



Pushing Performance

HARTING Han-Power® T Solutions



People | Power | Partnership

Fields of Application

HARTING industrial connectors are suitable in a wide variety of electronic and electrical applications.

- Power utilities
- Robotics
- Machine tool controls
- Injection molding
- Industrial instrumentation
- Conveyor equipment
- Transportation

The degree of protection of all hoods and housings is in accordance with International Standard IEC 60 529.

Specifications

VDE 0110 Table concerning clearance and creepage distances

VDE 0627 Connectors and plug devices

Standards: DIN EN 175 301-801 & DIN EN 61 984

Approvals: UL, CSA for inserts
UL for housings/hoods

Note

Connectors should not be coupled and decoupled under electrical load. Connectors of the same or different series being mounted side by side may be protected against incorrect mating by the use of coding options.

General Information

It is the user's responsibility to check whether the components illustrated in this catalog comply with different regulations from those stated in special fields of application which we are unable to foresee.

We reserve the right to modify designs in order to improve quality, keep pace with technological advancement or meet particular requirements in production.

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The construction and installation of distribution center conveyer systems are simplified and more cost effective by including Han-Power® T components. Preassembled cable assemblies provide fast installation and start-up of modular conveyer belts.



Certified according to EN ISO 9001 in design/development, production, installation and servicing

Connectorized Power and Signal Distribution Systems

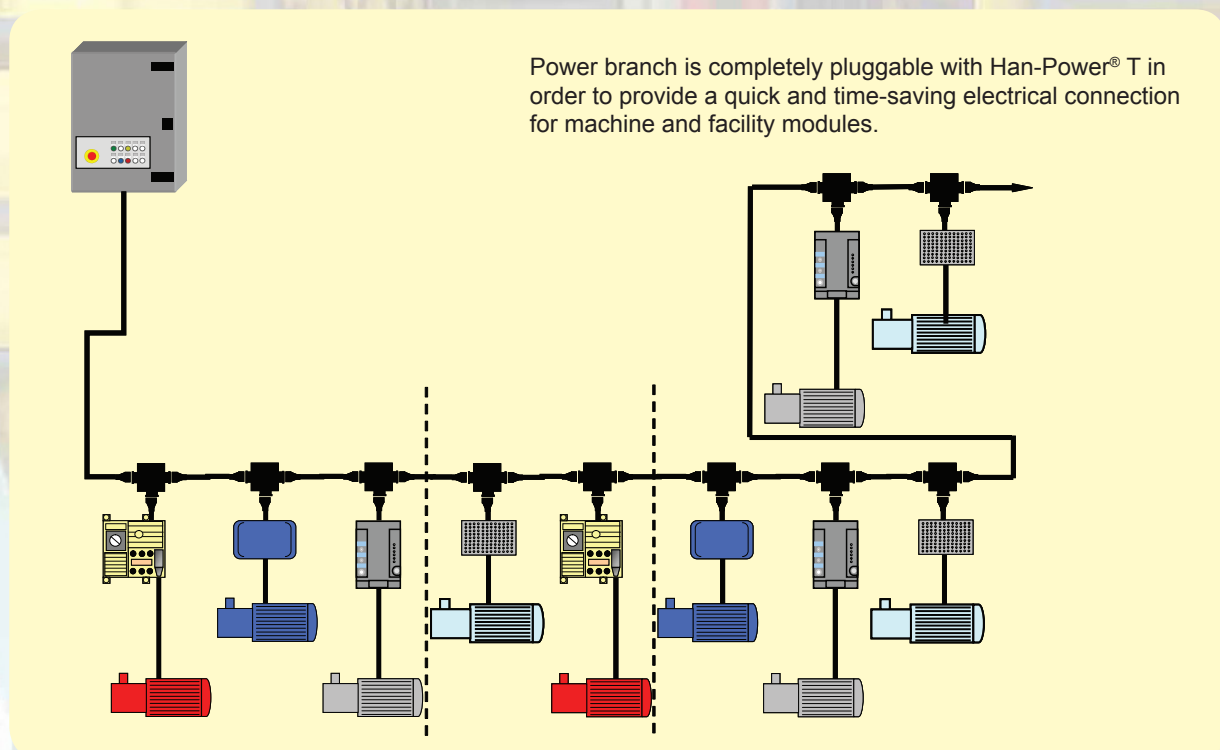
Machine and production tooling developers are implementing modern de-centralized factory topologies using standard interfaces. The objective is to cost reduce installation of power and data distribution networks, transforming and optimizing previous installation technologies.

