

**Polycab, low voltage energy cable insulated and sheathed with thermoplastic material of 300/500 V conforming to BS EN 50525-2-11 standard.**



These are low voltage energy flexible cables and designed to use for connection of domestic appliances to the fixed supply.

These cables are available in multicore circular and flat with conductor operating temperature of 70 °C & 90°C.

**Conductor:** High conductivity annealed bunched copper conductor produced in-house from state-of-the-art machine.

**Insulation:** In-house developed thermoplastic or heat resistant thermoplastic compound.

**Strain bearing member:** Zinc coated steel rope is placed centre of the insulated core in case strain bearing cable

**Sheath:** In-house developed thermoplastic compound sheath is applied over insulation

Polycab assures the highest quality standard in every product by having stringent quality control with requisite testing which are applied at every single stage from raw material to finished goods.

The construction based on the application and requirement of the user against BS EN 50525-2-11.



[POLYCAB H03V2V2-F & H03V2V2H2-F BS EN 50525-2-11 MC - Lighting & Appliances Cable, 300/300 V AC](#)



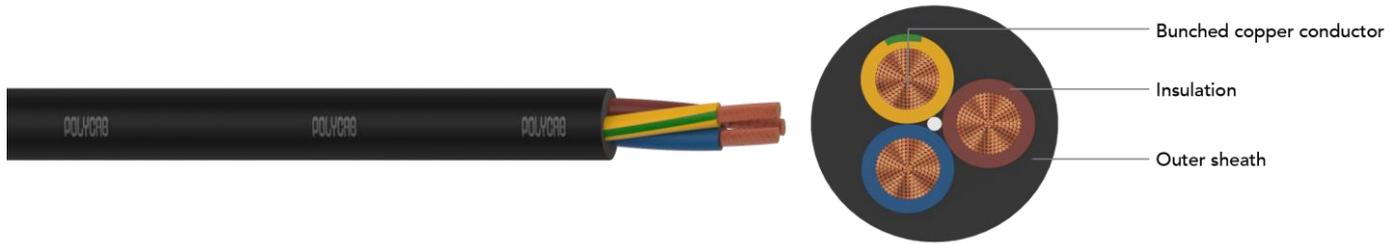
[POLYCAB H03VVH2-F BS EN 50525-2-11 MC - Lighting Appliances Cable, 300/300 V AC](#)



[POLYCAB H03VV-F BS EN 50525-2-11 MC - Lighting & Appliances, 300/300 V AC](#)

# POLYCAB H03V2V2-F & H03V2V2H2-F BS EN 50525-2-11 MC

## Lighting & Appliances Cable, 300/300 V AC



### Application

POLYCAB H03V2V2-F & H03V2V2H2-F multicore Flexible cable insulated and sheathed with thermoplastic compound. This cable fulfils the requirement as per EN 50525-2-11, cables intended to use for connection of domestic appliances to the fixed supply

### Voltage Rating

300/300 V

### Operation Temperature

Fixed: -15° C to + 90° C

### Construction

- Annealed stranded copper conductor as per IEC 60228, class 5
- Insulated with polyvinyl chloride Type TI 3 to EN 50363-3.
- Sheathed with polyvinyl chloride Type TM 3 to EN 50363-4-1

### Standard and References

IEC 60228  
BS EN 50363-3  
BS EN 50363-4-1  
BS EN 50525-2-11

### Test Voltage

1500V AC at (20±5) °C

### Compliance

Conductor Resistance test - IEC 60228  
Insulation Resistance test - EN 50525-2-11  
Test under fire condition - EN 60332-1-2

### Core Identification

Two core Blue, Brown  
Three core Green-Yellow, Blue, Brown  
Four core Green-Yellow, Brown, Black, Grey

### Bending Radius

Fixed installation 8 x Overall diameter  
Occasional installation 6 x Overall diameter

