

LEDBURN CABLES IS AN INDEPENDENTLY OWNED CABLE DISTRIBUTOR.



# MULTICORE CABLES-318Y PVC H05VV-F CABLE 300/500V

318Y flexible appliance cable H05VV-F harmonised cable

Conductors: Plain annealed flexible copper

Insulation: PVC (Polyvinyl Chloride)

Conductor identification: 2 core: brown & blue, 3 core: brown, blue & green/yellow, 4 core: brown, grey, black & green/yellow, 5 core: brown, blue, grey, black & green/yellow

Sheath/Jacket: PVC (Polyvinyl Chloride)

Colour: Black or white

Voltage: 300/500V

Operating temp: Maximum 60°C. Minimum bending 0°C

Standards: H05VV-F

Applications: suitable for medium duty appliances - eg washing machine



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# **Specification**

### 3182Y

Size	RT	Nom	Nom overall	Weight	Part No		
sqmm	of insulation	diameter over laid up	diameter mm	kg/km	Black	White	Orange
	mm	cores					
		mm					
0.5	0.6	4.7	4.7	53	37285	37284	-
0.75	0.6	5.4	5.4	63	37288	37289	37290
1.0	0.6	5.8	5.8	73	37293	37295	-
1.5	0.7	6.6	6.6	89	37299	37300	37481
2.5	0.7	7.8	7.8	140	37304	37305	-
4.0	0.8	9.0	9.0	200	37308	37309	-

### 3183Y

Size	RT	Nom	Nom overall	Weight	Part No		
sqmm	of insulation mm	diameter over laid up cores mm	diameter mm	kg/km	Black	White	Orange
0.5	0.6	5.2	7.0	61	37318	37319	-
0.75	0.6	5.8	7.6	74	37325	37327	37323
1.0	0.6	6.3	8.0	86	37334	37335	37616
1.5	0.7	7.1	9.1	115	37341	37342	37617
2.5	0.8	8.4	10.8	170	37346	37347	37615
4.0	0.8	9.7	12.1	250	37350	37351	-

### 3184Y

Size	RT	Nom	Nom overall	Weight	Part No		
sqmm	of insulation mm	diameter over laid up cores mm	diameter mm	kg/km	Black	White	Orange
0.5	0.6	5.8	7.6	73	37607	-	-
0.75	0.6	6.3	8.1	78	-	-	-
1.0	0.6	6.8	8.6	110	-	37531	-
1.5	0.7	7.8	9.8	140	37532	-	-
2.5	0.8	9.2	11.4	210	37547	37551	-
4.0	0.8	10.7	12.9	305	37575	-	-

### 3185Y

Size	RT	Nom	Nom overall	Weight	Part No		
sqmm	of insulation	diameter over laid up	diameter mm	kg/km	Black	White	Orange
	mm	cores					
		mm					
0.5	0.6	6.2	8.0	87	-	-	-
0.75	0.6	7.0	8.8	105	-	37559	-
1.0	0.6	7.6	9.6	135	-	37563	-



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1.5	0.7	8.7	10.7	174	37608	37560	-
2.5	0.8	10.3	12.5	265	37611	37561	-
4.0	0.8	11.9	14.3	376	-	-	-

# **Harmonised Codes-Technical Information**

### Part 1 of the designation

### **Table 1a: Relationship to standards**

Symbol	Relationship of cable to standards
Н	Cable conforming with harmonised
	standards
Α	Recognised National Type of cable listed in the relevantSupplement to harmonised standards

Table 1b: Rated voltage

Symbol	Value, U?/U*
01	=100/100V;
	(<300/300V)
03	300/300V
05	300/500V
07	450/750V

The rated voltages not yet harmonised are given in brackets

### Part 2 of the designation

### Table 2a: Insulating and non-metallic sheathing materials

Note: The descriptions given for the symbols are used in certain instances to cover a group of materials which have similar performance requirements for a given cable type will be found in the appropriate cable standard.

