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Inserts for adapter frames	25.9	
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Crimp module	25.13	
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		25 1
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### Description of the Han-Yellock® system

Yellock

# The Han-Yellock<sup>®</sup> - a special Han<sup>®</sup> connector

Han-Yellock<sup>®</sup> is a new product series which retains the core functionality but differs significantly from current size and shape formats. The approach of this series makes many new functions possible, for example:

- An internal, latched locking mechanism on the hood
- Multiplies the potentials in the connector with Han-Yellock<sup>®</sup> modules
- Usage of Han-Modular<sup>®</sup> modules with adapter frames
- · Insulators can snap into the front or back walls of the housing
- Protected Earth contact (PE) in crimp or Quick Lock termination

These new technical features encourage sustained and effective improvements:

when purchasing products -

- Less article numbers and less inventory,
- when planning for the electrical and mechanical layout -
  - · Less wiring work within a machine,

#### during the work flow -

· Less steps in the work flow and quicker assembly,

and during the after-sales stage -

• Reduced down times because of the latched locking mechanism and maintenance-friendly design



Assembly details

#### Design overview

The Han-Yellock<sup>®</sup> interface consists of a housing, bulkhead mounting, on the housing side and a carrier hood with cover on the cable side.

Han-Yellock® offers the following features when assembling components:

- Han-Yellock® modules require only male crimp contacts.
- The PE is contacted on the housing; it can be connected with crimp and/or Quick Lock contacts.
- The Han-Yellock® hoods/housing are not plug-compatible with all other Han® hood/housing series.

The Han-Yellock® system can be used with a variety of insulators and contact inserts in order to establish an interface.

#### Yellock

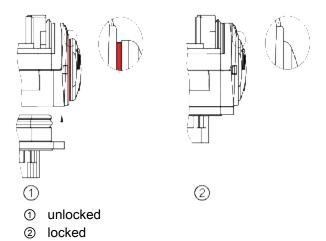
The Locking

The locking ability is a key function of the Han-Yellock<sup>®</sup>. The function makes connections and disconnections safe, simple and quick – even under harsh industrial conditions.

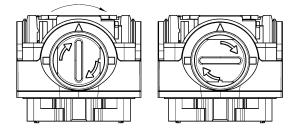
Main advantages include:

- Easy handling
- Resistance to vibrations and shock
- Protected against accidental opening
- Compact, space-saving design

Han-Yellock<sup>®</sup> features a patented internal locking mechanism. The locking takes place as the cable and device sides are simply joined together. A red ring around the perimeter of the push button will be visible if the housing halves do not snap together properly. This ring disappears as soon as the internally protected stainless steel springs snap into place.



This press-button locking also features an integrated blocking function. The locking mechanism can be locked by rotating the button 90°. It is then no longer possible to open the connector.



"open"

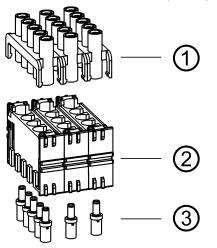
"blocked"

The press button can be set back to its visually open position only after the button is turned back 90°. It is then possible to release the two housing halves by pressing the snap-in button.

This feature provides an elegant mechanism for preventing an accidental opening of the connector – and no additional components are needed for it.

#### Han-Yellock® modules

This new product series enables an improved approach and strategy for electrical planning and procurement. For assembling the Han-Yellock<sup>®</sup> connector only male crimp contacts are needed. The conduct between the two male contacts is made by multipliers.



- 1 multiplier
- 2 Han-Yellock® module
- ③ Han-Yellock® crimp contacts

This concept allows a 1:1 wire to wire arrangement and in additon the use of bridges. Two to five contacts can be arranged.

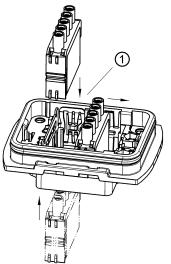
It does not matter if the bridge attachment is inserted on the cable side or the housing side of the connector.

In the past, terminals blocks have been responsible for the function of multiplying potentials. But now this function has been integrated into the connector for a quick, compact and easy-to-service solution.

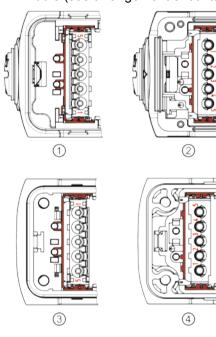
Yellock

#### Inserting the module into the hoods/housing

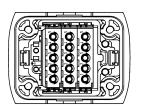
 The Han-Yellock<sup>®</sup> module should only be inserted into the "A" plug-in position in the metal clamp.



- ① plug-in position "A"
- The illustration shows the orientation of the module (see arrangement of contacts 1 ... 5).

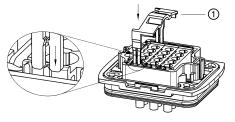


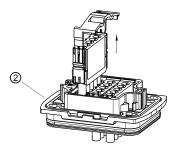
- ① Carrier hood, mating side
- ② Carrier hood, connection side
- ③ Housing, bulkhead mounting, mating side
- ④ Housing, bulkhead mounting, connection side
- A distinct click can be heard when the module snaps into position. It is then pushed along the rail to its final position. The plug-in slots must always be completely filled.



Disassembling the Han-Yellock® module

- The removal tool (part no. 11 99 000 0001) is required to take out the module.
- The following illustration shows how to insert the removal tool into the metal clamp. The tool should then be pressed down until it reaches the end stop.
- The tool is then pulled back and the module comes out of the housing.
- The removal can be made from the connection side as well as from the mating side.

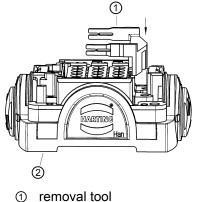




- ① removal tool
- ② housing, bulkhead mounting

The process is identical for both housings, bulkhead mounting, and carrier hoods.

The removal tool can be stored on the carrier hood:



carrier hood

25 . 4

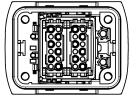
#### Han-Yellock® adapter frame

Han-Modular<sup>®</sup> series interfaces can be established using the Han-Yellock<sup>®</sup> adapter frame. The connection is based on a male/female contact arrangement.

Inserting the adapter frame in the housing:

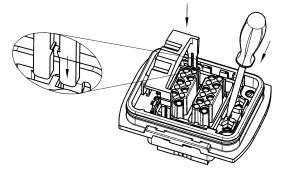
- The adapter frame can be snapped into the housing, bulkhead mounting, on the termination side and the mating side (refer to the illustration).
- The lateral plastic tabs ("B") are pressed into the metal clamps on the housing.
- The adapter frame then snaps in with a distinctly audible click.

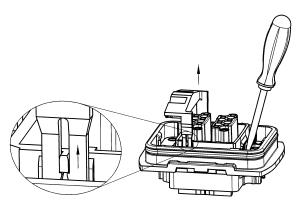
metal clamp



Removal the adapter frame:

- The removal tool part no. 11 99 000 0001 is required for disassembly.
- The removal tool is inserted into the metal clamp and pressed down as shown in the following illustration. A screwdriver need also be placed into the notch in the housing.
- The removal tool should then be pulled outwards to remove the adapter frame from the housing.
- The removal can be made from the termination side as well as from the mating side.
- The process is identical for both housings, bulkhead mounting, and carrier hoods.





#### Han-Yellock® Protection covers

Protection cover function

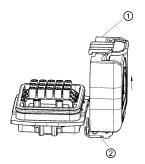
Yellock

To protect the insert against dust and water it is possible to use a Han-Yellock  $^{\textcircled{R}}$  protection cover.

The protection cover comes with a metal bearing pedestal and can be installed during initial or retrofit installation.

The Han-Yellock<sup>®</sup> design offer the possibility to snap in the pedestal either on the left or on the right side of the housing.

The direction of the cover movement can flip without turning the housing and inserts.

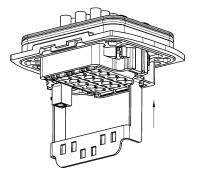


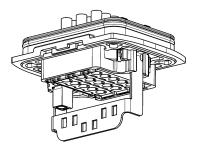


## Han-Yellock<sup>®</sup> Ground terminal Ground terminal assembly

On the housing side ground terminals can be used.

After placing the frame deeply inside the housing slots the housing will be fixed to the panel leading to solid mounting of the complete set.