Dimensions table of H03V2V2-F

Product Code	Nominal cross sectional area mm <sup>2</sup>	Stranding mm	Overall Diameter (Approx.) mm	Weight (Approx.) kg/km	POLYCAB/DOWEL Gland Size
LDBS05CYUAYC002C0.5S	2 x 0.5	16/0.2	5.02	38	-
LDBS05CYUAYC002C.75S	2 x 0.75	24/0.2	5.43	47	-
LDBS05CYUAYC003C0.5S	3 x 0.5	16/0.2	5.33	45	-
LDBS05CYUAYC003C.75S	3 x 0.75	24/0.2	5.77	57	-
LDBS05CYUAYC004C0.5S	4 x 0.5	16/0.2	5.83	56	-
LDBS05CYUAYC004C.75S	4 x 0.75	24/0.2	6.32	70	DBW - 01SS (UN)

- DBW – Weatherproof series

### OUR ACCREDITATION



## POLYCAB H03V2V2-F & H03V2V2H2-F BS EN 50525-2-11 MC

### Lighting & Appliances Cable, 300/300 V AC

Dimensions table of H03V2V2H2-F

Product Code	Nominal cross sectional area mm <sup>2</sup>	Stranding mm	Overall Dimension (Approx.) mm	Weight (Approx.) kg/km
LDBS05CYUAYC002C0.5S	2 x 0.5	16/0.2	3.11 x 5.02	31
LDBS05CYUAYC002C.75S	2 x 0.75	24/0.2	3.32 x 5.43	38

### Electrical Characteristics

Current carrying capacity and max. DC conductor resistance.

Nominal cross-sectional area mm <sup>2</sup>	Current-carrying capacity		Max. DC conductor resistance at 20°C Ω/km
	Single-phase a.c. Amp	Three-phase a.c. Amp	
0.5	3	3	39
0.75	6	6	26

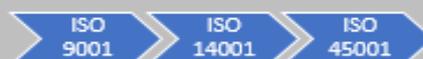
The above table is in accordance with Table 4F3A of BS 7671:2018

### De-Rating Factor

De-rating factor for thermoplastic insulated cable

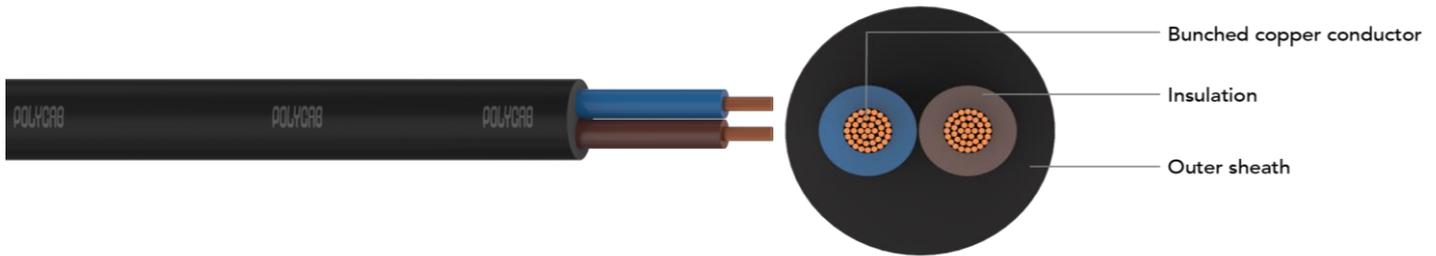
Air Temperature	35°C	40°C	45°C	50°C	55°C
De-Rating Factor	0.91	0.82	0.71	0.58	0.41

#### OUR ACCREDITATION



# POLYCAB H03VV-F BS EN 50525-2-11 MC

## Lighting & Appliances, 300/300 V AC



Bunched copper conductor

Insulation

Outer sheath

### Application

POLYCAB H03VV-F PVC insulated and sheathed multicore flexible fulfils the requirement as per EN 50525-2-11. This cable is intended to use for connection of domestic appliances to the fixed supply.

