TECHNICAL INFORMATION

ELECTRICAL DATA

H-FLEX PWR PUR AND H-FLEX PWR C-PUR

Size	Conductor resistance, max./20 °C	Insulation resistance max./20 °C
	ohm/km	Mohm/km
1.0 mm²	19.5	1300
1.5 mm²	13.3	1100
2.5 mm²	7.98	900
4 mm²	4.95	700
6 mm²	3.30	600
10 mm²	1.91	500
16 mm²	1.21	400
25 mm²	0.78	500
35 mm²	0.554	400
50 mm²	0.386	400
70 mm²	0.272	400
95 mm²	0.206	300
120 mm²	0.161	300
150 mm²	0.129	300
185 mm²	0.106	400
240 mm²	0.0801	300
300 mm²	0.0641	300

H-FLEX CTL PUR AND H-FLEX CTL C-PUR

Size	Loop resistance, max./20 °C	Loop inductance, nom.	Insulation resistance max./20 °C
	ohm/km	mH/km	Mohm/km
0.5 mm²	82.8	0.6	1000
0.75 mm²	55.2	0.6	1100

H-FLEX INS PUR AND H-FLEX INS C-PUR

Size	Loop resistance of pair, max./20 °C	Pair capacitance, nom.	Loop inductance, nom.	Insulation resistance max./20 °C
	ohm/km	nF/km	mH/km	Mohm/km
0.5 mm²	82.8	55	0.6	1000
0.75 mm²	55.2	55	0.6	1100
1.5 mm²	28.2	60	0.7	1100
2.5 mm²	16.94	60	0.7	900

OIL RESISTANCE

Sheathing material is oil resistant according to method EN 60811-404 and requirements from EN 50363-10-2. Oil resistance demonstrated by immersion in mineral oil IRM902 for one week in 100 °C.

MUD RESISTANCE

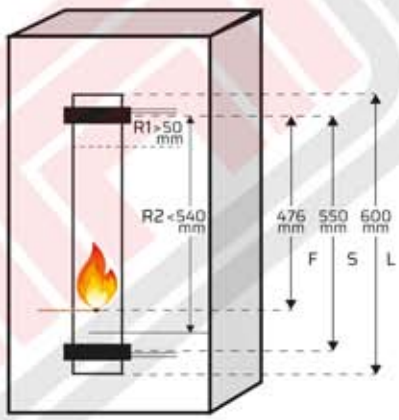
Sheathing material is mud resistant according to NEK 606 requirements. Mud resistance demonstrated by immersion in different types of drilling fluids for 56 days in 70 °C.

WATER PERFORMANCE

Water resistance: AD8 Submersion in salt and fresh water down to 500 m depth.

IEC 60332-1 TEST

IEC 60332-1 test for single cable. Test procedure and requirements according to picture below.



Min. 50 mm of the cable, measured from the upper support, must remain unburned after the specified time.

ADDITIONAL TESTS

IEC 60754-1
Acid gas emission test
Halogen content of material < 5 mg/g

IEC 60754-2
pH and conductivity test
Acidity of combustion gases pH > 4.3
Conductivity of combustion gases < 10 µS/mm

IEC 60684-2
Fluorine content test

EN 50396 PART 6.2
Mechanical flexing test
Mechanical bending test ongoing, 2.5 million bends

DIAMETER TOLERANCE

Nominal outer	Tolerance	Nominal outer	Tolerance
1 - 10	±0.5 mm	30.1 - 40	±2.0 mm
10.1 - 20	±1.0 mm	40.1 - 50	±2.5 mm
20.1 - 30	±1.5 mm	50.1 - 60	±3.0 mm

CORE IDENTIFICATION

H-FLEX PWR PUR / H-FLEX PWR C-PUR (according to HD 308 S2)

0.6/1 kV	Normal type	G-type (with earth conductor)
1-core	BK	
2-cores	BN BU	
3-cores	BN BK GY	Y/G BU BN
3-cores + 3-ground cores		Y/G BN BK Y/G GY Y/G
4-cores	BU BN GY BK	Y/G BN GY BK
5-cores	1 2 3 4 5	Y/G BU GY BK BN
7-cores and above	1 2 3 4 5 6 7	Y/G 1 2 3 4 5 6
	Black numbers on white base	Black numbers on white base Last core yellow/green.

BU = Blue, **BN** = Brown, **BK** = Black, **GY** = Grey, **Y/G** = Yellow/Green

250 V pair cables			250 V triad cables	250 V quad cables	250 V multicore cables	
Pairs numbered	a	b	Built up as triple with the following identification a b c	(Quad)cable is built up as a star quad with the following identification 1 core white 2 core blue 3 core white 4 core blue	**2-cores** 1 2	Black numbers on white base
Pair 1	1	1			**3-cores** 1 2 3	Black numbers on white base
Pair 2	2	2			**4-cores to 37-cores**	Black numbers on white base
Pair 3	3	3				
etc.						
Each pair white - blue.			Triple white-blue-red	1 3 4 2		
Pairs numbered 1, 2, 3, 4, 5....						

MARKING ON THE SHEATH

Lot number, Cable type, Cable size (number of cores x size of conductors mm²), Voltage, Temperature, Standards, Manufacturer's name, Production month and year, Meter marking.