

UX M 1000V P15/P108

Flame retardant conductors MUD resistant



GENERAL INFO

UX M 1000V P15/P108

Flame retardant conductors. Insulated conductor for earthing and bonding services. UX M 1000V meets the Oil & Mud resistance requirement in NEK TS 606:2022.

HF90 / SHF2 to IEC 60092-360 is a flame retardant halogen-free thermoset EVA rubber.

Marine;Offshore;Oil & Gas

CABLE CONSTRUCTION

Conductor material	Copper
Conductor surface	Tinned
Core insulation material	EVA rubber
Cable shape	Round
Max. conductor temperature [°C]	90

MARKING TEXT (EXAMPLE)

Cable marking example

"meter" "year/week" DRAKA 01 Part no. UX M 1000V P15/P108 1x 95 mm² IEC 332-3-22 Production no.

STANDARDS APPLIED



NEK TS 606:2022	Cables for offshore installations
IEC 60092-353	Design standard
IEC 60228 Class 2 or class 5	Conductors
IEC 60092-350	General construction and test methods for power, control and instrumentation cables for shipboard and offshore applications
IEC 60332-1-2 and IEC 60332-3-22(Cat.A)	Flame retardant properties
IEC 60754-1 and IEC 60754-2	Halogen free properties: IEC 60754-1 (pH ≥ 4,3, Conductivity ≤ 10μS), IEC 60754-2 (< 0,5% Halogen)
IEC 61034-1, -2	Low smoke properties: IEC 61034-1, -2 (minimum 60% light transmittance)
ISO 4892 part 3	UV and Ozone resistance
Oil resistant IEC 60092-360	IRM 902 oil (168 hours @ 100°C)
MUD resistant (IEC 60092-360 & NEK TS 606)	IRM 903 oil (168 hours @ 100°C), Calcium Bromide Brine (56 days @ 70°C), EDC 95-11 base oil (56 days @ 70°C)

APPLICATION PROPERTIES

Test voltage [kV]	8.4
Min. outer temperature, fixed installation [°C]	-52
Max. outer temperature, fixed installation [°C]	75
Low temperature resistant (acc. EN 60811-504+505+506)	Yes
Outdoor installation	Yes
Min. outer temperature during installation [°C]	-20
Max. outer temperature during installation [°C]	50
Underground installation	Yes
Bending radius (rule)	6 x OD (cable overall diameter)
Certified for shipboard application	Yes

PRODUCT RANGE

SAP code	Basic construction	Colour outer sheath	Conductor category	EL no.	EAN-code (GTIN)	Commodity code
20109530	1x6mm ²	Green/yellow	Class 2 = stranded	1045541	7021528008005	85444941
20109531	1x10mm ²	Green/yellow	Class 2 = stranded	1045542	7021528008012	85444941
20109532	1x16mm ²	Green/yellow	Class 2 = stranded	1045543	7021528008029	85444941
20109533	1x25mm ²	Green/yellow	Class 2 = stranded	1045553	7021528008036	85444941
20109534	1x35mm ²	Green/yellow	Class 2 = stranded	1045563	7021528008043	85444941
20236384	1x35mm ² CI5	Green/yellow	Class 5 = flexible	20236384	7021528009040	85444941
20109535	1x50mm ²	Green/yellow	Class 2 = stranded	1045573	7021528008050	85444941
20109536	1x70mm ²	Green/yellow	Class 2 = stranded	1045583	7021528008067	85444941
20109537	1x95mm ²	Green/yellow	Class 2 = stranded	1045593	7021528008074	85444942
20172920	1x95mm ² CI5	Green/yellow	Class 5 = flexible	20172920	7021528009071	85444942
20121097	1x120mm ²	Green/yellow	Class 2 = stranded	1045603	7021528008081	85444942
20109538	1x150mm ²	Green/yellow	Class 2 = stranded	1045604	7021528008098	85444942
20139738	1x185mm ²	Green/yellow	Class 2 = stranded	20139738	7021528008104	85444942
20139739	1x240mm ²	Green/yellow	Class 2 = stranded	20139739	7021528008111	85444942
20204198	1x300mm ²	Green/yellow	Class 2 = stranded	20204198	7021528008128	85444942