Conventional wiring schemes are characterized by point-to-point installation of signal and power. For example, each motor in a production line is connected to a power cable from a control cabinet. All sensor and actuators such as proximity switches or valves are also wired in parallel.

The introduction of serial bus components for connecting sensors and actuators has marked a key advance in plant wiring technology.

Products from the HARTING Technology Group support this change in installation engineering.

An essential element in this new wiring technology is the need for a power bus system that allows multiple consuming devices to be connected to one cable line while still complying with national and international standards in addition to being backward compatible with existing and standardized interfaces.

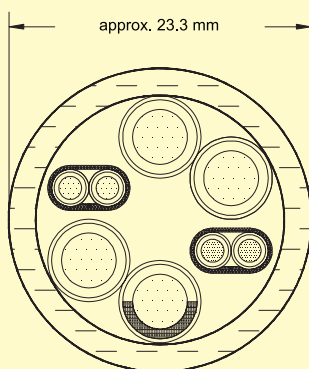


Features

- 1 connection for mixed power input
- 1 connection for mixed power output
- 1 T-connection to device
- 3 power contacts
- 4 signal contacts
- Separate ground contact
- Metal hood and housings
- Han-Easy Lock® lever

Cable Specifications

Conductors (incl. gnd)	4 x 8 AWG 2 pair (shielded) x 14 AWG
Insulation	PVC/Nylon
Diameter	23.3 mm (0.917")
Temperature range	-25°C to +90°C
Voltage	600 V
Approvals	UL Type TC-ER CSA AWM FT4



Technical Characteristics

Specifications

Han-Power® T Modular Twin

Rated voltage acc. to UL	600 V
Rated current	40 A
Number of contacts	3 power contact + PE max. 10 AWG 4 signal contacts max 12 AWG
Surface	Powder coated RAL 7037
Sealing	NBR
Temperature range	-40°C ... +125°C
Protection degree acc. to DIN 60 529	IP 65
UL 50	Type 4/12/4X

Suitable Inserts

Han® C module with crimp termination

Number of contacts	3
Electrical data acc. to DIN EN 61 984	40 A 400/690 V 6 kV 3
Rated current	40 A

Rated voltage

Conductor - ground	400 V
Conductor - conductor	690 V

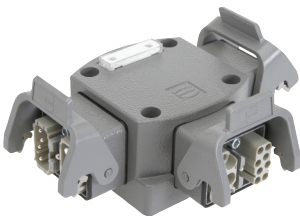
Rated impulse voltage	6 kV
Pollution degree	3
Material	Polycarbonate
Insulation resistance	≥ 10 ¹⁰ Ω
Temperature range	-40°C ... +125°C
Flammability acc. to UL 94	V 0
Mechanical working life	≥ 500 cycles

Han® EE module with crimp termination

Number of contacts	4
Electrical data acc. to DIN EN 61 984	16 A 400 V 6 kV 3
Rated current	16 A
Rated voltage	400 V
Rated impulse voltage	6 kV
Pollution degree	3

