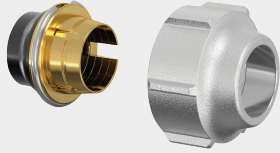


Connection Technology



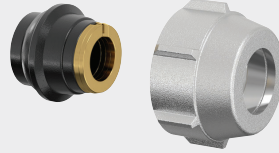
- *Compression Adapters*
- *Steel Pipe Adapters*

A11 Compression Adapter Set



P. 136

A1 Compression Adapter Set



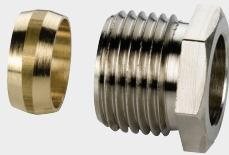
P. 137

A3 Compression Adapter Set



P. 138

Compression Fitting for Copper and Carbon Steel Pipes



P. 139

Angle Connection with Euro Taper



P. 139

Coupling Nipple with Euro Taper



P. 141

Angle Coupling with Euro Taper



P. 141

T-Piece with Euro Taper



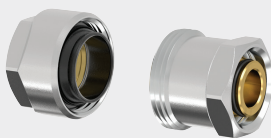
P. 142

Steel Pipe Adapter PLUS with Euro Taper



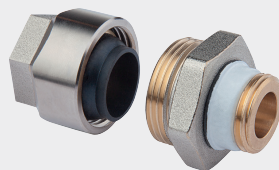
P. 144

Steel Pipe Adapter PLUS for Euro Taper



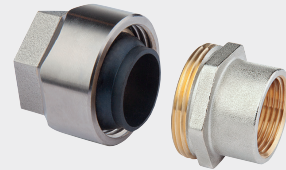
P. 145

Steel Pipe Adapter PLUS with Male Thread



P. 145

Steel Pipe Adapter PLUS with Female Thread

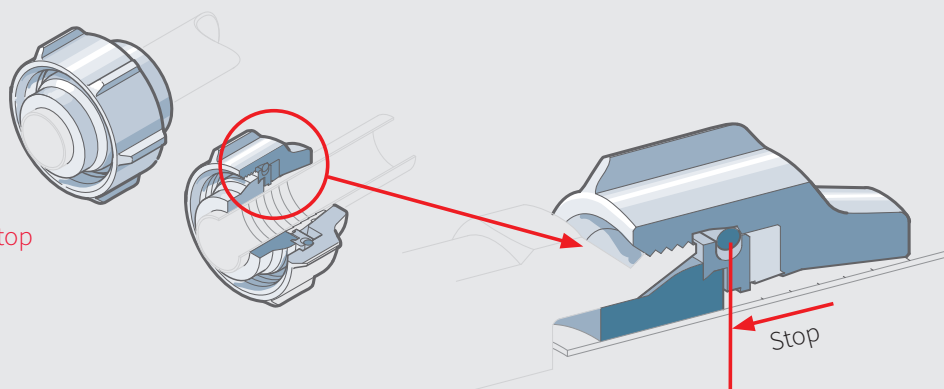


P. 146

COMPRESSION ADAPTERS

A11/F11 Compression Adapters - Innovative 2-stage Technology

Tighten without
torque through stop
technology

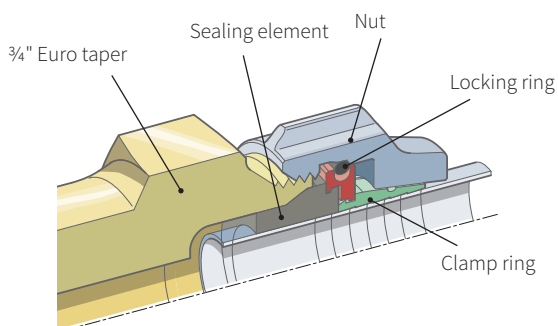


Stage 1 - Seal

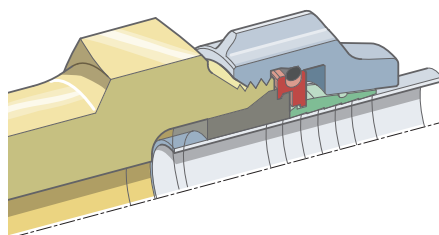
In the 1st step, the flexible sealing element is compressed. The connection is already 100% tight.

