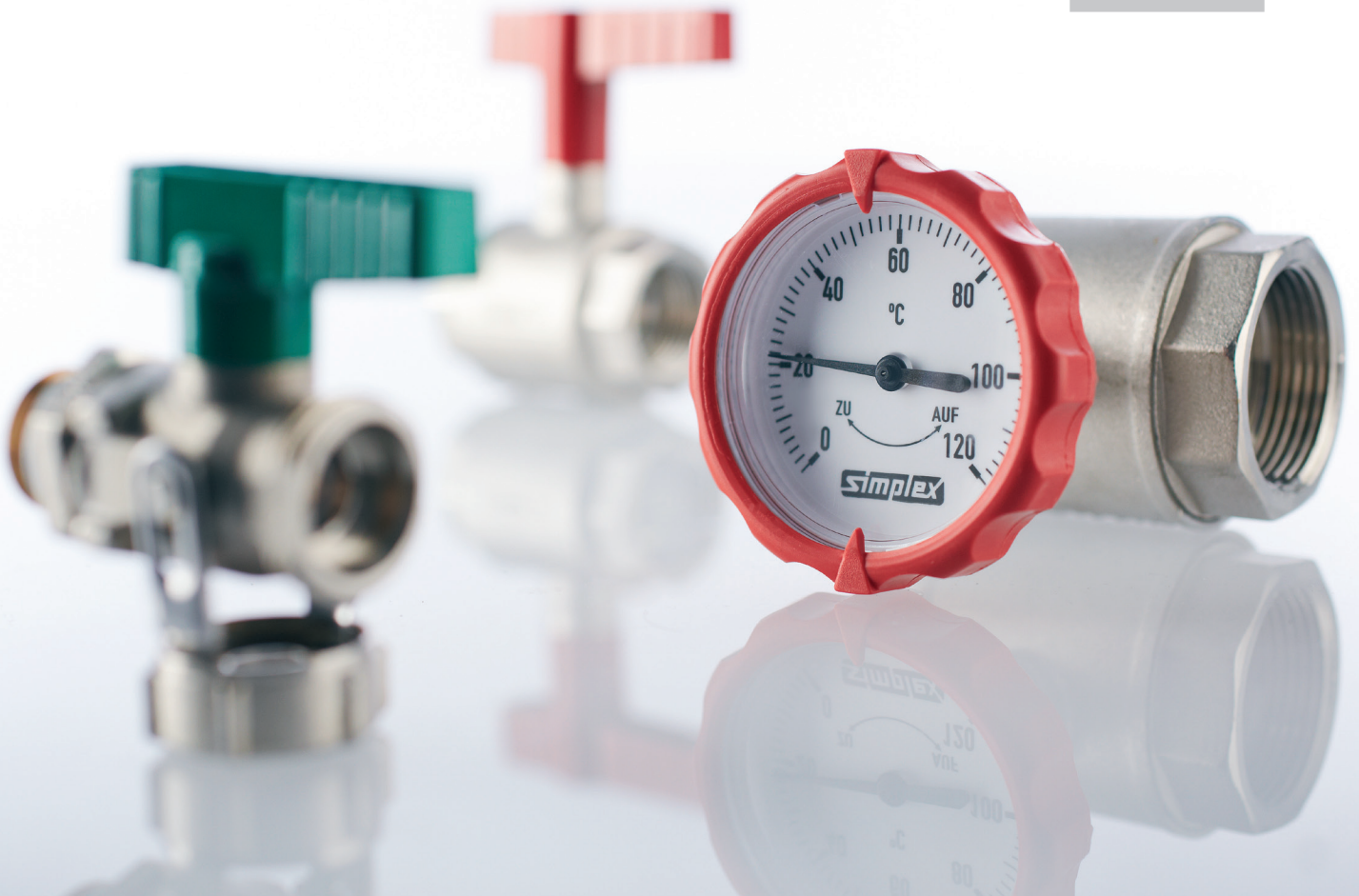


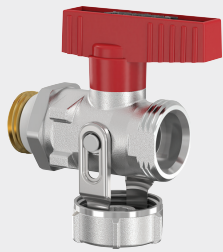
# Boiler Room Valves

# 1

**1**

- *KFE Ball Valves*
- *Pump Ball Valves, Pump Valve Sets, Ex-Couplings*

KFE Ball Valve with Male Thread



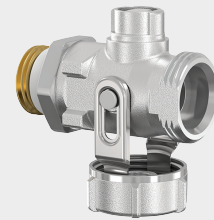
P. 22

KFE Ball Valve with Male Thread DN 20



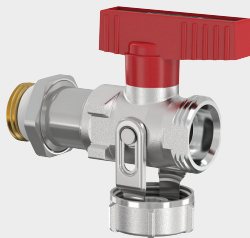
P. 24

KFE Ball Valve with Male Thread without Handle



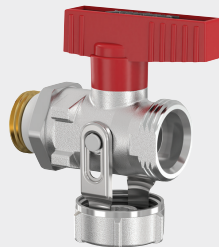
P. 25

KFE Ball Valve with Male Thread, Long Version



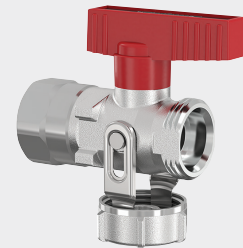
P. 27

KFE Ball Valve with Male Thread, Silicone-free



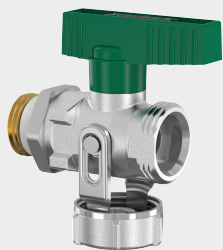
P. 29

KFE Ball Valve with Female Thread



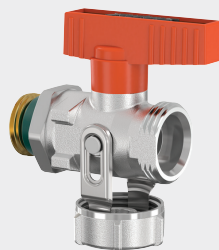
P. 30

KFE Ball Valve for Potable Water



P. 32

KFE Ball Valve for Solar



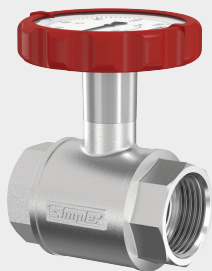
P. 33

Socket Ball Valve with Lever Handle



P. 36

Socket Ball Valve with Red Thermometer Handle



P. 37

Socket Ball Valve with Blue Thermometer Handle



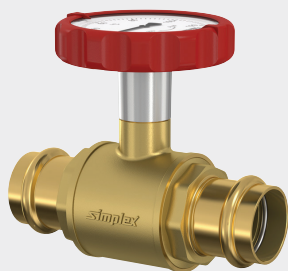
P. 38

Socket Ball Valve with Press Connection and Blue Thermometer Handle



P. 39

Socket Ball Valve with Press Connection and Red Thermometer Handle



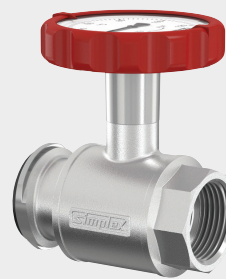
P. 40

Pump Ball Valve with Lever Handle



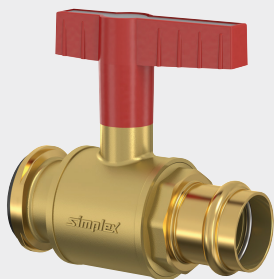
P. 41

Pump Ball Valve with Red Thermometer Handle



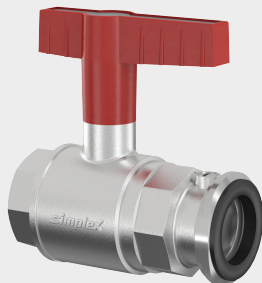
P. 42

Pump Ball Valve with Press Connection and Lever Handle



P. 43

Pump Ball Valve with Integral Backflow Limiter and Lever Handle



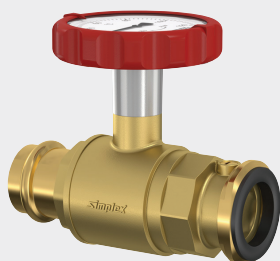
P. 44

Pump Ball Valve with Integral Backflow Limiter and Red Thermometer Handle



P. 45

Pump Ball Valve w. Integral Backflow Limiter, Press Connection and Thermometer Handle



P. 46

Socket Ball Valve with Motorized Actuator



P. 47

Thermometer Handle



P. 48

Pump Supply Set



P. 51

Pump Return Set



P. 51

Pump Valve Set



P. 52

Insulation Shells



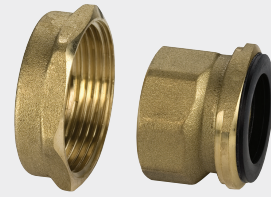
P. 53

Union Nut



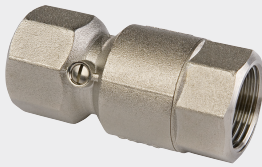
P. 54

Eccentric Threaded Connection DN 25



P. 54

Backflow Limiter Valve (Gravity Break)



P. 55

Quick Air Vent



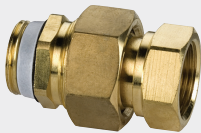
P. 55

Telescopic T-Piece with Press Connection



P. 56

Ex-Coupling Type A



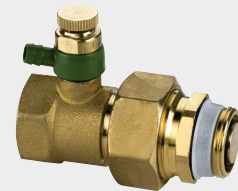
P. 57

Ex-Coupling Type B



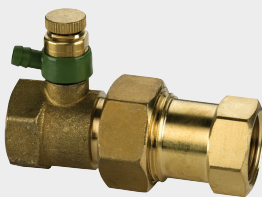
P. 57

Ex-Coupling with Drain Type A



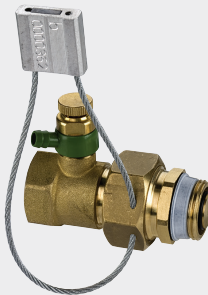
P. 58

Ex-Coupling with Drain Type B



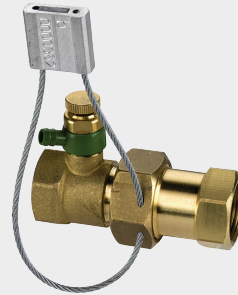
P. 58

Ex-Coupling with Drain and Lead Seal Type A



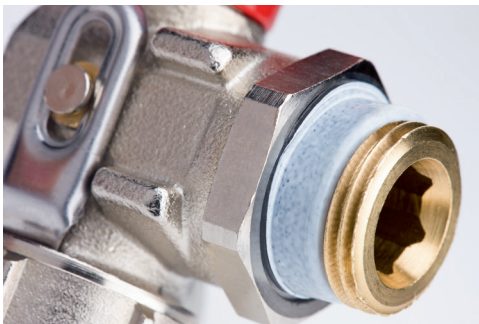
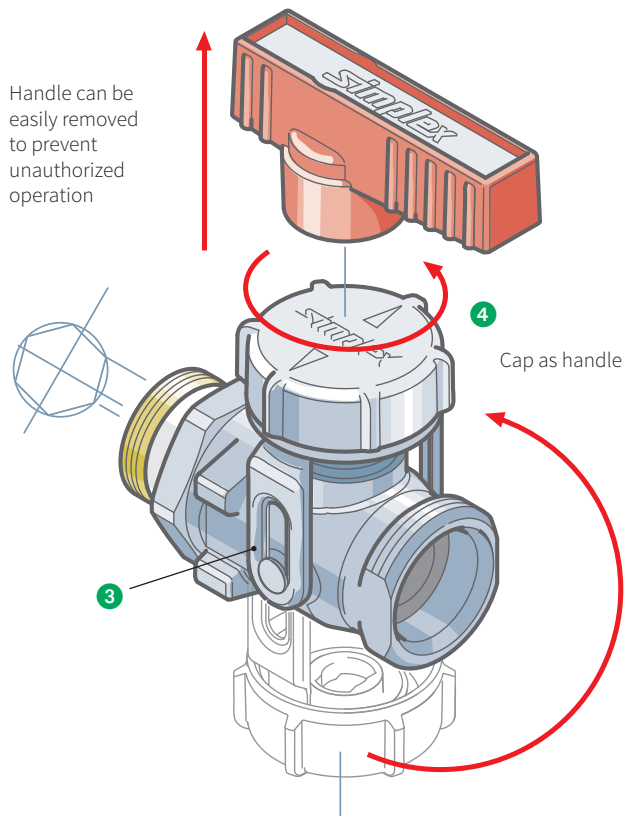
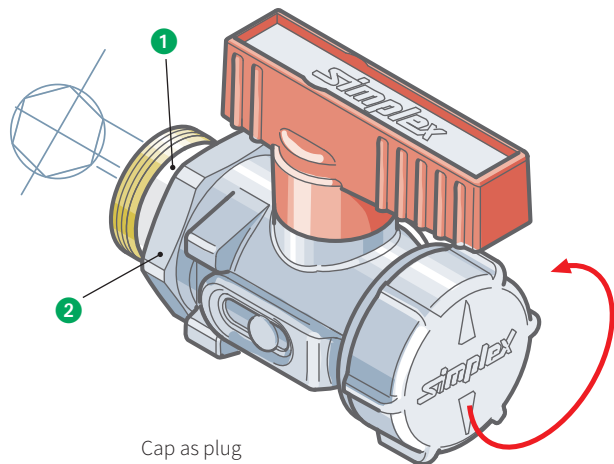
P. 59

Ex-Coupling with Drain and Lead Seal Type B



P. 59

## KFE BALL VALVES



### Advantages

- 1 Safe installation thanks to self-tightening thread seal
- 2 Exact axial positioning using lock nut
- 3 Exact positioning of blanking cap guide with stainless steel swivel bracket – no chain or loop to tear off
- 4 Hidden operating possibility using the blanking cap which serves as a hand wheel

### The seal is what matters.

The advantages are convincing: Threaded connections are permanently sealed and additional adhesives or elastomers are not necessary. The secret of our success is five building blocks, which Simplex has optimally combined:

#### Raw Mixture

Resistance against heat and the effects of aging are extremely important issues for heating systems seals. Thus, Simplex seals are manufactured to a unique, specially developed formula.

#### Interconnection

Normally sulphur cured EPDM seals are used in heating systems. These shrink when exposed to heat and therefore cannot guarantee a permanent leak-tightness. In opposition Simplex seals are made of a non-aging, peroxide-crosslinked raw mixture.

#### Vulcanization

Temperature stressed seals must be fully vulcanized (crosslinked) during the manufacturing process. Simplex easily meets these requirements with modern machines at its factory.

#### Hardness Setting

Another special feature: The hardness of Simplex seals is set with a narrow tolerance range of 85 Shore. This makes them harder than commonly known seals made of elastic materials.

#### The Coating

The white coating makes Simplex seals mechanically tough, abrasion resistant and friction free.

