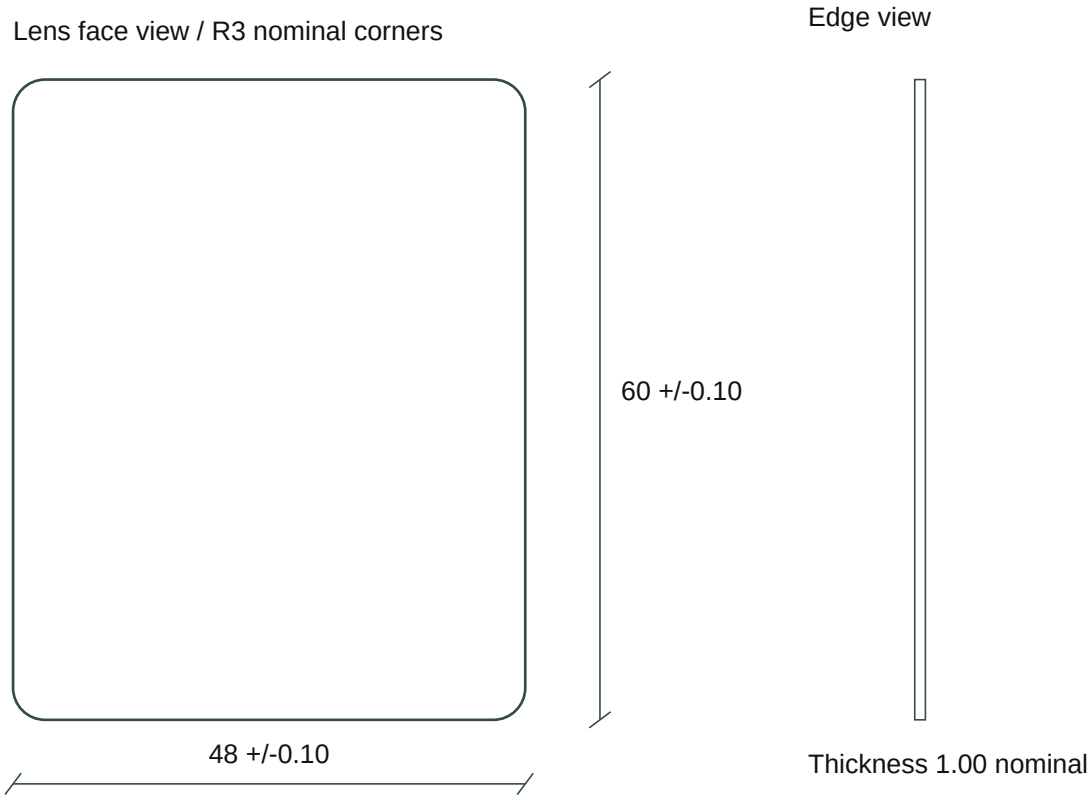
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01 / Transparent PC lens and front-shell pocket

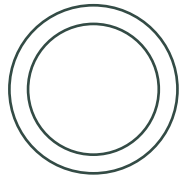


Matched pocket: 48.4 x 60.4 +/-0.10 after finishing (ME04).
Worst-case centered clearance: 0.10 to 0.30 per side.
PC must be optically transparent. Quote polishing and hard coat separately.
Mask printing: provisional 31 x 51 opening; confirm on the actual LCD.
Mechanical through-opening is 44 x 56; it is not the printed optical mask.
Lens seating: CAD shoulder z=24.95; adhesive 0.05; lens top z=26.00.
Flushness target: -0.10 to +0.10 relative to finished front face (ME03).
Do not derive flushness compliance from nominal CAD alone.
Supplier: propose finished pocket, thickness and adhesive tolerances.
If each contributes +/-0.05, worst-case flushness is +/-0.15: target fails.
Use measured matched parts / controlled bondline or propose a revision.
Keep adhesive outside the optical opening. Inspect all four corners + center.
These requirements request feasibility and quotation; no production release.