Stage 2 - Clamp

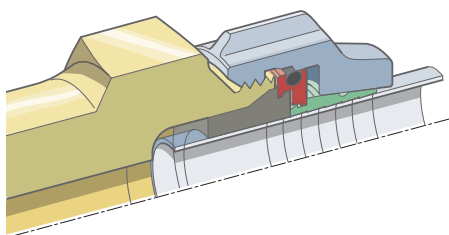
In the 2nd stage, the screw is tightened to the fixed stop, overcoming slight resistance, and the clamp ring is tightened to a precisely predetermined point. The connection is 100% tight.



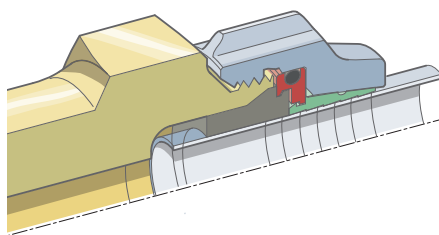
Starting condition



Stage 1: Seal



Stage 2: Clamp



Clamped state:
the nut is tightened to the stop

COMPRESSION ADAPTERS

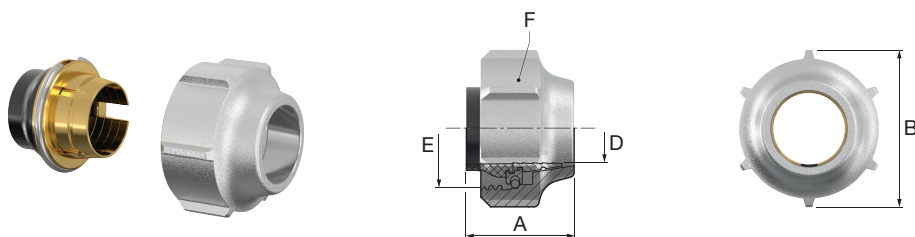
→ Further compression adapters see *Design Connection Accessories and Accessories for Baseboard Connection Valves!*


A11 Compression Adapter Set

PG = 702

2 pcs. compression adapters for use in heating systems, for blank, nickel- and chrome-plated copper pipes, carbon steel pipes and stainless steel pipes, suitable for G 3/4" M Euro taper, elastic seal, extended clamp rings for high pull forces, no support sleeves required, ribbed nut (wrench size 30 mm), with fixed stop, 2-step function: sealing - clamping.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar
- High pulling forces specifically with hard pipe surfaces
- No torque specifications
- Gentle pipe connection without deformation of the connecting pipe
- Detachable connection
- Permanent seal thanks to uniquely developed raw material formula for sealing element



Type	Connection		Dimensions			 [Set]	Article no.
	E (ET)	D [mm]	A* [mm]	B [mm]	F (WS) [mm]		
KV A11 - 12 x 1	G 3/4" F	12 x 1	23	34	30	20	F11171
KV A11 - 14 x 1	G 3/4" F	14 x 1	23	34	30	20	F11172
KV A11 - 15 x 1	G 3/4" F	15 x 1	23	34	30	50	F11170
KV A11 - 16 x 1	G 3/4" F	16 x 1	23	34	30	20	F11173
KV A11 - 18 x 1	G 3/4" F	18 x 1	20	34	30	20	F11174

* Minimum insertion length

F11174 with fixed stop, without 2-step function

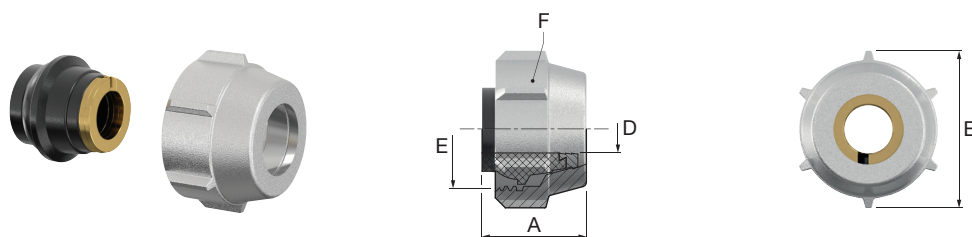



A1 Compression Adapter Set

PG = 702

2 pcs. compression adapters for use in heating systems, for blank copper pipes and carbon steel pipes, suitable for G $\frac{3}{4}$ " M Euro taper, elastic seal, no support sleeves required, ribbed nut (wrench size 30 mm), recommended tightening torque: 40 Nm.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Connection		Dimensions			 [Set]	Article no.
	E (ET)	D [mm]	A [mm]	B [mm]	F (WS) [mm]		
KV A1 - 10 x 1	G $\frac{3}{4}$ " F	10 x 1	22.3	34	30	20	F11187