Symbol	Material
В	Ethylene-propylene
	rubber
G	Ethylene-vinyl-acetate
J	Glass-fibre
	braid
M	Mineral
N	Polychloroprene
	(or equivalent material)
N2	Special
	polychloroprene compound for covering of welding cables according to HD 22.6
N4	Chlorosulfonated
	polyethylene or chlorinated polyethylene
N8	Special water resistant
	polychloroprene compound
Q	Polyurethane
Q4	Polyamide



R	Ordinary ethylene propylene rubber or equivalent synthetic elastomer for a continuous operating temperature of 60°C
S	Silicone rubber
T	Textile braid, impregnated or not, on assembled cores
Т6	Textile braid, impregnated or not, on individual cores of a multi-core cable
V	Ordinary PVC
V2	PVC compound for a continuous operating temperature of 90°C
V3	PVC compound for cables installed at low temperature
V4	Cross-linked PVC
V5	Special oil resistant PVC compound
Z	Polyolefin-based cross-linked compound having low level of emission of corrosive gases and which is suitable for use in cables which, when burned, have low emission of smoke
<b>Z1</b>	Polyolefin-based thermoplastic compound having low level of emission of corrosive gases and which is suitable for use in cables which, when burned, have low emission of smoke

### **Table 2b Metallic coverings**

Symbol	Sheath, concentric conductors and screens
С	Concentric copper conductor
C4	Copper screen as braid over the assembled cores

### Table 2c: Special constructional components of a cable

Note: These symbols, when required, are to follow the symbols selected from any of the previous tables 2a and 2b.

Symbol	Constructional components
D3	Strain-bearing element consisting of one or more textile components, placed at the centre of a round cable or distributed inside a flat cable.
D5	Central heart (non strain-bearing for lift cables only)
D9	Strain-bearing element consisting of one or more metallic components, placed at the centre of a
	round cable or distributed inside a flat cable.

### **Table 2d: Special construction of cable**

Note: These symbols, when required, are to follow the symbols selected from any of the previous tables 2a to 2c.

Symbol	Special construction
No Symbol	Circular construction of cable
Н	Flat construction of "divisible" cables and cores, either sheathed or non-sheathed



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H2	Flat construction of "non-divisible" cables and cores
Н6	Flat cable having three or more cores, according to DH 359 or EN 50214
H7	Cable having a double layer insulation applied by extrusion
Н8	Extensible lead

### **Table 2e: Conductor material**

Note: These symbols, when required are to follow after a dash, the symbols selected from any previous tables 2a to 2d.

Symbol	Conductor material
No Symbol	Copper
-A	Aluminium

### **Table 2f: Conductor form**

Note: These symbols are to follow after a dash (already included in the symbol –A, in the case of aluminium conductors) the symbols selected from any of the previous tables 2a to 2e. For cables containing two forms of conductors the symbol shall designate the form of the phase conductor only.

Symbol	Conductor form
-D	Flexible conductor for use in arc welding cables to HD 22 Part 6 (flexibility to different from class 5 of HD 383)
-E	Highly flexible conductor for use in arc welding cables to HD22 Part 6 (flexibility different from Class 6 of HD 383)
-F	Flexible conductor of a flexible cable or cord (flexibility according to Class 5 of HD 383)
-H	Highly flexible conductor of a flexible cable or cord (flexibility according to Class 6 of HD 383)
-K	Flexible conductor of a cable for fixed installations (unless otherwise specified, flexibility according to Class 5 of HD 383)
-R	Rigid, round conductor, stranded
-U	Rigid round conductor, solid
-Y	Tinsel conductor

### Part 3 of the designation

Table 3: Number(s) of cores and nominal cross-section(s) of conductors

Symbol	Number and size of conductors
(number)	Number, n of cores
Х	Times, where a green/yellow core is not included
G	Times, when a green/yellow core is included
(number)*	Nominal cross-section, s, of conductor in mm <sup>2</sup>
Υ	For a tinsel conductor where the cross-section is not specified

Countries are free to assign the "N" (placed after the conductor cross-section) to indicate that the cores are identified by number.

