

HARTING



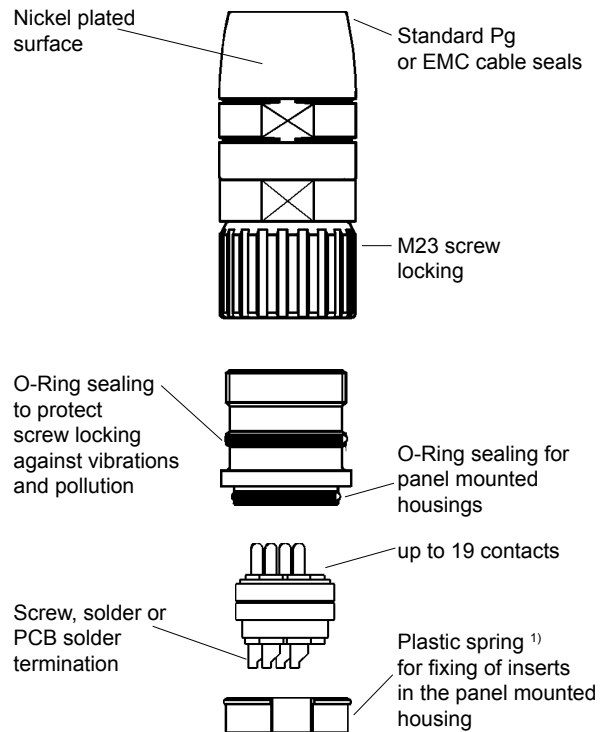
Han[®] R 23 Circular Connectors



Features

- Size R 23
- Outer diameter 26 mm
- High contact density
- Very robust hoods and housings
- Corrosion resistant
- Excellent EMC properties (with continuous shielding)
- Quick and easy assembly
- Vibration resistant screw locking system
- Up to 19 contacts, 25 V~ / 60 V-
- Ideal for applications such as measurement and automatic control

Description



1) is part of delivery range of bulkhead mounted housings
Part-number of spare part: 09 15 200 9901

General information

Fields of application:

HARTING Industrial Connectors are applicable in a wide variety of electronic and electrical applications.

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

- | | |
|-------------------------|------------------------------|
| • Power Utilities | • Industrial Instrumentation |
| • Robotics | • Conveyor Equipment |
| • Chemical Plants | • Transportation |
| • Machine Tool Controls | • and many more |
| • Injection Moulding | |



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

Specifications

VDE 0110 table concerning clearance and creepage distances

VDE 0627 Connectors and plug devices

Standards DIN EN 61 984

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 catalogue 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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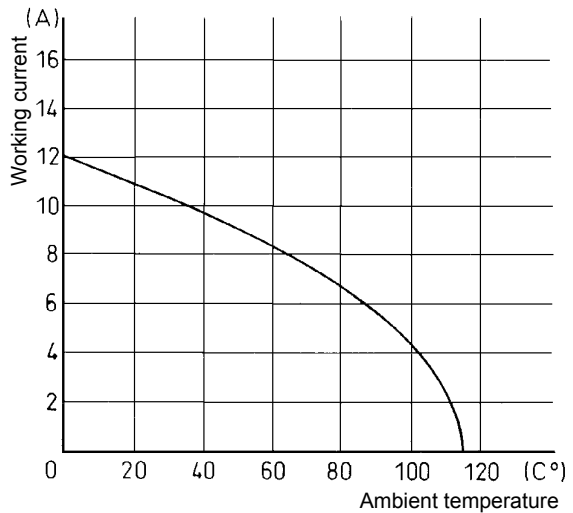


Technical characteristics

Derating Diagram

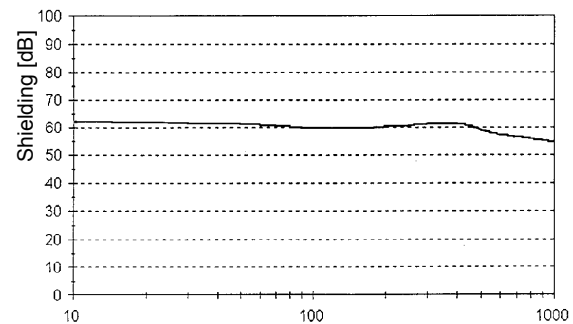
Specifications	DIN VDE 0110 DIN EN 61 984
Hoods and Housings	
Material	Copper zinc alloy
Surface	Nickel plated
Flat sealing	NBR
O-Ring sealing	FPM
Temperature range	-40 °C ... +115°C
Protection degree in locked position	IP 67
Inserts	
Number of contacts	6 9 12 17 19
Rated current	
- power contact	15A 1x15A 3 x 10A
- signal contact	8 x 7A 7A 7A 16 x 7A
(see Derating Diagram)	
Rated voltage ¹⁾	25 V~ / 60 V-
Degree of pollution	3
Test voltage U _{rms}	1.5 kV
Insulation resistance	≥ 10 ¹² Ω
Material	Thermoplastic polyester (PBT)
Temperature range	-40 °C ... +115 °C
Flammability accd. to UL 94	V 0