Han-Power® T Modular Twin

400 V 40 A 

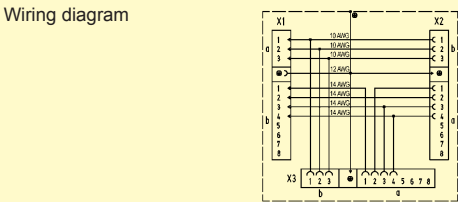
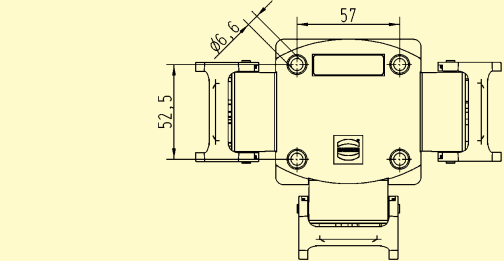
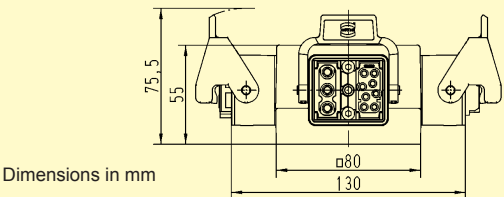
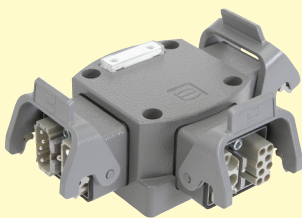


with 3x Han-Modular® Twin

Identification	Part Number	Drawing	Dimensions in mm
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Han-Power® T Modular Twin

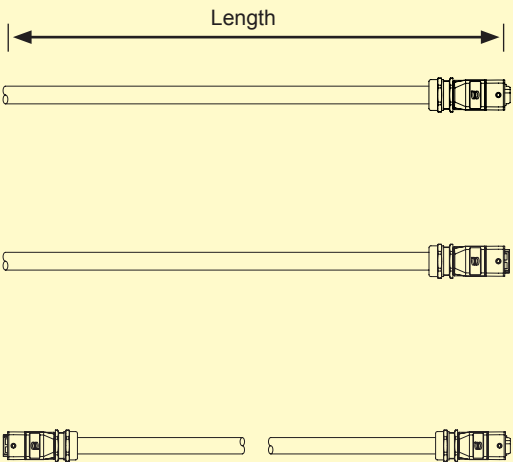
09 12 008 4760



Cables

Length

Han-Modular® Twin single ended, Female*	1.5 m	73 42 700 0101 0015
	3.0 m	73 42 700 0101 0030
	5.0 m	73 42 700 0101 0050
	10.0 m	73 42 700 0101 0100
	20.0 m	73 42 700 0101 0200
Han-Modular® Twin single ended, Male*	1.5 m	73 42 700 0102 0015
	3.0 m	73 42 700 0102 0030
	5.0 m	73 42 700 0102 0050
	10.0 m	73 42 700 0102 0100
	20.0 m	73 42 700 0102 0200
Han-Modular® Twin double ended, Male/Female*	1.5 m	73 42 702 0101 0015
	3.0 m	73 42 702 0101 0030
	5.0 m	73 42 702 0101 0050
	10.0 m	73 42 702 0101 0100
	20.0 m	73 42 702 0101 0200



*Additional cable lengths available upon request

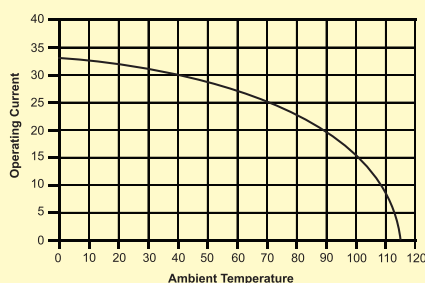
* Different inserts/modules available upon request

Features

- One connection for power input
- One through connection for power
- One connection to device
- Five contacts for power and signal
- Separate ground contact
- Thermoplastic pre-leading hoods and housings
- Degree of protection: IP 65/ IP 67
- Compact size

Derating diagram

The power rating of the connectors is limited by the capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly, without exceeding the allowed maximum temperature. Measuring and testing techniques according to DIN EN 60 512-5.