### **General Examples**

nXs or nGs	n cores of s mm² conductor cross-section
nXs+n-Xs-	n cores of s mm <sup>2</sup> and n- cores of s- mm <sup>2</sup> conductor cross-section
nXs/s-	n cores of s mm <sup>2</sup> conductor cross-section and concentric conductor of s- mm <sup>2</sup> cross-section
nXs + n-Xs-/s®	n cores of s mm² + n- cores of s- mm² conductor cross-section + concentric conductor of s® mm² cross-section

### **Particular Examples**



4 G 50	A cable with four cores having 50mm <sup>2</sup> conductor cross-section, one of the cored being green/yellow
4 X 50	A4-core cable without green/yellow core, all the cores having 50mm <sup>2</sup> conductor cross-section
3X50 +	A cable with four cores, three of which have 50mm <sup>2</sup> conductor cross-section, while the green/yellow core has a
1G25	reduced
	conductor cross-section of 25mm <sup>2</sup>
3X70/35	A cable with three cores having 70mm <sup>2</sup> conductor cross-section and a concentric conductor of 35mm <sup>2</sup> cross-section
2 X Y	A2-core cord with tinsel conductors

Table 4: Survey of symbols and their sequence in cable designations(1)

1	2	3	4	5	6	7	8	9	10	11
Part 1	2	3	4	5	Part 2	7	8	9	Part 3	11
Related Standar d	Rated voltag e	Insulatin g material	Metalic covering s (s)	Non - metallic sheath (2)	Constructiona I components & special instructions	Conducto r material	Conducto r forms	No. of core s	Time s	Conducto r size mm
				Symbols accordin g to table (s)						
1a	1b	2a	2b	2c and 2d	2e	2f	3			
Н	01	В	С	В	D3	No	-D	1	Χ	Υ
					D5	Symbol:	-E	2		0.5
Α	03	G	C4	G	D9	Copper	-F	3	G	
						-H	4		0.75	
	05	J		J	No symbol:	-A	-K	5		
					Circular		-R	Etc		
	07	M			Construction		-U			
					Of cable		-Y			
		N, N4		N, N2, 4, 8						
					Н				2.5	
		R		Q, Q4	H2					
					Н6				4	
		S		R	H7					
					Н8				R	
				S						
		V, V2		T, T6			·	<u> </u>	·	·
		V3, V4							16	
				V, V1, V2						
		Z, Z1		V4, V5					25	
				Z, Z1					etc	

<sup>(1)</sup> If two or more symbols listed in the same column need to be used in a given designation, they shall follow each other in their radial sequence starting from the core axis to cable axis.



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<sup>(2)</sup> The symbols might change their position in the designation with respect to the construction of the cable.

## **4H3A-Technical Information**

TABLE 4H3A Flexible Cords (Copper Conductors).

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

Conductor	current car	rying capacity	Maximum mass
cross- sectional area	single- phase a.c.	three-phase a.c.	suporatble by twin flexible cord (see Regulations 522.7.2 & 559.6.1.5)
1	2	3	4
(mm²)	(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

### Notes

Where cable is on a reel see the notes to Table 4H1A

### Rating factor for ambient temperature

60°C rubber and pvc cords::						
<b>Ambient Temp (°C)</b> 35 40 45 50 55						
Correction factor	0.91	0.82	0.71	0.58	0.41	

85°C rubber cords having h.o.f.r. sheath or a heat-resisting pvc sheath

and for 85°C and 90°C heat-resisting cords: :

Ambient Temp (°C) 35 to 50 55 60 65 70 Correction factor 1.0 0.96 0.83 0.67 0.47

150°C rubber cords:

Ambient Temp (°C)35 to 120125 130 135 140 145 Correction factor 1.0 0.960.850.740.600.42

Glass fibre cords:

Ambient Temp (°C)35 to 150155 160 165 170 175 Correction factor 1.0 0.920.820.710.570.40

### **TABLE 4F3B**

### **VOLTAGE DROP** (per ampere per metre):Conductor operating temperature:60°C\*

Conductorcross-sectionalarea	d.c orsingle-phasea.c.	three-phasea.c.
1	2	3
(mm²)	(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

### Notes

The tabulated values above are for 60°C rubber-insulated and pvc-insulated flexible cords and for other types of flexible cords they are to be multiplied by the following factors:

85°C rubber or 85°C and 90°C pvc-insulated	1.09
150°C rubber insulated	1.31
185°C glass fibre	1.43

