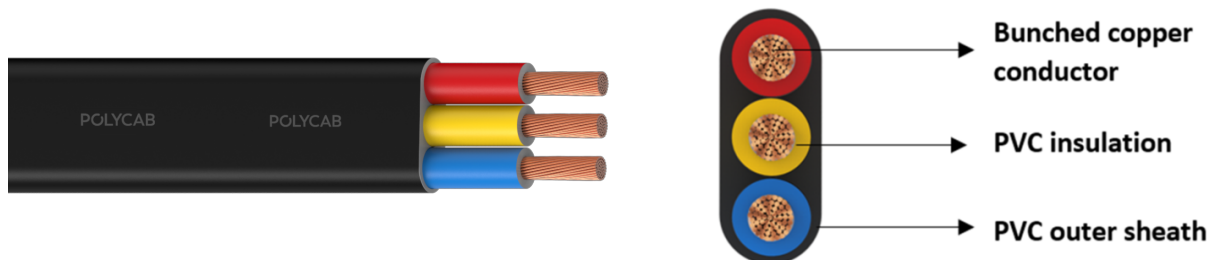


# POLYCAB 02YY-K SUBMERSIBLE

## Industrial cables, 1100 V AC



Images not to scale. Follow table for dimensions

### APPLICATION

POLYCAB 02YY-K Submersible flexible cable insulated and sheathed with PVC conforming to IS 694 is suitable to use for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. Polycab Submersible is highly recommended for submersible pump due to its rugged nature and extended life.

### CHARACTERISTICS

**Voltage Rating**  
1100 V

**Operation Temperature**  
Fixed: -15°C to 70°C

**Bending Radius**  
Fixed installation 6 x Overall diameter  
Occasional 4 x Overall diameter

### CONSTRUCTION

- Bunched copper conductor as per IS 8130, class 5
- Insulated with PVC Type D to IS 5831
- Sheathed with PVC Type ST3 to IS 5831

### Core Identification

Two core Red and Black  
Three core Red, Yellow and Blue

### STANDARD FOLLOWS

IS 8130:2013  
IS 5831:1984  
IEC 60332-1-2

### COMPLIANCE

Conductor resistance - IS 8130  
Insulation resistance - IS 5831:1984  
Flammability test - IEC 60332-1-2

### APPROVAL



### NOTES

- The above cable also available in HR PVC insulation with maximum operating temperature 85°C.
- Outer sheath with additional properties FR & FRLSH also available.

**WEIGHT AND DIMENSION DATA**

Product Code	Conductor size	Nominal insulation thickness	Overall dimension (Approx.)	Weight (Approx.)
	n x mm <sup>2</sup>	mm	mm	kg/km
WSIS09CYUAY1002C0.5S	2 x 0.5	0.6	6.02 x 3.91	45
WSIS09CYUAY1002C.75S	2 x 0.75	0.6	6.43 x 4.12	52
WSIS09CYUAY1002C001S	2 x 1	0.6	6.78 x 4.29	60
WSIS09CYUAY1002C1.5S	2 x 1.5	0.6	7.32 x 4.56	72
WSIS09CYUAY1002C2.5S	2 x 2.5	0.7	8.83 x 5.42	107
WSIS09CYUAY1002C004S	2 x 4	0.8	10.32 x 6.16	148
WSIS09CYUAY1002C006S	2 x 6	0.8	11.67 x 6.93	201
WSIS09CYUAY1002C010S	2 x 10	1	14.96 x 8.88	335
WSIS09CYUAY1002C016S	2 x 16	1	17.04 x 9.92	464
WSIS09CYUAY1002C025S	2 x 25	1.2	21.57 x 12.78	748
WSIS09CYUAY1002C035S	2 x 35	1.2	23.95 x 13.98	968
WSIS09CYUAY1002C050S	2 x 50	1.4	28.15 x 16.27	1350
WSIS09CYUAY1003C0.5S	3 x 0.5	0.6	8.14 x 3.91	67
WSIS09CYUAY1003C.75S	3 x 0.75	0.6	8.75 x 4.12	79
WSIS09CYUAY1003C001S	3 x 1	0.6	9.27 x 4.29	89
WSIS09CYUAY1003C1.5S	3 x 1.5	0.6	10.08 x 4.56	108
WSIS09CYUAY1003C2.5S	3 x 2.5	0.7	12.25 x 5.42	160
WSIS09CYUAY1003C004S	3 x 4	0.8	14.48 x 6.16	223
WSIS09CYUAY1003C006S	3 x 6	0.8	16.4 x 6.93	302
WSIS09CYUAY1003C010S	3 x 10	1	21.04 x 8.88	502
WSIS09CYUAY1003C016S	3 x 16	1	24.16 x 9.92	695
WSIS09CYUAY1003C025S	3 x 25	1.2	30.35 x 12.78	1123
WSIS09CYUAY1003C035S	3 x 35	1.2	33.93 x 13.98	1452
WSIS09CYUAY1003C050S	3 x 50	1.4	40.02 x 16.27	2025
WSIS09CYUAY1003C070S	3 x 70	1.4	45.06 x 17.95	2661
WSIS09CYUAY1003C095S	3 x 95	1.6	52.02 x 20.54	3555

### Electrical characteristics

#### Current carrying capacity and maximum DC conductor resistance.

Nominal cross-sectional area	Reference Method B (enclosed in conduit on a wall or in trunking etc.)		Reference Method C (clipped direct)		Maximum DC conductor resistance at 20°C
	1 two-core cable* single-phase a.c. or d.c.	1 three-core cable* or 1 four-core cable, three-phase a.c.	1 two-core cable* single-phase a.c. or d.c.	1 three-core cable* or 1 four-core cable, three-phase a.c.	
mm <sup>2</sup>	Amp.	Amp.	Amp.	Amp.	Ω/km
0.5	4	3.6	4	3.6	39
0.75	7	6	7	6	26
1	11	10	12	11	19.5
1.5	14	12	16	14	13.3
2.5	19	17	22	20	7.98
4	25	22	30	26	4.95
6	31	28	38	34	3.3
10	43	38	52	47	1.91
16	57	51	70	63	1.21
25	76	68	95	81	0.78
35	94	84	116	100	0.554
50	112	100	142	122	0.386
70	142	122	180	155	0.272
95	170	151	218	188	0.206

Ambient temperature: 40°C

Conductor operating temperature: 70°C

The above table is in accordance with BS:7671(Table 4D2A)

### De-Rating Factor

#### De-rating factor for various ambient temperature.

Ambient Temperature	35°C	40°C	50°C	60°C	65°C
De-Rating Factor	1.04	1	0.82	0.57	0.40