### Voltage Rating

300/300 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 2 to EN 50363-3.
- Sheathed with polyvinyl chloride Type TM 2 to EN 50363-4-1

### Core Identification

Two core      Blue, Brown  
 Three core    Green-Yellow, Blue, Brown  
 Four core     Green-Yellow, Brown, Black, Grey

### Bending Radius

Fixed installation - 8 x Overall diameter

### Standard and References

IEC 60228  
 BS EN 50363-3  
 BS EN 50363-4-1  
 BS EN 50525-2-11  
 IEC 60332-1-2

### Test Voltage

2000V AC at (20±5) °C

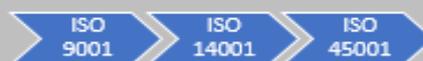
### Compliance

Conductor Resistance test      - IEC 60228  
 Insulation Resistance test      - EN 50525-2-11  
 Test under fire condition        - EN 60332-1-2

Product Code	Nominal cross sectional area mm <sup>2</sup>	Stranding mm	Overall Diameter (Approx.) mm	Weight (Approx.) kg/km	POLYCAB/DOWEL Gland Size
LDBS05CYUAYA002C0.5S	2 x 0.5	16/0.2	5.02	39	DBW-01SS(UN)
LDBS05CYUAYA002C.75S	2 x 0.75	24/0.2	5.43	48	DBW-01SS(UN)
LDBS05CYUAYA003C0.5S	3 x 0.5	16/0.2	5.33	46	DBW-01SS(UN)
LDBS05CYUAYA003C.75S	3 x 0.75	24/0.2	5.77	57	DBW-01SS(UN)
LDBS05CYUAYA004C0.5S	4 x 0.5	16/0.2	6.32	70	DBW-01SS(UN)
LDBS05CYUAYA004C.75S	4 x 0.75	24/0.2	5.83	56	DBW-01SS(UN)
LDBS05CYUAYA005C0.5S	5 x 0.5	16/0.2	7.50	74	DBW-01SS(UN)
LDBS05CYUAYA005C.75S	5 x 0.75	24/0.2	8.06	91	DBW-01SS(UN)

- DBW - Weather proof series

### OUR ACREDITATION



# POLYCAB H03VV-F BS EN 50525-2-11 MC

## Lighting & Appliances, 300/300 V AC

### Electrical Characteristics

Current carrying capacity and max. DC conductor resistance.

Nominal cross sectional area mm <sup>2</sup>	Current-carrying capacity		Max. DC conductor resistance at 20°C Ω/km
	Single-phase a.c. Amp	Three-phase a.c. Amp	
0.5	3	3	39
0.75	6	6	26

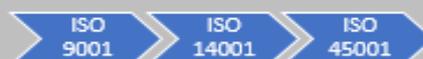
The above table is in accordance with Table 4F3A of BS 7671:2018

### De-Rating Factor

De-rating factor for thermoplastic insulated cable

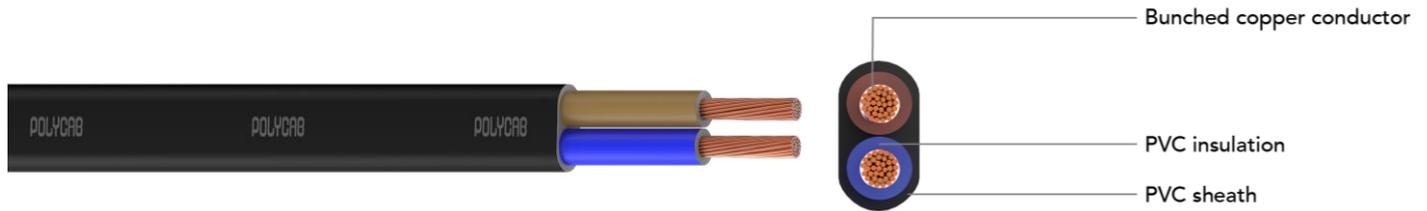
Air Temperature	35°C	40°C	45°C	50°C	55°C
De-Rating Factor	0.91	0.82	0.71	0.58	0.41

### OUR ACCREDITATION



# POLYCAB H03VVH2-F BS EN 50525-2-11 MC

## Lighting Appliances Cable, 300/300 V AC



### Application

POLYCAB H03VVH2-F multicore flexible flat cable insulated and sheathed with thermoplastic compound. This cable fulfils the requirement as per EN 50525-2-11, cables intended to use for connection of domestic appliances to the fixed supply

