

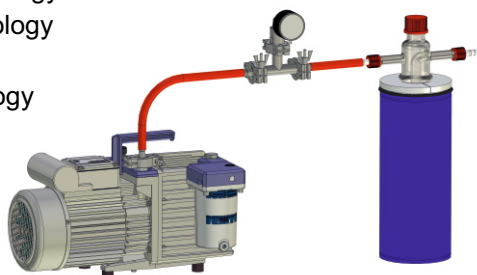


Technical data sheet for cold traps / coldfinger type S29-A with dewar flask made of glass

Area of application

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

- laboratory technology
- medicinal technology
- biotechnology
- vacuum technology



Cold trap / Coldfinger
Type KF29-GL-A



Cold trap / Coldfinger
Type KF29-NW16-A

Characteristics

- reliable and easy handling
- no stand material for holding the cold trap necessary
- 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 (-196°C)
- for solid cooling agents CO₂ (-77°C) with solvent (CO₂-wire basket necessary)
- pressure-free coolant sphere inside the Dewar flask

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, 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 + 150°C
- plastic ring to + 100°C

Pressure range in the cold trap

- up to 1 bar excess pressure
- vacuum up to 5x10⁻⁵ 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 x 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

KGW - ISOTHERM

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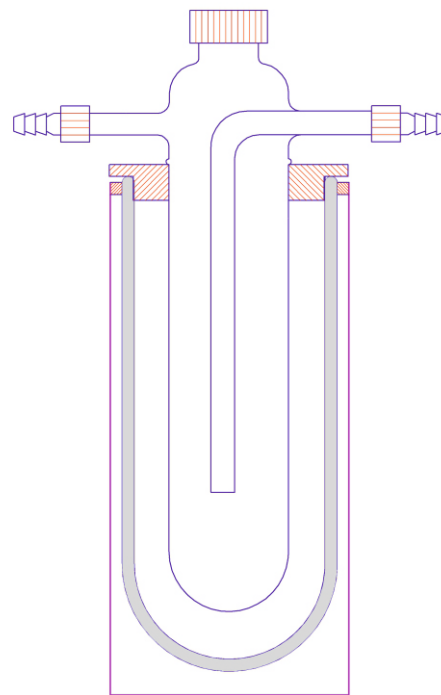
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Vacuum connections for the cold trap

- 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
- Pressure calculation according to "AD Merkblätter"



