Tradition and value:
Copper pipe meander from BEKA

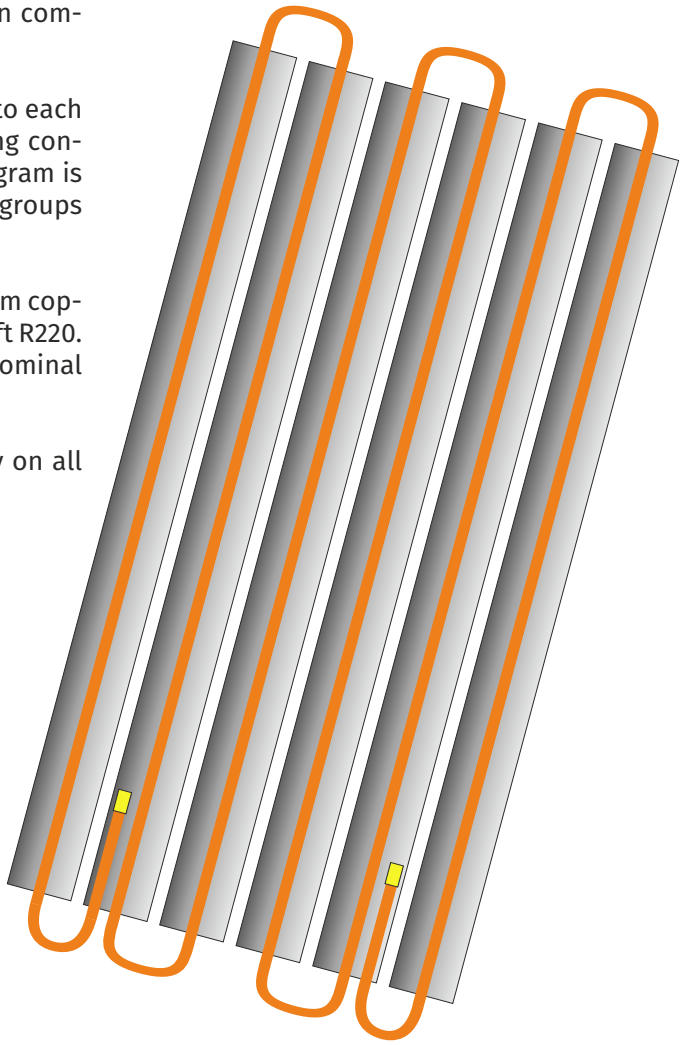
BEKA copper pipe meanders are used as surface heat exchangers in cooling and heating ceilings. The conventional applications are suspended metal panel ceilings and suspended plasterboard ceilings.

BEKA copper pipe elements are manufactured in the serpentine design. For efficient heat transfer from the cooling or heating water to the outer surface of the ceiling, the copper tubes are pressed into positive-locking aluminum heat-conducting profiles. During planning, a wide range of tube dimensions, distances between meander pipes and widths of heat-conducting profiles enable optimization in terms of thermal capacity and costs. The serpentine copper tubing is manufactured to order in the required dimension on computer-controlled production lines.

All BEKA serpentine copper tubes can be connected to each other and to the water system by soldering, crimping connections or quick-action couplings. The product program is completed by a range of flexible hoses, connector groups and fittings.

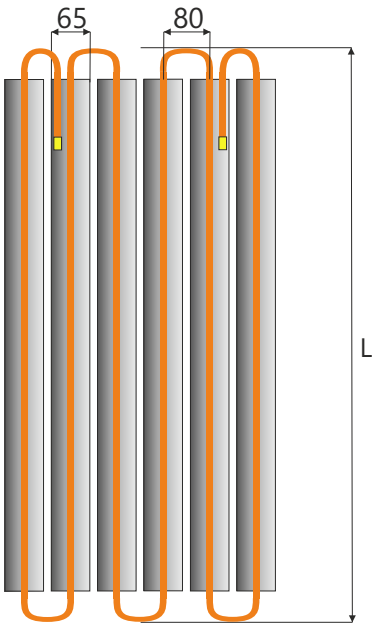
BEKA serpentine copper tubing is bent exclusively from copper tubes Cu-DHP according to EN 12449 standard, soft R220. The tube ends are deburred and calibrated to the nominal dimension of the serpentine tubes.

A 100% quality control as well as a 15 year warranty on all BEKA products ensure the constant high quality.



