



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







Pushing Performance



People | Power | Partnership

# HARTING News 2014

---

# Transforming customer wishes into concrete solutions



The HARTING Technology Group is skilled in the fields of electrical, electronic and optical connection, transmission and networking, as well as in manufacturing, mechatronics and software creation. The Group uses these skills to develop customized solutions and products such as connectors for energy and data transmission applications including, for example, mechanical engineering, rail technology, wind energy plants, factory automation and the telecommunications sector. In addition, HARTING also produces electro-magnetic components for the automobile industry and offers solutions in the field of Enclosures and Shop Systems. The HARTING Group currently comprises 37 subsidiary companies and worldwide distributors employing a total of approximately 3,800 staff.



### **We aspire to top performance.**

Connectors ensure functionality. As core elements of electrical and optical wiring, connection and infrastructure technologies, they are essential in enabling the modular construction of devices, machines and systems across a very wide range of industrial applications. Their reliability is a crucial factor guaranteeing smooth functioning in the manufacturing area, in telecommunications, applications in medical technology – in fact, connectors are at work in virtually every conceivable application area. Thanks to the consistent further development of our technologies, customers enjoy investment security and benefit from durable, long term functionality.

### **Always at hand, wherever our customers may be.**

Increasing industrialization is creating growing markets characterized by widely diverging demands and requirements. The search for perfection, increasingly efficient processes and reliable technologies is a common factor in all sectors across the globe.

**HARTING** is providing these technologies – in Europe, America and Asia. The **HARTING** professionals at our international subsidiaries engage in close, partnership based interaction with our customers, right from the very early product development phases, in order to realize customer demands and requirements in the best possible manner.

Our people on location form the interface to the centrally coordinated development and production departments. In this way, our customers can rely on consistently high, superior product quality – worldwide.

### **Our claim: pushing performance.**

**HARTING** provides more than optimally attuned components. In order to serve our customers with the best possible solutions, **HARTING** is able to contribute a great deal more and play a closely integrative role in the value creation process.

From ready assembled cables through to control racks or ready-to-go control desks: Our aim is to generate the maximum benefits for our customers – without compromise!

### **Quality creates reliability – and warrants trust.**

The **HARTING** brand stands for superior quality and reliability – worldwide. The standards we set are the result of consistent, stringent quality management that is subject to regular certifications and audits.

EN ISO 9001, the EU Eco-Audit and ISO 14001:2004 are key elements here. We take a proactive stance to new requirements, which is why **HARTING** ranks among the first companies worldwide to have obtained the new IRIS quality certificate for rail vehicles.



**HARTING technology creates added value for customers.** Technologies by HARTING are at work worldwide. HARTING's presence stands for smoothly functioning systems, powered by intelligent connectors, smart infrastructure solutions and mature network systems. In the course of many years of close, trust-based cooperation with its customers, the HARTING Technology Group has advanced to one of the worldwide leading specialists for connector technology. Extending beyond the basic functionalities demanded, we offer individual customers specific and innovative solutions. These tailored solutions deliver sustained effects, provide investment security and enable customers to achieve strong added value.

**Opting for HARTING opens up an innovative, complex world of concepts and ideas.**

In order to develop connectivity and network solutions serving an exceptionally wide range of connector applications and task scopes in a professional and cost optimized manner, HARTING not only commands the full array of conventional tools and basic technologies. Over and beyond these capabilities, HARTING is constantly harnessing and refining its broad base of knowledge and experience to create new solutions that ensure continuity at the same time. In securing this know-how lead, HARTING draws on a wealth of sources from both in-house research and the world of applications alike.

Salient examples of these sources of innovative knowledge include microstructure technologies, 3D design and construction technology, as well as high temperature

or ultrahigh frequency applications that are finding use in telecommunications or automation networks, in the automotive industry, or in industrial sensor and actuator applications, RFID and wireless technologies, in addition to packaging and housing made of plastics, aluminum or stainless steel.

**HARTING solutions extend across technology boundaries.**

Drawing on the comprehensive resources of the group's technology pool, HARTING devises practical solutions for its customers. Whether this involves industrial networks for manufacturing automation, or hybrid interface solutions for wireless telecommunication infrastructures, 3D circuit carriers with microstructures, or cable assemblies for high-temperature applications in the automotive industry – HARTING technologies offer far more than components, and represent mature, comprehensive solutions attuned to individual customer requirements and wishes. The range covers ready-to-use cable configurations, completely assembled backplanes and board system carriers, as well as fully wired and tested control panels.

In order to ensure the future proof design of RF- and EMC-compatible interface solutions, the central HARTING laboratory (certified to EN 45001) provides simulation tools, as well as experimental, testing and diagnostics facilities all the way through to scanning electron microscopes. In the selection of materials and processes, lifecycle and environmental aspects play a key role, in addition to product and process capability considerations.

