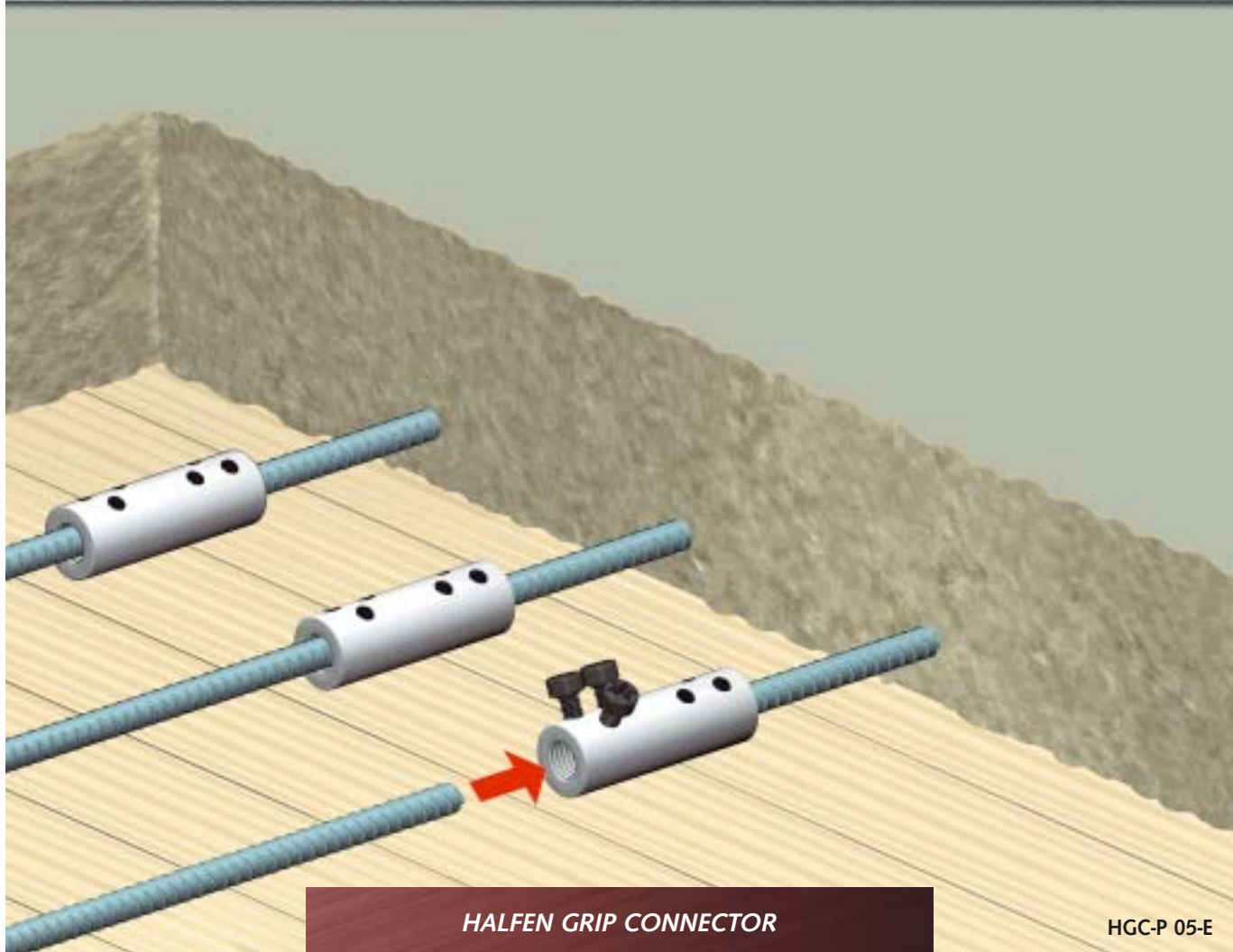


# HALFEN GRIP CONNECTOR HGC

PRODUCT INFORMATION



*HALFEN GRIP CONNECTOR*  
CONCRETE

HGC-P 05-E



**HALFEN·DEHA**  
YOUR BEST CONNECTIONS

## HALFEN GRIP CONNECTOR HGC

### Advantages

#### Advantages

Product application advantages at a glance:

- The rod ends require
  - no pretreatment
  - no sawing
  - no thread cutting
  - no pressing
  - no swaging
  - no welding
- The coupling and one end can be freely rotated before fitting.



- Officially approved by German Building Authority DIBt, Berlin.
- Connection is checked visually from sheared-off screws.
- Quick and simple to fit with HGC screws.
- Secure and simple connection.
- Smaller sleeves.
- HGC can also be used as transition coupler.
- Screw shear off at surface to sleeve.
- HGC works with various reinforcement steels (call for assistance).