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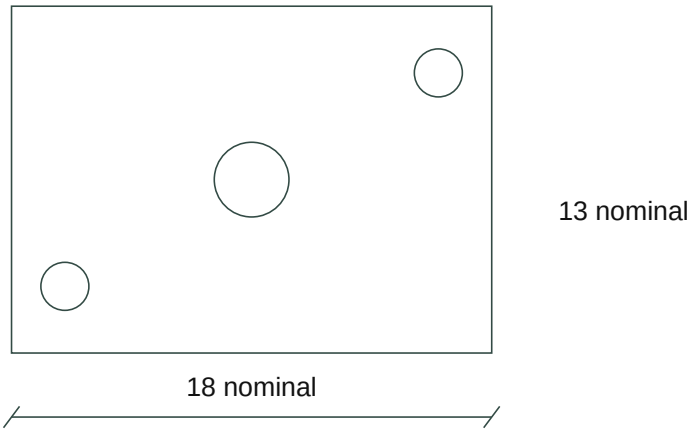
02 / POM key and guide - finished mating dimensions

Key cap / flange XY



Flange OD9 nominal

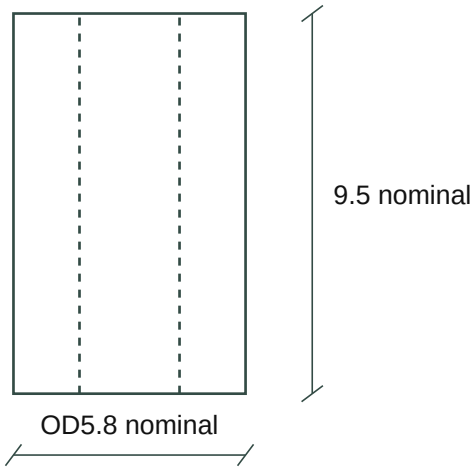
Guide plate / XY view



Cap OD7 +/-0.05; finished shell hole OD7.4 +/-0.10 (ME12).
Worst-case centered cap clearance: 0.125 to 0.275 per side.
Shaft OD2 +/-0.05; guide bore OD2.8 +/-0.10: RFQ proposal.
Proposed worst-case centered shaft clearance: 0.325 to 0.475 per side.
Supplier must confirm bore / shaft tolerances and straightness capability.
Guide plate thickness 1.5; stop ring OD8, bore4.1, height2.05 nominal.
Guide clearance holes OD1.8 at offsets (-7,-4) and (+7,+4).
Guide holes are clearance holes: do not tap them.
Front-shell posts OD4 with OD1.25 forming pilots (M1.6 x 4 screws).
Nominal post wall is 1.375; quote torque/pullout trial coupons (ME09-11).
No coating on sliding shaft or guide bore; measure after finishing.
Key top nominal z=26.10; shell face z=26.00: protrusion0.10 nominal.
Travel limit0.65; stop shims0/0.15/0.25 chosen from actual switch test.
Measure force vs displacement, trigger, release and off-axis return.
Four-key peak-force spread target <=0.30 N (ME15), not a CAD result.
4 keys + 4 guides per set: request20 of each for5 prototype sets.

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03 / PA66 insulating PCB spacer and quote response



PA66 Nylon66 insulating grade;20 pieces =4 per set x5 sets.
M3 x0.5 female threads at BOTH ends; usable depth >=3.5 each.
Broken-line OD2.5 is the CAD pilot envelope, not a finished thread.
Supplier: propose OD/length tolerances and thread gauging procedure.
No substitution with PA6, metal or larger hex bodies without review.
Inspect end-face seating and PCB support height on the actual assembly.
Confirm M3 nylon-screw engagement; avoid bottoming or PCB bowing.
Provide measured sample report by part / serial ID, including deviations.

Supplier response required before prototype acceptance

1. Feasibility per critical dimension, finished tolerance, and process.
2. Separately itemized machining, optics, finishing, inserts and fit checks.
3. Material availability / traceability and allowed substitutions for review.
4. Datum and measurement method, instruments, and calibration records.
5. Any required CAD changes: return marked drawings before processing.
6. First-article results must be measured, with photos and raw records.

Source geometry is unchanged. This supplement is not a full drawing set.
No paid NRE, purchasing, fabrication or risk waiver is authorized here.