### Voltage Rating

300/300 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 2 to EN 50363-3.
- Sheathed with polyvinyl chloride Type TM 2 to EN 50363-4-1

### Standard and References

IEC 60228  
BS EN 50363-3  
BS EN 50363-4-1  
BS EN 50525-2-11

### Test Voltage

2000V AC at (20±5) °C

### Compliance

Conductor Resistance test	- IEC 60228
Insulation Resistance test	- EN 50525-2-11
Test under fire condition	- EN 60332-1-2

### Core Identification

Two core      Blue, Brown

### Bending Radius

Fixed installation – 8 x Overall diameter

Dimension table of H03VVH2-F

Product Code	Nominal cross sectional area mm <sup>2</sup>	Stranding mm	Overall Dimension (Approx.) mm	Weight (Approx.) kg/km
LDBS05CYUAYA002C.75S	2 x 0.75	24/0.2	3.3 x 5.4	29
LDBS05CYUAYA002C001S	2 x 1	32/0.2	3.5 x 5.8	35

### OUR ACCREDITATION



## POLYCAB H03VVH2-F BS EN 50525-2-11 MC

### Lighting Appliances Cable, 300/300 V AC

#### Electrical Characteristics

Current carrying capacity and max. DC conductor resistances.

Nominal cross sectional area mm <sup>2</sup>	Current-carrying capacity		Max. DC conductor resistance at 20°C Ω/km
	Single-phase a.c. Amp	Three-phase a.c. Amp	
0.75	6	6	26
1	10	10	19.5

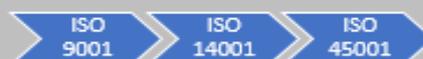
The above table is in accordance with Table 4F3A of BS 7671:2018

#### De-Rating Factor

De-rating factor for 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

#### OUR ACCREDITATION



**Polycab, Low voltage energy cable with halogen free thermoplastic material insulated and sheathed conforming to BS EN 50525-3-11.**



These are flexible fire performance cable with low smoke zero halogen thermoplastic insulation for connection of domestic appliances to the fixed supply. This covers low voltage energy cable confirms the construction and performance of thermoplastic insulated cable of voltage rating up to and including 300/500 V as per BS EN 50525-3-11. These cables emit low smoke and corrosive gases when exposed to fire. These are intended for the connection of domestic appliances to the fixed supply.

These cables available in multicore circular and flat cable with maximum conductor operating temperature of 70°C.

**Conductor:** High conductivity annealed bunched copper conductor produced in-house from state-of-the-art machine.

**Insulation:** In-house developed halogen free thermoplastic compound.

**Sheath:** In-house developed thermoplastic compound having low emission of smoke and corrosive gases when exposed to fire.

The construction based on the application and requirement of the user against BS EN 50525-3-11.



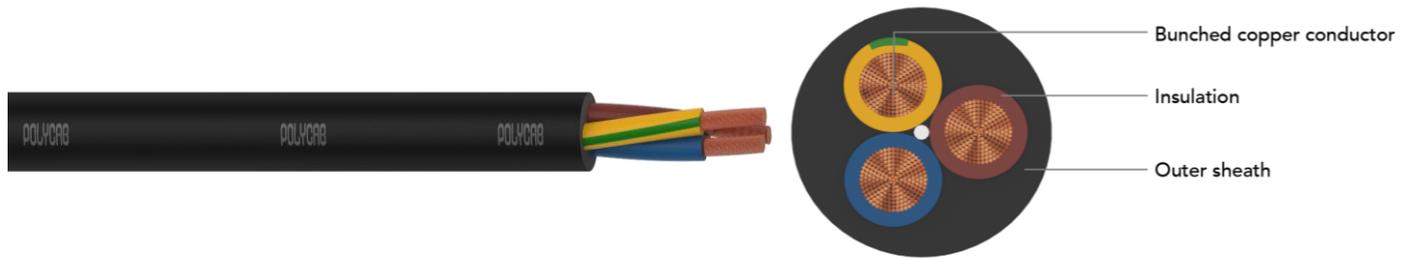
[POLYCAB H03Z1Z1-F BS EN 50525-3-11 - Lighting & Appliances Cable, 300/300 V AC](#)