- 1 cover
- ② bearing pedestal

### Inserts for Han- Yellock® 10

09 12 002 2654

09 12 002 2754

09 12 002 2653

09 12 002 2753

Male insert (M)

Female insert (F)

Series	Han <sup>®</sup> 3 A	Han <sup>®</sup> 3 A Quick Lock	Han <sup>®</sup> 3 A Quick Lock	Han <sup>®</sup> 4 A
Number of contacts	3 + 🖨	3 + 🖨	3 + 🖨	4 + 🕀
Termination	Screw terminal	Quick Lock termination	Quick Lock termination	Screw terminal
			۴ 🖗	
Rated current	10 A	10 A	10 A	10 A
Rated voltage	230 / 400 V 0.75 1.5 mm²	230 / 400 V	230 / 400 V	230 / 400 V
Wire gauge	0.75 1.5 mm <sup>-</sup>	0.5 2.5 mm²	0.25 1.5 mm²	0.75 1.5 mm²
Male insert (M)	09 20 003 2611	09 20 003 2633	09 20 003 2634	09 20 004 2611
Female insert (F)	09 20 003 2711	09 20 003 2733	09 20 003 2734	09 20 004 2711
Series	Han <sup>®</sup> 4 A Quick Lock	Han <sup>®</sup> 4 A Quick Lock	Han <sup>®</sup> 8 D	Han <sup>®</sup> 8 D Quick Lock
Number of contacts	4 + 🕀	4 + 🚍	8	8
Termination	Quick Lock termination	Quick Lock termination	Crimp terminal	Quick Lock termination
Rated current	10 A	10 A	10 A	10 A
Rated voltage	230 / 400 V	230 / 400 V	~ 50 V / – 120 V	~ 50 V / – 120 V
Wire gauge	0.5 2.5 mm²	0.25 1.5 mm²	0.14 2.5 mm²	0.25 1.5 mm²
Male insert (M)	09 20 004 2633	09 20 004 2634	09 36 008 3001	09 36 008 2632
Female insert (F)	09 20 004 2733	09 20 004 2734	09 36 008 3101	09 36 008 2732
Series	Han <sup>®</sup> Q 2/0			
Number of contacts	2 + 🕀	2 + 🕀	2 + 🕀	2 + 🕀
Termination	Axial screw terminal	Axial screw terminal	Crimp terminal	Axial screw terminal
Rated current	40 A	40 A	40 A	40 A
Rated voltage	400 V	400 V	400 V	830 V
Wire gauge	2.5 6 mm²	4 10 mm²	1.5 10 mm²	2.5 6 mm²

09 12 002 2651

09 12 002 2751

09 12 002 3051

09 12 002 3151

## Inserts for Han-Yellock® 10

Series	Han <sup>®</sup> Q 2/0	Han <sup>®</sup> Q 2/0	Han <sup>®</sup> Q 3/0	Han® Q 5/0
Number of contacts	2 + 🗐	2 + 🕀	3 + 🚇	5 + 🕀
Termination	ermination Axial screw terminal Crimp terminal		Crimp terminal	Crimp terminal
				P (
Rated current	40 A	40 A	40 A	16 A
Rated voltage	830 V	830 V	400 V	230 / 400 V
Wire gauge	4 10 mm²	1.5 10 mm²	1.5 10 mm²	0.14 2.5 mm²
Male insert (M)	09 12 002 2652	09 12 002 3052	09 12 003 3051	09 12 005 3001
Female insert (F)	09 12 002 2752	09 12 002 3152	09 12 003 3151	09 12 005 3101
Series	Han <sup>®</sup> Q 5/0 Quick Lock	Han <sup>®</sup> Q 7/0	Han <sup>®</sup> Q 12/0	
Number of contacts	5 + 🕀	7 + 🕀	12 + 🕀	
Termination	Quick Lock termination	Crimp terminal	Crimp termination/ Quick Lock termination	
		💙 将		
Rated current	16 A	10 A	10 A	
Rated voltage	230 / 400 V	400 V	400 V	
Wire gauge	0.5 2.5 mm²	0.14 2.5 mm²	0.14 2.5 mm²	
Male insert (M)	09 12 005 2633	09 12 007 3001	09 12 012 3001	
Female insert (F)	09 12 005 2733	09 12 007 3101	09 12 012 3101	
Series	Han-Brid <sup>®</sup> RJ45 C	Han-Brid <sup>®</sup> RJ45 C	Han-Brid <sup>®</sup> RJ45 C	Han-Brid <sup>®</sup> RJ45 C
Number of contacts	2/8	2/8	2/8	2/8
Termination	Crimp terminal /	Crimp terminal /	Crimp terminal /	Crimp terminal /
rennination	RJ45	RJ45	RJ45	RJ45
	all all		No.	A P
Rated current	10 A	10 A	10 A	10 A
Rated voltage	24 V	24 V	24 V	24 V
Wire gauge	0.14 2.5 mm²	0.14 2.5 mm²	0.14 2.5 mm²	0.14 2.5 mm²
Male insert (M)	09 12 003 3021	09 12 003 3031		
Female insert (F)			09 12 003 2774	09 12 003 2776

## Inserts for adapter frames

Series	Han <sup>®</sup> CC Protected module	Han <sup>®</sup> CD module	Han E <sup>®</sup> module	Han <sup>®</sup> E Quick Lock module	
Number of contacts	4	3	6	6	
Modules	Crimp terminal	Crimp terminal	Crimp terminal	Quick Lock termination	
Rated current Rated voltage Wire gauge	40 A 830 V 1.5 6 mm²	40 A 830 V 1.5 6 mm²	16 A 500 V 0.14 4 mm²	16 A 500 V 0.5 2.5 mm²	
Series	Han <sup>®</sup> EE module	Han <sup>®</sup> EE Quick Lock module	Han E <sup>®</sup> Protected module	Han <sup>®</sup> EEE module	
Number of contacts	8	8	6	20	
Modules	Crimp terminal	Quick Lock termination	Crimp terminal	Crimp terminal	
Rated current Rated voltage Wire gauge	16 A 400 V 0.14 4 mm²	16 A 400 V 0.5 2.5 mm²	16 A 830 V 0.14 4 mm²	16 A 500 V 0.14 4 mm²	
Series	Han <sup>®</sup> ES module	Han DD <sup>®</sup> module	Han DD <sup>®</sup> Quick Lock module	Han <sup>®</sup> DDD module	
Number of contacts	5	12	12	17	
Modules	Cage-clamp terminal	Crimp terminal	Quick Lock termination	Crimp terminal	
Rated current Rated voltage Wire gauge	16 A 400 V 0.14 2.5 mm²	10 A 250 V 0.14 2.5 mm²	10 A 250 V 0.25 1.5 mm²	10 A 160 V 0.14 2.5 mm²	
Series	Han® High Density module	Han <sup>®</sup> D-Sub module			
Number of contacts	25	9			
Modules	Crimp terminal	Crimp terminal			
Rated current Rated voltage Wire gauge	4 A 50 V 0.08 0.52 mm²	5 A 50 V 0.08 0.52 mm²			

Inserts	for	ad	lapter	frames
		~~		namee

	Series	Han <sup>®</sup> USB module	Han <sup>®</sup> GigaBit module		
	Number of contacts	4	8		
ſ	Modules	USB 2.0	Ethernet Cat. 6		
	Series		Han-Quintax <sup>®</sup> module		Han <sup>®</sup> Multi module
	Number of contacts		2		
	Modules	Han-Quintax <sup>®</sup> High Density     Han D <sup>®</sup> Coax     Han E <sup>®</sup> Coax       Quintax contact     Contact 75 Ω     Contact 50 Ω			Coaxial contact
		4 + shielding 8 +	shielding 1 + shielding	1 + shielding 50 Ω	50 Ω RG 174 75 Ω RG 179 50 Ω RG 58
5					

#### Quick Lock module

Yellock

#### Features

· Snap-in assembly from mating side and from termination side

5

- Bus bar within bridge attachements
- Finger safe design
- · Fast and tool-less assembly
- · Mating compatible to the crimp version

#### **Technical characteristics**

Number of contacts Electrical data acc. to IEC 61984 Rated current Rated voltage Rated impulse voltage Pollution degree Insulation resistance Contact resistance Limiting temperature Mating cycles Material (insert) Colour (insert) Material (contacts) Material flammability class acc. to UL 94 RoHS

20 A 500 V 6 kV 3, 10 A 500 V 6 kV 3 20 A, 10 A 500 V 6 kV 3 ≥10<sup>10</sup> Ω ≤2 mΩ -40 ... +125 °C ≥500 Polycarbonate RAL 7032 (pebble grey) Copper alloy V-0 compliant with exemption, compliant 6c: Copper alloy containing up

to 4 % lead by weight

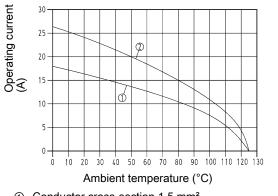
RoHS exemptions

### Derating

#### **Current carrying capacity**

The current carrying capacity of the connectors is limited by the thermal load 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 acc. to IEC 60512-5-2

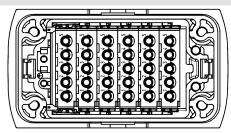


- Conductor cross-section 1.5 mm<sup>2</sup>
   Conductor cross-section 2.5 mm<sup>2</sup>
- for connector with 3 Han-Yellock<sup>®</sup> modules, fully loaded (multiplier 1:1)

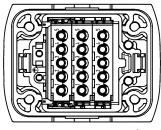
### Specifications and approvals

EN 60664-1 IEC 61984 UL 1977 ECBT2.E235076 DNV GL

#### Details



Placement for Han-Yellock® 60 with 6 Han-Yellock® modules



Placement for Han-Yellock® 30 with 3 Han-Yellock® modules

### Quick Lock module

Number of contacts

5

Yellock

25

12

20 A 500 V 6 kV 3 Drawing (dimensions in mm) Conductor cross-sec-Identification tion (mm<sup>2</sup>) Part number Han-Quick Lock<sup>®</sup> , Han-Quick Lock<sup>®</sup> termination, 20 A 0,5 ... 2,5 11 05 105 2633 8 -31,7 Ĩ Contact surface: R 品 Silver plated 40 9,75 Stripping length 10 mm -1 Blue slide 0,25 ... 1,5 11 05 105 2634 Han-Yellock®, Module, Han-Quick Lock® termination, 10 A Contact surface: Silver plated 1 Black slide

