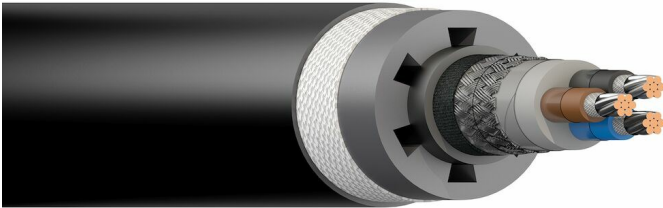


## BFOU-JF 1KV

Jet Fire resistant power cable



### GENERAL INFO

BFOU-JF 1KV

Armoured JetFire resistant, flame retardant halogen-free power cable.

Fixed installation for power, control and lighting in both EX (Zone 0, 1 & 2)- and safe areas, emergency and critical systems where requirement for fire resistance exists.

1200° / 250 kW/m<sup>2</sup> / Propane mass flow 0.3 ± 0.01 kg/s .

MGT/EPR/EPR/TCWB/SHF2/JF/SHF1

Offshore, Oil & Gas

### CABLE CONSTRUCTION

Conductor material	Copper
Core insulation material	Mica + polymer
Core identification (acc. HD 308 S2)	Yes
Armouring/reinforcement	Braiding
Armouring	Yes
Armouring/reinforcement material	Copper, tinned
Material inner sheath	Halogenfree polymer
Material outer sheath	Thermoplastic polymer
Cable shape	Round
Max. conductor temperature [°C]	90
Max. conductor temperature at short circuit [°C]	250

### MARKING TEXT ON OUTER SHEATH (EXAMPLE)

"METER" DRAKA 01 PART NO. BFOU-JF 0.6/1KV 2 X 2.5 / 6 MM2 ISO 22899-1 FLEX - FLAME IEC 60092-353/DRAKA IEC 60331-21 IEC 60332-3-22 PRODUCTION NO.

Core colours:

1X = Black, 2X = Blue - Brown, 3X = Brown - Black - Grey, 4X = Blue - Brown - Black - Grey, 5X = Blue - Brown - Black - Grey - Black, 7 - 37X = White cores with Black numbers, 3G Yellow/Green - Blue - Brown, 4G = Yellow/Green - Brown - Black - Grey, 5G = Yellow/Green - Blue - Brown - Black - Grey

G = one core is Yellow/Green - X = no Yellow/Green core, Core colours in acc. with HD308S2 and IEC 60445 Ed 5.0 2010-08

## STANDARDS APPLIED



**Prysmian Group Norge AS (former Draka Norsk Kabel AS)**

**IEC 60092-353**

**IEC 60228 Class 2 or class 5**

**IEC 60092-360**

**IEC 60092-350**

**ISO 22899-1**

**IEC 60331-1/2 and IEC 60331-21**

**IEC 60332-1-2 and IEC 60332-3-22(Cat.A)**

**IEC 60754-1 and IEC 60754-2**

**IEC 61034-1, -2**

Jet Fire Protection (1200°C / 250 kW/m<sup>2</sup>)

Design standard

Conductors

Insulation and sheath

General construction and test methods for power, control and instrumentation cables for shipboard and offshore applications

JetFire resistance for 30 minutes (1200°C / 250kW/m<sup>2</sup> /Propane mass flow 0,3 ± 0,01 kg/s)

Fire resistant properties: IEC 60331-1 & -2 (120 minutes @ 830°C), IEC 60331-21 (180 minutes @ 1000°C)

Flame retardant properties

Halogen free properties: IEC 60754-1 (pH ≥ 4,3, Conductivity ≤ 10μS), IEC 60754-2 (< 0,5% Halogen)

Low smoke properties: IEC 61034-1, -2 (minimum 60% light transmittance)

## APPLICATION PROPERTIES

Test voltage [kV]	8.4
Rated voltage U0/U (Um)	0.6/1 (1.2) kV
Min. outer temperature, fixed installation [°C]	-40
Max. outer temperature, fixed installation [°C]	75
Outdoor installation	Yes
Min. outer temperature during installation [°C]	-10
Max. outer temperature during installation [°C]	50
Bending radius (rule)	20 x OD (cable overall diameter) during installation 12 x OD (cable overall diameter) fixed installed

## PRODUCT RANGE / ORDER DATA

SAP code	Basic construction	Nominal electrical copper cross section armouring [mm <sup>2</sup> ]	Colour outer sheath	Conductor category	EL no.	EAN-code (GTIN)	Commodity code
20153271	2x2.5/4mm <sup>2</sup>	4	Black	Class 2 = stranded	20153271	7021528874266	85444941
20340300	3G2.5mm <sup>2</sup>		Orange	Class 2 = stranded	20340300	7021528879971	85444941
20153272	3x6/6mm <sup>2</sup>	6	Black	Class 2 = stranded	20153272	7021528874273	85444941
20153273	3x10/10mm <sup>2</sup>	10	Black	Class 2 = stranded	20153273	7021528874280	85444941
20183207	4G2.5mm <sup>2</sup>		Black	Class 2 = stranded	20183207	7021528876659	85444941
20153270	4x2.5/4mm <sup>2</sup>	6	Black	Class 2 = stranded	20153270	7021528874259	85444941
20339482	5G6mm <sup>2</sup>		Orange	Class 2 = stranded	20339482	7021528879896	82444943
20153269	12x2.5/10mm <sup>2</sup>	10	Black	Class 2 = stranded	20153269	7021528874242	85444943