[POLYCAB H03Z1Z1H2-F/H05Z1Z1H2-F BS EN 50525-3-11](#)

# POLYCAB H03Z1Z1-F BS EN 50525-3-11

## Lighting & Appliances Cable, 300/300 V AC



### Application

POLYCAB H03Z1Z1-F cable insulated and sheathed with halogen free thermoplastic compound and having low emission of smoke and corrosive gases when exposed to fire. This cable intended to use for connection of domestic appliances to the fixed supply

### Voltage Rating

300/300 V

### Operation Temperature

Fixed: -15°C to +70°C

### Construction

- Annealed bunched copper conductor as per IEC 60228, class 5
- Insulated with Halogen free thermoplastic Type TI 6 to EN 50363-7.
- Sheathed with Halogen free thermoplastic Type TM 7 to EN 50363-8

### Core Identification

Two core      Blue, Brown  
 Three core    Green-Yellow, Blue, Brown  
 Four core     Green-Yellow, Brown, Black, Grey

### Bending Radius

Fixed installation – 8 x Overall diameter

### Standard and References

IEC 60228  
 BS EN 50363-7  
 BS EN 50363-8  
 BS EN 50525-3-11  
 IEC 60332-1-2

### Test Voltage

1500V AC at (20±5) °C

### Compliance

Conductor Resistance test      - IEC 60228  
 Insulation Resistance test      - EN 50525-3-11  
 Test on sine vertical cable      - EN 60332-1-2  
 Smoke Emission test            - EN 61034-2

Flame Retardant according to IEC 60332-1-2.

### Approval



### OUR ACCREDITATION



# POLYCAB H03Z1Z1-F BS EN 50525-3-11

## Lighting & Appliances Cable, 300/300 V AC

Product Code	Construction n x mm <sup>2</sup>	Stranding mm	Overall Diameter (Approx.) mm	Weight (Approx.) kg/km
LDBS05CLUALS002C.75S	2 x 0.75	0.2/16	6.23	39
LDBS05CLUALS002C001S	2 x 1	0.2/24	6.58	48
LDBS05CLUALS003C.75S	3 x 0.75	0.2/16	6.60	46
LDBS05CLUALS003C001S	3 x 1	0.2/24	6.98	57
LDBS05CLUALS004C.75S	4 x 0.75	0.2/16	7.21	56
LDBS05CLUALS004C001S	4 x 1	0.2/24	7.83	70

### Electrical Characteristics

Current carrying capacity and max. DC conductor resistance.

Nominal Cross-sectional Area mm <sup>2</sup>	Current carrying Capacity		Max. DC cond. resistance at 20°C Ω/km
	Single Phase a.c Amp	Three Phase a.c Amp	
0.75	6	6	26
1	10	10	19.5

The ambient temperature is 30°C.

Conductor operating temperature 60°C.

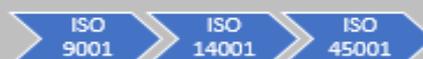
The above table is in accordance with Table 4F3A of BS 7671:2018

### De-Rating Factor

De-rating factor for ambient temperature 60°C thermoplastic insulation.

