

POWERKIT-M12

Basic kit comprising PSM-50 helm unit plus 12VDC load-sensing pump.

Can be fitted to suitable existing cylinders, or to any of the following:-
211BH-XT outboard cylinders or:-
210,216,213 bracket-mount inboard cylinders or any HD series cylinder.

**Not recommended for 211BH, 411BH or 216FM cylinders due to high pressure operation under power steering.*

***Note - hoses not included in the basic kit. Hoses can be supplied cut and pre-assembled to suit your size requirements.*

POWERKIT-M12-OB
Complete Outboard kit comprising PS-M50 helm unit, model 211BH-XT High performance cylinder, 12VDC load sensing pump.

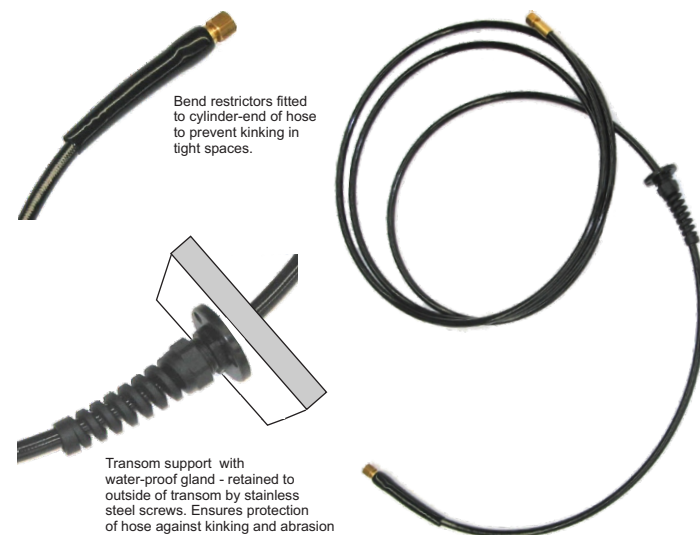
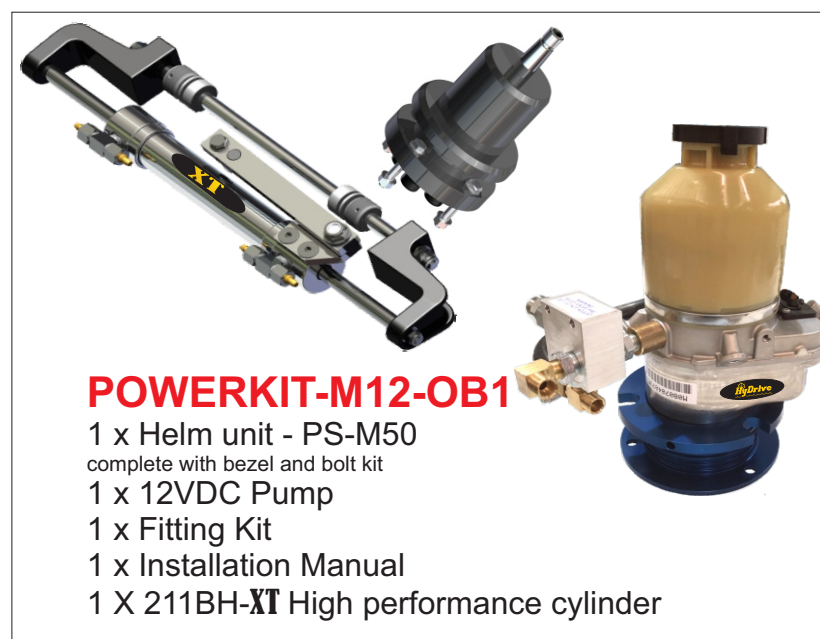
**Note - hoses not included in the kit. Hoses can be supplied cut and pre-assembled to suit your size requirements.*

Custom-made hoses
for use on the steering kit can be provided to suit your requirements - with or without the transom fittings and bend restrictors.

The hoses are supplied with O-ring sealed fittings to suit the fittings supplied with the kit. Hoses are supplied singly for more versatile fitting and minimum wastage.

**SEE PRICE LIST FOR
DETAILS ON HOW TO
ORDER HOSES**

For further information contact:-
HYDRIVE ENGINEERING PTY LTD
59 Wingfield Road, Wingfield, SA 5013
Tel 08 82431633 Fax 08 84457938



For multiple engine installations you should discuss the details with your dealer to ensure correct selection of the safest and most suitable combination of cylinders

12 VOLT DC POWER STEERING



HyDrive

Powerful, Efficient and Economical

ELECTRO HYDRAULIC STEERING FOR OUTBOARDS

12VDC POWER STEERING (EPS) TO SUIT ANY BRAND OR HORSEPOWER OUTBOARD!

The HyDrive **POWERKIT-M12** is designed to provide state-of-the-art Electro-hydraulic power steering to handle large horsepower or multiple outboard engines. Tried and proven for over 10 years on extreme performance boats, we now offer the latest generation of helm units with a smaller footprint which are lighter and give smoother control.

The system can be used to upgrade existing steering, or can be installed as a complete steering unit. It is **not** a servo-system therefore any movement on the wheel is instant and without delay - an absolute-must on high speed and high performance vessels. Other **servo-type** systems on the market provide much less direct control and are less reliable in the long run. They use a manual helm to activate a follow-up valve and pump. As such there are more components and more lost motion.

The heart of the package is the microprocessor-controlled pump unit which senses loads and delivers pressures up to 1000psi to handle the most powerful applications with finger-tip control on the wheel with in turn delivers **INSTANT** steering response and without any delay.