Contacts	
Material	Copper alloy
Surface	Gold plated
Contact resistance	≤ 5 mΩ
Screw termination	
- power contact	0.14 - 1.0 mm ² / AWG 26 - 16
- signal contact	0.14 - 0.75 mm ² / AWG 26 - 18
Solder termination	
- power contact	0.14 - 2.5 mm ² / AWG 26 - 14
- signal contact	0.14 - 1.0 mm ² / AWG 26 - 16
Crimp termination	
- D-Sub contact	see catalogue Interface Connectors
PCB solder termination	
- power contact	Ø 1.5 mm
- signal contact	Ø 0.6 mm
- reference to bulkhead mounted housing	3.5 mm


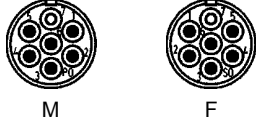


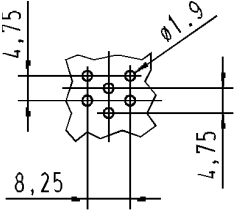
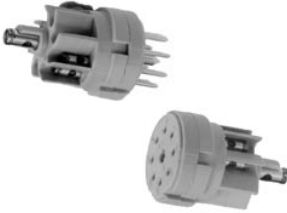
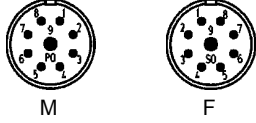



Insert: 12 pins
Wire gauge: 1 mm² (AWG 18)

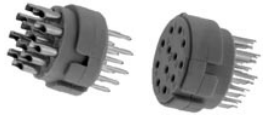

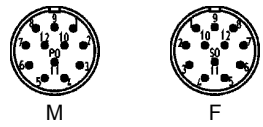
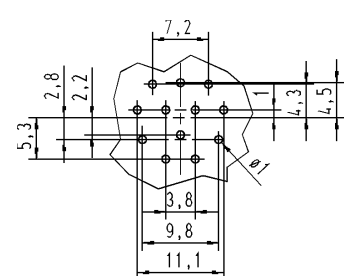


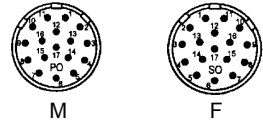
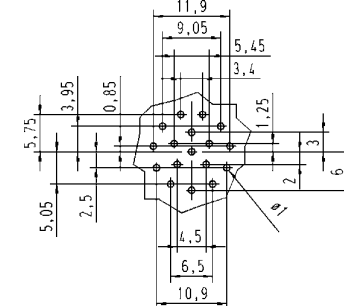

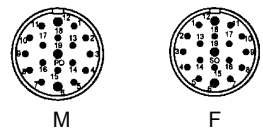
Shielding of the EMC housings


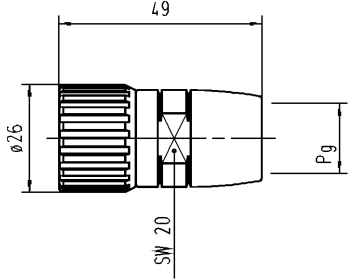

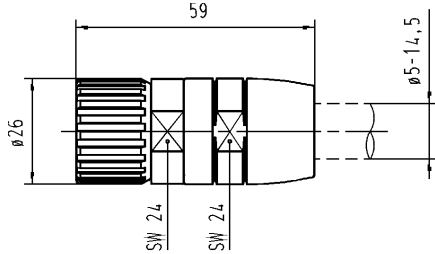

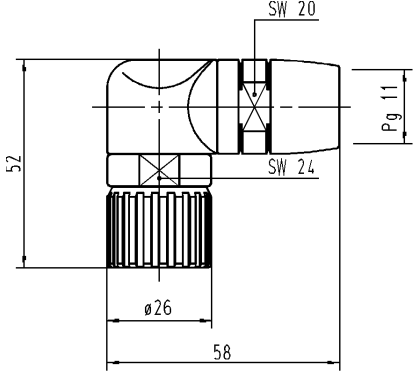



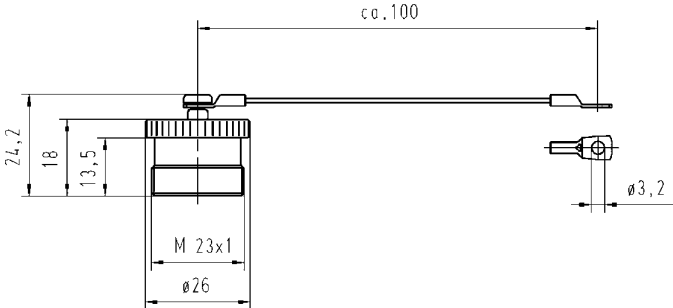
1) Accd. to DIN VDE 0627 metallic parts which may be touched by a person and may have voltages present under fault conditions, must have integral protection. Therefore this R 23 connector is limited for use up to 25 V~/60 V-.

