



# CONNECTION COMPONENTS



HEATING &  
COOLING MATS

PREFABRICATED  
PRODUCTS

TUBES, SUPPLY &  
RETURN LINES

CONNECTION  
COMPONENTS

FITTINGS

MEASUREMENT &  
CONTROL TECHNOLOGY

SYSTEM SEPERATION  
PLASTIC MANIFOLD

FIXING  
MATERIAL

TOOLS &  
ASSEMBLY KIT

## 6 Push-Lock Connection System

The Clina connection system consists of flexible hoses and Clina push-lock connections. By inserting the flexible hoses, the capillary tube mats are easily and securely connected with the supply and return lines of the piping system. At present more than **2 million** Clina push-lock connections are Europe-wide in use.

Clina connection systems consist of guide sleeves and cartridges which were exclusively developed for Clina. The claw fastener ensures that these connections, which are under pressure, do not loosen or become leaky even after years of operational service. A guide sleeve ensures the correct seating of the hose nipple of the flexible hose. The nipples of the flexible hoses are made of rust-proof metal.

An O-ring is used for sealing purposes and this prevents water from coming into contact with the guide sleeve. The O-ring cannot be pressed out of its position even if the hose nipples are pressed in a diagonally angle.

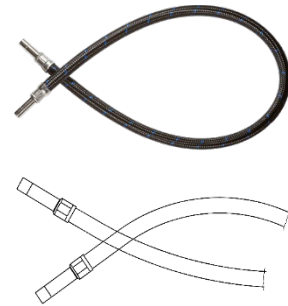
Clina connections are connected to the mat distributor pipe of the Clina capillary tube mat by socket welding or inside socket welding.

## 6.1 Flexible Hoses

### 6.1.1 FLEXIBLE HOSES 10

#### TECHNICAL DATA

<b>DESIGNATION</b>	flexible hoses for push-lock system 10 mm
<b>ITEM NO.</b>	SNY 10.
<b>DN</b>	10
<b>HOSE NIPPLE Ø OUTSIDE</b>	10 mm (on both sides)
<b>LENGTH</b>	500 mm, 800 mm, 1200 mm, 5000 mm
<b>PRESSURE STAGE PN</b>	10
<b>MATERIAL/SURFACE</b>	hose nipple: nickel-plated brass inner hose: EPDM coating: high pressure synthetic material

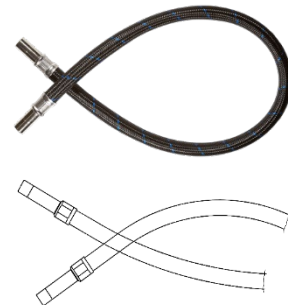


LENGTH	ITEM NO.
500 mm	SNY 10.0500
800 mm	SNY 10.0800
1200 mm	SNY 10.1200
5000 mm	SNY 10.5000

### 6.1.2 FLEXIBLE HOSES 15

#### TECHNICAL DATA

<b>DESIGNATION</b>	flexible hoses for push-lock system 15 mm
<b>ITEM NO.</b>	SNY 15.
<b>DN</b>	13
<b>HOSE NIPPLE Ø OUTSIDE</b>	15 mm (on both sides)
<b>LENGTH</b>	500 mm, 800 mm, 1200 mm
<b>PRESSURE STAGE PN</b>	10
<b>MATERIAL/ SURFACE</b>	hose nipple: nickel-plated brass inner hose: EPDM coating: high pressure synthetic material



LENGTH	ITEM NO.
500 mm	SNY 15.0500
800 mm	SNY 15.0800
1200 mm	SNY 15.1200

## 6.2 Push-Lock Connections

### 6.2.1 Push-Lock Connections 10 mm

suitable for Clina flexible hoses 10

#### STRAIGHT CONNECTION WITH INSIDE SOCKET

**TECHNICAL DATA**

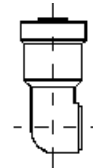
<b>DESCRIPTION</b>	straight connection with inside socket for PP-pipe 20 x 2,00 mm, for inside socket welding
<b>ITEM NO.</b>	FGAI 20/10
<b>PUSH-LOCK SYSTEM</b>	10 mm
<b>Ø OUTSIDE</b>	20 mm
<b>MATERIAL/COLOUR</b>	PP-R/blue



#### SIDE CONNECTION WITH INSIDE SOCKET

**TECHNICAL DATA**

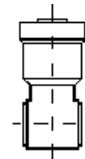
<b>DESCRIPTION</b>	side connection with inside socket for PP-pipe 20 x 2,00 mm, for inside socket welding
<b>ITEM NO.</b>	FSAI 20/10
<b>PUSH-LOCK SYSTEM</b>	10 mm
<b>Ø OUTSIDE</b>	20 mm
<b>MATERIAL/COLOUR</b>	PP-R/blue



#### MIDDLE CONNECTION WITH INSIDE SOCKET

**TECHNICAL DATA**

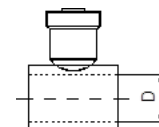
<b>DESCRIPTION</b>	middle connection with inside socket for PP-pipe 20 x 2,00 mm, for inside socket welding
<b>ITEM NO.</b>	FMAI 20/10
<b>PUSH-LOCK SYSTEM</b>	10 mm
<b>Ø OUTSIDE</b>	20 mm
<b>MATERIAL/COLOUR</b>	PP-R/blue



#### SOCKET CONNECTION

**TECHNICAL DATA**

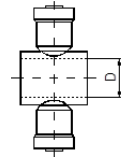
<b>DESCRIPTION</b>	socket connection for PP-pipe $d_a = 20$ mm, for heating element socket welding
<b>ITEM NO.</b>	FMA 20/10
<b>PUSH-LOCK SYSTEM</b>	10 mm
<b>Ø OUTSIDE</b>	20 mm
<b>MATERIAL/COLOUR</b>	PP-R/blue



