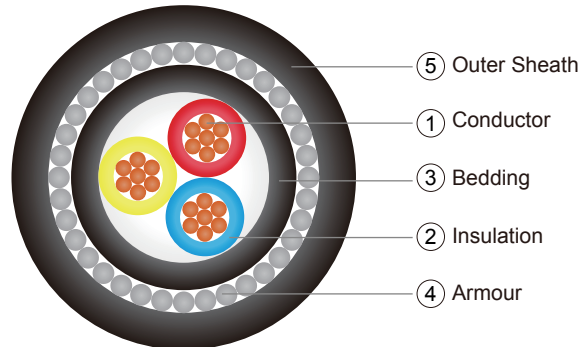


CU/PVC/PVC/SWA/PVC (2 Core to 5 Cores)

PVC Insulated, PVC Bedded, Galvanised Steel Wire Armoured, PVC Sheathed Cable

Application

These power cable for fixed installations such as distribution networks or industrial installations. Such as Plant engineering; Industrial machinery; Heating and air-conditioning systems; Power stations; Stage applications etc. Armoured cable suitable for direct burial.



Construction

① Conductor: Plain annealed copper, class1 solid or class 2 stranded as per IEC 60228. Flexible class 5 or tinned conductor could be offer upon request.

② Insulation: Polyvinyl chloride (PVC) compound as per IEC 60502-1.
Insulation Colour:

Number of Cores	Color Code to IEC 60502-1	Color Code to BS 5467
2	Red & Black	Brown & Blue
3	Red, Yellow and Blue	Brown, Black and Grey
4	Red, Yellow, Blue and Black	Blue, Brown, Black and Grey
5	Red, Yellow, Blue, Black and Green / Yellow	Green / Yellow, Blue, Brown, Black and Grey

Assembly: Cores cabled together with PP filler and covered with non-woven tape

③ Bedding: Polyvinyl chloride (PVC) compound type ST1 (80°C), ST2 (90°C) of IEC 60502-1.
Bedding Color: Black or other color as per customer request.

④ Armour: Round galvanized steel wire armoured (SWA).

⑤ Outer Sheath: Polyvinyl chloride (PVC) compound type ST1 (80°C), ST2 (90°C) of IEC 60502-1.
Outer Sheath Colour: Black or other color as per customer request.

Electrical Characteristics

Recommended rated voltages U_0

Highest system voltage (U_m) (kV)	Rated voltage (U_0) (kV)	
	Categories A and B	Category C
1,2	0,6	0,6

Routine test voltages

Rated voltage U_0 (kV)	0,6
Test voltage (kV)	3,5

Maximum conductor temperatures for different types of insulating compound

PVC Insulation compound	Maximum conductor temperature (°C)	
	Normal operation	Short-circuit (5 s maximum duration)
Conductor cross-section $\leq 300 \text{ mm}^2$	70	160
Conductor cross-section $> 300 \text{ mm}^2$	70	140

