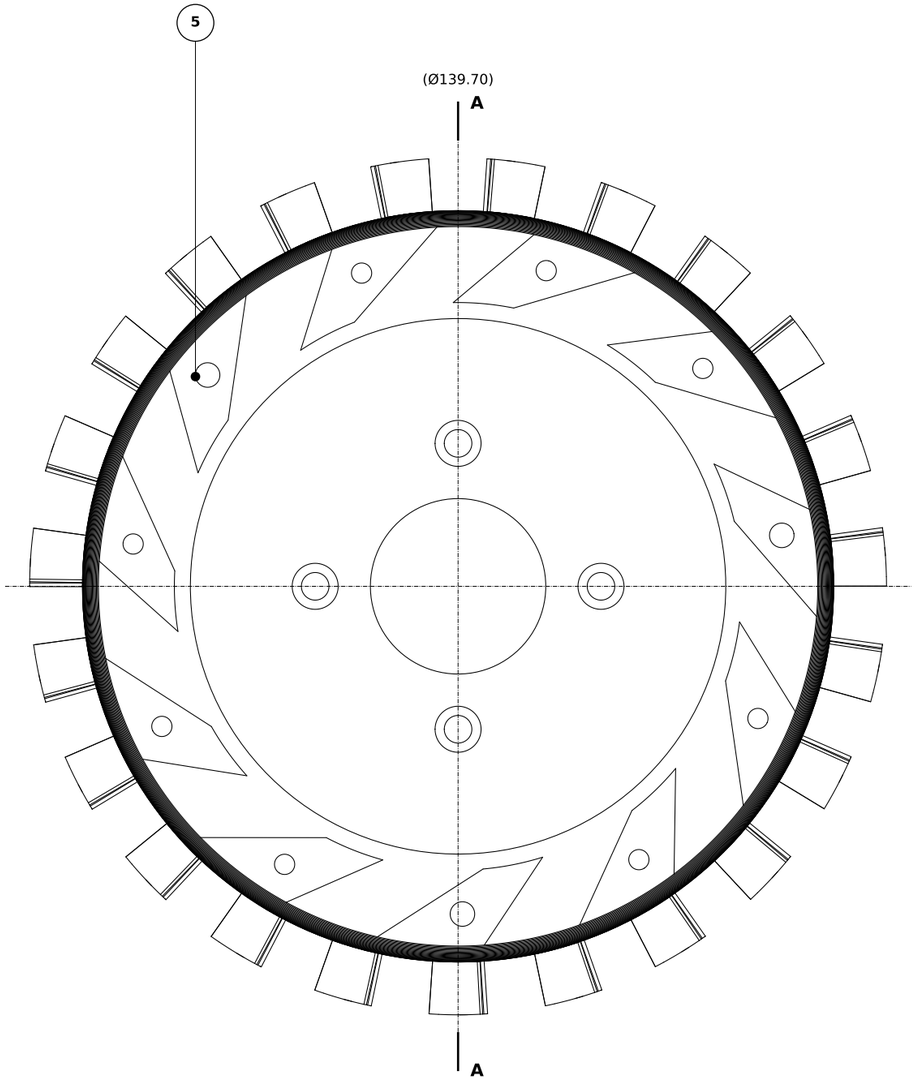
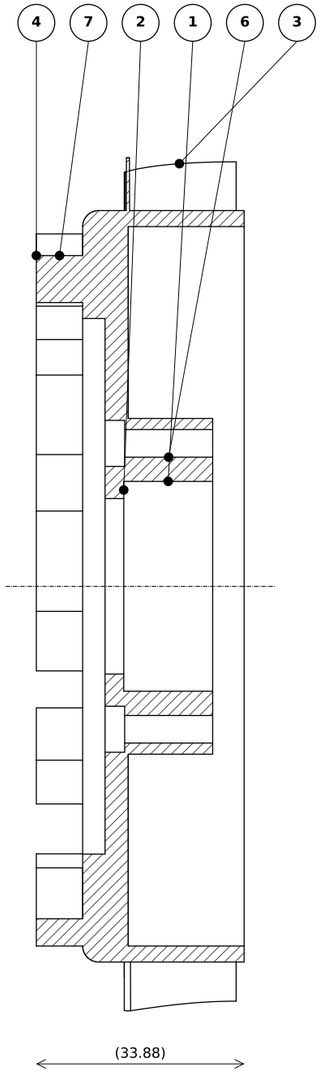


VIEW FROM THE INLET



SECTION A-A

REQUIREMENTS

1. A: front bearing cartridge bore Ø34.20 H8 (34.200–34.239); Ra 0.8
2. Cartridge shoulder face: perpendicular 0.01 to A
3. De-swirl vane tips Ø139.70 ±0.02, coaxial Ø0.02 to A (turn the ring before cutting the vanes)
4. Wedge vane front faces (the cover seats here): flat 0.02, perpendicular 0.02 to A
5. On Ø106.8, one per wedge: 8× M4×0.7-6H, 8 deep (Ø3.3 drill, 10.4 deep), positions ±0.1; 3× Ø4 H7 (4.000–4.012) reamed 7.9 deep for ISO 8734 4 × 10 m6 dowels (bought), at wedges 1, 5, 8 as modelled, position Ø0.02 to A
6. 4× Ø4.5 through the hub, counterbored Ø7.5 × 3.2 deep from the front face, on Ø46.6 at 0°, 90°, 180°, 270° ±0.1: the tunnel's 4 DIN 7984 M4 × 20 go in from the front
7. Wedge channels: width ±0.05; Ra 1.6

NOTES

1. Model is master: sizes not called out come from diffuser.step, at the general tolerance.
2. Break sharp edges 0.1–0.3 unless noted. No burrs. No tool marks across sealing or seating faces.
3. Surface finish Ra 1.6 µm unless noted. Threads to ISO 965 (metric fine).
4. Inspection report, CMM and material certificates are add-ons on the quote.

HIGHLAND Turbojet, 170 N class

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PART: Diffuser	PART NUMBER: HL-TJ-03		REVISION: A
MATERIAL: Aluminum 6061-T6 (ASTM B211 bar)			
FINISH: None, as machined		HEAT TREAT: None	
TOLERANCE UNLESS NOTED: ±0.13 mm (±0.005 in) unless noted; angles ±0.5°			
QUANTITY: 1 per engine	MASS: 318.7 g		SCALE: 1:1
UNITS: mm	PROJECTION: Third angle	DATE: 2026-11-20	SHEET: A3, 1 of 1