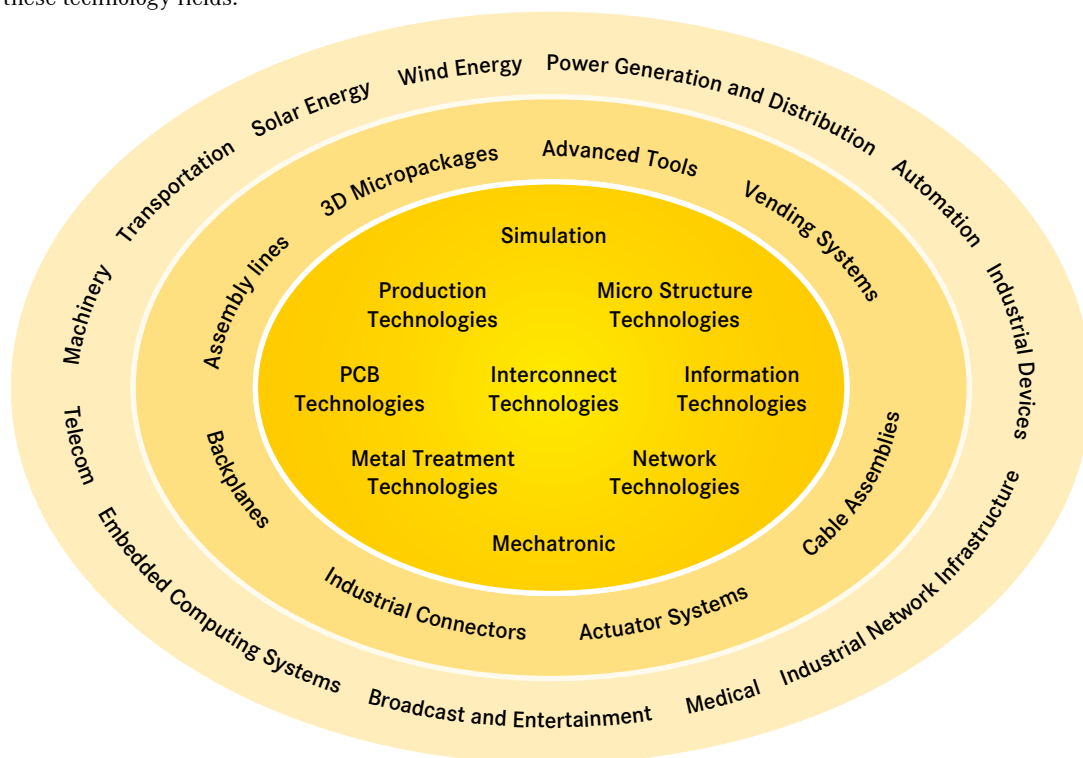




**HARTING knowledge is practical know-how generating synergy effects.**

HARTING commands decades of experience with regard to the applications conditions of connectors in telecommunications, computer and network technologies and medical technologies, as well as industrial automation technologies, such as the mechanical engineering and plant engineering areas, in addition to the power generation industry or the transportation sector. HARTING is highly conversant with the specific application areas in all of these technology fields.

The key focus is on applications in every solution approach. In this context, uncompromising, superior quality is our hallmark. Every new solution found will invariably flow back into the HARTING technology pool, thereby enriching our resources. And every new solution we go on to create will draw on this wealth of resources in order to optimize each and every individual solution. In this way, HARTING is synergy in action.



Contents

Page

**Installation Technology**

Han® HPR RFID .....	<b>11</b>
Han® HPR RFID .....	<b>11</b>
Han® HPR RFID Hoods/Housings .....	<b>12</b>
Ha-VIS RFID Handheld RF.M3000 .....	<b>14</b>
Han-Yellock® Panel Feed Through Hoods .....	<b>16</b>
Han-Modular® Twin .....	<b>18</b>
Han-INOX® 3 A Screw Mounted Housing .....	<b>20</b>
Han® Ex Sets. ....	<b>21</b>
Han® Ex 4A Quick-Lock Set .....	<b>22</b>
Han® Ex 8D Quick-Lock Set .....	<b>22</b>
Han® Ex Q7 Set .....	<b>23</b>
Han® Ex 8B Set .....	<b>23</b>
Han® Ex Q12 Set .....	<b>23</b>
Han® Hood Link .....	<b>24</b>
Han® HPR Panel Feed Through Housings .....	<b>25</b>
Han-Compact® Hood with 2 Cable Entries .....	<b>28</b>
Han-Eco® Monoblock E. ....	<b>29</b>
Han-Eco® Monoblock E Size 6 B + 10 B .....	<b>30</b>
Han-Eco® Monoblock E Size 16 B + 24 B .....	<b>31</b>
Han-Modular® 40 A Crimp Module .....	<b>32</b>
Han® Coax ETCS .....	<b>34</b>

**Contents**

Page

**HARTING Tools**

HARTING Crimp Tools . . . . .	<b>36</b>
HARTING Punch Tools . . . . .	<b>40</b>
HARTING Torque Driver Set. . . . .	<b>43</b>
HARTING Screw Driver Set Slimline . . . . .	<b>44</b>
HARTING Contact Lubricant. . . . .	<b>45</b>

**Automation IT**

Ha-VIS eCon 2000 Unmanaged Ethernet Switches . . . . .	<b>47</b>
Ha-VIS eCon 2000 Fast Ethernet Basic . . . . .	<b>50</b>
Ha-VIS eCon 2000 Full Gigabit Ethernet Basic . . . . .	<b>56</b>
Ha-VIS eCon 2000 Fast Ethernet Basic PoE . . . . .	<b>61</b>
Ha-VIS eCon 2000 Full Gigabit Ethernet Basic PoE . . . . .	<b>65</b>

Ha-VIS eCon 3000 Unmanaged Ethernet Switches . . . . .	<b>71</b>
Ha-VIS eCon 3000 Fast Ethernet Basic . . . . .	<b>74</b>
Ha-VIS eCon 3000 Full Gigabit Ethernet Basic . . . . .	<b>83</b>
Ha-VIS eCon 3000 Fast Ethernet Basic PoE . . . . .	<b>94</b>
Ha-VIS eCon 3000 Full Gigabit Ethernet Basic PoE . . . . .	<b>99</b>
Ha-VIS eCon 3000 Fast Ethernet Basic PoE DC/DC . . . . .	<b>108</b>
Ha-VIS eCon 3000 Full Gigabit Ethernet Basic PoE DC/DC . . . . .	<b>113</b>

