

CT-15-150



Highly compact, high-speed, electrically driven radial turbo compressor for the circulation and compression of various gases and refrigerants.

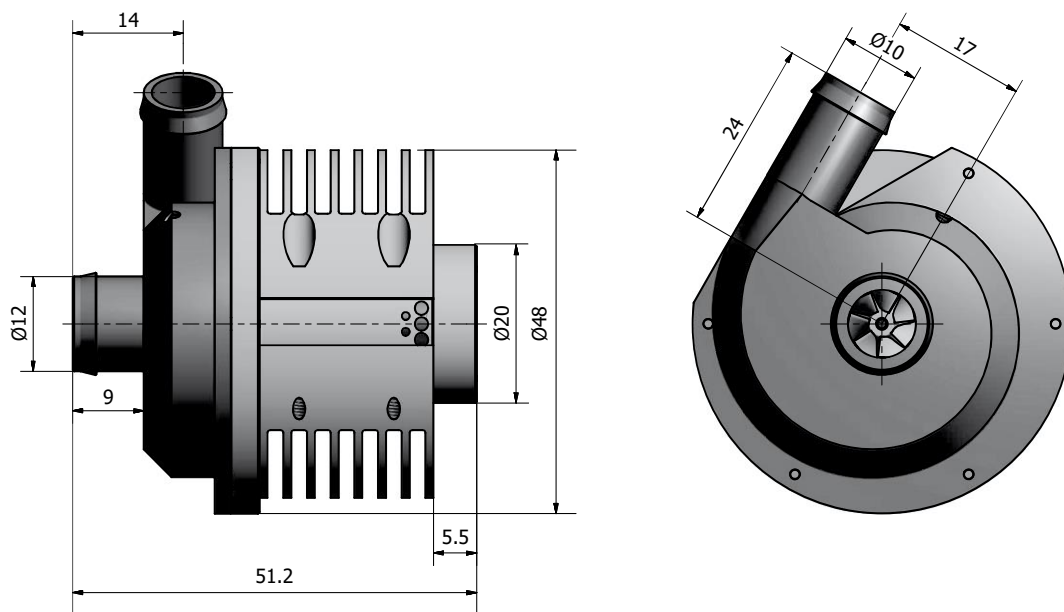
- Lowest ratio of volume and weight versus pressure and mass flow due to highest speeds
- Thermodynamic and electromagnetic optimization for highest total efficiency
- High-speed ball bearings with permanent lubrication
- Compatible to converter CC-75-500
- Integrated temperature measurement for overload protection



Specifications turbo compressor

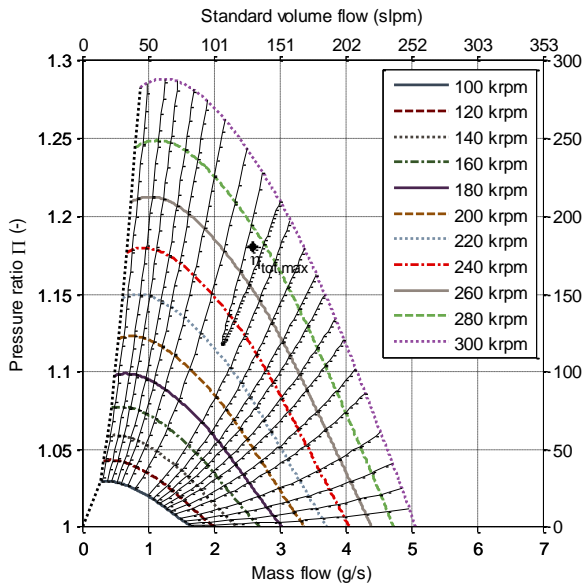
Maximum pressure ratio	1.3
Maximum mass flow	5 g/s
Isentropic overall efficiency η_{tot}	63 %
Rated power	70 W
Rated speed	300,000 rpm
Weight	110 g

Drawing (in mm)

