

Cable handling

Delivery, lengths and reels and recommended bend radius

Plastic delivery spools								
Type	Dimension							Weight kg
	A mm	B mm	C mm	D mm	E mm	F mm	G mm	
SD100/60K	16.5	60.0	100.0	38.0	45.0	25.0	3.5	0.06
E 100	16.0	80.0	100.0	80.0	100.0	20.0	7.0	0.09
E 125	16.0	80.0	125.0	100.0	125.0	20.0	7.0	0.15
E 160	22.0	100.0	160.0	128.0	160.0	32.0	13.0	0.25
SH370K	305.0	311.0	370.0	70.0	80.0	-	-	0.41
E 200	22.0	125.0	200.0	160.0	200.0	32.0	13.0	0.45
SD300K	51.5	212.0	300.0	91.0	103.0	44.5	11.0	0.65
K125	16.0	80.0	125.0	100.0	125.0	20.0	7.0	0.08
K160	22.0	100.0	160.0	128.0	160.0	32.0	13.0	0.24
K200	22.0	125.0	200.0	160.0	200.0	32.0	13.0	0.50
K250	33.0	155.0	250.0	160.0	200.0	30.0	13.0	1.05
K355	33.0	220.0	355.0	160.0	200.0	80.0	25.0	1.85
B60	33.0	110.0	255.0	148.0	165.0	43.5	11.5	0.60
P3	75.0	110.0	280.0	265.0	285.0	43.5	9.5	0.73
P4	75.0	175.0	400.0	300.0	340.0	62.0	20.0	2.0
P5	75.0	202.0	480.0	340.0	380.0	65.0	20.0	2.0

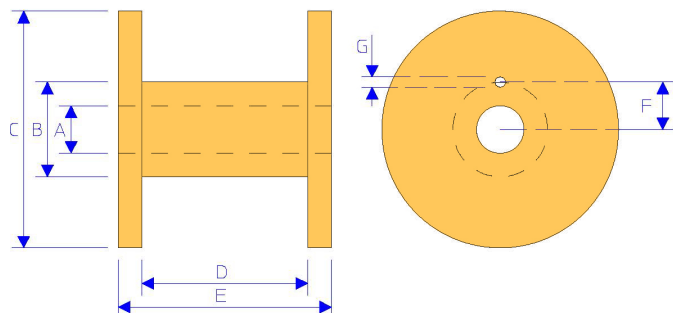
Woodend delivery spools								
Type	Dimension							Weight kg
	A mm	B mm	C mm	D mm	E mm	F mm	G mm	
H400	35.0	200.0	400.0	200.0	230.0	85.0	22.0	3.0
H470	35.0	200.0	470.0	230.0	250.0	85.0	22.0	3.5
K6	75.0	250.0	600.0	400.0	464.0	100.0	40.0	12
K7	75.0	325.0	700.0	500.0	576.0	100.0	40.0	20
K8	75.0	375.0	800.0	500.0	576.0	100.0	40.0	25
K9	75.0	425.0	900.0	550.0	627.0	100.0	10.0	34
K10	107.0	500.0	1,000.0	600.0	715.0	150.0	50.0	46
K11	107.0	575.0	1,100.0	650.0	765.0	150.0	50.0	55
K12	107.0	675.0	1,200.0	850.0	980.0	300.0	50.0	90
K14	107.0	800.0	1,400.0	850.0	980.0	300.0	50.0	115
K16	107.0	950.0	1,600.0	850.0	1,012.0	300.0	50.0	195
K18	132.0	1,100.0	1,800.0	850.0	1,012.0	500.0	65.0	230

Recommended Minimum Bend Radius (MBR)			
Type of usage	Definition	MBR for 'Standard cable'	MBR for Habiatron Q
Static (installation)	Flexed into position - no further movement	5 x overall cable diameter	7.5 x overall cable diameter
Flexing	General motion (e.g. unsupported cable movement)	10 x overall cable diameter	10 x overall cable diameter
Dynamic use	High frequency use (e.g. drag-chain)	20 x overall cable diameter	Not suitable for dynamic use

Habia Cable delivers on a number of standard spool sizes provided that the inner diameter of the spool remains consistent with the Minimum Bend Radius (MBR) of the cable.

Habia Cable will supply the cable with all ends out and capped unless otherwise specified.

Habia Cable can supply in crates and barrels depending on the product. Please ask for details.



