



Technical data sheet for cold trap type GKF with melted dewar coat

Area of application

For condensing water, solvents or gases in connection with a vacuum pump

- laboratory technology
- medicinal technology
- biotechnology
- vacuum technology

Characteristics

- reliable and easy handling
- glass material according to ISO 3585 (DURAN)
- protective casing of Dewar flask made of aluminum, type CAL
- for liquid cooling agents, e.g. LN2 (-196°C)
- for solid cooling agents CO₂ (-77°C) with solvent
- pressure-free coolant sphere inside the Dewar flask
- viewing strips for observing the condensation process
- condensate drain with O-ring seal
- insulating lid
- coolant content: approx. 1100 ml
- condensate volume: approx. 250 ml

Description of complete cold trap with Dewar flask

Types and accessories

- CAL = structured aluminium casing
- plastic ring = polyethylene (PE), white, two-parted
- connections for cold trap = flange KF NW, glass thread GI18 / olive, spherical joint S29 with and without o ring seal

Temperature ranges for the Dewar flasks and the plastic ring

- glass refill from - 196°C to + 80°C
- plastic ring to + 80°C

Pressure range in the cold trap

- vacuum up to 5×10^{-6} mbar



Cold trap Type GKF

Description of the glass for the cold trap and the Dewar flask

Material

- borosilicate glass 3.3 ISO 3585

Chemical characteristics

- hydrolytic resistance: according to ISO 719 (98°C)
- hydrolytic resistance: according to ISO 720 (121°C)
- acid resistance: according to ISO 1776
- alkaline resistance: according to ISO 695-A2

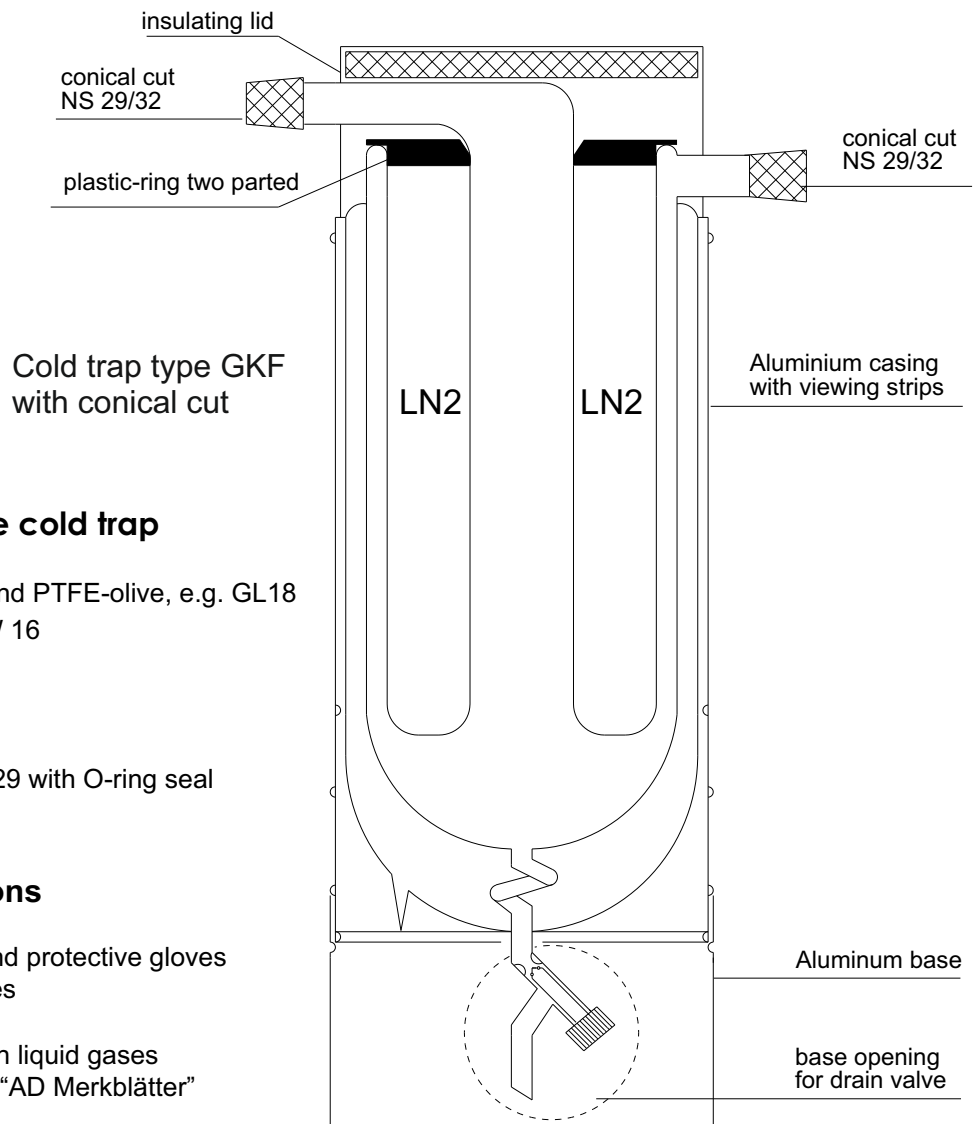
Physical characteristics

- linear expansion coefficient: $3,3 \times 10^{-6}$ 1/K (in between 20-300°C)
- density: 2,23 g/cm³
- specific thermal capacity: 910 J/kg K
- transformation temperature: 525°C

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Cold trap type GKF with conical cut

Vacuum connections for the cold trap

- glass threads with screw-on cap and PTFE-olive, e.g. GL18
- vacuum glass flanges, e.g. KF NW 16
- plane flanges, e.g. DN 25
- conical ground joints NS 29/32
- spherical ground joints S 29
- spherical ground joints Rotulex S 29 with O-ring seal

Safety advises and regulations

- always wear protective glasses and protective gloves
- national regulations for laboratories
- company-internal regulations
- safety regulations for handling with liquid gases
- Pressure calculation according to "AD Merkblätter"

Article number

Type	Connection	Article No.
GKF	NS 29/32	1702
GKF-GL25	glass thread with PTFE-Olive (Da13)	1702-GL25
GKF-KF16	glass flange KF-NW16 with brackets and NBR O-ring	1702-KF16
GKF-KF25	glass flange KF-NW25 with brackets and NBR O-ring	1702-KF25
GKF-S29	spherical ground joint S29	1702-S29

