



**110 TON
BOLLARD PULL**
Offshore & Anchorhandling tug

State-of-the-art, reliable, optimised performance

Since the foundation in 1918, MULLER has been building on expertise, reliability and inventiveness in the maritime business. With specialised marine equipment, we can offer you a tailored fit competitive towage service for your specific needs. MULLER performs core activities such as Harbour assistance, Coastal & Deep-sea towage, salvage and Heavy-lift & Transport. MULLER is owner & operator of inland & seagoing tugs up to 110 tons BP, seagoing ballastable heavy-lift pontoons up to 16.500 tons DWT, it's own harbour and yard in Dordrecht. Our crew is the driving element behind all those resources, with know-how, no-nonsense mentality, experienced and utmost dedication to offer extensive support to the offshore and marine industry.



EN AVANT 30

AHT Deepsea, FiFi2, Salvage & Escort



GENERAL INFORMATION

Year of construction	11/2011
Builder	Astilleros Armon Vigo, S.A. Pontevedra, Spain
Build type	ASD, FiFi 2, Escort, Deepsea, AHT & Salvage tug
Class	Bureau Veritas
Classification	Unrestricted Navigation. I \otimes HULL \otimes MACH Tug, Escort tug, Fire fighting ship 2, Oil recovery ship \otimes AUT-UMS, \otimes AUT-PORT, \otimes SYS-NEQ-1, INWATERSURVEY
Port of registry & Flag	Dordrecht, The Netherlands
IMO	9597317
Callsign	P B P T

MAIN PARTICULARS

Length o.a.	40.70 m
Breadth mld/o.a.	14.40 / 15.10 m (incl. D-fenders)
Depth	6.90 m
Draught min/max	5.50 / 6.30 m
Gross/Nett tonnage	927 GT / 278 NT
Displacement empty/full	1476 / 2015 T
Lightship weight	1274 T

PERFORMANCES

Bollard Pull cont. / max.	110 / 112 T
Speed	14,3 knots

PROPULSION SYSTEM

Main engines	2 x MAN 9L 27/38
Total power	8.950 hp (6.570 kW) at 800 rpm
Azimuth Thrusters	2 x SCHOTTEL, type SRP3030 CPP
Propellers	2 x 3400 mm controllable pitch
Bow Thruster	1 x SCHOTTEL 450 kW

AUXILIARY EQUIPMENT

Auxiliary Engine sets	2 x MAN D2876 LE301, each 345kW @ 1500 rpm
Emergency/harb. set	1 x MAN D2866 LXE20, 177kW @ 1500 rpm
Shaft Generators	Siemens Electronic 250kW 400V 50Hz
FW maker	2,5m ³ /day basis Rev. Osmosis system

DECK LAY-OUT

Free Deck Space	185m ² - well suited for Anchors and Materials.
Deck crane	1 x PALFINGER PK18500MD, SWL 940kg @ 13,10 m
Towing aft-winch	IBERCISA Hydraulic driven waterfall w. split drum Drum 1 1 x 1000m IWRC \varnothing 64mm Drum 2a 1 x 400m IWRC \varnothing 64mm Drum 2b 1 x 400m IWRC \varnothing 64mm Pull 110T / Break Holding 250T
Capacity aft-winch	Pull 110T / Break Holding 250T
Duty on towing	95T line pull at 0-14m/min, 220T brake load.
Spare tow wire winch	IBERCISA Hydraulic driven winch, 8T Pull, placed underdeck, fitted wire 1 x 1000m IWRC \varnothing 64mm
Towing hook aft	1 x FERRI disc type 1514, SWL 130T
Towing/Escort hook bow	1 x FERRI disc type 1514, SWL 130T
Towing/Escort winch bow	2 x ROLLS ROYCE Hydraulic driven Anchor/Escort winch type TW4200/1000, each with 1 drum fitted with 300m \varnothing 78mm Dyneema rope
Duty on towing	110 T dynamic Pull, 420T brake holding load
AHT equipment	1 x Karmoy Karm Fork 2 x Karmoy Towing Pins, rotational with locking plate 2 x Karmoy guiding pins with hardened rollers in aft bulw., SWL 50T 2 x IBERCISA Hydraulic driven tuggingwinch 220/40 10T Pull, 15T Hold each Stern Roller 250T SWL, dims. 4000mm x \varnothing 1800mm
Anchorsystem	2 x ROLLS ROYCE Hydraulic driven anchor winches Anchors 1140 kg each 8+8 chain lengths

SALVAGE & ANTI-POLLUTION EQUIPMENT

SALVAGE EQUIPMENT:

2 x Elec. subm. pumps, 200m³/h cap. each, fitted with hoses and connections, cutting & welding equipment, ropes, wires, shackles, stretchers, pennant wires, towing chains, diving equipment. 2 x wheelhouse remote contr. searchlights, fitted with 2000W Xenon lights.

ANTI-POLLUTION EQUIPMENT:

2 x Rec-oil tanks total capacity 120m³
1 x Rec-oil pump 20m³/hr
2 x Dispersant booms 6,00m, 2 spray booms with nozzles
1 x Dispersant Pump

FIRE FIGHTING EQUIPMENT

2 x main pumps KVAERNER 3600m³/h cap. each, 2 x elec. remote contr. monitors for water/foam with Fog/ Spray/ Jet fully compliant with FiFi2

TANK CAPACITIES

Fuel Oil (MGO); incl. Rec-oil	549,42 m ³
Rec-Oil (MGO)	119,66 m ³
Fresh Water	43,32 m ³
Lub/Hydr. Oil	63,10 m ³
Sludge	7,00 m ³
Dirty Oil	7,00 m ³
Sewage tank	8,35 m ³
Bilge water	14,49 m ³
Water Ballast	103,04 m ³

MOB

1 x SOLAS Rescue Boat; 1 x Service/Work Boat

ACCOMODATION

Living quarters fully heated & air-conditioned, suitable for a crew of 14
4 single cabins with WC and Shower
5 double cabins with WC and Shower
Crew lounge, deck office, mess-room, galley, walk-in store, one cold store (4°C) and one freezer store room (-20°C)

NAUTICAL & COMMUNICATION EQUIPMENT

GMDSS area	A3 equipped
Compass	Gyro Compass SIMRAD GC-80 Satellite Compass Furuno SC-50
Radar system	Furuno FAR 2117 X25 Kw Furuno FAR 2137 S30 Kw
GPS	2 x Furuno GP-150
Autopilot	SIMRAD AP-50
Echo sounder	Furuno FE700
Speedlog	Furuno DS-80
VHF Radio Telephone	2 x Furuno FM880
VHF Handheld	3 x GMDSS McMurdo R2
Navtex	Furuno NX-700
AIS	Furuno FA-150
Communication	VSAT - Iridium - SSB - Phones
ECDIS system	2 x Transas Navi-Sailor 4000 system
Weather system	Meteogroup Offshore SPOS onboard
Weather station	Wind system WS200 Furuno RD-33
Inmarsat C system	2 x Inmarsat C FC 15, 1 x Sys. FC250
VSAT system	Data / TV, Intellian by Radio-Holland
Maintenance system	MARAD 4.43 system onboard & office

CONTACT DETAILS

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