

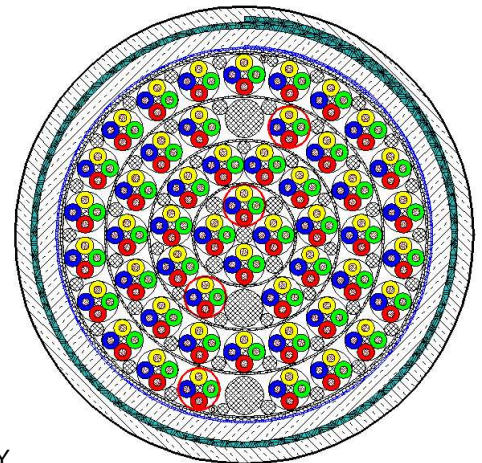


## A-02YSTF(L)2YV, ...B2Y, ...(SR)2Y STI LG n x 4 x 0.9 mm

### LONGDRAK<sup>®</sup> - Long-distance cable with moisture barrier

**Preferred** types according to specification DB Telematik TNP 02/05,  
deviating dimensions only based on

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Changes reserved according  
to technical progress



Principle drawing  
A-02YSTF(L)2Y(SR)2Y  
50x4x0.9 STI LG

### Application

Telecommunication cable (long distance), star quad twisted, used for telecommunication and data transmission.

### Colour Coding, Marking

In quad	a-core	b-core	The counting quad in each layer (including center quad)
Pair 1	yellow	red	is marked with a red open helix.
Pair 2	green	blue	

### Construction

<b>1) A-02YSTF(L)2YV</b>	
Conductor	copper, solid, 0.9 mm, soft annealed
Insulation	foam-skin-PE (02YS)
Twisting	star quads twisted in concentric layers
Pilot cores	copper, solid, 0.5 mm, perforated, two pilot cores diametrical positioned
Filling	interstices filled with water swellable material, dry filling
Cable core wrapping	one or more layers of water swellable material with overlap
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>2) A-02YSTF(L)2YB2Y</b>	construction as position 1), additionally:
Armouring	one or two layers of galvanised steel tape 1B0.2 or 2B0.3
Outer sheath	PE (2Y), black
<b>3) A-02YSTF(L)2Y(SR)2Y</b>	construction as position 1), additionally:
Armouring	corrugated steel tape, coated on both sides with copolymer
Outer sheath	PE (2Y), black



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### Mechanical and Thermal Properties

Temperature range	during operation	- 30°C to + 70°C
	during installation	- 5°C to + 50°C
Admissible bending radius		10 x outer cable diameter

### Electrical Properties

at 20°C ± 5°C

Conductor diameter	mm	0.9
Conductor loop resistance	Ω/km	≤ 56.6
Insulation resistance	GΩxkm	≥ 10
Mutual capacitance at 800 Hz	nF/km	≤ 34
Capacitance unbalance at 800 Hz		
$k_1$	pF/km	≤ 400
$k_{9-12}$	pF/km	≤ 400
$e_{a1/2}$	pF/km	≤ 1650
Test voltage at 50 Hz		
conductor/conductor	$V_{eff}$	500
conductor/screen	$V_{eff}$	2000
Attenuation at 800 Hz	dB/km	0.62



