

Cables

Page

<b>har-link®</b> .....	<b>40.02</b>
<b>har-mik®</b> .....	<b>40.02</b>
<b>D-Sub – S</b> .....	<b>40.04</b>
<b>SEK</b> .....	<b>40.05</b>

## Cables for insulation displacement termination

Identification	No. of pairs	Part No.
Twisted pair cable with braid shield AWG 28 Length per reel: 100 m*	5	60 90 005 6003
	10	60 90 010 6003
	13	60 90 013 6003
	14	60 90 014 6003
	18	60 90 018 6003
	20	60 90 020 6003
	25	60 90 025 6003
	34	60 90 034 6003
	40	60 90 040 6003
	48	60 90 048 6003
	50	60 90 050 6003

Drawing	No. of pairs	Outside diameter		Dimensions in mm
		Nominal	Max	
	5	5.4	5.6	
	10	6.2	6.5	
	13	6.5	6.8	
	14	6.5	6.8	
	18	7.4	7.7	
	20	7.7	8.2	
	25	8.2	8.5	
	34	8.7	9.0	
	40	9.9	10.4	
	48	10.1	10.6	
	50	13.0	13.5	

  

Technical characteristics			
Number of pairs	5, 10, 13, 14, 18, 20, 25, 34, 40, 48, 50	Propagation velocity	60 %
Voltage rating	30 V (style UL 2789)	Temperature range	- 20 °C ... + 105 °C
Maximum conductor resistance (20 °C)	233 Ω/km	<b>Cable materials</b>	
Minimum insulation resistance (20 °C)	1 MΩ/km	Conductor	7 x 0.13 mm stranded tinned copper
Nominal differential impedance (TDR)	85 Ω	Insulation (except 50 pairs) (for 50 pairs)	PVC Ø 0.62 mm PVC Ø 0.65 – 0.80 mm
Nominal differential capacitance (1 kHz)	110 pF/m	Shield	Tinned copper braid, covering ≥ 80 %
		Jacket	PVC
		Flammability rating	IEC 332-1
		Sheath marking	AWM 2789 60°C 30V VW1 36963

\* Except 60 90 050 6003: 150 m reel

Cables for insulation displacement termination

Identification	No. of wires	Part No.
Flat cable for IDC connector Pitch 0.635 mm AWG 30		
Length per reel: 100 ft 30.48 m	50 68	60 90 050 6008 60 90 068 6008

**Drawing** Dimensions in mm

	a ± 0.25	b ± 0.05	c ± 0.2	d ± 0.05
50	31.75	0.635	31.12	0.68
68	43.20	0.635	42.55	0.68

The tolerance b is not cumulative

Technical characteristics	
Number of wires	50, 68
Voltage rating	150 V
Impedance	75 Ω
Nominal differential capacitance (1 kHz)	90 pF/m
Pitch	0.635 mm
UL style	2 678
Temperature range	- 30 °C ... + 105 °C
<b>Materials</b>	
Conductor	7 x 0.102 mm regular tinning or Z-bonding AWG 30
Insulation	PVC FEP

## Cables for insulation displacement termination

Identification	No. of contacts	Part No.	Drawing	Dimensions in mm																																			
Flat cable <sup>2)</sup> AWG 28/7				style UL 2651																																			
				style UL 2884																																			
	9	09 18 009 700 <input type="checkbox"/> <sup>1)</sup>																																					
	15	09 18 015 700 <input type="checkbox"/> <sup>1)</sup>																																					
	25	09 18 025 700 <input type="checkbox"/> <sup>1)</sup>																																					
	37	09 18 037 700 <input type="checkbox"/> <sup>1)</sup>																																					
grey 50 m	1																																						
grey 150 m	4																																						
colour coded 30.48 m	5																																						
Round flat cable AWG 28/7																																							
			<p>Length per reel 30.48 m (100 feet) or 152.40 m (500 feet)</p> <ul style="list-style-type: none"> <li>① Flat cable, grey AWG 28/7</li> <li>② Barrier tape</li> <li>③ Outer insulation PVC, grey</li> <li>④ Tinned copper screen (shielded version)</li> <li>⑤ Drain Wire AWG 28 (shielded version)</li> </ul>																																				
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without screening 30 m	08																																						
with screening 150 m	10																																						
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<sup>1)</sup> Not available in colour coded version  
<sup>2)</sup> For dimensions and technical characteristics see page 40.05