# KFE BALL VALVES FOR HEATING

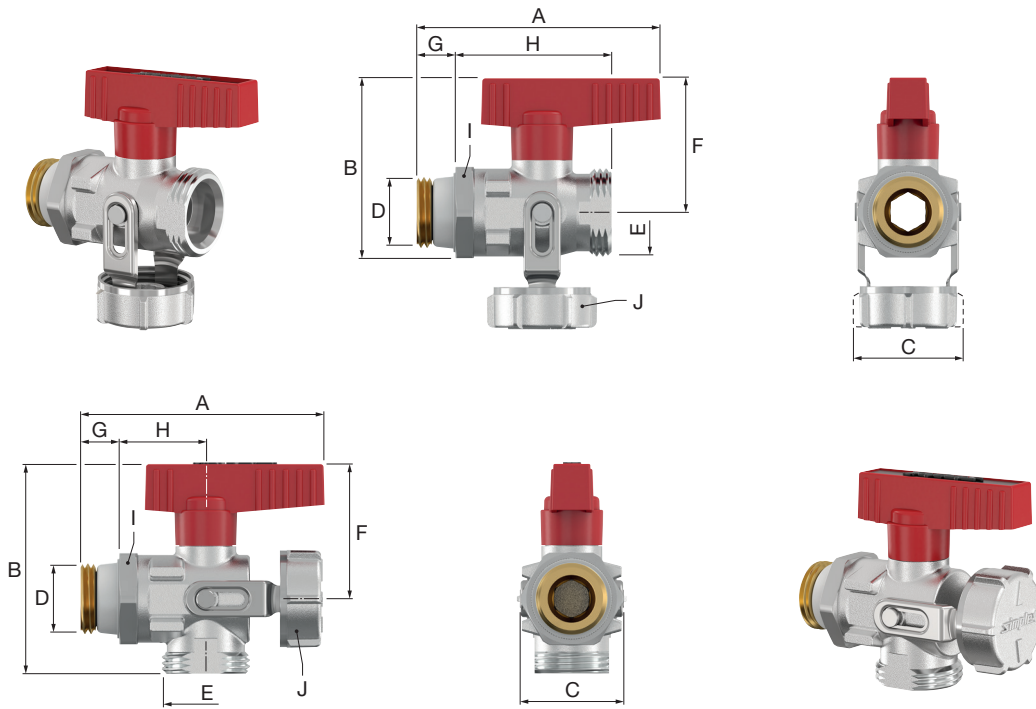
KFE ball valve for use in heating systems.

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

## KFE Ball Valve with Male Thread

PG = 706

With red lever handle, self-sealing with special thread seal, without hose connection.



Type	Version	Connection			Article no.
		D	E		
KFE-KH - D	straight	G 1/2" M	G 3/4" M	20	F10637
KFE-KH - E	angle	G 1/2" M	G 3/4" M	20	F10670



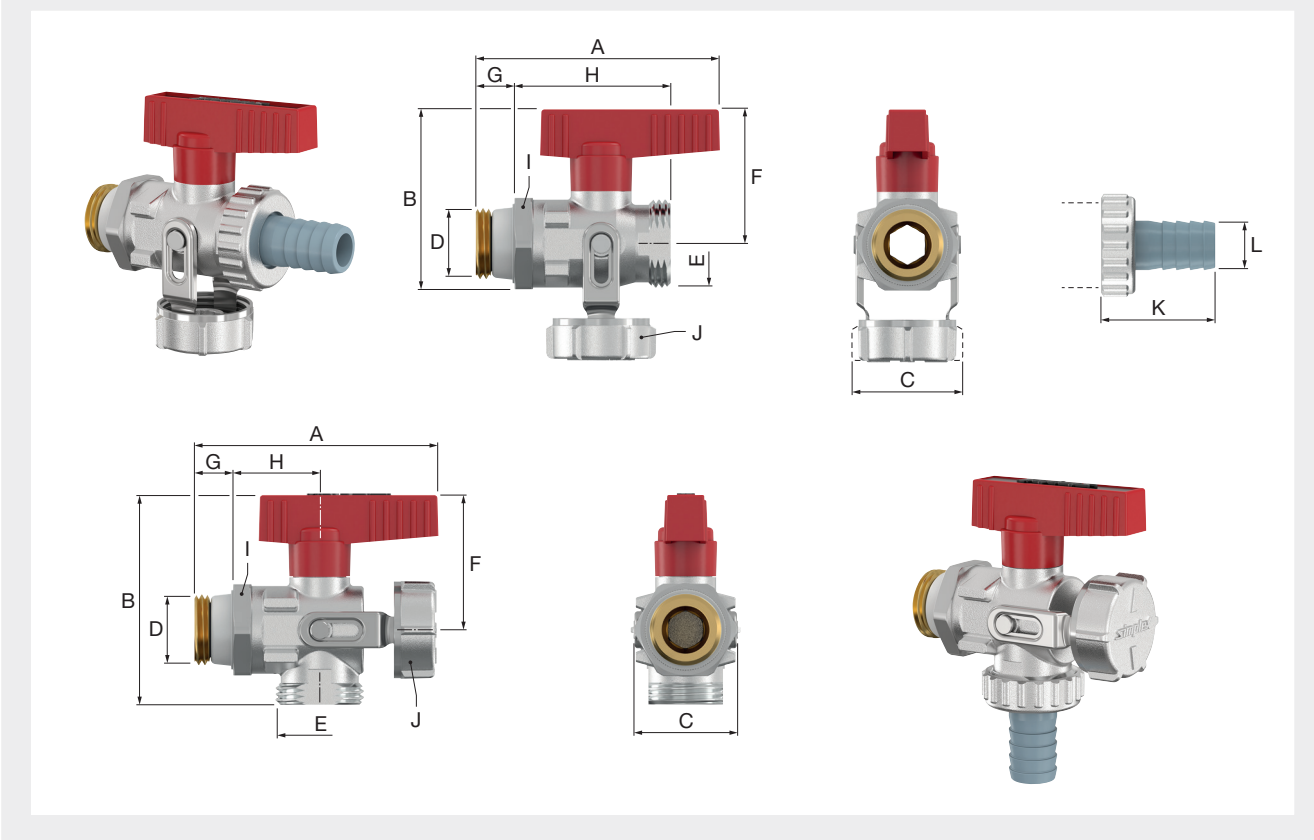
## Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
KFE-KH - D	72	52.5	32.5	40	11	46.5	27	30
KFE-KH - E	72	62.0	31.0	40	11	26.0	27	30

## KFE Ball Valve with Male Thread with Hose Connection

PG = 706

With red lever handle, self-sealing with special thread seal.



Type	Version	Connection			Article no.
		D	E		
KFE-KH - D SV	straight	G 1/2" M	G 3/4" M	20	F10638
KFE-KH - E SV	angle	G 1/2" M	G 3/4" M	20	F10671



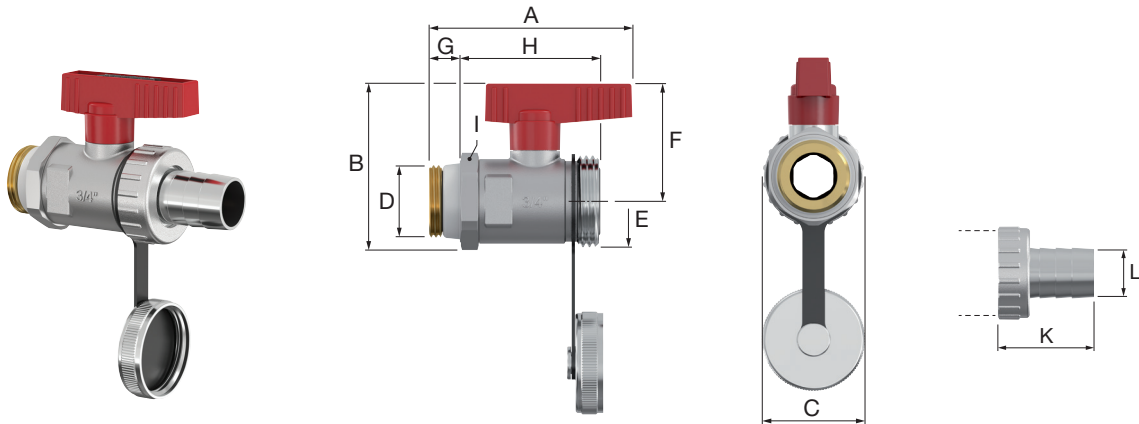
## Dimensions

Type	Dimensions [mm]									
	A	B	C	F	G	H	I (WS)	J (WS)	K	L (Ø)
KFE-KH - D SV	72	52.5	32.5	40	11	46.5	27	30	33	14.5
KFE-KH - E SV	72	62.0	31.0	40	11	26.0	27	30	33	14.5

## KFE Ball Valve with Male Thread DN 20 with Hose Connection

PG = 706

With red lever handle, self-sealing with special thread seal.



Type	Version	Connection			Article no.
		D	E		
KFE-KH DN20 - D SV	straight	G 3/4" M	G 1" M	10	F10680



### Dimensions

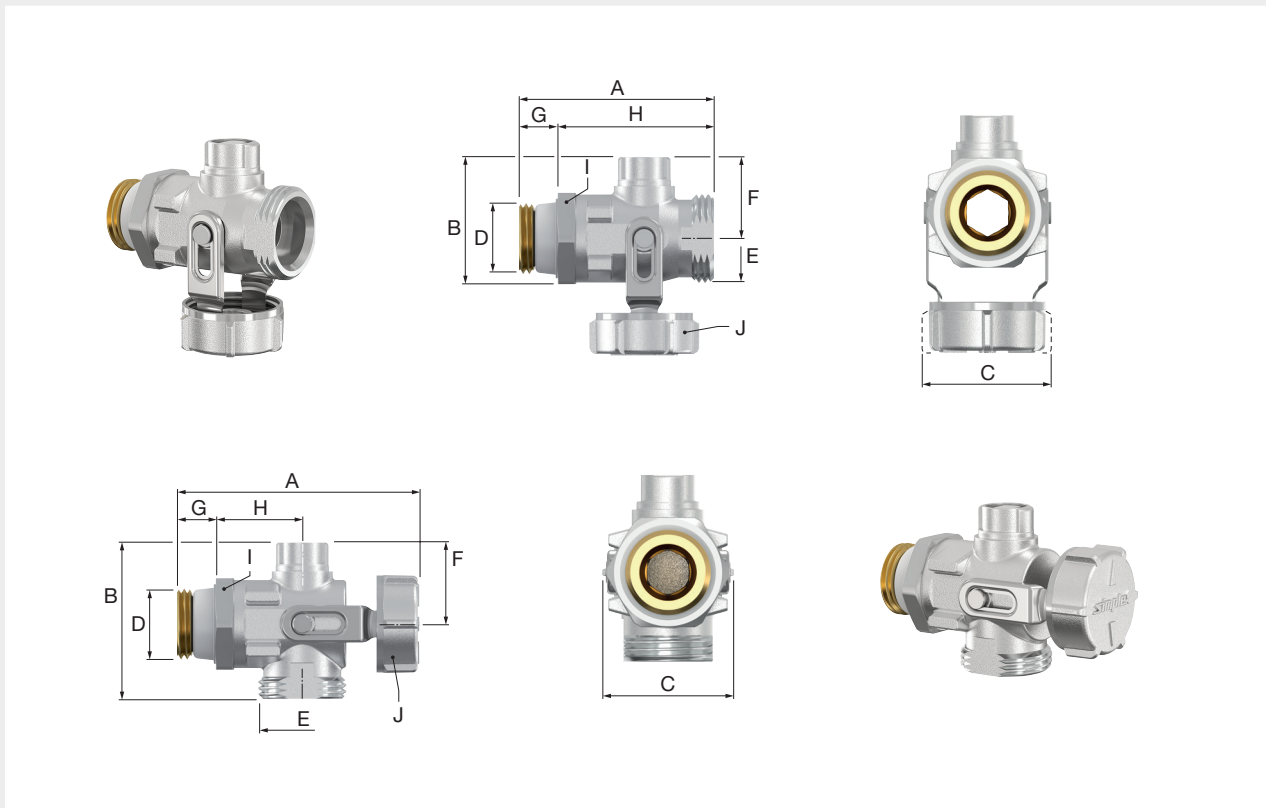
Type	Dimensions [mm]									
	A	B	C	F	G	H	I (WS)	K	L (Ø)	
KFE-KH DN20 - D SV	73	60	37	42.5	11	50	32	35	20	



**KFE Ball Valve with Male Thread without Handle** PG = 706

Without handle, operated using blanking cap, self-sealing with special thread seal, without hose connection.

1



Type	Version	Connection			Article no.
		D	E		
<b>KFE-KH without handle - D</b>	straight	G 1/2" M	G 3/4" M	20	F10644*
<b>KFE-KH without handle - E</b>	angle	G 1/2" M	G 3/4" M	20	F10677*

\* discontinued article



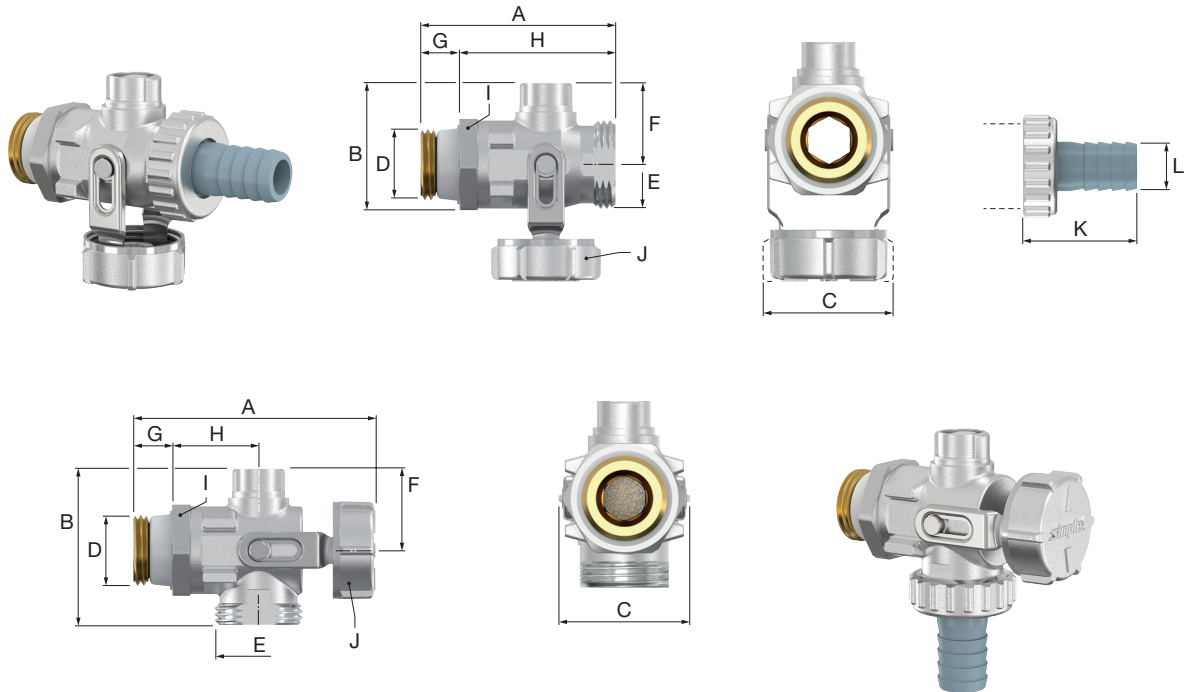
**Dimensions**

Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
<b>KFE-KH without handle - D</b>	57.5	37.5	32.5	24	11	46.5	27	30
<b>KFE-KH without handle - E</b>	71.3	49.5	31.0	24	11	26.0	27	30

## KFE Ball Valve with Male Thread without Handle with Hose Connection

PG = 706

Without handle, operated using blanking cap, self-sealing with special thread seal.



