

**POWER CABLES INSULATED IN CROSSLINKED POLYETHYLENE
UNDER PVC SHEATH WITH RIGID RED COPPER CONDUCTOR**

Câbles d'énergie isolés en polyéthylène réticulé sous gaine en PVC avec conducteur rigide en cuivre rouge

CE Accordingly to the standards
BT 2006/95/CE

**NFC32-321 C32-321/A1
IEC60502-1 IEC60332-1**

	A	Rigid red copper conductor. <i>Conducteur rigide en cuivre rouge.</i>
	B	Insulated in crosslinked polyethylene.. <i>Isolés en polyéthylène réticulé.</i>
	C	Not fibrous and not hygroscopic filler. <i>Non fibrous et non hygroscopic filler.</i>
	D	PVC sheath. <i>Gaine en PVC.</i>
	E	Identification marking. <i>Marquage.</i>

NOMINAL VOLTAGE U₀/U:	<i>TENSION NOMINALE U₀/U:</i>	0,6/1kV
MAXIMUM VOLTAGE U_m:	<i>TENSION MAXI U_m:</i>	1200V
MAXIMUM OPERATING TEMPERATURE:	<i>TEMPERATURE MAXI DE SERVICE:</i>	+90°C
MAXIMUM SHORT CIRCUIT TEMPERATURE:	<i>TEMPERATURE MAXI DE COURT-CIRCUIT:</i>	+250°C

Main features and Employment:

For use on industrial sites and the upright columns of buildings. Particularly suited in cases of high operating temperatures and when high resistance to solar radiation and atmospheric agents is required. Good resistance to low temperatures and chemical agents. Can be used without additional mechanical protection in the open air, fixed to walls or in raceways, inside walkways, and in empty in constructions in general. Can be laid underground with mechanical protection constructed from slabs, tiles, or bricks. It is not recommended to lay this cable in ground flooded for more than two months per year. With appropriate mechanical protection it can be used in areas subject to risk of explosion, but in this case the permitted current load is reduced by 15%. It can be used in ambient temperatures down to -25°.

Installation conditions:

Minimum installation and use temperature: -10°C;
Minimum bending radius per D cable diameter (in mm): 6D.
Maximum pulling stress: 5kg/mm² (of copper cross section)

Sheath colour:
Black.

Emploi et type de posa:

Dans les installations industrielles et dans les colonnes montantes des immeubles. Surtout indiqués dans le cas de températures de service élevées et lorsqu'une excellente résistance aux rayons de soleil et aux agents atmosphériques s'impose. Bonne résistance aux basses températures et aux agents chimiques. Sans protection mécanique complémentaire en plein air, fixés aux parois ou dans les conduits, dans les passerelles, dans les espaces vides des constructions en général. Si pourvu de protection mécanique réalisée à l'aide de plaques, tuiles, briques, la pose enterrée est autorisée. Il est conseillé de ne pas installer ces câbles dans des terrains inondés plus de deux mois par an. Si pourvu d'une protection mécanique appropriée, leur emploi est conseillé dans les locaux à risque d'exposition, mais dans ce cas le portée de courant admise doit être réduite de 15%. Prévu pour des températures ambiantes allant jusqu'à -25°C.

Etat de pose:

*Température de pose minimale: -10°C;
Minimum bending radius per D cable diameter in mm: 6D.
Effort de traction maximum conseillé: 5kg/mm² (de section de cuivre)*

Gaine colour:
Noir.

