



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB 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



# POLYCAT H05Z-U/H07Z-U BS EN 50525-3-41 SC

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

**POLYCAT**  
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### Dimension:

Dimensions for H05Z-U

Product basic code	Nominal cross sectional area mm <sup>2</sup>	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 mm <sup>2</sup>	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		
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	2 cables, single-phase a.c. or d.c. or 3 cables three-phase a.c. flat
						Horizontal Vertical
mm <sup>2</sup>	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