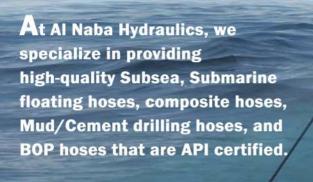
ALNABA HYDRAULICS





Our hoses are designed and manufactured to meet the highest standards of safety and reliability, ensuring that they can withstand the most demanding applications and environments. We take pride in our reputation for excellence in the industry and are committed to providing our customers with the best possible products and services.





## Technical features

SUBMARINE HOSES

- · For high demanding submarine configurations
- API Spec 17K certified (ISO 13628-10)
- Compact nippleless reinforced flanges with integrated bending stiffener
- Reinforced structure with steel cable layers and steel rings
- . Continuous inner liner and integrated gaskets
- Design pressure up to 100 bar depending on diameter
- Diameter up to 600mm (24"), smooth bore.
- . Hose section length up to 12.2m (40')

## Single Carcass Hoses



Submarine hoses can be built with location collars for the application of deepwater floats on request

#### **FLOATING HOSES**





## **Double Carcass Hoses**

## **SUBMARINE HOSES**



One end reinforced submarine hose

Mainline submarine hose

Tail submarine hose

Reducer submarine hose

Fully reinforced submarine hose

Tanker rail submarine hose

Submarine hoses can be built with location collars for the application of deepwater floats on request

#### **FLOATING HOSES**



One end reinforced half floating hose

Mainline full floating hose

Tail full floating hose

Reducer full floating hose

Fully reinforced full floating hose

Tanker rail full dumbbell floating hose

Hoses for special applications can be manufactured on request





# **BOP HOSES**

EAGNE BORHOSE ECONOMIS PAIN (1.00 - 1

Eaton is excited to announce an extension to its industrial hose portfolio by introducing the new blowout preventer (BOP) hose.

The Eaton EC556 blowout preventer hose system is a critical part of oil & gas drilling and exploration equipment, where reliability and safety are of utmost importance.

The EC556 combines high-performing spiral-reinforced hose with special flame-resistant rubber and is qualified with our reliable 1W-ISC fittings (carbon steel and stainless steel).

Eaton EC556 is rated for 350 bar (5000 psi) constant working pressure in all sizes ½" through 1 ½", meets or exceeds the requirements of API 16D minimum of 700°C (1300°F) for 5 minutes - and is certified by Lloyd's Registry.

The specially-designed cover is abrasion-resistant and allows for greater flexibility and is easier to route than steel-armored offerings.

Our hoses are proudly assembled by Eaton-certified partners to meet every unique customer need.





Part Number	Hose I.D.			Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	Lb/ft
EC556-12	19	19	0.75	32	1.26	350	5000	1400	20000	280	11	1.58	11.4
EC556-16	25	25.4	1	38.3	1.5	350	5000	1400	20000	340	13.4	2	14.6
EC556-20	32	31.7	1.25	45.1	1.77	350	5000	1400	20000	460	18.1	2.47	17.8
EC556-24	38	38	1.5	56.4	2.12	350	5000	1400	20000	500	19.6	4.64	33.5

#### **Fittings**

Internal Skive Crimp (ISC) 1W series fitting for all sizes -12,-16, -20,-24

#### **Operating Temperature**

-40°C to +100°C

(-40°F to +212°F)

#### **Agency Listings**

Lloyd's certified

API 16D flame resistant

#### Construction

Black, oil resistant synthetic rubber tube Multiple high tensile wire spiral reinforcement layers Red, specially compounded, flame resistant cover

#### Application

For prevention of pressure escape at the wellhead during drilling-completion operations

