

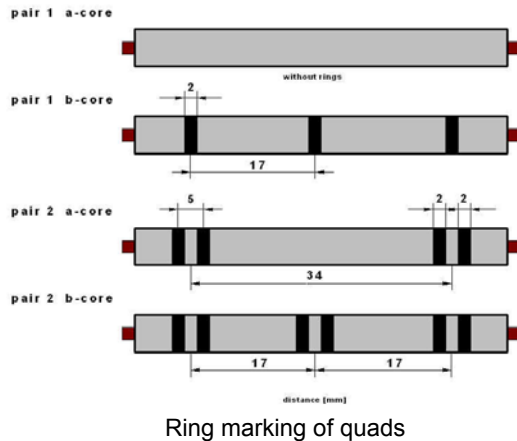


## A-2Y(L)2Y, A-2Y(L)2YB2Y n x 2 x 0.4 / 0.6 / 0.8 mm STIII BD

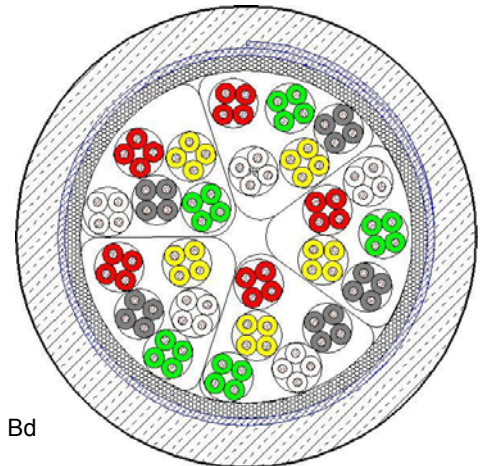
### PE-insulated TELDRAK® - telecommunication cable, with moisture barrier

According to specification DIN VDE 0816 part 1, edition 02/1988

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to technical progress



Principle drawing  
A-2Y(L)2Y 50x2x0.8 STIII Bd



### Application

Telecommunication cable for local networks and PABX, used for telecommunication and data transmission. Suitable for laying in ground or in cable ducts.

### Colour Coding, Marking

- Quad: Marking of cores of star quads with black rings according to DIN VDE 0816 part 1
- Basic unit: 5 main colours of star quad: red, green, grey, yellow, white. Marking units of basic and main units are marked with a red open helix, all others have a white helix
- Sheath: Icon „telephone“ and meter marking in white sintered print.

### Construction

<b>A-2Y(L)2Y</b>	
Conductor	copper, solid, 0.4, 0.6 or 0.8 mm, soft annealed
Insulation	PE (2Y)
Twisting	star quads in unit stranding (SZ-stranding)
Cable core wrapping	one or more layers of swellable material
Moisture barrier	laminated sheath formed by an aluminium tape (0.15 mm thick) coated on at least one side with copolymer, and bonded with
Sheath	PE (2Y), black
<b>A-2Y(L)2YB2Y</b>	Construction as described before, additionally:
Armouring	one layer of galvanized steel tape 0.3 mm (1B0.3) or two layers of galvanized steel tape 0.3 mm (2B0.3) or two layers of galvanized steel tape 0.5 mm (2B0.5)
Sheath	PE (2Y), black



## A-2Y(L)2Y, A-2Y(L)2YB2Y n x 2 x 0.4 / 0.6 / 0.8 mm STIII BD

### Mechanical and Thermal Properties

Admissible bending radius	with tension	≥ 10 x outer cable diameter
	without tension	≥ 5 x outer cable diameter
Temperature range	during operation	-40°C to + 70°C
	during installation	-20°C to + 50°C
Peel-off strength Al-foil – PE-sheath		0.8 N/mm

### Electrical Properties

at 20°C ± 5°C

Conductor diameter	mm	0.4	0.6	0.8
Conductor loop resistance	Ω/km	≤ 300	≤ 130	≤ 73.2
Insulation resistance, at least <sup>3</sup>	GΩxkm		≥ 5	
Mutual capacitance at 800 Hz <sup>4</sup>				
100% of all values	nF/km	< 50	< 52	< 55
95% of all values <sup>5</sup>	nF/km	< 48	< 50	< 53
80% of all values	nF/km	-	< 48	< 50
Capacitance unbalance <sup>7</sup> at 800 Hz				
k <sub>1</sub>				
100% of all values	pF/300 m		< 800 <sup>8</sup>	
98% of all values	pF/300 m		< 400	
k <sub>9-12</sub>				
100% of all values	pF/300 m		< 300 <sup>8</sup>	
98% of all values	pF/300 m		< 100	
Test voltage				
core/core	V <sub>eff</sub>		500 <sup>9</sup>	
core/screen	V <sub>eff</sub>		2000	
Operating peak voltage	V	150	225	225
<sup>3</sup> pls see section 6.2 of DIN VDE 0816, part 1				
<sup>4</sup> pls see section 6.3 of DIN VDE 0816, part 1				
<sup>5</sup> for cables up to 10 pairs, only the 100% value is valid				
<sup>6</sup> pls see section 6.4 of DIN VDE 0816, part 1				
<sup>7</sup> pls see section 6.5 of DIN VDE 0816, part 1				
<sup>8</sup> valid for at least 2 quads				
<sup>9</sup> cables with > 100 pairs will not be checked core/core				