A11, F11, A1 Compression Adapters - Appropriate Pipes

Pipe	Version	A11, F11	A1
Copper pipe according to DIN EN 1057 (soft, semi-hard, hard)	blank	✓	✓
	nickel-plated	✓	-
	chrome-plated	✓*	-
Carbon steel pipe according to DIN EN 10305	blank	✓	✓
	zinc-plated	✓	✓
Stainless steel pipe according to DIN EN 10312	-	✓	-

* Limitations on chrome-plated copper pipes: Dimensions 14-18 mm only for semi-hard and hard copper pipes

A3 Compression Adapter Set

PG = 702

2 pcs. compression adapters for use in heating systems, for plastic and multilayer composite pipes, suitable for G $\frac{3}{4}$ " M Euro taper, consisting of ribbed nut (wrench size 30 mm), plastic clamp ring and sleeve, O-ring seal on the sleeve, with fixed stop.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Pressure or temperature stress according to pipe manufacturer specifications

→ **Calibration arbor see Tools!**

Appropriate pipes

The Simplex Armaturen & Systeme GmbH has no access to technical modifications by the pipe manufacturer and therefore reserves the right make adjustments and technical amendments to the compression adapters.

For material specifications please refer to the relevant pipe manufacturer's specifications. Pipes which meet the following technical requirements are generally suitable.

DIN 16833/16834 - Pipes made of Polyethylene with raised temperature resistance (PE-RT) - general quality requirements and testing, dimensions

DIN 16892 - Pipes of cross-linked high density Polyethylene (PE-X) - general quality requirements and testing

DIN 16893 - Pipes of cross-linked high density Polyethylene (PE-X) - dimensions

DIN 16894 - Pipes of cross-linked medium density Polyethylene (PE-MDX) - general quality requirements and testing

DIN EN ISO 15875 - Plastic piping systems for cold and hot water systems - cross-linked Polyethylene (PE-X)

DIN EN ISO 15874 - Plastic piping systems for cold and hot water systems - Polypropylene (PP)

DIN EN ISO 15876 - Plastic piping systems for cold and hot water systems - Polybutylene (PB)

DIN EN ISO 15877 - Plastic piping systems for cold and hot water systems - Chlorinated Polyvinyl Chloride (CPVC)

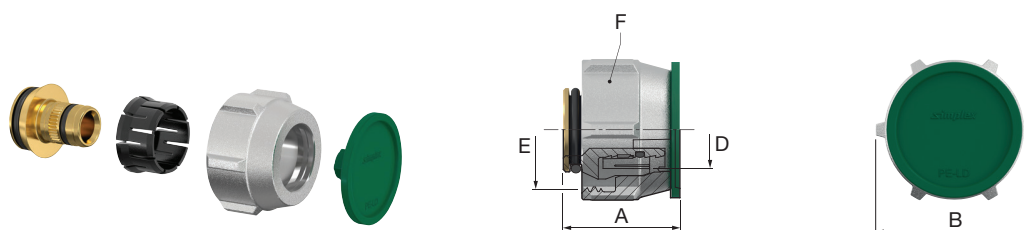
DIN 16836 - Multilayer composite pipes - Polyolefin-aluminum composite pipes


DIN 16837 - Multilayer composite pipes - Multilayer plastic composite pipes

DIN EN ISO 21003-2 - Multilayer piping systems for hot and cold water systems inside of buildings - Part 2: Pipes (ISO 21003-2:2008);

