

ATLAS POSITIONING CONTROL SYSTEM

ECO-FRIENDLY
HIGH PRECISION
MANIPULATOR



Descriptions

The Envirex Atlas PCS upgrade kit enables the operator to use an Atlas Manipulator with a Master Arm to operate with full position control. This upgrade ensures great manipulator control by combining servo hydraulics, sensor feedback and a manipulator master controller. The PCS kit increases the performance of the Atlas 7F to the same or higher level than competitive manipulator arms, as i.e. the T4 Manipulator Arm. The magnetic sensors offer a live position feedback to maximize precision and speed control.

The Kit is easily installed on any standard Atlas 7F and does not require any further adjustments or equipment for operation. All joints are operated by servo valves, while jaw and jaw rotation are proportionally controlled.

The system includes position visualization for the operator and the functionality of route planning, set limits and set speed/torque for increase operational security.

Critical operational performance such as load capacities, equipment reliability and easy maintenance procedures are not reduced or changed.

The system can be remotely operated from any onshore location and combines software features as A-B distance measures, auto functions and vibration feedback to support the operator.

Features

PCS Upgrade Kit:

- ▣ Height precision
- ▣ Feedback from joints / rotation
- ▣ Gamepad and pendant arm controller
- ▣ Master controller w/ large display and visualizing
- ▣ Master Arm can control both Atlas and T4 Manipulator
- ▣ Easily disassembled after work
- ▣ A – B distance measure
- ▣ Possible to expand functionality/library

Features

Atlas 7F Manipulator:

- ▣ High force, lift capacity - 250Kg
- ▣ Robust and reliable
- ▣ Cost efficient
- ▣ Low downtime
- ▣ Low leakage
- ▣ Unlimited tooling choice
- ▣ Maintenance friendly
- ▣ Low maintenance time and cost

SPECIFICATIONS

ATLAS POSITIONING CONTROL SYSTEM

General technical specification

| | |
|---------------------------------------|-------------------|
| Type | PCS V2 |
| Part number | 2202995 |
| Weight PCS (in air / Submerged) | 8 / 6 Kg |
| Weight Atlas arm (in air / Submerged) | 73/ 50 Kg |
| Dimensions (L x W x H) | 306 x 174 x 205mm |

Environmental data

| | |
|-----------------------|---------------|
| Design Lifetime | |
| Depth Rating | 3000msw |
| Operating Temperature | -10°C - +60°C |
| Storage Temperature | -30°C - +70°C |

Electrical data

| | |
|----------------|-------------------------|
| Supply Voltage | 24VDC |
| COMS | Ethernet-Modbus UDP/TCP |

Electrical interface

| | |
|--------|--|
| COM1 | Glenair FCR 5506-2008 Shell 20 |
| COM2 | Burton Shell 15 daisy chain for light/camera |
| COM3-7 | CRE BCR |

Hydraulic data

| | |
|---------------------------------------|---|
| Supply pressure (from ROV) | 210 Bar |
| Supply flow (from ROV) | 5-19 L/min |
| Fluid compatibility Supply (from ROV) | Mineral Oil VG 22/32 (10 - 200 cSt / optimal 25 - 35 cSt) |

ROV Hydraulic Interface

| | |
|-------------------------------|----------|
| ROV Supply with On/Off in PCS | 1/4" BSP |
| ROV Return | 3/8" BSP |
| ROV Compensator | 1/4" BSP |

Kit Includes

Servo Valve Pack
 Master controller w/Pendant arm
 Sensor package w/magnets
 Cables and brackets

Option – Atlas T4 Manipulator arm