Wire gauge: 14 AWG

Cable Specifications

Conductors (incl. gnd)	5 x 14 AWG
Insulation	PVC/Nylon
Diameter	10.9 mm (0.429")
Temperature range	-25°C to +90°C
Voltage	600 V
Approvals	UL Type TC-ER, FT4, WTTC AWM Style 21179, cUL FT1 FT2 FT4



Technical Characteristics

Specifications

DIN EN 61 984
DIN VDE 0110

Han-Power® T

Number of contacts

Power contacts

4 + PE / ≤ 12 AWG

Electrical data acc. to EN 61 984

Rated current

16 A 230/400 V 4kV 3
16 A

Rated voltage

Conductor - ground

Conductor - conductor

Rated impulse voltage

Pollution degree

230 V

400 V

4 kV

3

Rated voltage acc. to UL/CSA

Material

Limiting temperatures

Flammability acc. to UL 94

Degree of protection acc. to

EN 60 529

600 V

Polycarbonate

-40°C ... 125°C

V 0

IP 65/IP 67

Hoods/housings Han® A

Material

Surface

Hoods/housings sealing

Limiting temperatures

Flammability acc. to UL 94

Degree of protection acc. to

EN 60 529 for coupled connector

Polycarbonate

RAL 9005

NBR

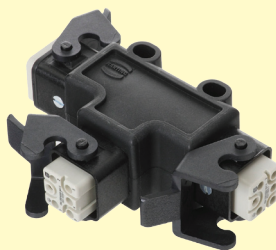
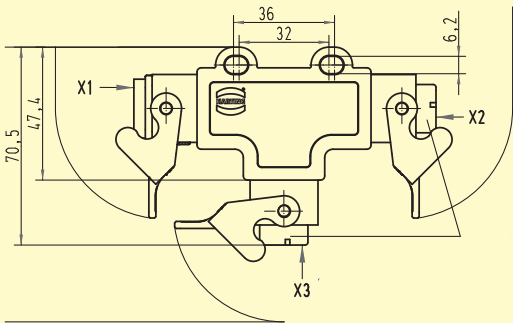
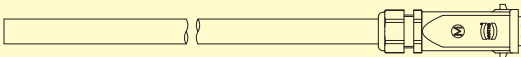
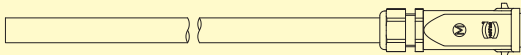
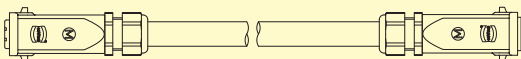
-40°C ... 125°C