Data indicates nominal values in millimetres (mm) unless otherwise stated.

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Continuous current de-rating factors and safe handling methods

Multicore de-rating factors													
Factor	Number of cores												
	2	3	4	6	8	10	12	16	20	24	28	36	40
	0.87	0.79	0.74	0.66	0.61	0.57	0.54	0.49	0.46	0.43	0.41	0.37	0.35

Multiply the current rating as stated on Habia Cable's technical data sheets by the factor stated above to account for the heat generated by multiple cores in close proximity.

Installation method de-rating factors												
Number of cores	Clipped to a vertical structure			Clipped to a horizontal structure			On solid metal trays			On aerated metal trays		
	1	2	3	1	2	3	1	2	3	1	2	3
Without spacing	0.94	0.80	0.76	0.89	0.76	0.57	0.97	0.85	0.74	1.00	0.87	0.74
With spacing	0.94	0.90	0.87	0.89	0.81	0.77	0.97	0.96	0.93	1.00	1.00	1.00

Multiply the current rating as stated on Habia Cable's technical data sheets by the factor stated above to account for the additional heating effect that may result from different methods of installation.

Temperature de-rating factors								
Ambient air temperature	Insulation temperature rating							
	80°C	100°C	125°C	135°C	150°C	180°C	200°C	260°C
0°C	1.52	1.37	1.28	1.24	1.21	1.18	1.15	1.10
10°C	1.40	1.28	1.21	1.19	1.16	1.14	1.11	1.08
20°C	1.28	1.19	1.15	1.13	1.10	1.08	1.07	1.05
30°C	1.14	1.09	1.07	1.06	1.05	1.04	1.03	1.02
40°C (nominal ambient air temperature)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
50°C	0.82	0.89	0.92	0.93	0.94	0.95	0.96	0.97
60°C	0.65	0.78	0.83	0.86	0.88	0.90	0.92	0.94
70°C	0.42	0.65	0.74	0.79	0.82	0.85	0.88	0.91
80°C	-	0.50	0.65	0.71	0.76	0.81	0.84	0.88
90°C	-	0.40	0.54	0.63	0.69	0.76	0.79	0.85
100°C	-	-	0.42	0.54	0.61	0.71	0.75	0.82
110°C	-	-	0.27	0.44	0.53	0.65	0.70	0.79
120°C	-	-	0.17	0.32	0.45	0.59	0.65	0.75
130°C	-	-	-	0.16	0.35	0.53	0.60	0.72
140°C	-	-	-	-	0.23	0.46	0.54	0.69
150°C	-	-	-	-	-	0.38	0.49	0.65
160°C	-	-	-	-	-	0.30	0.42	0.61
170°C	-	-	-	-	-	0.19	0.36	0.57
180°C	-	-	-	-	-	-	0.28	0.53
190°C	-	-	-	-	-	-	0.18	0.49
200°C	-	-	-	-	-	-	-	0.45
210°C	-	-	-	-	-	-	-	0.40
220°C	-	-	-	-	-	-	-	0.35
230°C	-	-	-	-	-	-	-	0.29
240°C	-	-	-	-	-	-	-	0.23
250°C	-	-	-	-	-	-	-	-

Multiply the current rating as stated on Habia Cable's technical data sheets by the factor stated above to account for changes in the expected ambient air temperature.

Note: De-rating factors are accumulative. A multi-core cable, installed in a cable-tray at used at temperature should have all three de-ratings applied.

Example: 3 cores of RT 0.5, clipped to a horizontal structure at an ambient temperature of 50°C = 10 Amps x 0.79 x 0.77 x 0.94 = 5.7 Amps.

Safe handling temperatures

It is important to consider the cable in the context of its surroundings as the process of applying current to a cable generates heat.

Although many of Habia Cable's materials are capable of withstanding very high temperatures, this heat will be radiated out, affecting neighbouring cables and infrastructure as well as operators who may have to handle the cable.

Habia Cable's recommended safe handling temperatures (taken from MIL-STD-1472) are proposed as:

- Momentary contact +85°C
- Prolonged contact or handling: +69°C

De-rating factors assume the insulation to be operating at its maximum temperature (e.g. an 80°C rated material at 40°C ambient air temperature: the heat generated by the current passing through the conductor will increase the temperature by an additional 40°C to its maximum 80°C rating)

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