



Pushing Performance



People | Power | Partnership

HARTING Selection Guide

Han[®] 1A Connectors

	2+PE Screw	3+PE Screw	3+PE Shielded
Power	2+PE	3+PE	3+PE + shielding
Contacts / wires	2+PE	3+PE	3+PE + shielding
Electrical data	10 A / 230/400 V	10 A / 230/400 V	10 A / 400 V
Termination	Screw	Screw	Crimp
Wire gauge mm ²	0.75 ... 1.5 mm ²	0.75 ... 1.5 mm ²	0.14 ... 2.5 mm ²
Male with snap-in latch	09 10 002 2600	09 10 003 2600	09 10 003 3000
Female with snap-in latch	09 10 002 2700	09 10 003 2700	09 10 003 3100
Male for locking lever	09 10 002 2605	09 10 003 2605	09 10 003 3005
Female for locking lever	09 10 002 2705	09 10 003 2705	09 10 003 3105
Single wire seal	09 10 004 9900	09 10 004 9900	
Advice	Insert incl. contacts	Insert incl. contacts	Han® D contacts to be ordered separately

	3+PE Crimp	5+PE Crimp	12 Crimp
Power and Signal	3+PE	5+PE	12
Contacts / wires	3+PE	5+PE	12
Electrical data	16 A / 400 V	10 A / 400 V	6.5 A / 50 V
Termination	Crimp	Crimp	Crimp
Wire gauge mm ²	0.14 ... 4 mm ²	0.14 ... 2.5 mm ²	0.09 ... 0.52 mm ²
Male with snap-in latch	09 10 003 3200	09 10 005 3000	09 10 012 3000
Female with snap-in latch	09 10 003 3300	09 10 005 3100	09 10 012 3100
Male for locking lever	09 10 003 3205	09 10 005 3005	09 10 012 3005
Female for locking lever	09 10 003 3305	09 10 005 3105	09 10 012 3105
Single wire seal	09 10 004 9901	09 10 006 9900	09 10 012 9900
Advice	Han E® contacts to be ordered separately	Han D® contacts to be ordered separately	Han® D-Sub contacts to be ordered separately. Please use removal tool 09 99 000 0346

	Cat. 5	Cat. 6 _A	Cat. 5	Cat. 6 _A
Data	With snap-in latch	With snap-in latch	For locking lever	For locking lever
Contacts / wires	4	8	4	8
Electrical data	4 A / 250 V	0.5 A / 48 V	4 A / 250 V	0.5 A / 48 V
Data transmission	100 Mbit/s	10 Mbit/s	100 Mbit/s	10 Mbit/s
Termination	Crimp	Crimp	Crimp	Crimp
Wire gauge mm ²	0.13 ... 0.82 mm ²	0.08 ... 0.25 mm ²	0.13 ... 0.82 mm ²	0.08 ... 0.25 mm ²
Male with snap-in latch	09 10 004 3000	09 10 008 3000	09 10 004 3005	09 10 008 3005
Female latch	09 10 004 3100	09 10 008 3100	09 10 004 3105	09 10 008 3105
Advice	M12 contacts to be ordered separately	M12 contacts to be ordered separately	M12 contacts to be ordered separately	M12 contacts to be ordered separately

Housing components	Bulkhead mounted housing, straight	Bulkhead mounted housing, angled	Cable adapter	Strain relief
	Cable diameter		5.7 - 10 mm	
	IP protection class	IP65	IP65	IP20
Part number	09 10 000 0300	09 10 000 0800	09 10 000 0400	09 10 000 5300

Accessories	Mounting frame	Dummy plugs	Locking lever	Colour coding elements	
	Part number	09 10 000 9907	09 10 000 9909	09 10 000 5200*	09 10 000 9901 (blue)
					09 10 000 9902 (red)
					09 10 000 9903 (green)
					09 10 000 9904 (yellow)
				09 10 000 9905 (violet)	

Technical characteristics

Material characteristics

Material (insert, hood, housing)	Polyamide, TPE
Material seal	NBR
Material single wire seal	Silicone
	Halogen free
	High chemical resistance
Flammability UL94	V-0
Fire protection on railway vehicles (EN 45545-2)"	R22: HL1, HL2, HL3 R23: HL1, HL2, HL3 R24: HL1, HL2, HL3
Limiting temperature	-30 ... +90 °C

Mechanical characteristics

Mating cycles	
With snap-in latch	≥100
With metal locking lever	≥100
Shock and vibration (EN 61373)	Cat. 1B
IP protection	IP20 - IP65

