



Images not to scale. Follow table for dimensions

## APPLICATION

POLYCAB 01Y-R SC PVC cable, PVC insulated unsheathed cable conforming to IS 694 is suitable to use in electric power, lighting & panel wiring for indoor use in AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

## CHARACTERISTICS

**Voltage Rating**  
1100 V

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

**Bending Radius**  
Fixed 4 x Overall Diameter  
Occasional 6 x Overall Diameter

## CONSTRUCTION

- Annealed stranded plain copper conductor as per IS 8130, class 2
- Insulated with FR-PVC Type A as per IS 5831

### Core Identification

Red/Black/Blue/Yellow/White/Grey.

**Test Voltage**  
3kV AC

## OUTSTANDING FEATURES

- Optimized current carrying capacity
- Fire retardant and safe for protection
- Low emission of toxic gases
- Low carbon emission
- Low volatile organic content- less contamination
- High conductivity electrolytic copper conductor

## STANDARD FOLLOWS

IS 8130  
IS 5831  
IS 694  
IEC 60332-1-2

## COMPLIANCE

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

## OUR ACCREDITATIONS



## APPROVAL



## NOTES

- Anti-Termite and anti-Rodent
- The above cable is also available in HR PVC insulation with maximum operating temperature of 85°C.
- Outer sheath with additional properties of FR & FRLSH are also available
- The cable is also available with tinned copper conductor.

**WEIGHT & DIMENSION DATA:**

Product Code	Nominal cross-sectional area mm <sup>2</sup>	insulation thickness mm	Overall Diameter (Approx.) mm	Weight (Approx.)
LDIS09CYUAYF001C001S	1	0.7	2.70	15
LDIS09CYUAYF001C1.5S	1.5	0.7	3.00	21
LDIS09CYUAYF001C2.5S	2.5	0.8	3.60	32
LDIS09CYUAYF001C004S	4	0.8	4.20	49
LDIS09CYUAYF001C006S	6	0.8	4.70	68
LDIS09CYUAYF001C010S	10	1	6.10	114
LDIS09CYUAYF001C016S	16	1	7.10	171
LDIS09CYUAYF001C025S	25	1.2	8.90	270
LDIS09CYUAYF001C035S	35	1.2	10.00	364
LDIS09CYUAYF001C050S	50	1.4	11.90	519
LDIS09CYUAYF001C070S	70	1.4	13.50	706
LDIS09CYUAYF001C095S	95	1.6	15.70	959
LDIS09CYUAYF001C120S	120	1.6	17.30	1198
LDIS09CYUAYF001C150S	150	1.8	19.30	1497
LDIS09CYUAYF001C185S	185	2	21.50	1848
LDIS09CYUAYF001C240S	240	2.2	24.30	2387
LDIS09CYUAYF001C300S	300	2.4	27.10	2981
LDIS09CYUAYF001C400S	400	2.6	30.80	3927
LDIS09CYUAYF001C500S	500	2.8	34.40	4929
LDIS09CYUAYF001C630S	630	3	38.30	6188

**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)		Reference method F ( in free air or on a perforated cable tray horizontal or vertical)					Maximum DC conductor resistance at 20°C
	2 cables single phase AC or DC	3 or 4 cables three phase AC	2 cables single phase AC or DC flat and touching	3 or 4 cables three phase AC flat and touching or trefoil	Touching			Spaced by one meter		
					2 cables single phase AC or DC flat	3 cables three phase AC flat	3 cables three phase AC trefoil	2 cables ,single-phase AC or DC or 3 cables three phase AC flat		
								Horizontal	Vertical	
mm²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
1	12	10	13	12	-	-	-	-	-	18.1
1.5	15	13	17	16	-	-	-	-	-	12.1
2.5	21	18	23	22	-	-	-	-	-	7.41
4	28	24	32	29	-	-	-	-	-	4.61
6	36	31	41	37	-	-	-	-	-	3.08
10	50	44	57	51	-	-	-	-	-	1.83
16	66	59	76	69	-	-	-	-	-	1.15
25	88	77	99	90	114	99	96	127	113	0.727
35	109	96	123	112	141	124	119	157	141	0.524
50	131	117	158	145	171	151	145	191	171	0.387
70	167	149	204	186	218	196	188	244	221	0.268
95	202	180	247	227	264	239	230	297	271	0.193
120	234	208	287	264	306	279	268	345	315	0.153
150	261	228	331	304	353	324	310	397	365	0.124
185	297	258	379	348	403	371	356	453	418	0.0991
240	348	301	448	411	475	441	422	535	495	0.0754
300	398	343	517	474	547	511	488	617	573	0.0601
400	475	406	604	552	656	599	571	741	692	0.047
500	545	464	689	629	755	686	652	854	800	0.0366
630	626	532	786	719	874	787	744	990	931	0.0283

Ambient temperature: 40°C  
Conductor operating temperature: 70°C  
The above table is in accordance with BS 7671(Table 4D1A)

De-Rating Factor

De-rating factor at various air temperature.

Ambient Temperature	45°C	50°C	55°C	60°C	65°C
De-Rating Factor	0.91	0.82	0.71	0.58	0.41

POLYCAB