Critical component of blowout preventer system

On-shore oil and gas exploration

#### EC556 BOP FITTINGS AND STAINLESS STEEL PROTECTIVE SLEEVE



#### N.P.T.F Male pipe stainless steel fittings

Part number	Hose size		Terminal end dash size	Thread	A		D cut off factor		E		Hex 1
	Dash	DN			mm	in	mm	in	mm	in	
1W12MP12BA	-12	19	-12	3/4-12	92.1	3.6	40.1	1.6	15.1	0.6	30
IW16MP16BA	-16	25	-16	1-11 1/2	114.5	4.5	47.8	1.9	19.6	0.8	36
1W20MP20BA	-20	32	-20	1 1/4-11 1/2	127.2	5.0	52.3	2.1	25.5	1.0	46
1W24MP24BA	-24	38	-24	1 1/2-11 1/2	150.5	5.9	55.5	2.2	30.1	1.2	50



### **Quick connect couplings for BOP application**

#### FD85 Series Thread to Connect

The Eaton FD85 Series is a thread to connect coupling most commonly used in Oil and Gas applications, but can also be found on demanding applications on both mobile and stationary equipment where operating pressures of 5,000 psi are present.

#### **Product Features**

Thread to connect feature allows for use in high vibration and impulse applications

Standard body material: Zinc trivalent plated carbon steel. Stainless steel construction available upon request

Connect under pressure capability up to 5,000 psi (345 bar)

Standard seal material: Buna-N. FKM seals are available upon request

Wing nut and hex flat design allows for easy connection and disconnection

3/4" design is offered in a hex nut design

Female NPTF and BSPP ends available







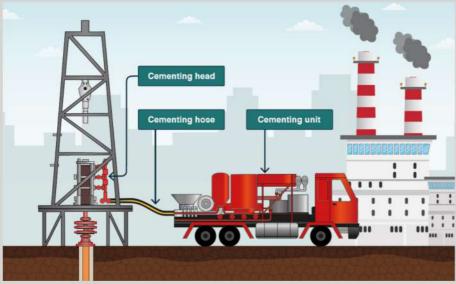
#### **CEMENTING APPLICATIONS**

The harsh environmental condition in the drilling fields required high quality products, safety, reliability and durability. Oil well cementing hose assemblies is the solution for cementing operations to connect the high pressure cementing pump to the cementing head.

High abrasion resistance inner tube special compound.

Oil well cementing 10K is provided with a Supertuff cover for the most demanding abrasion requirements.

Easy and faster installation compared to the iron pipe hoses.







## DRILLING

#### **ROTARY & VIBRATOR 5K**



Rotary 5.000 psi API SPEC 7K - Grade D - FSL2

Tube: oil and drilling mud resistant synthetic rubber.

Reinforcement: multiple layers of spiralled high tensile steel wire.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: Rotary drilling, Vibrator and Motion Compensator.

Temperature: -20 °C +100 °C (-4 °F +212 °F)

Length: 47,25 m (155 ft) max

#### **ROTARY & VIBRATOR 7.5K**



Rotary 7.500 psi API SPEC 7K - Grade E - FSL2

Tube: oil and drilling mud resistant synthetic rubber.

Reinforcement: multiple layers of spiralled high tensile steel wire.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: Rotary drilling, Vibrator and Motion Compensator.

Temperature: -20 °C +100 °C (-4 °F +212 °F)

Length: 47,25 m (155 ft) max

#### RIG - OIL WELL CEMENTING





Cementing 5.000 psi API Spec 7K - FSL0

Tube: cement, oil and drilling mud resistant synthetic rubber.

Reinforcement: six high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

"Minetuff" cover.

Application: high pressure cement slurry transfer between pump

manifold and cementing head.

Temperature: -20 °C +121 °C (-4 °F +250 °F)

Length: 61 m (200 ft) max

Notes: Available with integral Fig. 1502 coupling or API threaded

male extra-long hexagon fittings.





#### RIG - OIL WELL CEMENTING 10K SUPERTUFF





Cementing 10.000 psi API Spec 7K - FSL0

Tube: cement, oil and drilling mud resistant synthetic rubber.

Reinforcement: six high tensile steel spirals.