# HALFEN GRIP CONNECTOR HGC

## Introduction

### System Description

The HGC HALFEN GRIP CONNECTOR (patent pending) is a mechanical coupler for concrete reinforcing steels with diameters of 8-28 mm. Using HGC, the transfer of forces is 100 % like using a continuous reinforcement bar.

The connection transfers tensile and compressive forces without special pre-treatment due to a mechanical interlocking inside the sleeve.

The two ends of the concrete reinforcing steel are connected inside the coupler using special screws which press into the concrete reinforcing steel when tightened and shear off at a defined torque. The inside of the coupler is provided with parallel grooves which clamp the reinforcing steel securely.

This principle ensures that the reinforcement is always properly installed. Once installed, the connections cannot work loose.

### Application

- Bridge construction
- Chimney stacks
- Connections on close-laid reinforcement
- Splicing of accidentally cutted reinforcement
- Reconstruction
- Pile foundations



# HALFEN GRIP CONNECTOR HGC

## Installation of HGC

### Installation

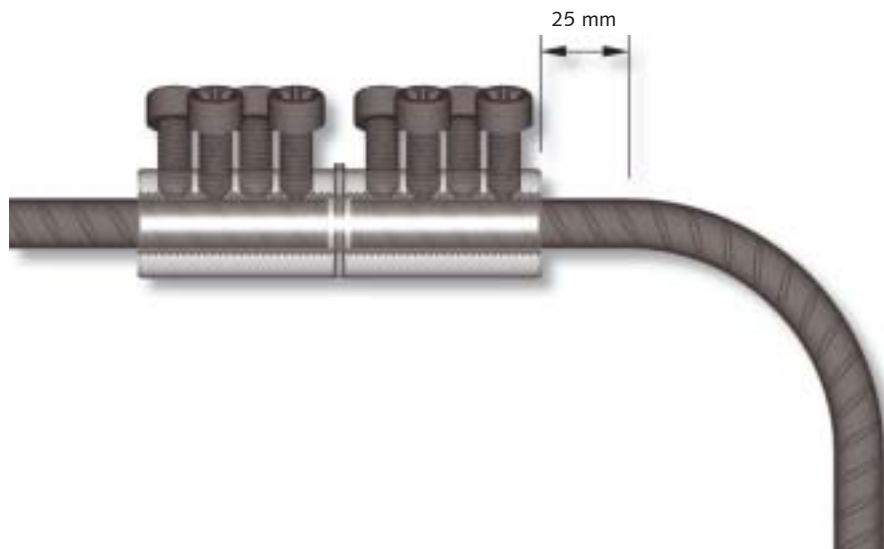
1)



Insert one reinforcing bar into the coupler (to stop pin). Secure screws by hand tightening. If the stop pin is removed, the central fit must be checked using suitable permanent marking at the required distance from the ends of the rods.

**Note:**

When installing bended reinforcing steels, the rod must be straight for at least 25 mm outside of the coupler.



2)



Insert second bar into the coupler to correct depth. Secure screws by hand tightening.

3)



Shear screws off by power operated tool (electronic torque wrench).

4)



Correct installed HGC coupler with sheared off screws.



HGC coupler after installation

We recommend to stagger the HGC couplers, especially in case of small reinforcement bar distances. (Notes for installation on page 5)

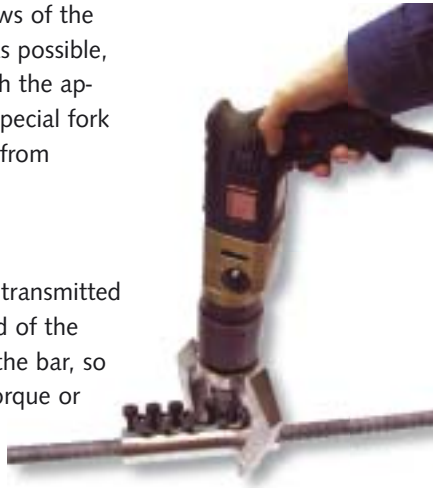
# HALFEN GRIP CONNECTOR HGC

## Installation of HGC

### Installation of HGC

In order to turn off the screws of the HGC coupler as efficiently as possible, an electrical screwdriver with the appropriate TORX bits and a special fork can be purchased or leased from HALFEN-DEHA. Please ask us for a quote.

The torque moment will be transmitted through the fork at the head of the electrical screw-driver onto the bar, so that the operator feels no torque or impact.