Inserts

Signal	Up to 12 pole
Power	Up to 16 A
Data	Cat. 5; Cat. 6 _A



Locking mechanism with snap-in latch or robust metal locking lever



IP65 protection by single wire seal

Crimp Contacts and Crimping Tools



6.5 A - D-Sub/0.5A/4A-M12	Cross-section / wire gauge		M12 male	M12 female	male	female		
	(mm ²)	(AWG)	(gold plated)	(gold plated)	(gold plated)	(gold plated)		
	0.13 - 0.25	26 - 23	21 01 100 9019	21 01 100 9021				
	0.09 - 0.25	28 - 24	21 01 100 9014	21 01 100 9023	09 67 000 7576	09 67 000 7476		
				09 67 000 5576	09 67 000 5476			
				09 67 000 8576	09 67 000 8476			
10 A - Han D®	Cross-section / wire gauge		male	female	male	female		
	(mm ²)	(AWG)	(silver plated)	(silver plated)	(gold plated)	(gold plated)		
	0.14 - 0.37	26 - 22	09 15 000 6104	09 15 000 6204	09 15 000 6124	09 15 000 6224		
	0.5	20	09 15 000 6103	09 15 000 6203	09 15 000 6123	09 15 000 6223		
	0.75	18	09 15 000 6105	09 15 000 6205	09 15 000 6125	09 15 000 6225		
	1	18	09 15 000 6102	09 15 000 6202	09 15 000 6122	09 15 000 6222		
	1.5	16	09 15 000 6101	09 15 000 6201	09 15 000 6121	09 15 000 6221		
		09 15 000 6106	09 15 000 6206	09 15 000 6126	09 15 000 6226			
16 A - Han E®	Cross-section / wire gauge		male	female	male	female		
	(mm ²)	(AWG)	(silver plated)	(silver plated)	(gold plated)	(gold plated)		
	0.14 - 0.37	26 - 22	09 33 000 6127	09 33 000 6227	09 33 000 6117	09 33 000 6217		
	0.5	20	09 33 000 6121	09 33 000 6220	09 33 000 6122	09 33 000 6222		
	0.75	18	09 33 000 6114	09 33 000 6214	09 33 000 6115	09 33 000 6215		
	1	18	09 33 000 6105	09 33 000 6205	09 33 000 6118	09 33 000 6218		
	1.5	16	09 33 000 6104	09 33 000 6204	09 33 000 6116	09 33 000 6216		
	2.5	14	09 33 000 6102	09 33 000 6202	09 33 000 6123	09 33 000 6223		
		09 33 000 6106	09 33 000 6206					
		09 33 000 6107	09 33 000 6207	09 33 000 6119	09 33 000 6221			
Crimping tools	Crimping tools acc. to IEC 60352-2		09 99 000 0501	09 99 000 0631	09 99 000 0635	09 99 000 0825	09 99 000 0531	
	Contacts / cross-section [mm ²]	D-Sub / 0.09 ... 0.52	Positioner for D-Sub male	Positioner for D-Sub female	Positioner for M12 male	Positioner for M12 female		
Crimping tools	Crimping tools acc. to IEC 60352-2		09 99 000 0021	09 99 000 0110	09 99 000 0888	09 99 000 0012	09 99 000 0847	09 99 000 0346
	Contacts / cross-section [mm ²]	Han D® / 0.14 ... 1.5 Han E® / 0.5 ... 2.5	Han D® / 0.14 ... 1.5 Han E® / 0.5 ... 4.0 Han® C / 1.5 ... 4.0	Han D® / 0.14 ... 2.5 Han E® / 0.14 ... 4.0 Han® C / 1.5 ... 4.0	Han D® Removal Tool	Han E® / Han D® Assembly Tool	D-Sub Removal Tool	



- Door systems and ramps
- Illumination
- Headlights
- Speakers
- Indicating lights
- Warning lights
- Screens
- Door opener
- Push buttons
- Buzzers
- Windscreen wiper systems

- Battery storage systems
- Solar inverters
- Power plant control systems and cabinets
- Power generator sets
- Sensors