HARTIN

#### Crimp module



#### Features

- · Snap-in assembly from mating side and from termination side
- · Wiring with male contacts only
- · Bus bar within bridge attachements
- · Finger safe design
- · Fast and tool-less assembly

#### **Technical characteristics**

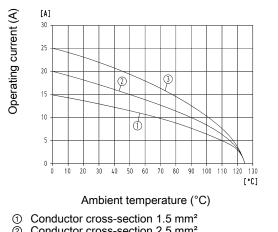
Number of contacts	5
Electrical data acc. to IEC 61984	20 A 500 V 6 kV 3
Rated current	20 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Insulation resistance	≥10 <sup>10</sup> Ω
Contact resistance	≤2 mΩ
Limiting temperature	-40 +125 °C
Mating cycles	≥500
Material (insert)	Polycarbonate
Colour (insert)	RAL 7032 (pebble grey), RAL 5015 (sky blue), RAL 3000 (flame red)
Material (contacts)	Copper alloy
Material flammability class acc. to UL 94	V-0
RoHS	compliant, compliant with exemption
RoHS exemptions	<b>6c:</b> Copper alloy containing up to 4 % lead by weight

#### Derating

#### **Current carrying capacity**

The current carrying capacity of the connectors is limited by the thermal load 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 acc. to IEC 60512-5-2



- Conductor cross-section 2.5 mm<sup>2</sup> 2
- Conductor cross-section 4 mm<sup>2</sup> 3

```
for connector with 3 Han-Yellock® modules, fully loaded
(multiplier 1:1)
```

## Specifications and approvals

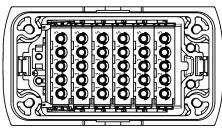
EN 60664-1 IEC 61984 DNV GL

## Details

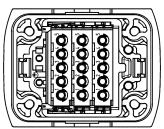
Crimping tools see chapter 90

#### Remarks on the crimp technique

The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.



Placement for Han-Yellock® 60 with 6 Han-Yellock® modules



Placement for Han-Yellock® 30 with 3 Han-Yellock® modules

#### Crimp module

Number of contacts

Yellock

20 A 500 V 6 kV 3 Drawing (dimensions in mm) Conductor cross-sec-Identification tion (mm<sup>2</sup>) Part number 11 05 105 3001 Han-Yellock®, 0,14 ... 4 9,75 40 0,14 ... 4 0,14 ... 4 Module, 11 05 105 3011 11 05 105 3012 Crimp termination, 1Ľ 비 Contact surface: ò Silver plated 23, 22225 II A A t 11 05 105 3001 Grey 11 05 105 3011 Blue 11 05 105 3012 Red Han-Yellock® 0,14 ... 0,37 11 05 000 6101 0,5 11 05 000 6102 Crimp contact, Ø4,5 0,75 11 05 000 6103 Contact surface: 1 11 05 000 6104 Silver plated 1,5 11 05 000 6105 -6,2 2,5 3 11 05 000 6106 13,2 11 05 000 6107 4 11 05 000 6108 0,14 ... 0,37 11 05 000 6121 Han-Yellock®, Stripping 11 05 000 6122 Wire gauge Crimp contact, 0,5 length 0,75 11 05 000 6123 Contact surface: 0.14-0.37 mm<sup>2</sup> AWG 26-22 6.5 mm 1 11 05 000 6124 Gold plated 0.5 mm<sup>2</sup> AWG 20 6.5 mm . 1,5 11 05 000 6125 0.75 mm<sup>2</sup> AWG 18 6.5 mm 2,5 11 05 000 6126 3 4 AWG 18 6.5 mm 11 05 000 6127 1 mm<sup>2</sup> 1.5 mm<sup>2</sup> AWG 16 6.5 mm 11 05 000 6128 2.5 mm<sup>2</sup> AWG 14 6.5 mm 3 mm<sup>2</sup> AWG 12 6.5 mm 6.5 mm AWG 12 4 mm<sup>2</sup> Removal tool 09 99 000 0319 See chapter 90

HARTIN

25 . 14

### **Multiplier block**



#### Features

- Up to 3 Han-Yellock® multipliers can be used in one multiplier bloc
- · By using the multipliers, the potential of one up to five contacts can be multiplied
- Needs 3 places in the Han-Modular® Docking frame and • Hinged frame
- · Wiring with male contacts only

#### **Technical characteristics**

Number of contacts	15
Electrical data acc. to IEC 61984	16 A 500 V 6 kV 3
Rated current	16 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Insulation resistance	≥10 <sup>10</sup> Ω
Contact resistance	≤1 mΩ
Limiting temperature	-40 +125 °C
Mating cycles	≥500
Material (insert)	Polycarbonate
Colour (insert)	RAL 7032 (pebble grey
Material (contacts)	Copper alloy
Material flammability class acc.	V-0
to UL 94	
RoHS	compliant, compliant w exemption
RoHS exemptions	6c: Copper alloy contain to 4 % lead by weight

e grey) iant with containing up

### Specifications and approvals

EN 60664-1 IEC 61984

#### Details

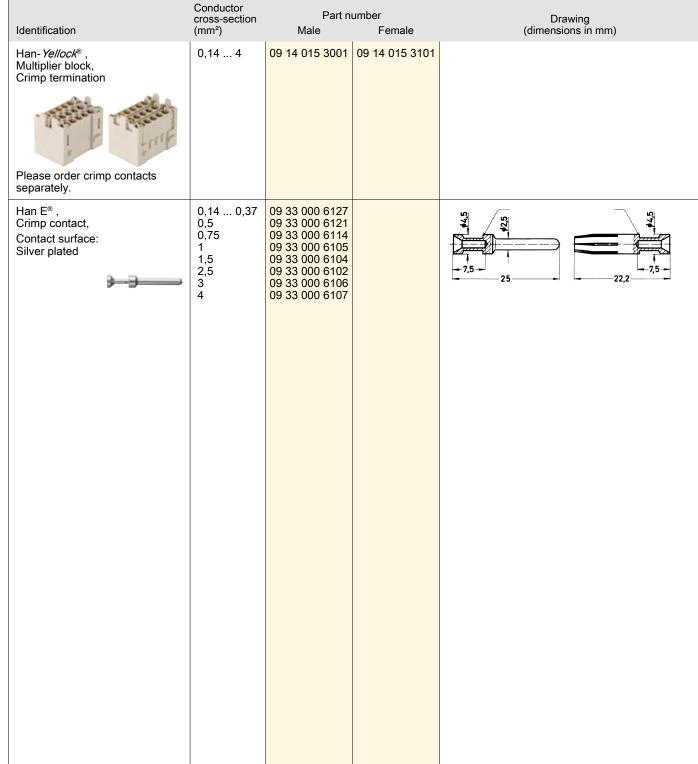
Crimping tools see chapter 90

#### Remarks on the crimp technique

The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Number of contacts

15 16 A 500 V 6 KV 3



### **Multiplier**

#### Features

- · Snap-in assembly from mating side and from termination side
- Bus bar within bridge attachements
- Visible bridge position from mating side and from termination side
- Fast and easy exchange

### **Technical characteristics**

Number of contacts Insulation resistance Limiting temperature Mating cycles Material (insert) Colour (insert) 5 ≥10<sup>10</sup> Ω -40 ... +125 °C ≥500 Polycarbonate RAL 7032 (pebble grey), RAL 3000 (flame red), RAL 5015 (sky blue) V-0

Material flammability class acc. to UL 94 RoHS

compliant

### Specifications and approvals

EN 60664-1 IEC 61984 UL 1977 ECBT2.E235076 DNV GL

### **Multiplier**

Number of contacts

5

Yellock

Drawing (dimensions in mm)

