

# HEAVY DUTY WORK CLASS ROV

## SYSTEM INFORMATION

The Triton XLR is a 125hp Hydraulic Work Class ROV with exceptional performance and reliability.

The XLR ROV is a compact and yet powerful system suitable for almost any application, from inspection, high performance survey and deepwater operations. The system offers interfaces for all underwater survey equipment and tooling.

### FEATURES

- Depth Rating 3,000 m
- Power 125 HP
- Speed 3.7 knots
- Payload 250 Kg
- Through Frame Lift 3,000 kg
- Aft Load Capacity 600 kg
- Bollard Pull 975 kg (fwd./ lat. / vert.)
- Heavy Lift Tophat TMS
- Tether 350 m.
- 7F Schilling T4 Manipulator
- 5F Schilling Rigmaster Grabber
- 20' Control Van, A60 DnV
- 20' Workshop Van, DnV



## ROV VEHICLE

<b>DEPTH RATING</b>	3000 msw
<b>POWER</b>	125 hp shaft
<b>SPEED</b>	
Forward	3.7 knots
Latitude	3.2 knots
Vertical	3.5 knots
Turning Rate	40° per second
<b>BOLLARD PULL</b>	
Forward	850 Kgf
Lateral	850 Kgf
Vertical	850 Kgf
<b>THRUSTERS</b>	Hydraulic, fixed pitch, Thruster guards optional
RPM.	2,000 (maximum)
Axial	4 x 380 mm (canted @45°)
Vertical	3 x 380 mm (canted @15°)
<b>SUBSEA HPU MOTOR</b>	4-Pole Induction
RPM	1800
Voltage	3-phase, 3000 VAC, 60 Hz
Configuration	Dual ended
Instrumentation	Ground fault, temperature, leak detect
<b>MANIPULATORS</b>	
Whittaker 5F (Port)	5 Degree of freedom, rate control
Max Reach / Lift @ Reach	1.35 m / 300 Kg
Schilling T4 (Starboard)	7 degree of freedom, precision control
Max Reach / Lift @ Reach	1.9 m / 122 Kg
Jaw Torque	170 Nm



## HYDRAULICS

**MAIN PUMP** 147 cc Variable Displacement

    System Pressure 240 bar 3500 psi

    Max. System Flow 230 lpm 61 gpm

**AUXILIARY PUMP** 45 cc

    System Pressure 210 bar 3060 psi

    Flow 70 lpm 19 gpm

**MANIFOLDS** External metering, cross-port relief, on all valve stations

    Main 12 x NG3

    Thruster 16 x M33 cartridge

(total housed in 2 manifolds) 2 X NG3

    Auxiliary (if fitted) 12 x NG3

    NG6 Auxiliary (if fitted) 2 x NG6 Pressure and Bidirectional Flow (user configurable)

    Hi Flow Auxiliary 2 x High Flow P/O Cartridge Check Valve

## INSTRUMENTATION

    Main and auxiliary pressure (mechanical and electrical gauges)

    Filter pressure differential (Thruster Case Drain)

    Reservoir levels (analogue)

    Water detectors in all manifolds

    Valve position and power indicators (visual onboard and on GUI)

## RESERVOIRS

    Main System 20 L (5.2 US gal/1,200 in3) including 6.6 L (1.7 US gal/400 in3) compensation

    Auxiliary System (if fitted) 7L (1.8 US gal/427 in3) including 3.3 L (0.85 US gal/200 in3) compensation

## FILL VOLUMES

    Main System 50 L (13 US gal), 15 psi compensation

    Auxiliary System 25 L (7 US gal), 5 psi compensation

## FILTERING

    Pressure 3 Micron Absolute, No Bypass

    Return 5 Micron Absolute, 50 psi bypass

    Case Drain 10 Micron Absolute, 15 psi bypass, back pressure alarm

    Water Separation CARDEV Filter

## OIL

    ISO rated, Shell Tellus

## TUBING

    Stainless steel seamless tubing

## FITTINGS

    Stainless steel Parker Seal-Lok & SAE Ports

## POWER REQUIREMENTS

Power Input	250kVA Nominal
Voltage	420, 440, 460, 480, 3-Phase, 60Hz

## ELECTRICAL & TELEMTRY

Junction Boxes	Core Termination
Pressure Vessel	1 x Control Can (Anodized Aluminum)
Protocol	ICEnet Distributed Network Control
Communications	CWDM Multiplexers on 1 Single Mode Fiber—6 Spare CWDM Channels
Serial Channels	7 ZLA x RS232/RS485 Spare (+ 5 ZLA optional + 8 ICE optional) @115 kbps
DC Power	5V, ±15V @ 85W for Can Equipment, 24V @ 100W for ICE Boards 24V @ 300W Cameras, 24V @ 300 W, 48 V @ 300 W
AC Power	120 V @ 3.5 kWfor DC supplies above, AC Instruments and lights
DC Power (Manifolds)	28V unsmoothed @ 750W

## COMPENSATION- ELECTRICAL

Relief Pressure	10 psi- 15 psi
Oil	Shell Tellus
Capacity	90L (23 gallons)
Junction Boxes	Core termination Auxiliary
Manifolds	Thruster x 2 Main Auxiliary NG 6
Instrumentation	Analog level sensors, 4- 20 mA Water Detect

## AUTO CONTROLS

Heading	± 2'
Depth	+ 0.1 m
Altitude	± 0.1 m
Pitch and Roll	± 5°
Heading Park	Maintains heading relative to manipulator
Failsafe	Maintains depth during emergency loss of telemetry

