

CRYOGENIC COMPRESSORS (CC) CRYOGENIC PUMPS (CP)

Specially designed for use with helium

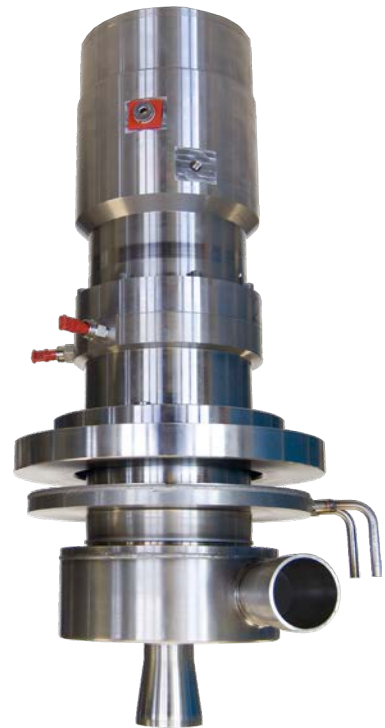
Cold compressors (CC) for exhausting gas vapors from liquid gas tanks and cold pumps (CP) for transporting liquefied gas to a cryogenic device



Basic technical information and main parameters

Main features

- Modular solution suitable for customization
- Compact design
- Single-stage axial-radial impeller with a pressure ratio up to 4
- Speed up to 90,000 RPM (CC) and 45,000 RPM (CP)
- Used independently or as a part of compressor cascades with total pressure ratio up to 20-25
- Unit driven by a variable frequency electric motor with high quality ball bearings
- Long service life and high durability
- Insulation system ensuring low heat inleak
- Use in research or in industry as helium liquefier actuators
- Possibility to be used with other inert gases – nitrogen, argon etc.



Main parameters

TYPE	MASS FLOW	IMPELLER DIAMETER	MIN. INLET PRESSURE	MIN. INLET TEMPERATURE	RPM (MAX.)
	g/s	mm	MPa	K	min ⁻¹
CC	10 – 115	40 – 280	0.001	4	90,000
CP	50 – 500	40 – 110	0.1	3	45,000

Main references



Max-Planck-Institut
für Plasmaphysik