**HARTING Transponder**

Ha-VIS RFID VT 86 S (HT). . . . .	<b>122</b>
Ha-VIS RFID VT 92 S (HT). . . . .	<b>124</b>
Ha-VIS RFID FT 89 on Metal (NT) . . . . .	<b>126</b>

Ha-VIS Application-Suite . . . . .	<b>128</b>
------------------------------------	------------

Ha-VIS RFID Antenna sMR20 . . . . .	<b>130</b>
-------------------------------------	------------



Contents

Page

**Device Connectivity**

DIN 41612 connectors

Technical characteristics for types 3Q and 3R . . . . .	<b>135</b>
Male connectors of complementary type 3Q . . . . .	<b>136</b>
Male connectors of complementary type 3R. . . . .	<b>138</b>
Technical characteristics for type <i>har-bus</i> ® 64 . . . . .	<b>140</b>
Female connectors of type <i>har-bus</i> ® 64 . . . . .	<b>141</b>
Technical characteristics for type E. . . . .	<b>142</b>
Female connectors of type E . . . . .	<b>143</b>

*har-flexicon*® connectors

Pitches 1.27 mm / 2.54 mm

PCB connectors female with IDC termination . . . . .	<b>144</b>
PCB terminal blocks with push-in-spring-cage termination . . .	<b>146</b>
PCB connectors female with push-in-spring-cage termination	<b>148</b>
PCB connectors male . . . . .	<b>150</b>

Pitches 3.50 mm / 3.81 mm

PCB terminal blocks with push-in-spring-cage termination . . .	<b>152</b>
PCB terminal blocks with screw termination . . . . .	<b>154</b>
PCB connectors female with push-in-spring-cage termination	<b>156</b>
PCB connectors female with screw termination. . . . .	<b>158</b>
PCB connectors male . . . . .	<b>160</b>

Pitches 5.00 mm / 5.08 mm

PCB terminal blocks with push-in-spring-cage termination . . .	<b>162</b>
PCB terminal blocks with screw termination . . . . .	<b>164</b>
PCB connectors female with push-in-spring-cage termination	<b>168</b>
PCB connectors female with screw termination. . . . .	<b>170</b>
PCB connectors male . . . . .	<b>172</b>

**Contents**

Page

**Circular connectors**

<i>har</i> -speed with slim design .....	<b>174</b>
<i>har</i> -speed adapter M12 - RJ45 and Genderchanger .....	<b>175</b>
M12 INOX .....	<b>176</b>
M12 accessories .....	<b>178</b>

**D-Sub connectors**

D-Sub InduCom full metal hoods .....	<b>179</b>
D-Sub coding system .....	<b>180</b>

**SEK connectors**

2 row PCB transition connector with strain relief clamp .....	<b>182</b>
---------------------------------------------------------------	------------

**Cables**

PROFINET cables .....	<b>184</b>
HARTING RJ Industrial® system cables .....	<b>186</b>
Ha-VIS data bus cables .....	<b>188</b>

**Han® PushPull connectors**

PushPull Power panel feed-through M25 .....	<b>192</b>
PushPull SCRJ Genderchanger .....	<b>193</b>
PushPull Signal .....	<b>194</b>

**HARTING PushPull connectors**

PushPull bulkhead .....	<b>197</b>
PushPull Signal .....	<b>198</b>

**HARTING RJ Industrial® connectors**

EtherRail® RJ45 .....	<b>200</b>
PN Compact .....	<b>201</b>
Jacks .....	<b>202</b>

HARTING eCatalogue .....	<b>204</b>
--------------------------	------------

Addresses .....	<b>205</b>
-----------------	------------







## Features

- Sizes 6 B, 10 B, 16 B, 24 B
- Large wiring space
- Robust and long-living transponder
- Expanded storage
- Read range 30 cm

## Technical characteristics

### Hoods/housings

Material	aluminium die cast
Colour	RAL 9005 (black)
Surface	powder coated

### Locking element

Screw locking	M6
Material	stainless steel
Tightening torque	4 Nm
Hoods/housings seal	NBR
Limiting temperatures	-40 °C... +125 °C
Degree of protection acc. to DIN EN 60 529 in locked position	IP65, IP68, IP69K


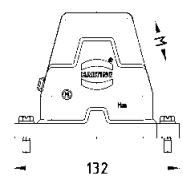
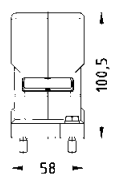

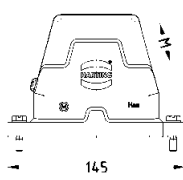
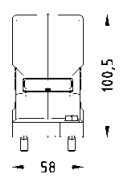

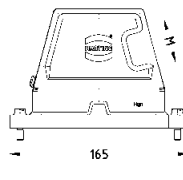
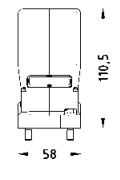

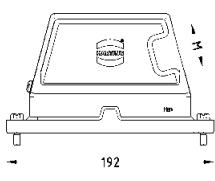
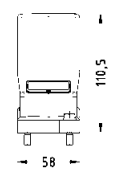
### Transponder Ha-VIS RFID VT 86

