

DUR06-ND Diver Umbilical

DUR06-ND | Multipurpose Diver Umbilical with Gas Hose, Pneumo & Cable

The DUR06-ND is a multipurpose umbilical that can be deployed in a wide variety of activities. The umbilical consists of a Gas hose, a Pneumo hose and a newly developed data cable (CDUR06). This data cable can be used for comms (2- or 4-wire), Video (Coax or/and Twisted Pair), light and sensor data. The umbilical is the first to have both a Coax and a Twisted pair for a video signal, which makes it compatible with both types of underwater cameras.

The DUR06-ND is flexible umbilical that is very hard to kink, this makes it an extra safe umbilical for divers. The umbilical floats in fresh and seawater with the pneumo hose filled with air. It will sink when the pneumo hose is filled with water.

The umbilicals can be terminated as specified by the client. The umbilical can be configured with or without a pneumo hose and optional with a HOT WATER HOSE.



Configurations:



DUR06-ND
With pneumo hose



DUR06H-ND
With Hot Water hose & pneumo hose



DUR06-ND1
Without pneumo hose

Features:

- Positive buoyant
- Cable kevlar reinforced
- Low priced
- Comms, video, light and data over 1 cable

Applications:

- Commercial Diving

website link : <https://www.novasub.com/product/DUR06-nd-diver-umbilical/>

product video : <https://www.youtube.com/channel/UCRqqqmJy8O7XEabp7S1rpQ>

DUR06-ND Diver Umbilical

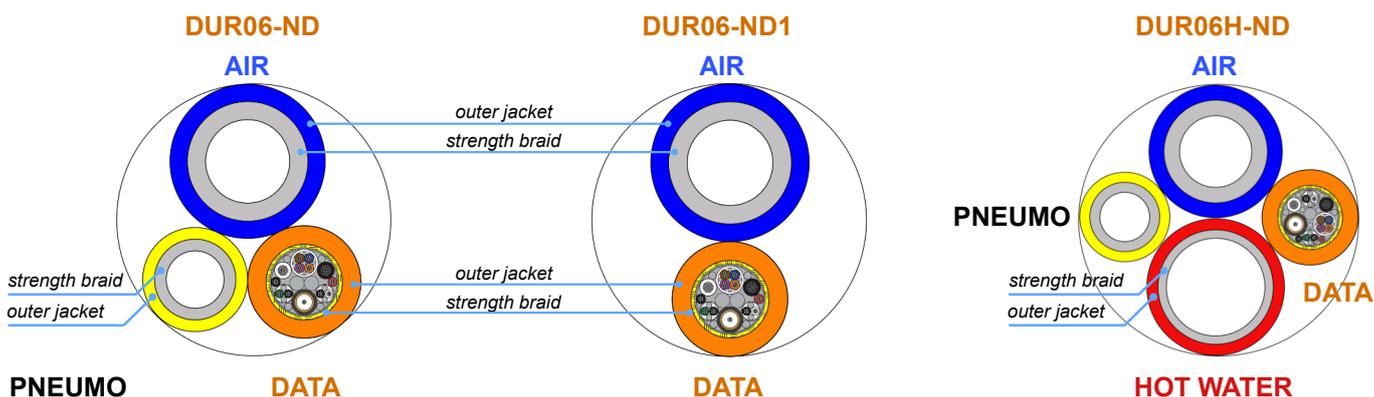
Specifications : UMBILICAL

NAME	DUR06-ND	DUR06-ND1	DUR06H-ND
Pneumo Hose	1/4" NovaDive	-	1/4" NovaDive
Gas Hose	3/8" NovaDive		
Hot Water Hose	-	-	1/2" NovaDive
Cable	Novasub CDUR-06		
Termination Surface	<i>alternative terminations and custom configurations can be supplied to suit specific requirements</i>		
GasHose	Standard: JIC6 Swivel		
Pneumo	Standard: JIC4 Swivel	-	Standard: JIC4 Swivel
Hot Water Hose	-	-	Standard: JIC8 Swivel
Cable	Standard: UTS Multipin		
Termination Diver	<i>alternative terminations and custom configurations can be supplied to suit specific requirements</i>		
Gas Hose	Standard: JIC6 Swivel		
Pneumo Hose	Standard: Open End	-	Standard: Open End
Hot Water Hose	-	-	Standard: JIC8 Swivel
Cable :	<i>alternative terminations and custom configurations can be supplied to suit specific requirements</i>		
Comms	Standard: RMG-4-FS		
Camera	Standard: MCIL4F		
Light	Standard: MCIL2F		
Depth sensor	Standard: MCIL3F		
Size			
Nominal overall diameter	32 mm	31 mm	37.6 mm
Weight in Air	494 g/m	391 g/m	684 g/m
Weight in Seawater	-34 g/m	-11 g/m	-5 g/m
Weight in Fresh water	-20 g/m	-5 g/m	-25 g/m
Min. Static bending radius	> 160 mm	> 155 mm	> 188 mm
Min. Dynamic bending radius	> 320 mm	> 310 mm	> 376 mm

