

Hydraulic Projects

Data Sheet PC25_d

HYDRAULIC POWER UNIT DC CONSTANT RUNNING 2.5 LITRES PER MINUTE

Manufactured specifically for marine autopilot steering applications the versatile PC25 constant running pumps use a powerful fan-cooled 4 brush motor to deliver up to 2.5 litres per minute. Designed to be used for heavy duty applications on larger yachts or commercial craft these units come fitted with pressure compensated flow controls, relief valves and cylinder lock valves as standard.

Description

Once the hard-over time has been set via the speed control, steering is achieved by switching a double acting solenoid valve. The motor and precision gear pump are protected by a pre-set relief valve and toughened check valve components positively lock the steering on course. The unit comes fitted with an 0.75 litre aluminium oil tank.

Application

Designed specifically for the marine autopilot market, these 12V and 24V D.C. pumps are used on the larger sailing craft or commercial vessels. They can be used with single or twin double acting rams. They can also be used with balanced or unbalanced cylinders and pressurized systems.

Features

- 12V 405 watt and 24V 550 watt fan cooled motors.
- Adjustable pressure compensated flow control.
- Integral Relief valve
- Low power consumption for size.
- Quiet operation.
- Compact.
- Replaceable brushes.
- Service kits.
- Easy installation.
- Cylinder and hose kits supplied to suit.



Technical Data

Performance

Pump output	0-2.5 lpm
Relief valve pressure setting	58 bar
Temperature rating minimum	-20°C
Temperature rating maximum	+55°C
Max ram size (10-12 sec. hard-over)	500cc

Electrical

	PC25 12	PC25 24
Motor voltage nominal	12Vdc	24Vdc
Motor output watts	405w	550w
Max continuous current	34 amps	23 amps

Motor connection	2 core flying lead 6.0mm ²
Solenoid coil power (continuous)	24 watt
Solenoid coil connection	DIN 46350 plug
Solenoid coil protection	IP65
Solenoid coil cable Ø (not supplied)	6 - 8mm
Solenoid A energized	Pump to A port
Solenoid B energized	Pump to B port

Materials

Main body - Aluminium	BS1490
Manifold - Cast Iron	BS1452-250
Tank - Aluminium	LM25TF
Seals	Nitrile & PTFE
Weight	8.2 Kgs

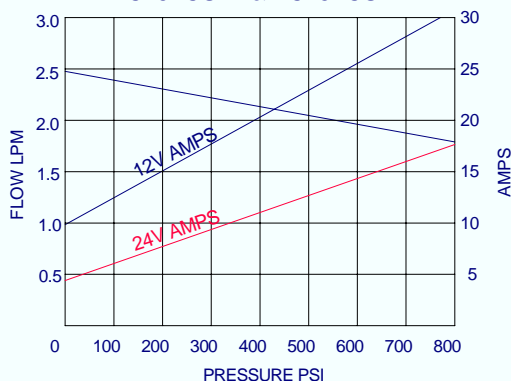
Environmental protection IP44
Suitable only for 'under-deck', dry environment mounting.

Recommended Oil

Mineral based hydraulic	ISO VG10 to ISO VG42
Ambient below 0 deg	ISO VG15
Ambient 0 to 35 deg	ISO VG22
Ambient above 35 deg	ISO VG32
Tank capacity	0.75 litres

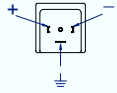
TYPICAL PERFORMANCE
WITH FLOW CONTROL SET TO MAXIMUM

PC25FCU12 & PC25FCU24

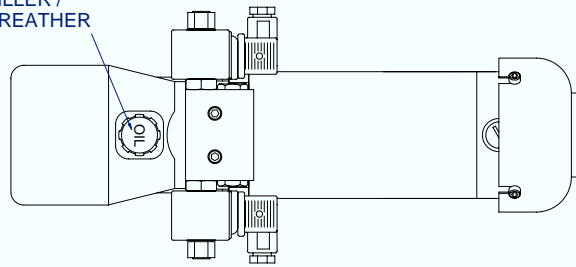


INSTALLATION DETAILS

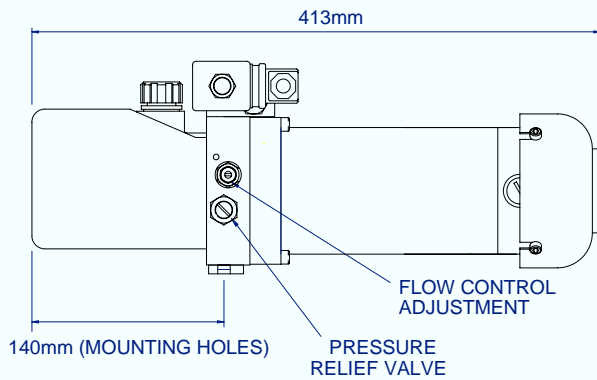
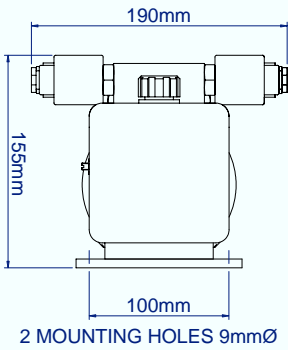
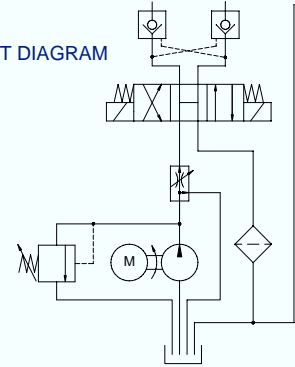
COIL WIRING DIAGRAM



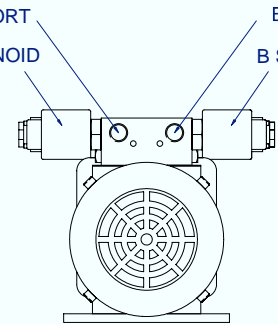
FILLER / BREATHER



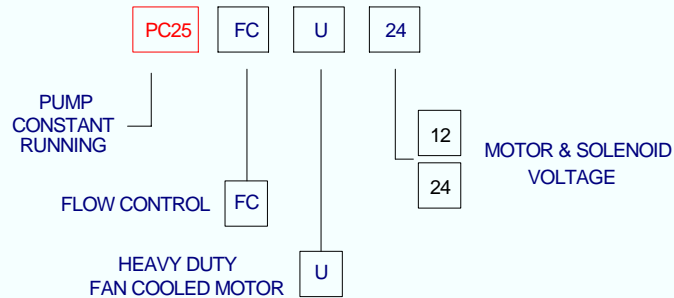
CIRCUIT DIAGRAM



A PORT
A SOLENOID B PORT
B SOLENOID



ORDER CODE



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