Type	Version	Connection			Article no.
		D	E		
KFE-KH without handle - D SV	straight	G 1/2" M	G 3/4" M	20	F10645*
KFE-KH without handle - E SV	angle	G 1/2" M	G 3/4" M	20	F10678*

\* discontinued article



### Dimensions

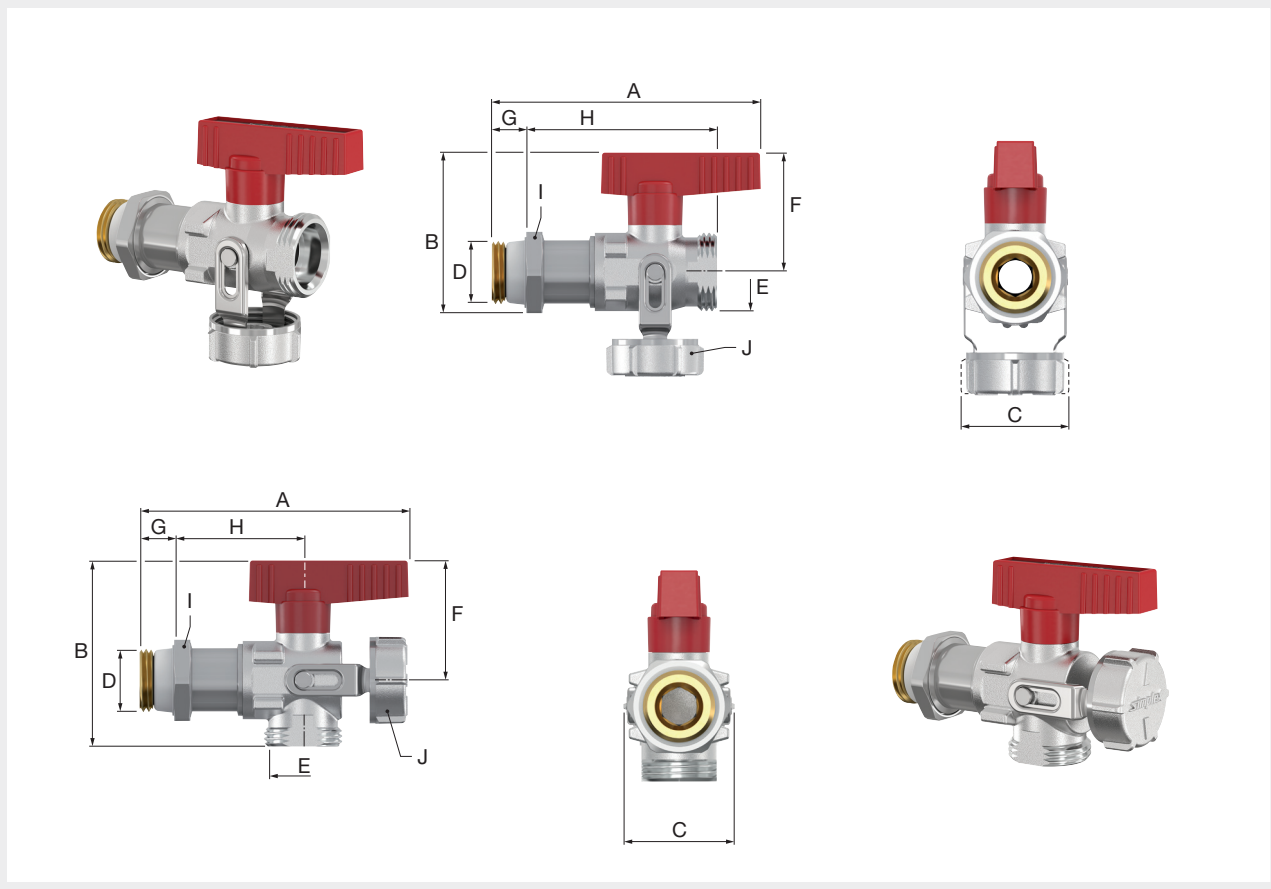
Type	Dimensions [mm]										
	A	B	C	F	G	H	I (WS)	J (WS)	K	L (Ø)	
KFE-KH without handle - D SV	57.5	37.5	32.5	24	11	46.5	27	30	33	14.5	
KFE-KH without handle - E SV	71.3	49.5	31.0	24	11	26.0	27	30	33	14.5	

**KFE Ball Valve with Male Thread, Long Version**

PG = 706

With red lever handle, self-sealing with special thread seal, without hose connection.

1



Type	Version	Connection			Article no.
		D	E		
<b>KFE-KH long - D</b>	straight	G 1/2" M	G 3/4" M	20	F10640*
<b>KFE-KH long - E</b>	angle	G 1/2" M	G 3/4" M	20	F10673*

\* discontinued article



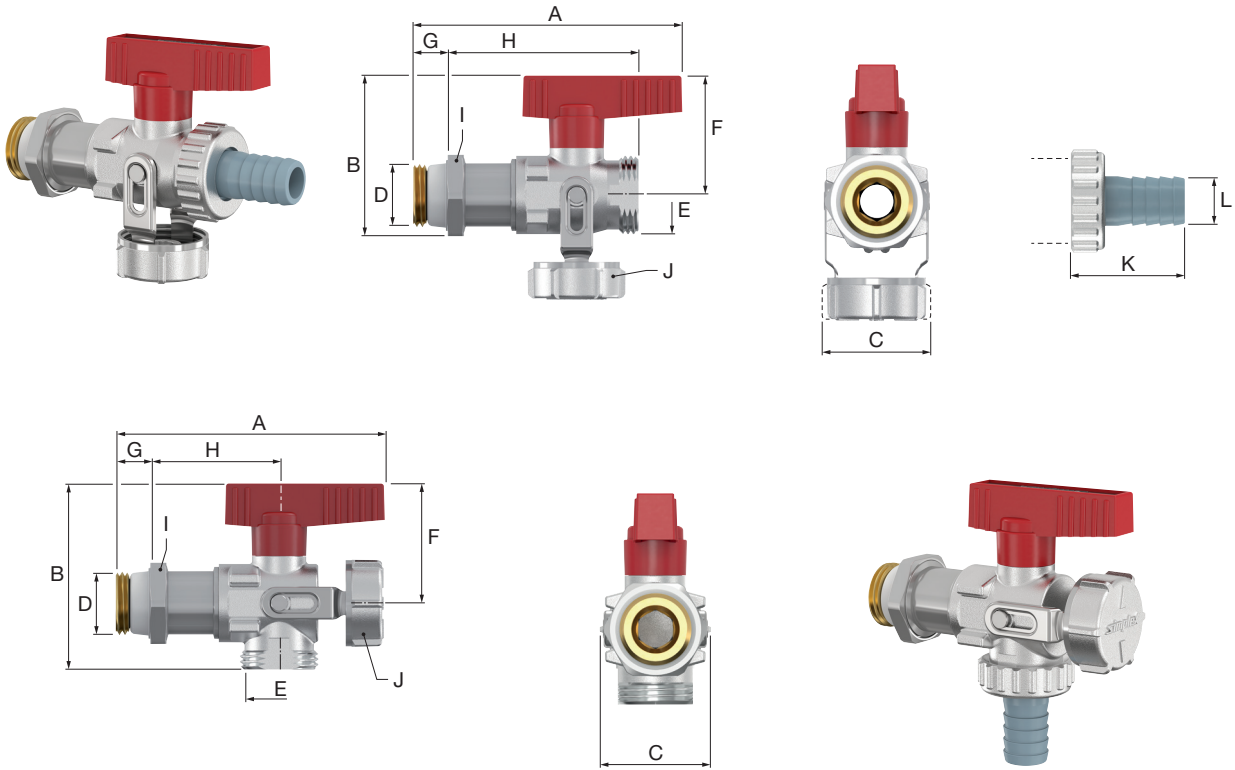
**Dimensions**

Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
<b>KFE-KH long - D</b>	89	54.5	32.5	40	11	63.5	27	30
<b>KFE-KH long - E</b>	89	62.0	31.0	40	11	43.5	27	30

## KFE Ball Valve with Male Thread, Long Version with Hose Connection

PG = 706

With red lever handle, self-sealing with special thread seal.



Type	Version	Connection			Article no.
		D	E		
KFE-KH long - D SV	straight	G 1/2" M	G 3/4" M	20	F10641
KFE-KH long - E SV	angle	G 1/2" M	G 3/4" M	20	F10674



### Dimensions

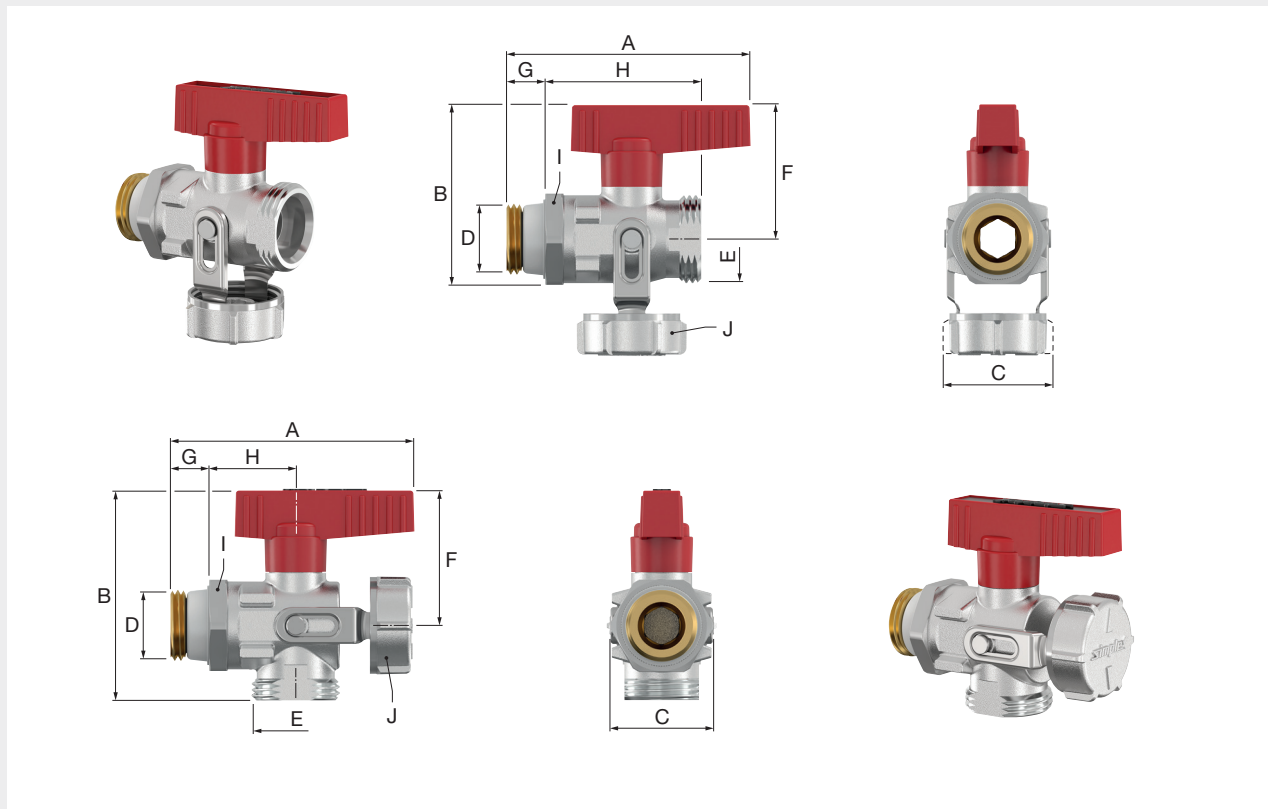
Type	Dimensions [mm]										
	A	B	C	F	G	H	I (WS)	J (WS)	K	L (Ø)	
KFE-KH long - D SV	89	54.5	32.5	40	11	63.5	27	30	33	14.5	
KFE-KH long - E SV	89	62.0	31.0	40	11	43.5	27	30	33	14.5	

**KFE Ball Valve with Male Thread, Silicone-free** PG = 706

With red lever handle, self-sealing with special thread seal, without hose connection.

- **Why silicone-free?** Free of lubricants and assembly aids that interfere with painting of completed installations.

1



Type	Version	Connection			Article no.
		D	E		
KFE-KH silicone-free - D	straight	G 1/2" M	G 3/4" M	20	F10657
KFE-KH silicone-free - E	angle	G 1/2" M	G 3/4" M	20	F10658



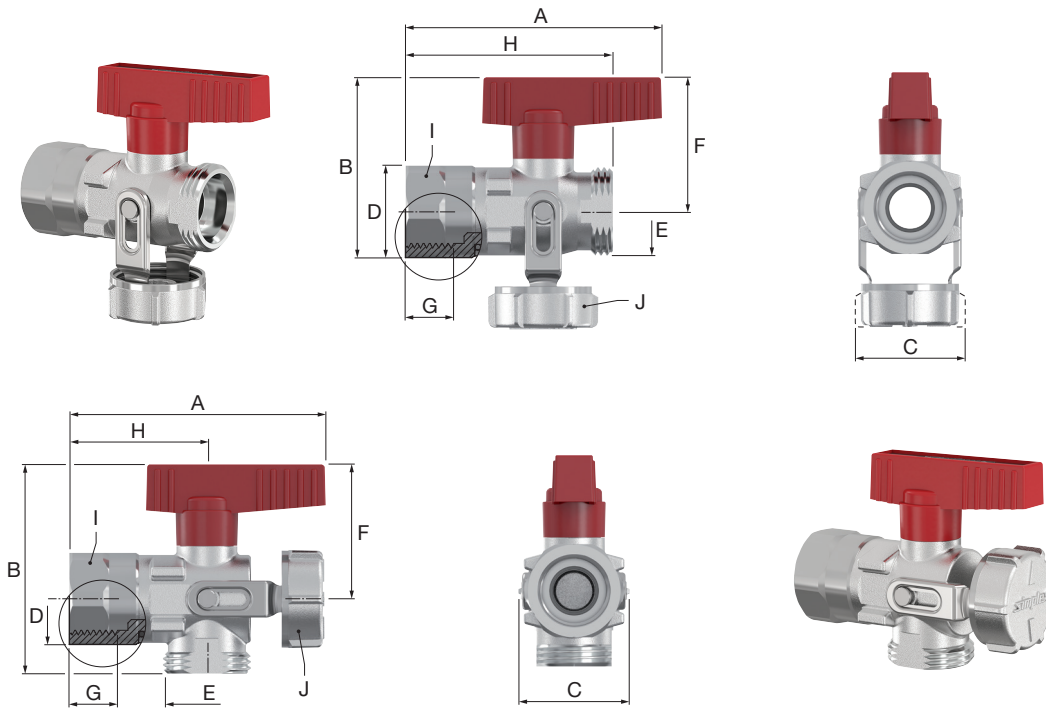
**Dimensions**

Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
KFE-KH silicone-free - D	72	52.5	32.5	40	11	46.5	27	30
KFE-KH silicone-free - E	72	62.0	31.0	40	11	26.0	27	30

## KFE Ball Valve with Female Thread

PG = 706

With red lever handle, without hose connection.