Cores number	Cross section	Approx conductor diameter	Insulation medium thickness	Minimum sheath thickness	Maximum external diameter	Electric resistance at 20°C	Approx cable weight
[N°]	[mm ²]	[mm]	[mm]	[mm]	[mm]	[Ohm/km]	[kg/km]
1x	1.5	1.4	0.7	1.09	6.6	12.1	45
	2.5	1.8	0.7	1.09	7.0	7.41	55
	4	2.25	0.7	1.09	7.6	4.61	75
	6	3.05	0.7	1.09	8.2	3.08	100
	10	3.8	0.7	1.09	9.2	1.83	140
	16	4.7	0.7	1.09	10.5	1.15	205
	25	5.9	0.9	1.09	12.5	0.727	315
	35	7.1	0.9	1.09	13.5	0.524	400
	50	8.0	1	1.09	15.0	0.387	530
	70	9.6	1.1	1.09	17.0	0.268	725
	95	11.4	1.1	1.18	19.0	0.193	985
	120	13.1	1.2	1.18	21.0	0.153	1260
	150	14.6	1.4	1.26	23.0	0.124	1520
	185	16.5	1.6	1.26	25.5	0.0991	1940
	240	18.4	1.7	1.35	28.5	0.0754	2310
300	21.1	1.8	1.43	31.0	0.0601	3200	
2x	1.5	1.4	0.7	1.43	10.5	12.1	115
	2.5	1.8	0.7	1.43	11.5	7.41	145
	4	2.25	0.7	1.43	13.0	4.61	195
	6	3.05	0.7	1.43	14.0	3.08	265
	10	3.8	0.7	1.43	16.0	1.83	390
	16	4.7	0.7	1.43	18.5	1.15	560
	25	5.9	0.9	1.43	22.0	0.727	850
	35	7.1	0.9	1.43	24.5	0.524	1080
3x	1.5	1.4	0.7	1.43	11.0	12.1	130
	2.5	1.8	0.7	1.43	12.5	7.41	170
	4	2.25	0.7	1.43	13.5	4.61	230
	6	3.05	0.7	1.43	15.0	3.08	325
	10	3.8	0.7	1.43	17.0	1.83	485
	16	4.7	0.7	1.43	19.5	1.15	705
	25	5.9	0.9	1.43	23.5	0.727	1080
	35	7.1	0.9	1.43	26.0	0.524	1390
	50	8.0	1.0	1.43	29.0	0.387	1840
	70	9.6	1.1	1.52	34.0	0.268	2540
	95	11.4	1.1	1.60	38.5	0.193	3430
	120	13.1	1.2	1.69	42.5	0.153	4440
	150	14.6	1.4	1.86	47.5	0.124	5380
	185	16.5	1.6	1.94	53.0	0.0991	6920
240	18.4	1.7	2.11	59.5	0.0754	8420	
300	21.1	1.8	2.28	66	0.0601	11300	

Note: Le portate di corrente per i cavi quadripolari sono state calcolate nel caso di una condotta con 3 conduttori caricati.
Current carrying capacities for four-cores cables are calculated relatively to piping with 3 loaded conductors.

Cores number	Cross section	Approx conductor diameter	Insulation medium thickness	Minimum sheath thickness	Maximum external diameter	Electric resistance at 20°C	Approx cable weight
[N°]	[mm ²]	[mm]	[mm]	[mm]	[mm]	[Ohm/km]	[kg/km]
4x	1.5	1.4	0.7	1.43	12.0	12.1	150
	2.5	1.8	0.7	1.43	13.0	7.41	205
	4	2.25	0.7	1.43	14.5	4.61	280
	6	3.05	0.7	1.43	16.0	3.08	390
	10	3.8	0.7	1.43	18.5	1.83	590
	16	4.7	0.7	1.43	21.0	1.15	870
	25	5.9	0.9	1.43	25.5	0.727	1365
	35	7.1	0.9	1.43	28.5	0.524	1760
3x50 + 1x35		8.0	1.0	1.52	31.1	0.387	2160
3x70 + 1x50		9.6	1.1	1.60	36.2	0.268	3010
3x95 + 1x50		11.4	1.1	1.69	40.6	0.193	3960
3x120 + 1x70		13.1	1.2	1.86	45.4	0.153	5160
3x150 + 1x70		14.6	1.4	1.94	49.5	0.124	6150
3x185 + 1x70		16.5	1.6	2.11	54.4	0.0991	7780
3x240 + 1x95		18.4	1.7	2.28	61.5	0.0754	9550
5x	1.5	1.4	0.7	1.43	13.0	12.1	180
	2.5	1.8	0.7	1.43	14.5	7.41	240
	4	2.25	0.7	1.43	16.0	4.61	335
	6	3.05	0.7	1.43	17.5	3.08	475
	10	3.8	0.7	1.43	20.0	1.83	720
	16	4.7	0.7	1.43	23.0	1.15	1060
	25	5.9	0.9	1.43	28.0	0.727	1645
7x	1.5	1.4	0.7	1.43	13.5	12.1	220
	2.5	1.8	0.7	1.43	15.0	7.41	310
10x	1.5	1.4	0.7	1.43	16.5	12.1	310
	2.5	1.8	0.7	1.43	19.0	7.41	440
12x	1.5	1.4	0.7	1.43	17.0	12.1	370
	2.5	1.8	0.7	1.43	19.5	7.41	525
14x	1.5	1.4	0.7	1.43	18.0	12.1	430
	2.5	1.8	0.7	1.43	20.5	7.41	610
19x	1.5	1.4	0.7	1.43	19.5	12.1	560
	2.5	1.8	0.7	1.43	22.5	7.41	745
24x	1.5	1.4	0.7	1.43	22.5	12.1	710
	2.5	1.8	0.7	1.43	25.5	7.41	1000

Note: Le portate di corrente per i cavi quadripolari sono state calcolate nel caso di una condotta con 3 conduttori caricati.
Current carrying capacities for four-cores cables are calculated relatively to piping with 3 loaded conductors.