Specifications : HOSES

NAME	3/8" NovaDive	1/4" NovaDive	1/2" NovaDive
Color	Blue	Yellow	Red
Material outer jacket	Hydrolysis UV resistant polyurethane	Hydrolysis UV resistant polyurethane	Hydrolysis UV resistant polyurethane
Outside Diameter	18,50 mm	12,50 mm	19,1 mm
Inside Diameter	9,10 mm	6,35 mm	12,7 mm
Working pressure	35 bar	35 bar	25 bar
Burst pressure	276 bar	172 bar	80 bar
Minimum bending radius	121 mm	82 mm	82 mm
Max. water temperature	n.a.	n.a.	max.70°C

Intersection UMBILICAL



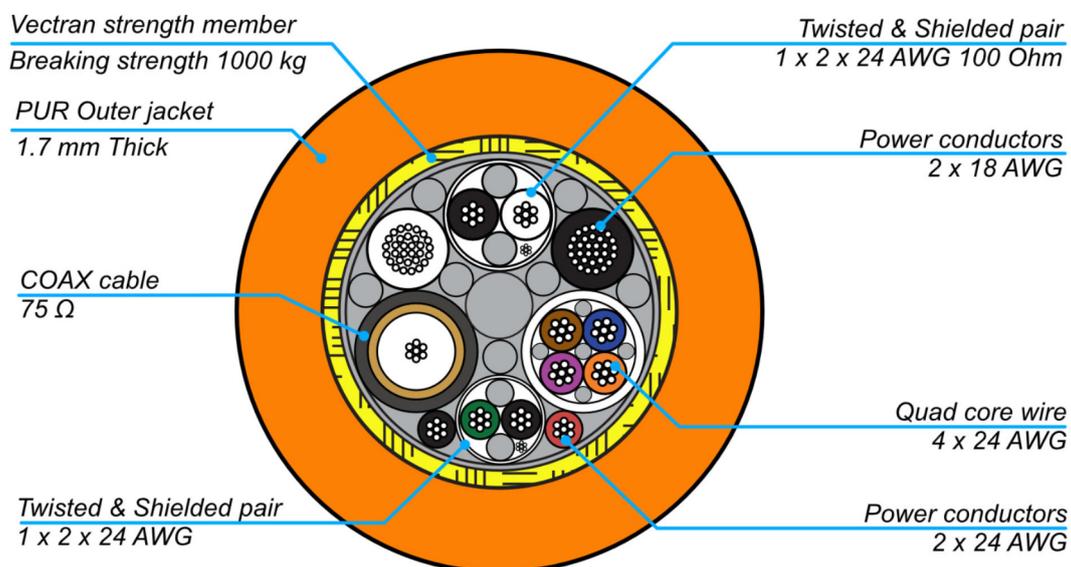
DUR06-ND Diver Umbilical

The DUR06-ND is equipped with the CDUR-06 cable. This cable has 2 shielded twisted pairs, 4 wires, a coax cable and a Quad core. That means that the cable can be used simultaneously for 4-wire Comms, Video, light, and a depth sensor! It also support both unbalanced (COAX) as balanced (Twisted Pair) camera's. This ensures that your diver is fully equipped for the task ahead.

Specifications : DATA CABLE CDUR-06

NAME	CDUR-06
Conductors	2 x 1,0 mm ² (2 x 17 AWG) Power Conductors
	2 x 0,22 mm ² (2 x 24 AWG) Power Conductors
	2 x 0,22 mm ² (2 x 24 AWG) Twisted Shielded Pair
	2 x 0,22 mm ² (2 x 24 AWG) Twisted Shielded Pair (100 Ω)
	4 x 0,22 mm ² (4 x 24 AWG) Quad Core
Strength member	1x COAX (75 Ω)
Outer jacket	Vectran fiber braid
Outside diameter	Orange hydrolysis UV resistant polyurethane (1,7 mm)
	Ø 12,5 mm
Electrical resistance conductors 0,22 mm ²	< 88,67 Ω/km @ 20°C
Electrical resistance conductors 1,0 mm ²	< 19.50 Ω/km @ 20°C
COAX impedance	75 Ω
Shielded twisted pair impedance	100 Ω ± 15
Working voltage 1,0 mm ²	250 V
Working voltage 0,22 mm ²	250 V
Weight in air	153 g/m
Weight in fresh water	30 g/m
Weight in sea water	27 g/m
Breaking strength	1000 kg
Working load max.	250 kg
Minimum Static bending radius	65 mm
Minimum Dynamic bending radius	130 mm
Operating temperature	-30°C - +80 °C
Length available up to	1000 m