Cables for insulation displacement termination

Identification	No. of contacts	Part No.	Drawing	Dimensions in mm
<b>Flat cable</b> grey style UL 2651 IEC 918 NFC 93525				
	6	09 18 006 700	<input type="checkbox"/>	
	9	09 18 009 700	<input type="checkbox"/>	
	10	09 18 010 700	<input type="checkbox"/>	
	14	09 18 014 700	<input type="checkbox"/>	
	15	09 18 015 700	<input type="checkbox"/>	
	16	09 18 016 700	<input type="checkbox"/>	
	20	09 18 020 700	<input type="checkbox"/>	
	24	09 18 024 700	<input type="checkbox"/>	
	25	09 18 025 700	<input type="checkbox"/>	
	26	09 18 026 700	<input type="checkbox"/>	
	28	09 18 028 700	<input type="checkbox"/>	
	34	09 18 034 700	<input type="checkbox"/>	
	37	09 18 037 700	<input type="checkbox"/>	
	40	09 18 040 700	<input type="checkbox"/>	
	50	09 18 050 700	<input type="checkbox"/>	
	60	09 18 060 700	<input type="checkbox"/>	
	64	09 18 064 700	<input type="checkbox"/>	
Length per reel 50 m (164 feet)	1			
150 m (492 feet)	4			
			Conductor material _____ Cu tinned Gauge _____ AWG 28/7 0.089 mm <sup>2</sup> Voltage rating _____ 300 V <sub>r.m.s.</sub> Conductor resistance _____ 225 mΩ/m Capacity unbalanced _____ 42 pF/m Impedance unbalanced _____ 108 Ω Inductance unbalanced _____ 0.5 μH/m Signal delay _____ 5 ns/m Insulation material _____ PVC Temperature rating _____ -30 °C ... + 105 °C Flammability rating _____ IEC 332-1 Insulation resistance _____ > 50 MΩ/km	
<b>Flat cable</b> colour coded				
Length per reel 30.48 m (100 feet)				
style UL 2884 IEC 918				
	10	09 18 010 7005	<input type="checkbox"/>	
	14	09 18 014 7005	<input type="checkbox"/>	
	16	09 18 016 7005	<input type="checkbox"/>	
	20	09 18 020 7005	<input type="checkbox"/>	
	24	09 18 024 7005	<input type="checkbox"/>	
	25	09 18 025 7005	<input type="checkbox"/>	
	26	09 18 026 7005	<input type="checkbox"/>	
	34	09 18 034 7005	<input type="checkbox"/>	
	37	09 18 037 7005	<input type="checkbox"/>	
	40	09 18 040 7005	<input type="checkbox"/>	
	50	09 18 050 7005	<input type="checkbox"/>	
	60	09 18 060 7005	<input type="checkbox"/>	
	64	09 18 064 7005	<input type="checkbox"/>	
				Colour code sequence (in 10 steps) brown, red, orange, yellow, green, blue, violet, grey, white, black
			Conductor material _____ Cu tinned Gauge _____ AWG 28/7 0.089 mm <sup>2</sup> Voltage rating _____ 300 V <sub>r.m.s.</sub> Conductor resistance _____ 230 mΩ/m Capacity unbalanced _____ 49 pF/m Impedance unbalanced _____ 105 Ω Inductance unbalanced _____ 0.66 μH/m Signal delay _____ 4.6 ns/m Insulation material _____ PVC Temperature rating _____ -20 °C ... + 105 °C Flammability rating _____ UL: VW 1 Insulation resistance _____ 10 <sup>3</sup> MΩ/km	

Important: always store reels vertically

Cables for insulation displacement termination

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