

2491-X PVC SINGLE CORE FLEXIBLE CABLE H05V-K



This PVC sheathed flexible cable serves as internal equipment wire and is commonly used in instrumentation panels of power switchgear. It's designed for flexible panel wiring, including applications in switch control, relay panels, and motor starters. With a single core design and PVC sheath, it offers flexibility and comes in various colors to support different applications.

CONDUCTOR	Plain Copper
STRANDING	Class 5
OUTERSHEATH	PVC
OUTERSHEATH COLOUR	Black, White, Blue, Grey, Violet, Orange, Red, Green/Yellow, Brown, Pink, Yellow, Green
RATED VOLTAGE	300/500V
MINIMUM BENDING RADIUS	Fixed: 6 x overall diameter
OPERATING TEMPERATURE	Maximum 70°C, Minimum bending 0°C
STANDARDS	BS EN 50525-2-31

SPECIFICATION DATA

Nominal cross sectional area of conductor sqmm	RT on insulation mm	Approx conductor diameter mm	Nominal overall diameter mm	Weight kg/km	Approx overall diameter	Electrical resistance at 20°C OHM/KM	Insulation resistance min at 70°C OHM/KM	Current carrying capacity at 30°C in air or pipe
0.5				9.1	2.20	39		
0.75				11.7	2.40	26		
1.0				14.4	2.55	19.5		

RATING TABLES

TABLE 4F3A - Flexible cables, non-armoured (COPPER CONDUCTORS)

COPPER CONDUCTORS

CURRENT-CARRYING CAPACITY (amperes): and MASS SUPPORTABLE (kg):

Conductor cross-sectional area	Current-carrying capacity		Maximum mass supportable by twin flexible cable (see Regulations 522.7.2 and 559.5.2)
	Single-phase AC	Three-phase AC	
1	2	3	4
(mm ²)	(A)	(A)	(kg)
0.5	3	3	2
0.75	6	6	3
1	10	10	5
1.25	13	-	5
1.5	16	16	5
2.5	25	20	5
4	32	25	5

Where cable is on a reel see the notes to Table 4F1A.

RATING FACTOR FOR AMBIENT TEMPERATURE

60 °C thermoplastic or thermosetting insulated cable:

Ambient temperature	35 °C	40 °C	45 °C	50 °C	55 °C
Rating factor	0.91	0.82	0.71	0.58	0.41

110 °C flexible cable:

Ambient temperature	35 to 80 °C	85 °C	90 °C	95 °C	100 °C	105 °C
Rating factor	1.0	0.96	0.85	0.74	0.60	0.42

90 °C thermoplastic or thermosetting insulated cable:

Ambient temperature	35 to 50 °C	55 °C	60 °C	65 °C	70 °C
Rating factor	1.0	0.96	0.83	0.67	0.47

150 °C flexible cable:

Ambient temperature	35 to 120 °C	125 °C	130 °C	135 °C	140 °C	145 °C
Rating factor	1.0	0.96	0.85	0.74	0.60	0.42

Glass fibre flexible cable:

Ambient temperature	35 to 50 °C	155 °C	160 °C	165 °C	170 °C	175 °C
Rating factor	1.0	0.92	0.82	0.71	0.57	0.40

TABLE 4F3B

VOLTAGE DROP (per ampere per metre):

Conductor operating temperature: 60 °C

Conductor cross-sectional area	DC or single-phase AC	Three-phase AC
1	2	3
(mm ²)	(mV/A/m)	(mV/A/m)
0.5	93	80
0.75	62	54
1	46	40
1.25	37	-
1.5	32	27
2.5	19	16
4	12	10

NOTE: * The tabulated values above are for 60 °C thermoplastic or thermosetting insulated flexible cables and for other types of flexible cable they are to be multiplied by the following factors:

For	90 °C thermoplastic or thermosetting insulated	1.09
	110 °C	1.17
	150 °C	1.31
	185 °C glass fibre	1.43

The information in this datasheet is for guidance only and subject to change without liability. Images provided are representations; actual cable dimensions may vary due to manufacturing tolerances.

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