Intersection DATA CABLE



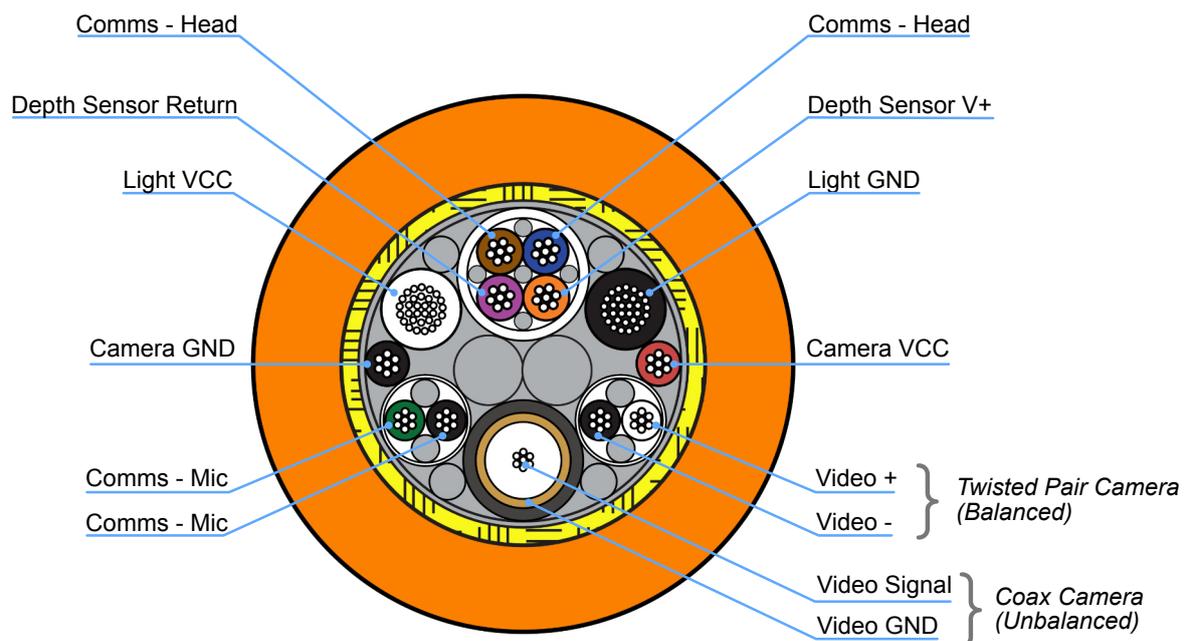
NOVASUB CDUR06 - Recommended Termination

The CDUR06 is a very agile cable that can be used in many different configurations. Below you will find the termination that we recommend when the cable is used on a umbilical for a diver. If you want to use the cable for another application then you can contact us for a termination tailored for your situation.

Color	Cable Configuration	Recommended Function
Black 17 AWG	Single Core	Light GND
White 17 AWG		Light VCC
Black 22 AWG		Camera GND*
Red 22 AWG		Camera VCC*
White 24 AWG	Twisted Pair	Video +
Black 24 AWG		Video -
White	Coax	Video Signal
Braid		Video GND
Black 24 AWG	Twisted Shielded Pair	Comms Mic
Green 24 AWG		Comms Mic
Drain		
Brown 24 AWG	Quad Core	Comms Head
Blue 24 AWG		Comms Head
Orange 24 AWG		Depth Sensor V+
Violet 24 AWG		Depth Sensor Return

*Please note that both camera's are powered by the black and red 22 AWG. This is the case if you use either Twisted Pair or COAX. If you want to have two camera's connected then both will use the black and red 22 AWG as a power source.

Termination Schematic



NOVASUB Available products that can be used in combination with UMBILICALS :

THETIS



DIVER RADIO

THALLASA



VIDEO RECORDER

TRITON



DIVER COMMUNICATION &
VIDEO RECORDER

DLRx & CDURx



CABLES
for video & comms

ARGOS



CAMERAS

HELIOS



LIGHTS

HERMES



COMMS

UDS



Depth Sensor

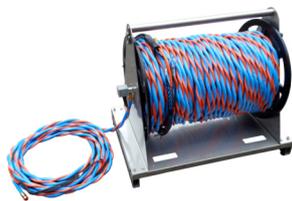
ACCESSORIES Compatible with UMBILICALS :

UB-1



WALL MOUNTED UMBILICAL
BRACKET

NSUR470-700



STANDING REEL

NSURHR1-60M



WALL MOUNTED REEL

HDPE SPIRAL



FLEETER



MOLD

