



### APPLICATION

Flexible, shielded, halogen-free cable, designed for use in industrial processes and engine power. In fixed installations where a better fire performance is required. Especially recommended for variable speed drives due to its double shielding and symmetrical distribution of the protective conductor.

### STRUCTURE

#### Conductor

Bare copper conductor, class 5, according to EN 60228 and IEC 60228

#### Insulation

Cross-linked polyethylene (XLPE) according to 60502-1.

#### Insulation colour

The standard identification of insulated conductors according to UNE 21089 and HD 308:

- 1 x Natural
- 2 x Blue + Brown
- 3 G Blue + Brown + Green/Yellow
- 3 x Brown + Black + Grey
- 4 G Brown + Black + Grey + Grey + Green/Yellow
- 4 x Brown + Black + Grey + Grey + Blue
- 5 G Brown + Black + Grey + Grey + Blue + Green/Yellow
- 6 or more Numbered Black + Green/Yellow

\*Other non-standard colours should be consulted in advance prior to ordering.

#### Stranding

Wiring in concentric layers

#### Screen

Pes Tape x 2 + Al-Pes Tape

#### Screen

Tinned copper braid, 80 % Coverage

#### Tape

Non-woven tape

#### Sheath

Polyolefin according to IEC 60502-1 +UV additive

#### Colour Sheath

Black

#### Type of extrusion

Tube

#### Printing

Marking identification according to customer specifications.

### CHARACTERISTICS

#### Electrical characteristics

Working voltage:  $U_0 / U = 0.6/1kV$   
Insulation resistance: > 1000 MOhm x Km  
AC test voltage: 3500V 5 minutes

#### Thermal characteristics

Maximum conductor temperature: 90°C.  
Maximum short-circuit temperature: 250°C (maximum 5 s).  
Minimum service temperature:

- -5°C flexible installation
- -40°C (static with protection).

#### Fire characteristics

Flame retardant according to UNE-EN 60332-1 / IEC 60332-1  
Fire retardant according to UNE-EN 60332-3-24 / IEC 60332-3-24.  
Halogen free according to UNE-EN 60754-1 / IEC 60754-1.  
Corrosivity according to UNE-EN 60754-2 / IEC 60754-2. (pH >= 4,3; conductivity <= 10µS/mm)  
Low emission of opaque smoke UNE-EN 61034-2 / IEC 61034-2.

#### Mechanical characteristics

Min. bending radius according to DIN EN 50565-1:

Application	<12	12-20	>20
Fixed installation	5D	7.5D	10D
Mobile installation	10D	15D	20D

Impact resistance: AG2 Medium

#### Environmental characteristics

Resistance to chemical attack: Acceptable  
Degree of water infiltration: AD5.  
UV resistant according to UL 1581

#### Installation conditions

In the air.  
Buried.  
Piped.

#### RoHS

All homogeneous materials of all articles must not contain the substances of Annex II of the European Directive 2011/65/EU (RoHS) more than the concentration limits listed therein.

#### REACH

All materials used in the manufacturing process of the product are subject to the EC-Regulation No. 1907/2006 regarding Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).  
If substances based on the current Candidate List are used, they must be listed with their designation and their concentration.

