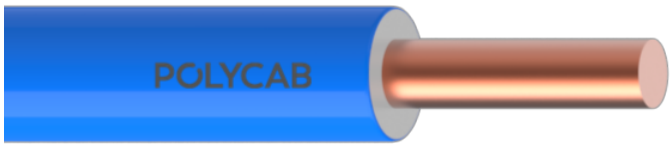
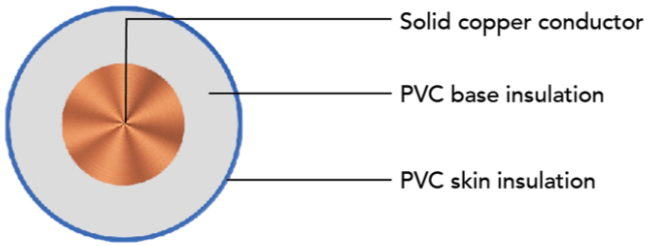
POLYCAB H05Z-U/H07Z-U BS EN 50525-3-41 SC
Industrial Cable, 300/500 & 450/750 V AC





Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB H05Z-U/H07Z-U BS EN 50525-3-41 SC, insulated with halogen free cross-linked compound and having low smoke emission and corrosive gases when exposed to fire condition. This cable fulfils the requirement of BS EN 50525-3-41. This Cable intended for fixed wiring application.

CHARACTERISTICS

Voltage Rating
H05Z-U - 300/500 V
H07Z-U - 450/750 V

Operation Temperature
Fixed: 0°C to 90° C

CONSTRUCTION

- Annealed stranded copper conductor as per IEC 60228, class 1
- Insulated with cross linked polyolefin Type EI 5 to EN 50363-5

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

Bending Radius
Fixed installation – 8 x Overall Dia.
Test Voltage
H05Z-U - 2000V AC at (20±5) °C
H07Z-U - 2500V AC at (20±5) °C

OUTSTANDING FEATURES

• Highly Flexible
• Good Insulation Resistance
• Halogen Free
• Low Smoke

STANDARD FOLLOWS

IEC 60228
BS EN 50363-5
BS EN 50525-3-41
IEC 60332-1-2

COMPLIANCE

Conductor resistance test - IEC 60228
Insulation resistance - EN 50525-3-41
Smoke emission test - EN 61034-2
Test on vertical flame - EN 60332-1-2
Flame retardant properties as per IEC 60332-1-2

OUR ACCREDITATIONS

APPROVAL

POLYCAB H05Z-U/H07Z-U BS EN 50525-3-41 SC
Industrial Cable, 300/500 & 450/750 V AC

Dimension:
Dimensions for H05Z-U

Product basic code	Nominal cross sectional area mm²	Minimum insulation thickness mm	Overall Diameter (Approx.) mm	Weight (Approx.) kg/km
LDBS04CLUALC001C0.5S	0.5	0.6	2.00	8
LDBS04CLUALC001C.75S	0.75	0.6	2.20	11
LDBS04CLUALC001C001S	1	0.6	2.40	15

Dimensions for H07Z-U

Product basic code	Nominal cross sectional area mm²	Minimum insulation thickness mm	Overall Diameter (Approx.) mm	Weight (Approx.) kg/km
LDBS06CLUALC001C1.5S	1.5	0.7	2.80	20
LDBS06CLUALC001C2.5S	2.5	0.8	3.40	32
LDBS06CLUALC001C004S	4	0.8	3.90	48
LDBS06CLUALC001C006S	6	0.8	4.40	68
LDBS06CLUALC001C010S	10	1.0	5.60	111

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 F (in free air or on a perforated cable tray etc horizontal or vertical etc.)			Reference Method G (in free air)		Max. 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	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	Ω/km
1.5	19	17	23	20	–	–	–	–	–	12.1
2.5	26	23	31	28	–	–	–	–	–	7.41
4	35	31	42	37	–	–	–	–	–	4.61
6	45	40	54	48	–	–	–	–	–	3.08
10	61	54	75	66	–	–	–	–	–	1.83

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 thermosetting 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