

Connecting parts with nominal width DN 20 for analytic instruments

Valves, coupling valves, fittings and adapters

Model GCx-20

WIKA data sheet SP 61.14

Applications

- Handling of SF₆ gas tanks and alternative insulating gases
- For indoor and outdoor equipment

Special features

- For alternative insulating gases from -1 ... +100 bar [-14.50 ... +1,450.38 psi]
- For SF₆ gas from -1 ... +64 bar [-14.50 ... +928.24 psi]
- Temperature of use: -40 ... +80 °C [-40 ... +176 °F]
- Leakage rate GCV, GCA, gas measuring chambers: $\leq 1 \cdot 10^{-8}$ mbar · l / s
- Tested helium tightness of 100 %



Connection parts with nominal width DN 20

Description

Safe and simple operation

The WIKA connecting parts for alternative insulating gases enable the safe and reliable fitting of different gas connections in modern medium- and high-voltage switchgear. They are specifically designed for use with insulating gases, e.g. CO₂, Clean Air or C4-based gas mixtures, and ensure a compatible and gas-appropriate application.

Due to their precisely fitting design and the optimised coordination with different thread and connection standards, the connecting parts allow easy integration into existing systems. The secure adaptation between different nominal sizes and connection types ensures a reliable interface in the gas filling and maintenance process.

Both the simple mounting and dismounting and the tested leak tightness under pressure and vacuum ensure safe and low-emission handling of the alternative insulating gases.

Highest quality

To meet the increasing requirements in the field of alternative insulating gases, the connecting parts are equipped with optimised sealing concepts and suitable materials. They are specifically designed to minimise diffusion effects and permeation of the new gas mixtures.

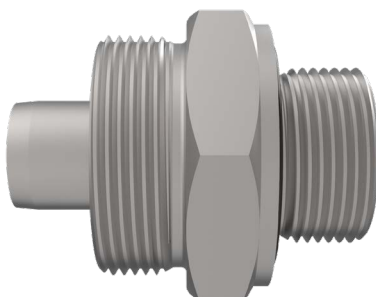
The robust design is based on many years of experience in the field of connecting parts and meets the highest requirements in terms of mechanical durability and leak tightness. Manufactured from high-quality materials such as aluminium and stainless steel, the connecting parts offer high resistance to different gas media and ambient conditions. On request, the connecting parts can be supplied with a material certificate.

The connecting parts for alternative insulating gases are part of a modular system comprising valves, couplings and connecting parts. They enable flexible adaptation between different thread forms, nominal sizes and gas standards and thus support the migration from SF₆ applications to sustainable insulating gas solutions.

Using the WIKA connecting parts creates a reliable, leak-tight and secure connection that prevents both the escape of gases and the ingress of moisture, thus contributing to long-term operational safety.

Attachment parts, left

A cross-sectional diagram of a mechanical assembly. It features a central yellow coiled spring housed within a grey cylindrical component. To the right, a grey piston-like structure is shown, with a small black pin or rod passing through it and into the spring housing. The entire assembly is mounted on a base.



Technical drawing of a mechanical assembly showing a cross-section of a housing with a pin and a shaft.

Technical drawing of a mechanical assembly in cross-section. The drawing shows a central component with a threaded section (M4.5x2) and a flange. Dimensions include a total width of 16, a flange width of 18, and a central bore diameter of 20.5. A note indicates "SW 50" and "AF 50" for the central part. A dimension of 65 is shown at the bottom.

Gas mixture	Thread A	Colour coding	Thread B	Material	Order number
SF₆	M45 x 2	-	M33 x 2	Aluminium	13364830
			M33 x 2	Brass	13364899
			M33 x 2	Stainless steel	14341337
			G 1 B	Aluminium	13365186
			G 1 B	Brass	14045888
			G 1 B	Stainless steel	On request
C4-FN	M48 x 2	Green	M33 x 2	Aluminium	On request
			M33 x 2	Stainless steel	On request
			G 1 B	Aluminium	On request
			G 1 B	Stainless steel	On request
CO₂/O₂	M43 x 2	Dark grey	M33 x 2	Aluminium	On request
			M33 x 2	Brass	On request
			M33 x 2	Stainless steel	On request
			G 1 B	Aluminium	On request
			G 1 B	Brass	On request
			G 1 B	Stainless steel	On request
N₂/O₂	M50 x 2	Blue	M33 x 2	Aluminium	On request
			M33 x 2	Brass	On request
			M33 x 2	Stainless steel	On request
			G 1 B	Aluminium	On request
			G 1 B	Brass	On request
			G 1 B	Stainless steel	On request