C.M10.65.n.L.080.aa | BEKA Serpentine copper tubing

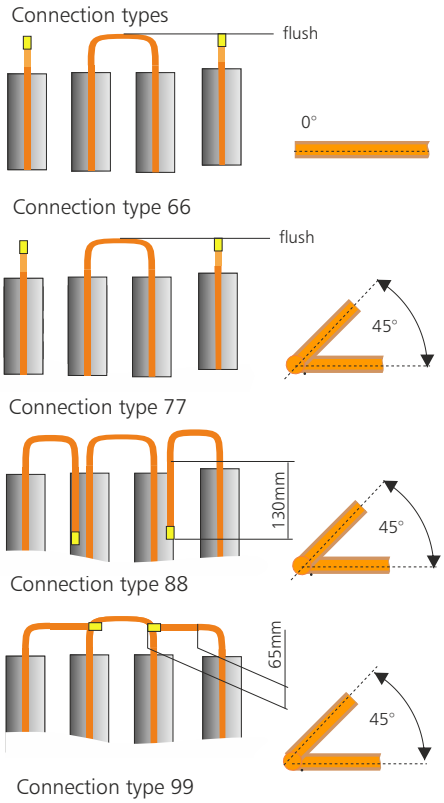
Material Pipe	Cu-DHP acc. EN 12449, soft R220
Heat-conducting profile material crimp pressed on tube	Aluminum AlMgSi0, 5 F22
Ø Cooling tube Width of heat-conducting profile Cooling tube intervals (A)	10 x 0,6 mm 65 mm 80 mm
Length (L) No. of tubes (n)	580 - 2200 mm (in 10 mm increments) min. 2 pieces max. 12 pieces
Mass when filled Water content	6,23 kg/m² 0,730 l/m²
Cooling capacity* Operating pressure	79 W/m² 4 bar
Connection type aa (60 mm tube ends)	66, straight 0° 77, straight 45° 88, 2 x 180° inwards 45° 99, 2 x 90° inwards 45°
Application area	Metal ceiling panels



Ordering example:
Serpentine copper tubing, 10 mm diameter,
with 65mm wide heat-conducting profiles,
6 tubes, 1500 mm long, tube spaced 80 mm intervalls,
both tube ends straight, 60 mm

C.M10.65.6.1500.080.66

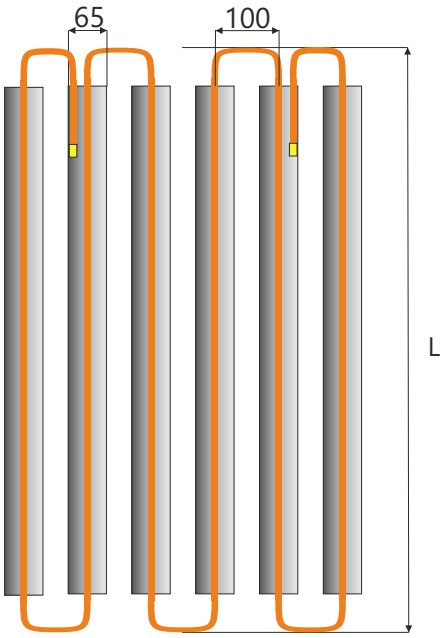
*Capacity attained under conditions defined by EN 14240.



Product versions	
No heat-conducting profile	individual further processing
with Hotmelt-adhesive strip for bonding in ceiling panels	Further processing by metal ceiling manufacturer
Boded in factory in supplied metal ceiling panels	Ceiling panels / trays up to 2200 mm long can be fitted
Customized versions with deviating tube intervalls	Assembly for e.g. sprinkler installations or lamps
Individual design of connections	With respect to the free tube ends and the bending radiuses or angles

C.M10.65.n.L.100.aa | BEKA Serpentine copper tubing

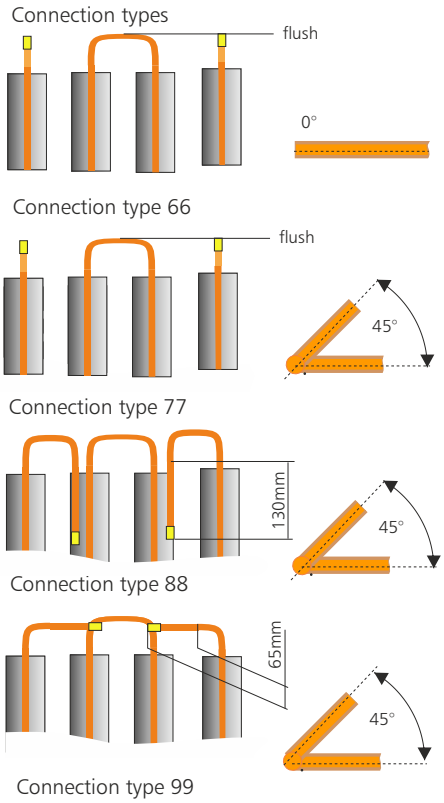
Material Pipe	Cu-DHP acc. to EN 12449, soft R220
Heat-conducting profile material crimp pressed on tube	Aluminum AlMgSi0, 5 F22
Ø Cooling tube Width of heat-conducting profile Cooling tube intervals (A)	10 x 0,6 mm 65 mm 100 mm
Length (L) No. of tubes (n)	580 - 2200 mm (in 10 mm increments) min. 2 pieces max. 12 pieces
Mass when filled Water content	5,19 kg/m² 0,608 l/m²
Cooling capacity* Operating pressure	64 W/m² 4 bar
Connection type aa (60 mm tube ends)	66, straight 0° 77, straight 45° 88, 2 x 180° inwards 45° 99, 2 x 90° inwards 45°
Application area	Metal ceiling panels Plasterboard ceilings