## PERIPHERAL EQUIPMENT User Configurable

Lights	6 x 250 W (+2 optional) 120 VAC, dimmable Controlled in pairs, 3 x breakers protect 4 lights each
Cameras	4 x NTSC or PAL, (+4 optional)
Pan & Tilts	1 (+1 optional) Hydraulic Proportional speed control Max Torque: 100 Nm75 ft-lbs
Altimeter	200 kHz, 30m/100m Range (If DVL fitted Altimeter typically removed)
Depth	± 0.1% FS Quartz Resonator
Imaging Sonar	675 kHz, 100 m range
Emergency RDF Beacon	Channel C 160.275 kHz pressure deactivated
Emergency Flasher	Pressure de-activated strobe

## ENVIRONMENTAL CONDITIONS

Air Temperature	-20 to 45°C
Water Temperature	4 to 32°C
Storage Temperature	-20 to 60°C
Humidity	Up to 100%
Saltwater	Designed for intermittent submersion
Vibration	0.5g Peak, sine-sweep 5 Hz to 55 Hz

## LOAD FRAME DESIGN SPECIFICATIONS

	Load Frame: TMS frame, vehicle frame, work package mount
DNV	Rules for Certification of Lifting Appliances
Lloyds Register	Lifting Appliances in a Marine Environment
ABS	

## TMS

Electrical Horsepower	10 HP
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## TETHER LINE SPEED

Empty to Full Drum	30m/min AVERAGE
Full Drum	45m/min MAXIMUM

## PAY OUT COUNTER

Digital Readout

## DEPTH DISPLAY

Digital Readout

## TETHER IN/OUT

Pilot operated foot pedals & pilot console switch control

## CONTROL

Controlled from pilot's console

## INSTRUMENT POW-

Controlled from pilot's console

## HYDRAULIC POWER

Controlled from pilot's console

## VIDEO CHANNEL

4 Composite Channels

## VEHICLE

ROV MFG	FORUM
IMCA-ROV CLASS	CLASS III
ROV P/N	XLR
ROV S/N	7
WEIGHT IN AIR	4,000 Kg
ROV LENGTH	2,730 mm
ROV WIDTH	1,700 mm
ROV HEIGHT	2,120 mm
SAFE WORKING LOAD	7,000 Kg
FRAME	Aluminum 6082T6 with SST Hardware
THRU-FRAME LIFT	3,000 Kg 6,614 lb
AUXILIARY LIFT	4 x padeyes provided with lift sling ass'y.
WORK PACKAGE MOUNTINGS	4 x 35 mm @ horizontal pin and socket Aft mounts also available

## TMS

TMS TYPE	4A
TMS S/N	115
TMS DIAMATER	1800 mm
TMS HEIGHT	2030 mm
TMS WEIGHT (AIR)	2,297 Kg
TMS SLIPRING MFG	MOOG Focal

## A-FRAME LARS

LARS MFG	Lawson
LARS S/N	SK1258A
LARS LENGTH	7,000 mm
LARS WIDTH	2,900 mm
LARS HEIGHT	850 mm
LARS WEIGHT	13,800 Kg

LARS DIST BETWEEN RAMS	2,300 mm
LARS OVERBOARD REACH	3,454 mm
LARS SWL ON STOPS	10,000 Kg

## WINCH

WINCH MFG	Lawson
WINCH S/N	SK1258C
WINCH SWL (TOP LAYER)	11,000 Kg
WINCH MAX LINE PULL	15,000 Kg
WINCH LENGTH	3,300 mm
WINCH WIDTH	2,900 mm
WINCH HEIGHT	3,200 mm
WINCH WEIGHT	12,000 Kg
WINCH UMB CAPACITY	3,000 m
WINCH UMB TYPE	Nexans RS427
WINCH SLIPRING MANUFACTURER	MOOG Focal
WINCH SLIPRING S/N	176-0824-05

LINE SPEED (MAX)	36 m/min
HPU MFG	Lawson
HPU S/N	260TM
HPU TYPE	TWIN 75 kW
HPU LENGTH	2,400 mm
HPU WIDTH	2,000 mm
HPU HEIGHT	2,420 mm
HPU WEIGHT	4,500 Kg

## PURGE CART

PURGE MFG	FORUM
PURGE CART LENGTH	1,800 mm
PURGE CART WIDTH	1,000 mm
PURGE CART HEIGHT	1,500 mm
PURGE CART DRY WEIGHT	1,000 Kg

## CONTROL VAN

CONTROL VAN CLASS	DNV 2.7.1
CONTROL VAN TYPE	20ft ISO 20' HC
CONTROL VAN S/N	CTXU 903996
CONTROL VAN EX TYPE	None
CONTROL VAN LENGTH	6,100 mm
CONTROL VAN WIDTH	2,450 mm
CONTROL VAN HEIGHT	2,600 mm
CONTROL VAN WEIGHT	5,500 Kg

## WORKSHOP VAN

WORK VAN CLASS	DNV 2.7.1
WORK VAN TYPE	20ft ISO 20'
WORK VAN S/N	BNSU 207249
WORK VAN EX TYPE	None
WORK VAN LENGTH	6,100 mm
WORK VAN WIDTH	2,450 mm
WORK VAN HEIGHT	2,600 mm
WORK VAN WEIGHT	5,500 Kg