For SF₆ gas

Spare part: O-ring made of EPDM (D38)

Order number: 1247670

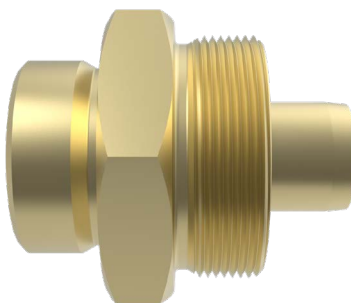
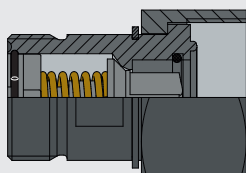
For alternative insulating gases

Spare part: O-ring made of CIIR (D38)

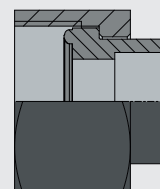
Order number: on request

Attachment parts, left

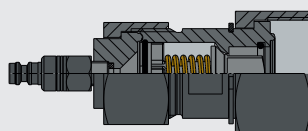
Coupling valve, model GCC-20



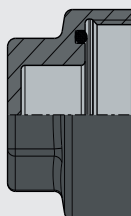
Fitting, model GCF-20



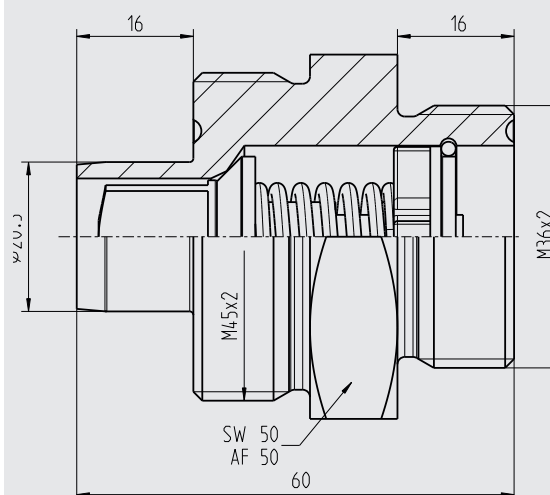
Connection for analytic instruments, model GCG-20



Protective cap, model GCP-20



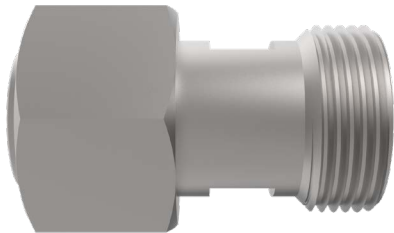
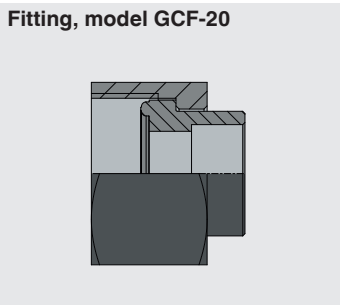
Dimensions in mm