German version EN ISO 21003-2:2008

Version 2011 - Changes, mistakes and additions reserved



Type	Connection		Dimensions			 [Set]	Article no.
	E (ET)	D [mm]	A [mm]	B [mm]	F (WS) [mm]		
KV A3 - 12 x 2.0	G $\frac{3}{4}$ " F	12 x 2.0	24.5	34	30	20	F11401
KV A3 - 14 x 2.0	G $\frac{3}{4}$ " F	14 x 2.0	24.5	34	30	20	F11404
KV A3 - 16 x 1.5	G $\frac{3}{4}$ " F	16 x 1.5	24.5	34	30	20	F11415
KV A3 - 16 x 2.0	G $\frac{3}{4}$ " F	16 x 2.0	25.0	34	30	50	F11405
KV A3 - 16 x 2.2	G $\frac{3}{4}$ " F	16 x 2.2	24.5	34	30	20	F11412
KV A3 - 17 x 2.0	G $\frac{3}{4}$ " F	17 x 2.0	24.5	34	30	50	F11407
KV A3 - 17 x 2.5	G $\frac{3}{4}$ " F	17 x 2.5	24.5	34	30	20	F11414
KV A3 - 18 x 2.0	G $\frac{3}{4}$ " F	18 x 2.0	24.5	34	30	20	F11408
KV A3 - 18 x 2.5	G $\frac{3}{4}$ " F	18 x 2.5	24.5	34	30	20	F11409
KV A3 - 20 x 2.0	G $\frac{3}{4}$ " F	20 x 2.0	24.5	34	30	20	F11410
KV A3 - 20 x 2.25	G $\frac{3}{4}$ " F	20 x 2.25	24.5	34	30	20	F11418
KV A3 - 20 x 2.5	G $\frac{3}{4}$ " F	20 x 2.5	24.5	34	30	20	F11416
KV A3 - 20 x 2.8	G $\frac{3}{4}$ " F	20 x 2.8	24.5	34	30	20	F11417



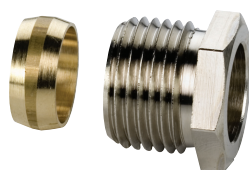
Compression Fitting for Copper and Carbon Steel Pipes


PG = 702

Compression adapter suitable for Simplex valves and Simplex screw connections with female thread. Support sleeves are required for copper and carbon steel pipes.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching support sleeves available!**



Type	Version	Connection			Article no.
		A	B [mm]		
Compr. Fitting - 3/8 x 12	nickel-plated	G 3/8" M	12	50/200	F10351
Compr. Fitting - 1/2 x 12	nickel-plated	G 1/2" M	12	50/200	F10353
Compr. Fitting - 1/2 x 15	nickel-plated	G 1/2" M	15	50/200	F10352

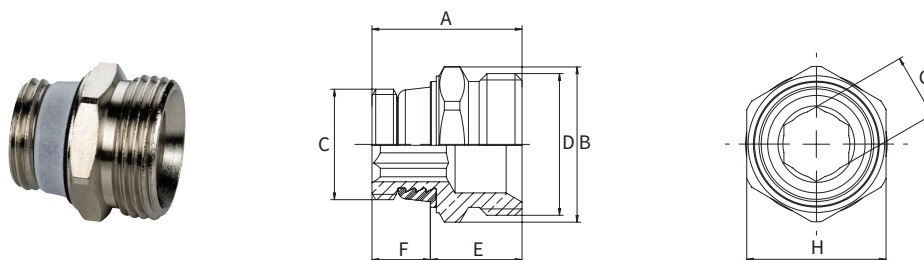



Connection Nipple with Euro Taper for Radiators with Integrated Valve

PG = 702

Connection nipple self-sealing with special thread seal.

