

## M701 7 FUNCTION LIGHT WORK CLASS TITANIUM MANIPULATOR

The M701 is a seven function hydraulic manipulator developed for Light Work Class ROVs. Resistant, lightweight and reliable, it's designed for heavy duty ROV works improving performance and operation. It could be rate operated by any low power (1kW) hydraulic power unit and a five function with drain/comp line valve pack fitted in the ROV vehicle



### M701 7 FUNCTION MANIPULATOR ARM SPECIFICATIONS

#### GENERAL SPECIFICATIONS

Depth rating (m)	3000
Weight in air (kg)	16,5 Kg
Weight in water (kg)	12,5 Kg
Maximum reach (mm)	1235 mm
Lift at full extension (kg)	40 @ 140 bar (2031 psi)
Maximum lift (kg)	50 @ 140 bar (2031 psi)
Jaw Grip (kgf)	80 kgf
Yaw Torque (Nm)	30 Nm
Dimensions stowed LxWxH (mm)	316 x 382 x 519 mm
Operating temperature (°C), limited by hyd. Oil specs	-5 / +55 °C
Construction main materials	Ti6Al4V Titanium/AISI 316 SS

**FUNCTIONS**

SHOULDER Azimuth (Yaw) (deg)	120° (+90° / -30°)
SHOULDER Pitch (deg)	104°
ELBOW Pitch (deg)	110°
WRIST Pitch	120°
WRIST Yaw	120°
JAW Rotate (deg)	360° continuous
JAW Opening (mm)	150 mm

**HYDRAULIC REQUIREMENTS**

Hydraulic Oil type	Mineral / Synthetic
Standard Hydraulic Oil	ISO 32 / 46 / 68
Viscosity grade	ISO 22 to ISO 150
Operating pressure (bar)	140 - 207 bar
Operating Flow Rate (lpm)	Min 1.1 lpm
Test Pressure (bar)	240 (3481 psi)
Max. Oil Temp. (C)	55 C
Oil cleanliness	20/16 (ISO 4406)

