



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB 02YY-K power and control cable for fixed and flexible installation for industrial use where dry, damp and wet atmosphere. They are generally resistant to acids, caustic solution and certain oils in room temperature. Suitable to use in machine tool application, plant engineering, in panels, heating and air conditioning installation. Suitable for freely moved without forced guidance and tensile stress.

## CHARACTERISTICS

**Voltage Rating**  
1100 V

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

**Bending Radius**  
Fixed installation 6 x Overall diameter  
Occasional 8 x Overall diameter

## CONSTRUCTION

- Bunched copper conductor as per IS 8130/IEC 60228, class 5
- Insulated with PVC Type A to IS 5831
- Sheathed with PVC Type ST1 to IS 5831

### Core Identification

Two core - Red, Black

Three core - Green/yellow, Red, Black Or Red, Yellow, Blue

Four core - Green/Yellow, Red, Yellow, Blue Or Red, Yellow, Blue, Black

Five core - Red, Yellow, Blue, Black, Grey

## STANDARD FOLLOWS

IS 8130:2013/IEC 60228

IS 5831:1984

IS 10810-53/IEC 60332-1

## COMPLIANCE

Conductor resistance - IS 8130/IEC 60228

Insulation resistance - IS 5831:1984

Flammability test - IS 10810-53/IEC 60332-1

## OUR ACCREDITATIONS



## APPROVAL



# POLYCAT 02YY-K

## Industrial cable, 1100 V AC

**POLYCAT**  
IDEAS. CONNECTED.

### WEIGHT AND DIMENSION DATA

Product Code	Conductor size  n x mm <sup>2</sup>	Overall diameter  mm	Weight
			(Approx.)  kg/km
LDIS09CYUAY1002C0.5S	2 x 0.5	6	50
LDIS09CYUAY1003C0.5S	3 G 0.5	6.4	57
LDIS09CYUAY1004C0.5S	4 G 0.5	6.9	69
LDIS09CYUAY1002C.75S	2 x 0.75	6.4	59
LDIS09CYUAY1003C.75S	3 G 0.75	6.8	69
LDIS09CYUAY1004C.75S	4 G 0.75	7.4	84
LDIS09CYUAY1002C001S	2 x 1	6.8	67
LDIS09CYUAY1003C001S	3 G 1	7.2	80
LDIS09CYUAY1004C001S	4 G 1	7.8	97
LDIS09CYUAY1002C1.5S	2 x 1.5	7.3	82
LDIS09CYUAY1003C1.5S	3 G 1.5	7.8	98
LDIS09CYUAY1004C1.5S	4 G 1.5	8.7	125
LDIS09CYUAY1005C1.5S	5 x 1.5	9.5	135
LDIS09CYUAY1002C2.5S	2 x 2.5	8.8	123
LDIS09CYUAY1003C2.5S	3 G 2.5	9.4	149
LDIS09CYUAY1004C2.5S	4 G 2.5	10.3	184
LDIS09CYUAY1005C2.5S	5 x 2.5	11.2	199
LDIS09CYUAY1003C004S	3 G 4	11	213
LDIS09CYUAY1004C004S	4 G 4	12.1	265
LDIS09CYUAY1005C004S	5 x 4	13.2	287
LDIS09CYUAY1003C006S	3 G 6	12.6	294
LDIS09CYUAY1004C006S	4 G 6	13.9	367
LDIS09CYUAY1005C006S	5 x 6	15.6	417
LDIS09CYUAY1003C010S	3 G 10	15.9	516
LDIS09CYUAY1004C010S	4 G 10	17.5	649
LDIS09CYUAY1005C010S	5 x 10	19.2	716
LDIS09CYUAY1003C016S	3 G 16	18.2	730
LDIS09CYUAY1004C016S	4 G 16	20	925
LDIS09CYUAY1005C016S	5 x 16	22	1029
LDIS09CYUAY1003C025S	3 G 25	22	1098
LDIS09CYUAY1004C025S	4 G 25	24.5	1409

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Product Code	Conductor size  $n \times mm^2$	Overall diameter  mm	Weight (Approx.)
			kg/km
LDIS09CYUAY1005C025S	5 x 25	27.1	1581
LDIS09CYUAY1003C035S	3 G 35	24.7	1467
LDIS09CYUAY1004C035S	4 G 35	27.5	1886
LDIS09CYUAY1005C035S	5 x 35	30.9	2156
LDIS09CYUAY1003C050S	3 G 50	29.6	2106
LDIS09CYUAY1004C050S	4 G 50	32.7	2686

X – without Green-Yellow conductor

G – with Green-Yellow conductor

### Electrical characteristics

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

Nominal cross sectional area  $mm^2$	Reference Method B (enclosed in conduit on a wall or in trunking etc.)		Reference Method C (clipped direct)		Reference Method E (free air or on a perforated cable tray etc, horizontal or vertical)		Maximum DC conductor resistance at 20°C  $\Omega/km$
	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.	1 two-core cable* single-phase a.c. or d.c.	1 three-core cable* or 1 four-core cable, three-phase a.c.	
0.5	4	3.6	4	3.6	-	-	39
0.75	7	6	7	6	-	-	26
1	11	10	12	11	14	12	19.5
1.5	14	12	16	14	18	15	13.3
2.5	19	17	22	20	25	21	7.98
4	25	22	30	26	33	28	4.95
6	31	28	38	34	42	36	3.3
10	43	38	52	47	58	50	1.91
16	57	51	70	63	78	66	1.21
25	76	68	95	81	100	85	0.78
35	94	84	116	100	125	106	0.554
50	112	100	142	122	152	129	0.386

Air Ambient temperature: 40°C

Conductor operating temperature: 70°C

The above table is in accordance with Table 4D2A of BS 7671:2018

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**De-Rating Factor**

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

Ambient Temperature	35°C	40°C	45°C	50°C	55°C	60°C	65°C
De-Rating Factor	1.08	1	0.91	0.82	0.7	0.57	0.4