NA2XS(F)2Y 12/20KV CPR F

Aluminium medium voltage cables 20kV

F_{ca} CPR

Medium voltage cables with aluminium conductors for rated voltages from 6 kV (Um = 7,2 kV) up to 30 kV (Um = 36 kV). Suitable for outdoor applications such as industrial installations and electrical stations, for laying underground, in trench or in ducts or in air. It has to be considered that the cables are not flame retardant. The ingress of water in case of a damaged outer sheath is limited by the longitudinal watertight screen.
Conductor shape round, class 2 = stranded; black outer sheath

STANDARDS AND CERTIFICATIONS

RoHS

EN 60228	Conductors of insulated cables
DIN VDE 0276-620	Distribution cables for rated voltages from 3,6/6(7,2) up to and including 20,8/36(42) kV
HD 620 S3:2023	Distribution cables for rated voltages from 3,6/6(7,2) up to and including 20,8/36(42) kV
IEC 60502-2	Cables for rated voltages from 6 kV (Um = 7,2 kV) up to 30 kV (Um = 36 kV)
EN 60754-1	Test on gases evolved during combustion of materials from cables. Halogen acid gas content.

CABLE DESIGN

Conductor material	Aluminium
Core insulation material	XLPE
Screen construction	Wire screen and counterhelix tape
Screen material	Copper, bare
Longitudinal water blocking screen	Yes
Longitudinal water blocking cable	Yes
Longitudinal water blocking construction	Water swellable tape(s)
Material outer sheath	HDPE
Cable shape	Round

ELECTRICAL & THERMAL PARAMETERS

Nominal voltage U0 [V]	12,000
Nominal voltage U [V]	20,000
Test voltage [kV]	42
Rated voltage U0/U (Um)	12/20 (24) kV
Max. conductor temperature [°C]	90
Max. conductor temperature at short circuit [°C]	250
Laying temperature (min) [°C]	-20
Laying temperature (max) [°C]	50

CHEMICAL PROPERTIES

CPR reaction to fire	Fca
Halogen free	acc. IEC/EN 60754-1/2
Resistant to UV	Yes
UV resistant	Yes
Silicon free	Yes
Lead free	Yes

CHARACTERISTICS

Outdoor installation	Yes
Underground installation	Yes
Suitable as installation cable	Yes
Bending radius (rule)	During installing: 15 x D single-core cables

SUSTAINABILITY COMMITMENT

Our commitment to a low-carbon future remains unwavering as we strive to create sustainable solutions while upholding quality standards. We prioritize sustainability and environmental protection in our daily operations, collaborating with local communities to ensure workplace safety and safeguard the areas we operate in.

Sustainability and environmental responsibility is evident also in our **packaging** solutions across the CEE region. We use fully recyclable drum cover foils to minimize environmental impact. Our packaging for rings is made from 30% recycled materials, supporting a circular economy. Additionally, our boxes are made from recyclable, environment-friendly cardboard, promoting eco-conscious choices. By choosing Prysmian, you are not only selecting high-quality products but also contributing to a greener future.

Check for more details about our sustainability commitment here: Sustainability: report and responsibility.