The pump unit comes as a package with a compact and powerful single station steering helm unit which delivers 50cc per rev giving very direct steering with a turns ratio on a **210BH-XT** outboard steering cylinder of only 3 turns lock to lock.

This is the basic start-up kit:-

POWERKIT-M12

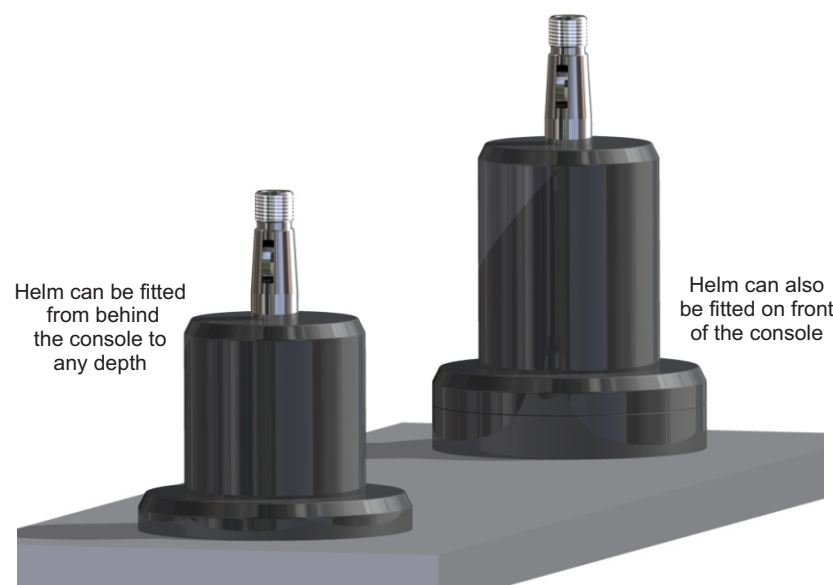
Comprising:-

1 x HD12VDC PUMP UNIT

1 X PS-M50 HELM UNIT

This kit must be added to one of our steering cylinders, which are available to suit all types of outboards and engine wells.

Models also available for stern-drives and inboard rudders!



HD12VDC
PUMP UNIT



PS-M50
Compact Helm unit

OPTIONS

Fitting an Autopilot is simple using a 12VDC **2-directional** autopilot pump connected into the circuit. The pump size should be selected based on the size of the cylinder fitted and for outboard steering should be 600cc per minute to achieve best results. Hydrive can offer a suitable pump if not part of your autopilot system.

When Should I Consider Power Steering Instead of Manual Hydraulic?

HyDrive's impressive range of Manual Hydraulic Outboard Steering is ideal for most applications, but from time to time you will come across applications for this type of Power Steering. Such things as large horsepower boats that require small turns ratio's for little effort, or simply to match offers by competitors. The system can be installed as a complete unit, or used to upgrade an existing HyDrive manual hydraulic unit. Care must be used however to ensure that the old cylinder is in good condition as the power steering unit outputs 1000psi. Steering lines need to be upgraded to high pressure flexible hoses - and NOT nylon tubing. Ideal for Single or Dual Stations, Single or Dual cylinders and for use with autopilots.

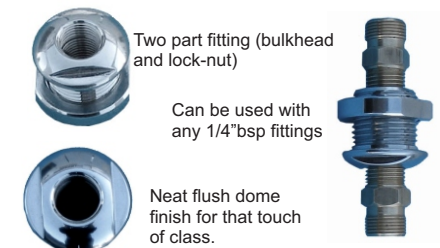
Simple to install? - YES
Full manual backup if power fails? - YES
Reliable? - YES
Competitive price? - YES



Typical 12VDC 2-directional autopilot pump

PROFESSIONAL TOUCH

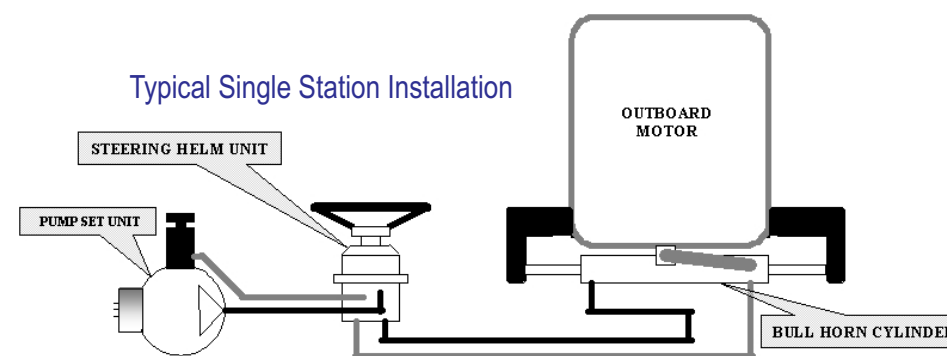
Bulkhead or Transom fittings are available to help complete the installation through any bulkhead, engine well or transom. These attractive and smooth chrome plated brass fittings give a high class finish to any hole required to carry hoses. They act also as saddles to avoid abrasion of hoses as they pass through open holes.



Model 211BH-XT

High performance outboard steering cylinder with extra security. Built from robust stainless steel, bronze and chrome-plated marine brass!

Other models are available to suit outboard, sterndrive and inboard steering applications.



SAFETY

With HyDrive steering equipment, safety always comes first. In case of power failure to the electronic pump unit, the steering helm immediately and automatically converts to a manual hydraulic pump, ensuring that full control is maintained.