Cold trap / Coldfinger with a spout

Dimensions and article numbers of standard cold traps

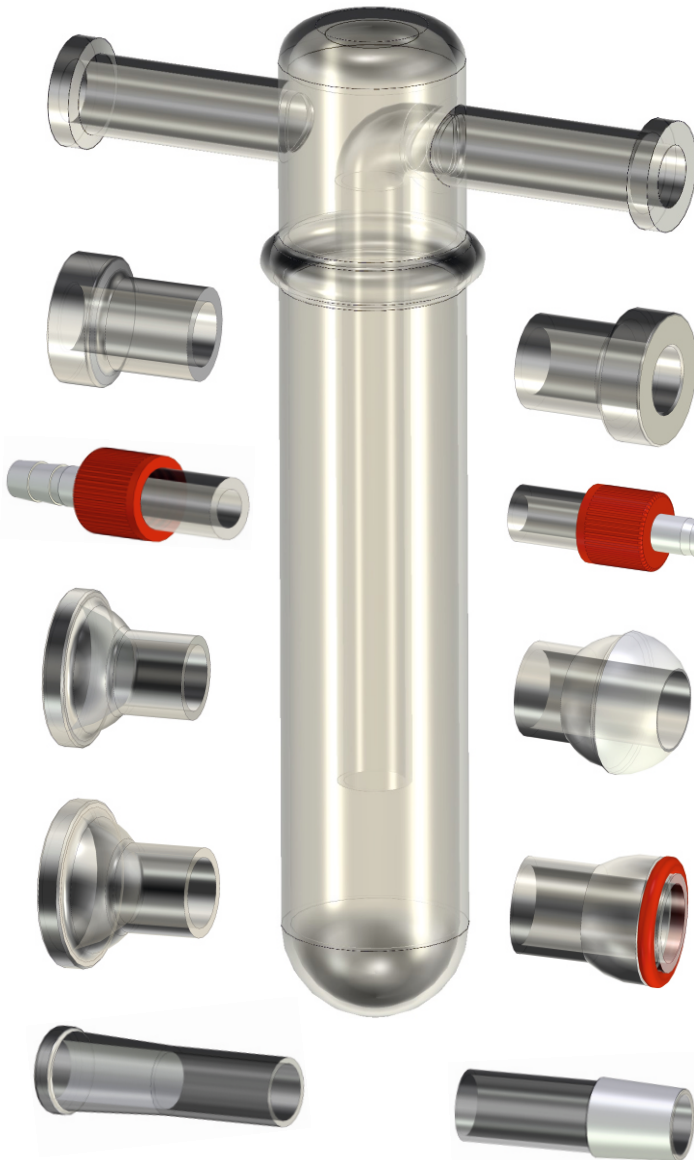
cold trap completely	condensate	coolant	dewar	cold trap	Art. No.		spar coldfinger	Art.No.
Type	theoret.Vol.	theoret.Vol.	Type	connection				
Type KF 29-K-A	150 ml	1000 ml	12 C	S 29	17370		coldfinger S 29-A	17375
Type KF 29-OK-A	150 ml	1000 ml	12 C	O 29	17371		coldfinger S 29 O-A	17376
Type KF 29-GL-A	150 ml	1000 ml	12 C	GL 18	17372		coldfinger S 29 GL-A	17377
Type KF 29-NW16-A	150 ml	1000 ml	12 C	NW16	17370-NW16		coldfinger S 29 NW16	17375-NW16
Type KF 29-NW25-A	150 ml	1000 ml	12 C	NW25	17370-NW25		coldfinger S 29 NW25	17375-NW25
Type KFL 29-K-A	250 ml	2000 ml	18 C	S 29	17380		coldfinger SL 29-A	17385
Type KFL 29-OK-A	250 ml	2000 ml	18 C	O 29	17381		coldfinger SL 29 O-A	17386
Type KFL 29-GL-A	250 ml	2000 ml	18 C	GL 18	17382		coldfinger SL 29 GL-A	17387
Type KFL 29-NW16-A	250 ml	2000 ml	18 C	NW16	17380-NW16		coldfinger SL 29 NW16	17385-NW16
Type KFL 29-NW25-A	250 ml	2000 ml	18 C	NW25	17380-NW25		coldfinger SL 29 NW25	17385-NW25

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Connection variants cold traps