Minimum Insulation Resistance at 20°C: 36.7 M Ω ·km

Operating Temperature: -15°C to 70°C

Test Voltage: 3.5 kV for 5 minutes

Installation Reference

Min.Bending Radius (mm): 8 x cable overall diameter

Max.Pulling Tension (N/mm²): 70

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Reference Standards

Design: IEC60502-1

Conductor: IEC60228, BS EN60228

Flame Retardancy: IEC 60332-1, BS EN60332-1

Dimension

2 Cores

Nominal Conductor Area (mm ²)	No. and Diameter of Wires (no./mm)	Thickness of Insulation (mm)	Thickness of Inner Sheath (mm)	Diameter of Armour Wire (mm)	Thickness of Outer Sheath (mm)	Overall Diameter (mm)	Approximate Weight (kg/km)
2x1.5	7/0.53	0.8	1.0	0.80	1.8	13.6	346
2x2.5	7/0.67	0.8	1.0	0.80	1.8	14.4	394
2x4	7/0.85	1.0	1.0	1.25	1.8	17.2	625
2x6	7/1.04	1.0	1.0	1.25	1.8	18.3	716
2x10	7/1.35	1.0	1.0	1.25	1.8	20.2	883
2x16	7/1.70	1.0	1.0	1.60	1.8	23.0	1239
2x25	7/2.14	1.2	1.0	1.60	1.8	26.4	1621
2x35	7/2.52	1.2	1.0	1.60	1.8	28.7	1941
2x50	19/1.78	1.4	1.0	2.00	2.0	33.8	2721
2x70	19/2.14	1.4	1.2	2.00	2.1	37.6	3401
2x95	19/2.52	1.6	1.2	2.00	2.3	43.0	4364
2x120	37/2.03	1.6	1.2	2.50	2.4	47.4	5558
2x150	37/2.25	1.8	1.4	2.50	2.6	51.7	6507
2x185	37/2.52	2.0	1.4	2.50	2.7	56.5	7706
2x240	61/2.25	2.2	1.6	2.50	3.0	63.5	9601
2x300	61/2.52	2.4	1.6	2.50	3.2	69.6	11464
2x400	61/2.85	2.6	1.8	3.15	3.5	78.6	15016
2x500	61/3.20	2.8	1.8	3.15	3.7	86.1	17977
2x630	127/2.52	2.8	1.8	3.15	4.0	94.6	21881
2x800	127/2.85	2.8	2.0	3.15	4.3	104.2	26700
2x1000	127/3.20	3.0	2.0	3.15	4.6	114.7	32369

3 Cores

Nominal Conductor Area (mm ²)	No. and Diameter of Wires (no./mm)	Thickness of Insulation (mm)	Thickness of Inner Sheath (mm)	Diameter of Armour Wire (mm)	Thickness of Outer Sheath (mm)	Overall Diameter (mm)	Approximate Weight (kg/km)
3x1.5	7/0.53	0.8	1.0	0.80	1.8	14.1	387
3x2.5	7/0.67	0.8	1.0	0.80	1.8	15.0	448
3x4	7/0.85	1.0	1.0	1.25	1.8	17.9	711
3x6	7/1.04	1.0	1.0	1.25	1.8	19.1	829
3x10	7/1.35	1.0	1.0	1.25	1.8	21.1	1048
3x16	7/1.70	1.0	1.0	1.60	1.8	24.1	1484
3x25	7/2.14	1.2	1.0	1.60	1.8	27.8	1989
3x35	7/2.52	1.2	1.0	1.60	1.9	30.5	2439
3x50	19/1.78	1.4	1.2	2.00	2.1	35.8	3399
3x70	19/2.14	1.4	1.2	2.00	2.2	39.9	4326
3x95	19/2.52	1.6	1.2	2.50	2.4	46.2	5989
3x120	37/2.03	1.6	1.4	2.50	2.5	50.3	7125
3x150	37/2.25	1.8	1.4	2.50	2.7	54.9	8412
3x185	37/2.52	2.0	1.6	2.50	2.9	60.6	10169
3x240	61/2.25	2.2	1.6	2.50	3.1	67.5	12649
3x300	61/2.52	2.4	1.6	3.15	3.4	75.5	16200
3x400	61/2.85	2.6	1.8	3.15	3.6	83.6	19844
3x500	61/3.20	2.8	1.8	3.15	3.9	91.8	24024
3x630	127/2.52	2.8	2.0	3.15	4.2	101.3	29639
3x800	127/2.85	2.8	2.0	3.15	4.5	111.2	36292
3x1000	127/3.20	3.0	2.0	3.15	4.9	122.6	44389