V 0

IP 67

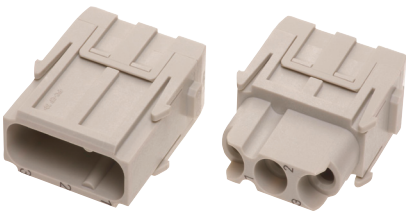


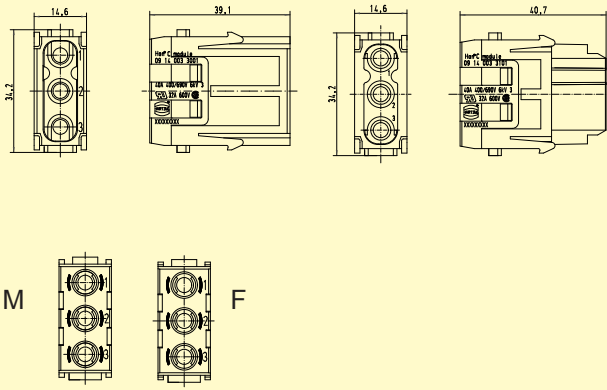
with 3x Han® Q 5/0

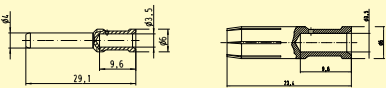
Identification	Part Number	Drawing	Dimensions in mm						
Han-Power® T 	09 12 008 4751								
Cables <table><tr><th>Length</th><th></th></tr><tr><td>Han® Q 5/0 single ended, Female*</td><td> 1.5 m73 42 800 0101 0015 3.0 m73 42 800 0101 0030 5.0 m73 42 800 0101 0050 10.0 m73 42 800 0101 0100 20.0 m73 42 800 0101 0200 </td></tr><tr><td>Han® Q 5/0 single ended, Male*</td><td> 1.5 m73 42 800 0102 0015 3.0 m73 42 800 0102 0030 5.0 m73 42 800 0102 0050 10.0 m73 42 800 0102 0100 20.0 m73 42 800 0102 0200 </td></tr><tr><td>Han® Q 5/0 double ended, Male/Female*</td><td> 1.5 m73 42 802 0101 0015 3.0 m73 42 802 0101 0030 5.0 m73 42 802 0101 0050 10.0 m73 42 802 0101 0100 20.0 m73 42 802 0101 0200 </td></tr></table>	Length		Han® Q 5/0 single ended, Female*	1.5 m73 42 800 0101 0015 3.0 m73 42 800 0101 0030 5.0 m73 42 800 0101 0050 10.0 m73 42 800 0101 0100 20.0 m73 42 800 0101 0200	Han® Q 5/0 single ended, Male*	1.5 m73 42 800 0102 0015 3.0 m73 42 800 0102 0030 5.0 m73 42 800 0102 0050 10.0 m73 42 800 0102 0100 20.0 m73 42 800 0102 0200	Han® Q 5/0 double ended, Male/Female*	1.5 m73 42 802 0101 0015 3.0 m73 42 802 0101 0030 5.0 m73 42 802 0101 0050 10.0 m73 42 802 0101 0100 20.0 m73 42 802 0101 0200	Length   
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Han® Q 5/0 double ended, Male/Female*	1.5 m73 42 802 0101 0015 3.0 m73 42 802 0101 0030 5.0 m73 42 802 0101 0050 10.0 m73 42 802 0101 0100 20.0 m73 42 802 0101 0200								
*Additional cable lengths available upon request									

Number of contacts

3



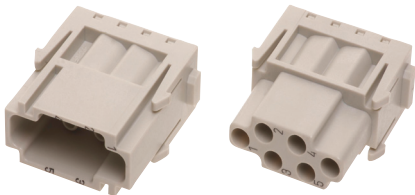
Identification	Part Number		Drawing	Dimensions in mm
	Male Insert	Female Insert		
Crimp terminal Order crimp contacts separately				
Cable diameter up to 5 mm	09 14 003 3001	09 14 003 3101		
Cable diameter up to 7.5 mm	09 14 003 3002	09 14 003 3102		
Contact arrangement view from termination side				

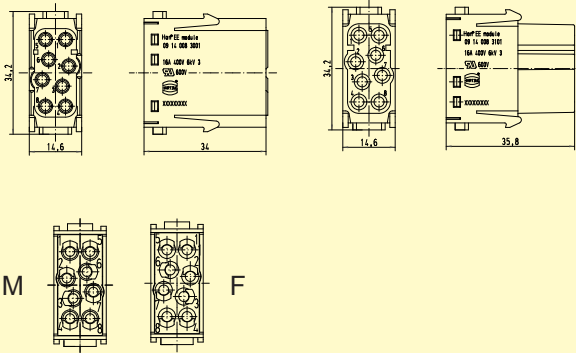
Identification	AWG	Part Number		Drawing	Dimensions in mm																		
		Male Insert	Female Insert																				
Crimp contacts																							
silver plated	16	09 32 000 6104	09 32 000 6204																				
	14	09 32 000 6105	09 32 000 6205																				
	12	09 32 000 6107	09 32 000 6207																				
	10	09 32 000 6108	09 32 000 6208																				
	8*	09 32 000 6109	09 32 000 6209																				
<table><tr><th>Wire Gauge</th><th>Ø</th><th>Stripping Length</th></tr><tr><td>AWG 16</td><td>1.75</td><td>9 mm</td></tr><tr><td>AWG 14</td><td>2.25</td><td>9 mm</td></tr><tr><td>AWG 12</td><td>2.85</td><td>9.6 mm</td></tr><tr><td>AWG 10</td><td>3.5</td><td>9.6 mm</td></tr><tr><td>AWG 8*</td><td>4.3</td><td>15 mm</td></tr></table> Stripping length a = 15 mm for cables ≥ 5 mm Stripping length a = 18 mm for cables ≥ 6.4 mm						Wire Gauge	Ø	Stripping Length	AWG 16	1.75	9 mm	AWG 14	2.25	9 mm	AWG 12	2.85	9.6 mm	AWG 10	3.5	9.6 mm	AWG 8*	4.3	15 mm
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AWG 8*	4.3	15 mm																					