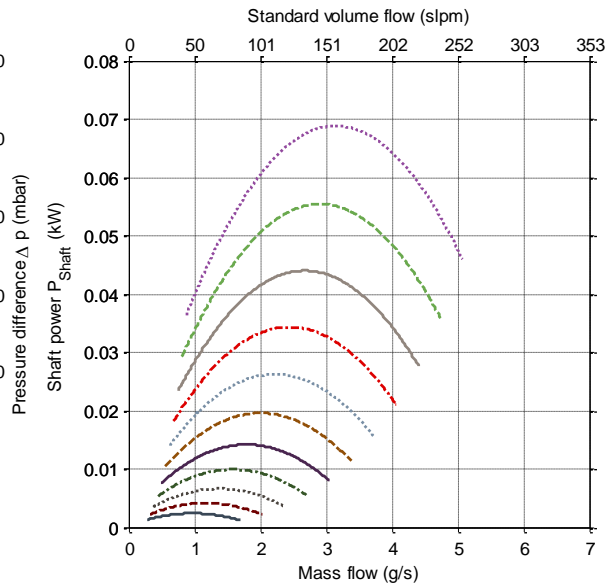


Compressor maps: overpressure operation

Pressure ratio versus mass flow



Input power versus mass flow

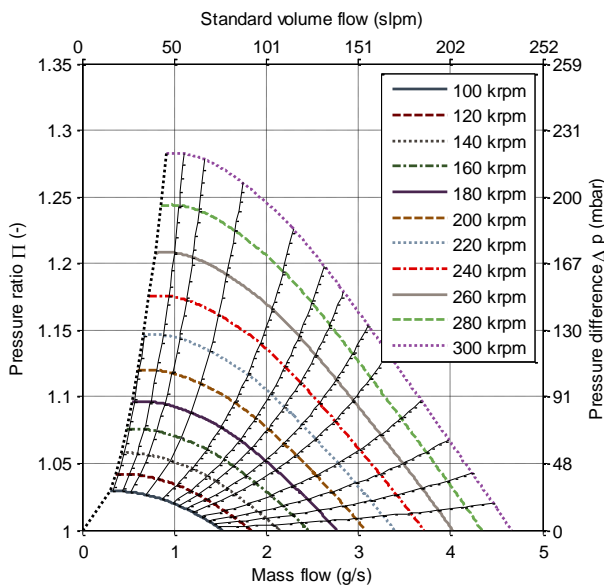


The specifications and compressor maps in this datasheet for overpressure operation refer to air (ISO 8778) at the inlet: temperature: $T = 293.15 \text{ K} = 20 \text{ }^\circ\text{C}$, pressure: $p_{in} = 1 \text{ bar}$.

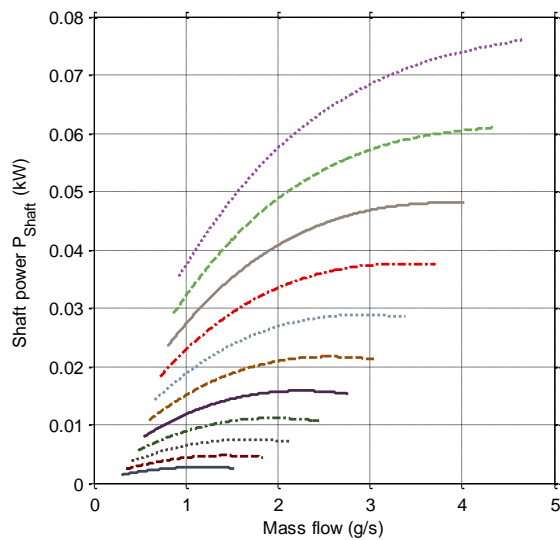
For technical details and further information please refer to the user's manual.

Compressor maps: vacuum operation

Pressure ratio versus mass flow



Input power versus mass flow



Order codes: CT-15-150.Bxx

Bearing options Bxx

B00	Standard ball bearing
B01	Vacuum ball bearing
B99	Custom specific ball bearing (inlet conditions and / or gas, etc.)

$\eta_{tot} = \eta_{is} * \eta_m$: isentropic overall efficiency

η_{is} : isentropic compressor efficiency

η_m : motor efficiency

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