Frequency range	860...960 MHz
Protocol	EPC C1 Gen2
Storage	512 Bit
IC	Alien Higgs 3
Read range	30 cm
Dimensions (W x D x H)	41 x 11 x 5 mm
Degree of protection	IP65 / IP68 / IP69K


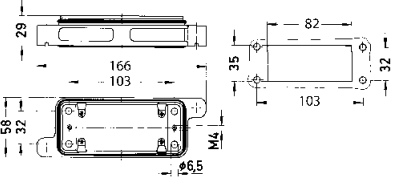

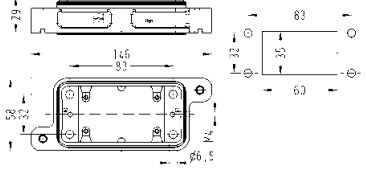

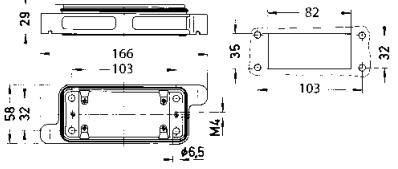

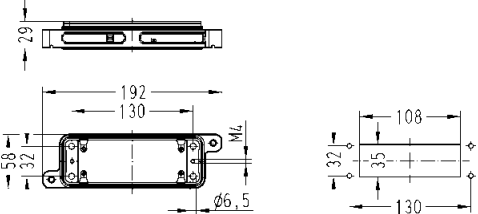
### Operating temperature

Function (read)	-50 °C ... +85 °C
Function (write)	-50 °C ... +85 °C
Max. range	-65 °C .... +210 °C
Mounting Transponder	glue
Colour	black

## Hoods/Housings for harsh environmental requirements / Screw locking system

Identification	Size	Part number	Cable entry metric	Drawing	Dimensions in mm
<p>Hoods</p> <p>side entry with RFID transponder</p> 	6 B	19 40 006 0522	1 x 32		
<p>Hoods</p> <p>side entry with RFID transponder</p> 	10 B	19 40 010 0522	1 x 32		
<p>Hoods</p> <p>side entry with RFID transponder</p> 	16 B	19 40 016 0523	1 x 40		
<p>Hoods</p> <p>side entry with RFID transponder</p> 	24 B	19 40 024 0523	1 x 40		

Hoods/Housings for harsh environmental requirements / Screw locking system

Identification	Size	Part number	Drawing	Dimensions in mm
<p>Housings, bulkhead mounting</p> 	6 B	09 40 006 0311		<p>Panel cut out</p>
<p>Housings, bulkhead mounting</p> 	10 B	09 40 010 0311		<p>Panel cut out</p>
<p>Housings, bulkhead mounting</p> 	16 B	09 40 016 0311		<p>Panel cut out</p>
<p>Housings, bulkhead mounting</p> 	24 B	09 40 024 0311		<p>Panel cut out</p>





Ha-VIS RFID Handheld RF-M3000  
mobile UHF RFID Reader

## Advantages

- Robust
- Flexible
- For industrial applications

## General Description

The Ha-VIS RF-M3000 is a powerful mobile RFID Reader, approved acc. to ETSI, FCC and IC.

Properties:

- Highly sensitive receiver for extended reading range
- Robust housing
- High protection class IP 65
- WLAN, Bluetooth and RFID in one handheld
- Large, very bright display
- Very long battery life (> 8 h)
- Highly modular

Identification	Part number	Drawing	Dimensions in mm
<b>Ha-VIS RFID Handheld RF-M3000</b> standard configuration: <ul style="list-style-type: none"> <li>• WLAN</li> <li>• Bluetooth</li> <li>• large keyboard</li> <li>• no barcode scanner</li> </ul>	20 91 211 1011		
<b>Ha-VIS RFID Handheld RF-M3001</b> additional to Ha-VIS RF-M3000 with: <ul style="list-style-type: none"> <li>• 1D Laser Scanner</li> </ul>	20 91 211 1111		
<b>Ha-VIS RFID Handheld RF-M3002</b> additional to Ha-VIS RF-M3000 with: <ul style="list-style-type: none"> <li>• 2D Imager</li> </ul> Optional: <ul style="list-style-type: none"> <li>• GPS</li> <li>• small keyboard</li> <li>• GPRS</li> <li>• 3G HSDPA</li> </ul>	20 91 211 1311  on request		
<b>Recommended accessories:</b> High capacity battery Docking Station Desktop Docking Station Quad	20 93 405 0101 20 93 305 0101 20 93 305 0102		