Cover: special "Supertuff" cover for excellent abrasion resistance and

long service life in heavy duty applications.

Application: high pressure cement slurry transfer between pump

manifold and cementing head.

Temperature: -20 °C +121 °C (-4 °F +250 °F)

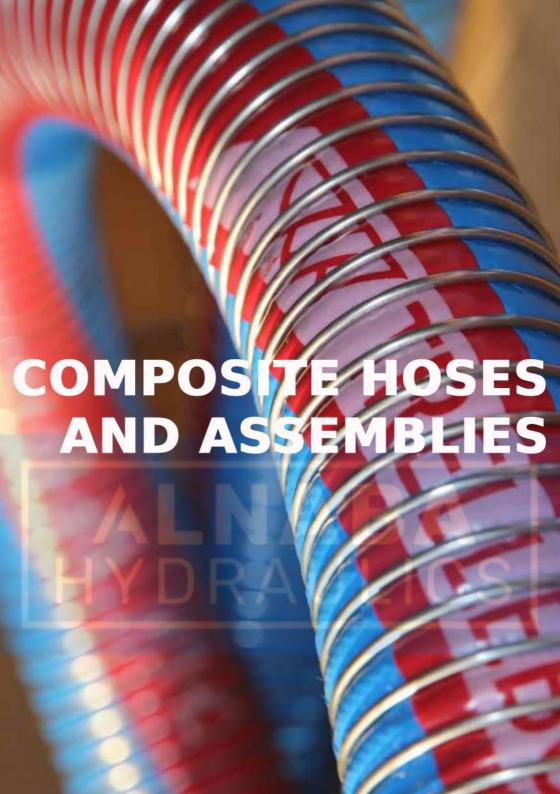
Length: 61 m (200 ft) max

Notes: Fully API 7K approved when supplied with Integral 2" 1502

Hammer Union couplings. Also available with API threaded male

extra-long hexagon fittings.





### A FIELD-PROVEN TECHNOLOGY

#### DESIGN

TRELLFLEX composite hoses are designed from multi layers of foils wrapped between two steel wire helix.

The wires coating and the type of foil (PP, PA, PTFE) are optimized to resist to petroleum, chemicals and the application requirements.

#### DIAMETERS

Diameters can range from 25 to 250 mm.

Should your application require any specific designs, we can also offer tailor-made solutions to meet your specific needs, please consult us.

TRELLFLEX RANGE		INNER TUBE	WORKING PRESSURE			HELIX	TEMPERATURE	STANDARD
FOR OIL AND	FOR OIL AND PETROLEUM TRANSFERS		4 bar 10 bar 1		14 bar	ASSESSMENT OF		
TRELLFLEX	1 646 1446 140 141 144 144 140 141 141 141	PP Polypropylene			v	AA AG GG	-30°C/+100°C	EN 13765
TRELLFLEX BIOFUEL		PA Polyamide			v	SS GG	-30°C/+100°C	EN 13765
TRELLFLEX JET	(14444) + 1444   P+144   P+144	PA Polyamide	1	la pick	v	SS GG	+30°C/+100°C	EN 13765
TRELLFLEX OIL VR		PP Polypropylene	,	7		PĞ	-30°C/+100°C	EN 13765
TRELLFLEX ROOF DRAIN		PP Polypropylene		/	v	SS	-30°C/+ 100°C	EN 13765

## **COUPLINGS & ACCESSORIES**

#### **END CONNECTION**

With 40 years experience, Trelleborg Fluid Handling Solutions can supply any tailor-made hose assemblies to suit your end connection requirements, like flanged, threaded, 1/2 symmetrical, camlock couplings, etc.

#### ACCESSORIES

A complete range of accessories is available on request: dry disconnect coupling, isolating flange, supporting device, etc.



















## TRELLEBORG FLUID HANDLING SOLUTIONS



Industrial hoses

Oil & Gas hoses

**Expansion joints** 

Rubber sheeting and matting























