Installation Instructions 20398A



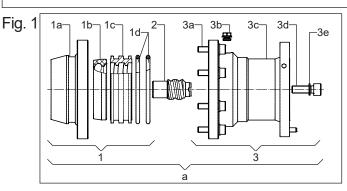
These instructions apply to:

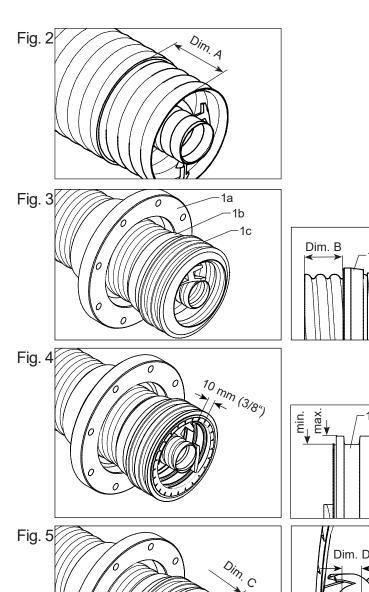
Connectors with EIA-flanges

for cables

HCA495-50, HCA550-50, HCA618-50

Figures show symbolic connector





These instructions were written for qualified and experienced personnel. Please read them carefully before starting work. Any liability or responsibility for the results of improper or unsafe installation practices is disclaimed! Please respect valid environmental regulations for assembly and waste disposal!

#### **Tools and Materials**

Measuring tape, cable knife, saw, flat file, flat pliers, metal shears, scraper, hexagon socket screw key size 6 mm, 10 mm and 14 mm, open-ended spanner 11 mm (7/16") for gas inlet, 3 mm (1/8") drill bit, mandrel Ø 3 (1/8") hammer, plastic hammer or flaring rod (hard wood).

## Connector disassembly, Fig. 1

- a) Disassembly of connector.
  - 1 Connector back end
  - 1a Back nut
  - 1b Gasket
  - 1c Clamping ring
  - 1d O-rings
  - 2 Screw unit (inner conductor)
  - 3 Connector head
  - 3a Hexagon screw
  - 3b Gas inlet screw (1/8" NPT)
  - 3c Connector outer conductor
  - 3d Hexagon screw
  - 3e copper sealing

### Cable trimming, Fig. 2

b) Clean cable end and saw it off rectangular to cable axis

Caution: Do not deform cable while trimming! Cut back cable jacket. Please observe that no metal particles get inside of the cable. It is recommended to seal the cable inside with a cloth temporarily. Deburr sawing edges! Remove all metal particles!

## Preparing of outer conductor, Fig. 3

- c) Slide part (1a) over the cable.
- d) Lubricate gasket (1b) with the supplied grease for easy installation.

Screw part (1b) onto outer conductor close against jacket.

- Check smooth fit of part (1b) in the cable corrugation.
- e) Screw part (1c) against part (1b)

Notice: Observe the cone direction of the gasket!

# Flaring of outer conductor, Fig. 4

1c

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f) Cut slits in the protruding outer conductor in axial direction until part (1c). The spacing of the slits shall be aprox. 10 mm (3/8").

Flare outer conductor segments outwards against part (1c). Use flaring rod (hard wood).

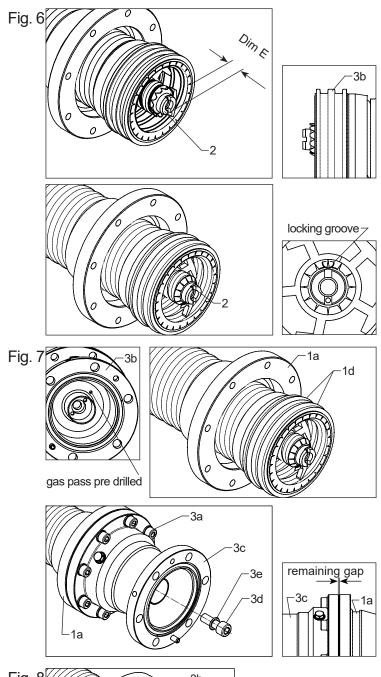
The flared cable outer conductor must be equally thick, if not it can be obtained by finishing this flared area with a file. The flared sebments that exeed the diameter of part (1c) must be cut back with metal shears of flat file.

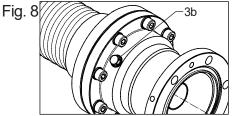
## Flaring of inner conductor, Fig. 5

g) Deburr inner conductor. Cut off protruding insulating helix even with outer conductor. Cut notches with metal shears (recommended: 12 notches).

Notice: Observe that the cloth has been removed after trimming!

Ensure the insulating helix remains in its original path. Do not push or stretch the insulating helix!





Cable	Dim A	Dim B	Dim C	Dim D	Dim E	Torque A approx.	Torque B approx.
HCA495-50	82 mm	55 mm	15 mm	8 mm	26 mm	20 Nm	40 Nm
	(3 7/32")	(2 3/16")	(19/32")	(5 /16")	(1 1/32")	(15 ftlb.)	(30 ftlb.)
HCA550-50	102 mm	74 mm	23 mm	10 mm	43 mm	20 Nm	60 Nm
	(4 1/32")	(2 29/32")	(29/32")	(13/32")	(1 11/16")	(15 ftlb.)	(45 ftlb.)
HCA618-50	104 mm	74 mm	28 mm	11 mm	42 mm	20 Nm	60 Nm
	(4 3/32")	(2 29/32")	(1 3/32")	(7/16")	(1 21/32")	(15 ftlb.)	(45 ftlb.)

# Preparing of inner conductor, Fig. 6

- h) Screw part (2) into cable inner conductor. Adjust part (2) with mandrel Ø3 (1/8") or screw driver.
- Push one jag of cable inner conductor into locking groove of part (2).

Flare back cable inner conductor, making sure that part (2) does not change its position.

The flared cable inner conductor must be equally thick, if not it can be obtained by finishing this flared area with a file. Overlaying tabs must be reworked. Remove protruding flaring edges.

#### Fitting of connector head, Fig. 7

- j) If a gas pass connector is needed drill through pre drilled hole in the insulator with 3 mm (1/8") drill bit.
- k) Put o-rings (1d, 2x) into grooves of part (1c). Apply supplied grease to parts (1d).
  Slide part (1a) onto part (1c).

Slide part (3c) onto part (1c) of prepared cable end. Tightly and equally screw together part (3c) and part (1a) with hexagon socket screws parts (3a). Apply torque acc. to table.

At correct installation a small gap will remain between part (1a) and part (3c).

 Screw up hexagon screw (3d) and copper sealing (3e) with part (2). Apply torque acc. to table. Note: In case of repeated assembly exchange the worn-out copper sealing part (3e) with the enclosed spare sealing.

### Gas inlet (if required), Fig. 8

m) Remove part (3b) and install a suitable tube adapter.