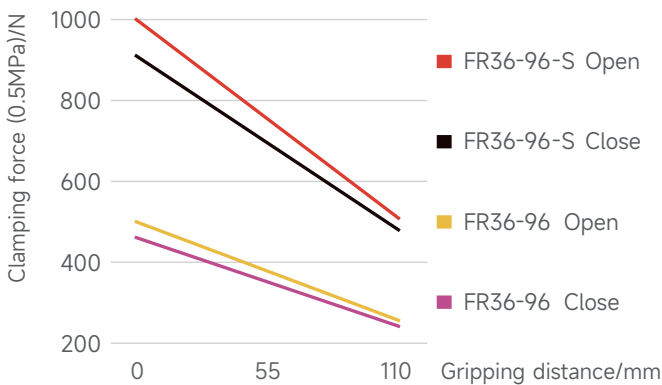
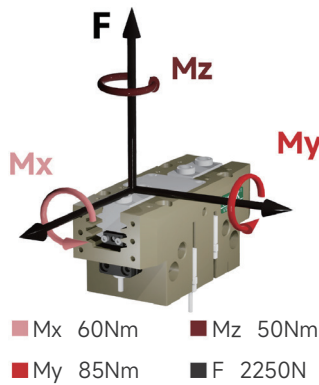


Toothed parallel gripper series FOUK-FR

FR36-96

Static load-bearing torque

Gripping force curve



FR 36 - 96 - S - B - P - NO - H

| Serial No.                  | Cylinder bore | Shell length | Short stroke                                  | Ventilation at bottom     | Dust cover IP64      | Self-locking form                                                                  | High temperature resistance |
|-----------------------------|---------------|--------------|-----------------------------------------------|---------------------------|----------------------|------------------------------------------------------------------------------------|-----------------------------|
| FR Toothed parallel gripper |               |              | S Increased gripping force Standard version M | / Ventilation on the side | / Without dust cover | NO Self-locking by opening<br>NC Self-locking by closing<br>/ Without self-locking | H -5~240°C<br>/ 0~60°C      |

Inductive proximity sensor

|                  |                          |
|------------------|--------------------------|
| IPSD-2NS-0823-L3 | Inductive, NPN, 3-core3m |
| IPSD-2PS-0823-L3 | Inductive, PNP, 3-core3m |

Magnetic proximity sensor

|         |                         |
|---------|-------------------------|
| D-M9NAL | Magnetic, NPN, 3-core3m |
| D-M9PAL | Magnetic, PNP, 3-core3m |

\*Two sensors are required for each gripper. For the detailed monitoring of two positions, see the sensor appendix.

