

# Hydraulic Projects

Data Sheet PR\_d

## HYDRAULIC POWER UNIT DC REVERSING

Manufactured specifically for marine autopilot steering applications, the range of gear pumps are suitable for 12 or 24 volt systems. Innovative development over the last 25 years has produced the latest generation of quiet, efficient pumps. Every pump is fitted with check valves as standard and can be used with balanced or unbalanced cylinders. Selected by leading autopilot manufacturers the compact versatile pumps can steer vessels up to 18 metres.

### Description

The reversing pumps are available in 0.6, 1.0, 1.5, 2.0 and 2.5 litre per minute flows. The gear form has been selected to give minimum noise with maximum performance up to 55 bar. Pilot check valves fitted as standard; these pumps come with a protective coating designed especially for the salt laden atmosphere of the marine environment.

### Application

Designed specifically for the marine autopilot market, these 12 or 24 volt d.c. pumps are used on sailing or powerboats. They can be used with balanced or unbalanced cylinders. Due to their low noise they can be used for other applications such as window and door openers. Internal relief valves are a further option.

### Features

- 5 pump sizes.
- 12 and 24v d.c. option.
- Low power consumption.
- Quiet operation.
- Zero back drive.
- Compact.
- Relief Valve option
- Replaceable brushes.
- Service kits available.
- G1/4 (BSP) ports (NPTF adapter kits available).
- Cylinders and hose kits supplied to suit.
- Easy installation.



### Technical Data

#### Performance

Maximum pressure	55 bar
Temperature rating minimum	-20°C
Temperature rating maximum	+55°C

#### Electrical

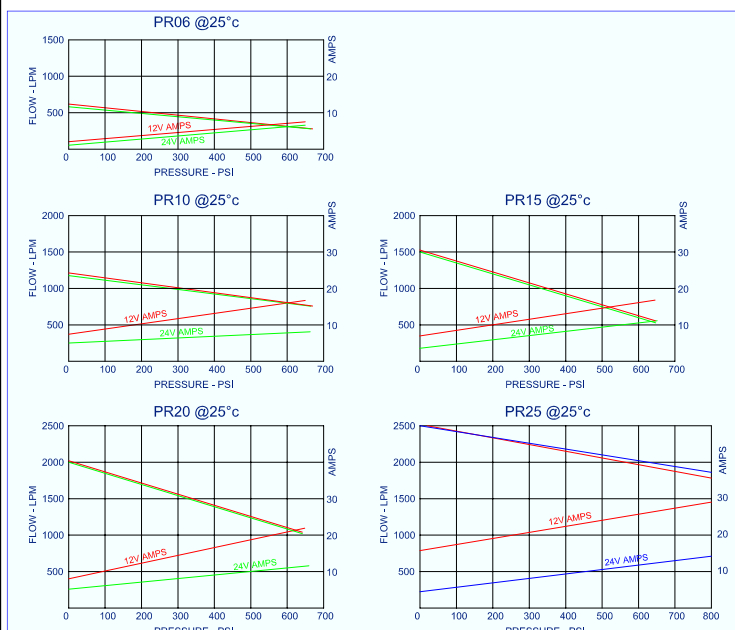
Motor voltage	12Vdc or 24Vdc
Motor output	100 watt
Motor output 24-180	180 watt
Maximum cont. current 12V	22.5A
Maximum cont. current 24V	18A
Maximum cont. current 24-180	11A
Rotation	Reversing
Orientation + to red	P to A
Protection	IP55
Connection	2 core flying lead

#### Recommended Oil

Mineral based hydraulic	ISO VG10 – ISO VG42
Ambient below 0 deg	ISO VG15
Ambient 0 to 35 deg	ISO VG22
Ambient above 35 deg	ISO VG32

