318-Y / H05VV-F BS EN 50525-2-11 Flex - Flexible Cable







3183Y BLACK

APPLICATION

PVC flex cable is used as an electrical supply to many household appliances such as refrigerators, washing machines and spin dryers. Plain annealed flexible copper conductors, PVC insulated, PVC outer sheath. Not advised for outdoor use. Available in 100M reels.

CHARACTERISTICS

Voltage Rating Uo/U 300/500V

Temperature Rating Flexed: +5°C to +70°C

Minimum Bending Radius

Flexed: 8 x overall diameter

CONSTRUCTION

Conductor

Class 5 flexible copper cond

Insulation

PVC (Polyvinyl Chloride)

Sheath

PVC (Polyvinyl Chloride)

CABLE THIRD-PARTY ACCREDITATION



Cables are tested and accredited by BASEC, The British Approvals Service for Cables

STANDARDS

BS EN 60228, BS EN 50525-2-11

Flame Retardant according to BS EN/IEC 60332-1-2

REGULATORY COMPLIANCE

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation.

This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance.

DIMENSIONS

BYSON PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL THICKNESS OF INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
31820075*	2	0.75	0.6	6.4	57
3182010*	2	1	0.6	6.6	65
3182015*	2	1.5	0.7	7.4	84
3182025*	2	2.5	0.8	9.1	130
31830075*	3	0.75	0.6	6.7	68
3183010*	3	1	0.6	7	78
3183015*	3	1.5	0.7	8.1	108
3183025*	3	2.5	0.8	9.9	163
3183040*	3	4	0.8	11.3	227
31840075*	4	0.75	0.6	7.3	82
3184010*	4	1	0.6	7.9	100
3184015*	4	1.5	0.7	9	134
3184025*	4	2.5	0.8	10.8	201
318075*	5	0.75	0.7	8.1	102
3185010*	5	1	0.7	8.6	120
3185015*	5	1.5	0.7	10	166

^{*} Designates the sheath colour. For each Byson part number replace with the colour code as listed below e.g. 3180075WH = 0.75mm² White



CONDUCTORS

Class 5 Flexible Copper Conductors for Single Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA mm²	MAXIMUM DIAMETER OF WIRES IN CONDUCTOR mm	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	
		Plain Wires	
0.75	0.21	26	
1	0.21	19.5	
1.5	0.26	13.3	
2.5	0.26	7.98	
4	0.31	4.95	

The above table is in accordance with BS EN 60228 (previously BS 6360)

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity and Mass Supportable

NOMINAL CROSS SECTIONAL AREA mm²	CURRENT CARRYING CAPACITY Amps		MAXIMUM MASS SUPPORTABLE BY TWIN FLEXIBLE CORD (See regulations 522.7.2 and 559.6.1.5 of the 17th Edition of IEE Wiring Regulations) kg
	Single-Phase AC	Three-Phase AC	
0.75	6	6	3
1	10	10	5
1.5	16	16	5
2.5	25	20	5
4	32	25	5

The above table is in accordance with Table 4F3A of the 17th Edition of IEE Wiring Regulations.

VOLTAGE DROP

NOMINAL CROSS SECTIONAL AREA mm ²	DC OR SINGLE-PHASE AC mV/ A/m	THREE-PHASE AC mV/A/m	
0.75	62	54	
1	46	40	
1.5	32	27	
2.5	19	16	
4	12	10	

Conductor operating temperature: $60^{\underline{o}}\text{C}^*$

The above table is in accordance with Table 4F3B of the 17th Edition of IEE Wiring Regulations.

DE-RATING FACTORS

De-Rating Factor for Ambient Temperature 60°C Thermoplastic or Thermosetting Insulated

AIR TEMPERATURE	35ºC	40°C	45°C	50°C	55ºC
DE-RATING FACTOR	0.91	0.82	0.71	0.58	0.41

The above table is in accordance with Table 4F3A of the 17th Edition of IEE Wiring Regulations.