- Components made of brass
- Sealing materials: EPDM
- Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Version	Connection		Dimensions [mm]							Article no.
		C	D (ET)	A	B	E	F	G (WS)	H (WS)		
Conn. Nipple ET - bl	blank	G 1/2" M	G 3/4" M	28	29	17	11	12	26	25/200	F10389
Conn. Nipple ET - Ni	nickel-plated	G 1/2" M	G 3/4" M	28	29	17	11	12	26	25/200	F10390

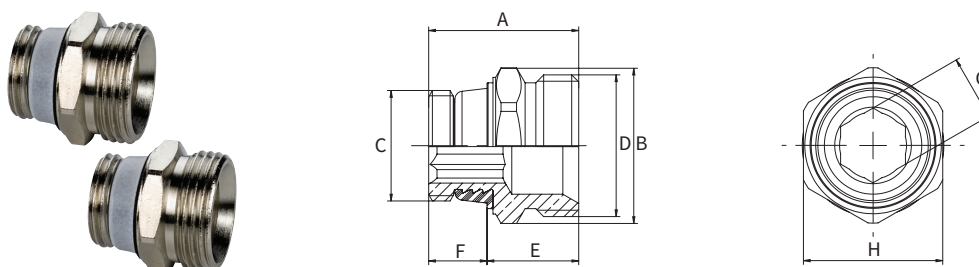



D5 Connection Set with Euro Taper for Radiators with Integrated Valve

PG = 702

Set consisting of 2 pcs. screw connections, self-sealing with special thread seal.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Version	Connection		Dimension [mm]						 [Set]	Article no.
		C	D (ET)	A	B	E	F	G (WS)	H (WS)		
Conn. Set D5 - Ni	nickel-plated	G 1/2" M	G 3/4" M	28	29	17	11	12	26	1/100	F10391

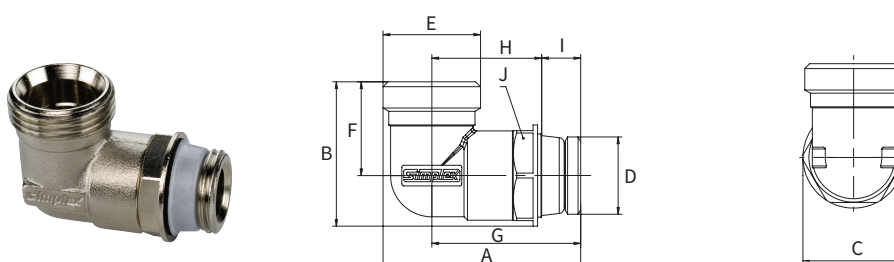



Angle Connection with Euro Taper

PG = 702

Angle connection for use in heating systems, self-sealing with special thread seal, with connection for compression adapters.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Version	Connection		 [Set]	Article no.
		D	E (ET)		
Angle Conn. ET - Ni	nickel-plated	G 1/2" M	G 3/4" M	10/100	F10368



Dimensions

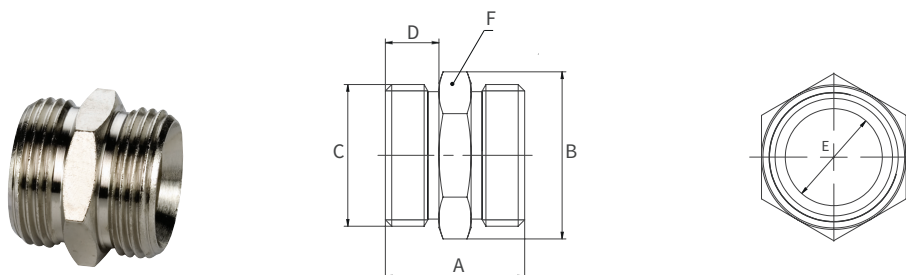
Type	Dimensions [mm]							
	A	B	C	F	G	H	I	J (WS)
Angle Conn. ET Ni	53	38.5	27	25	39.7	29.3	10.4	24


Coupling Nipple with Euro Taper

PG = 702

Coupling nipple for use in heating systems.