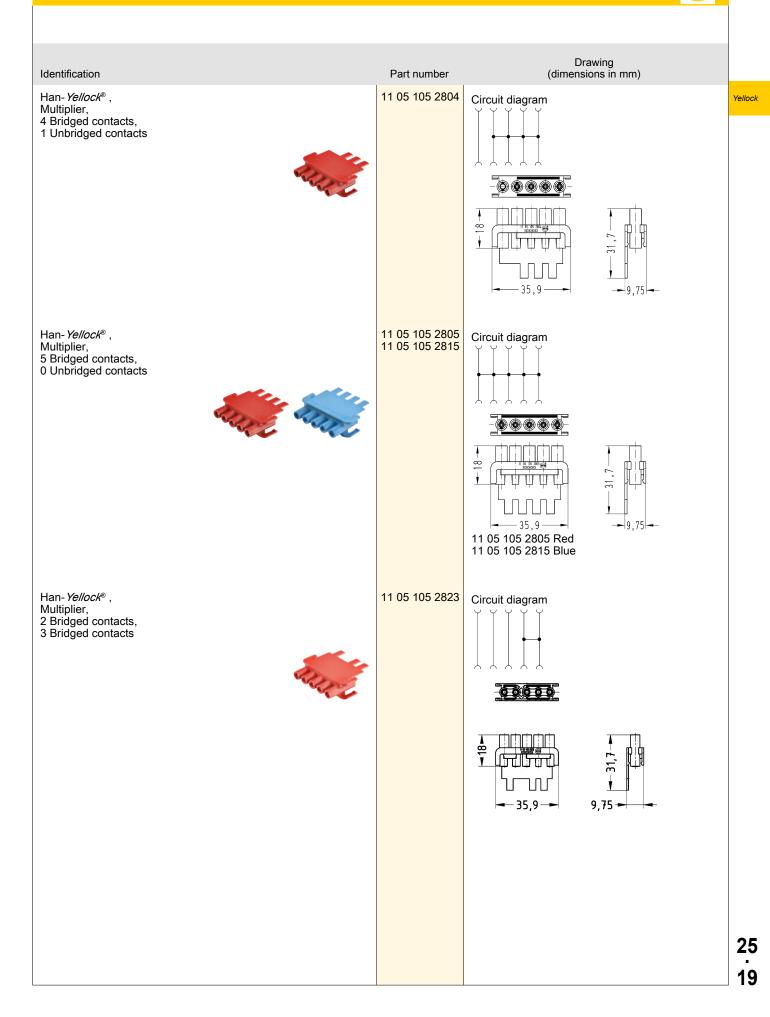
Circuit diagram

Identification Han-Yellock®, Multiplier, 0 Bridged contacts, 5 Unbridged contacts Han-*Yellock*® , Multiplier, 2 Bridged contacts, 3 Unbridged contacts Han-Yellock®,

and a start 00000 T ò 1 35,9 9.75 11 05 105 2802 Circuit diagram and a 1 ţ <u>.</u> -35,9 -19,75-11 05 105 2803 Circuit diagram Multiplier, 3 Bridged contacts, 2 Unbridged contacts W. 0000 ÷ 31.7 ł τh 35,9--19,75

Part number 11 05 105 2801

## **Multiplier**



#### Adapter frames

#### Features

Yellock

- Suitable for Han-Modular® modules
- · Fast and tool-less assembly
- · Snap-in assembly from mating side and from termination side
- Removal from mating side and from termination side possible

### **Technical characteristics**

Material (accessories) Colour (accessories) Material flammability class acc. to UL 94 RoHS Polycarbonate RAL 7032 (pebble grey) V-0

compliant

#### Specifications and approvals

EN 60664-1 IEC 61984 DNV GL

#### Details

#### Han-Yellock® adapter frame

Han-Modular<sup>®</sup> series interfaces can be established using the Han-*Yellock*<sup>®</sup> adapter frame. The connection is based on a male/ female contact arrangement.

Inserting the adapter frame in the housing:

The adapter frame can be snapped into the housing, bulkhead mounting, on the termination side and the mating side (refer to the illustration).

The lateral plastic tabs ("B") are pressed into the metal clamps on the housing.

The adapter frame then snaps in with a distinctly audible click. ① metal clamp

#### Removal of the adapter frame

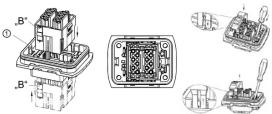
The removal tool part no. 11 99 000 0001 is required for disassembly. (see chapter 90)

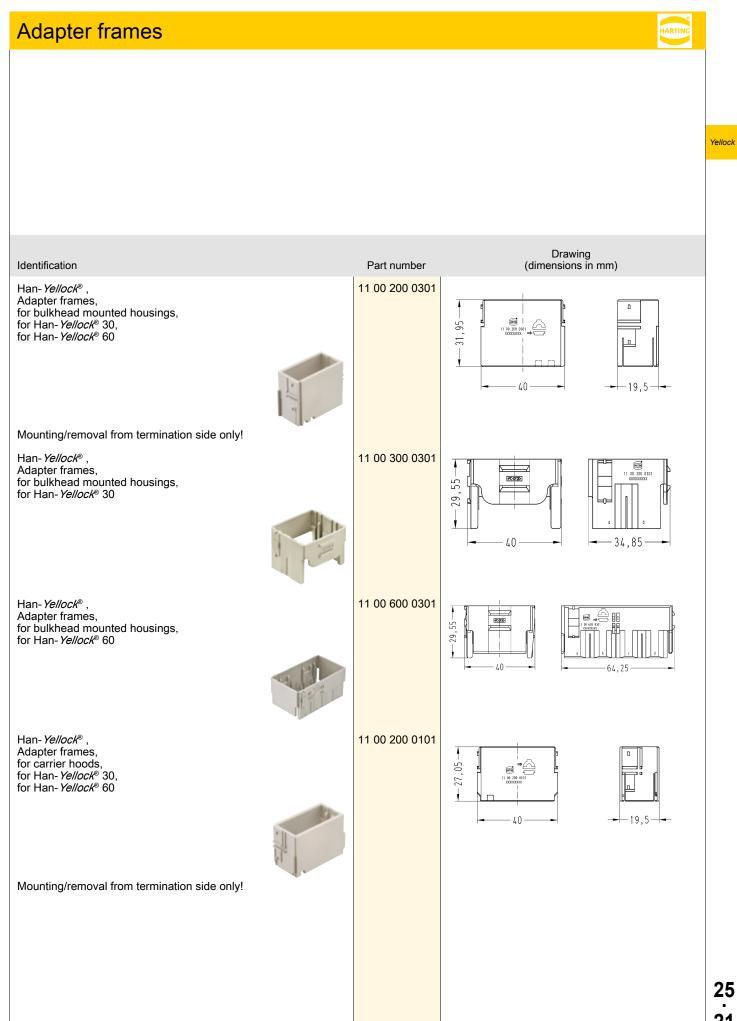
The removal tool is inserted into the metal clamp and pressed down as shown in the following illustration. A screwdriver need also be placed into the notch in the housing.

The removal tool should then be pulled outwards to remove the adapter frame from the housing.

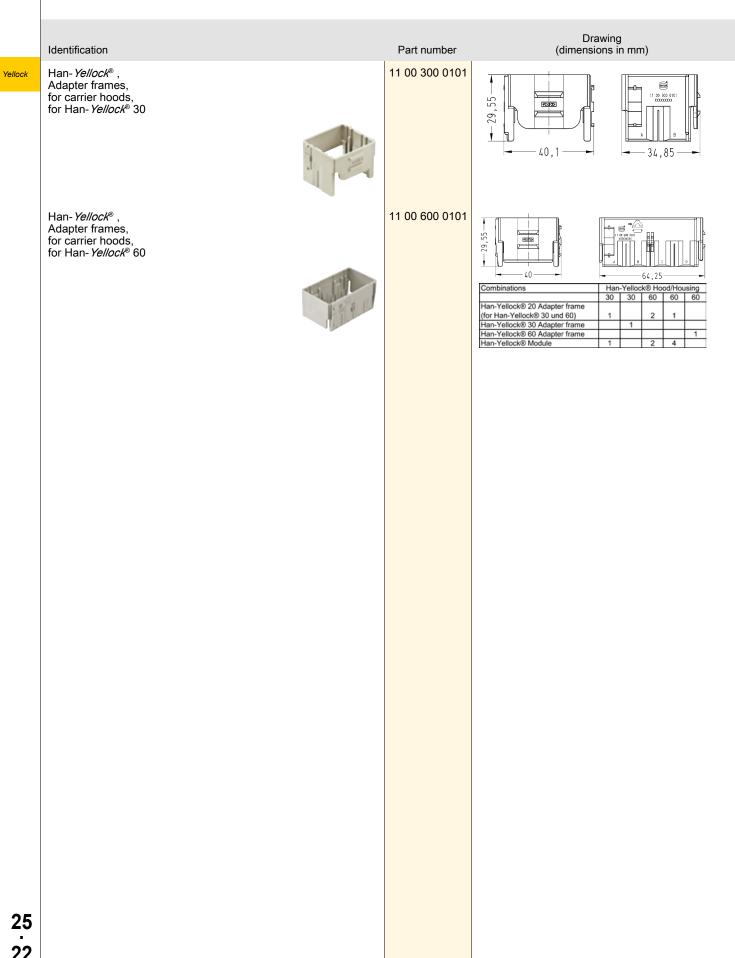
The removal can be made from the termination side as well as from the mating side.

The process is identical for both housings, bulkhead mounting, and carrier hoods.





