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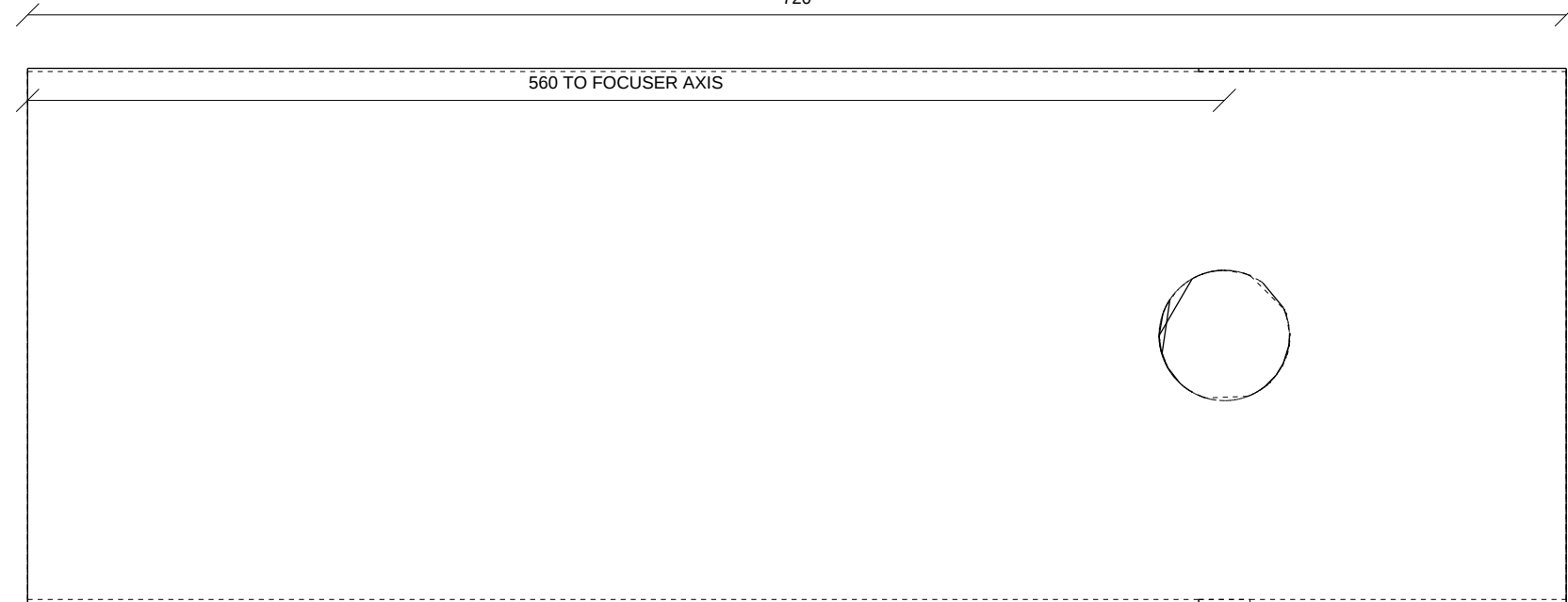
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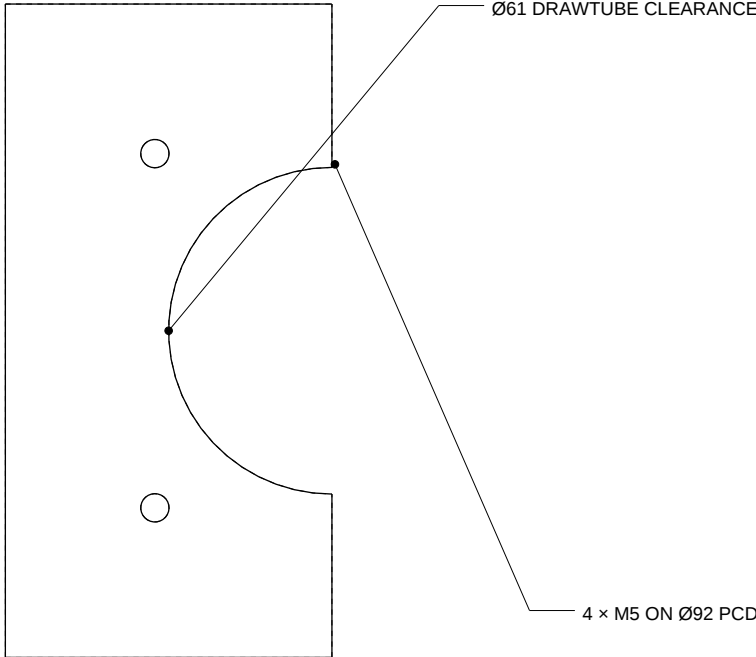
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TUBE — DEVELOPED LAYOUT



FOCUSER BOARD

REVISION HISTORY

REV	DESCRIPTION	DATE
A	First issue for manufacture	2026-08-16

TUBE AND FOCUSER NOTES

- TUBE Ø250 OD × 1.5 WALL × 720. WALL THICKNESS FEA-AUTHORISED.
- ROUNDNESS 0.5 TIR OVER THE TUBE-RING SEATING BANDS.
- FOCUSER BOARD SEAT MACHINED CONCAVE TO Ø250 — MUST NOT ROCK.
- FOCUSER AXIS SQUARE TO TUBE AXIS WITHIN 0.1°. THIS IS A MACHINED FEATURE. A HAND-CUT HOLE GUARANTEES A TILT YOU WILL CHASE FOR MONTHS.
- FOCUSER MUST BE LOW PROFILE: HEIGHT ≤35 ABOVE TUBE OD. EVERY EXTRA 10 mm OF HEIGHT COSTS 2.3 mm OF SECONDARY MINOR AXIS.
- DRAWTUBE SAG UNDER 1 kg CAMERA ≤20 µm — THE FOCUS BUDGET IS ±21.5 µm.

FLOWMATIC · ASTROGRAPH PROGRAMME

200 mm f/4 NEWTONIAN ASTROGRAPH · CANBERRA ACT 35.28°S

OPTICAL TUBE AND FOCUSER BOARD

DRAWING NUMBER FM-AST-005	REVISION A	SHEET 5 OF 6
SCALE 1:5 / 1:2	MATERIAL ALUMINIUM 6061-T6	MASS 2.47 kg
PROJECTION FIRST ANGLE (ISO 128)	FINISH INTERIOR FLOCKED MATT BLACK	UNITS MILLIMETRES
GENERAL TOL ISO 2768-mK UNLESS STATED · DO NOT SCALE DRAWN NaXief's Claude CHECKED SELF-CHECK + VISUAL JUDGE, SEE SHEET 6 QA GATES DATE 2026-08-16 STATUS ISSUED FOR MANUFACTURE		