## Technical characteristics

<b>Processor and memory</b>	PXA270 624 MHz Processor 1 GB FLASH ROM 256 MB RAM
<b>Operating system</b>	Windows(R) CE 5
<b>Wireless communication</b>	WLAN 802.11 b/g Compact Flash Bluetooth® Class II, V 2.0 + EDR
<b>Barcode scanner</b>	1D Laser Scanner Long Range or 2D Area Imager Optional pistol grip
<b>RFID module</b>	UHF module Frequency 868 MHz or 915 MHz Tag supported: EPC Class 1 Gen 2; other protocols on request Reading-Writing distance up to 250 cm
<b>External connections</b>	Tether-Port for RS 232 and USB On-The-Go (USB 1.1) Docking-connector DC power jack
<b>User interface</b>	VGA colour touchscreen 3,6", resolution 480x640, TFT Sunlight readable (for outdoor use), LED backlight Touch screen pencil (stylus) or finger operation Keyboard (alphanumeric ABCDEF); alternatives on request Audio: 90 dB speaker, microphone, beeper
<b>Programming environment</b>	HTML, XML Mobile Devices SDK .NET and C++ via Microsoft Visual Studio® 2005 Java programming support JDK 1.2 or higher Standard Protocol APIs Windows sockets (CE.net)
<b>Expansion slots</b>	SD/MMC memory card slot 100-pin Expansion interface supports PCMCIA (Type II), GPRS/EDGE One Type II CF card slot
<b>Power management</b>	4400 mAh High capacity Accu (3,7 V) Advanced Smart Battery System Built-in Charger
<b>Environmental</b>	Withstands several drops from 1.8 m to polished concrete while powered on and configured with accessories Rain/Dust: IP65, IEC 60 629 Operating temperature: -20 °C ... +50 °C Storage temperature: -40 °C ... +60 °C Relative humidity: 5 % ... 95 % (non-condensing) ESD +/- 8 kV DC air discharge; +/- 4 kV DC contact
<b>Dimensions (W x H x D)</b>	223 mm x 75/100 mm x 31/42 mm
<b>Approvals</b>	Safety CSA/UL60 950-1, IEC 60 950-1, EN 60 950-1 EMC FCC Part15 Class B EN 55 022; EN 55 024; EN 301 489 Laser IEC 60 825-1, Class 2 FDA 21 CFR 1040.10, 1040.11 Class II Bluetooth 1.2 In-vehicle cradle: e Mark

## Features

- Large wiring space
- Compact design
- Pre-assembly possible
- High EMC resistance
- For sensitive interfaces that have to be shielded and protected
- Fixing flange for panel mounting

## Technical characteristics

Specifications	DIN EN 60 664-1 DIN EN 61 984
<b>Hoods</b>	
Material	aluminium
Surface	powder coated, RAL 7021 (black grey)
Limiting temperatures	-40 °C ... +125 °C
Working temperatures	-10 °C ... +85 °C
Protection degree acc. to DIN EN 60 529 in screwed-down position	IP65 / IP67





Identification	Size	Part number	Metric Cable entry Drawing	Dimensions in mm
----------------	------	-------------	----------------------------	------------------

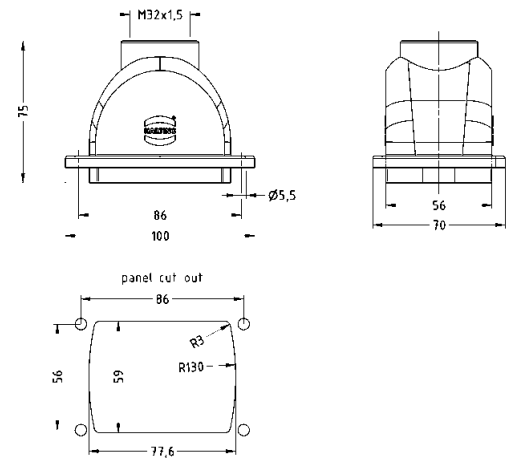
Panel feed through hoods

1 top entry M32

30

11 12 300 1702

M32

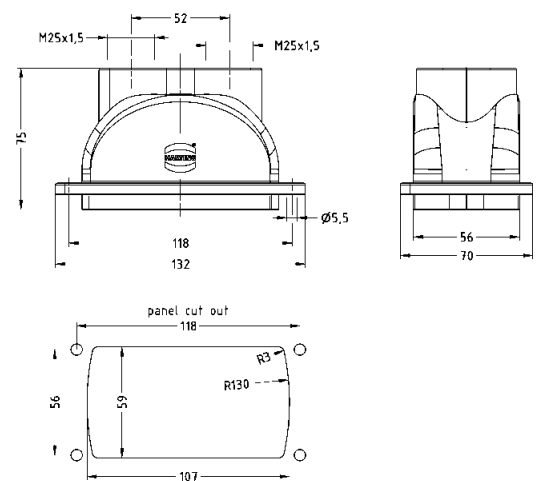


2 top entries M25



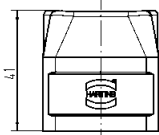
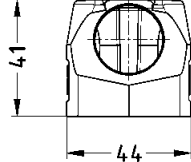
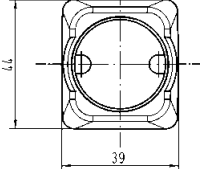
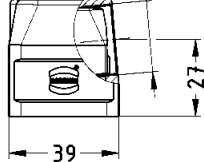

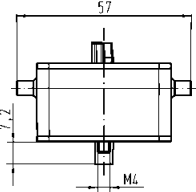
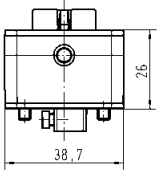

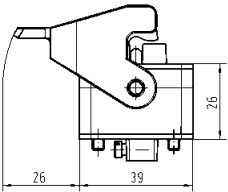
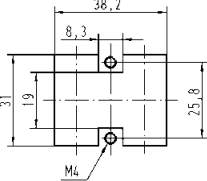

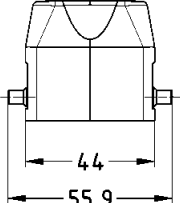
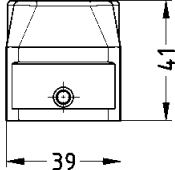
60