- Components made of brass
- Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Version	Connection C (ET)	Dimensions [mm]						Article no.
			A	B	D	E (Ø)	F (WS)		
Coupl. Nipple ET - bl.	blank	G 3/4" M	26	31	10	18.1	27	25/200	F10392
Coupl. Nipple ET - Ni	nickel-pl.	G 3/4" M	26	31	10	18.1	27	25/200	F10393

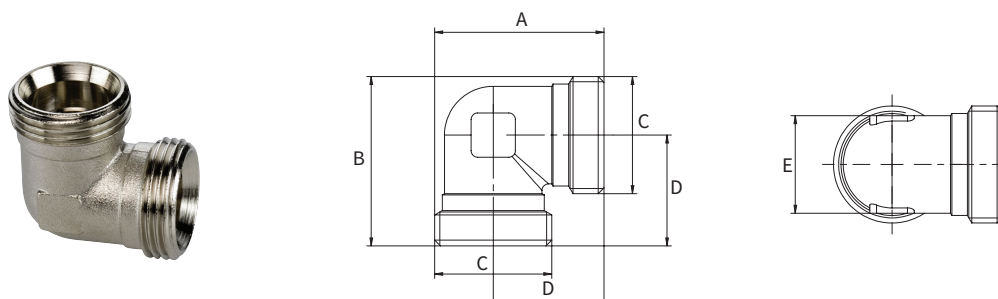



Angle Coupling with Euro Taper

PG = 702

Angle coupling for use in heating systems.

- Components made of nickel-plated brass
- Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Version	Connection C (ET)	Dimensions [mm]					Article no.
			A	B	D	E (WS)		
Angle Coupl. ET - Ni	nickel-pl.	G 3/4" M	38.2	38.2	25	22	10/100	F10387

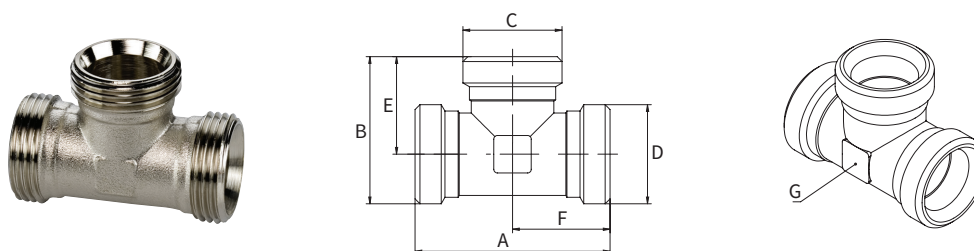



T-Piece with Euro Taper

PG = 702

T-piece for use in heating systems.

- Components made of nickel-plated brass
- Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Version	Connection		Dimensions [mm]						Article no.
		C (ET)	D (ET)	A	B	E	F	G (WS)		
T-Piece ET - Ni	nickel-pl.	G 3/4" M	G 3/4" M	52	39.5	26	26	22	10/100	F10388

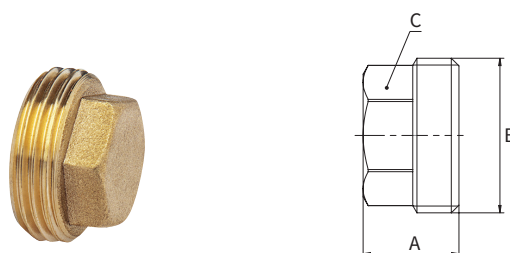


Blind Plug with Euro Taper

PG = 702

Blind plug for use in heating systems.

- Components made of brass
- Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Version	Connection B (ET)	Dimensions [mm]			Article no.
			A	C (WS)		
Blind Plug ET - bl.	blank	G 3/4" M	16.4	21	10	F10706



→ G5 Connection Set see Connection Accessories (Radiator Valves)!

STEEL PIPE ADAPTERS PLUS



Easy to install and can be used in narrow spaces



No welding



No thread cutting



Application in heating installations with DIN steel pipe

How often is it that "old" radiators don't generate enough heat after a boiler replacement due to the lower system temperatures.

A new radiator is needed, but do the connections fit?

The Simplex steel pipe adapter range makes replacing radiators simple, even in the smallest spaces.

The steel pipe adapter can also be connected directly to the connection valves or used as a transition to other pipes.

Installation is very simple: The existing pipe is cut to size and the paint removed, then the pipe end cleaned to the bare metal. Attach the adapter, tighten the clamp fitting - finished. In this way building site welding equipment is not required for modernization of inhabited rooms.