Ordering example:
Serpentine copper tubing, 10 mm diameter,
with 65mm wide heat-conducting profiles,
6 tubes, 1500 mm long, tube spaced 100 mm intervalls,
both tube ends straight, 60 mm

C.M10.65.6.1500.100.66

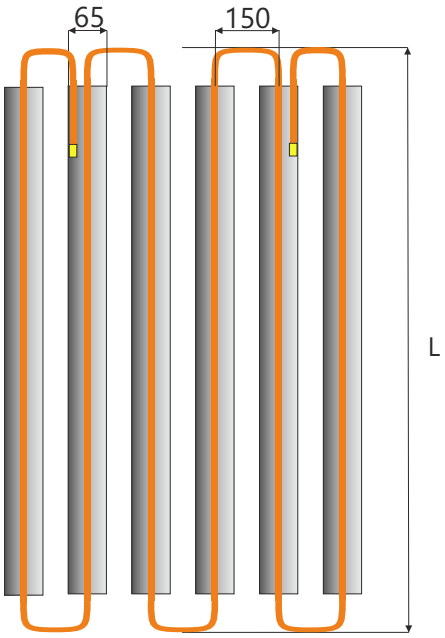
*Capacity attained under conditions defined by EN 14240.



Product versions	
No heat-conducting profile	individual further processing
with Hotmelt-adhesive strip for bonding in ceiling panels	Further processing by metal ceiling manufacturer
Boded in factory in supplied metal ceiling panels	Ceiling panels / trays up to 2200 mm long can be fitted
Customized versions with deviating tube intervalls	Assembly for e.g. sprinkler installations or lamps
Individual design of connections	With respect to the free tube ends and the bending radiuses or angles

C.M10.65.n.L.150.aa | BEKA Serpentine copper tubing

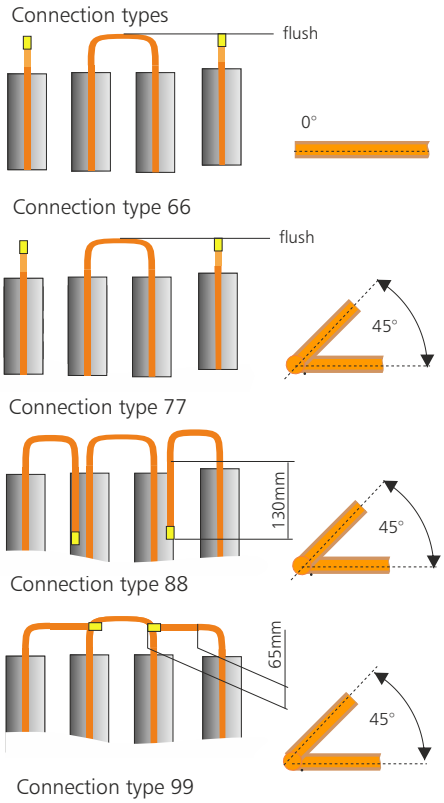
Material Pipe	Cu-DHP acc. EN 12449, soft R220
Heat-conducting profile material crimp pressed on tube	Aluminum AlMgSi0, 5 F22
Ø Cooling tube Width of heat-conducting profile Cooling tube intervals (A)	10 x 0,6 mm 65 mm 150 mm
Length (L) No. of tubes (n)	580 - 2200 mm (in 10 mm increments) min. 2 pieces max. 12 pieces
Mass when filled Water content	3,63 kg/m² 0,426 l/m²
Cooling capacity* Operating pressure	52 W/m² 4 bar
Connection type aa (60 mm tube ends)	66, straight 0° 77, straight 45° 88, 2 x 180° inwards 45° 99, 2 x 90° inwards 45°
Application area	Metal ceiling panels Plasterboard ceilings



Ordering example:
Serpentine copper tubing, 10 mm diameter,
with 65mm wide heat-conducting profiles,
6 tubes, 1500 mm long, tube spaced 150 mm intervalls,
both tube ends straight, 60 mm

C.M10.65.6.1500.150.66

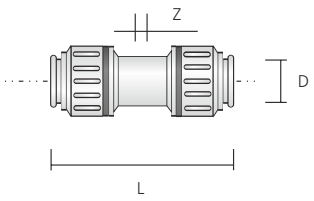
*Capacity attained under conditions defined by EN 14240.