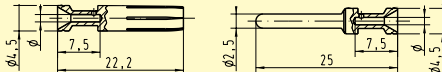
* for modules 09 14 003 3002 and 09 14 003 3102 only

Number of contacts

6



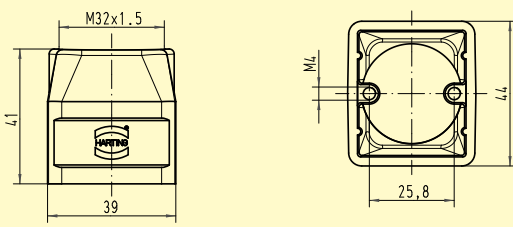
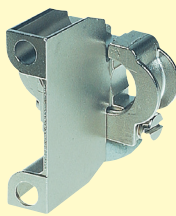
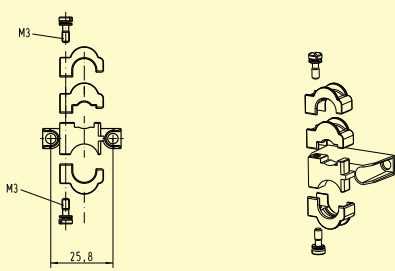
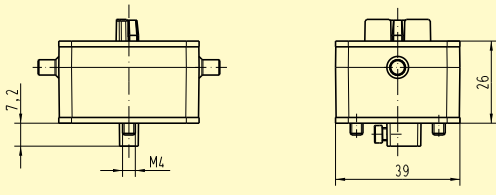
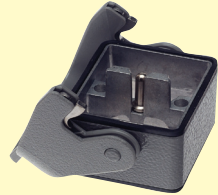
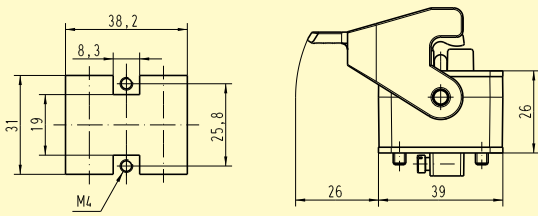
Identification	Part Number		Drawing	Dimensions in mm
	Male Insert	Female Insert		
Crimp terminal Order crimp contacts separately	09 14 008 3001	09 14 008 3101		
Contact arrangement view from termination side				

Identification	AWG	Part Number		Drawing	Dimensions in mm
		Male Insert	Female Insert		
Crimp contacts Power contacts					
silver plated	18	09 33 000 6105	09 33 000 6205		
	16	09 33 000 6104	09 33 000 6204		
	14	09 33 000 6102	09 33 000 6202		
	12	09 33 000 6107	09 33 000 6207		

Identification	Wire Gauge	Stripping Length
1 groove*	AWG 18	7.5 mm
2 grooves	AWG 16	7.5 mm
3 grooves	AWG 14	7.5 mm
no groove	AWG 12	7.5 mm
* on the back crimp collar		