Type	Version	Connection			Article no.
		D	E		
KFE-KH IG - D	straight	Rp 1/2"	G 3/4" M	20	F10634
KFE-KH IG - E	angle	Rp 1/2"	G 3/4" M	20	F10664



### Dimensions

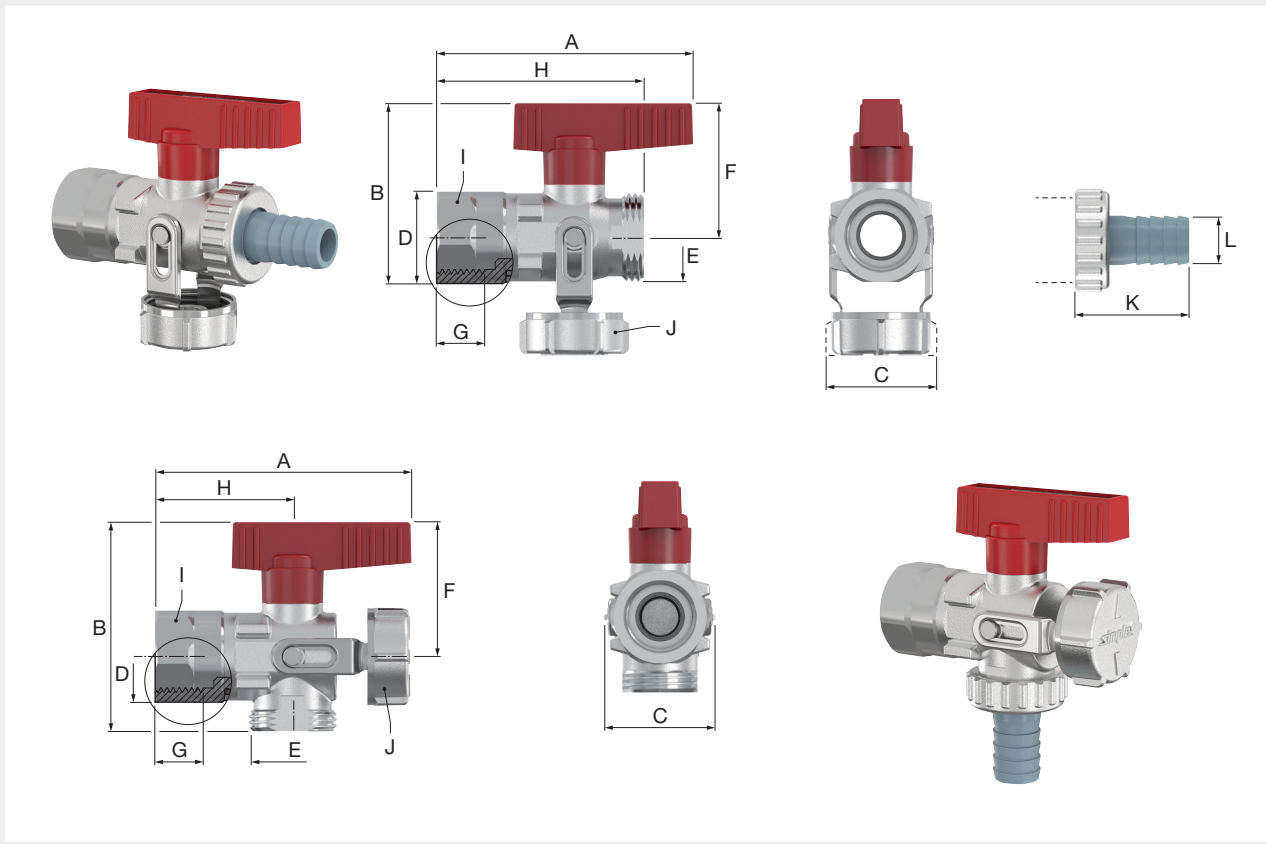
Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
KFE-KH IG - D	76	53.0	32.5	40	12	61.0	27	30
KFE-KH IG - E	76	61.5	31.0	40	12	40.5	27	30


KFE Ball Valve with Female Thread with Hose Connection

PG = 706

With red lever handle.

1



Type	Version	Connection			Article no.
		D	E		
KFE-KH IG - D SV	straight	Rp 1/2"	G 3/4" M	20	F10646
KFE-KH IG - E SV	angle	Rp 1/2"	G 3/4" M	20	F10676



Dimensions

Type	Dimensions [mm]									
	A	B	C	F	G	H	I (WS)	J (WS)	K	L (Ø)
KFE-KH IG - D SV	76	53.0	32.5	40	12	61.0	27	30	33	14.5
KFE-KH IG - E SV	76	61.5	31.0	40	12	40.5	27	30	33	14.5

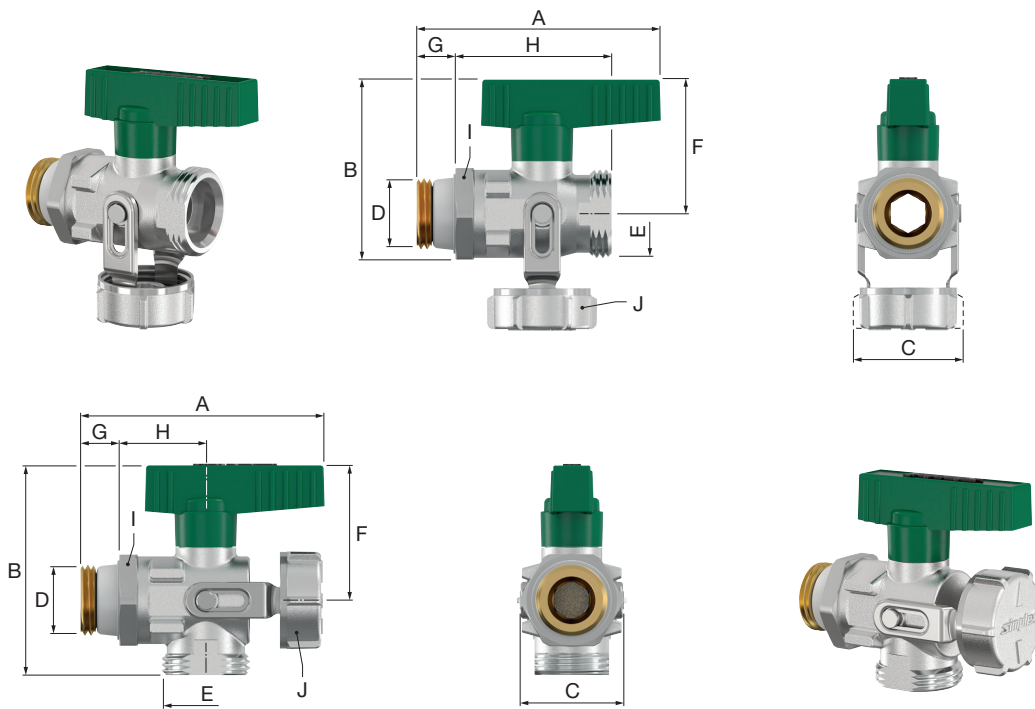
## KFE BALL VALVES FOR POTABLE WATER

KFE ball valve with DVGW approval for potable water systems (in accordance with the German TrinkwV) and heating systems, with green lever handle and male thread, self-sealing with special thread seal, without hose connection.

- Components made of nickel-plated brass, parts that come in contact with potable water are self finish brass
- Sealing materials: EPDM, PTFE
- Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

### KFE Ball Valve for Potable Water

PG = 706



Type	Version	Connection			Article no.
		D	E		
KFE-KH DVGW - D	straight	G 1/2" M	G 3/4" M	20	F10639
KFE-KH DVGW - E	angle	G 1/2" M	G 3/4" M	20	F10669



### Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
KFE-KH DVGW - D	72	52.5	32.5	40	11	46.5	27	30
KFE-KH DVGW - E	72	62.0	31.0	40	11	26.0	27	30



## KFE BALL VALVES FOR SOLAR

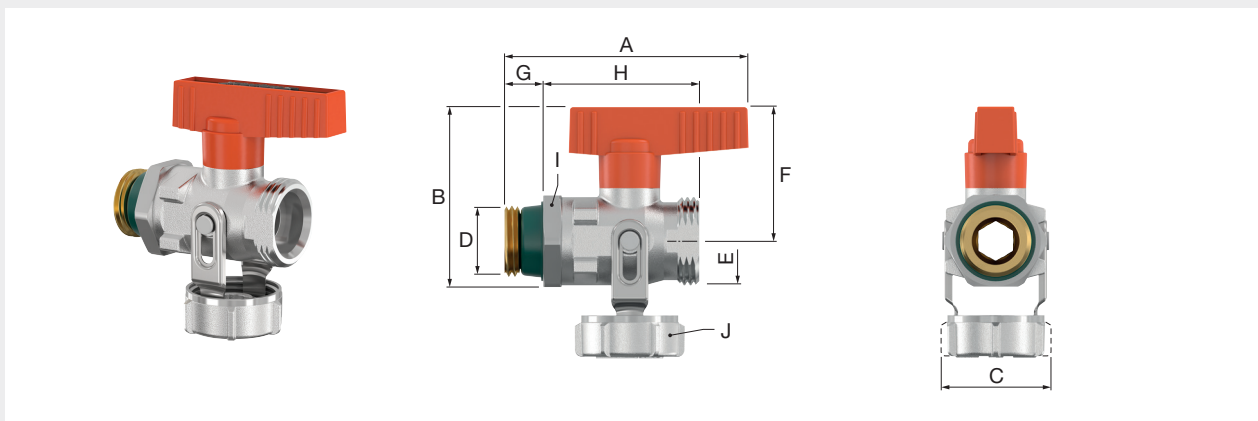
KFE ball valve for use in solar systems, for water-glycol mixes up to 50% and increased temperature requirements, with orange lever handle and male thread, self-sealing with special thread seal.

- Components made of nickel-plated brass
- Sealing materials: AFLAS, FKM, PTFE
- Max. operating temp.: 180 °C permanent temperature, 200 °C short-term
- Max. operating pressure: 10 bar

### KFE Ball Valve for Solar

PG = 706

Without hose connection.



Type	Version	Connection			Article no.
		D	E		
KFE-KH Solar - D	straight	G 1/2" M	G 3/4" M	20	F10647

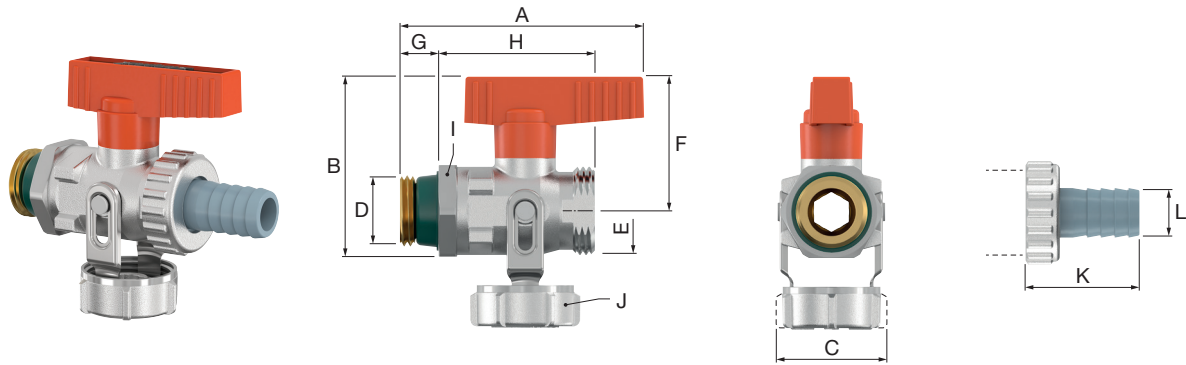


### Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
KFE-KH Solar - D	72	52.5	32.5	40	11	46.5	27	30

## KFE Ball Valve for Solar with Hose Connection

PG = 706



Type	Version	Connection			Article no.
		D	E		
KFE-KH Solar - D SV	straight	G 1/2" M	G 3/4" M	20	F10648



### Dimensions

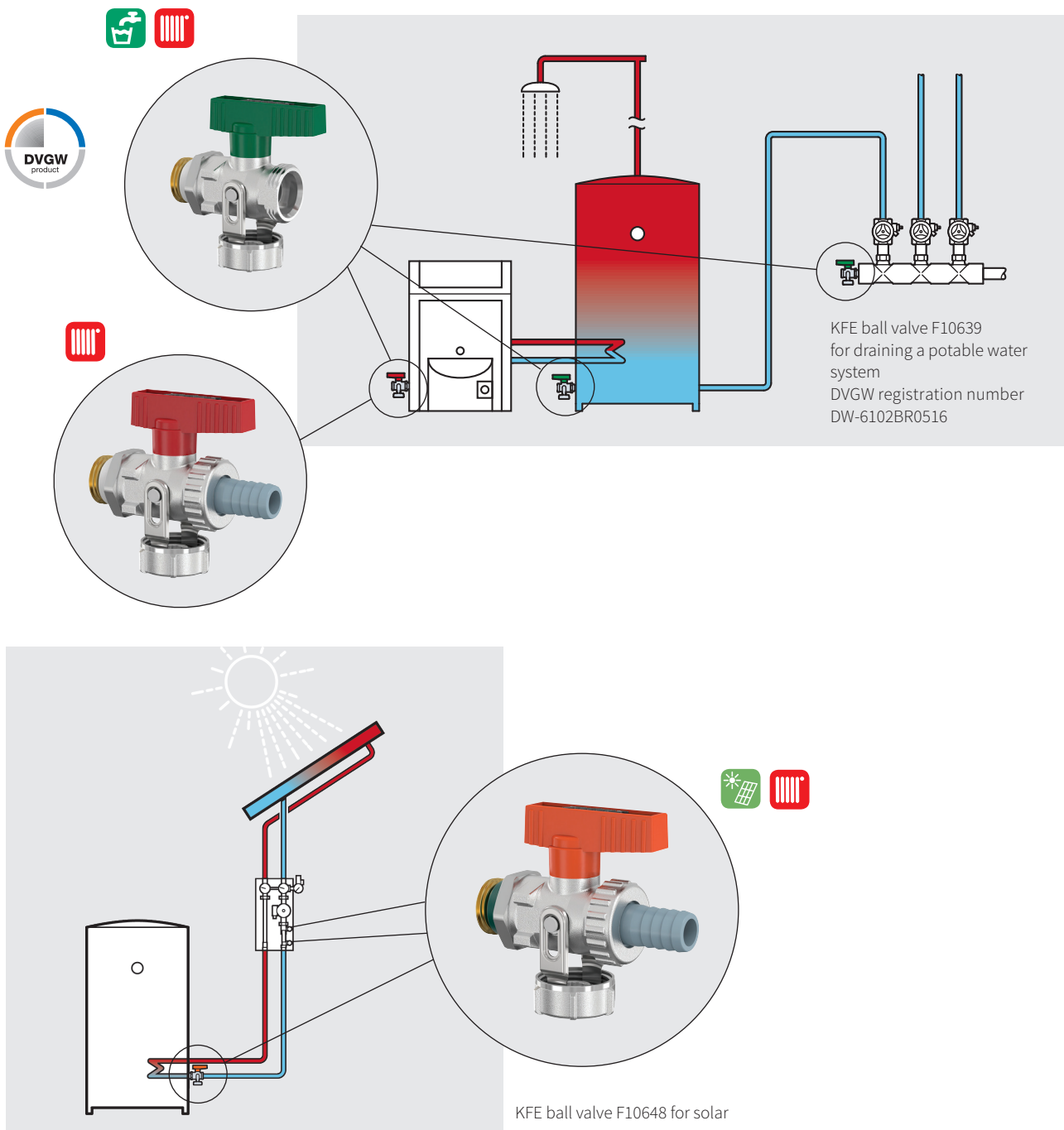
Type	Dimensions [mm]									
	A	B	C	F	G	H	I (WS)	J (WS)	K	L (Ø)
KFE-KH Solar - D SV	72	52.5	32.5	40	11	46.5	27	30	33	14.5

## Material

For our valve components we use brass in accordance with European quality standards for turned and pressed parts EN 12164 and EN 12165; mainly types CW614N and CW617N.

For our potable water version we use brass alloy CW617N and the dezincing resistant alloy CW626N according to UBA-positive list (recommendation).