## A-02YSTF(L)2YV, ...B2Y, ...(SR)2Y STI LG n x 4 x 0.9 mm

### Additional Properties

Dimension	Outer diameter	Cable weight net	Standard supply length	Drum size	Transport weight gross	Copper content	Tensile strength max.	Fire load	
	mm	kg/km	m	KTG	kg/drum	kg/km	N	MJ/m	
<b>A-02YSTF(L)2YV n x 4 x 0.9 STI LG</b>									
3 x	17.0	230	1000	121	374	81	430	6	
<b>5 x *)</b>	<b>21.0</b>	<b>330</b>	<b>1000</b>	<b>141</b>	<b>505</b>	<b>132</b>	<b>690</b>	<b>7</b>	
7 x	23.0	400	1000	161	680	183	960	9	
8 x	23.0	430	1000	161	710	208	1090	9	
<b>10 x *)</b>	<b>28.0</b>	<b>560</b>	<b>1000</b>	<b>161</b>	<b>840</b>	<b>259</b>	<b>1310</b>	<b>12</b>	
12 x	29.0	620	1000	181	1000	310	1550	13	
14 x	31.0	730	1000	181	1110	361	1780	15	
<b>16 x *)</b>	<b>33.0</b>	<b>820</b>	<b>1000</b>	<b>201</b>	<b>1370</b>	<b>412</b>	<b>1990</b>	<b>17</b>	
<b>19 x *)</b>	<b>34.0</b>	<b>910</b>	<b>1000</b>	<b>201</b>	<b>1460</b>	<b>488</b>	<b>2340</b>	<b>18</b>	
<b>24 x *)</b>	<b>39.0</b>	<b>1140</b>	<b>1000</b>	<b>221</b>	<b>1850</b>	<b>615</b>	<b>2770</b>	<b>22</b>	
<b>30 x *)</b>	<b>42.0</b>	<b>1360</b>	<b>500</b>	<b>181</b>	<b>1060</b>	<b>768</b>	<b>3390</b>	<b>25</b>	
37 x	46.0	1640	500	201	1370	946	4000	29	
48 x	52.0	2110	333	201	1253	1226	4880	38	
<b>A-02YSTF(L)2YB2Y n x 4 x 0.9 STI LG</b>									
3 x	2B0,3	22.0	580	1000	161	860	81	410	11
<b>5 x *)</b>	<b>1B0,2</b>	<b>25.0</b>	<b>550</b>	<b>1000</b>	<b>161</b>	<b>830</b>	<b>132</b>	<b>670</b>	<b>14</b>
7 x	2B0,3	27.0	870	1000	161	1150	183	910	15
7 x	1B0,2	27.0	650	1000	161	930	183	920	15
8 x	1B0,2	27.0	680	1000	161	960	208	1050	15
10 x	2B0,3	33.0	1150	1000	201	1700	259	1240	19
10 x	1B0,2	33.0	880	1000	201	1430	259	1240	20
12 x	1B0,2	33.0	940	1000	201	1490	310	1490	20
14 x	1B0,2	35.0	1070	1000	201	1620	361	1710	23
16 x	1B0,2	37.0	1180	1000	221	1890	412	1910	25
16 x	2B0,3	37.0	1490	1000	221	2200	412	1910	24
19 x	1B0,2	39.0	1290	1000	221	2000	488	2220	27
20 x	2B0,3	39.0	1650	500	181	1205	513	2340	26
24 x	1B0,2	44.0	1590	500	201	1345	615	2650	33
30 x	1B0,2	46.0	1840	500	201	1470	768	3240	37
37 x	1B0,2	50.0	2160	500	221	1790	946	3810	42
48 x	1B0,2	56.0	2680	333	221	1602	1226	4580	51

\*) Preferred types according to DB Telematik TNP 02/05



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### Additional Properties

Dimension	Outer diameter	Cable weight net	Standard supply length	Drum size	Transport weight gross	Copper content	Tensile strength max.	Fire load
	mm	kg/km	m	KTG	kg/drum	kg/km	N	MJ/m
<b>A-02YSTF(L)2Y(SR)2Y n x 4 x 0.9 STI LG</b>								
3 x	22.0	420	1000	161	700	81	430	11
<b>5 x</b> *)	<b>26.0</b>	<b>550</b>	<b>1000</b>	<b>161</b>	<b>830</b>	<b>132</b>	<b>660</b>	<b>13</b>
7 x	28.0	650	1000	161	930	183	910	15
8 x	28.0	670	1000	161	950	208	1040	15
10 x	33.0	860	1000	201	1410	259	1240	19
12 x	34.0	930	1000	201	1480	310	1480	20
14 x	36.0	1060	1000	221	1770	361	1690	23
16 x	38.0	1160	1000	221	1870	412	1890	24
19 x	39.0	1270	1000	221	1980	488	2220	26
24 x	45.0	1570	500	201	1335	615	2620	33
30 x	47.0	1800	500	201	1450	768	3200	36
37 x	51.0	2120	500	221	1770	946	3760	41
48 x	57.0	2640	333	221	1589	1226	4580	50

\*) Preferred types according to DB Telematik TNP 02/05