KW	HP	Run Amps	Nominal Casing Bore		Port/Flange BSP F		Impeller Dia. mm
						Suction	Discharge	Suction	Discharge	
OCS804	415	3	5.5	7.5	8.5	80mm	65mm	3"	2 1/2"	140
OCS805	415	3	7.5	10.5	15.2	80mm	65mm	3"	2 1/2"	170

OCS500, OCS650 & OCS800 Series Performance Curves