## Installation example



## SOCKET BALL VALVES

Shut-off ball valve for use in heating systems, full bore.

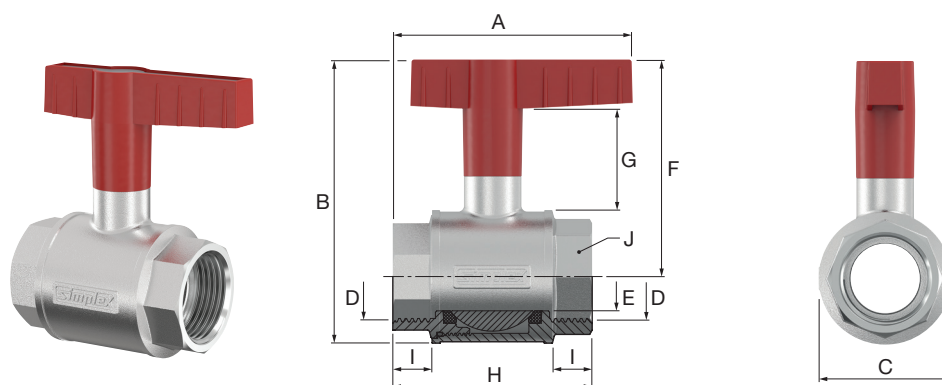
- Components made of nickel-plated brass, ball valves with press connection made of brass
- Sealing materials: EPDM, PTFE
- Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar


→ **Matching insulation shells available!**

### Socket Ball Valve with Lever Handle

PG = 782

With female thread on both sides, extended lever handle, metal, red coating.



Type	Nom. diameter	Connection (D)		Article no.
MKH FG - DN 15	DN 15	G 1/2" F	1 / 50	F10120
MKH FG - DN 20	DN 20	G 3/4" F	1 / 50	F10121
MKH FG - DN 25	DN 25	G 1" F	1 / 20	F10122
MKH FG - DN 32	DN 32	G 1 1/4" F	1 / 10	F10123
MKH FG - DN 40	DN 40	G 1 1/2" F	1	F10115
MKH FG - DN 50	DN 50	G 2" F	1	F10116



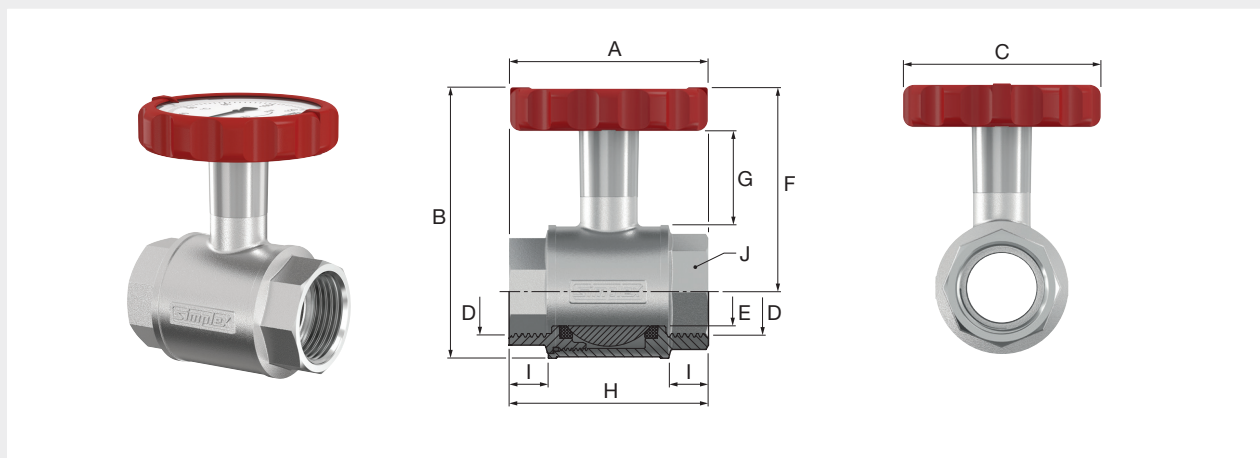
### Dimensions


Type	Dimensions [mm]								
	A	B	C	E (Ø)	F	G	H	I	J (WS)
MKH FG - DN 15	62.0	71.0	31.5	15	56	24	52.5	11	27
MKH FG - DN 20	65.0	79.0	40.0	20	59	24	59.0	12	32
MKH FG - DN 25	87.0	103.0	48.5	25	79	37	72.5	14	39
MKH FG - DN 32	91.0	112.0	58.0	32	83	36	80.0	15	49
MKH FG - DN 40	97.5	124.0	71.0	40	89	35	92.5	16	55
MKH FG - DN 50	106.5	140.5	87.0	50	97	35	106.5	17	70

## Socket Ball Valve with Red Thermometer Handle

PG = 782

With female thread on both sides, round thermometer handle in red, integrated  $\varnothing 63$  mm thermometer.



Type	Nom. diameter	Connection (D)		Article no.
MKH TG-R - DN 20	DN 20	G 3/4" F	3	F10118
MKH TG-R - DN 25	DN 25	G 1" F	3	F10125
MKH TG-R - DN 32	DN 32	G 1 1/4" F	3	F10126
MKH TG-R - DN 40	DN 40	G 1 1/2" F	1	F99727
MKH TG-R - DN 50	DN 50	G 2" F	1	F99771



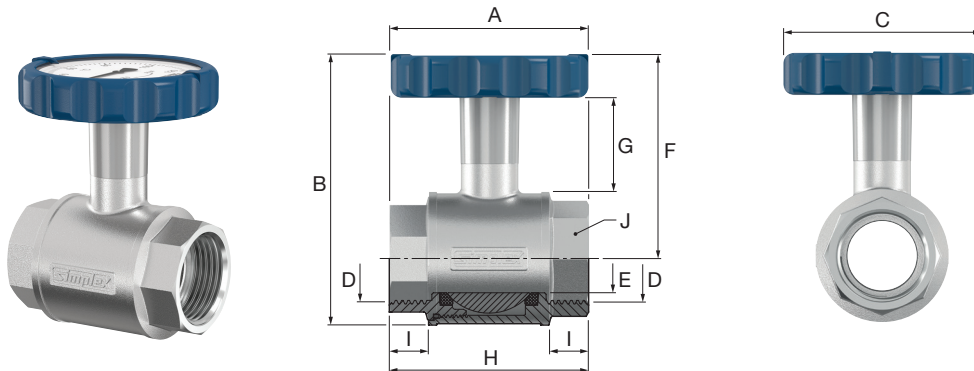
## Dimensions


Type	Dimensions [mm]								
	A	B	C (Ø)	E (Ø)	F	G	H	I	J (WS)
MKH TG-R - DN 20	59	95.0	72	20	73.0	38.5	59	12	32
MKH TG-R - DN 25	73	100.0	72	25	75.5	36.0	73	14	39
MKH TG-R - DN 32	80	108.0	72	32	79.0	35.0	80	15	49
MKH TG-R - DN 40	93	120.0	72	40	86.0	35.0	93	15	55
MKH TG-R - DN 50	107	136.5	72	50	93.0	35.0	107	17	70

## Socket Ball Valve with Blue Thermometer Handle

PG = 782

With female thread on both sides, round thermometer handle in blue, integrated Ø 63 mm thermometer.



Type	Nom. diameter	Connection (D)		Article no.
MKH TG-B - DN 20	DN 20	G 3/4" F	3	F10119
MKH TG-B - DN 25	DN 25	G 1" F	3	F10150
MKH TG-B - DN 32	DN 32	G 1 1/4" F	3	F10151
MKH TG-B - DN 40	DN 40	G 1 1/2" F	1	F99728
MKH TG-B - DN 50	DN 50	G 2" F	1	F99772



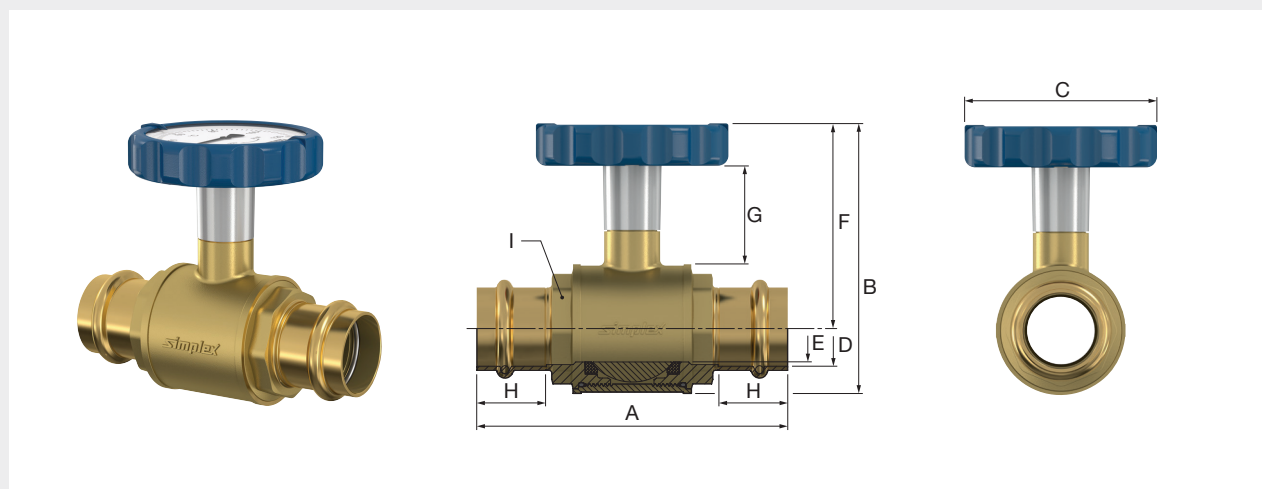
## Dimensions


Type	Dimensions [mm]								
	A	B	C (Ø)	E (Ø)	F	G	H	I	J (WS)
MKH TG-B - DN 20	59	95.0	72	20	73.0	38.5	59	12	32
MKH TG-B - DN 25	73	100.0	72	25	75.5	36.0	73	14	39
MKH TG-B - DN 32	80	108.0	72	32	79.0	35.0	80	15	49
MKH TG-B - DN 40	93	120.0	72	40	86.0	35.0	93	15	55
MKH TG-B - DN 50	107	136.5	72	50	93.0	35.0	107	17	70

## Socket Ball Valve with Press Connection and Blue Thermometer Handle

PG = 782

With press connection for M and V profile on both sides, for copper, carbon steel and stainless steel pipes, round thermometer handle in blue, integrated Ø 63 mm thermometer.



Type	Nom. diameter	Connection (D Ø) [mm]		Article no.
MKH PRESS TG-B - DN 25	DN 25	28	1	F10523
MKH PRESS TG-B - DN 32	DN 32	35	1	F10524



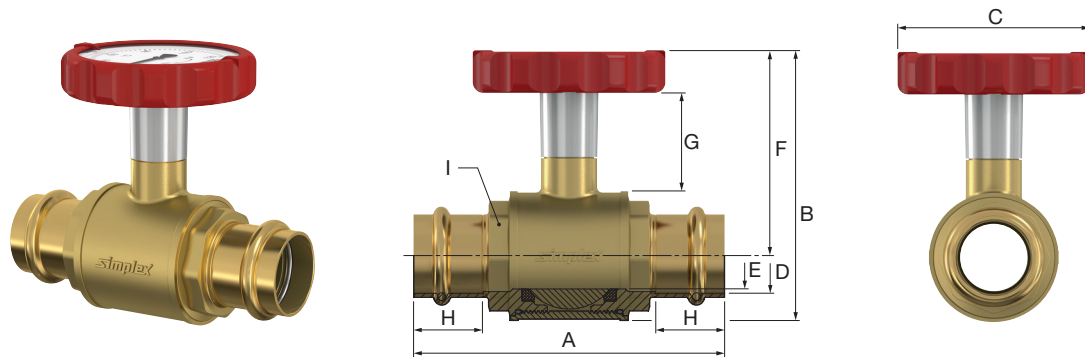
## Dimensions

Type	Dimensions [mm]							
	A	B	C Ø	E (Ø)	F	G	H	I (WS)
MKH PRESS TG-B - DN 25	116.5	101	72	25	77	37	26	39
MKH PRESS TG-B - DN 32	127.0	104	72	25	79	34	28	45

## Socket Ball Valve with Press Connection and Red Thermometer Handle

PG = 782

With press connection for M and V profile on both sides, for copper, carbon steel and stainless steel pipes, round thermometer handle in red, integrated Ø 63 mm thermometer.



Type	Nom. diameter	Connection (D Ø) [mm]		Article no.
MKH PRESS TG-R - DN 25	DN 25	28	1	F10536



### Dimensions

Type	Dimensions [mm]							
	A	B	C (Ø)	E (Ø)	F	G	H	I (WS)
MKH PRESS TG-R - DN 25	116.5	101	72	25	77	37	26	39



## PUMP BALL VALVES

Shut-off ball valve for use in heating systems, for installation on the suction side of circulation pumps, pump connection with flange for pump screw connection and integrated flat seal (union nut not included), full bore.

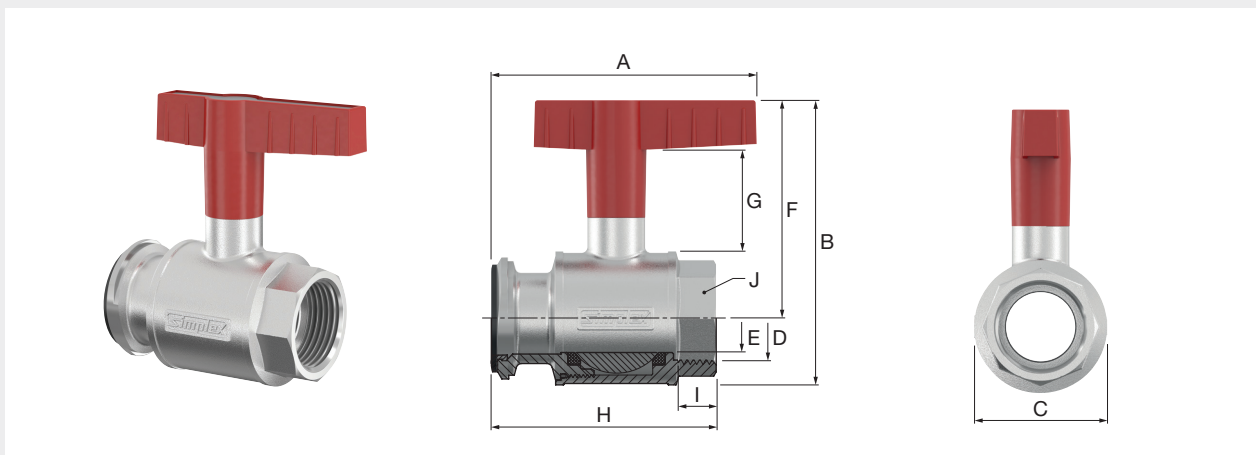
- Components made of nickel-plated brass, ball valves with press connection made of brass
- Sealing materials: EPDM, PTFE
- Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar


→ **Matching union nuts and insulation shells available!**

### Pump Ball Valve with Lever Handle

PG = 782

Pipe connection with female thread, extended lever handle, metal, red coating.



