
HELIUM EXPANSION TURBINE HEXT



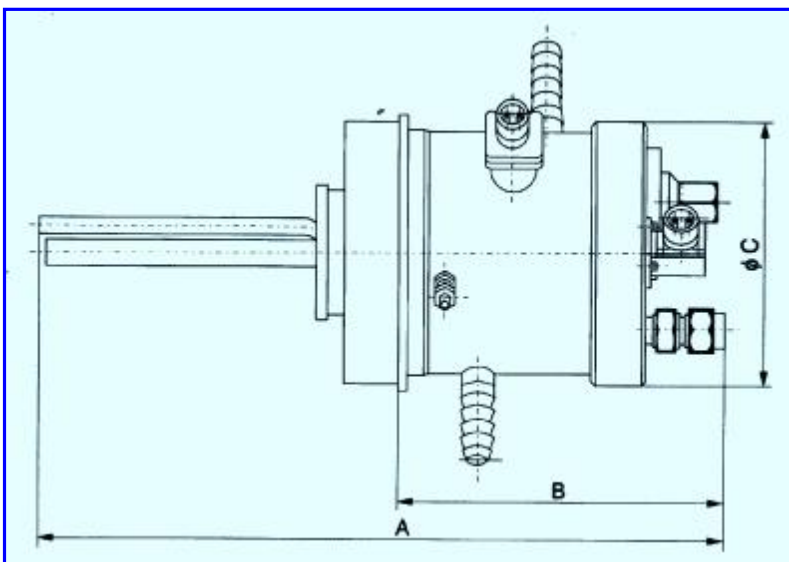
The helium expansion turbine is a small expansion turbine whose rotor is mounted on the dynamic gas lubricated bearings. The rotor of turbine is braked by eddy-current brake which is cooled by water. Small expansion turbines are mainly used in the process of gas liquefying in small helium liquefiers about different liquefied power in l/h.

Table of Hext Basic Dimensions

TYPE OF TURBINE	HEXT 0.5	HEXT 1	HEXT 1.5	HEXT 2.0	HEXT 10
DIMENSION	mm	mm	mm	mm	mm
A	310	310	330	330	510
B	170	170	190	190	242
C	114	114	114	114	200

Table of Hext Parameters

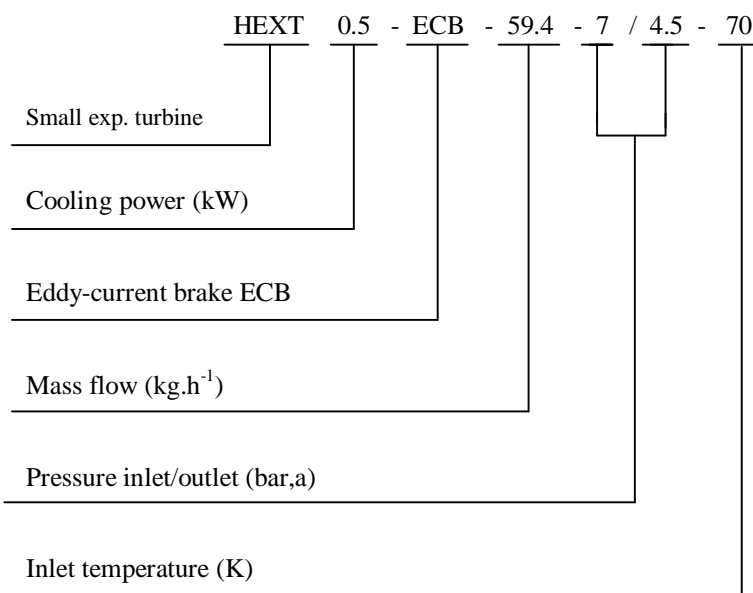
TYPE	MASS FLOW	COOLING POWER	MAX. INLET PRESSURE	INLET TEMPERATURE	R. P. M. (MAX.)
	Kg/hod.	W	MPa	K	min ⁻¹
HEXT 0,5	15-30	50-500	1.6	10-100	350,000
HEXT 1	20-80	150- 1,000	1.6	10-100	350,000
HEXT 1,5	40-120	200-1.500	1.6	10-100	350,000
HEXT 2	50-180	300-2,000	1.6	10-100	350,000
HEXT 10	100-300	2,000-10,000	1.6	10-100	170,000



The turbines are able to operate with others cryogenic gases: N₂, Ar, Ne and gas mixtures.

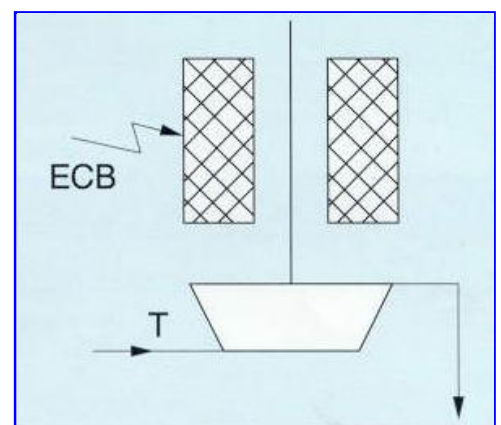
Cross-section of Turbine

Hext expansion Turbines Marking



Hext Circuit Diagram

EDDY - CURRENT BRAKE



T – turbine, ECB – Eddy-current Brake