## Adapter frames



#### Monoblocks

#### Features

- · Snap-in assembly from mating side and from termination side
- Finger safe design
- Fast and tool-less assembly

## **Technical characteristics**

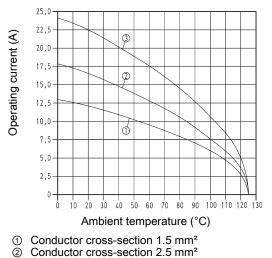
Number of contacts	25, 48
Electrical data acc. to IEC 61984	16 A 500 V 6 kV 3
Rated current	16 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Insulation resistance	≥10 <sup>10</sup> Ω
Contact resistance	≤2 mΩ
Limiting temperature	-40 +125 °C
Mating cycles	≥500
Material (insert)	Polycarbonate
Colour (insert)	RAL 7032 (pebble grey)
Material (contacts)	Copper alloy
Material flammability class acc. to UL 94	V-0
RoHS	compliant, compliant with exemption
RoHS exemptions	6c: Copper alloy containing

6c: Copper alloy containing up to 4 % lead by weight

### Derating

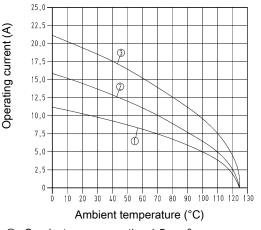
#### **Current carrying capacity**

The current carrying capacity of the connectors is limited by the thermal load 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 acc. to IEC 60512-5-2



Conductor cross-section 4 mm<sup>2</sup> ദ

## Derating



- Conductor cross-section 1.5 mm<sup>2</sup>
- 2 3 Conductor cross-section 2.5 mm<sup>2</sup>
- Conductor cross-section 4 mm<sup>2</sup>

## Specifications and approvals

EN 60664-1 IEC 61984 UL 1977 ECBT2.E235076 DNV GL

#### Details

Crimping tools see chapter 90

#### Remarks on the crimp technique

The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

### Han-Yellock® Monoblock 30

Size Han- *Yellock*® 30

HARTIN

Number of contacts



Yellock

25 24

Identification	Conductor cross-section (mm²)	Part n Male	umber Female	Drawing (dimensions in mm)
Han-Yellock®, Monoblock, Crimp termination Please order crimp contacts separately. ATTENTION! It is not possible to use 2 monoblocks 30 in the Han-Yellock® 60 series!	0,14 4	11 05 325 3001	11 05 325 3101	
Han- <i>Yellock</i> ®, Crimp contact, Contact surface: Silver plated	0,14 0,37 0,5 0,75 1 1,5 2,5 3 4	11 05 000 6101 11 05 000 6102 11 05 000 6103 11 05 000 6104 11 05 000 6105 11 05 000 6106 11 05 000 6107 11 05 000 6108	11 05 000 6201 11 05 000 6202 11 05 000 6203 11 05 000 6204 11 05 000 6205 11 05 000 6206 11 05 000 6207 11 05 000 6208	-6,2- -13,2- 14,6
Han-Yellock®, Crimp contact, Contact surface: Gold plated	0,14 0,37 0,5 0,75 1 1,5 2,5 3 4	11 05 000 6121 11 05 000 6122 11 05 000 6123 11 05 000 6124 11 05 000 6126 11 05 000 6127 11 05 000 6128	11 05 000 6221 11 05 000 6222 11 05 000 6223 11 05 000 6224 11 05 000 6226 11 05 000 6227 11 05 000 6228	Wire gauge         Stripping length           0.14-0.37 mm²         AWG 26-22         6.5 mm           0.5 mm²         AWG 20         6.5 mm           0.75 mm²         AWG 18         6.5 mm           1 mm²         AWG 18         6.5 mm           1.5 mm²         AWG 16         6.5 mm           2.5 mm²         AWG 14         6.5 mm           3 mm²         AWG 12         6.5 mm           3 mm²         AWG 12         6.5 mm           4 mm²         AWG 12         6.5 mm           See chapter 90         99 000 0319         See chapter 90

Size Han- Yellock® 60

ARTING

Number of contacts

4	8		
16 A	500 V	6 kV	3

Identification	Conductor cross-section (mm <sup>2</sup> )	Part n Male	umber Female	Drawing (dimensions in mm)
Han-Yellock®, Monoblock, Crimp termination Please order crimp contacts separately.	0,14 4	11 05 648 3001	11 05 648 3101	
Han- <i>Yellock</i> <sup>®</sup> , Crimp contact, Contact surface: Silver plated	0,14 0,37 0,5 0,75 1 1,5 2,5 3 4	11 05 000 6101 11 05 000 6102 11 05 000 6103 11 05 000 6104 11 05 000 6105 11 05 000 6106 11 05 000 6107 11 05 000 6108	11 05 000 6201 11 05 000 6202 11 05 000 6203 11 05 000 6203 11 05 000 6204 11 05 000 6205 11 05 000 6206 11 05 000 6208	- 6,2
Han-Yellock®, Crimp contact, Contact surface: Gold plated	0,14 0,37 0,5 0,75 1 1,5 2,5 3 4	11 05 000 6121 11 05 000 6122 11 05 000 6123 11 05 000 6124 11 05 000 6125 11 05 000 6127 11 05 000 6128	11 05 000 6221 11 05 000 6222 11 05 000 6223 11 05 000 6225 11 05 000 6226 11 05 000 6227 11 05 000 6227 11 05 000 6228	Wire gauge         Stripping length           0.14-0.37 mm²         AWG 26-22         6.5 mm           0.5 mm²         AWG 20         6.5 mm           0.75 mm²         AWG 18         6.5 mm           1 mm²         AWG 18         6.5 mm           1.5 mm²         AWG 16         6.5 mm           2.5 mm²         AWG 12         6.5 mm           3 mm²         AWG 12         6.5 mm           3 mm²         AWG 12         6.5 mm           See chapter 90         99 000 0319



#### **Features**

Yellock

- Hoods/housings for industrial applications
- ٠ Highly EMC resistant
- · High robustness due to internal locking mechanism
- Compatible with inserts size Han® 3 A

### **Technical characteristics**

Un-/locking temperature Limiting temperature Mating cycles Degree of protection acc. to IEC IP65, IP67 60529 Material (hood/housing) Surface (hood/housing) Colour (hood/housing) Material (seal) Material (locking) Colour (locking) Material flammability class acc.

to UL 94 RoHS

-10 ... +85 °C -40 ... +125 °C ≥500 Zinc die-cast

compliant

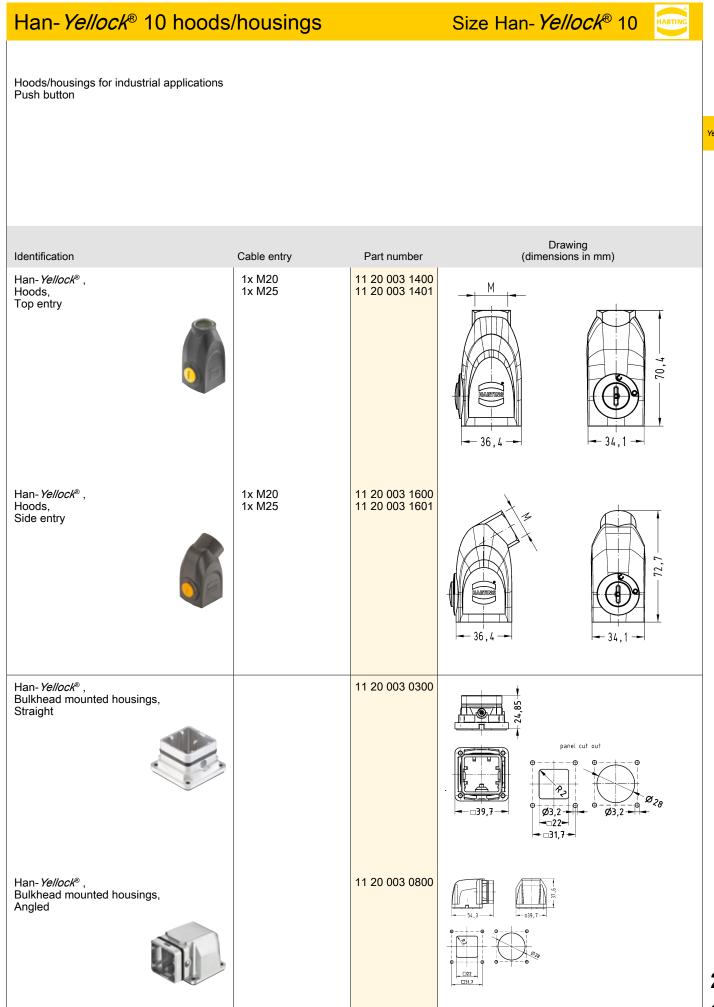
Powder-coated, Zinc passivation RAL 7021 (black grey), Metallic NBR Polyamide, Stainless steel Melon yellow V-0

#### Specifications and approvals

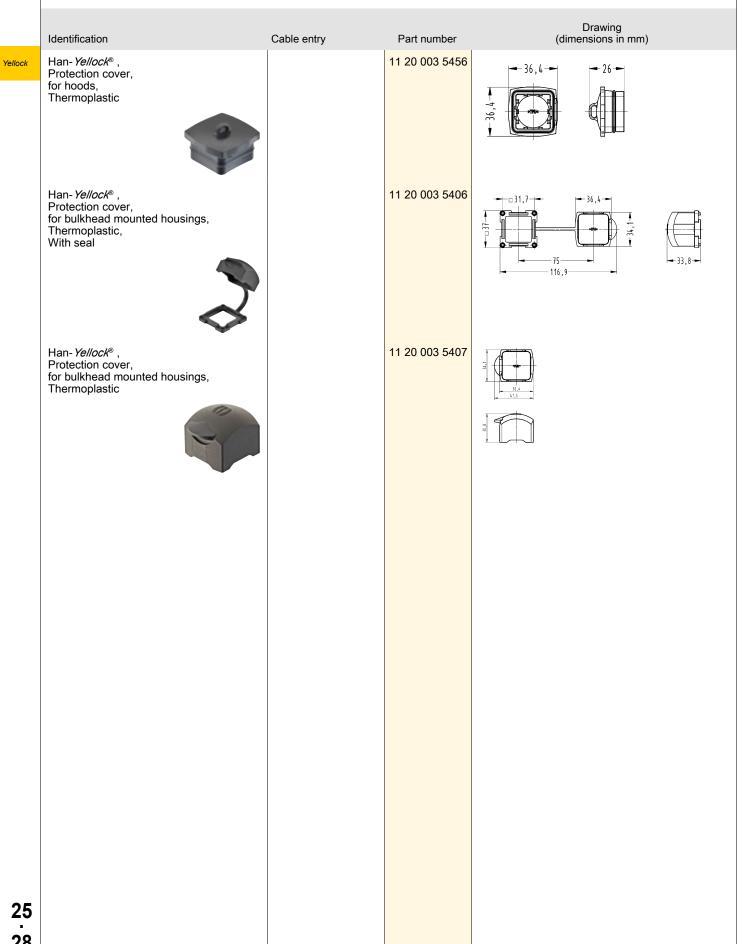
EN 60664-1 IEC 61984 DNV GL

#### Details

For use with inserts Han® Q, the seal on the insert has to be removed.



