

Hydraulic Projects

Data Sheet HS_d

HS50 HYDRAULIC STEERING SYSTEM

The HS hydraulic steering systems are designed specifically for marine secondary steering applications. They are available with either a 2.5lpm reversing pump or two sizes of constant running pumps. The systems are protected by integral relief valves. A solenoid clutch is also fitted so that manual mechanical steering can be used.

Description

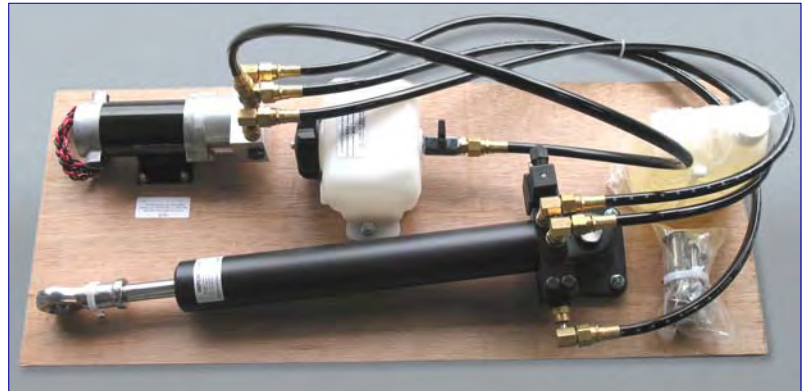
The hydraulic steering systems comprise of a compact cylinder which includes the relief valves and solenoid clutch, a reversing or constant running pump, marine hoses, fittings and a reservoir. The system comes filled ready for installation. A choice of pump sizes can be selected with single or twin cylinders to give a range of hard-over times and thrusts.

Application

Designed specifically for the marine autopilot market where they can be used on sailboats and power-craft with displacement and fast planing hulls. The pumps and cylinders can be matched to give the hard-over times and thrusts to suit the application.

Features

- Shorter than conventional cylinders.
- Solenoid bypass valve.
- Integral relief valves.
- 12 or 24V options.
- Installation kits available.
- Fully serviceable.
- Quiet operation.
- Reversing pump option.
- Two constant running pump options.
- Twin cylinder options
- Adjustable or non adjustable rod-ends
- Marinised hoses and fittings.
- Low maintenance.
- Replaceable brushes.
- Low power consumption.



Technical Data

For Pump details refer data sheets PRd, PC25d & PC45d

Performance

Thrust at 62 bar	1080 kgs
Stroke of cylinder	305 mm
Volume of cylinder	553 cc
Relief valve setting	62 bar
Temperature rating minimum	-20°C
Temperature rating maximum	+65°C
Hard over time typical	See graph
Protection	IP44

Electrical

Clutch Coil power continuous	12 watt
Connection	DIN 43650
Protection	IP65
Cable Ø (not supplied)	6 - 8mm

Oil

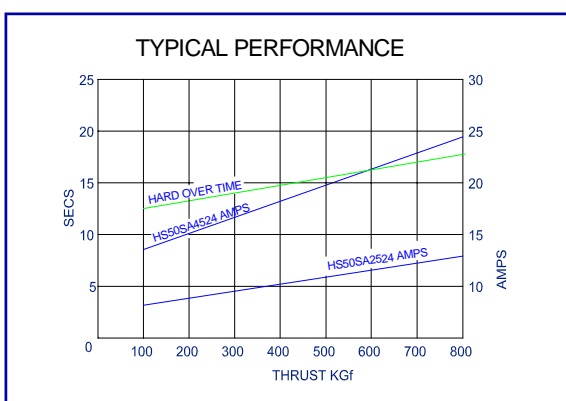
Recommended	Q8 Dynobear 10
Equivalent	Mineral based hydraulic Min. ISO VG10 Max. ISO VG40

Materials

Body aluminium	Aluminium BS1490
Piston rod	Stainless steel chrome plated
Seals	Nitrile & PTFE
Body Protection	SP270

Weights Typical

HS50SA2524	14.0 Kgs
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TYPICAL INSTALLATION DETAILS



