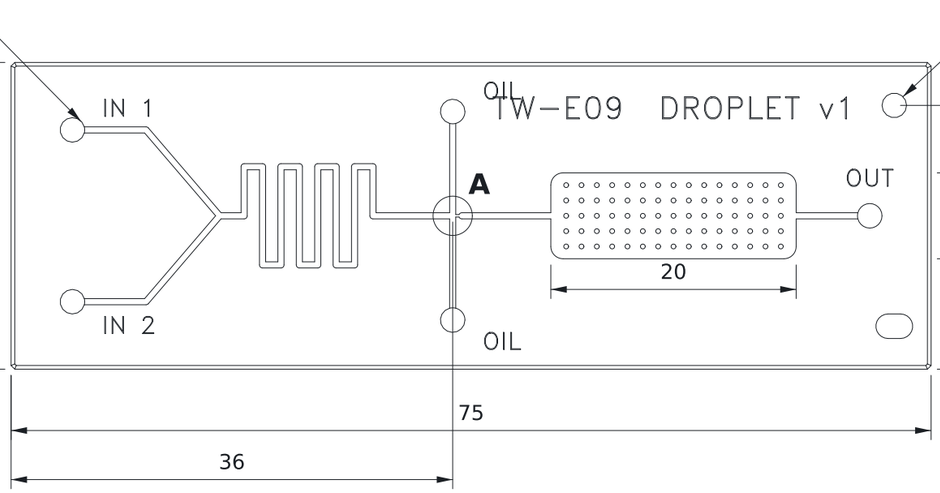
Front view



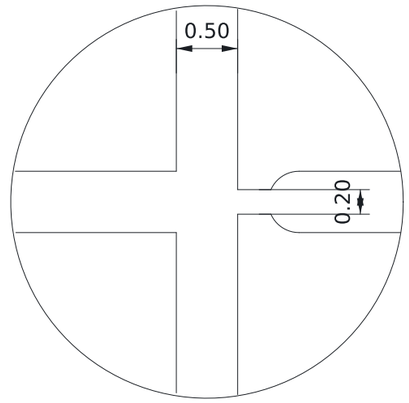
Plan view

Features

1. Channels 0.50 wide (the Ø0.5 tool, one pass along the centre line), 0.150 ±0.010 deep - Y junction, 7-pass serpentine mixer
2. Flow-focusing cross; orifice 0.20 wide (the Ø0.2 tool) from its centre, opening with R0.25 into the 0.50 outlet - see detail A
3. Chamber 20 x 7 x 0.150, 75 pillars Ø0.40 on a 1.25 grid - droplet observation
4. 5x well Ø2.0 ↧1.0 - under the cover's ports
5. Ø2.0 H7 THRU + slot 2.0 H7 x 3.0 THRU - cover alignment
6. Engrave chip id (cap height 1.8) and port names (1.4): single-line font, V 60°, 0.08 deep
7. Face the top to 2.0 thick before the channels (flat to 0.01)

Notes

1. General tolerances ISO 2768-fK
2. Blank: cast PMMA sheet 3 mm, cut to 75 x 25; the bottom as bought
3. Channel tools Ø0.5 and Ø0.2, 2 flutes, 24,000 rpm
4. Clamp on a vacuum plate or double-sided tape; no burrs on channel edges
5. Bonded to a 1 mm PMMA cover with ports above the wells



Detail A (20:1)

Microfluidic droplet chip

微流控液滴芯片

Material PMMA (cast) Stock 75 x 25 x 3 mm	**Drawing TW-E09**
General tolerances ISO 2768-fK · mm · Ra 1.6 unless noted	Scale 2:1 A3
Twinwright Studio 1.0 example · drawn 2026-10-06	ISO E (first angle)