The advantages at a glance

- For heating and potable water* with DVGW approval (registration number DW-8511CR0167)
- Highly stress-resistant thanks to Simplex compression adapter technology
- Can be used in niches - saves space
- Easy to install
- No thread cutting, no welding
- Detachable system
- Reusable

**DVGW (German Technical and Scientific Association for Gas and Water) certification as a brass clamp connector for galvanised steel pipes in accordance with DIN EN 10255 and DIN EN 10240 for use with cold water*



Application in potable water installations with galvanised DIN steel pipe

STEEL PIPE ADAPTERS

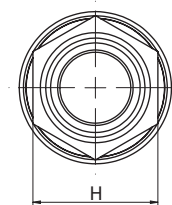
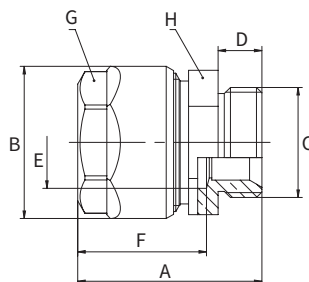
Friction-fit compact compression adapter for steel pipes in accordance with DIN EN 10255, for use in heating systems and potable water systems.

- Components made of nickel-plated brass, parts that come in contact with potable water are self finish brass
- Sealing materials: EPDM
- Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar
- Highly stress-resistant thanks to proven compression adapter technology
- Easy to install
- Can be used in narrow spaces
- Removable system
- Reusable

Steel Pipe Adapter PLUS with Euro Taper

PG = 703

Screw connection with Euro taper.



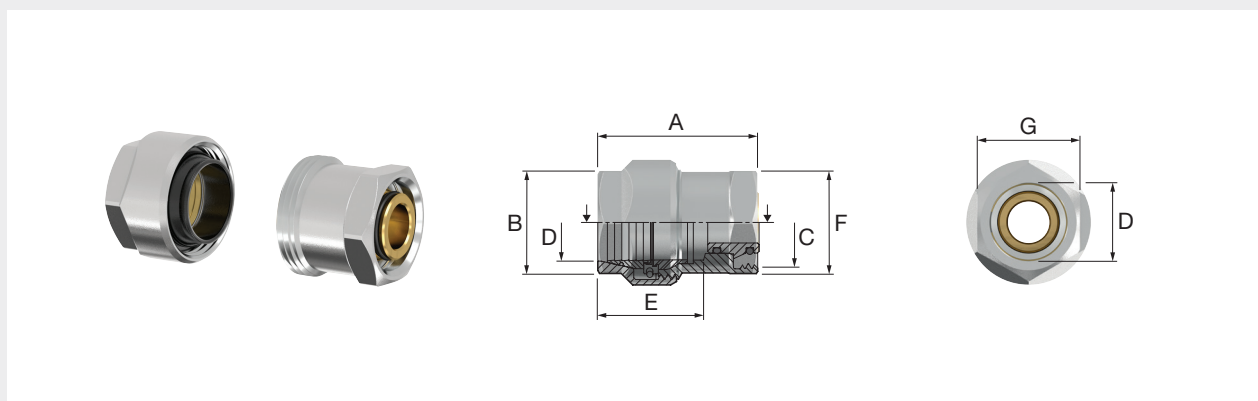
Type	Connection		Dimensions [mm]							Article no.
	C (ET)	E (for pipe)	A	B	D	F	G (WS)	H (WS)		
SPA - 3/4 ET x 1/2	G 3/4" M	1/2"	45	36.5	10.5	30.9	30	30	10	F13063



Steel Pipe Adapter PLUS for Euro Taper

PG = 703

Screw connection for Euro taper.