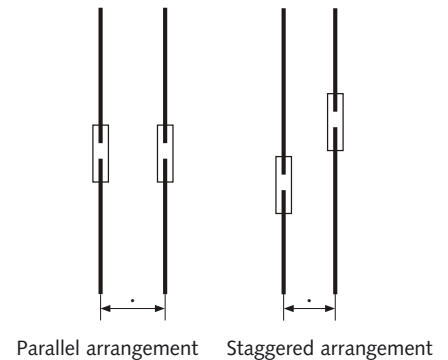
Designation	
Type HGC	Order number 0712.
HGC electrical screwdriver LDE-16 Rental set	025-00001
HGC electrical screwdriver LDE-16 Purchase set	020-00001
HGC-Torx insert 16 x T55	020-00007
HGC-Torx insert 16 x T60	020-00008
HGC-Torx insert 16 x T70	020-00009
HGC-Torx insert 16 x T80	020-00010

Structural note:

Please observe the following minimum bar distances when using the electric tool with shaft.

HGC Coupler	Parallel arrangement s (mm)	Staggered arrangement s (mm)
HGC 8/10 up to HGC 16	110	100
HGC 20 up to HGC 28	140	125

We recommend to stagger the HGC sleeves.



### Installation by change-over ratchet

For small quantities, the screws of HGC couplers can be screwed-off by using a manual changeover ratchet. The necessary tools are listed in the table below.

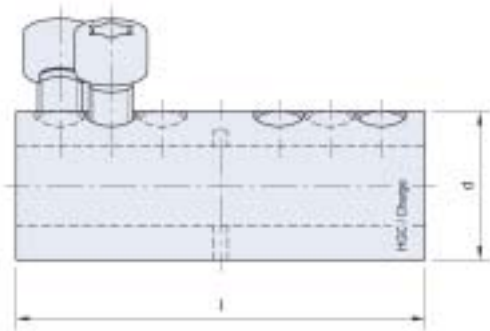
HGC coupler	Change-over ratchet	Torx-insert	Order number
HGC 8/10 HGC 12	Standard change-over ratchet 1/2"; Lever arm ≥ 0,4 m	T 55 1/2"	0712.020-00110
HGC 14 HGC 16 HGC 20	change-over ratchet with 3/4" - connection; order number 0712.020-00101	T 60 3/4" T 70 3/4"	0712.020-00111 0712.020-00112

We recommend installation by power screw-driver for HGC 25 and HGC 28.

# HALFEN GRIP CONNECTOR HGC

## Corrosion Protection and dimensions

### Identification and dimensions



Dimensions of the coupler (d, l) are shown in the table below.

Type HGC	Order number 0712.010-	ds (mm) rebar	Transition (mm)	d (mm)	l (mm)	HGC screws		
						No. bolts	Thread	Torx
HGC 8/10	00001	8/10	10 to 8	26,50	76	4	M10	T55
HGC 12	00002	12	12 to 10	31,80	100	6	M10	T55
HGC 14	00003	14	14 to 12	38,00	112	6	M12	T60
HGC 16	00004	16	16 to 14	38,00	140	8	M12	T60
HGC 20	00005	20	20 to 16	48,30	164	8	M14	T70
HGC 25	00006	25	25 to 20	51,00	216	10	M16	T80
HGC 28	00007	28	28 to 25/20	60,30	252	12	M16	T80

### Corrosion protection

If the connection has to meet special requirements for corrosion protection of the rebar, the inside of the sleeve can be filled with suitable anti-corrosion media such as DENSO Jet or DENSO Fill paste.

The paste must be injected into the coupler by the client through a filler opening after assembly, or the coupler can be filled with the paste before inserting the reinforcement bar.

Type HGC	Filling weights (g)
HGC 8/10	8
HGC 12	15
HGC 14	22
HGC 16	22
HGC 20	50
HGC 25	60
HGC 28	90



### Please indicate this extra function when placing your order:

The DENSO product and application instructions must be followed.

Designation	Denomination	Order number
3205-01	DENSO Fill Paste (250 g cartridge)	0711.010-00001

## HALFEN GRIP CONNECTOR HGC

### Specification

#### Tender

Position Text

1.0 HALFEN Grip Connector HGC for concrete reinforcing steel with general construction approval. For static and dynamic tensile and compression stresses. For reinforcement connections on floor slabs, floors, columns, girders and corbel, etc. Installation according to manufacturer specifications and in accordance with the approval.

			Quantity	Unit	Amount unit	Amount
1.1	HGC 8/10 for reinforcing steel	$d_s = 8/10$ mm	.....	pieces	.....	.....
1.2	HGC 12 for reinforcing steel	$d_s = 12$ mm	.....	pieces	.....	.....
1.3	HGC 14 for reinforcing steel	$d_s = 14$ mm	.....	pieces	.....	.....
1.4	HGC 16 for reinforcing steel	$d_s = 16$ mm	.....	pieces	.....	.....
1.5	HGC 20 for reinforcing steel	$d_s = 20$ mm	.....	pieces	.....	.....
1.6	HGC 25 for reinforcing steel	$d_s = 25$ mm	.....	pieces	.....	.....
1.7	HGC 28 for reinforcing steel	$d_s = 28$ mm	.....	pieces	.....	.....

# HALFEN GRIP CONNECTOR HGC

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## Contact

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