Product versions	
No heat-conducting profile	individual further processing
with Hotmelt-adhesive strip for bonding in ceiling panels	Further processing by metal ceiling manufacturer
Boded in factory in supplied metal ceiling panels	Ceiling panels / trays up to 2200 mm long can be fitted
Customized versions with deviating tube intervalls	Assembly for e.g. sprinkler installations or lamps
Individual design of connections	With respect to the free tube ends and the bending radiuses or angles

A.V.10 | Plug-in connector

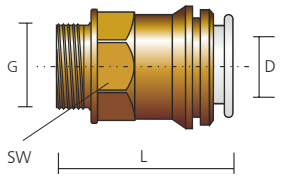
Material	Plastic, Claw: stainless
Diameter (D) Length (L) Design dimension (Z)	10 mm 44 mm 1 mm
Description	Plug-in connector for flexible hoses to serpentine coppert tubes



Ordering example:
Plug-in connector 10 mm: A.V.10

A.AGV.10 | Plug-in connector/Screw connector 10 x 1/2" external thread, Brass

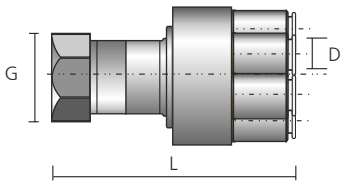
Material	Brass, Plastic, Claw: stainless
Diameter Length (L) Thread (G) Spanner-width (SW)	10 mm 30 mm 1/2" AG 20 mm
Description	Plug-in connector 10mm diameter and 1/2" external thread



Ordering example:
Plug-in connector 10 mm 1/2" e.t.: A.AGV.10

E.UV.10.4 | Distributor arm for 10 mm pipes (4 connections)

Material	Brass, Plastic, Claw: stainless
Diameter (D) Length (L) Thread Spanner-width (SW)	10 mm 53 mm 1/2" IG 44 mm
Description	Plug-in connections 4 x diameter 10 mm, 1/2" inner thread



Ordering example:
Distributor arm 4 connections for 10 mm 1/2" i.t.: E.UV.10.4

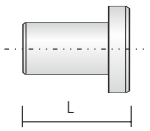
R.RR.500.10.1.1 | PE-RT Pipe

Material	PE-RT 5-layer composite Pipe, Oxygen tight acc. DIN 4726 ISO 24033/22391/21003
Diameter (D) Length (L)	10 x 1,1 mm 600 m
Application	flexible connection tube to cut in size, always use with support sleeve A.STS.10

Ordering example:
PE-RT Pipe 10 x 1,1 mm: R.RR.600.10.1.1

A.STS.10 | Support sleeve for 10 mm PE-RT Pipe

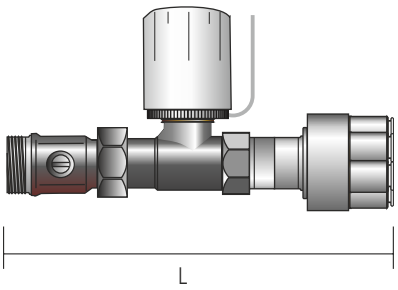
Material	Plastic
Length (L)	17 mm
Description	Support sleeve for PE-RT Pipe 10 x 1,1mm diameter



Ordering example:
Support Sleeve for PE-RT Pipe 10x1,1 mm: A.STS.10

E.SAR15.4 | Connecting point for return pipe

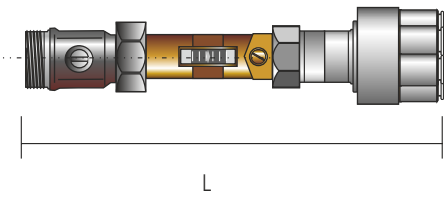
Material	Brass and Brass nickel-plated
Arrangement	4x Plug-in connections 10 mm Eurocone transition connector et 3/4"; cone tap, ball cock, regulation valve (thermal actuator 24 V AC/DC, closed when power off)
Version	Dimension: DN15 Length (L): 175 mm Kvs-Value: 1,7
Description	The connections are screwed completely tight and pressure checked. The image shows the design. Modified designs, such as with a boiler fill- and drain-cock, are available on request.