Identification	Number of contacts	Part number		Drawing	Dimensions in mm
		Male insert (M)	Female insert (F)		
<p>Screw terminal</p> 	6	09 15 206 2601	09 15 206 2701	<p>Contact arrangement view: mating side</p> 	
<p>Solder terminal</p> 	6	09 15 206 2603	09 15 206 2703		
<p>PCB solder termination²⁾</p> 	6	09 15 206 2604	09 15 206 2704	<p>PCB hole details:</p> 	
<p>Screw terminal</p> 	9	09 15 209 2601	09 15 209 2701	<p>Contact arrangement view: mating side (numbering in opposite direction on request)</p> 	
<p>Solder terminal</p> 	9	09 15 209 2603	09 15 209 2703		

2) Suitable only for bulkhead mounted housings
No. 09 15 200 0311, 09 15 200 0313 and
09 15 200 0301


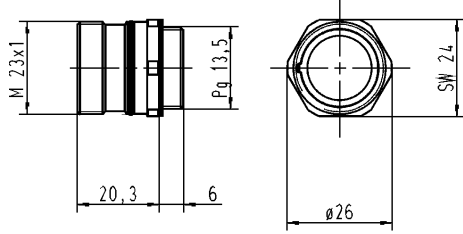

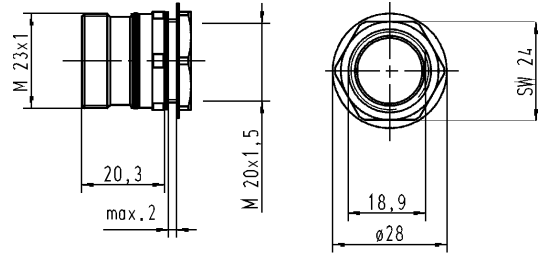

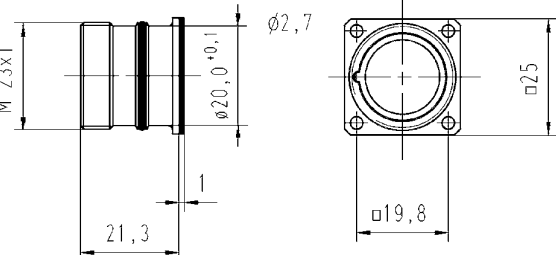

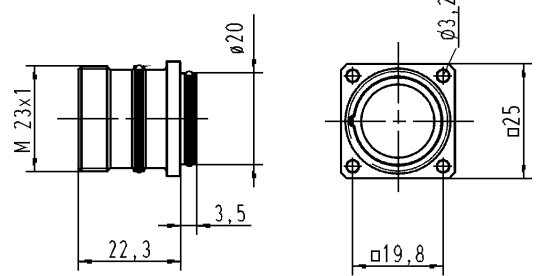

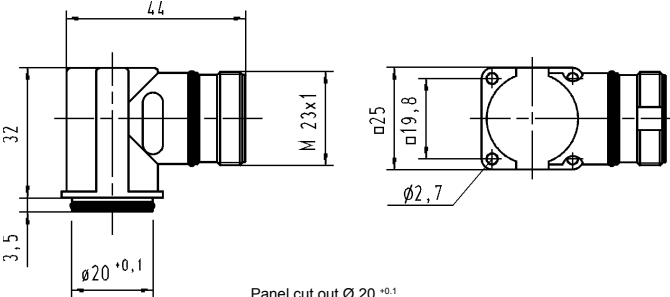
Identification	Number of contacts	Part number		Drawing	Dimensions in mm
		Male insert (M)	Female insert (F)		
<p>Solder terminal</p>  <p>Crimp terminal for D-Sub contacts</p> <p>PCB solder termination²⁾</p> 	12	09 15 212 2603	09 15 212 2703	<p>Contact arrangement view: mating side (numbering in opposite direction on request)</p>  <p>PCB hole details:</p>  <p>2) Suitable only for bulkhead mounted housings No. 09 15 200 0311, 09 15 200 0313 and 09 15 200 0301</p>	
<p>Solder terminal</p>  <p>Crimp terminal for D-Sub contacts</p> <p>PCB solder termination²⁾</p> 	17	09 15 217 2601	09 15 217 2701	<p>Contact arrangement view: mating side (numbering in opposite direction on request)</p>  <p>PCB hole details:</p>  <p>2) Suitable only for bulkhead mounted housings No. 09 15 200 0311, 09 15 200 0313 and 09 15 200 0301</p>	
<p>Solder terminal</p> 	19	09 15 219 2603	09 15 219 2703	<p>Contact arrangement view: mating side</p> 	

Identification	Part-Number	Pg	Drawing	Dimensions in mm
Hood top-entry 	09 15 200 0402 09 15 200 0403	9 11		
Hood top-entry EMC version 	09 15 200 0451	-		
Hood right angle entry 	09 15 200 0603	11		

Identification	Part-Number	Drawing	Dimension in mm
Screw cover for hoods with tether 	09 15 200 5421		


