

# CRYOGENIC COMPRESSORS (CC) CRYOGENIC PUMPS (CP)

**A small unit designed for the exhaustion of helium vapors from liquid helium tanks (CC) or feeding liquid or supercritical helium to cryogenic equipment (CP)**



## Basic technical information and main parameters

### Main features

- Compact design according to the liquefier process specifications
- Single-stage axial-radial impeller with a pressure ratio up to 4
- Revolutions 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 use for other inert gases – nitrogen, argon etc.



### Main parameters

TYPE	MASS FLOW	IMPELLER DIAMETER	MIN. INLET PRESSURE	MIN. INLET TEMPERATURE	R.P.M. (MAX.)
	g/s	mm	MPa	K	min <sup>-1</sup>
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