\*) These cables have double braids (see under Basic construction)

## DIMENSIONAL DATA PART 1

SAP code	Basic construction	Diameter conductor [mm]	Nominal thickness insulation [mm]	Nominal diameter over insulation [mm]	Nominal thickness inner sheath [mm]	Nominal diameter over inner sheath [mm]	Tolerance diameter inner sheath [±mm]
20153271	2x2.5/4mm <sup>2</sup>	2	1	4.2	1.1	10.5	0.8
20340300	3G2.5mm <sup>2</sup>	2	1	4.2	1.1	11	0.8
20153272	3x6/6mm <sup>2</sup>	3.1	1	5.3	1.1	13.5	0.8
20153273	3x10/10mm <sup>2</sup>	4	1	6.2	1.1	15.5	0.8
20183207	4G2.5mm <sup>2</sup>	2	1	4.2	1.1	12.5	0.8
20153270	4x2.5/4mm <sup>2</sup>	2	1	4.2	1.1	12.5	0.8
20339482	5G6mm <sup>2</sup>	3.1	1	5.3	1.1	16.5	0.8
20153269	12x2.5/10mm <sup>2</sup>	2	1	4.2	1.1	19	0.8

\*) These cables have double braids (see under Basic construction)

## DIMENSIONAL DATA PART 2

SAP code	Basic construction	Diameter braid wire [mm]	Mechanical cross section reinforcement [mm <sup>2</sup> ]	Nominal thickness outer sheath [mm]	Nominal outer diameter [mm]	Tolerance diameter outer sheath [±mm]	Cable weight [kg/km]	Copper weight [kg/km]
20153271	2x2.5/4mm <sup>2</sup>	0.2	5.3	2.2	40.5	2.5	1,960	94
20340300	3G2.5mm <sup>2</sup>	0.3	8.5	2.2	41.5	2.5	2,100	146
20153272	3x6/6mm <sup>2</sup>	0.3	10.2	2.4	44.5	2.5	2,500	261
20153273	3x10/10mm <sup>2</sup>	0.3	11.9	2.4	46.5	2.5	2,810	377
20183207	4G2.5mm <sup>2</sup>	0.3	10.2	2.3	43	2.5	2,250	184
20153270	4x2.5/4mm <sup>2</sup>	0.3	10.2	2.3	43	2.5	2,255	184
20339482	5G6mm <sup>2</sup>	0.3	13.6	2.5	48	2.5	2,960	401
20153269	12x2.5/10mm <sup>2</sup>	0.3	15.3	2.6	50.5	3	3,235	403

\*) These cables have double braids (see under Basic construction)

## ELECTRICAL VALUES POWER CABLES

SAP code	Basic construction	Conductor resistance at 20° C [Ohm/km]	Conductor resistance at operation temperature [Ohm/km]	Current carrying capacity [A]	Short circuit current conductor (1sec) [kA]	Short circuit current conductor (5sec) [kA]
20153271	2x2.5/4mm <sup>2</sup>	7.56	9.64	26	0.35	0.16
20340300	3G2.5mm <sup>2</sup>	7.56	9.64	26	0.35	0.16
20153272	3x6/6mm <sup>2</sup>	3.11	3.97	36	0.84	0.38
20153273	3x10/10mm <sup>2</sup>	1.84	2.35	50	1.4	0.63
20183207	4G2.5mm <sup>2</sup>	7.56	9.64	21	0.35	0.16
20153270	4x2.5/4mm <sup>2</sup>	7.56	9.64	21	0.35	0.16
20339482	5G6mm <sup>2</sup>	3.11	3.97	36	0.84	0.38
20153269	12x2.5/10mm <sup>2</sup>	7.56	9.64	13	0.35	0.16

Current Rating IEC 60092-352 Table B.4 at 45°C ambient temperature. Maximum operating temperature = 90°C

## AMBIENT TEMPERATURE CORRECTION FACTORS

Ambient temperature °C / Omgivelsestemperatur °C	35	40	45	50	55	60	65	70	75	80
Rating factor / Korreksjonsfaktor	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 temperatur
20 x D	12 x D	50 N x total cross section (mm <sup>2</sup> ) of conductors / 50 N x totalt ledertverrsnitt (mm <sup>2</sup> )	- 10°C

D = Cable overall diameter

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