### DIMENSIONS 2XSL(St)CHv DB

Cross Section	Insulation Thickness (mm)	Sheath Thickness (mm)	Outside Diameter Approx. (mm)	Ampacity in air (30°C) (A)	Ampacity in ground (20°C) (A)	Max. resistance at 20°C (Ohm/Km)	Weight Cable (Kgs/Km)
4 G 1,5	0,7	1,8	11,3	23	31	13,3	177
4 G 2,5	0,7	1,8	12,6	32	40	7,98	235
4 x 4	0,7	1,8	13,8	42	52	4,95	304
4 G 6	0,7	1,8	15	54	70	3,3	387
4 G 10	0,7	1,8	17,4	74	86	1,91	565
4 G 16	0,7	1,8	19,9	98	112	1,21	837
4 G 25	0,9	1,8	23,9	127	145	0,78	1208
4 G 35	0,9	1,8	26,5	158	174	0,554	1589
4 G 50	1	1,9	30,7	192	206	0,386	2181
4 G 70	1,1	2,1	36,2	246	254	0,272	3137
4 G 95	1,1	2,3	41,9	298	305	0,206	4075
4 G 120	1,2	2,4	46	346	348	0,161	5088
4 G 150	1,4	2,6	52,8	399	392	0,129	6498
4 G 185	1,6	2,8	59,2	456	442	0,106	7776
4 G 240	1,7	3	65,1	538	509	0,0801	10142

\*Other possible compositions outside the range can be manufactured on request.

### DIMENSIONS 2XSL(St)CHv/3 DB

Cross Section

	Insulation Thickness (mm)	Sheath Thickness (mm)	Outside Diameter Approx. (mm)	Ampacity in air (30°C) (A)	Ampacity in ground (20°C) (A)	Max. resistance at 20°C (Ohm/Km)	Weight Cable (Kgs/Km)
3 x 1,5 + 3 G 0,25	0,7 / 0,3	1,8	10,6	23	31	13,3 / ~ 76	158
3 x 2,5 + 3 G 0,5	0,7 - 0,6	1,8	13,1	32	40	7,98 - 39	253
3 x 2,5 + 3 G 0,75	0,7 / 0,7	1,8	13,6	32	40	7,98 / 26	251
3 x 4 + 3 G 0,75	0,7 - 0,6	1,8	14,1	42	52	4,95 / 26	317
3 x 6 + 3 G 1	0,7 - 0,7	1,8	15,1	54	86	3,3 - 19,5	422
3 x 6 + 3 G 1,5	0,7 / 0,7	1,8	15,7	54	86	3,3 / 13,3	397
3 x 10 + 3 G 1,5	0,7 - 0,7	1,8	16,8	74	86	1,91 - 13,3	518
3 x 16 + 3 G 2,5	0,7 - 0,7	1,8	19,3	98	112	1,21 / 7,98	796
3 x 16 + 3 G 6	0,7 / 0,7	1,8	21,7	98	112	1,21 / 3,3	938
3 x 25 + 3 G 4	0,9 - 0,7	1,8	22	127	145	0,78 - 4,95	1.068
3 x 25 + 3 G 6	0,9 / 0,7	1,8	22,1	127	145	0,78 / 3,3	1.130
3 x 35 + 3 G 6	0,9 - 0,7	1,8	24,5	158	174	0,554 / 3,3	1.487
3 x 50 + 3 G 10	1 - 0,7	1,8	28,7	192	206	0,386 / 1,91	2.154
3 x 70 + 3 G 10	1,1 - 0,7	2	33,1	246	254	0,272 - 1,91	2.731
3 x 70 + 3 G 16	1,1 / 0,7	2	33,1	246	254	0,272 / 1,21	2.886
3 x 95 + 3 G 16	1,1 - 0,7	2,1	37,9	298	305	0,206 - 1,21	3.545
3 x 120 + 3 G 16	1,3 - 0,7	2,3	42,2	359	348	0,161 - 1,21	4.642
3 x 120 + 3 G 25	1,3 / 0,9	2,3	42,3	359	348	0,161 / 0,78	4.877
3 x 150 + 3 G 25	1,4 / 0,9	2,5	47,5	399	392	0,129 / 0,78	5.884
3 x 185 + 3 G 35	1,6 - 0,9	2,7	53,4	456	442	0,106 / 0,554	7.201
3 x 240 + 3 G 50	1,7 - 1	2,8	58,7	538	509	0,0801 / 0,386	9.437
3 x 300 + 3 G 50	1,8 / 1	3,1	68,1	594	553	0,0641 / 0,386	11.388

\*Other possible compositions outside the range can be manufactured on request.