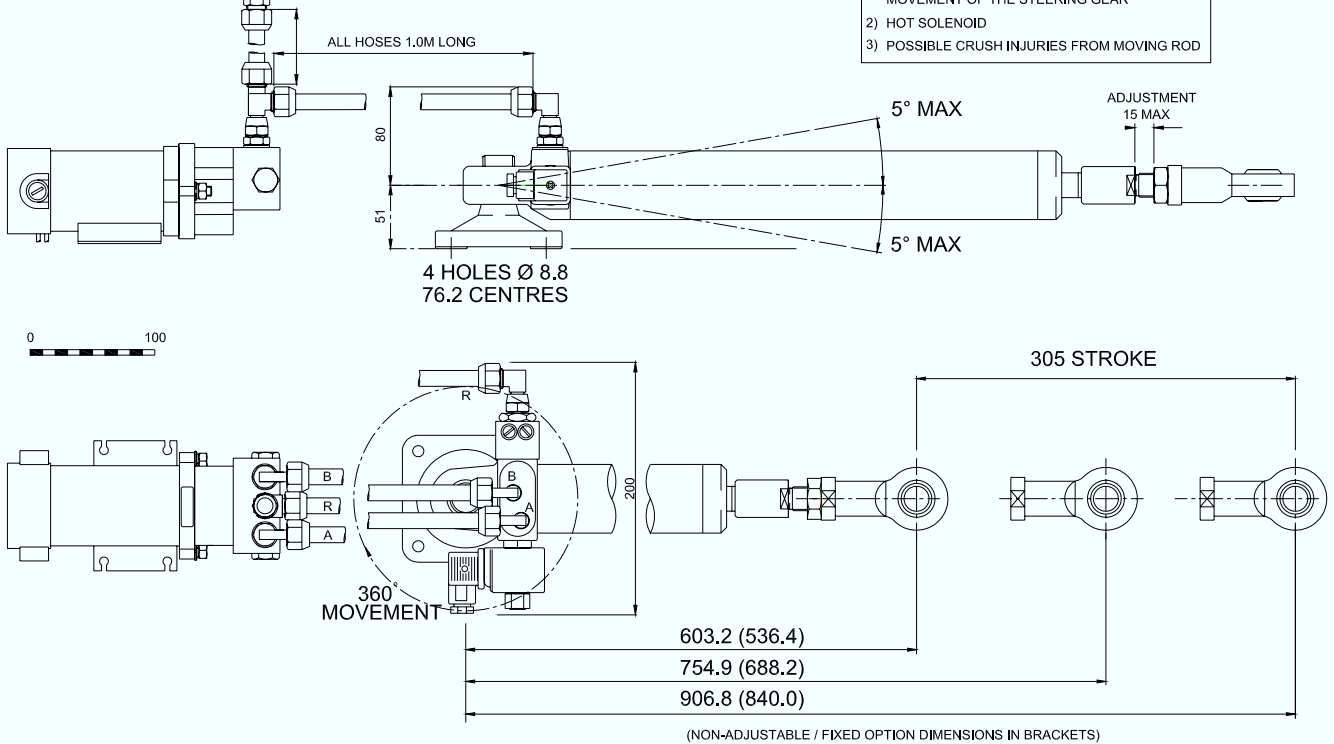
REVERSING PUMP ILLUSTRATED
REF DATA SHEET PRd

FOR CONSTANT RUNNING PUMPS
REFER DATA SHEETS PC25d & PC45d

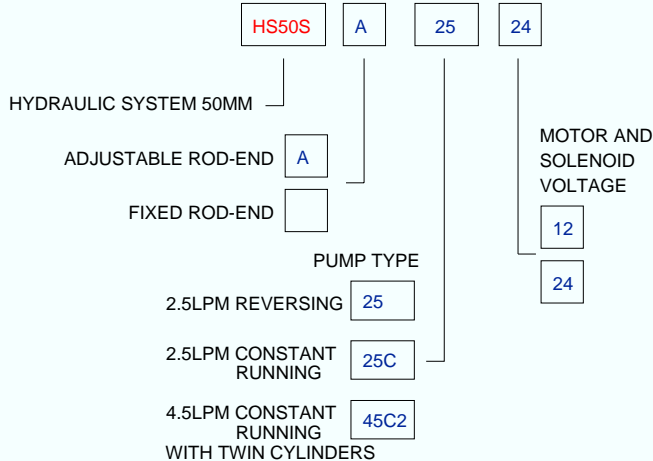
FOR FULL INSTALLATION DETAILS
REFER TO HS50 MANUAL HS50m

WARNING

- 1) THIS EQUIPMENT IS FITTED WITH RELIEF VALVES AND WHEN THE UNIT IS OVERSTRESSED THE CYLINDER WILL MOVE CAUSING INVOLUNTARY MOVEMENT OF THE STEERING GEAR
- 2) HOT SOLENOID
- 3) POSSIBLE CRUSH INJURIES FROM MOVING ROD



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