Type	Nom. diameter	Connection (D)		Article no.
PKH FG - DN 25	DN 25	G 1" F	1 / 20	F10127
PKH FG - DN 32	DN 32	G 1 1/4" F	1 / 20	F10128



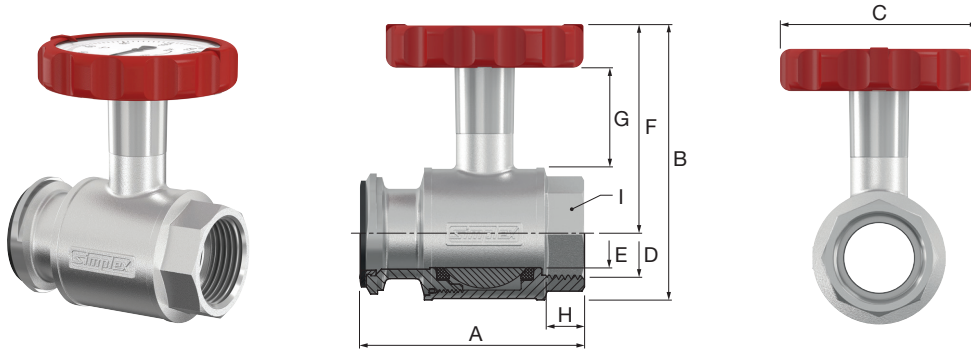
### Dimensions


Type	Dimensions [mm]								
	A	B	C	E (Ø)	F	G	H	I	J (WS)
PKH FG - DN 25	87.5	104	48.5	25	79	37.0	82.0	14	39
PKH FG - DN 32	105.5	112	58.0	32	83	35.5	94.5	14	49

## Pump Ball Valve with Red Thermometer Handle

PG = 782

Pipe connection with female thread, round thermometer handle in red, integrated  $\varnothing$  63 mm thermometer.



Type	Nom. diameter	Connection (D)		Article no.
PKH TG-R - DN 25	DN 25	G 1" F	3	F10129
PKH RG-R - DN 32	DN 32	G 1 1/4" F	3	F10130



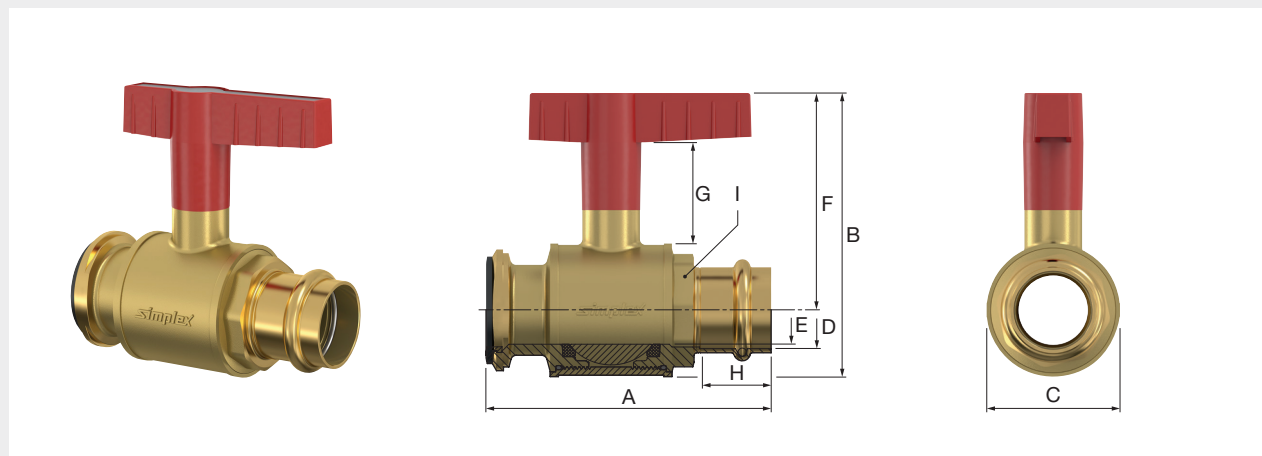
### Dimensions


Type	Dimensions [mm]							
	A	B	C ( $\varnothing$ )	E ( $\varnothing$ )	F	G	H	I (WS)
PKH TG-R - DN 25	82.0	104	72	25	75	34	14	39
PKH TG-R - DN 32	94.5	108	72	32	79	34	14	49

## Pump Ball Valve with Press Connection and Lever Handle

PG = 782

With press connection for M and V profile on the pipe side, for copper, carbon steel and stainless steel pipes. Extended lever handle, metal, red coating.



Type	Nom. diameter	Connection (D Ø) [mm]		Article no.
PKH PRESS FG - DN 25	DN 25	28	1	F10521
PKH PRESS FG - DN 32	DN 32	35	1	F10522



### Dimensions

Type	Dimensions [mm]							
	A	B	C (Ø)	E (Ø)	F	G	H	I (WS)
PKH PRESS FG - DN 25	103.5	103	48.5	25	79	36.5	26	39
PKH PRESS FG - DN 32	118.0	112	58.0	32	83	35.5	28	45

## PUMP BALL VALVES WITH INTEGRAL BACKFLOW LIMITER

Shut-off ball valve for use in heating systems, for fitting to circulation pumps on the discharge side, with integral backflow limiter and opening device (does not act as a check valve), pump connection with flange for pump screw connection and integrated flat seal (union nut not included), full bore.

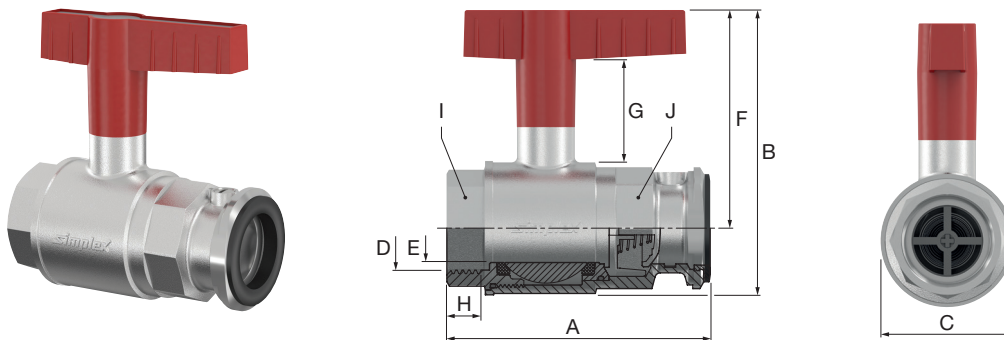
- Components made of nickel-plated brass, ball valves with press connection made of brass
- Sealing materials: EPDM, PTFE
- Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar


→ **Matching union nuts and insulation shells available!**

### Pump Ball Valve with Integral Backflow Limiter and Lever Handle

PG = 782

Pipe connection with female thread, extended lever handle, metal, red coating.



Type	Nom. diameter	Connection (D)		Article no.
PKH SKB FG - DN 25	DN 25	G 1" F	1/20	F10131
PKH SKB FG - DN 32	DN 32	G 1 1/4" F	1/10	F10132



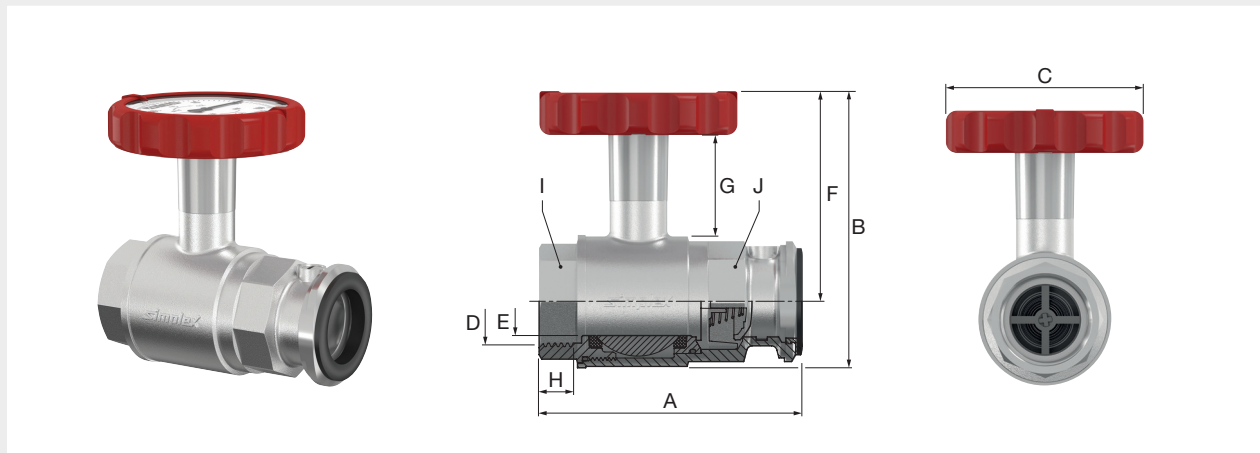
### Dimensions


Type	Dimensions [mm]								
	A	B	C	E (Ø)	F	G	H	I (WS)	J (WS)
PKH SKB FG - DN 25	96	103.5	48.5	25	79	37	14	39	41
PKH SKB FG - DN 32	110	111.0	58.0	32	83	36	14	49	50

## Pump Ball Valve with Integral Backflow Limiter and Red Thermometer Handle

PG = 782

Pipe connection with female thread, round thermometer handle in red, integrated  $\varnothing$  63 mm thermometer.



Type	Nom. diameter	Connection (D)		Article no.
PKH SKB TG-R - DN 25	DN 25	G 1" F	3	F10135
PKH SKB TG-R - DN 32	DN 32	G 1 1/4" F	3	F10136



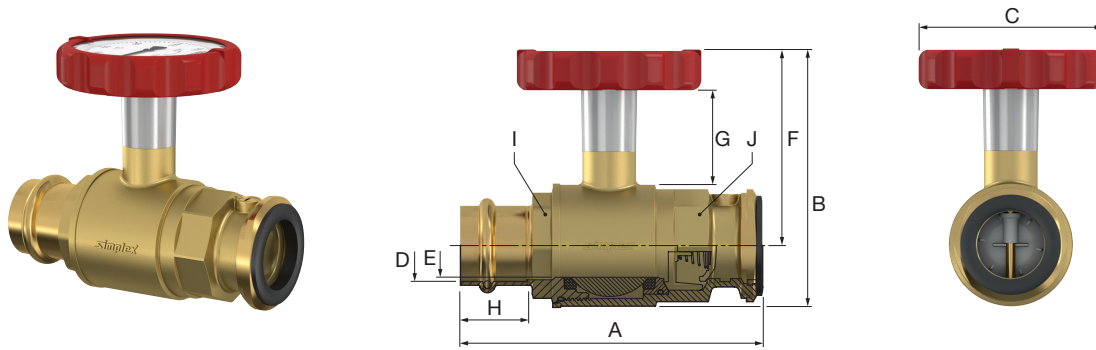
### Dimensions

Type	Dimensions [mm]								
	A	B	C (Ø)	E (Ø)	F	G	H	I (WS)	J (WS)
PKH SKB TG-R - DN 25	96	99	72	25	75.0	35	14	39	41
PKH SKB TG-R - DN 32	110	108	72	32	78.5	36	14	49	50

## Pump Ball Valve with Integral Backflow Limiter, Press Connection and Red Thermometer Handle

PG = 782

With press connection for M and V profile on the pipe side, for copper, carbon steel and stainless steel pipes, round thermometer handle in red, integrated Ø 63 mm thermometer.



Type	Nom. diameter	Connection (D Ø) [mm]		Article no.
PKH SKB PRESS TG-R - DN 25	DN 25	28	1	F10525
PKH SKB PRESS TG-R - DN 32	DN 32	35	1	F10526



### Dimensions

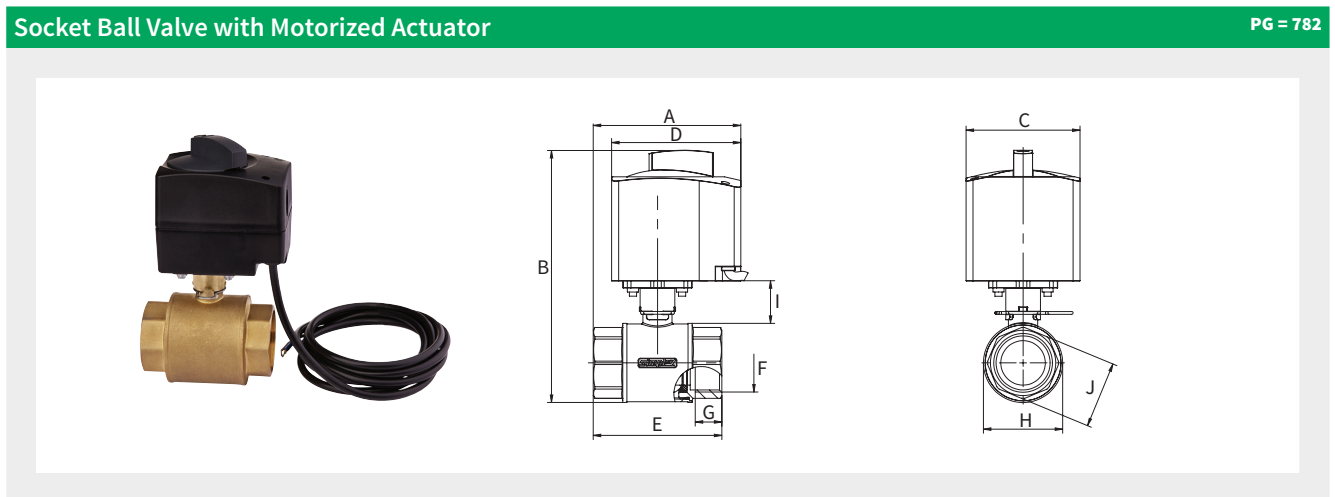
Type	Dimensions [mm]								
	A	B	C (Ø)	E (Ø)	F	G	H	I (WS)	J (WS)
PKH SKB PRESS TG-R - DN 25	118	99.5	72	25	75	35.0	26	39	41
PKH SKB PRESS TG-R - DN 32	134	107.5	72	32	79	34.5	28	45	50


# SOCKET BALL VALVE WITH MOTORIZED ACTUATOR

Shut-off ball valve for use in heating systems, with female thread on both sides, full bore. Motor:

- Activation: 3-point
  - Maximum load: 10 Nm (DN 50: 15 Nm)
  - Runtime: 135 sec. (DN 50: 120 sec.)
  - Angle of rotation: 90°
  - Nominal voltage: 230 V, ~50 Hz
  - Nominal capacity: 3,5 VA - 4 VA (DN 50: 2,5 VA - 4 VA)
  - Fuse type: IP42
  - Protection classe: II
- Components made of brass
  - Sealing materials: EPDM, PTFE
  - Max. operating temp.: 110 °C permanent temperature, 130 °C short-term
  - Max. operating pressure: 10 bar

→ **Matching insulation shells available!** (leave the insulation shells blank around the brackets)



Type	Nom. diameter	Connection (F)		Article no.
MKH STA - DN 20	DN 20	G 3/4" F	1	F10586
MKH STA - DN 25	DN 25	G 1" F	1	F10588
MKH STA - DN 32	DN 32	G 1 1/4" F	1	F10590
MKH STA - DN 40	DN 40	G 1 1/2" F	1	F10592
MKH STA - DN 50	DN 50	G 2" F	1	F10594

## Dimensions



Type	Dimensions [mm]								
	A	B	C	D	E	G	H	I	J (WS)
MKH STA - DN 20	94	167	82	93	67.0	14.5	39	34	32
MKH STA - DN 25	100	173	82	93	81.0	17.0	47	32	37
MKH STA - DN 32	107	181	82	93	93.0	19.0	57	31	48
MKH STA - DN 40	109	195	82	93	97.0	19.0	70	31	54
MKH STA - DN 50	124	215	86	100	119.5	23.5	86	30	68

## Interface for other drives

Designed in accordance with the	Interface specification	Hole diameter	For threaded screw	Max. perm. drive torque	Number of screws	Adapter interface	For drive interface
ISO 5211 F03	EN ISO 5211 - F03-N-L(H)	36	M5	30 Nm	4	Type L (square)	Type L (square)*
ISO 5211 F04	EN ISO 5211 - F04-N-L(H)	42	M5	30 Nm	4	Type L (square)	Type L (square)*
ISO 5211 F05	EN ISO 5211 - F05-N-L(H)	50	M6	30 Nm	4	Type L (square)	Type L (square)*

\* can also be used with type H (double)

## HANDLES FOR BALL VALVES

All ball valves in versions DN 20 to DN 50 (except article no. F10121) are equipped with a special hollow spindle, which allows the mounting of various handle options depending on the application. All handle types are interchangeable. The handles can be removed from and mounted on the valves without the use of tools.