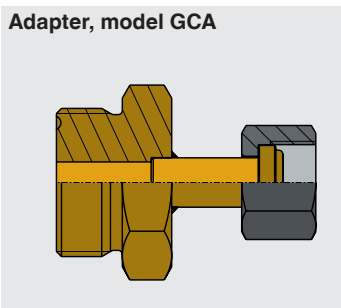
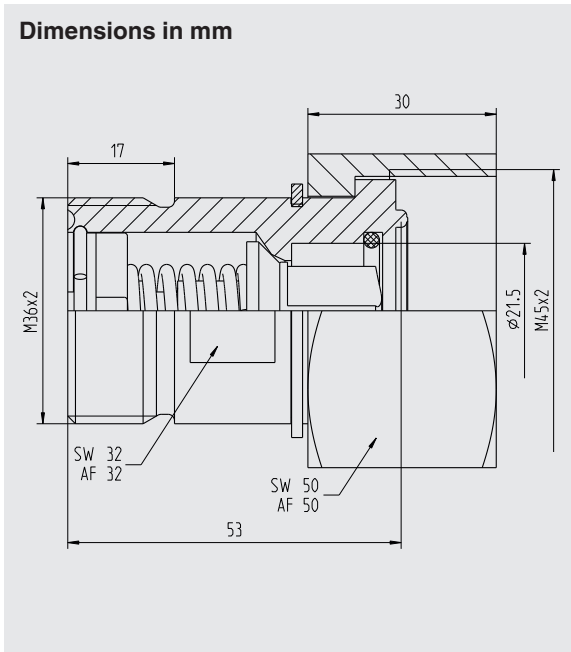
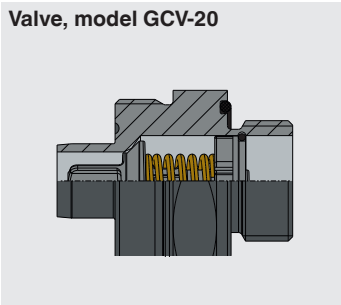
Gas mixture	Colour coding	Thread A	Thread B	Material	Order number
SF ₆	-	M45 x 2	M36 x 2	Aluminium	14146148
			M36 x 2	Brass	13366361
C4-FN	Green	M48 x 2	M36 x 2	Aluminium	On request
			M36 x 2	Stainless steel	On request
CO ₂ /O ₂	Dark grey	M43 x 2	M36 x 2	Aluminium	On request
			M36 x 2	Brass	On request
			M36 x 2	Stainless steel	On request
N ₂ /O ₂	Blue	M50 x 2	M36 x 2	Aluminium	On request
			M36 x 2	Brass	On request
			M36 x 2	Stainless steel	On request

Coupling valve, model GCC-20

Attachment parts, left



Attachment parts, right



Gas mixture	Thread A	Colour coding	Thread B	Material	Order number
SF ₆	M45 x 2	-	M36 x 2	Aluminium	13363817
			M36 x 2	Brass	13363833
			M36 x 2	Stainless steel	13363841
			G 1 B	Aluminium	13365186
			G 1 B	Brass	14045888
			G 1 B	Stainless steel	On request
C4-FN	M48 x 2	Green	M36 x 2	Aluminium	On request
			M36 x 2	Stainless steel	On request
			G 1 B	Aluminium	On request
			G 1 B	Stainless steel	On request

Gas mixture	Thread A	Colour coding	Thread B	Material	Order number
CO ₂ /O ₂	M43 x 2	Dark grey	M36 x 2	Aluminium	On request
			M36 x 2	Brass	On request
			M36 x 2	Stainless steel	On request
			G 1 B	Aluminium	On request
			G 1 B	Brass	On request
			G 1 B	Stainless steel	On request
N ₂ /O ₂	M50 x 2	Blue	M36 x 2	Aluminium	On request
			M36 x 2	Brass	On request
			M36 x 2	Stainless steel	On request
			G 1 B	Aluminium	On request
			G 1 B	Brass	On request
			G 1 B	Stainless steel	On request

For SF₆ gas

Spare part: O-ring made of EPDM (D20)

Order number: 11469553

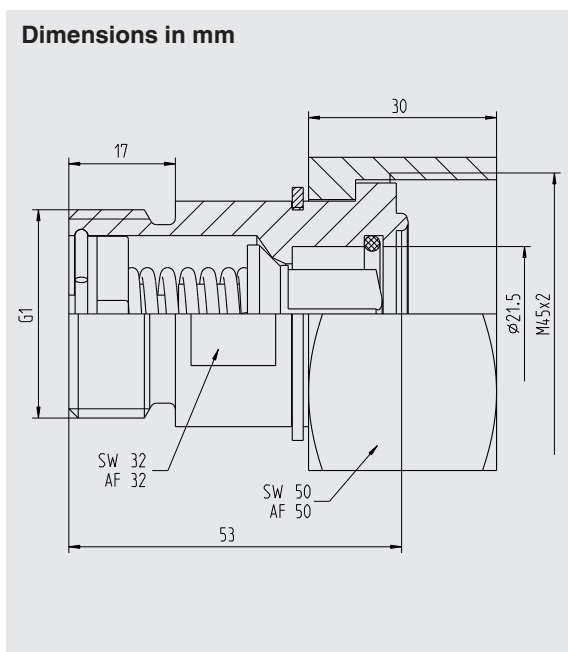
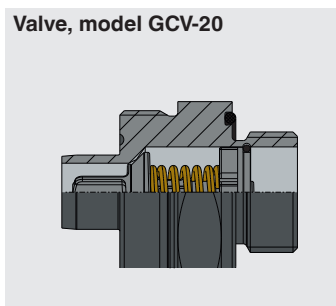
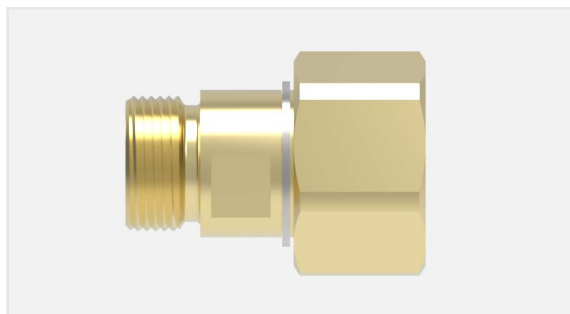
For alternative insulating gases