25 . 27



Yellock

#### Features

- for three Han-Yellock® modules
- · High robustness due to internal locking mechanism
- · Two-part hood

RoHS

- Earthed contacts PE in crimped or Han-Quick Lock<sup>®</sup> termination
- · Protection cover retrofit on housing side

### **Technical characteristics**

Un-/locking temperature -10 ... +85 °C Limiting temperature -40 ... +125 °C ≥500 Mating cycles Degree of protection acc. to IEC IP65, IP67 60529 Zinc die-cast, Aluminium Material (hood/housing) die-cast Surface (hood/housing) Zinc passivation, Powder-coated, Passivated Metallic, RAL 7021 (black grey), Colour (hood/housing) RAL 9005 (jet black) Material (seal) NBR Polyamide, Stainless steel Material (locking) Colour (locking) Melon yellow Material flammability class acc. V-0 to UL 94

compliant

#### Specifications and approvals

EN 60664-1 IEC 61984 DNV GL

#### Details





M4 fixing screw (screw length > 20 mm, tightening torque: 1Nm)

② Panel fastener (tightening torque: 2.3 Nm)



- ① Shell with top entry
- 2 Cable entry M20 ... M40
- ③ Carrier hood with push button release④ Bulkhead mounted housings

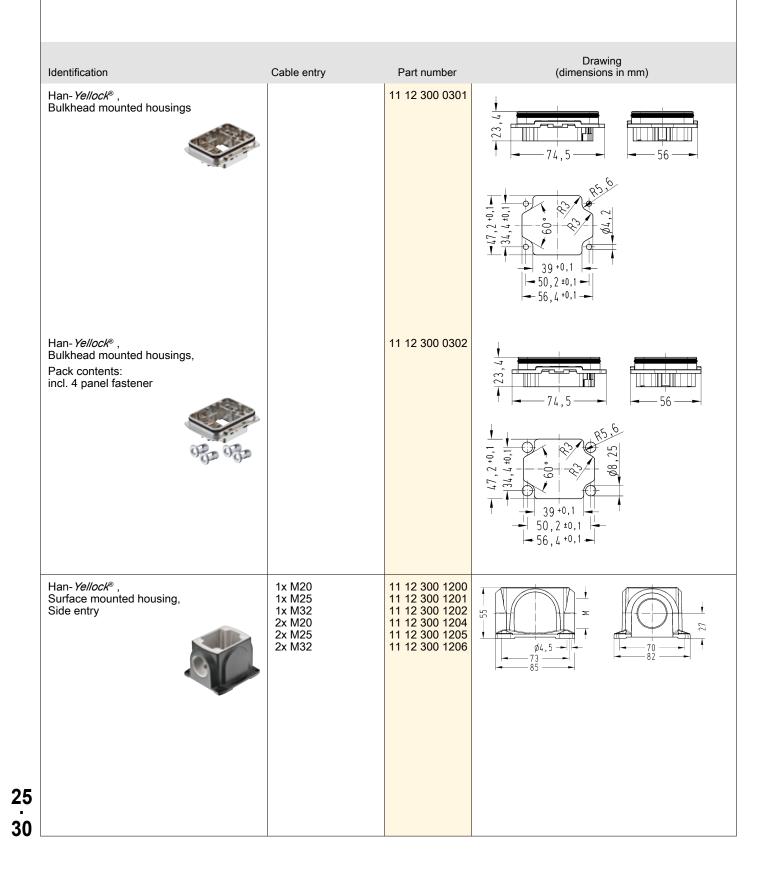
25 29

ngs

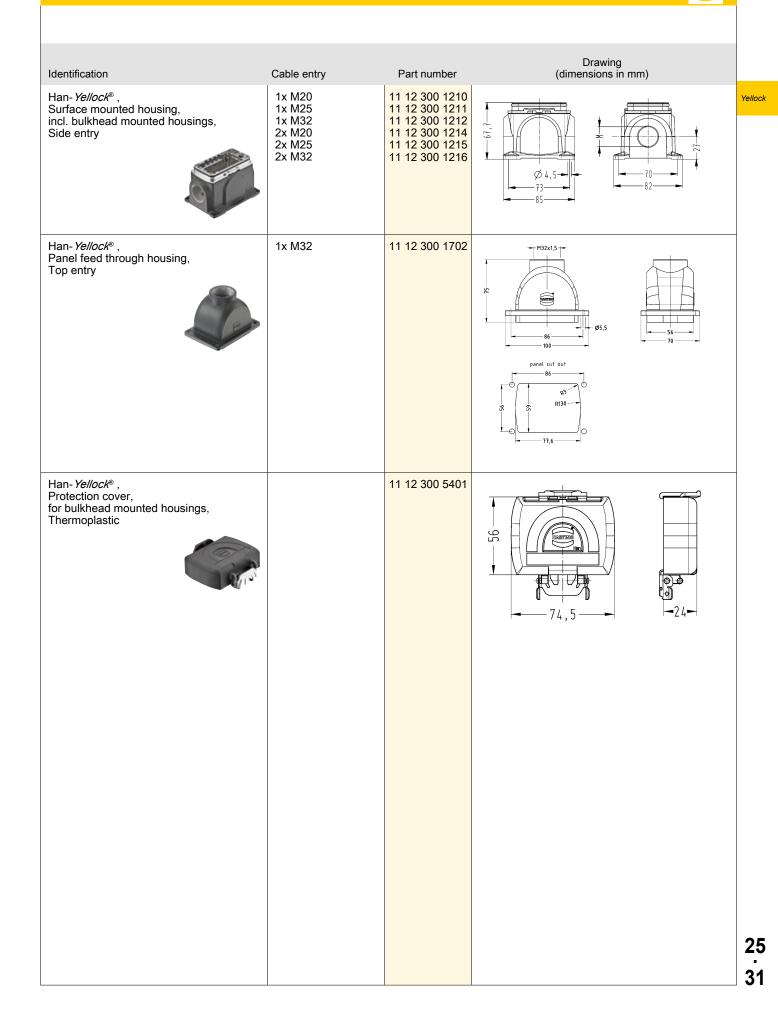
Size Han- Yellock® 30

Hoods/housings for industrial applications





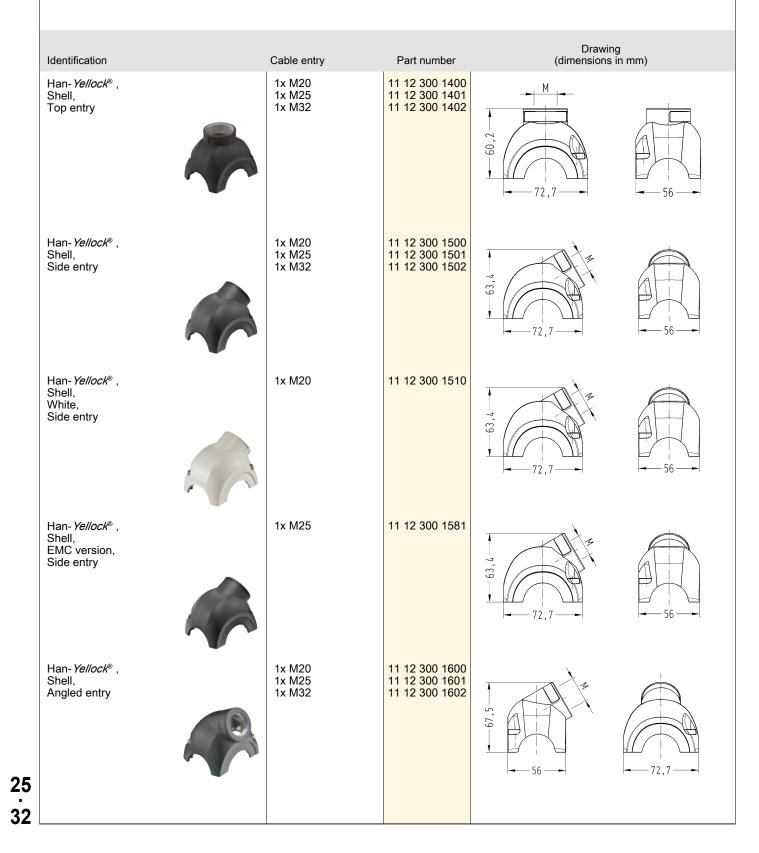




#### Size Han- Yellock® 30

Hoods/housings for industrial applications Push button

Yellock



HARTIN

## Size Han- Yellock® 30

Identification	Cable entry	Part number	Drawing (dimensions in mm)	
Han- <i>Yellock</i> <sup>®</sup> , Carrier hood, Plain push button		11 12 300 0100	87,6	56
Han- <i>Yellock</i> ® , Carrier hood, Push button, slot		11 12 300 0110	87,6	
Han- <i>Yellock</i> <sup>®</sup> , Protection cover, for carrier hoods, With fixing cord, Thermoplastic		11 12 300 5451	74,6	-14- 04-55