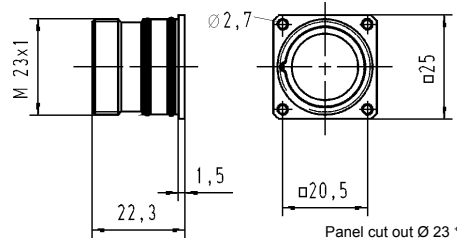

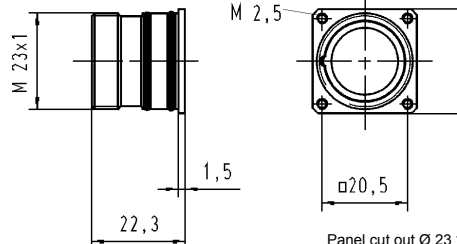

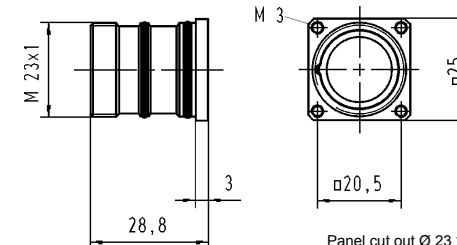

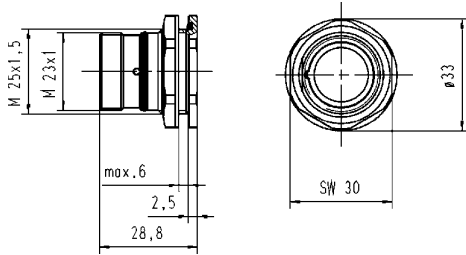

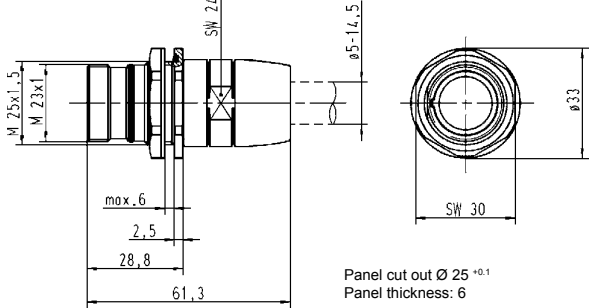
Order inserts separately see page 4 - 5

Corresponding hoods and housing see page 7 - 9

Identification	Part-Number	Drawing	Dimension in mm
<p>Bulkhead mounted housing front wall assembly with central locking Pg 13.5</p> 	<p>09 15 200 0324</p>	 <p>Panel cut out Pg 13.5</p>	
<p>Bulkhead mounted housing front wall assembly with central locking M20</p> 	<p>09 15 200 0303</p>	 <p>Panel cut out Ø 20 ^{+0,1}</p>	
<p>Bulkhead mounted housing front wall assembly with flat sealing</p> 	<p>09 15 200 0301</p>	 <p>Panel cut out Ø 20 ^{+0,1}</p>	
<p>Bulkhead mounted housing front wall assembly with O-ring sealing</p> 	<p>09 15 200 0305</p>	 <p>Panel cut out Ø 20 ^{+0,1}</p>	
<p>Bulkhead mounted housing front wall assembly with O-ring sealing</p> 	<p>09 15 200 0901</p>	 <p>Panel cut out Ø 20 ^{+0,1}</p>	


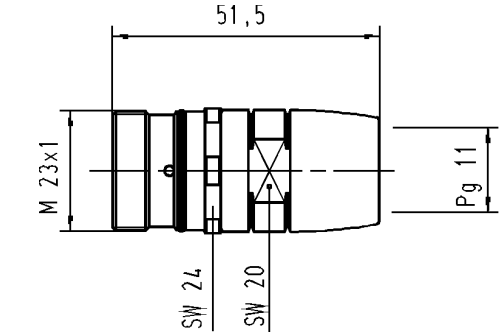

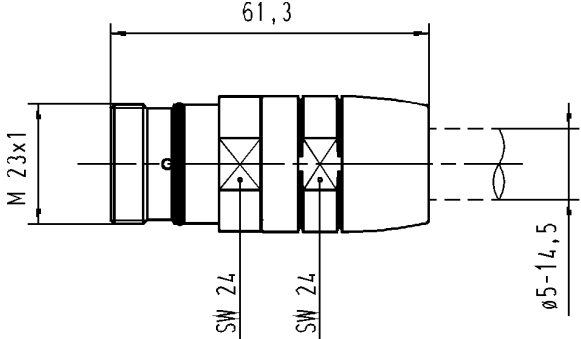

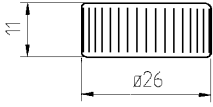

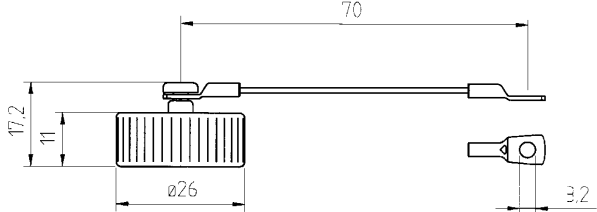
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Corresponding hoods and housings see page 6