Spare part: O-ring made of CIIR (D20)

Order number: on request

Coupling valve, model GCC-20

Attachment parts, right



Gas mixture	Colour coding	Thread A	Thread B	Material	Order number
SF ₆	-	M45 x 2	G 1	Brass	14019353
C4-FN	Green	M48 x 2	G 1	Aluminium	On request
				Stainless steel	On request
CO ₂ /O ₂	Dark grey	M43 x 2	G 1	Aluminium	On request
			G 1	Brass	On request
			G 1	Stainless steel	On request
N ₂ /O ₂	Blue	M50 x 2	G 1	Aluminium	On request
			G 1	Brass	On request
			G 1	Stainless steel	On request

For SF₆ gas

Spare part: O-ring made of EPDM (D20)

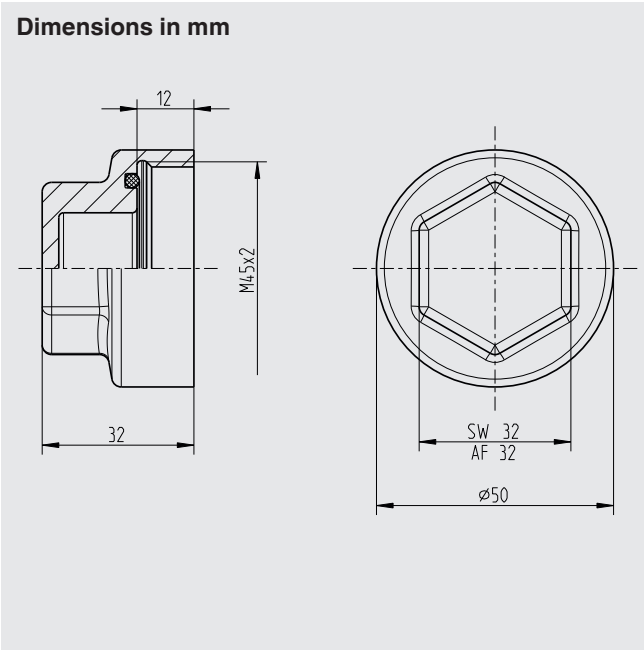
Order number: 11469553

For alternative insulating gases

Spare part: O-ring made of CIIR (D20)

Order number: on request

Protective cap, model GCP-20



Gas mixture	Thread A	Colour coding	Material	Order number
SF ₆	M45 x 2	-	Aluminium	13368631
C4-FN	M48 x 2	Green	Aluminium	On request
CO ₂ /O ₂	M43 x 2	Dark grey	Aluminium	On request
N ₂ /O ₂	M50 x 2	Blue	Aluminium	On request

For SF₆ gas

Spare part: O-ring made of EPDM (D34)

Order number: 11471779

For alternative insulating gases

Spare part: O-ring made of CIIR (D34)

Order number: on request

In addition to the standard versions shown in this data sheet, further variants and configurations are available for the DN20 connecting parts. These include different connection variants, materials and customer-specific adaptations. Detailed information on the available versions and ordering options can be found in the respective catalogue for connecting parts.

Ordering information

To order the described product, the order number or the model is sufficient.

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