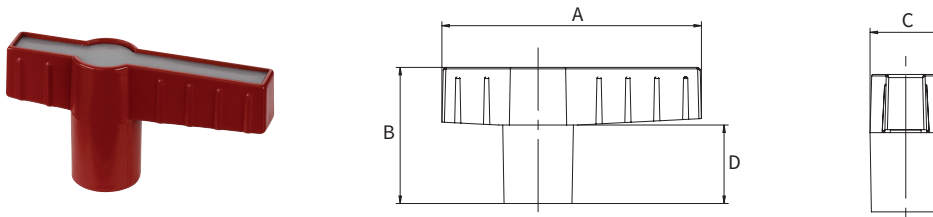
→ **Thermometer handle with company logo on request!**


### Lever Handle

PG = 990

Lever handle for Simplex socket and pump ball valves, extended version.

- Components made of coated metal



Type	Nom. diameter	Colour	Dimensions [mm]					Article no.
			A	B	C	D		
FG PKH	DN 20 - DN 50	red	81	43	22	24,5	1	F10104

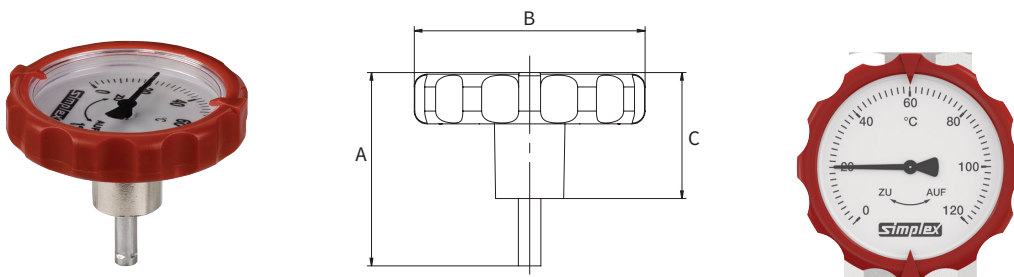



### Thermometer Handle

PG = 990

Thermometer handle for Simplex socket and pump ball valves, integrated Ø 63 mm thermometer. Company logo on request.

- Metal body with plastic handle



Type	Nom. diameter	Colour	Dimensions [mm]				Article no.
			A	B (Ø)	C		
TG-R PKH	DN 20 - DN 50	red	59.5	72	38.5	1	F10198
TG-B PKH	DN 20 - DN 50	blue	59.5	72	38.5	1	F10199



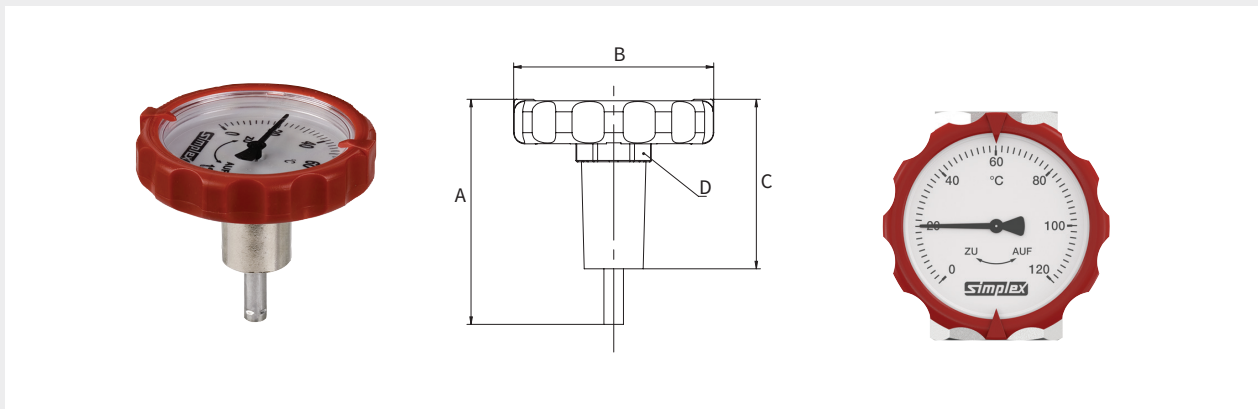



## Thermometer Handle, Long Version

PG = 990

Thermometer handle for Simplex socket and pump ball valves, integrated  $\varnothing$  63 mm thermometer.  
Company logo on request.

- Metal body with plastic handle



Type	Nom. diameter	Colour	Dimensions [mm]					Article no.
			A	B (Ø)	C	D (WS)		
TG-R long PKH	DN 20 - DN 50	red and blue	80.5	72	60.5	24	1	F10304

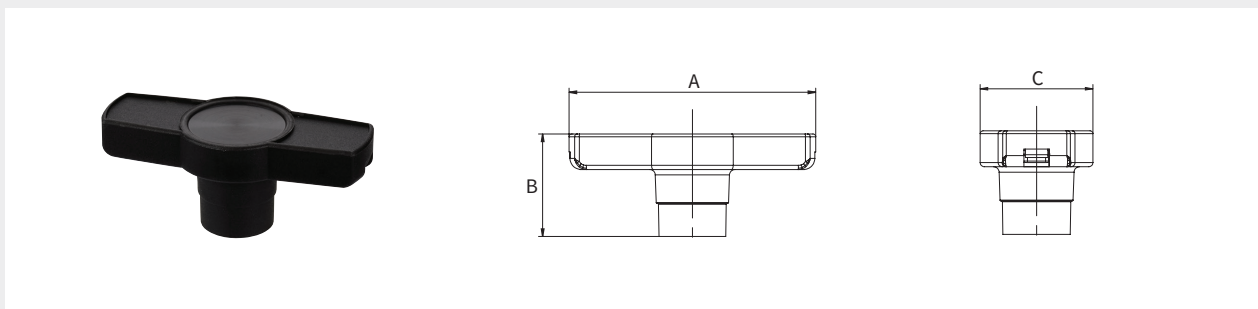



## T-Handle without Thermometer

PG = 990

T-Handle for Simplex socket and pump ball valves.

- Components made of plastic



Type	Nom. diameter	Colour	Dimensions [mm]				Article no.
			A	B	C		
KG PKH	DN 20 - DN 50	black	89	37	40.5	1	F10202



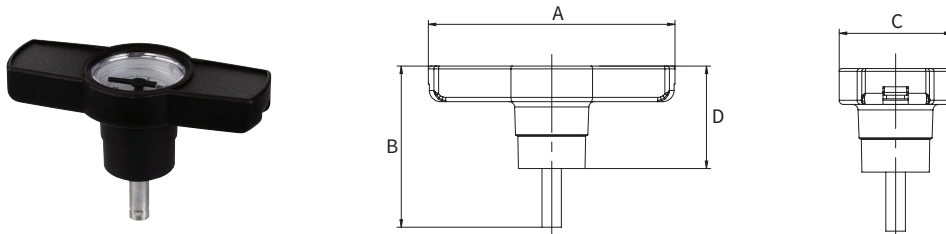
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## T-Handle with Integrated Thermometer

PG = 990

T-Handle for Simplex socket and pump ball valves, integrated  $\varnothing 32$  mm thermometer.

- Components made of plastic and metal



Type	Nom. diameter	Colour	Dimensions [mm]					Article no.
			A	B	C	D		
KG + TG PKH	DN 20 - DN 50	black	89	58	40.5	37	1	F10197

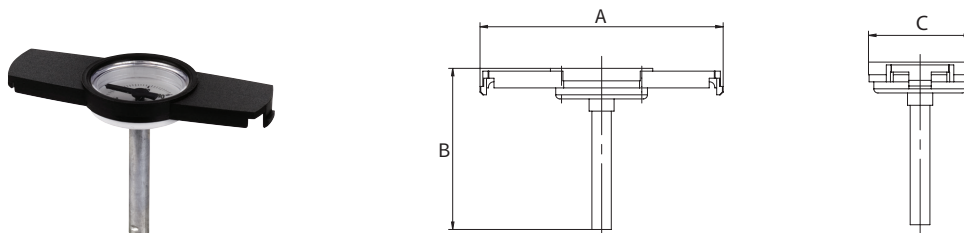


## Thermometer T-Handle Retrofit Kit

PG = 990

Retrofit kit for Simplex thermometer T-handle F10202, consisting of thermometer and protective cap.

- Components made of plastic



Type	Colour	Dimensions [mm]				Article no.
		A	B	C		
TG Retrofit Kit	black	87.5	58	37	1	F10108



## PUMP SUPPLY SET

Pump supply set for use in heating systems, consisting of:

- 1 pc. pump ball valve with integral backflow limiter and red thermometer handle
- 1 pc. pump ball valve with red lever handle
- Including 2 union nuts  
(Pump is not included)

Technical information and dimensional drawings see at the respective ball valves.

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

→ **Matching insulation shells available!**

### Pump Supply Set

PG = 782



Type	Nom. diameter	Connection		Article no.
<b>VL-Set - DN 25</b>	DN 25	G 1" F	1	F10255
<b>VL-Set - DN 32</b>	DN 32	G 1 1/4" F	1	F10256

## PUMP RETURN SET

Pump return set for use in heating systems, consisting of:

- 1 pc. pump ball valve with blue thermometer handle
- Including union nut and screw connector

Technical information and dimensional drawings see pump ball valve with blue thermometer handle.

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

→ **Matching insulation shells available!**

### Pump Return Set

PG = 782



Type	Nom. diameter	Connection		Article no.
<b>RL-Set - DN 25</b>	DN 25	G 1" F	1	F10258
<b>RL-Set - DN 32</b>	DN 32	G 1 1/4" F	1	F10259

## PUMP VALVE SETS

Pump valve set for use in heating systems, consisting of:

- 1 pc. pump ball valve with integral backflow limiter and red thermometer handle
- 1 pc. socket ball valve with blue thermometer handle
- 1 pc. pump ball valve with red lever handle

(Pump and pipe not included)

Technical information and dimensional drawings see at the respective ball valves.


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

→ **Matching insulation shells available!**

### Pump Valve Set without Union Nut

PG = 782




Type	Nom. diameter	Connection		Article no.
<b>PAG - DN 25</b>	DN 25	G 1" F	1	F10190
<b>PAG - DN 32</b>	DN 32	G 1 1/4" F	1	F10191

### Pump Valve Set with Two Union Nuts

PG = 782




Type	Nom. diameter	Connection		Article no.
<b>PAG ÜM - DN 25</b>	DN 25	G 1" F	1	F10192
<b>PAG ÜM - DN 32</b>	DN 32	G 1 1/4" F	1	F10193

### Pump Valve Set with Screw Connector and Union Nuts

PG = 782

Including all connections and union nuts.



Type	Nom. diameter	Connection		Article no.
<b>PAG RV ÜM - DN 25</b>	DN 25	G 1" F	1	F10194
<b>PAG RV ÜM - DN 32</b>	DN 32	G 1 1/4" F	1	F10195

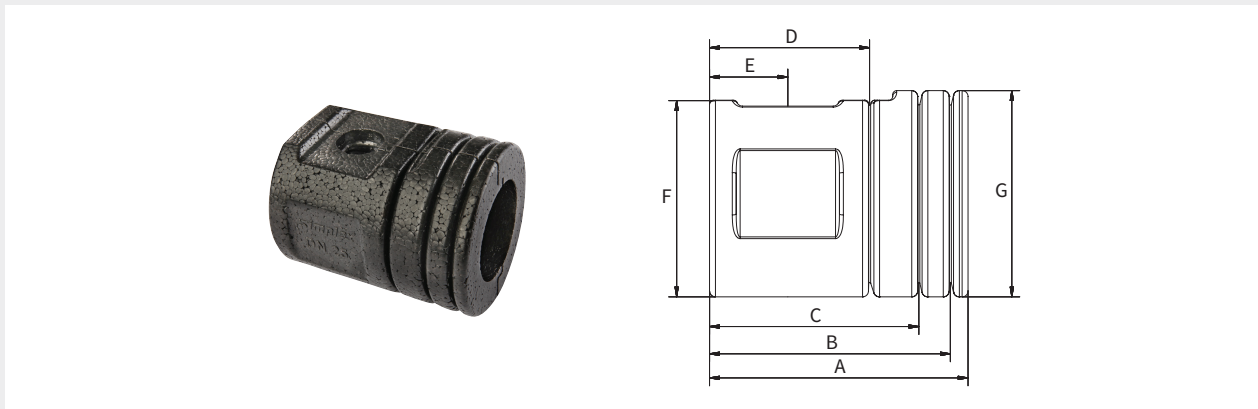
## ACCESSORIES FOR PUMP BALL VALVES


### Insulation Shells

PG = 782

2-piece, insulates in accordance with EnEV, adapts to Simplex pump ball valves and socket ball valves with screw-in or press connection, fits in conjunction with Simplex union nuts F10212-F10214.

- Components made of EPP



Type	Nom. diameter	Suitable for	Dimensions [mm]								Article no.
			A	B	C	D	E	F (Ø)	G (Ø)		
<b>Insulation Shell - DN 25</b>	DN 25	BV DN 25	118	108	94	73	36	93	98	1	F10555
<b>Insulation Shell - DN 32</b>	DN 32	BV DN 32	131	122	106	81	40	100	105	1	F10556

BV = Ball valve




### Insulation Shell Set

PG = 782



Insulation shell set for Simplex pump valve sets, consisting of 3 pcs. insulation shells (2-piece), insulates in accordance with EnEV, adapts to Simplex pump ball valves and socket ball valves with screw-in or press connection, fits in conjunction with Simplex union nuts F10212-F10214. Dimension drawings see insulation shells, article no. F10555 and F10556.

- Components made of EPP

Type	Nom. diameter	Suitable for	 [Set]	Article no.
<b>Insulation Shell Set - DN 25</b>	DN 25	BV DN 25	1	F10555SET
<b>Insulation Shell Set - DN 32</b>	DN 32	BV DN 32	1	F10556SET

BV = Ball valve

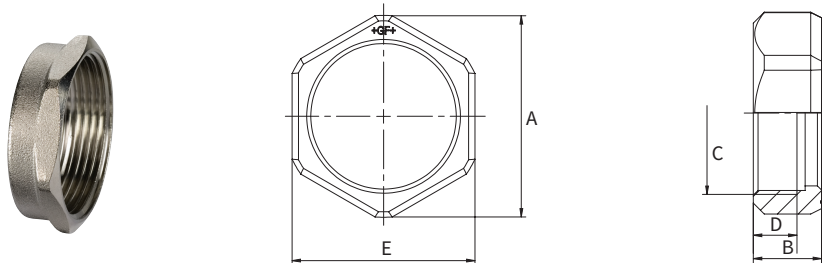


## Union Nut

PG = 782

Union nut for Simplex pump ball valves.