Identification	Part-Number	Drawing	Dimension in mm
<p>Bulkhead mounted housing back wall assembly with O-ring sealing</p> 	<p>09 15 200 0313</p>		<p>Panel cut out $\text{Ø} 23^{+0,1}$ Panel thickness: 2.7 - 3.5 when using counter sunk screws</p>
<p>Bulkhead mounted housing back wall assembly with O-ring sealing</p> 	<p>09 15 200 0311</p>		<p>Panel cut out $\text{Ø} 23^{+0,1}$ Panel thickness: 2.7 - 3.5 when using counter sunk screws</p>
<p>Bulkhead mounted housing back wall assembly with O-ring sealing</p> 	<p>09 15 200 0312</p>		<p>Panel cut out $\text{Ø} 23^{+0,1}$ Panel thickness: 3.5 - 8.5 when using counter sunk screws</p>
<p>Bulkhead mounted housing back wall assembly with central locking M25</p> 	<p>09 15 200 0314</p>		<p>Panel cut out $\text{Ø} 25^{+0,1}$ Panel thickness: 6</p>
<p>Cable to cable housing back wall assembly with central locking M25</p> 	<p>09 15 200 0351</p>		<p>Panel cut out $\text{Ø} 25^{+0,1}$ Panel thickness: 6</p>


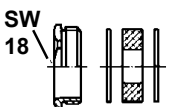


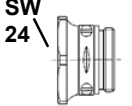

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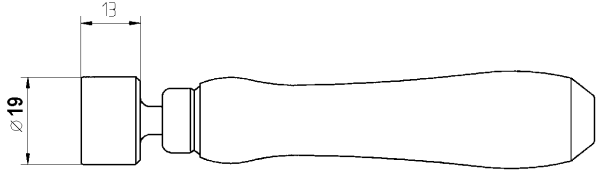

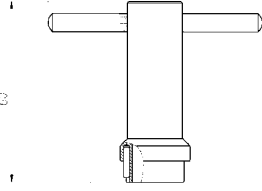

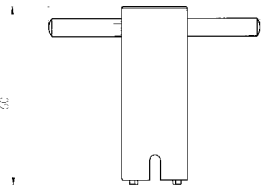
Corresponding hoods and housings see page 6

Identification	Part-Number	Pg	Drawing	Dimensions in mm
<p>Cable to cable housing top-entry</p> 	<p>09 15 200 0703</p>	<p>11</p>		
<p>Cable to cable housing top-entry EMC version</p> 	<p>09 15 200 0751</p>	<p>-</p>		
Identification	Part-Number	Drawing	Dimension in mm	
<p>Screw cover for bulkhead mounted and cable to cable housings</p> 	<p>09 15 200 5401</p>			
<p>Screw cover for bulkhead mounted and cable to cable housings with tether</p> 	<p>09 15 200 5411</p>			

Order inserts separately see page 4 - 5

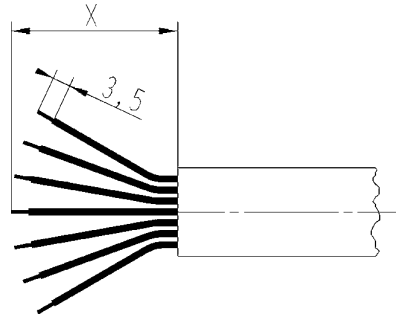
Corresponding hoods and housings see page 6

Identification	Part-Number	Pg	Drawing	Dimensions in mm
<p>Cable clamp metal (IP 65) with normal seal</p> 	09 00 000 5113	11	Suitable cable Ø 10 - 12	
<p>with multiple seal</p> 	09 00 000 5013	11	6.5 - 12	
<p>Spacel cable clamp metal (IP 65) with strain relief and bell mouth</p> 	09 00 000 5191	11	Suitable cable Ø 8 - 12	
<p>with strain relief and bell mouth order separately</p> 	09 00 000 5027	11	6.5 - 12	

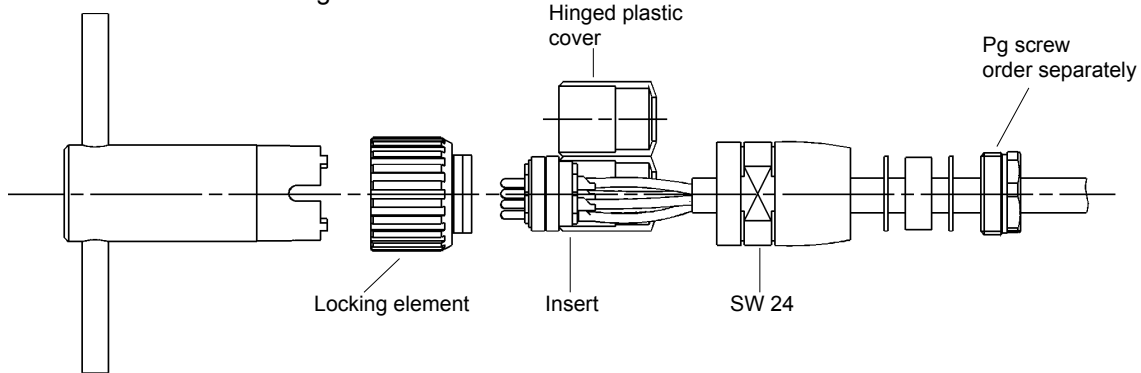
Identification	Part-Number	Drawing	Dimension in mm
<p>Assembly tool for angled bulkhead mounted housings</p> 	09 99 000 0324		
<p>Assembly tool for bulkhead mounted and cable to cable housings</p> 	09 99 000 0325	 <p>As an alternative a screw driver can be used.</p>	
<p>Assembly tool for hoods</p> 	09 99 000 0326	 <p>Alternatively for the assembly of the EMC version a screw driver can be used.</p>	