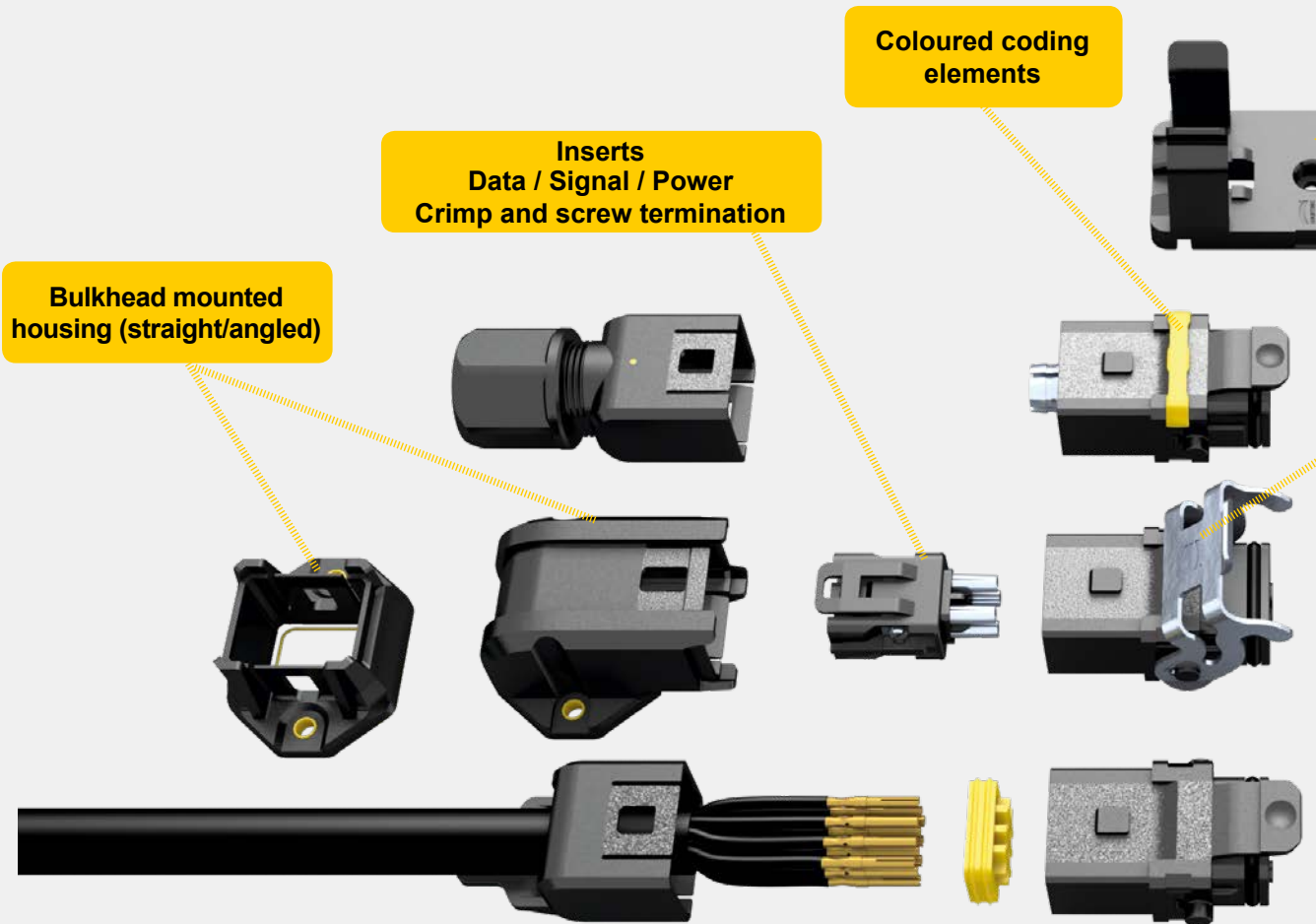
- Tower lighting
- Emergency stops
- Sensors
- Indicating sounds
- Ventilators

- Heater
- Fans
- Control terminals
- Industrial lighting
- Small drives
- Vibratory conveyors
- Connections inside cabinet



Your configuration:

The right connectivity solution for every application!



