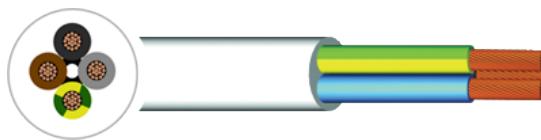


309*Y Flexible Cable - H05V2V2-F, PVC - 0.5mm² to 2.5mm²



Description

309*Y Flexible PVC Cable used in the installation of external electrical appliances. Generally used with appliances that reach / maintain hot temperatures such as heaters. Temperature limits of the 309*Y PVC cable range from -5 to +90°C.

Key Features



Voltage Rating
300/500 Volts



Minimum Bending Radius
Fixed: 6 x overall diameter
Flexing: 10 x overall diameter



Flame Retardancy
BS EN 60332-1-2



Temperature Limits
Temperature Range: 0°C to +90°C

Standards

- BS EN 50525-2-11
- BS EN/IEC 60332-1-2
- BS EN/IEC 60228
- Conforms to H05V2V2-F

Construction

- **Conductor:** Class 5 flexible, stranded copper
- **Insulation:** Polyvinyl Chloride (PVC)
- **Outer Sheath:** Polyvinyl Chloride (PVC)
- **Sheath Colour:** White

QA Lab

Cleveland Cable Test & Training Lab

Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.



CPR

Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.



Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.



ecovadis

Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance.



Core Colours

2 Core -

3 Core -

4 Core -

5 Core -

309*Y Flexible Cable - H05V2V2-F, PVC - 0.5mm² to 2.5mm² - Dimensions

Reference	Conductor Size (mm ²)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Gland Size
3092Y/5WH	0.5	2	16/0.20	6.3	46	20/16
3093Y/5WH	0.5	3	16/0.20	6.5	66	20/16
3094Y/5WH	0.5	4	16/0.20	7.2	70	20/16
3092Y/75WH	0.75	2	24/0.20	6.8	56	20S
3093Y/75WH	0.75	3	24/0.20	7.2	68	20S
3094Y/75WH	0.75	4	24/0.20	7.7	85	20S
3095Y/75WH	0.75	5	24/0.20	8.5	104	20S
3092Y1WH	1	2	32/0.20	7.2	65	20S
3093Y1WH	1	3	32/0.20	7.7	77	20S
3094Y1WH	1	4	32/0.20	8.5	100	20S
3092Y1/5	1.5	2	30/0.25	8.2	80	20S
3093Y1/5WH	1.5	3	30/0.25	8.9	100	20S
3094Y1/5	1.5	4	30/0.25	10	130	20
3092Y2/5	2.5	2	50/0.25	10	135	20S
3093Y2/5WH	2.5	3	50/0.25	10.8	150	20
3094Y2/5	2.5	4	50/0.25	11.8	195	20



Multi core non-armoured 90 °C and 180°C thermosetting insulated flexible cables with sheath Reproduced from BS7671:2018 Wiring Regulations

TABLE 4F2A

CURRENT-CARRYING CAPACITY (Amps)

Ambient temperature: 30 °C
Conductor operating temperature: 90 °C

Conductor cross sectional area (mm ²)	Single-phase AC or DC	Three-phase AC	Single-phase AC or DC
	1 x 2 core cable, with or without protective conductor	1 x 3 core, 4 core or 5 core cable	2 single-core cables, touching
	(A)	(A)	(A)
4	42	37	-
6	55	49	-
10	76	66	-
16	103	89	-
25	136	119	-
35	-	146	200
50	-	177	250
70	-	225	310
95	-	273	369
120	-	316	432
150	-	363	497
185	-	414	564
240	-	487	673
300	-	560	773
400	-	-	924
500	-	-	1062
630	-	-	1242

NOTES:

The current ratings tabulated are for cables in free air but may also be used for cables resting on a surface. If the cable is to be wound on a drum on load the ratings should be reduced in accordance with *NOTE 2* below and for cables which may be covered, *NOTE 3* below.

2 Flexible cables wound on reeling drums

The current ratings of cables used on reeling drums are to be reduced by the following factors:

b) Ventilated cylindrical type drum

a) Radial type drum	1 layer of cable: 85 %
ventilated: 85 %	2 layers of cable: 65 %
unventilated: 75 %	3 layers of cable: 45 %
	4 layers of cable: 35 %

A radial type drum is one where spiral layers of cable are accommodated between closely spaced flanges; if fitted with solid flanges the ratings given above should be reduced and the drum is described as non-ventilated. If the flanges have suitable apertures the drum is described as ventilated.

A ventilated cylindrical cable drum is one where layers of cable are accommodated between widely spaced flanges and the drum and end flanges have suitable ventilating apertures.

Where cable may be covered over or coiled up whilst on load, or the air movement over the cable restricted, the current rating should be reduced.

3

It is not possible to specify the amount of reduction but the table of rating factors for reeling drums can be used as a guide.

4 For 180 °C cables, the rating factors for ambient temperature allow a conductor operating temperature up to 150 °C.

Consult the cable manufacturer for further information.

Where it is intended to connect the cables in this table to equipment or accessories designed to operate at a temperature lower than the maximum operating temperature of the cable, the cables should be rated at the maximum operating temperature of the equipment or accessory (see Regulation 512.1.5).

6 Where it is intended to group a cable in this table with other cables, the cable should be rated at the lowest of the maximum operating temperatures of any of the cables in the group (see Regulation 512.1.5).



TABLE 4F2B

VOLTAGE DROP (per ampere per metre):

Conductor operating temperature: 90 °C

Conductor cross-sectional area (mm ²)	Two-core cable or 2 x Single core cables DC (mV/Nm)	2 core cable, single-phase AC (mV/Nm)			1 x 3 core, 4 core or 5 core cable, three-phase AC (mV/Nm)			2 single-core cables, touching Single-phase AC* (mV/Nm)		
		r	x	z	r	x	z	r	x	z
4	13.20		13.20			11.10			-	
6	8.50		8.50			7.40			-	
10	5.10		5.10			4.40			-	
16	3.20		3.20			2.70			-	
25	2.03	2.03	0.175	2.04	1.73	0.150	1.73	-	-	-
35	1.420	-	-	-	1.22	0.150	1.23	1.44	0.21	1.46
50	1.000	-	-	-	0.91	0.145	0.93	1.00	0.21	1.02
70	0.710	-	-	-	0.62	0.140	0.64	0.71	0.20	0.73
95	0.540	-	-	-	0.47	0.135	0.49	0.54	0.195	0.57
120	0.420	-	-	-	0.37	0.135	0.39	0.42	0.190	0.46
150	0.340	-	-	-	0.29	0.130	0.32	0.34	0.190	0.39
185	0.270	-	-	-	0.24	0.130	0.27	0.27	0.190	0.33
240	0.210	-	-	-	0.188	0.130	0.23	0.210	0.185	0.28
300	0.167	-	-	-	0.147	0.125	0.195	0.173	0.180	0.25
400	0.127	-	-	-	-	-	-	0.132	0.175	0.22
500	0.100	-	-	-	-	-	-	0.107	0.170	0.20
630	0.074	-	-	-	-	-	-	0.085	0.170	0.190

NOTES:

1 The voltage drop figures given above are based on a conductor operating temperature of 90 °C and are therefore not accurate when the operating temperature is in excess of 90 °C. In the case of the 180 °C cables with a conductor temperature of 150 °C the above resistive values should be increased by a factor of 1.2.

2 *A larger voltage drop will result if the cables are spaced.

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.