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4 Cores

Nominal Conductor Area (mm ²)	No. and Diameter of Wires (no./mm)	Thickness of Insulation (mm)	Thickness of Inner Sheath (mm)	Diameter of Armour Wire (mm)	Thickness of Outer Sheath (mm)	Overall Diameter (mm)	Approximate Weight (kg/km)
4x1.5	7/0.53	0.8	1.0	0.80	1.8	14.9	438
4x2.5	7/0.67	0.8	1.0	1.25	1.8	16.8	639
4x4	7/0.85	1.0	1.0	1.25	1.8	19.1	817
4x6	7/1.04	1.0	1.0	1.25	1.8	20.5	964
4x10	7/1.35	1.0	1.0	1.60	1.8	23.4	1384
4x16	7/1.70	1.0	1.0	1.60	1.8	25.9	1764
4x25	7/2.14	1.2	1.0	1.60	1.9	30.3	2416
4x35	7/2.52	1.2	1.0	2.00	2.0	34.0	3239
4x50	19/1.78	1.4	1.2	2.00	2.2	39.0	4151
4x70	19/2.14	1.4	1.2	2.00	2.3	43.6	5337
4x95	19/2.52	1.6	1.4	2.50	2.6	51.1	7476
4x120	37/2.03	1.6	1.4	2.50	2.7	55.2	8855
4x150	37/2.25	1.8	1.6	2.50	2.9	60.7	10576
4x185	37/2.52	2.0	1.6	2.50	3.1	66.6	12739
4x240	61/2.25	2.2	1.6	3.15	3.4	75.8	16902
4x300	61/2.52	2.4	1.8	3.15	3.6	83.4	20445
4x400	61/2.85	2.6	1.8	3.15	3.9	92.2	25071
4x500	61/3.20	2.8	2.0	3.15	4.2	101.7	30598
4x630	127/2.52	2.8	2.0	3.15	4.6	112.1	37801
4x800	127/2.85	2.8	2.0	3.15	4.9	123.1	46466
4x1000	127/3.20	3.0	2.0	3.15	5.3	135.8	57010

5 Cores

Nominal Conductor Area (mm ²)	No. and Diameter of Wires (no./mm)	Thickness of Insulation (mm)	Thickness of Inner Sheath (mm)	Diameter of Armour Wire (mm)	Thickness of Outer Sheath (mm)	Overall Diameter (mm)	Approximate Weight (kg/km)
5x1.5	7/0.53	0.8	1.0	1.25	1.8	16.7	616
5x2.5	7/0.67	0.8	1.0	1.25	1.8	17.8	716
5x4	7/0.85	1.0	1.0	1.25	1.8	20.4	928
5x6	7/1.04	1.0	1.0	1.60	1.8	22.6	1244
5x10	7/1.35	1.0	1.00	1.60	1.8	25.1	1594
5x16	7/1.70	1.0	1.0	1.60	1.8	28.0	2053
5x25	7/2.14	1.2	1.0	2.00	2.0	33.8	3105
5x35	7/2.52	1.2	1.2	2.00	2.1	37.5	3879
5x50	19/1.78	1.4	1.2	2.00	2.3	42.6	4924
5x70	19/2.14	1.4	1.4	2.50	2.5	49.3	6917
5x95	19/2.52	1.6	1.4	2.50	2.7	55.9	8911
5x120	37/2.03	1.6	1.6	2.50	2.9	61.0	10704
5x150	37/2.25	1.8	1.6	2.50	3.1	66.6	12717
5x185	37/2.52	2.0	1.6	3.15	3.3	74.5	16277
5x240	61/2.25	2.2	1.8	3.15	3.6	83.7	20453
5x300	61/2.52	2.4	1.8	3.15	3.9	91.9	24721
5x400	61/2.85	2.6	2.0	3.15	4.2	102.0	30521
5x500	61/3.20	2.8	2.0	3.15	4.6	112.4	37232
5x630	127/2.52	2.8	2.0	3.15	4.9	123.7	46042
5x800	127/2.85	2.8	2.0	3.15	5.3	136.1	56799
5x1000	127/3.20	3.0	2.0	3.15	5.8	150.4	69887