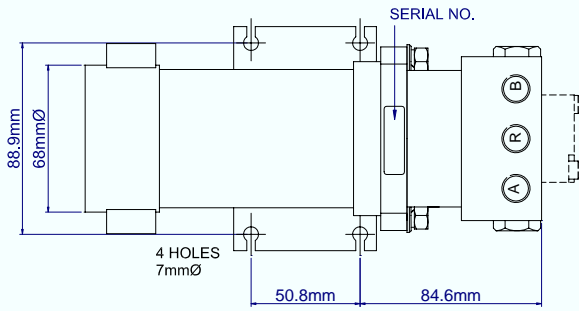
#### Materials

Body Aluminium	BS1490
Seals	Nitrile
Body coating	SP230
Weight	PR10 3kg PR25 4kg

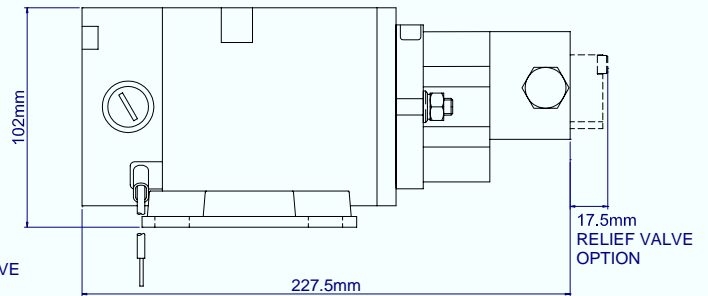
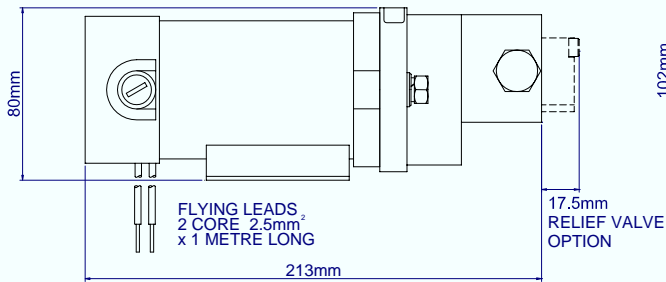
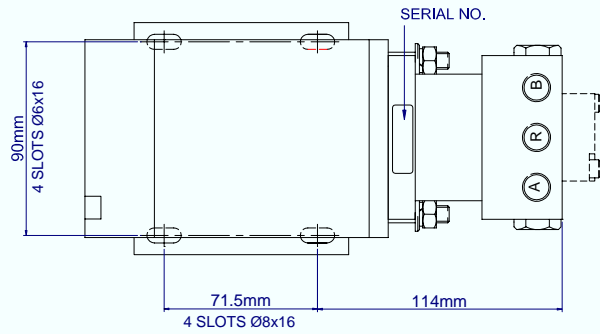


## INSTALLATION DETAILS

**PR06 PR10 PR15 & PR20 (100W)**



**PR25 (180W)**



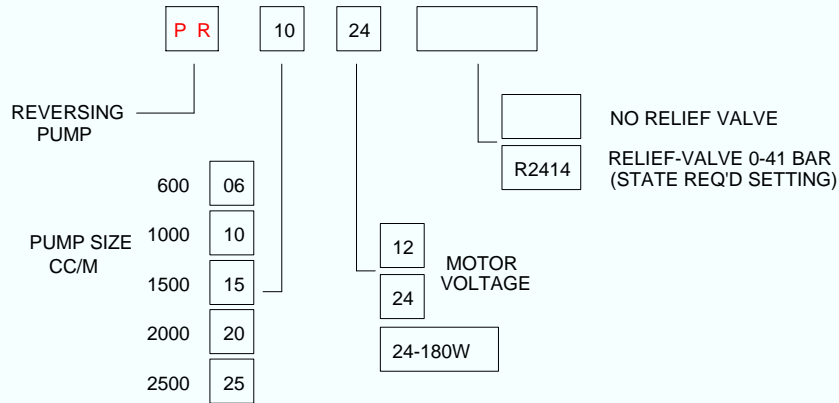
RED LEAD POSITIVE -  
PRESSURE TO 'A' PORT

A & B = CYLINDER PORTS  
G1/4 (BSP) PARALLEL

R = RESERVOIR PORT  
G1/4 (BSP) PARALLEL

**WARNING!**  
1) EMC PROTECTED - DO NOT FLASH TEST  
2) HOT MOTOR COMPONENTS

## ORDER CODE



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