* Different inserts/modules available upon request

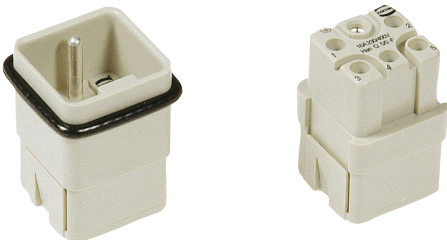


Identification	Part Number	Drawing	Dimensions in mm
Hood straight M 32 	19 14 002 0402		
Shielding Frame 	09 14 000 9924	Assembly Instructions 	
Carrier Hood 	09 14 002 0311		
Housing bulkhead mounting 	09 14 002 0301	Panel Cut Out 	



Number of contacts

5 +



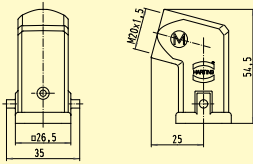
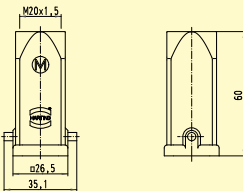
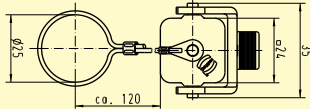
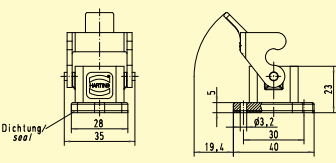
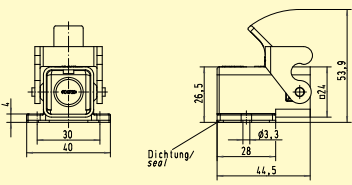
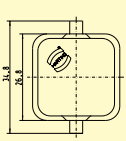
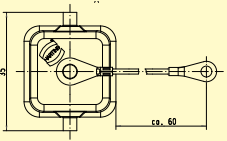
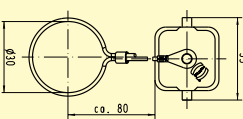
Identification	Part Number		Drawing	Dimensions in mm
	Male Insert	Female Insert		
Crimp terminal Order crimp contacts separately	09 12 005 3001	09 12 005 3101		

Identification	AWG	Male Insert	Female Insert	Drawing	Dimensions in mm
Crimp contacts					
silver plated	18	09 33 000 6105	09 33 000 6205		
	16	09 33 000 6104	09 33 000 6204		
	14	09 33 000 6102	09 33 000 6202		

Identification	Wire Gauge	Stripping Length
1 groove	AWG 18	7.5 mm
2 grooves	AWG 16	7.5 mm
3 grooves	AWG 14	7.5 mm

