

TITANROB M701 7-F MINI MANIPULATOR

LOW WEIGHT
HIGH FORCE
RELIABLE



The TitanRob M701 is a seven-function hydraulic manipulator made of titanium and developed for Observation- and Light Work Class ROVs. It is a manipulator with enhanced characteristics of weight/power ratio and capabilities: by using titanium as main material, lower weight and more mechanical characteristics are achieved which allows for improved dimensioning.

Resistant, lightweight, and reliable; it's designed for heavy duty ROV works and robotics which require manipulation operations.

The manipulator can be operated by any low power (1kW) HPU and solenoids (x7) valve pack fitted in the ROV vehicle.

Typical Operations

- ▣ Observation - & Light Weight Work ROV
- ▣ Fish Farming
- ▣ Seabed exploration
- ▣ Seabed mining
- ▣ Robotics

Features

- ▣ Robust construction
- ▣ Low weight – 14 kg submerged
- ▣ Corrosion resistant materials
- ▣ High force
- ▣ Submersible to 3 000m seawater
- ▣ Service- and user friendly
- ▣ Cost effective
- ▣ Left and right hand configuration
- ▣ Low power consumption

SPECIFICATIONS

TITANROB M701 7F MINI MANIPULATOR

General technical specification

Type		TitanRob M701 7F Mini Manipulator
OEM		TitanRob
Envirex part no		2214906 (left hand)
Depth rating	M	3 000
Weight (in air / Submerged)	kg	17 / 14
Max reach	mm	1200
Lift at full extension	kg	40 @ 140bar
Max lift	kg	50 @ 140bar
Yaw grip	kgf	80
Yaw torque	Nm	30
Dimension stowed - LxWxH	mm	330 x 375 x 518
Operation temperature	°C	-5 to 55
Construction main materials		Ti6Al4V Titanium AISI 316 SS

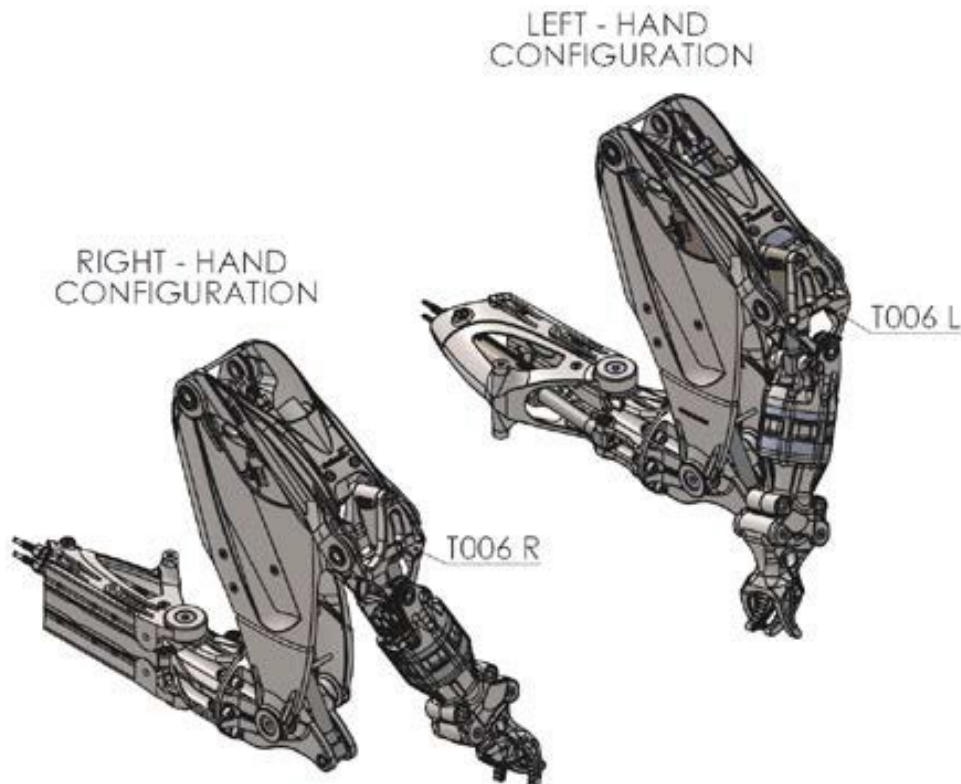
Functions

Shoulder Azimuth (yaw)	°	120 (+90 / -30)
Shoulder Pitch	°	105
Elbow Pitch	°	110
Wrist Pitch	°	120
Wrist Yaw	°	120
Jaw Rotate	°	360 continuous
Jaw Opening	mm	150

Hydraulic requirements

Working Pressure	bar	140 – 180
Test pressure	bar	240
Min Flow	l/min	1,5
Max fluid temp.	°C	55
Fluids		Mineral based oils (ISO 32, etc) ** HF-Fluids on request / consult supplier.

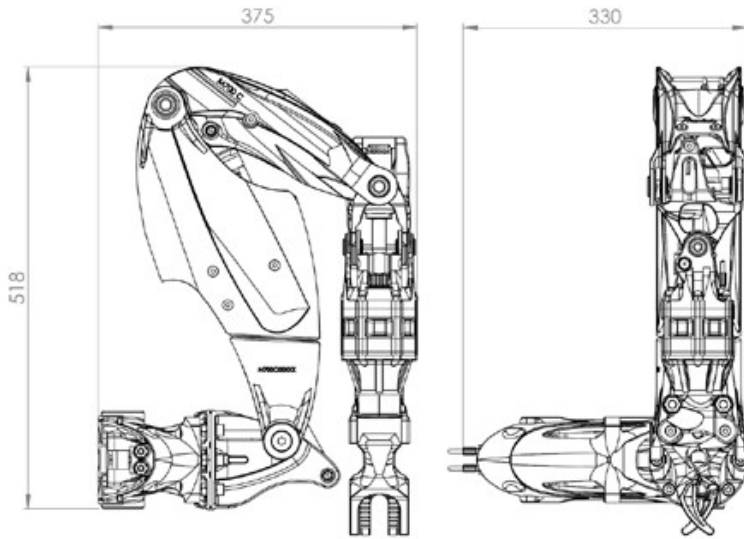
Configurations



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Dimensions



STOWED DIMENSIONS