11 12 600 1711

2x  
M25





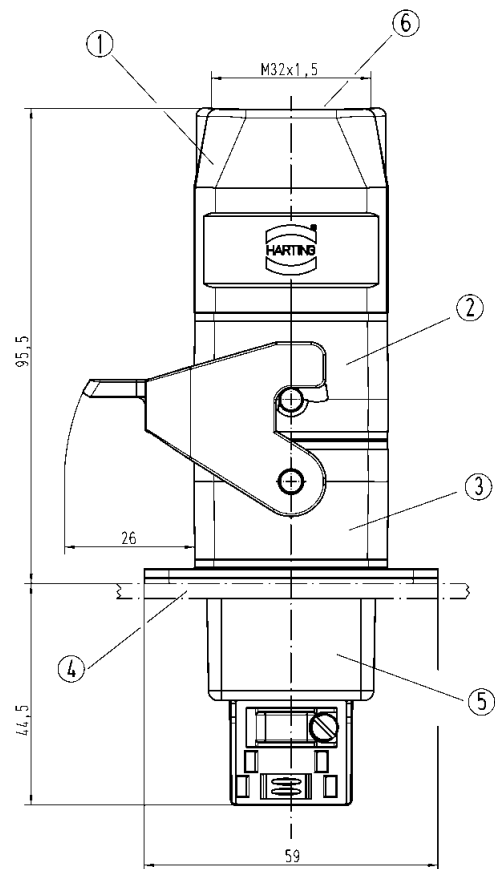
Identification	Part-Number	Cable entry metric	Drawing	Dimensions in mm
<b>Hood</b>  top entry    side entry  	19 14 002 0400 19 14 002 0401 19 14 002 0402  19 14 002 0501	M20 M25 M32  M25	  	  
<b>Carrier hood</b>  	09 14 002 0311	—		
<b>Bulkhead mounted housing</b>  	09 14 002 0301	—		
<b>Cover for bulkhead mounted housing</b>  	09 14 002 5401	—		

## Features

- Compact and space-saving
- High flexibility due to modular assembly
- Easy and quick assembly
- Hood consists of two parts
- It is easy to realize a cable-to-cable housing, by screwing hood and bulkhead mounted housing together
- Suitable for two single modules of the Han-Modular® series

## Technical characteristics

Specifications	DIN EN 61 984
<b>Hoods/housings</b>	
Material	aluminium die-cast
Surface	powder coated
Locking element	Han-Easy Lock®
Material	
Panel feed through housing	
Shielding frame	zinc die-cast
Hoods/housings seal	NBR
Limiting temperatures	-40 °C ... +125 °C
Degree of protection acc. to DIN EN 60 529 in coupled connector	IP65
Mechanical working life	
- mating cycles	500
PE contact	
- wire gauge	10 mm <sup>2</sup> / AWG 8
- stripping length	10 mm
- tightening torque	1 Nm



- ① Hood
- ② Carrier hood
- ③ Bulkhead mounted housing with locking lever
- ④ Switch board panel
- ⑤ Optional: Panel feed through housing (to connect shielded conductors within the switch board)
- ⑥ Cable entry M20 up to M32



## Stainless steel housings

### Features

- Hoods and housings as well as locking elements out of stainless steel
- Resistant against aggressive detergents
- Fields of application
  - Food and beverage industry
  - Water and sewage industry
  - Pharmaceutical industry
  - Chemical industry
  - Offshore and shipbuilding
- Suitable for standard inserts that fit into size Han® 3 A

### Technical characteristics

Material	stainless steel
Seal	NBR
Limiting temperatures	-40 °C ... +125 °C
Protection degree acc. to DIN EN 60 529 in locked position	IP44 IP65/67 when using sealing screw 09 20 000 9918
Locking lever	stainless steel

#### Identification

#### Part-Number

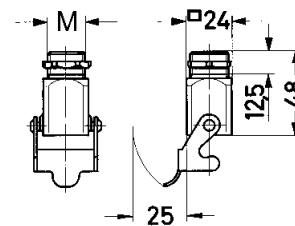
#### Drawing

#### Dimensions in mm

Screw mounted housing

top entry M20

19 44 003 1150





## Connector Sets for explosion-proof environments

### Features

- Connector sets especially for explosion-proof applications
- Suitable for intrinsically safe circuits
- Hoods, housings and inserts in one set
- Inserts with compact design and a high number of connections
- Available with innovative Han-Quick Lock® termination technology

**NOTICE** Industrial connectors of the Han® Ex series are designed exclusively for the use in intrinsically safe electrical circuits of categories "ia", "ib" and "ic"!

- ▶ The explosion group is defined by the intrinsically safe equipment.
- ▶ Temperature class T6 according to DIN EN 60079-11

### Technical characteristics

Specifications	DIN EN 60 079-0 DIN EN 60 079-11
Hoods/ housings	
Material	Zinc die cast
Colour	RAL 5015 (blue)
Surface	powder coated
Locking element	stainless steel
Lever type	metal lever
Seal	NBR
Limiting temperatures	-20 °C ... +40 °C
Protection degree acc. to DIN EN 60 529 in locked position	IP67 is achieved with seal screw and cable gland
Inserts	
Number of contacts	4, 7, 8, 12
Pollution degree	3
Insulation resistance	≥ 10 <sup>10</sup> Ω
Material	Polycarbonate
Limiting temperatures	-20 °C ... +40 °C
Mechan. working life - mating cycles	≥ 500
Contacts	
Material	copper alloy
Surface	
- hard-silver plated	3 µm Ag
Contact resistance	≤ 1 mΩ
Crimp termination	0.14 ... 2.5 mm <sup>2</sup> AWG 26 ... 14
Han-Quick Lock® termination	0.5 ... 2.5 mm <sup>2</sup> AWG 20 ... 14
Max. insulation diameter	3.6 mm