Assembly manuals

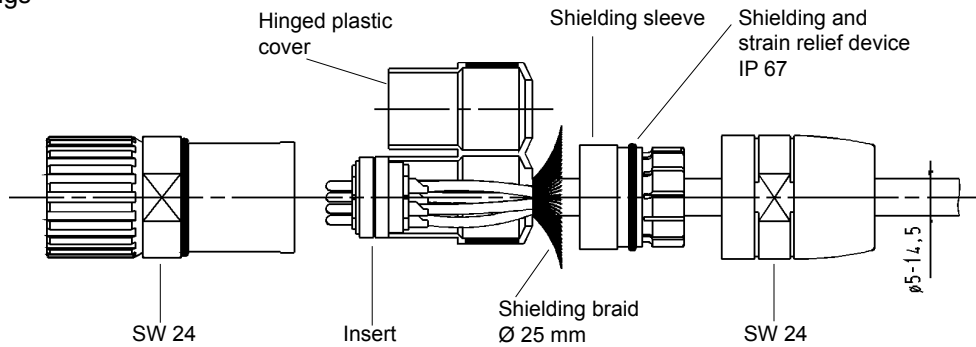
Hoods and Housings	Cable stripping length x
09 15 200 0351	26 mm
09 15 200 0403	20 mm
09 15 200 0451	26 mm
09 15 200 0603	30 mm
09 15 200 0703	20 mm
09 15 200 0751	26 mm
09 15 200 0901	30 mm



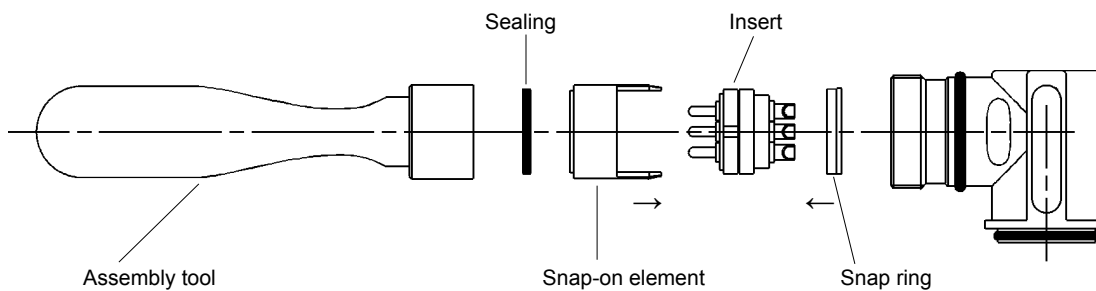
Standard hoods and housings



EMC housings



Right angled bulkhead mounted housing



Subsidiary companies – worldwide



Austria
HARTING Ges. m. b. H.
Deutschstraße 19, A-1230 Wien
Phone +43 1/6 16 21 21; Fax +43 1/6 16 21 21-21
E-Mail: at@HARTING.com

Belgium
HARTING N.V./S.A.
Z.3 Doornveld 23, B-1731 Zellik
Phone +32 2/4 66 01 90; Fax +32 2/4 66 78 55
E-Mail: be@HARTING.com; Internet: www.HARTING.be

Brazil
HARTING Ltda.
Av. Dr. Lino de Moraes, Pq. Jabaquara, 255
CEP 04360-001 - São Paulo - SP - Brazil
Phone +55 11/50 35-0073; Fax +55 11/50 34-47 43
E-Mail: br@HARTING.com
Internet: www.HARTING.com.br

China
Zhuohai HARTING; Limited Shanghai branch
Room 5403, 300 Huaihai Zhong Road
Hong Kong New World Tower
Luwan District, P.R.C; Shanghai 200021, China
Phone +86 21 - 63 86 22 00; Fax +86 21 - 63 86 86 36
E-Mail: cn@HARTING.com

Czech Republic
HARTING spol. s.r.o.
Mlýnská 2, 160 00 Praha 6
Phone +420 220 380 460; Fax +420 220 380 461
E-Mail: cz@HARTING.com; Internet: www.HARTING.cz

Finland
HARTING Oy
Teknobulevardi 3-5, PL 35, FI-01530 Vantaa
Phone +358 9 350 87 300; Fax +358 9 350 87 320
E-Mail: fi@HARTING.com