Ordering example:
Connection point for return pipe: E.SAR.15.4

E.SAV15.4 | Connection point for flow Pipe

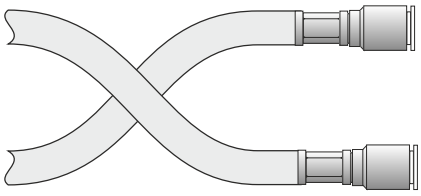
Material	Brass and Brass nickel-plated
Arrangement	4x Plug-in connections 10 mm Eurocone transition connector et 3/4"; ball cock and Tacosetter
Version	Dimension: DN15 Length (L): 200 mm Kvs-Value: 1,8 l/min: 2 - 8
Description	The connections are screwed completely tight and pressure checked. The image shows the design. Modified designs, such as with a boiler fill- and drain-cock, are available on request.



Ordering example:
Connection point for flow pipe: E.SAV15.4

A.KD | Connection hose with quick-action couplings

Material	Hose: HDPE Sheath: Stainless steel Press tube: Stainless Grommet: Brass Nickel-
Diameter (D) Length (L)	10 mm 800 mm
Description	Flexible connection hose with EVOHdiffusion barrier and quick-action couplings

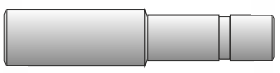


Ordering example:
Connection hose, stainless steel sheath, Length 800 mm; Diameter 10 mm: A.KD.800.10

Flexible hoses in other lengths and connection forms are available on request.

A.VST.10.12 | Connecting sleeve for flexible hoses ø 10 to ø 12 mm smooth

Material	Adapter: Nickel-plated brass
Diameter (D) Lenth (L)	10 mm, transition piece to 12 mm 55 mm
Description	Connection sleeve for connection hoses with smooth ø 10 to ø 12 mm



Ordering example:
A.VST.10.12

A.BS.10 | Sealing Plug.in

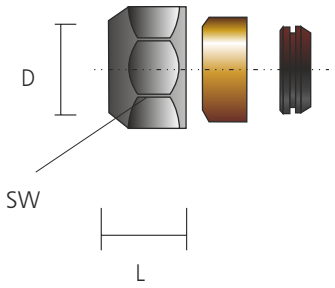
Material	Plastic
Diameter	10 mm
Description	Sealing Plug-in for quick-action coupling

Ordering example:
Sealing Plug-in Diameter 10 mm: A.BS.10

Deviations from the illustrations are possible. | April 2021

V.KV.CU.18 | Clamp screw connection - soft seal

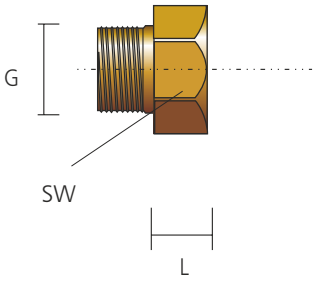
Material	Brass / Brass ickel-plated
Diameter Length (L) Spanner-width (SW)	18 mm 20 mm 30 mm
Design	Union nut 3/4", Clamp-ring, seal
Description	to connect connection points to serpentine copper tubes



Ordering example:
Clamp screw connection, soft seal : V.KV.CU.18

F.VIM.AP.1 | Eurocone screw connection - soft seal

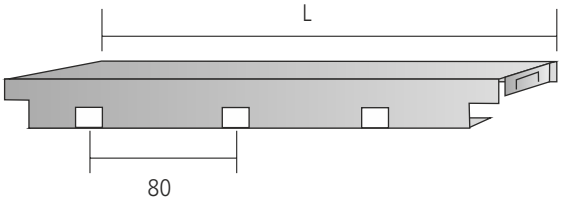
Material	Brass / Brass Nickel-plated
Outside thread (D) Length (L) Spanner-width (SW)	1/2" OT 20 mm 30 mm
Design	Union nut 3/4", Eurocone, self sealing
Description	to connect connection points to connection pipes or as transition pieces



Ordering example:
Eurocone screw connection, soft-seal : F.VIM.AP.1

V.SPACER.333.80 | Spacer for 80 mm intervals

Material	Galvanized steel sheeting
Nominal Length IntervalDivision (Division depend of nominal length)	333; 400; 500 mm 80 mm 3; 4; 5; 6; 7; 9
Description	Spacer for suspending serpentine copper tubing in plasterboard substructures



Ordering example:
Spacer for nominal length 333 mm; 4 x 80 mm interval: V.SPACER.333.80