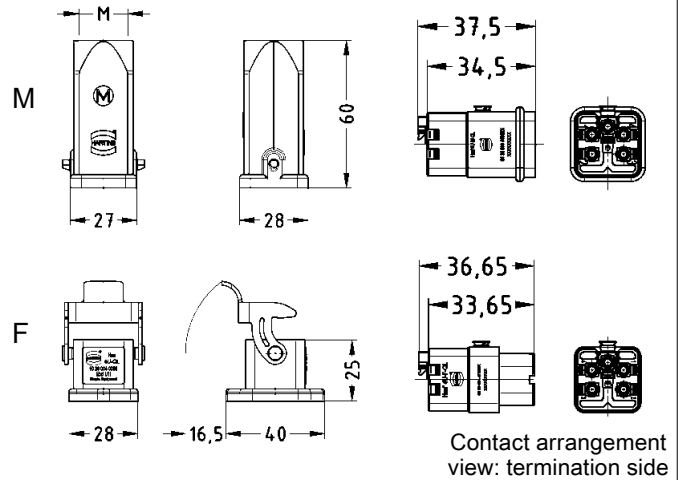
Identification      Part number      Size      Drawing      Dimensions in mm

## Han® Ex 4A Quick Lock Set



10 36 004 0003

3 A



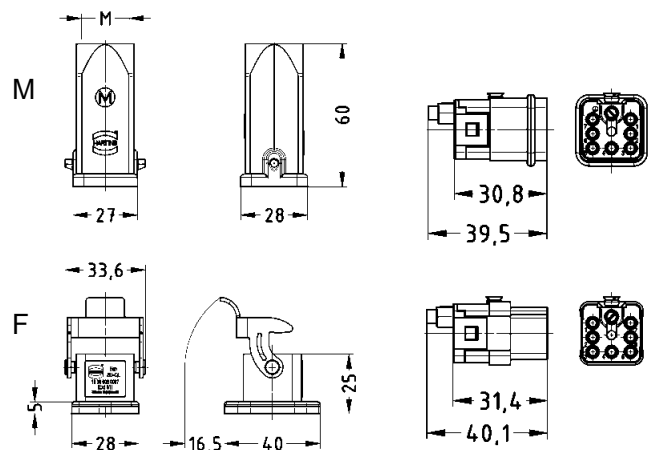
Panel cut out: 22 x 22 mm

## Han® Ex 8D Quick Lock Set



10 36 008 0007

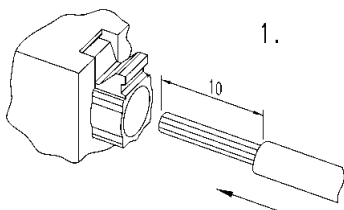
3 A



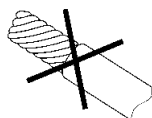
Panel cut out: 22 x 22 mm

## Assembly manual

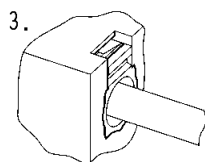
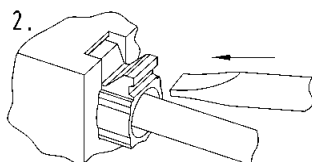
Remove cable jacket and strip the fine stranded wires



Do not twist the fine stranded wires!

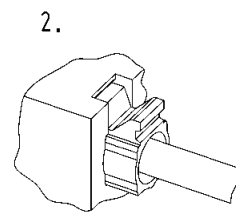
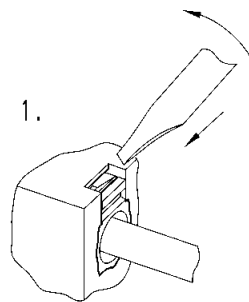


Push fine stranded wires into the Han-Quick Lock® contact and push the blue slide with a screw driver<sup>1)</sup> until it comes to a stop


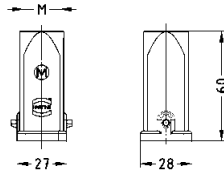
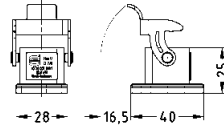
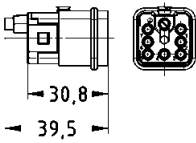
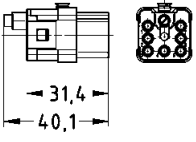

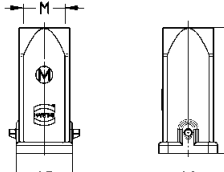
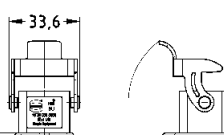
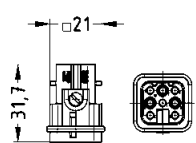
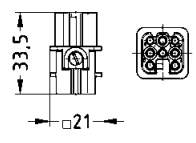

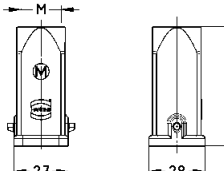
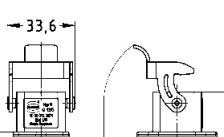
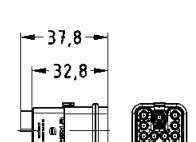
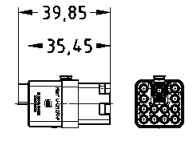



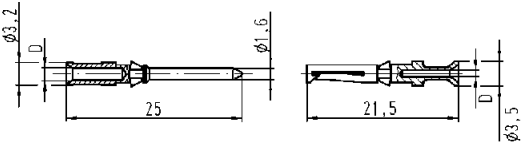
## Removal manual

Please insert the screw driver<sup>1)</sup> at an angle of 45° into the opening and lever the blue slide out



