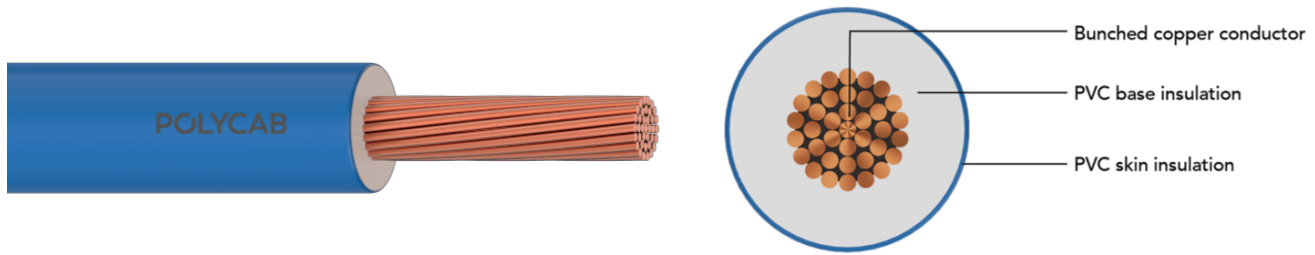


# POLYCAB H07V-K BS EN 50525-2-31 SC

## Industrial Cable, 450/750 V AC



Images not to scale. Follow table for dimensions

### APPLICATION

POLYCAB H07V-K single core non-sheathed thermoplastic insulated signal and control cable is suitable for power installation, domestic application, industrial appliances, and equipment. These cables are used in exposed conduits, embedded conduits as well as closed installation duct.

### CHARACTERISTICS

#### Voltage Rating

450 / 750 V

#### Operation Temperature

Fixed: -15°C to 70° C

### CONSTRUCTION

- Annealed stranded copper conductor as per IEC 60228, class 5
- Insulated with Polyvinyl Chloride Type TI 1 to EN 50363-3

#### Core Identification

Black/Blue/Brown/Grey/Orange/Pink/Red/Turquoise/Violet/White

#### Bending Radius

Fixed installation - 8 x Overall Dia.

#### Test Voltage

2500V AC at (20±5) °C

### OUTSTANDING FEATURES

- Flexible
- Flame Retardant
- Good Insulation Resistance

### STANDARD FOLLOWS

IEC 60228

BS EN 50363-3

BS EN 50525-2-31

IEC 60332-1-2

### COMPLIANCE

Conductor resistance test - IEC 60228

Insulation resistance - EN 50525-2-31

Tests under fire condition - EN 60332-1-2

Flame retardant properties as per IEC 60332-1-2

### OUR ACCREDITATIONS



### APPROVAL



POLYCAB H07V-K BS EN 50525-2-31 SC  
Industrial Cable, 450/750 V AC



Weight & Dimension Data

Product Code	Nominal cross sectional area  mm <sup>2</sup>	Overall Diameter (Approx.) mm	Weight (Approx.) kg/km	POLYCAB DOWEL/GLAND SIZE
LDBS06CYUAYA001C1.5S	1.5	2.96	20	-
LDBS06CYUAYA001C2.5S	2.5	3.62	32	-
LDBS06CYUAYA001C004S	4	4.16	48	-
LDBS06CYUAYA001C006S	6	4.73	68	-
LDBS06CYUAYA001C010S	10	6.08	114	DBW - 01SS (UN)
LDBS06CYUAYA001C016S	16	7.12	171	DBW - 01SS (UN)
LDBS06CYUAYA001C025S	25	8.78	264	DBW - 01SS (UN)
LDBS06CYUAYA001C035S	35	9.98	361	DBW - 01SS (UN)
LDBS06CYUAYA001C050S	50	11.87	517	DBW - 01SS (UN)
LDBS06CYUAYA001C070S	70	13.55	710	DBW - 01S (UN)
LDBS06CYUAYA001C095S	95	15.74	962	DBW - 01A (UN)
LDBS06CYUAYA001C120S	120	17.28	1198	DBW - 02 (UN)
LDBS06CYUAYA001C150S	150	19.21	1475	DBW - 02 (UN)
LDBS06CYUAYA001C185S	185	21.49	1851	DBW - 02 (UN)
LDBS06CYUAYA001C240S	240	24.23	2370	DBW - 04A (UN)

- DBW – Weather proof Series

### Electrical Characteristics

**Current carrying capacity and max. DC conductor resistance.**

Nominal cross sectional area	Reference Method A (enclosed in conduit in thermally insulating wall etc.)		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 etc.)						Maximum resistance of conductor at 20°C
							Touching			Spaced by one diameter			
	2 cables, single-phase a.c. or d.c.	3 or 4 cables, three-phase a.c.	2 cables, single-phase a.c. or d.c.	3 or 4 cables, three-phase a.c.	2 cables, single-phase a.c. or d.c. flat and touching	3 or 4 cables, three-phase a.c. flat and touching or trefoil	2 cables, single-phase a.c. or d.c. flat	3 cables, three-phase a.c. flat	3 cables, three-phase a.c. trefoil	2 cables, single-phase a.c. or d.c. or 3 cables three-phase a.c. flat			
											Horizontal	Vertical	
mm²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
1.5	13.8	12.8	16.6	14.7	19	17	–	–	–	–	–	–	13.3
2.5	19	17	23	20	26	24	–	–	–	–	–	–	7.98
4	25	23	30	27	35	31	–	–	–	–	–	–	4.95
6	32	29	39	34	45	41	–	–	–	–	–	–	3.3
10	44	40	54	48	62	56	–	–	–	–	–	–	1.91
16	58	56	72	65	83	75	–	–	–	–	–	–	1.21
25	78	71	98	86	111	101	127	111	107	142	126		0.78
35	96	86	121	107	137	125	157	139	133	176	157		0.554
50	115	105	146	130	177	162	190	169	162	212	191		0.386
70	146	132	186	166	227	208	243	218	210	273	246		0.272
95	177	159	225	201	275	253	295	267	256	331	302		0.206
120	204	182	261	232	320	294	341	311	299	384	351		0.161
150	233	210	291	254	370	339	394	361	345	442	406		0.129
185	265	238	331	287	423	388	449	414	397	505	466		0.106
240	311	277	388	336	500	458	530	492	470	597	552		0.0801

The ambient temperature is 30°C. Conductor operating temperature 70°C. The above table is in accordance with Table 4D1A of BS 7671:2018

### De-Rating Factor

#### De-rating factor for 70°C thermoplastic insulated cable

Air Temperature	35°C	40°C	45°C	50°C	55°C
De-Rating Factor	0.91	0.82	0.71	0.58	0.41