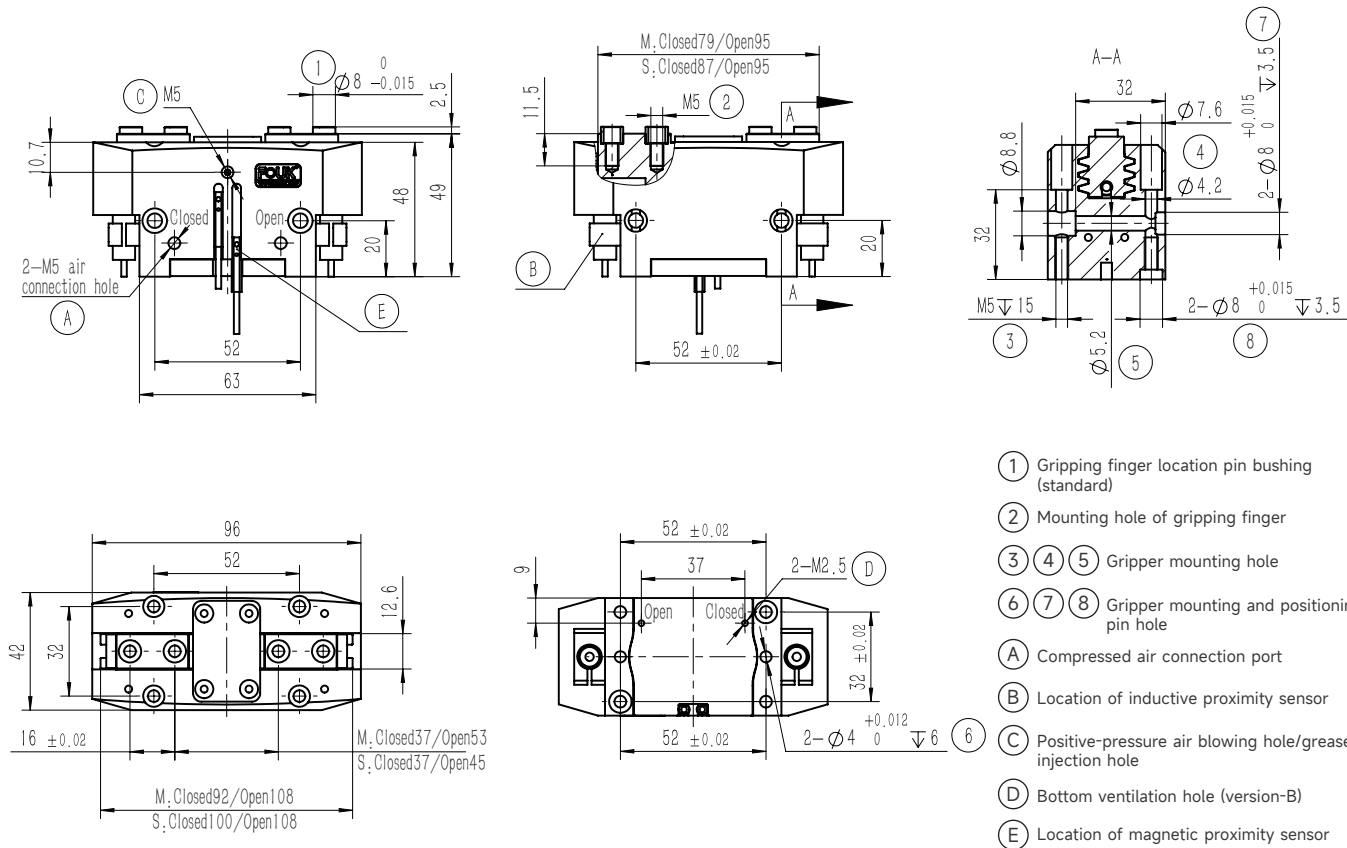
| Product attributes                                  | FR36-96     | FR36-96-NO | FR36-96-NC | FR36-96-S   | FR36-96-S-NO | FR36-96-S-NC | Unit |
|-----------------------------------------------------|-------------|------------|------------|-------------|--------------|--------------|------|
| Single stroke                                       | 8           | 8          | 8          | 4           | 4            | 4            | mm   |
| Product weight                                      | 0.5         | 0.6        | 0.6        | 0.5         | 0.6          | 0.6          | kg   |
| Maximum allowable gripping distance                 | 110         | 110        | 110        | 105         | 105          | 105          | mm   |
| Theoretical maximum gripping force: opening/closing | 100P/92P    | 100P/-     | -/92P      | 200P/184P   | 200P/-       | -/184P       | N    |
| Minimum Spring Locking Force                        |             | 180        | 180        |             | 360          | 360          | N    |
| Workpiece weight                                    | 2.5         | 2.5        | 2.5        | 5           | 5            | 5            | kg   |
| Opening/closing time                                | 0.035/0.035 | 0.03/0.05  | 0.05/0.03  | 0.035/0.035 | 0.03/0.05    | 0.05/0.03    | s    |
| Gas consumption of single opening and closing cycle | 0.124       | 0.188      | 0.188      | 0.124       | 0.188        | 0.188        | L    |

P: Compressed air pressure [bar]

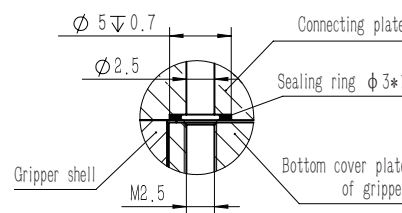
Gas consumption: volume of gas consumed at normal pressure (0.5MPa)

|                                  |        |                                                    |       |
|----------------------------------|--------|----------------------------------------------------|-------|
| Repeated gripping accuracy/mm    | ± 0.02 | Specification of air connection port               | M5    |
| Operating air pressure range/bar | 3~8    | Temperature range of application/°C                | -5~60 |
| IP rating                        | 40     | Maximum allowable single-finger gripping weight/kg | 0.7   |

FR36-96-M/S

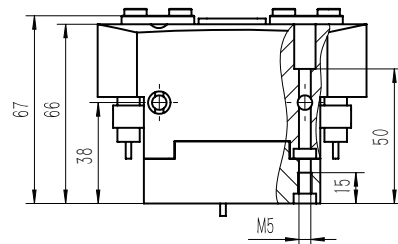


FR36-96-B Ventilation at bottom



FR36-96-NC/NO Self-locking

Built-in spring, mechanical self-locking



FR36-96-P Dust-proof

Dust-proof module, IP64 for the positive-pressure air blowing hole after it, is connected to the compressed air of 0.05-0.10MPa, otherwise, IP50