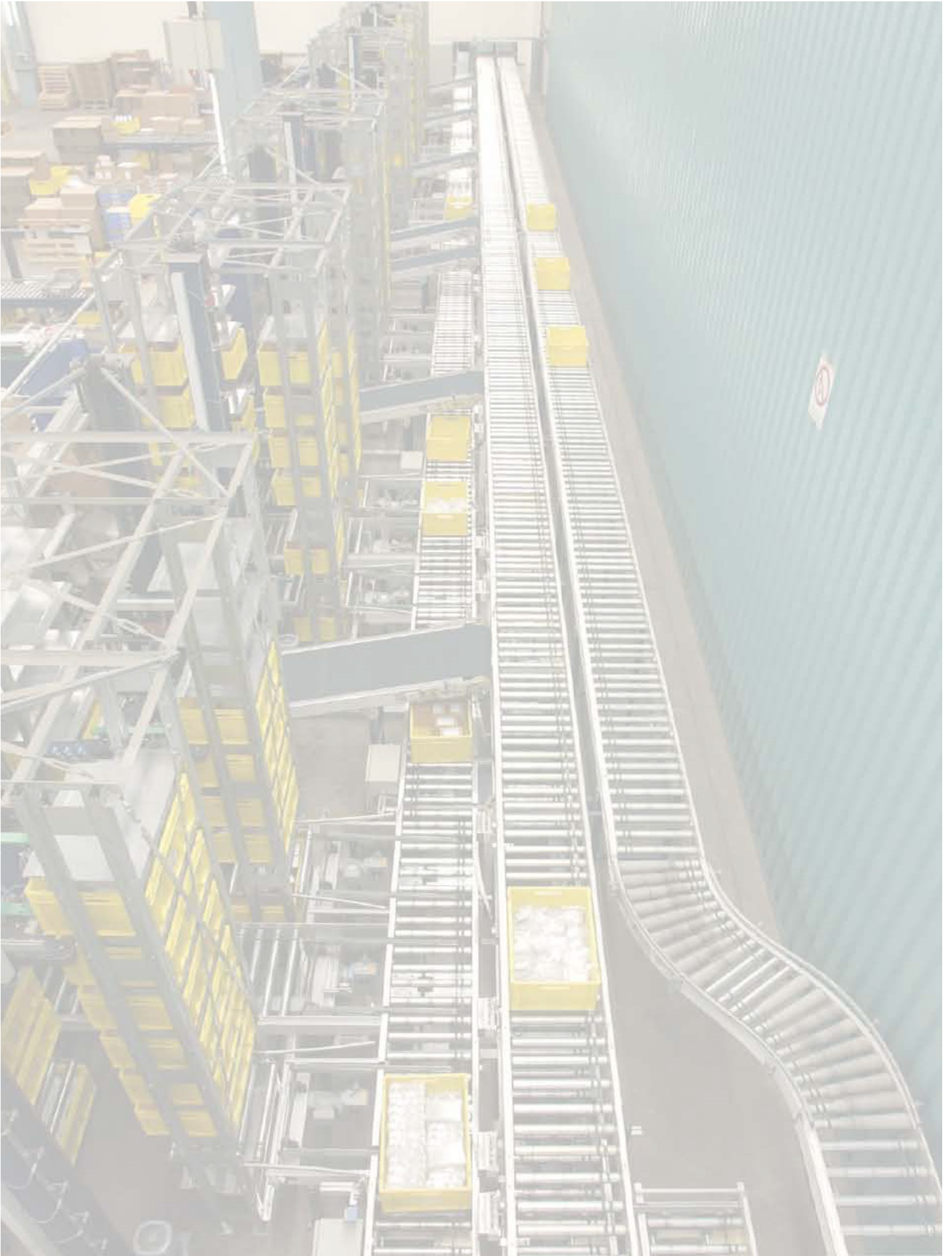
Hoods

Housings

Identification	Part Number	M	Drawing	Dimensions in mm
Hoods side-entry 	black 19 20 003 0627	20		
Hoods top-entry 	black 19 20 003 0427	20		
Protection Covers for hoods	09 20 003 5442¹⁾ 09 20 003 5441²⁾ 1) for mounted male insert 2) for mounted female insert			
Housings bulkhead mounting 	black 09 20 003 0327			
Housings 	black 09 20 003 0827			
Protection Covers for housings A	09 20 003 5407¹⁾ 09 20 003 5408²⁾			
B	09 20 003 5449²⁾ 09 20 003 5450¹⁾			
C	09 20 003 5447²⁾ 1) for mounted male insert 2) for mounted female insert			

* Different inserts/modules available upon request

Identification	AWG	Part Number	Drawing	Dimensions in mm
BUCHANAN crimping tool		09 99 000 0001		
Locator 0932 Type	16-12	09 99 000 0308		
Locator 0933 Type	26-12	09 99 000 0310		
Multiple crimping tool depth adjustment gauge		09 99 000 0379	 order locator separately	
HARTING crimping tool 0932 Type	12-10	09 99 000 0303	 Locator is supplied with the tool	
HARTING Service crimping tool with locator 0933 Type	20-14	09 99 000 0021		
Removal Tool for crimp contacts				
Removal tool 0932 Type		09 99 000 0305		
Removal tool 0933 Type		09 99 000 0319		





Pushing Performance

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