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



Type	Version	Nom. diameter	Connection (C)	Dimensions [mm]				Suitable for		Article no.
				A	B	D	E (WS)			
<b>Union Nut - DN 25 bl.</b>	brass, blank	DN 25	G 1 1/2" F	57	16	12	51	PBV DN 25	1	F10212
<b>Union Nut - DN 25 Ni</b>	brass, nickel plated	DN 25	G 1 1/2" F	57	16	12	51	PBV DN 25	1	F10213
<b>Union Nut - DN 32 Zn</b>	Cast-iron, zinc plated	DN 32	G 2" F	74	25	16	67	PBV DN 32	1	F10214

PBV = Pump ball valve

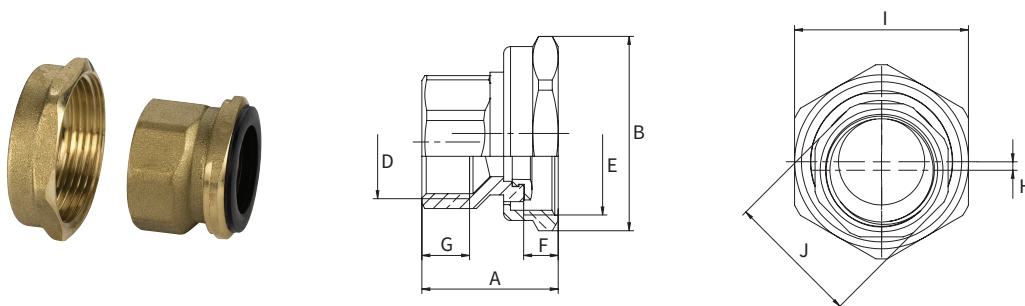


## Eccentric Threaded Connection DN 25

PG = 782

As compensation fitting for DN 25 manifold with 120 mm axial distance, 2.5 mm offset per piece.

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



Type	Connection		Dimensions [mm]								Article no.
	D	E	A	B	F	G	H	I (WS)	J (WS)		
<b>Eccentric Screw Conn.</b>	G 1 1/2" F	G 1" F	40	57	12	14	2.5	51	39	1	F10297

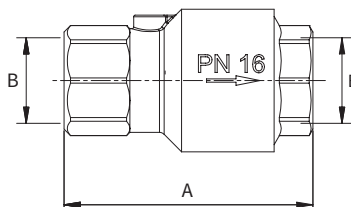



## Backflow Limiter Valve (Gravity Break)

PG = 782

Backflow limiter with opening device 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	Nom. diameter	Connection (B)	Dimension A [mm]		Article no.
SKB - DN 20	DN 20	Rp 3/4"	77	5	F10163
SKB - DN 25	DN 25	Rp 1"	92	5	F10164
SKB - DN 32	DN 32	Rp 1 1/4"	95	5	F10167



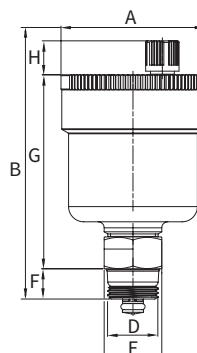
## QUICK AIR VENT


Automatic Air Vent (AAV) for use in heating systems, vent made of high strength and heat-resistant plastic, with brass non-return valve for easy replacement, self-sealing with special thread seal.

- Components made of plastic and brass
- Sealing materials: EPDM
- Max. operating temperature: 95 °C
- Max. operating pressure: 6 bar

## Quick Air Vent

PG = 782



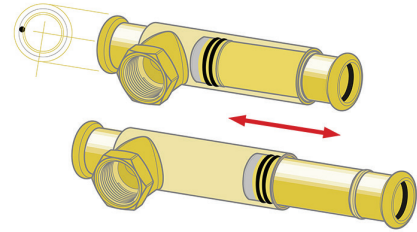
Type	Conn- ection (D)	Dimensions [mm]							Article no.
		A (Ø)	B	E (WS)	F	G	H		
Quick Air Vent	G 3/8" M	48	85	19	10	64	11	10	F10254



## TELESCOPIC T-PIECE

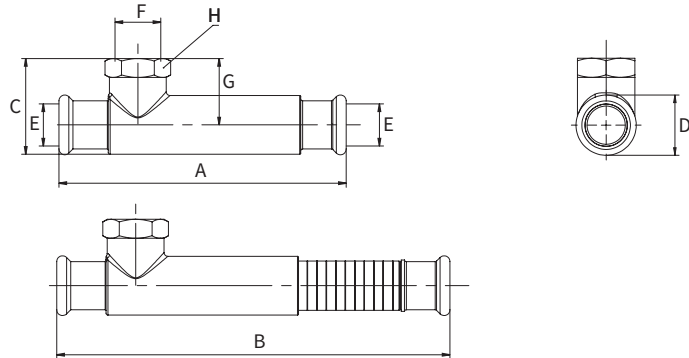
Telescopic T-piece for use in heating systems, with press connection for M and V profile, for copper, carbon steel and stainless steel pipes.

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



### Telescopic T-Piece with Press Connection

PG = 782



Type	Connection		Dimensions [mm]							Article no.
	E (∅) [mm]	F	A	B	C	D (∅)	G	H (WS)		
<b>Telescope-T PRESS 15</b>	15	G 1/2" F	124.0	174.0	42.0	31.5	30	24	1	F13193
<b>Telescope-T PRESS 22</b>	22	G 3/4" F	151.5	207.5	50.5	31.5	35	30	1	F13194
<b>Telescope-T PRESS 28</b>	28	G 1" F	165.5	222.0	66.5	37.0	48	41	1	F13195





## EX-COUPLINGS

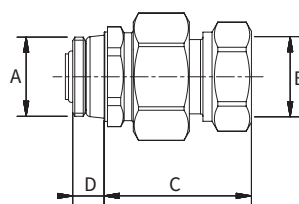
The ex-coupling is installed into the expansion pipe in front of the expansion vessel in heating systems. It is used for shut off, draining, maintenance and exchange of expansion vessels without draining the heating systems.


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

### Ex-Coupling Type A

PG = 782

With male thread, self-sealing with special thread seal and female thread.



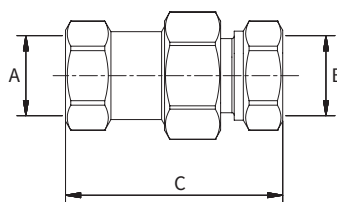
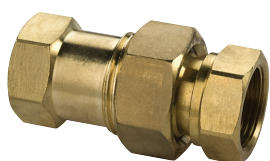
Type	Nom. diameter	Connection		Dimensions [mm]			Article no.
		A	B	C	D		
<b>Ex-Coupling A</b>	DN 20	G 3/4" M	G 3/4" F	49	11	10/50	F10385




### Ex-Coupling Type B

PG = 782

Female thread on both sides.



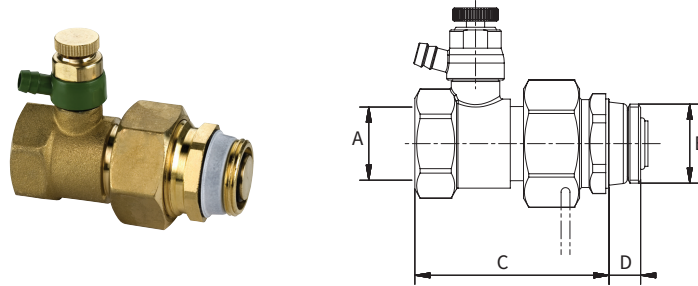
Type	Nom. diameter	Connection		Dimension (C) [mm]		Article no.
		A	B			
<b>Ex-Coupling B</b>	DN 20	G 3/4" F	G 3/4" F	72	10/50	F10386



### Ex-Coupling with Drain Type A

PG = 782

With male thread, self-sealing with special thread seal and female thread.



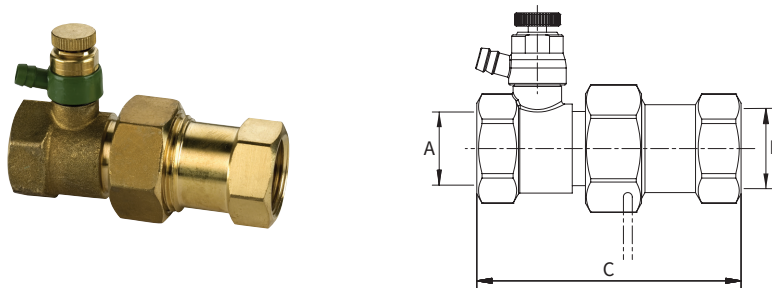
Type	Nom. diameter	Connection		Dimensions [mm]		📦	Article no.
		A	B	C	D		
Ex-Coupling w. Drain A	DN 20	G 3/4" F	G 3/4" M	64	11	5/25	F10305



### Ex-Coupling with Drain Type B

PG = 782

Female thread on both sides.



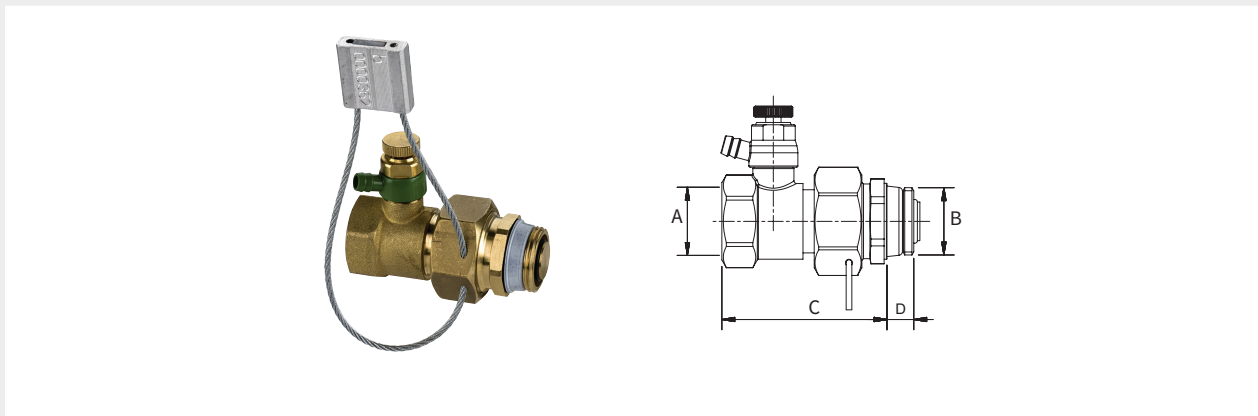
Type	Nom. diameter	Connection		Dimension (C) [mm]	📦	Article no.
		A	B			
Ex-Coupling w. Drain B	DN 20	G 3/4" F	G 3/4" F	87	5/25	F10306




## Ex-Coupling with Drain and Lead Seal Type A

PG = 782

With male thread, self-sealing with special thread seal and female thread.



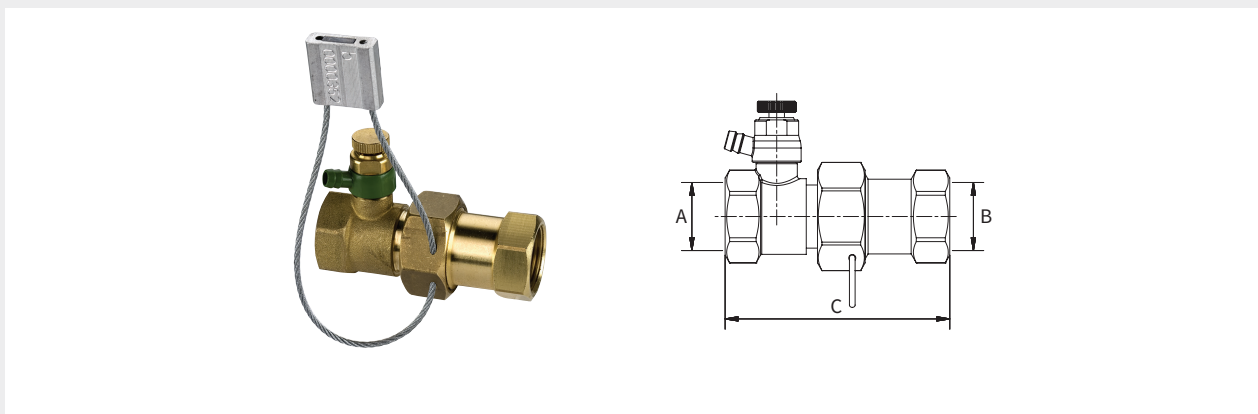
Type	Nom. diameter	Connection		Dimensions [mm]			Article no.
		A	B	C	D		
Ex-Coupl. w. Drain a. Lead A	DN 20	G 3/4" F	G 3/4" M	64	11	5/25	F10310




## Ex-Coupling with Drain and Lead Seal Type B

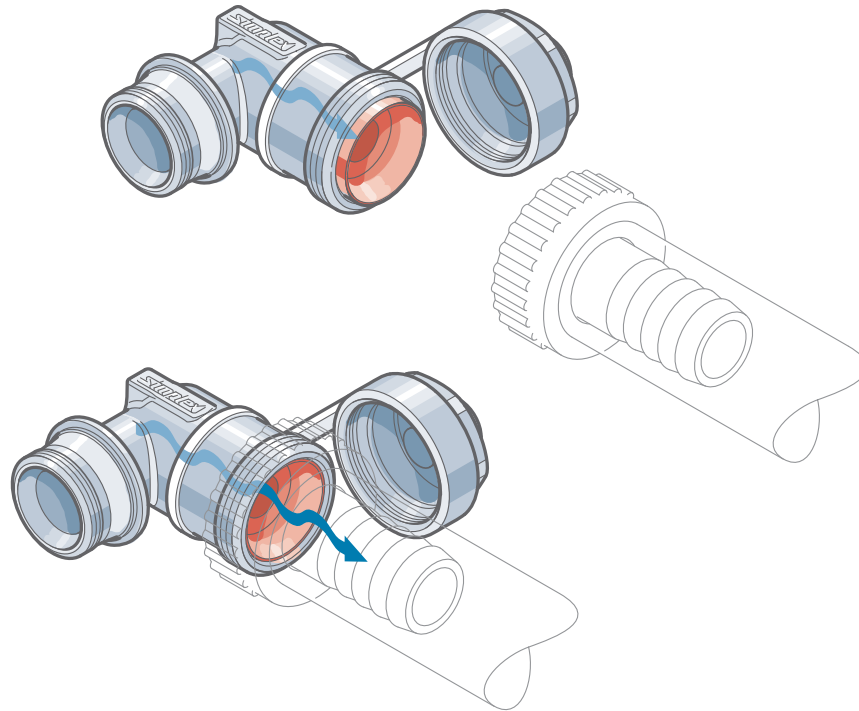
PG = 782

Female thread on both sides.



Type	Nom. diameter	Connection		Dimension (C) [mm]		Article no.
		A	B			
Ex-Coupl. w. Drain a. Lead B	DN 20	G 3/4" F	G 3/4" F	87	5/25	F10311





**Simplex EXCLUSIV Fill and Drain Plug:  
simple draining by attaching a hose connection**