CABLE PROPERTIES

Basic construction	SAP code	Nominal thickness insulation [mm]	Nominal diameter over insulation [mm]	Nominal outer diameter [mm]	Cable weight [kg/km]	Bending radius, during laying (min) [mm]	Conductor resistance at 20° C [Ohm/km]	Short circuit current conductor (1sec) [kA]	Short circuit current screen (1sec) [kA]	DOP number
1x50RM/25	20285779	5.5	20.2	29	858	436	0.641	4.9	4.1	1003520
1x70RM/16	20350512	5.5	21.9	30.9	877	464	0.443	6.8	2.6	1003520
1x95RM/16	20021066	5.5	23.3	32.3	982	485	0.32	9.2	2.6	1003520
1x95RM/25	20183327	5.5	23.3	32.3	1,066	485	0.32	9.2	4.1	1003520
1x120RM/16	20137776	5.5	24.7	33.7	1,084	506	0.253	11.6	2.6	1003520
1x120RM/25	20157873	5.5	24.7	33.7	1,168	506	0.253	11.6	4.1	1003520
1x150RM/25	20294737	5.5	26	34.8	1,271	522	0.206	14.5	4.1	1003520
1x150RM/25	20348406 ENEA	5.5	26	36	1,332	542	0.206	14.5	4.1	1003520
1x150RM/25	20350513	5.5	26.2	35.2	1,277	528	0.206	14.5	4.1	1003520
1x150RM/25	20060322	5.5	26	35	1,289	525	0.206	14.5	4.1	1003520
1x150RM/25	20290279	5.5	26	34.4	1,271	516	0.206	14.5	4.1	1003520
1x150RM/35	20021072	5.5	26.2	35.2	1,374	528	0.206	14.5	5.9	1003520
1x185RM/25	20021069	5.5	27.8	36.8	1,418	552	0.164	17.9	4.1	1003520
1x185RM/25	20345496	5.5	27.8	36.8	1,448	552	0.164	17.9	4.1	1003520
1x240RM/25	20294738	5.5	30	38.8	1,623	582	0.125	23.1	4.1	1003520
1x240RM/25	20290278	5.5	30.2	38.4	1,623	576	0.125	23.1	4.1	1003520
1x240RM/25	20350514	5.5	30.2	39.2	1,627	588	0.125	23.1	4.1	1003520
1x240RM/25	16010201026	5.5	30.2	38.4	1,623	576	0.125	23.1	4.1	1003520
1x240RM/50	20021080	5.5	30.2	39.2	1,868	588	0.125	23.1	8.3	1003520
1x300RM/25	20354045	5.5	32.9	41.9	1,877	617	0.1	28.8	4.1	1003520
1x300RM/25	20025227	5.5	32.9	41.9	1,886	628	0.1	28.8	4.1	1003520
1x400RM/25	16010201138	5.5	35.6	44.4	2,180	666	0.0778	38.3	4.1	1003520
1x400RM/35	20021071	5.5	35.8	44.6	2,279	669	0.0778	38.3	5.9	1003520
1x400RM/35	20294739	5.5	35.6	44.4	2,280	666	0.0778	38.3	5.9	1003520
1x400RM/35	20180516	5.5	35.6	44.4	2,280	666	0.0778	38.3	5.9	1003520
1x400RM/70	20021081	5.5	35.8	44.8	2,611	672	0.0778	38.3	11.5	1003520
1x500RM/35	20209735	5.5	38.8	47.6	2,644	714	0.0605	47.8	5.9	1003520
1x500RM/35	16010201117	5.5	38.6	47.7	2,659	716	0.0605	47.8	5.9	1003520
1x630RM/35	20354009	5.5	42.2	51.2	3,150	768	0.0469	60.2	5.9	1003520
1x630RM/50	16010201136	5.5	42.2	51.2	3,312	768	0.0469	60.2	8.3	1003520
1x800RM/35	16010201103	5.5	46	56	3,767	840	0.0367	76.5	5.9	1003520
1x1000RM/35	16010201110	5.5	50.3	60.3	4,457	905	0.0291	95.3	5.9	1003520
1x1200RM/35	16010201111	5.5	54.9	64.7	5,128	971	0.0247	114.5	5.9	1003520

CURRENT CARRYING CAPACITY

Cross-section (mm²)	Direct in ground trefoil (A)	Direct in ground flat spaced (A)	Air trefoil (A)	Air flat spaced (A)
70	210	237	231	273
95	251	282	280	332
120	285	319	323	384
150	319	352	366	432
185	361	396	420	494
240	417	455	496	581
300	471	510	569	663
400	535	564	660	753
500	609	634	766	866
630	692	700	885	975
800	775	763	1009	1082
1000	857	824	1142	1194
1200	1199	1146	1294	1298

Ground temperature: 20°C; Air temperature: 30°C
Depth of laying: 0,7 m; Soil resistivity, moist: 1 K.m/W
Screen bonded at both ends