## Han-Yellock<sup>®</sup> 30 outdoor hoods/housings

Hoods/housings for outdoor applications

Yellock

25 34

Part number	Drawing (dimensions in mm)
11 13 300 0301	
11 13 300 0302	
	11 13 300 0301

Han- Yellock <sup>®</sup> 30 outdoor hoods/housings			Size Han- <i>Yellock</i> ® 30		
Hoods/housings for outdoor applicat Push button	tions				
					Yellock
Identification	Cable entry	Part number	Drawing (dimensions in m	m)	
Han- <i>Yellock</i> <sup>®</sup> , Shell, Top entry	1x M25	11 13 300 1401			
Han- <i>Yellock</i> <sup>®</sup> , Shell, Side entry	1x M25	11 13 300 1501	72,7		
Han- <i>Yellock</i> <sup>®</sup> ,	1x M25	11 13 300 1601		56	
Shell, Angled entry			5°. 29 56	72,7	
Han- <i>Yellock</i> <sup>®</sup> , Carrier hood, Plain push button		11 13 300 0100			
Han- <i>Yellock</i> <sup>®</sup> , Carrier hood, Push button, slot		11 13 300 0110			
					25



#### **Features**

Yellock

- for six Han-Yellock® modules
- ٠ High robustness due to internal locking mechanism
- Two-part hood
- Earthed contacts PE in crimped or Han-Quick Lock® termination
- Protection cover retrofit on housing side

#### **Technical characteristics**

Un-/locking temperature -10 ... +85 °C Limiting temperature -40 ... +125 °C ≥500 Mating cycles Degree of protection acc. to IEC IP65, IP67 60529 Material (hood/housing) die-cast Surface (hood/housing) Colour (hood/housing) Material (seal) NBR Material (locking) Colour (locking) Melon yellow Material flammability class acc. V-0 to UL 94 RoHS compliant

Zinc die-cast, Aluminium Passivated, Powder-coated Metallic, RAL 7021 (black grey), RAL 9005 (jet black) Polyamide, Stainless steel

#### Specifications and approvals

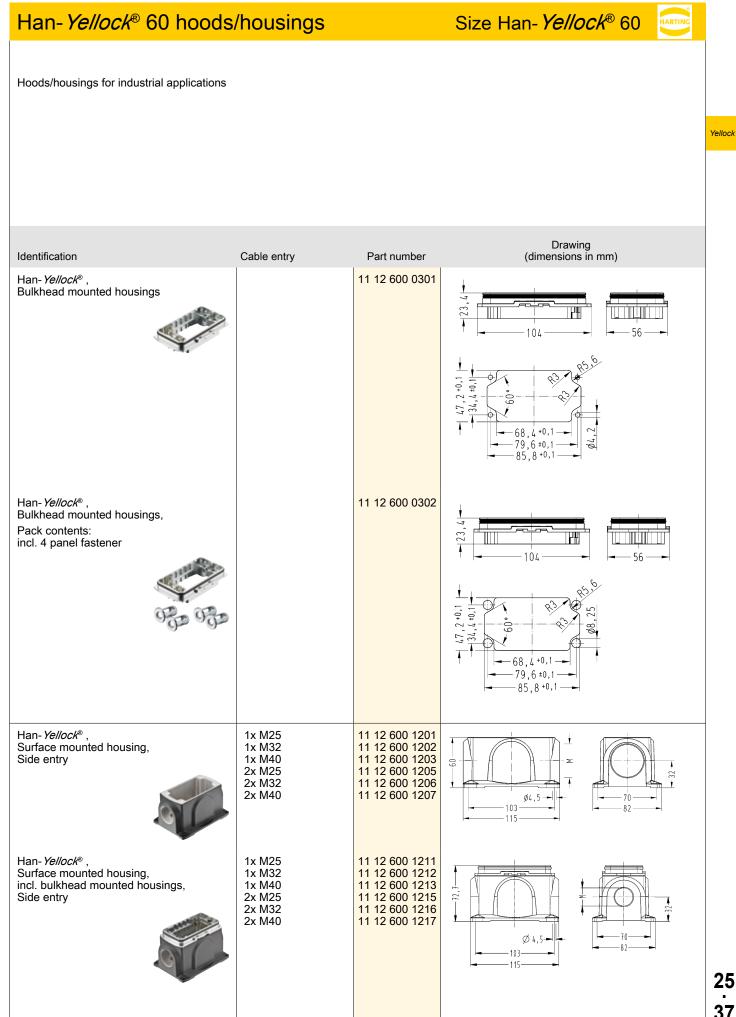
EN 60664-1 IEC 61984 DNV GL

### Details





① M4 fixing screw (screw length > 20 mm, tightening torque: 1Nm) ② Panel fastener (tightening torque: 2.3 Nm)



# Han-Yellock® 60 hoods/housings

Panel feed through housing. Top only							
Han-Yéléset: Top entry       2x M25       11 12 600 1711         Hen-Yéléset: Top entry       Image: State of the state o		Identification	Cable entry	Part number	Drawing (dimensions in mm)		
	Yellock	Han- <i>Yellock</i> ® , Panel feed through housing, Top entry		11 12 600 1711	$\begin{array}{c} 125x1,5 \\ \hline \\ 125x1,5 \\ \hline \\ 132 \\ \hline \\ 10 \\ \hline \\ 10 \\ 10 \\ \hline 10 \\$		
	25 38	Han-Yellock®, Protection cover, for bulkhead mounted housings, Thermoplastic		11 12 600 5401			

# Han-Yellock® 60 hoods/housings

Size Han- Yellock® 60

ARTING

Hoods/housings for industrial applications Push button

Identification	Cable entry	Part number	Drawing Part number (dimensions in mm)		
Han- <i>Yellock</i> <sup>®</sup> , Shell, Top entry	1x M20, 1x M25 1x M25 1x M32 1x M40 2x M25	11 12 600 1415 11 12 600 1401 11 12 600 1402 11 12 600 1403 11 12 600 1411	M25x1,5		
			52		
Han- <i>Yellock</i> <sup>®</sup> , Shell, Side entry	1x M25 1x M32 1x M40	11 12 600 1501 11 12 600 1502 11 12 600 1503			
Han- <i>Yellock</i> <sup>®</sup> , Carrier hood, Plain push button		11 12 600 0100			

Yellock

# Han-Yellock® 60 hoods/housings

# Size Han- Yellock® 60

Identification	Cable entry	Part number	Drawing (dimensions in mm)
Han- <i>Yellock</i> <sup>®</sup> , Carrier hood, Push button, slot		11 12 600 0110	
Han- <i>Yellock</i> ®, Protection cover, for carrier hoods, With fixing cord, Thermoplastic		11 12 600 5451	
		Han- <i>Yellock</i> <sup>®</sup> , Carrier hood, Push button, slot	Han- <i>Yellock</i> ®, Carrier hood, Push button, slot

Yell

Han-Yellock® 60 outdoor hoods/hou	sings	Size Han- <i>Yellock</i> ® 60	TING
Hoods/housings for outdoor applications			
Identification	Part number	Drawing (dimensions in mm)	
Han- <i>Yellock</i> <sup>®</sup> , Bulkhead mounted housings	11 13 600 0301		
Han-Yellock <sup>®</sup> , Bulkhead mounted housings, Pack contents: incl. 4 panel fastener	11 13 600 0302	$\begin{array}{c} & & & \\ & &$	