## DOUBLE SOCKET CONNECTION

### TECHNICAL DATA

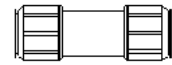
<b>DESCRIPTION</b>	double socket connection for PP-pipe da = 20 mm, for heating element socket welding
<b>ITEM NO.</b>	FMDA 20/10
<b>PUSH-LOCK SYSTEM</b>	10 mm
<b>Ø OUTSIDE</b>	20 mm
<b>MATERIAL/COLOUR</b>	PP-R/blue



## PUSH-LOCK CONNECTION, STRAIGHT 10

### TECHNICAL DATA

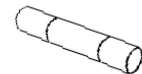
<b>DESCRIPTION</b>	push-lock connection straight 10 mm, suitable for Clina flexible hoses 10
<b>ITEM NO.</b>	FSVG 10
<b>PUSH-LOCK SYSTEM</b>	10 mm
<b>Ø INSIDE</b>	10 mm
<b>LENGTH</b>	45 mm
<b>MATERIAL/COLOUR</b>	plastic/white



## DOUBLE NIPPLE 10

### TECHNICAL DATA

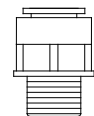
<b>DESCRIPTION</b>	double nipple 10 mm
<b>ITEM NO.</b>	FDON 10
<b>PUSH-LOCK SYSTEM</b>	10 mm
<b>DN</b>	8
<b>Ø OUTSIDE</b>	10 mm
<b>LENGTH</b>	45 mm
<b>MATERIAL/SURFACE</b>	nickel-plated brass



## SCREW-IN CONNECTOR, STRAIGHT 10 X 1/2" EXTERNAL SCREW THREAD

### TECHNICAL DATA

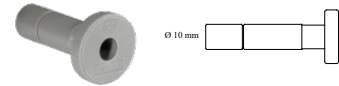
<b>DESCRIPTION</b>	screw-in connector with retaining ring, straight 10 x 1/2" external screw thread, suitable for Clina flexible hoses 10
<b>ITEM NO.</b>	FSVAGM 10
<b>PUSH-LOCK SYSTEM</b>	10 mm
<b>Ø INSIDE</b>	10 mm
<b>MATERIAL/SURFACE</b>	brass



## PLUG 10

### TECHNICAL DATA

<b>DESCRIPTION</b>	plug 10 mm for closing push-lock connections 10 mm
<b>ITEM NO.</b>	FST 10
<b>PUSH-LOCK SYSTEM</b>	10 mm
<b>Ø OUTSIDE</b>	10 mm
<b>MATERIAL/COLOUR</b>	plastic/grey



## 6.2.2 Push-Lock Connections 15 mm suitable for Clina flexible hoses 15

### STRAIGHT CONNECTION WITH RETAINING RING

#### TECHNICAL DATA

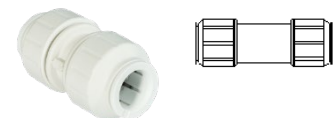
<b>DESCRIPTION</b>	straight connection with retaining ring, with pipe connection for heating element socket welding, suitable for Clina flexible hoses 15
<b>ITEM NO.</b>	FGAS 20/15
<b>PUSH-LOCK SYSTEM</b>	15 mm
<b>CONNECTOR Ø OUTSIDE</b>	20 mm
<b>MATERIAL/COLOUR</b>	PP-R/blue



### PUSH-LOCK CONNECTION 15

#### TECHNICAL DATA

<b>DESCRIPTION</b>	push-lock connection 15, suitable for Clina flexible hoses 15
<b>ITEM NO.</b>	FSVG 15
<b>PUSH-LOCK SYSTEM</b>	15 mm
<b>Ø INSIDE</b>	15 mm
<b>LENGTH</b>	60 mm
<b>MATERIAL/COLOUR</b>	plastic/white



### DOUBLE NIPPLE 15

#### TECHNICAL DATA

<b>DESCRIPTION</b>	double nipple 15
<b>ITEM NO.</b>	FDON 15
<b>PUSH-LOCK SYSTEM</b>	15 mm
<b>DN</b>	13
<b>Ø OUTSIDE</b>	15 mm
<b>LENGTH</b>	65 mm
<b>MATERIAL/SURFACE</b>	nickel-plated brass



## SCREW-IN CONNECTOR, STRAIGHT 15 X 1/2" EXTERNAL SCREW THREAD

### TECHNICAL DATA

<b>DESCRIPTION</b>	screw-in connector with retaining ring, straight 15 x 1/2" external screw thread, suitable for Clina flexible hoses 15
<b>ITEM NO.</b>	FSVAGM 15
<b>PUSH-LOCK SYSTEM</b>	15 mm
<b>Ø INSIDE</b>	15 mm
<b>MATERIAL/SURFACE</b>	brass



## TRANSITION NIPPLE EUROCONUS STRAIGHT

### TECHNICAL DATA

<b>DESCRIPTION</b>	transition nipple Euroconus straight, for pipe connections with clamp ring connection 3/4" Euroconus
<b>ITEM NO.</b>	FSG 2015
<b>PUSH-LOCK SYSTEM</b>	15 mm
<b>Ø OUTSIDE</b>	15 mm
<b>MATERIAL/SURFACE</b>	nickel-plated brass



## PLUG 15

### TECHNICAL DATA

<b>DESCRIPTION</b>	plug 15 mm for closing push-lock connections 15 mm
<b>ITEM NO.</b>	FST 15
<b>PUSH-LOCK SYSTEM</b>	15 mm
<b>Ø OUTSIDE</b>	15 mm
<b>MATERIAL/COLOUR</b>	plastic/blue