Vacuum flange
KF NW16 - NW40
for external centering
ring with Viton O-ring

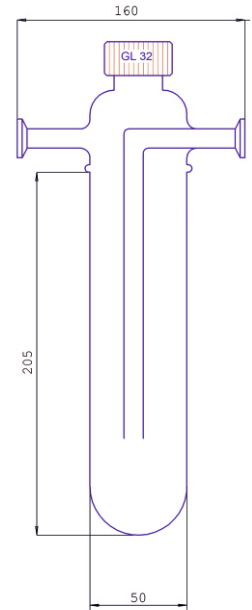
Plan flange
DN15-DN25

Glass threads
with olive
GL14-GL25

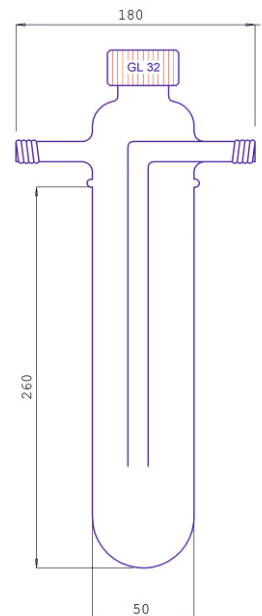
Spherical ground
joints S13 - S40

Spherical ground
joints S29-S35 with
O-ring seal Typ Rotulex

Conical ground joints
NS14/23 - NS45/40



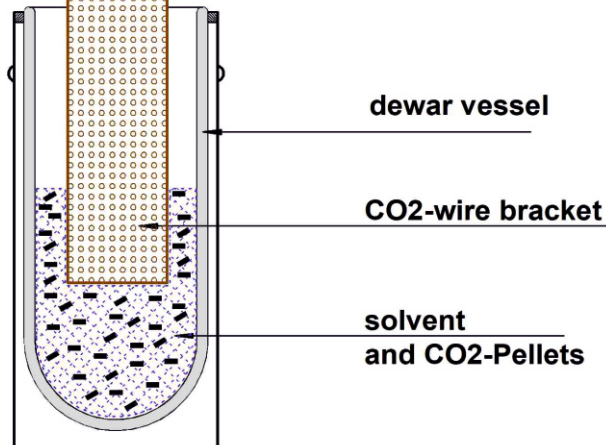
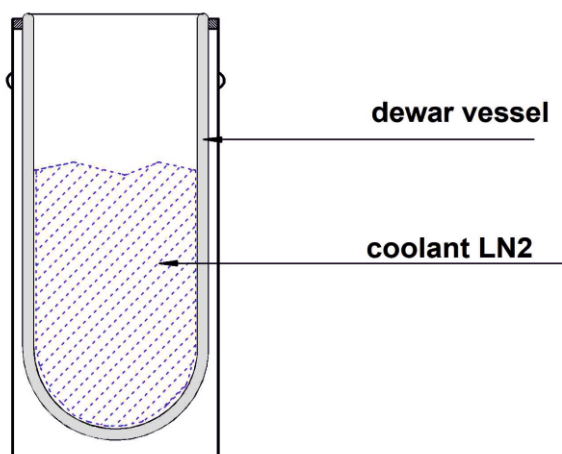
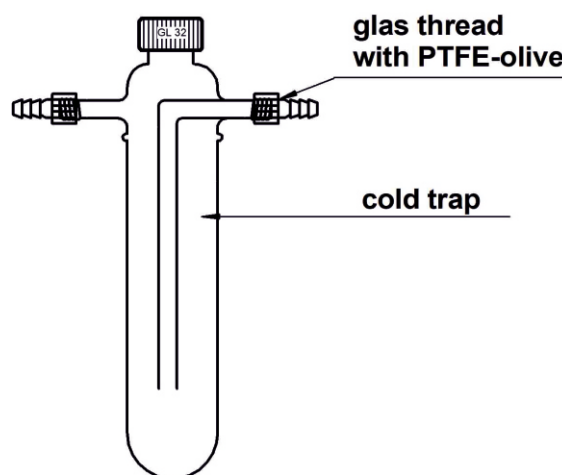
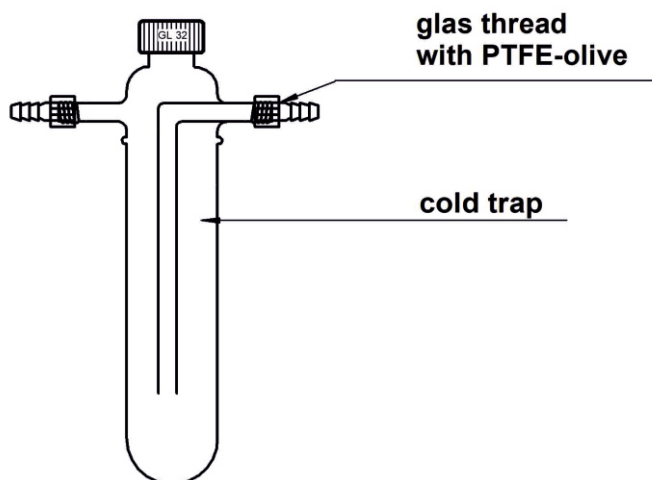
Cold trap / Coldfinger
Type S 29-NW16-A



Cold trap / Coldfinger
Type SL 29-GL-A



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Order example:

Cold trap type KF 29 - GL-A, Article No. 17372
with a CO2 wire bracket, Article No. 17570

Article No. 17372 + 17570

CO2-wire bracket for	
dewar vessel Type	Article No.
12 C	17570
18 C	17571