DIMENSIONAL DATA

SAP code	Basic construction	Diameter conductor [mm]	Nominal thickness insulation [mm]	Nominal diameter over insulation [mm]	Cable weight [kg/km]	Copper weight [kg/km]
20109530	1x6mm ²	3.1	1	5.1	80	54
20109531	1x10mm ²	4	1	6	120	87
20109532	1x16mm ²	5.05	1	7.1	175	140
20109533	1x25mm ²	6.3	1.2	8.8	275	220
20109534	1x35mm ²	7.4	1.2	10	370	302
20236384	1x35mm ² CI5	8.45	1.2	11	380	306
20109535	1x50mm ²	8.75	1.4	12	500	411
20109536	1x70mm ²	10.6	1.4	13.5	715	608
20109537	1x95mm ²	12.35	1.6	16	955	820
20172920	1x95mm ² CI5	13.25	1.6	16.5	910	767
20121097	1x120mm ²	14	1.6	17.5	1,215	1,060
20109538	1x150mm ²	15.4	1.8	19.5	1,475	1,284
20139738	1x185mm ²	17.3	2	21.5	1,830	1,596
20139739	1x240mm ²	19.85	2.2	24.5	2,400	2,105
20204198	1x300mm ²	22.25	2.4	27.5	3,000	2,644

Conductor diameter tolerances for our Class 2 conductors are within the Lower and Upper Limits listed in IEC 60092-350 Annex D and Table D.1

ELECTRICAL VALUES POWER CABLES

SAP code	Basic construction	Conductor resistance at 20° C [Ohm/km]	Conductor resistance at operation temperature [Ohm/km]	Inductive Reactance (at 50Hz) [Ohm/km]	Inductive Reactance (at 60Hz) [Ohm/km]	Current carrying capacity [A]	Short circuit current conductor (1sec) [kA]	Short circuit current conductor (5sec) [kA]
20109530	1x6mm ²	3.11	3.97			52	0.84	0.37
20109531	1x10mm ²	1.84	2.35			72	1.4	0.62
20109532	1x16mm ²	1.16	1.48			96	2.24	1
20109533	1x25mm ²	0.734	0.936			127	3.5	1.56
20109534	1x35mm ²	0.529	0.675			157	4.9	2.19
20236384	1x35mm ² CI5	0.565	0.7204			157	4.9	2.19
20109535	1x50mm ²	0.391	0.499			196	7	3.13
20109536	1x70mm ²	0.27	0.344			242	9.8	4.38
20109537	1x95mm ²	0.195	0.249			293	13.3	5.94
20172920	1x95mm ² CI5	0.21	0.2677			293	13.3	5.94
20121097	1x120mm ²	0.154	0.196			339	16.8	7.51
20109538	1x150mm ²	0.126	0.161			389	21	9.39
20139738	1x185mm ²	0.1	0.128			440	25.9	11.58
20139739	1x240mm ²	0.0762	0.0972			522	33.6	15
20204198	1x300mm ²	0.0607	0.0774			601	42	18.7

Current Rating IEC 61892-4 Table 4 at 45°C ambient temperature. Maximum operating conductor temperature = 90°C

AMBIENT TEMPERATURE CORRECTION FACTORS

Ambient temperature °C / Omgivelsestemperatur °C	25	30	35	40	45	50	55	60	65	70	75	80	85
Rating factor / Korreksjonsfaktor	1,20	1,15	1,10	1,05	1,00	0,94	0,88	0,82	0,74	0,67	0,58	0,47	-

BENDING RADII & PULLING RECOMMENDATIONS

Minimum Bending Radius During Installation / Minimum bøyeradius under installasjon	Minimum Bending Radius Fixed Installed / Minimum bøyeradius ferdig installert	Maximum Tensile Load During Installation / Maksimum trekkraft ved installasjon	Minimum Installation Temperature / Minimum installasjons temperature
8 x D	6 x D	50 N x total cross section (mm ²) of conductors / 50 N x totalt ledertverrsnitt (mm ²)	- 20 °C

D = cable overall diameter

Maximum Tensile Load during installation shall not in any case exceed 20000N

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