<sup>1)</sup> Screw driver: 0.4 x 2.5 mm

Identification	Part number	Size	Drawing	Dimensions in mm
<b>Han® Ex Q7 Set</b> Order crimp contacts separately 	10 36 007 0001	3 A	M  F 	  Contact arrangement view: termination side
<b>Han® Ex 8D Set</b> Order crimp contacts separately 	10 36 008 0006	3 A	M  F 	  Contact arrangement view: termination side
<b>Han® Ex Q12 Set</b> Order crimp contacts separately 	10 36 012 0001	3 A	M  F 	  Contact arrangement view: termination side

Identification	Wire gauge mm <sup>2</sup>	Partnumber		Drawing	Dimensions in mm																					
		Male contact	Female contact																							
<b>Crimp contact</b> silver plated 	0.14-0.37 0.5 0.75 1.0 1.5 2.5	09 15 000 6104 09 15 000 6103 09 15 000 6105 09 15 000 6102 09 15 000 6101 09 15 000 6106	09 15 000 6204 09 15 000 6203 09 15 000 6205 09 15 000 6202 09 15 000 6201 09 15 000 6206		<table border="1"> <thead> <tr> <th>Wire gauge</th> <th>Ø mm</th> <th>Stripping length</th> </tr> </thead> <tbody> <tr> <td>0.14-0.37 mm<sup>2</sup></td> <td>AWG 26-22</td> <td>0.9</td> </tr> <tr> <td>0.5 mm<sup>2</sup></td> <td>AWG 20</td> <td>1.1</td> </tr> <tr> <td>0.75 mm<sup>2</sup></td> <td>AWG 18</td> <td>1.3</td> </tr> <tr> <td>1.0 mm<sup>2</sup></td> <td>AWG 18</td> <td>1.45</td> </tr> <tr> <td>1.5 mm<sup>2</sup></td> <td>AWG 16</td> <td>1.75</td> </tr> <tr> <td>2.5 mm<sup>2</sup></td> <td>AWG 14</td> <td>2.25</td> </tr> </tbody> </table>	Wire gauge	Ø mm	Stripping length	0.14-0.37 mm <sup>2</sup>	AWG 26-22	0.9	0.5 mm <sup>2</sup>	AWG 20	1.1	0.75 mm <sup>2</sup>	AWG 18	1.3	1.0 mm <sup>2</sup>	AWG 18	1.45	1.5 mm <sup>2</sup>	AWG 16	1.75	2.5 mm <sup>2</sup>	AWG 14	2.25
Wire gauge	Ø mm	Stripping length																								
0.14-0.37 mm <sup>2</sup>	AWG 26-22	0.9																								
0.5 mm <sup>2</sup>	AWG 20	1.1																								
0.75 mm <sup>2</sup>	AWG 18	1.3																								
1.0 mm <sup>2</sup>	AWG 18	1.45																								
1.5 mm <sup>2</sup>	AWG 16	1.75																								
2.5 mm <sup>2</sup>	AWG 14	2.25																								



Locking element for hoods and housings

### Features

- Cable to cable connection simple to realize and easy to mount
- Resistant elastomer
- Locking as well as seal combined in one system
- Protection degree IP65 in locked position
- For two lever locking system

### Technical characteristics

Material	NBR
Colour	black
Limiting temperatures	-40 °C ... +85 °C
Protection degree acc. to DIN EN 60 529 in locked position	IP65

Identification	Part-Number	Size	Drawing	Dimensions in mm
----------------	-------------	------	---------	------------------

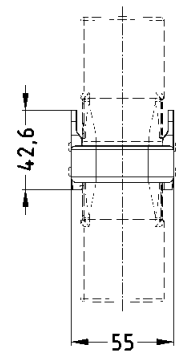
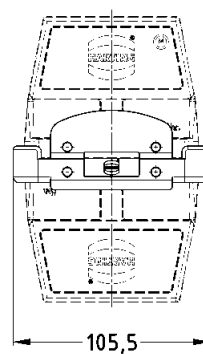
#### Han® Hood Link

for Han® B standard hoods



09 30 016 9901

16 B



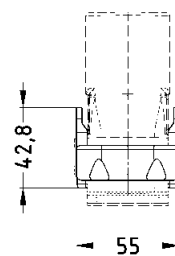
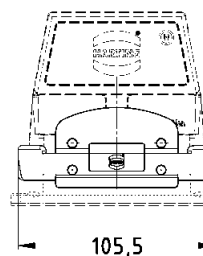
#### Han® Hood Link

for Han® B surface mounted housings  
bulkhead mounted housings  
and cable to cable hoods



09 30 016 9801

16 B



## Features

- Suitable for harsh environments
- Suitable for sensitive interconnections that have to be protected and shielded
- Robust metal version
- For size 6, 10, 16 and 24 with screw locking
- For each size, a variant for mounting inside and outside

## Technical characteristics

Specifications	DIN EN 61 984
<b>Housings</b>	
Material	aluminium die-cast corrosion resistant
Colour	RAL 9005 (black)
Surface	
- Top coat	powder-coated
<b>Locking element</b>	
- Screw locking	M6
- Material	stainless steel
- Tightening torque	4 Nm
<b>Seal</b>	
- Material	NBR
Limiting temperatures	-40 °C ... +125 °C
Corrosion resistance	ASTM B117-09 (500 h)
Protection degree acc. to DIN EN 60 529 in locked position	IP66 / IP68