France
HARTING France
181 avenue des Nations, Paris Nord 2
BP 66058 Tremblay en France
F-95972 Roissy Charles de Gaulle Cédex
Phone +33 1 49 38 34 00; Fax +33 1 48 63 23 06
E-Mail: fr@HARTING.com

Germany
HARTING Deutschland GmbH & Co. KG
Postfach 2451 · D-32381 Minden
Simeons carré 1 · D-32427 Minden
Phone (05 71) 88 96 - 0; Fax (05 71) 88 96 - 2 82
E-Mail: de@HARTING.com
Internet: www.HARTING.com

Office Germany
HARTING Deutschland GmbH & Co. KG
Blankenauer Straße 99; D-09113 Chemnitz
Phone +49 0371 429211; Fax +49 0371 429222
E-Mail: de@HARTING.com

Great Britain
HARTING Ltd.
Caswell Road; Brackmills Industrial Estate
GB-Northampton, NN4 7PW
Phone +44 16 04/76 66 86, 82 75 00
Fax +44 16 04/70 67 77,
E-Mail: gb@HARTING.com
Internet: www.HARTING.co.uk

Hong Kong
HARTING (HK) Limited, Regional Office Asia Pacific
4208 Metroplaza Tower 1; 223 Hing Fong Road
Kwai Fong, N. T., Hong Kong
Phone +852/24 23-73 38; Fax +852/24 80-43 78
E-Mail: ap@HARTING.com
Internet: www.HARTING.com.hk

Hungary
HARTING Eastern Europe GmbH
Magyarországi Kereskedelmi Képviselete
1119 Budapest; Fehérvári út 89-95, II. emelet 217/A.
Phone +36-1-205 3464; Fax +36-1-205 3465
E-Mail: hu@HARTING.com; Internet: www.HARTING.hu

Indien
HARTING India Pvt. Ltd.
D4, Doshi Towers; 156 Poonamallee High Rd.
Kilpauk, Chennai - 600 010, INDA
Tel. +91 44 43560415; Fax +91 44 4356 0417
pushpendra.singh@HARTING.com; www.HARTING.com

Italy
HARTING SpA
Via Dell' Industria 7; I-20090 Vimodrone (Milano)
Phone +39 02/25 08 01; Fax +39 02/26 05 97
E-Mail: it@HARTING.com

Japan
HARTING K. K.
Yusen Shin-Yokohama 1 Chome Bldg., 2F
1-7-9, Shin-Yokohama; Kohoku-ku, Yokohama
222-0033 Japan
Phone +81 45 476 3456; Fax: +81 45 476 3466
E-Mail: jp@HARTING.com
Internet: www.HARTING.co.jp

Korea
HARTING Korea Limited
#308 Leaders Bldg., 342-1, Yatap-dong, Bundang-gu,
Sungnam-City, Kyunggi-do, 463-828, Korea
Phone +82-31-781-4615; Fax +82-31-781-4616
E-Mail: kr@HARTING.com

Netherlands
HARTING B.V.
Larenweg 44; NL-5234 KA 's-Hertogenbosch
Postbus 3526; NL-5203 DM 's-Hertogenbosch
Phone +31 73/6 41 04 04
Fax +31 73/6 44 06 99
E-Mail: nl@HARTING.com

Norway
HARTING A/S,
Øststensjøveien 36, N-0667 Oslo,
Phone +47 22/70 05 55
Fax +47 22/70 05 70
E-Mail: no@HARTING.com

Poland
HARTING Eastern Europe GmbH
Przedstawicielstwo w Polsce
ul. Kamiejskiego 201-219
51-126 Wrocław
Phone +48 71-352 81 71; Fax +48 71-320 74 44
E-Mail: pl@HARTING.com; Internet: www.HARTING.pl

Portugal
HARTING Iberia, S. A.
Avda. Josep Tarradellas, 20-30, 4º 6º
E-08029 Barcelona
Phone +351.219.673.177; Fax +351.219.678.457
E-Mail: es@HARTING.com

Russia
HARTING ZAO
ul. Tobolskaja 12, Saint Petersburg 194044 Russia
Phone +7/8 12/3 27 64 77; Fax +7/8 12/3 27 64 78
E-Mail: ru@HARTING.com
Internet: www.HARTING.ru

Singapore
HARTING Singapore Pte Ltd.
No. 1 Coleman Street; #B1-21 The Adelphi
Singapore 179803
Phone +656 2 25 52 85; Fax +656 2 25 99 47
E-Mail: sg@HARTING.com

Spain
HARTING Iberia S.A.
Josep Tarradellas 20-30 4º 6º; E-08029 Barcelona
Phone +34 933 638 475; Fax +34 934 199 585
E-Mail: es@HARTING.com

Sweden
HARTING AB
Gustavslundsvägen 141 B 4tr; 167 51 Bromma
Phone +46 8/4 45 71 71; Fax +46 8/4 45 71 70
E-Mail: se@HARTING.com

Switzerland
HARTING AG
Industriestrasse 26; CH-8604 Volketswil
Phone +41 44 908 20 60; Fax +41 44 908 20 69
E-Mail: ch@HARTING.com

