

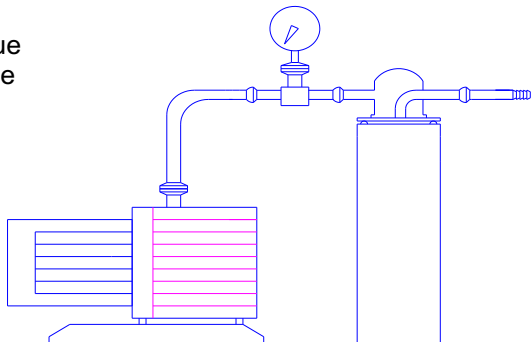


Technical data sheet for cold traps with Dewar flasks out of glass

Area of application

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

- laboratory technique
- medicinal technique
- Biotechnology
- vacuum technique



Features of performance

- reliably and easy handling
- no stand material for holding the cold trap necessarily
- Dewar flasks according to DIN 12492
- glass material according to ISO 3585 (DURAN)
- protective casing of Dewar flask made of blue coated metal or aluminum
- for liquid cooling agents, e.g. LN₂
- for solid cooling agents CO₂ with solvent (CO₂-wire basket necessarily)
- pressure-free cooling agent area inside of Dewar flask



Cold trap Type KF 29-GL- A

Description of complete cold trap with Dewar flask

Types and accessories

- C = blue-coated protective casing out of metal
- CAL = structured aluminium casing
- plastic ring = polyethylene (PE), white, two-parted
- connections for cold trap = flange KF NW, GL18/olive, spherical joint S29 with and without o ring

Temperature ranges for the Dewar flasks and the plastic ring

- glass refill from - 196°C to + 150°C
- plastic ring to + 100°C

Pressure range in the cold trap

- up to 1 bar over pressure
- vacuum up to 5×10^{-5} mbar

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

ISO THERM

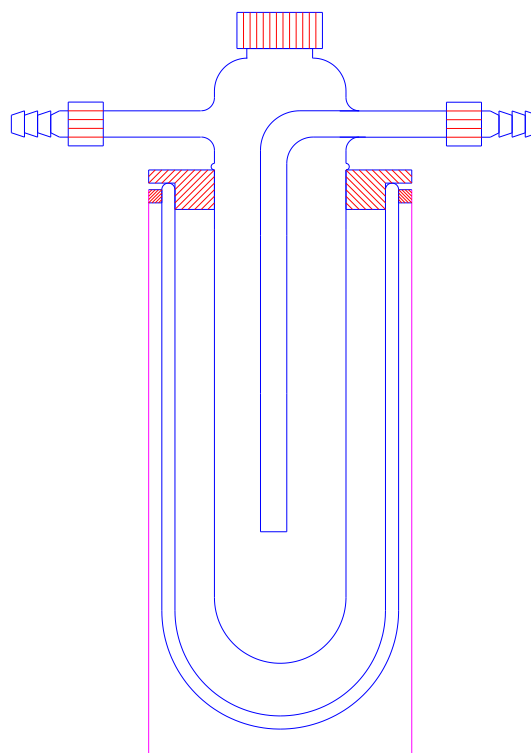
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Vacuum connections for the cold trap

- 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
- ADR regulations

Technical and order data for cold traps

Cold traps complete	Condensate	Coolant	Dewar	Cold trap	Art. No.	Assesoirs	Art. No.
Type	theoret.cap.	theoret.cap.	Type	joints		Cold trap	Art. No.
Typ KF 29-K	150 ml	1000 ml	12 C	S 29	1731	Cold trap S 29	1732
Typ KF 29-OK	150 ml	1000 ml	12 C	O 29	1735	Cold trap S 29 O	1736
Typ KF 29-GL	150 ml	1000 ml	12 C	GL 18	1740	Cold trap S 29 GL	1741
Typ KFL 29-K	250 ml	2000 ml	18 C	S 29	17360	Cold trap SL 29	17365
Typ KFL 29-OK	250 ml	2000 ml	18 C	O 29	17361	Cold trap SL 29 O	17366
Typ KFL 29-GL	250 ml	2000 ml	18 C	GL 18	17362	Cold trap SL 29 GL	17367
Typ KF 29-K-A	150 ml	1000 ml	12 C	S 29	17370	Cold trap S 29-A	17375
Typ KF 29-OK-A	150 ml	1000 ml	12 C	O 29	17371	Cold trap S 29 O-A	17376
Typ KF 29-GL-A	150 ml	1000 ml	12 C	GL 18	17372	Cold trap S 29 GL-A	17377
Typ KFL 29-K-A	250 ml	2000 ml	18 C	S 29	17380	Cold trap SL 29-A	17385
Typ KFL 29-OK-A	250 ml	2000 ml	18 C	O 29	17381	Cold trap SL 29 O-A	17386
Typ KFL 29-GL-A	250 ml	2000 ml	18 C	GL 18	17382	Cold trap SL 29 GL-A	17387

S 29 = Spherical joints S29

GL 18 = Glass screw threads with 10mm-PTFE olive

O 29 = Spherical joints S29 with O-ring seal

Cold traps complete = cold trap with Dewar and plastic ring / theoret.cap. = theoretical capacity

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