## A-2Y(L)2Y, A-2Y(L)2YB2Y n x 2 x 0.4 / 0.6 / 0.8 mm STIII BD

### Additional Properties

Dimension	Outer diameter	Cable weight net	Standard supply length	Drum size	Transport weight gross	Copper content	Tensile strength max.	Fireload
	mm	kg/km	m	KTG	kg/drum	kg/km	N	MJ/m
<b>A-2Y(L)2Y n x 2 x 0,4 St III BD</b>								
100	18.8	403	2000	161	1086	252	-	-
200	30.0	860	2000	221	2430	503	2510	
<b>A-2Y(L)2Y n x 2 x 0.6 St III BD</b>								
2 *)	6.5	50	2000	091	147	11	100	2.0
4 *)	8.8	80	2000	101	231	23	200	2.0
6	10.0	110	2000	121	364	34	300	3.0
10	11.2	140	2000	121	424	57	500	4.0
20	14.0	220	2000	121	584	113	700	5.0
30	15.7	300	2000	141	775	170	950	6.0
40	17.4	370	2000	161	1020	226	1200	7.0
50	18.9	450	2000	161	1180	283	1500	8.0
70	21.7	580	2000	181	1540	396	2000	10.0
100	25.4	810	2000	201	2795	565	2800	13.0
150	30.6	1160	2000	221	3030	848	4100	17.0
200	34.4	1500	2000	250	3875	1131	5200	21.0
250	38.3	1850	1000	201	2400	1414	6500	26.0
300	41.3	2180	1000	221	2890	1696	7800	29.0
400	47.6	2890	1000	250	3765	2262		39.0
500	52.5	3540	1000	250	4415	2828		46.0
600	57.7	4320	1000	281	5495	3393		57.0
700	61.7	4970	500	250	3360	3959		64.0
800	65.9	5630	500	250	3690	4524		71.0
1000	73.1	7030	500	250	4390	5652		89.0
1200	80.1	8430	500	280	5390	6786		107.0
<b>A-2Y(L)2Y n x 2 x 0.8 St III BD</b>								
2 *)	7.2	70	2000	091	187	20	110	2.0
4 *)	11.0	120	2000	121	384	40	230	3.0
6	11.4	140	2000	121	424	60	340	4.0
10	13.0	200	2000	121	544	101	570	4.0
20	16.5	330	2000	161	940	201	1100	6.0
30	18.7	450	2000	161	1180	302	1620	7.0
40	20.9	580	2000	181	1540	402	2110	9.0
50	22.8	700	2000	181	1780	503	2590	10.0
70	26.7	950	2000	201	2450	704	3490	14.0
100	30.9	1290	2000	250	3755	1005	4740	17.0
150	37.8	1910	2000	250	4695	1508	6600	24.0
200	42.7	2480	2000	281	6135	2011	8250	30.0
250	47.8	3100	1000	250	3975	2514	9680	38.0
300	51.8	3670	1000	250	4545	3016	10920	44.0
400	59.5	4850	500	221	3135	4021	13040	58.0
500	65.6	5970	500	250	3860	5027	14600	69.0
600	72.1	7190	500	250	4470	6032	15370	84.0
700	77.2	8300	500	281	5325	7037	16190	94.0
800	82.7	9580				8042		

\*) based on VDE 0816 part 1 (number of pairs)



## A-2Y(L)2Y, A-2Y(L)2YB2Y n x 2 x 0.4 / 0.6 / 0.8 mm STIII BD

### Additional Properties

Dimension	Outer diameter	Cable weight net	Standard supply length	Drum size	Transport weight gross	Copper content		
	mm	kg/km	m	KTG	kg/drum	kg/km		
<b>A-2Y(L)2YB2Y n x 2 x 0.6 St III BD mit Bewehrung 2B0.5 nach VDE 0816 Teil 1</b>								
20	20.8	680	1000	121	801	113		
<b>A-2Y(L)2YB2Y n x 2 x 0.6 St III BD with armouring 2B0.3 based on VDE 0816 part 1</b>								
50	24.2	830	1000	161	1110	283		
100	31.2	1330	1000	201	1880	565		
150	36.7	1800	1000	221	2510	849		
<b>A-2Y(L)2YB2Y n x 2 x 0.8 St III BD with armouring 2B0.3 based on VDE 0816 part 1</b>								
6	15.3	370	1000	121	514	61		
10	17.0	450	1000	121	594	101		
20	21.0	640	1000	121	784	202		
30	23.0	820	1000	141	995	302		
100	37.1	2010	1000	201	2560	1005		
<b>A-2Y(L)2YB2Y n x 2 x 0.8 St III BD with armouring 2B0.5 according to VDE 0816 part 1</b>								
10	18.0	550	1000	121	694	101		
20	21.5	809	1000	141	984	201		
30	24.0	1020	1000	161	1300	302		
<b>A-2Y(L)2YB2Y n x 2 x 0.8 St III BD with armouring 2B0.8 according to VDE 0816 part 1</b>								
10	21.2	847	1000	141	1022	101		
20	26.2	1190	1000	161	1470	201		
30	29.2	1475	1000	161	1755	302		
50	34.5	2006	1000	181	2386	503		
100	44.3	3160	1000	221	3870	1005		