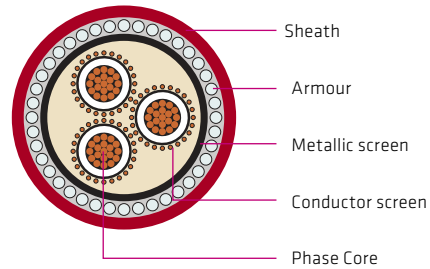


## 6.35/11 kV Copper



### Cable description

Three core copper wire screened armoured to AS/NZS 1972.

### Application

Suitable as primary supply for mines and industrial networks.

### Approvals

AS/NZS 1972

### Behaviour in flame and fire

Flame retardant

### Temperature range

Maximum operating temperature: +90 °C

Minimum operating temperature: -25 °C

### Minimum bending radius

Installed cables: 12D

### Flexibility

Rigid

### Resistance to

Chemical exposure: Very good/Frequent

Mechanical impact: Very heavy

Water exposure: Water splashes

Solar radiation and

weather exposure: Very good/Frequent

### Cable design

XLPE insulated, screened, GSW armoured, PVC sheathed cable.

Core: Metal: Plain circular compacted copper.

Conductor screen:

Extruded semiconducting compound, bonded to the insulation and applied in the same operation as the insulation.

Insulation: Cross Linked Polyethylene (XLPE) - standard.

Insulation screen:

Extruded semiconducting compound.

Metallic screen:

Plain annealed copper wire. Combined screen area is designed to provide not less than 50% conductance of one associated power conductor.

Armour: Galvanised steel wires.

Outer sheath:

Red 5V-90 polyvinyl chloride (PVC).

### Installation conditions

In free air

In duct

In ground

In trench

**Note:** Not specifically designed for use as self supporting cables, as submarine cables or where exposure to excessive heat and/or corrosive products is involved. In case of any doubt concerning the suitability of a particular cable type for a particular application, guidance should be sought from the Prysmian Customer Service Team.

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Physical & electrical characteristics

6.35/11 kV Copper									
Product code:	25XFED3C11	35XFED3C11	50XFED3C11	70XFED3C11	95XFED3C11	120XFED3C11	150XFED3C11	185XFED3C11	240XFED3C11
Nominal conductor area mm <sup>2</sup>	25	35	50	70	95	120	150	185	240
Nominal conductor diameter mm	6.1	7.0	8.2	9.8	11.5	12.9	14.3	16.0	18.2
Nominal diameter under armour mm	40.9	42.9	45.5	49.4	53.2	56.3	59.5	66.0	71.2
Nominal wire armour diameter mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.15	3.15
Nominal diameter mm	51.3	53.5	56.3	60.4	64.4	67.9	71.3	79.5	85.1
Nominal mass kg/100m	425	475	539	646	778	888	1009	1286	1533
Pulling tension: Cond(s) kN	5.3	7.4	10.5	14.7	20.0	25.0	25.0	25.0	25.0
Pulling tension: Stocking kN	5.3	7.4	10.5	12.8	14.5	16.1	17.8	22.1	25
Pulling Tension: Armour wires kN	10.52	11.46	12.75	14.77	16.95	18.75	20.6	25.0	25.0
Min bending radius during install mm	920	960	1010	1090	1160	1220	1280	1430	1530
Min bending radius set in position mm	615	640	676	725	773	814	855	954	1020
Rdc @ ref temp: Phase cond Ohm/km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754
Rac @ oper temp: Phase conductor	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0983
Inductance mH/km	0.415	0.397	0.379	0.349	0.333	0.319	0.310	0.309	0.298
Inductance reactance Ohm/km	0.130	0.124	0.119	0.109	0.104	0.100	0.097	0.097	0.0937
Zo @ ref temp: Ro Ohm/km	4.00+j0.084	3.51+j0.018	2.51+j0.073	1.76+j0.063	1.29+j0.059	1.02+j0.054	0.82+j0.051	0.66+j0.050	0.52+j0.047
Capacitance: Phase to earth uF/km	0.211	0.230	0.254	0.289	0.324	0.353	0.382	0.418	0.465
Capacitance: Charging curr. per phase A/km	0.42	0.46	0.51	0.58	0.65	0.70	0.76	0.83	0.92
ISC: Phase cond. kA, 1 sec	3.6	5.0	7.2	10.0	13.6	17.2	21.5	26.5	34.3
In ground, direct buried A	145	172	202	246	290	330	370	410	464
In ground, in duct A	120	145	170	205	245	280	310	350	410
In free air A; Spaced from wall	148	177	210	259	312	356	400	460	529
In free air A; Clipped to wall	138	166	197	242	291	332	373	427	490
Preferred duct nominal size	80	80	100	100	100	100	100	125	125

Note: For rating factors see technical information.

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