Light weight

Thanks to the used material the Han® 1A has a weight advantage in comparison to connectors that are e.g. made of metal



Shock and vibration resistant

The Han® 1A product series provides a high reliable connection even under shock and vibration conditions



Versatile concept

Build your own connectivity solution by using the modularity advantage of the Han® 1A with inserts covering power, signal and data transmission. Together with all accessory parts the Han® 1A is a very flexible system usable for a broad range of applications



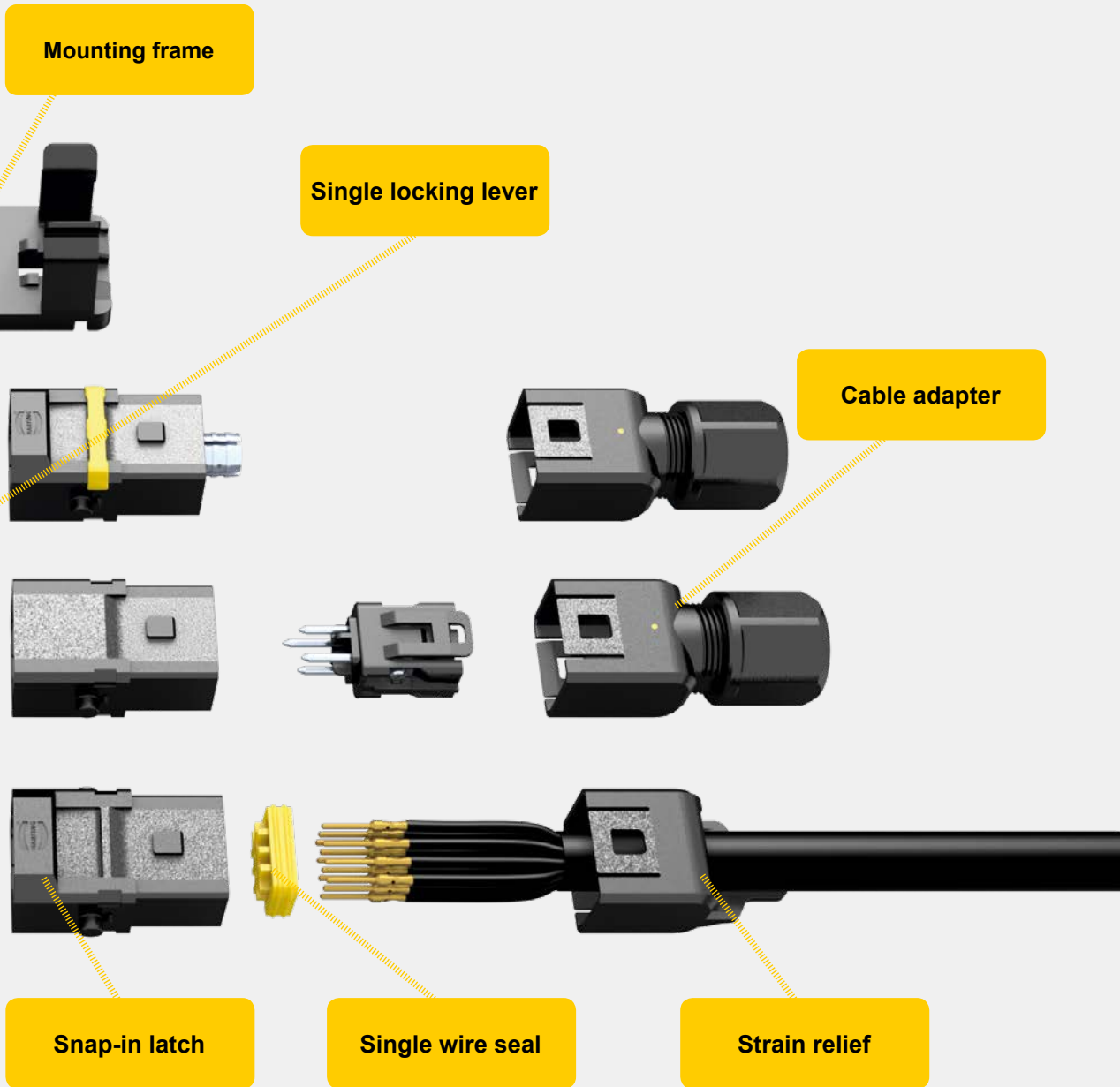
Time saving

Due to the easy mate and click design of all single components the assembly of the connector is done within seconds - and there are no tools needed



Space saving

The Han® 1A components are designed to fulfil the trend of miniaturisation - while being still a robust Han® connector also for harsh environments



Chemical resistance

Although the Han® 1A is made of plastic, the connector is resistant to chemicals and other aggressive influences



Cost saving

Limited storage costs due to a versatile system – almost unlimited combinations possible



Data transmission up to Cat. 6_A

The modularity of the new connector offers a complete system which also includes the possibility of highspeed data transmission



IP protected where needed

By usage of hood and housing elements or single wire seals IP65 protection degree can be realized in an easy way



Pushing Performance

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