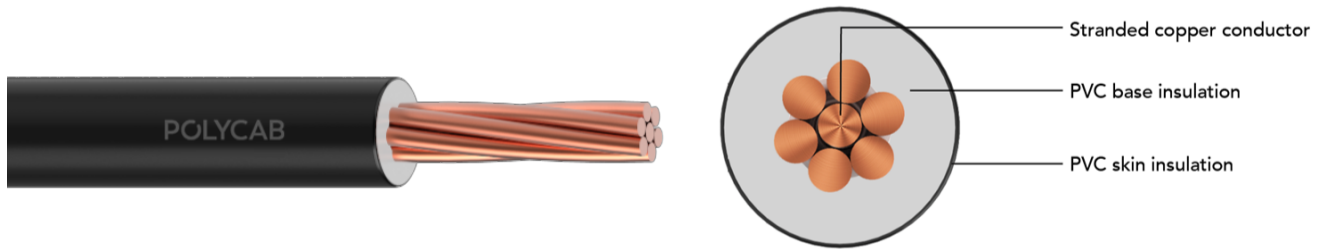


# POLYCAB H05V2-U/H05V2-R/H07V2-U/H07V2-R BS EN 50525-2-31 SC

## Industrial Cable, 300/500 V & 450/750 V AC



Images not to scale. Follow table for dimensions

### APPLICATION

POLYCAB H05V2-U/H05V2-R/H07V2-U/H07V2-R single core non-sheathed thermoplastic insulated signal and control cable is suitable for power installation, domestic application, industrial appliances and equipment. This cable is used in exposed conduits, embedded conduits as well as closed installation duct.

### CHARACTERISTICS

#### Voltage Rating

H05V2-U/H05V2-R - 300/500 V  
H07V2-U/H07V2-R - 450/750 V

#### Operation Temperature

Fixed: -15°C to 90°C

### CONSTRUCTION

- Annealed stranded or solid copper conductor as per IEC 60228, class 2 or class 1
- Insulated with Polyvinyl Chloride Type TI 3 to EN 50363-3

#### Core Identification

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

#### Bending Radius

Fixed installation - 8 x Overall Diameter

#### Test Voltage

H05V2-U/H05V2-R - 2000V AC at (20±5) °C  
H07V2-U/H07V2-R - 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 H05V2-U/H05V2-R/H07V2-U/H07V2-R BS EN  
50525-2-31 SC  
Industrial Cable, 300/500 V & 450/750 V AC



Weight & Dimension

H05V2-U/H05V2-R

Product Code	Nominal cross sectional area mm <sup>2</sup>	Class of conductor	Overall Diameter (Approx.) mm	Weight (Approx.) kg/km
LDBS04CYUAYC001C0.5S	0.5	1	2.20	11
LDBS04CYUAYC001C.75S	0.75	1	2.40	15
LDBS04CYUAYC001C001S	1	1	2.60	19
LDBS04CYUAYC001C0.5S	0.5	2	2.10	8
LDBS04CYUAYC001C.75S	0.75	2	2.31	11
LDBS04CYUAYC001C001S	1	2	2.46	14

H07V2-U/H07V2-R

Product Code	Nominal cross sectional area mm <sup>2</sup>	Class of conductor	Overall Diameter (Approx.) mm	Weight (Approx.) kg/km	POLYCAB DOWEL/GLAND SIZE
LDBS06CYUAYC001C1.5S	1.5	1	2.80	21	-
LDBS06CYUAYC001C2.5S	2.5	1	3.40	32	-
LDBS06CYUAYC001C004S	4	1	3.90	49	-
LDBS06CYUAYC001C006S	6	1	4.40	69	-
LDBS06CYUAYC001C010S	10	1	5.60	113	-
LDBS06CYUAYC001C1.5S	1.5	2	2.99	21	-
LDBS06CYUAYC001C2.5S	2.5	2	3.61	32	-
LDBS06CYUAYC001C004S	4	2	4.18	49	-
LDBS06CYUAYC001C006S	6	2	4.72	68	-
LDBS06CYUAYC001C010S	10	2	6.05	113	DBW - 01SS (UN)
LDBS06CYUAYC001C016S	16	2	7.10	171	DBW - 01SS (UN)
LDBS06CYUAYC001C025S	25	2	8.82	269	DBW - 01SS (UN)
LDBS06CYUAYC001C035S	35	2	9.96	363	DBW - 01SS (UN)

- DBW – Weatherproof series

**POLYCAB H05V2-U/H05V2-R/H07V2-U/H07V2-R BS EN  
50525-2-31 SC  
Industrial Cable, 300/500 V & 450/750 V AC**

**Electrical characteristics**

**Current carrying capacity and maximum 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 etc horizontal or vertical etc.)			Reference Method G (in free air)		Maximum DC conductor resistance at 20°C
							Touching			Spaced by one cable 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.	Ω/km
1	14	13	17	15	19	17.5	—	—	—	—	—	18.1
1.5	19	17	23	20	25	23	—	—	—	—	—	12.1
2.5	26	23	31	28	34	31	—	—	—	—	—	7.41
4	35	31	42	37	46	41	—	—	—	—	—	4.61
6	45	40	54	48	59	54	—	—	—	—	—	3.08
10	61	54	75	66	81	74	—	—	—	—	—	1.83
16	81	73	100	88	109	99	—	—	—	—	—	1.15
25	106	95	133	117	143	130	161	141	135	182	161	0.727
35	131	117	164	144	176	161	200	176	169	226	201	0.524

The ambient temperature is 30°C

Conductor operating temperature 90°C.

The above table is in accordance with Table 4E1A of BS 7671:2018

**De-Rating Factor**

**De-rating factor for 90°C thermoplastic insulated cable**

Air Temperature	35°C to 50°C	55°C	60°C	65°C	70°C
De-Rating Factor	1	0.96	0.83	0.67	0.47