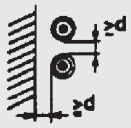
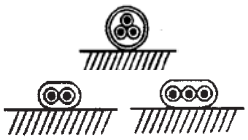
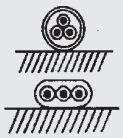
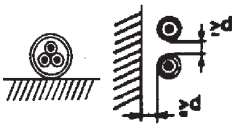
Table 12-1: current rating

For cables with a nominal voltage of up to 1000 V and for heat-resistant cables at an ambient temperature of +30 °C.

Cable category						
	A **Single-core cables** • Rubber insulation • PVC insulation • TPE insulation • Heat-resistant	**B** **Multi-core cables for domestic/handheld equipment** • Rubber insulation • PVC insulation • TPE insulation		**C** **Multi-core cables excl. domestic/handheld equipment** • Rubber insulation • PVC insulation • TPE insulation • Heat-resistant	**D** **Multi-core rubber-sheathed cables** min. 0.6/1 kV Single-core **Special rubber core cables** 0.6/1 or 1.8/3 kV	
Installation type						
Number of cores under load	**1**[3]	**2**	**3**	**2** or **3**	**3**	**1**[3]
Nominal cross-section in mm²	**Current rating in A**	**Current rating in A**		**Current rating in A**	**Current rating in A**	
0.08[1]	1.5	-	-	1	-	-
0.14[1]	3	-	-	2	-	-
0.25[1]	5	-	-	4	-	-
0.34[1]	8	-	-	6	-	-
0.5	12[2]	3	3	9[2]	-	-
0.75	15	6	6	12	-	-
1.0	19	10	10	15	-	-
1.5	24	16	16	18	23	30
2.5	32	25	20	26	30	41
4	42	32	25	34	41	55
6	54	40	-	44	53	70
10	73	63	-	61	74	98
16	98	-	-	82	99	132
25	129	-	-	108	131	176
35	158	-	-	135	162	218
50	198	-	-	168	202	276
70	245	-	-	207	250	347
95	292	-	-	250	301	416
120	344	-	-	292	-	488
150	391	-	-	335	-	566
185	448	-	-	382	-	644
240	528	-	-	453	-	775
300	608	-	-	523	-	898
400	726	-	-	-	-	-
500	830	-	-	-	-	-
Current rating from:	DIN VDE 0298-4, 2003-08 Table 11/column 2	DIN VDE 0298-4, 2003-08 Table 11/columns 3 + 4		DIN VDE 0298-4, 2003-08 Table 11/column 5	DIN VDE 0298-4, 2003-08 Table 15/columns 4 + 2	

IMPORTANT:
The information portrayed in this table differs from that in VDE 0298-4. As such, in the event of any uncertainty the current version of DIN VDE 0298-4 always applies. Please also observe all applicable conversion factors going beyond table 12-1 for:

- differing ambient temperatures: table T12-2
- several-core cables up to 10 mm² with more than 3 cores under load: table 12-3
- heat-resistant cables for ambient temperatures exceeding 50 °C: table T12-4
- for wound cables: table 12-5
- bundling of single-core or multi-core cables in pipes, ducts, walls or flooring: T 12-6
- bundling of multi-core cables on troughs or conduits: table 12-7
- bundling of single-core cables on troughs or conduits: table 12-8

Cable designs as per table 12-1 category

A: Single-core cables: LiY, LiYCY- EA, H05V-K, H07V-K, H07V2-K, H07Z-K, multi-standard single-core cable, ÖLFLEX® HEAT, ÖLFLEX® HEAT 180 single cores, ÖLFLEX® HEAT 205/260 single cores

B: Multi-core connecting cables for domestic/handheld devices: all ÖLFLEX® connecting cables, H05VV-F, H05RR-F, H05RN-F, H05BQ-F, H07BQ-F

C: Multi-core and several-core connecting and/or control cables for all other applications except domestic/household equipment: all ÖLFLEX®, ÖLFLEX® CRANE, ÖLFLEX® HEAT, ÖLFLEX® HEAT 180, ÖLFLEX® HEAT 205/260 cables

D: Multi-core rubber-sheathed cables V_0/V min. 0.6/1 kV: ÖLFLEX® CRANE PUR ÖLFLEX® CRANE VS, NSHTÖU, NSSHÖU; ÖLFLEX® HEAT 145 multi-core cables. Single-core special rubber core cables V_0/V 0.6/1 kV or 1.8/3 kV: NSGAFÖU, NSHXAFÖU; ÖLFLEX® HEAT 145 single-core cables.

Current rating of other cables:
ESUY earthing cable: see VDE 0105, part 1
H07RN-F/A 07RN-F/H07BQ-F for industrial applications: see catalogue table T12-9.
Welding cable H01N2-D: see catalogue table T12-10.
Cables for fixed installation in buildings (NYM, NHXMH, NYY, NYCY, NYCWY, NHXHX): see VDE 0298-4, 2003-08, tables 3 + 4.
Cables in machinery: DIN EN 60204-1/VDE 0113-1
Current rating for cables in the USA: see NEC excerpt table 13

[1] Current rating values for small conductor cross-sections taken from VDE 0891-1 (0.08 mm² – 0.34 mm²)
[2] Extended range for 0.5 mm² in line with VDE 0298-4, 2003-08, table 11 column 2
[3] When bundling single-core, touching or bundled cables:

- When installed on surfaces, the following calculations must be performed on the current rating values in table 12-1 column A or D prior to applying the conversion factors as per table 12-6
- - Multiplied by a factor of 0.76 for single-phase AC or DC circuits or
  - Multiplied by a factor of 0.67 for three-phase circuits.
- When installed in the open air or on cable conduits, the following calculations must be performed on the current rating values in table 12-1 column A or D prior to applying conversion table 12-8
  - Multiplied by a factor of 0.8 for single-phase AC and DC circuits or
  - Multiplied by a factor of 0.7 for three-phase circuits.
- **ATTENTION:** For the current rating of core cables in pipes for electrical installations fitted on and in buildings (installation type A1 or B1), the values from VDE 0298 tables 3 or 5, columns 2, 3, 6 or 7 respectively, must be multiplied with the conversion factors stated in VDE 0298 table 21.