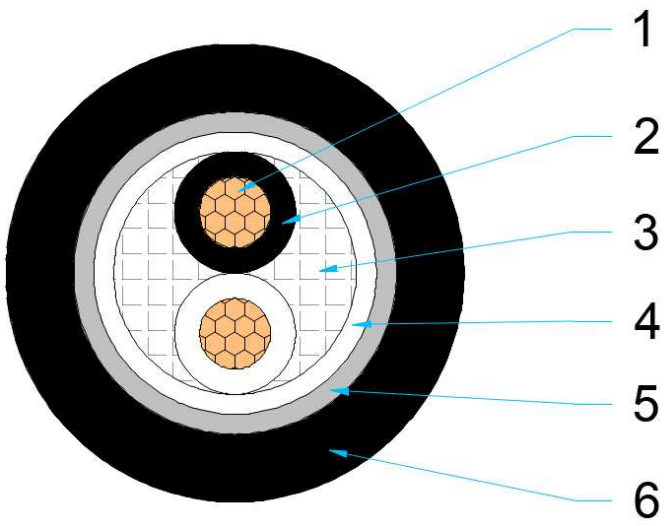
CU/PVC/OS/PVC 300V

1. Standard compliance

Item	Standard
Cable design	BS EN 50288-7
Conductor	AS/NZS 1125
Insulating and sheathing material	AS/NZS 3808

2. Construction



No.	Construction	Specification
1	Conductor	Class 2 plain annealed stranded circular copper conductor
2	Insulation	V-90 as per AS/NZS 3808
3	Filler	PP rope (if necessary)
4	Binder tape	Polyester tape
5	Overall screen	Al-PET with tinned copper drain wire of **7/0.3**mm
6	Outer sheath	5V-90 (UV resistant) as per AS/NZS 3808, **Black** or as per client's requirements

3. Cable identification & Packing

Item	Requirement
Core identification:	1 Pair: White and Black
	1 Triad: White and Black, Red
Printing Colour:	**White** colour text on **Black** sheath or **Black** colour text on **Other color** sheath
Cable marking by printing:	**e.g.:** ****** CABLES ELECTRIC CABLE CU/V-90/OS/5V-90 1P0.5MM2 300V BS EN 50288-7 2026 0000M**
Printing criteria:	By printing in one line on the surface of outer sheath. The distance between the end of one block of marking and the beginning of the next shall not exceed 550 mm. Meter marking interval is every one meter.
Packing length in meters:	As per cable schedule
Type of drum:	Steel-wooden/Wooden/Plywood/Steel Drum

4. Electrical properties

Item	Specification
Voltage grade	300V
Permissible frequency variation	49Hz~61Hz
Normal use conductor temperature at rated current	75°C
Max. permissible conductor temperature	90°C (See note 3&4)
Max. conductor temp. at the end of short circuit	160°C
Ambient temperature during operation	-15°C~55°C
Lowest temperature during installation	0°C
Test voltage	1.0kV AC/1 min. (50 Hz)

5. Construction characteristics

Dimensions								
No. of cores & CSA	Minimum number of wires in conductor	Approx. dia. of conductor	Insulation thickness (Nom.)	Structure of drain wire	Nominal thickness of Al-Mylar tape	Outer sheath thickness (Nom.)	Approx. OD of cable	Approx. weight of cable
Sq.mm	Nos.	mm	mm	No./mm	mm	mm	mm	kg/km
1P0.5	3	0.9	0.4	7/0.3	0.05	0.8	6.2±1.0	44.1
1P0.75	3	1.1	0.4	7/0.3	0.05	0.9	6.8±1.0	54.8
1P1	3	1.29	0.4	7/0.3	0.05	0.9	7.1±1.0	62.9
1P1.5	3	1.5	0.5	7/0.3	0.05	0.9	8.0±1.0	81.4

6. Electrical and Mechanical properties

Characteristics							
No. of cores & CSA	Max. DC conductor resistance at 20°C	Min. insulation resistance at 20°C	Mutual capacitance	Inductance to resistance ratio (L/R)	Max. allowable pulling force of armor	Min. bending radius	
						During installation	After installation
	Ω/km	MΩ/km	nf/km	μH/Ω	kN	mm	mm
1P0.5	38.4	10	<250	<25	0.07	93	75
1P0.75	25.3	10	<250	<25	0.11	102	82
1P1	21.2	10	<250	<25	0.14	107	86
1P1.5	13.6	10	<250	<40	0.21	120	96

Note:

1. The particulars given above are nominal & are subject to normal manufacturing tolerances.
2. All parameter is approximate value for reference only.
3. The maximum permissible temperatures are applicable when there is no chance of thermal deformation or a reasonable chance of human contact in normal use.
4. V-90 and V-90HT insulated cables may be operated up to the maximum permissible temperatures 90°C and 105°C provided that the cable is installed in a manner that is not subject to, or is protected against, severe mechanical pressure at temperatures higher than 75°C.