# 4H3A,17th Edition-Technical Information

TABLE 4F3A Flexible cords, non-armoured (Copper Conductors)
CURRENT-CARRYING CAPACITY (amperes): and MASS SUPPORTABLE (kg):

Conductor cross- sectional area	single- phase a.c.	three-phase a.c.	Maximum mass suporatble by twin flexible cord (see Regulations 522.7.2 & 559.6.1.5)
1	2	3	4
(mm²)	(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

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

### Rating factor for ambient temperature

60°C thermoplastic of cords:	or ther	mosetti	ing insu	lated		
Ambient Temp (°C)	35	40	45	50	55	



<b>Rating Factor</b> 0.91 0.82 0.71 0.58 0.41
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90°C thermoplastic or thermosetting insulated cords:						
Ambient Temp (°C)	35 to 50	55	60	65	70	
Rating Factor	1.0	0.96	0.83	0.67	0.47	

180°C thermosetting insulated cords:	:					
Ambient Temp (°C)	35 to 120	125	130	135	140	145
Rating Factor	1.0	0.96	0.85	0.74	0.60	0.42

Glass fibre cords:						
Ambient Temp (°C)	35 to 150	155	160	165	170	175
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	d.c orsingle-phasea.c.	three-phasea.c.
1	2	3
(mm²)	(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

### Notes

The tabulated values above are for  $60^{\circ}$ C thermoplastic or thermosetting insulated flexible cords and for other types of flexible cords they are to be multiplied by the following factors:

90°C thermoplastic or thermosetting insulated	1.09
180°C thermosetting insulated	1.31
185°C glass fibre	1.43



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# **Parts options**

Part No.	Core	Size	Colour/Reference
37285	2	0.5sqmm (Class 5)	Black
37284	2	0.5sqmm (Class 5)	White
37288	2	0.75sqmm (Class 5)	Black
37289	2	0.75sqmm (Class 5)	White
37290	2	0.75sqmm (Class 5)	Orange
37293	2	1.0sqmm (Class 5)	Black
37295	2	1.0sqmm (Class 5)	White
37299	2	1.5sqmm (Class 5)	Black
37300	2	1.5sqmm (Class 5)	White
37481	2	1.5sqmm (Class 5)	Orange
37304	2	2.5sqmm (Class 5)	Black
37305	2	2.5sqmm (Class 5)	White
37308	2	4.0sqmm (Class 5)	Black
37309	2	4.0sqmm (Class 5)	White
37318	3	0.5sqmm (Class 5)	Black
37319	3	0.5sqmm (Class 5)	White
37325	3	0.75sqmm (Class 5)	Black
37327	3	0.75sqmm (Class 5)	White
37334	3	1.0sqmm (Class 5)	Black
37335	3	1.0sqmm (Class 5)	White
37616	3	1.0sqmm (Class 5)	Orange
37341	3	1.5sqmm (Class 5)	Black
37342	3	1.5sqmm (Class 5)	White
37617	3	1.5sqmm (Class 5)	Orange
37346	3	2.5sqmm (Class 5)	Black
37347	3	2.5sqmm (Class 5)	White
37615	3	2.5sqmm (Class 5)	Orange
37350	3	4.0sqmm (Class 5)	Black
37351	3	4.0sqmm (Class 5)	White
37567	4	0.75sqmm (Class 5)	Black
37550	4	0.75sqmm (Class 5)	White
37556	4	1.0sqmm (Class 5)	Black
37531	4	1.0sqmm (Class 5)	White
37532	4	1.5sqmm (Class 5)	Black
37554	4	1.5sqmm (Class 5)	White
37547	4	2.5sqmm (Class 5)	Black
37551	4	2.5sqmm (Class 5)	White
37559	5	0.75sqmm (Class 5)	White
37563	5	1.0sqmm (Class 5)	White
37560	5	1.5sqmm (Class 5)	White
37561	5	2.5sqmm (Class 5)	White
37575	4	4.0sqmm (Class 5)	Black
37607	4	0.5sqmm (Class 5)	Black
37608	5	1.5sqmm	Black
37611	5	2.5sqmm (Class 5)	Black
37628	5	0.75sqmm (Class 5)	Black
37323	3	0.75sqmm (Class 5)	Orange