Taiwan
HARTING R.O.C. Limited
Room 1, 5th Floor, No. 495, GuangFu South Road
Taipei, 110 Taiwan
Phone +886 - 2 - 2758-6177
Fax +886 - 2 - 2758-7177
E-Mail: tw@HARTING.com

USA
HARTING Inc. of North America
1370 Bowes Road; Elgin, Illinois 60123
Phone +1 (877) 741-1500 (toll free)
Fax +1 (866) 278-0307 (Inside Sales)
Fax +1 (847) 717-9430 (Sales and Marketing)
E-Mail: us@HARTING.com
Internet: www.HARTING-USA.com

Eastern-Europe
HARTING Eastern Europe GmbH
Bamberger Straße 7; D-01187 Dresden
Phone +49 351 / 4361760
Fax +49 351 / 4361770
E-Mail: Eastern.Europe@HARTING.com

Other countries
HARTING Electric GmbH & Co. KG
P.O. Box 14 73, D-32328 Espelkamp
Phone +49 57 72/47 - 97 100
Fax + 49 57 72/47 - 4 95
E-Mail: electric@HARTING.com

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Condelectric S.A.
Hipólito Yrigoyen 2591
(B1640HFY) Martínez, Buenos Aires
Phone + Fax +54 11 4836-1053
E-Mail: info@condelectric.com.ar

Bulgaria COMET ELECTRONICS
16, Tsar Samuil Str., BG-1000 Sofia
Phone +359-2-9155800; Fax +359-2-9540384
E-Mail: office@comet.bg; Internet: www.comet.bg

Canada Chartwell Electronics Inc.
140 Duffield Drive; Markham; Ontario L6G 1B5
Phone +1 905-513-7100; Fax +1 905-513-7101
Toll Free +1 877-513-7769; www.chartwell.ca

Denmark Knud Wexøe A/S
Skaettekaeret 11, P.O. Box 152; DK-2840 Holte
Phone +45 45 46 58 00; Fax +45 45 46 58 01
E-Mail: wexoe@wexoe.dk
Internet: www.wexoe.dk

Estonia SKS-tehnika Ou
Mustamäe tee 55, EE-01621 Tallinn
Phone +372 6819 234; Fax +372 6819 235
E-Mail: peeter.kuus@sksf.fi

Finland SKS-automaatio OY
Martinkyläntie 50, FIN-01721 Vantaa
Phone +358 9 852 66 61; Fax +358 9 852 68 20
E-Mail: automaatio@sksf.fi

Hungary Mile Kft.
Mádi u. 52, H-1104 Budapest
Phone +36-1-431-9800; Fax +36-1-431-9817
E-Mail: milekft@mile-kft.hu
Internet: www.mile-kft.hu

Island Smith & Norland
Nóatún 4, IS - 105 Reykjavik
Phone +354 520 3000; Fax +354 520 3011
E-Mail: olaf@smnino.is; Internet: www.sminor.is

Israel MIGVAN
Technologies & Engineering Ltd.
13 Hashiloh St., P.O.Box 7022
IL - Petach Tikva 49170
Phone +972 3 9240784; Fax +972 3 9240787
E-Mail: info@mte.co.il; Internet: www.mte.co.il

Poland Soyter Sp. z o. o.
ul. Warszawska 3, 05-082 Warszawa - Stare Babice
Phone +48 22 722 0 685; Fax +48 22 722 0 550
E-Mail: handlowy@soyter.com.pl
Internet: www.soyter.com

South-Africa HellermannTyton Pty Ltd.,
Private Bag X158 Rivonia 2128
34 Milky Way Avenue; Linbro Business Park 2065
Johannesburg, South Africa
Phone +27 (0)11 879-6600; Fax +27 (0)11 879-6606
E-Mail: sales.jhb@hellermann.co.za

Switzerland Distrelec AG
Grabenstrasse 6, CH-8606 Nänikon
Phone +41 1 944 99 11; Fax +41 1 944 99 88
E-Mail: info@distrelec.com
Internet: www.distrelec.com

Turkey Gökhan Elektrik San. Tic. Ltd. Sti.
Perpa Elektrikçiler İş Merkezi A Blok
Kat:7-8-9 No.694; TR - 80270 Okmeydanı/Istanbul
Phone +90 (212) 2 21 32 36 (pbx)
Fax +90 (212) 2 21 32 40
E-Mail: gokhan@gokhanelektrik.com
Internet: www.gokhanelektrik.com

Ukraine Incomtech Ltd.
4 Lermontovskaya St., UA-04050 Kiev
Phone +380-44-213-3641; Fax +380-44-213-3814
E-Mail: eletech@incomtech.com.ua
Internet: www.incomtech.com.ua

Global Business Unit Electric



HARTING Electric GmbH & Co. KG
P.O. Box 14 73
D-32328 Espelkamp
Phone +49 57 72/47-97 100
Fax +49 57 72/47-4 95
E-Mail: HARTING.electric@HARTING.com
Internet: www.HARTING.com