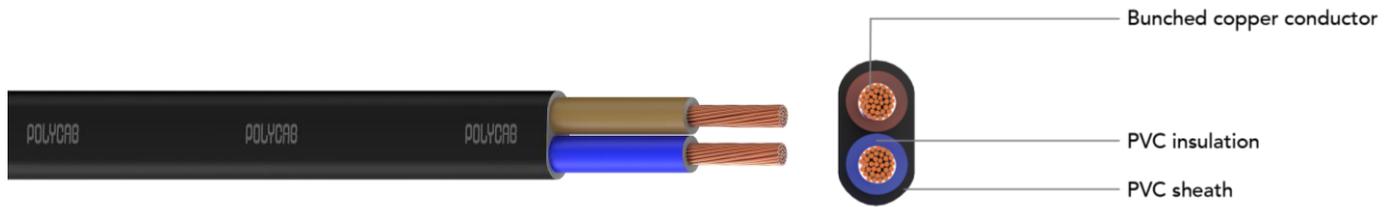
Air Temperature	35°C	40°C	45°C	50°C	55°C
De-Rating Factor	0.91	0.82	0.71	0.58	0.41

#### OUR ACCREDITATION



## POLYCAB H03Z1Z1H2-F/H05Z1Z1H2-F BS EN 50525-3-11

### Lighting & Appliances Cable, 300/300 V & 300/500 V AC



#### Application

POLYCAB H03Z1Z1H2-F/H05Z1Z1H2-F cable insulated and sheathed with halogen free thermoplastic compound and having low emission of smoke and corrosive gases when exposed to fire. This cable intended to use for connection of domestic appliances to the fixed supply.

#### Voltage Rating

H03Z1Z1H2-F - 300/300 V

H05Z1Z1H2-F – 300/500 V

#### Operation Temperature

Fixed: -15°C to +70° C

#### Construction

- Annealed stranded copper conductor as per IEC 60228, class 5
- Insulated with Halogen free thermoplastic Type TI 6 to EN 50363-7.
- Sheathed with Halogen free thermoplastic Type TM 7 to EN 50363-8

#### Core Identification

Two core      Blue, Brown

#### Bending Radius

Fixed installation – 8 x Overall diameter

#### Standard and References:

IEC 60228

BS EN 50363-7

BS EN 50363-8

BS EN 50525-3-11

IEC 60332-1-2

#### Test Voltage

H03Z1Z1H2-F - 1500V AC at (20±5) °C

H05Z1Z1H2-F - 2000V AC at (20±5) °C

#### Compliance

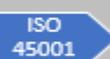
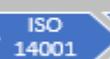
Conductor Resistance test	- IEC 60228
Insulation Resistance test	- EN 50525-3-11
Test on sine vertical cable	- EN 60332-1-2
Smoke Emission test	- EN 61034-2

Flame Retardant according to IEC 60332-1-2.

#### Approval



#### OUR ACCREDITATION



## POLYCAB H03Z1Z1H2-F/H05Z1Z1H2-F BS EN 50525-3-11

### Lighting & Appliances Cable, 300/300 V & 300/500 V AC

#### Dimensions

Dimension table for H03Z1Z1H2-F

Product basic code	Construction n x mm <sup>2</sup>	No. of strands/wire dia. No./mm	Overall Dimension mm	Weight (Approx.) kg/km
LDBS05CLUALS002C0.5S	2 x 0.5	16/0.2	3.11 x 5.02	31
LDBS05CLUALS002C.75S	2 x 0.75	24/0.2	3.32 x 5.43	38

Dimension table for H05Z1Z1H2-F

Product basic code	Construction n x mm <sup>2</sup>	No. of strands/wire dia. No./mm	Overall Dimension mm	Weight (Approx.) kg/km
LDBS04CLUALS002C.75S	2 x 0.75	24/0.2	3.92 x 6.23	49
LDBS04CLUALS002C001S	2 x 1	32/0.2	4.09 x 6.58	56

#### Electrical Characteristics

Current carrying capacity and max. DC conductor resistance at 20°C

Nominal Cross sectional Area mm <sup>2</sup>	Current carrying Capacity		Max. DC cond. resistance at 20°C Ω/km
	Single Phase a.c Amp	Three Phase a.c Amp	
0.5	3	3	39
0.75	6	6	26
1	10	10	19.5

The ambient temperature is 30°C.

Conductor operating temperature 60°C.

The above table is in accordance with Table 4F3A of BS 7671:2018

#### De-Rating Factor

De-rating factor for ambient temperature 60°C thermoplastic insulation.

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

#### OUR ACCREDITATION