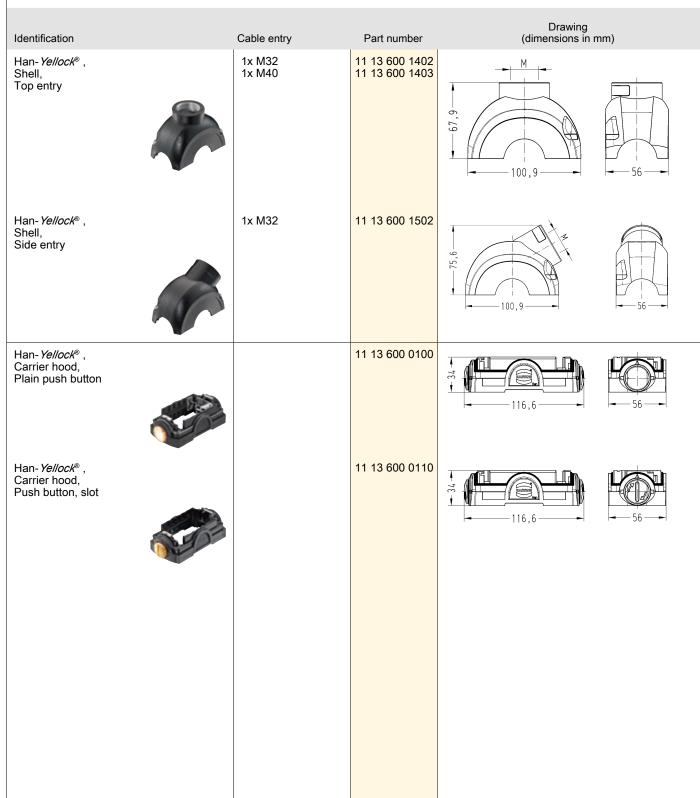
ellock

## Han-Yellock<sup>®</sup> 60 outdoor hoods/housings

Size Han- Yellock® 60

Hoods/housings for outdoor applications Push button

Yellock

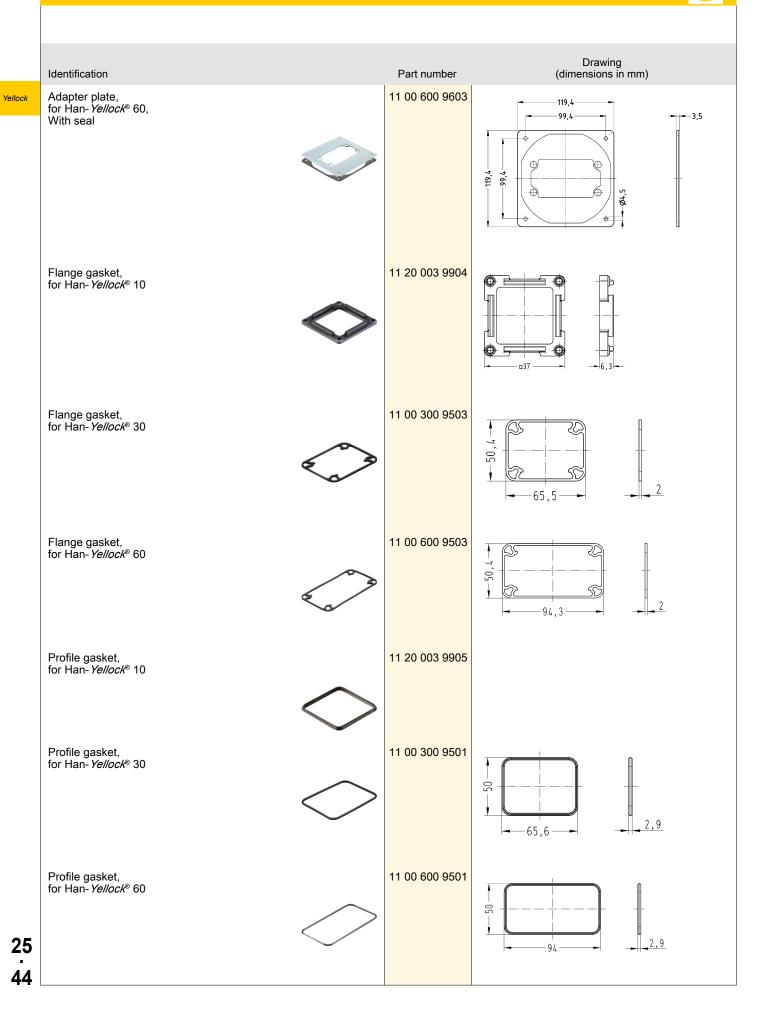


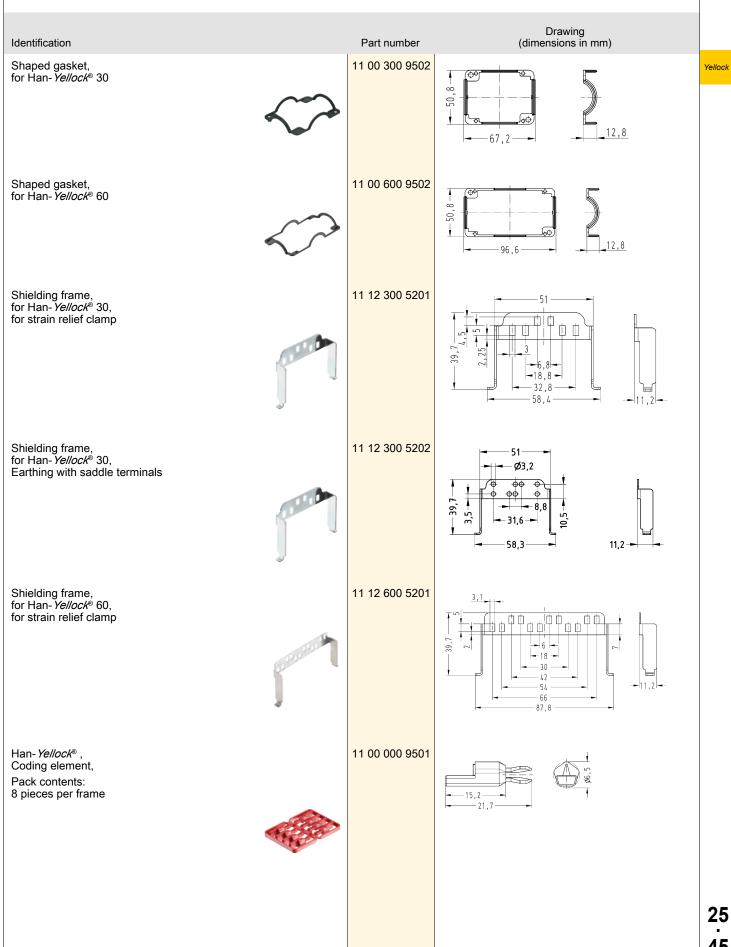
•								
A	n	$\sim c$	S	C	$\frown$	rı		C
	J		50	3	U	11	C	Э

Yellock

#### **Technical characteristics Technical characteristics** Steel, zinc plated, Thermoplastic Material (accessories) Material (seal) NBR Colour (seal) Black RoHS compliant Drawing (dimensions in mm) Identification Part number Adapter plate, for Han- Yellock® 30 11 00 300 9601 90 φ -\$ .09 80 Circular 68 mm punch for Han-Yellock® panel cut out φ 1 2 Ø4,5 76 Adapter plate, for Han- *Yellock*<sup>®</sup> 30, With seal 11 00 300 9603 90 -3,5 76 Ø4,5 80 9 φ Adapter plate, for Han- Yellock<sup>®</sup> 60 11 00 600 9601 85,8 79.6 -Ø8,25 4 ~ **1**99, 34, 47, 2 Ø4,5 -- 119,4

25 43





Yellock

	Identification	Part number	Drawing (dimensions in mm)
:	Fixing screws, M3, for Han- <i>Yellock</i> ® 10	11 20 003 9903	
	Identification strip, Pack contents: 500 pieces on a reel	11 00 000 9601	
	PE / N rail, Suitable for Han- <i>Yellock</i> <sup>®</sup> 30 surface mounted housing, Pack contents: 1 bar with fixing screws	11 00 000 9512	
	PE / N rail,         Suitable Han- Yellock® 60 surface mounted housing,         Pack contents:         1 bar with fixing screws	11 00 000 9511	
5			

Yellock

#### **Technical characteristics**

Contact resistance Material (contacts) RoHS RoHS exemptions ≤2 mΩ Copper alloy compliant with exemption 6c: Copper alloy containing up to 4 % lead by weight

#### Specifications and approvals

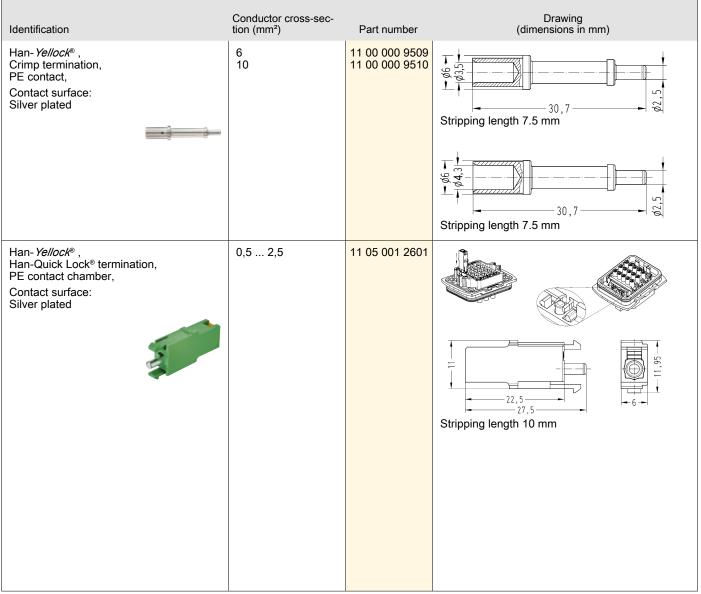
EN 60664-1 IEC 61984

## Details

Crimping tools see chapter 90

#### Remarks on the crimp technique

The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.



# Application





25 The KR 6 R900 sixx (KR AGILUS) with Han-Yellock<sup>®</sup> combines functional design and high technical requirements. Photo courtesy: KUKA Roboter GmbH