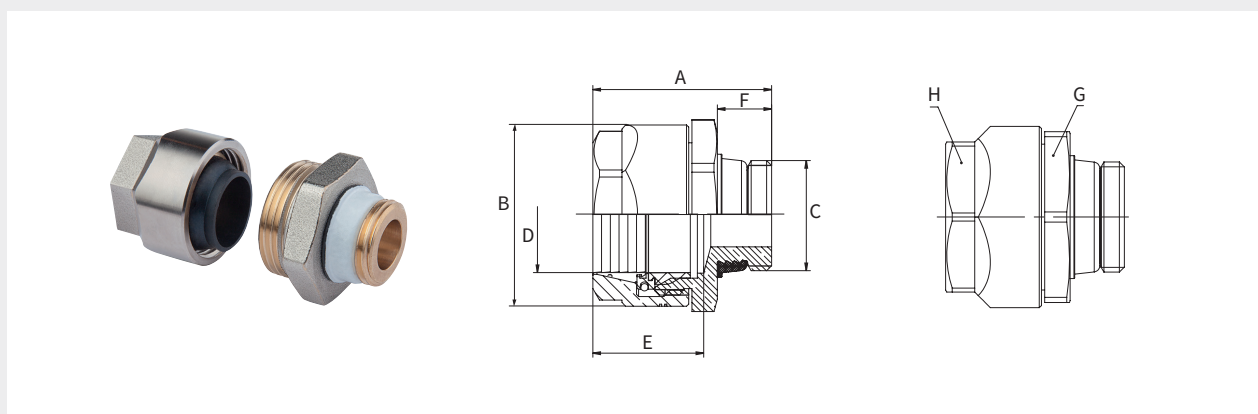
Type	Connection		Dimensions [mm]						Article no.
	C (ET)	D (for pipe)	A	B (Ø)	E	F (Ø)	G (WS)		
SPA - for 3/4 ET x 3/8	G 3/4" F	3/8"	48.7	27	31.1	34	24	10	F13064
SPA - for 3/4 ET x 1/2	G 3/4" F	1/2"	47.0	34	30.9	34	30	10	F13065



Steel Pipe Adapter PLUS with Male Thread

PG = 703

Screw connection with male thread, self-sealing with special thread seal.



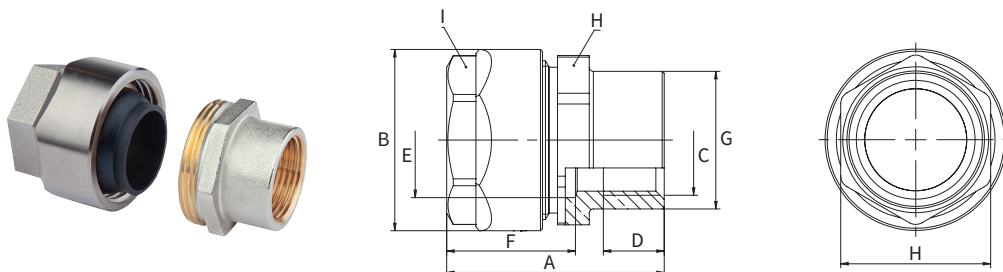
Type	Connection		Dimensions [mm]						Article no.
	C	D (for pipe)	A	B	E	F	G (WS)	H (WS)	
SPA M - 1/2 x 3/8	G 1/2" M	3/8"	48	32	30	11.5	32	24	10
SPA M - 1/2 x 1/2	G 1/2" M	1/2"	48	37	31	11.5	30	30	10
SPA M - 3/4 x 3/4	G 3/4" M	3/4"	48	44	33	13.0	41	36	10
SPA M - 1 x 1	G 1" M	1"	55	53	35	14.0	46	46	1 / 5
SPA M - 1 1/4 x 1 1/4	G 1 1/4" M	1 1/4"	57	65	36	15.0	55	55	1 / 5




Steel Pipe Adapter PLUS with Female Thread

PG = 703

Screw connection with female thread.



Type	Connection		Dimensions [mm]								Article no.
	C	E (for pipe)	A	B	D	F	G	H (WS)	I (WS)		
SPA F - 1/2 x 3/8	G 1/2" F	3/8"	52	32.0	13.6	34	27	27	24	10	F13090
SPA F - 1/2 x 1/2	G 1/2" F	1/2"	49	36.5	13.6	31	27	27	30	10	F13091
SPA F - 3/4 x 3/4	G 3/4" F	3/4"	53	43.5	14.6	31	33	36	36	10	F13092
SPA F - 1 x 1	G 1" F	1"	52	53.0	17.0	30	39	46	46	1 / 5	F13093
SPA F - 1 1/4 x 1 1/4	G 1 1/4" F	1 1/4"	57	65.0	19.8	33	48	55	55	1 / 5	F13094

