

Hybrid Feedback Control System

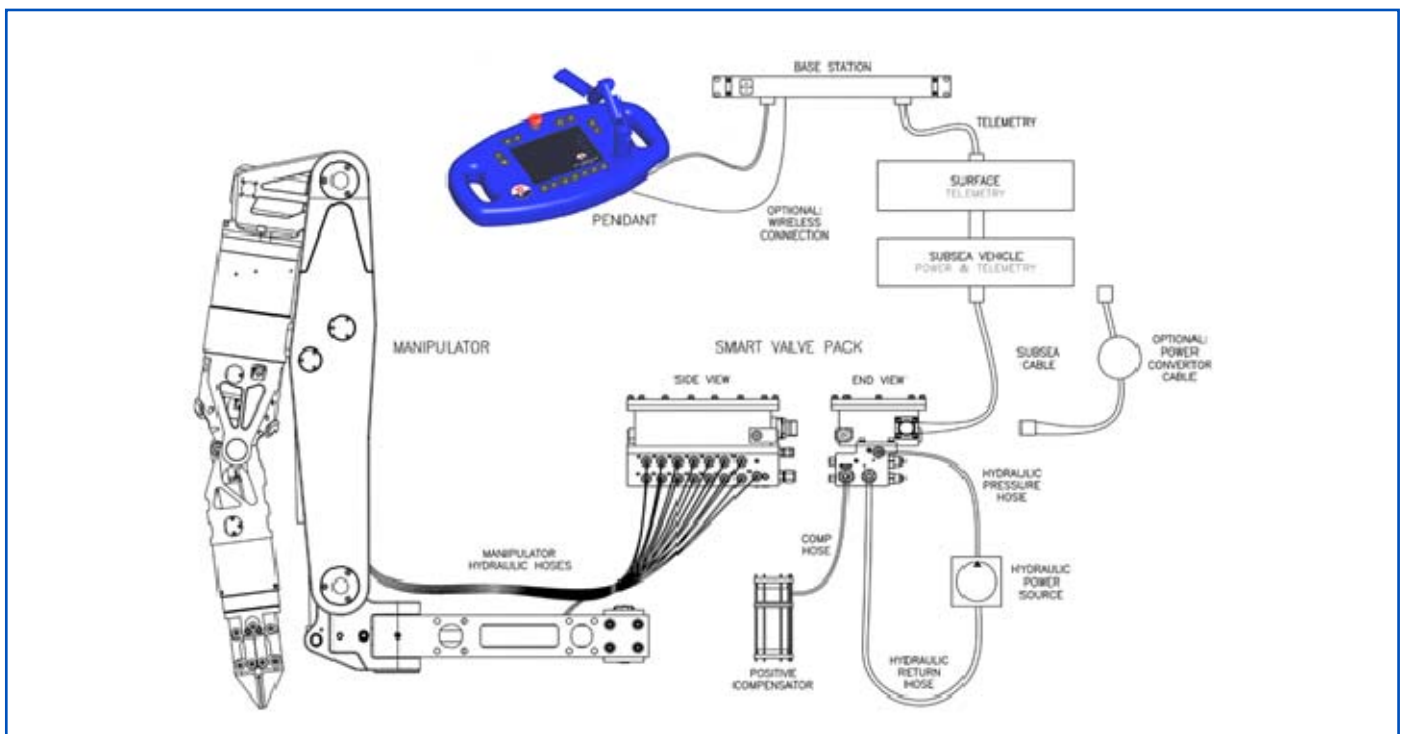
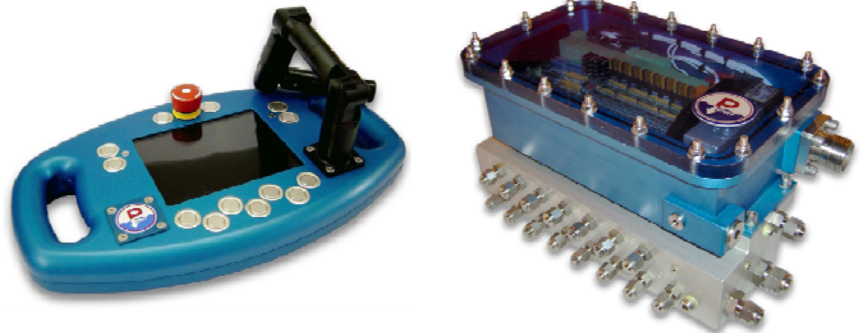
The PSS Hybrid Feedback Control System can upgrade existing manipulators and will provide the master slave performance of a servo manipulator, while providing the inherent reliability of a basic manipulator. This is a class leading control solution, not only from the operators view point in terms of performance and reliability but also in terms of through life costs.

The surface element of the PSS Hybrid Feedback Control System comprises a rugged ergonomic operator control pendant with backlit color TFT display. A robust miniature replica master arm that features proportional claw rotate grip control and a freeze/re-indexing button that ensures comfortable, intuitive manipulator operation, and a compact 1U rack mounting base station housing a low power computer and power supply.

The PSS Smart Valve Pack forms the heart of the subsea element of the PSS Hybrid Feedback Control System, and incorporates full diagnostic facilities.

Features

- Provides feedback level control on rate arms
- Intuitive user interface
- Rapid diagnostics
- Retrofit to most rate arms



Specifications

Options

Smart Valve Pack Features

Local Diagnostic LEDs:	Supply & Onboard Voltages, Comms, Status
Remote Diagnostics:	Supply & Onboard Voltages, Drive Currents Ambient Temperature, Water Ingress etc
Input Supply Protection:	Reverse Polarity, Limited Overvoltage, Spike
Output Drive Protection:	Active Overcurrent, Short Circuit

Electrical Power & Telemetry Requirement

Telemetry

Smart Valve Pack:	Half Duplex RS485
Pendant Base Station:	Half Duplex RS485 or RS232

Power Supply

Smart Valve Pack*:	Nominal 30V DC Smoothed/Unsmoothed/AC Required Static Power 12W, Typical Dynamic Power 12W-100W
Pendant Base Station:	100/230 V AC (Auto Select) 47-63 Hz 50W

AC Power Module (if required)

Electrical Input*:	Nominal 110V AC 50-60 HZ
Electrical Output to SVP:	Nominal 30V RMS AC

*Suitable protection is recommended at the power source to protect the cable to the SVP

Master Control Pendant Specification

Length:	380 mm (15 in.)
Width:	215 mm (8.5 in.)
Height:	45 mm (1.8 in.) Excluding Master Arm
Weight:	4.3 kg (9.5 lb)

Pendant Base Station Specification

Width:	19" Rack Mounting
Height:	1U-44.45 mm (1.75 in.)
Depth:	280 mm (11 in.)

AC Power Module Specification

Module is required only if a smoothed/unsmoothed DC supply is unavailable

Length:	160 mm (6 in.)
Width:	140 mm (5.5 in.)
Height:	70 mm (3 in.)

- Hydraulic supply hoses
- Power & Telemetry cable
- 110 V Power conversion module
- Alternative master arm tips
- SVP remote 5 function manifold for grabber
- SVP expansion-Additional SVP stations for tools etc
- Spares kit
- Radiation hardening
- Wireless master connection

Data Sheet: A001-350-072 issue 3

The specification details are illustrative for marketing purposes only. Actual equipment may be different as a result of product improvement or other reasons. Specific interface and performance information should be reconfirmed at time of order placement.

