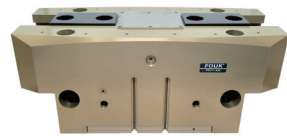
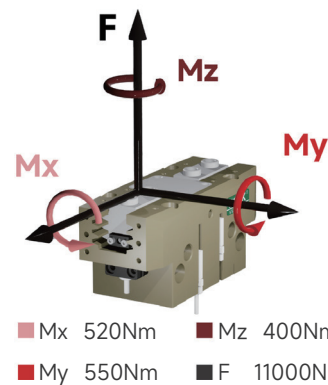


## Toothed parallel gripper series FOUK-FR

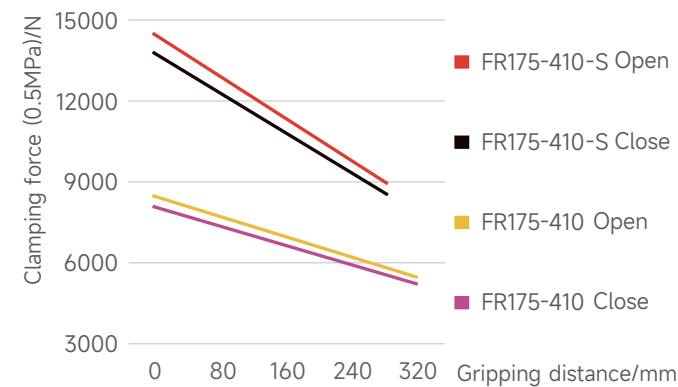
## FR175-410



### Static load-bearing torque



## Gripping force curve



FR 175 - 410 - 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<br>/ 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-0848-L3 | Inductive, NPN, 3-core3m |
| IPSD-2PS-0848-L3 | Inductive, PNP, 3-core3m |

## Magnetic proximity sensor

|                |                         |
|----------------|-------------------------|
| MZC2-1V7NS-FU0 | Magnetic, NPN, 3-core3m |
| MZC2-1V7PS-FU0 | Magnetic, PNP, 3-core3m |

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

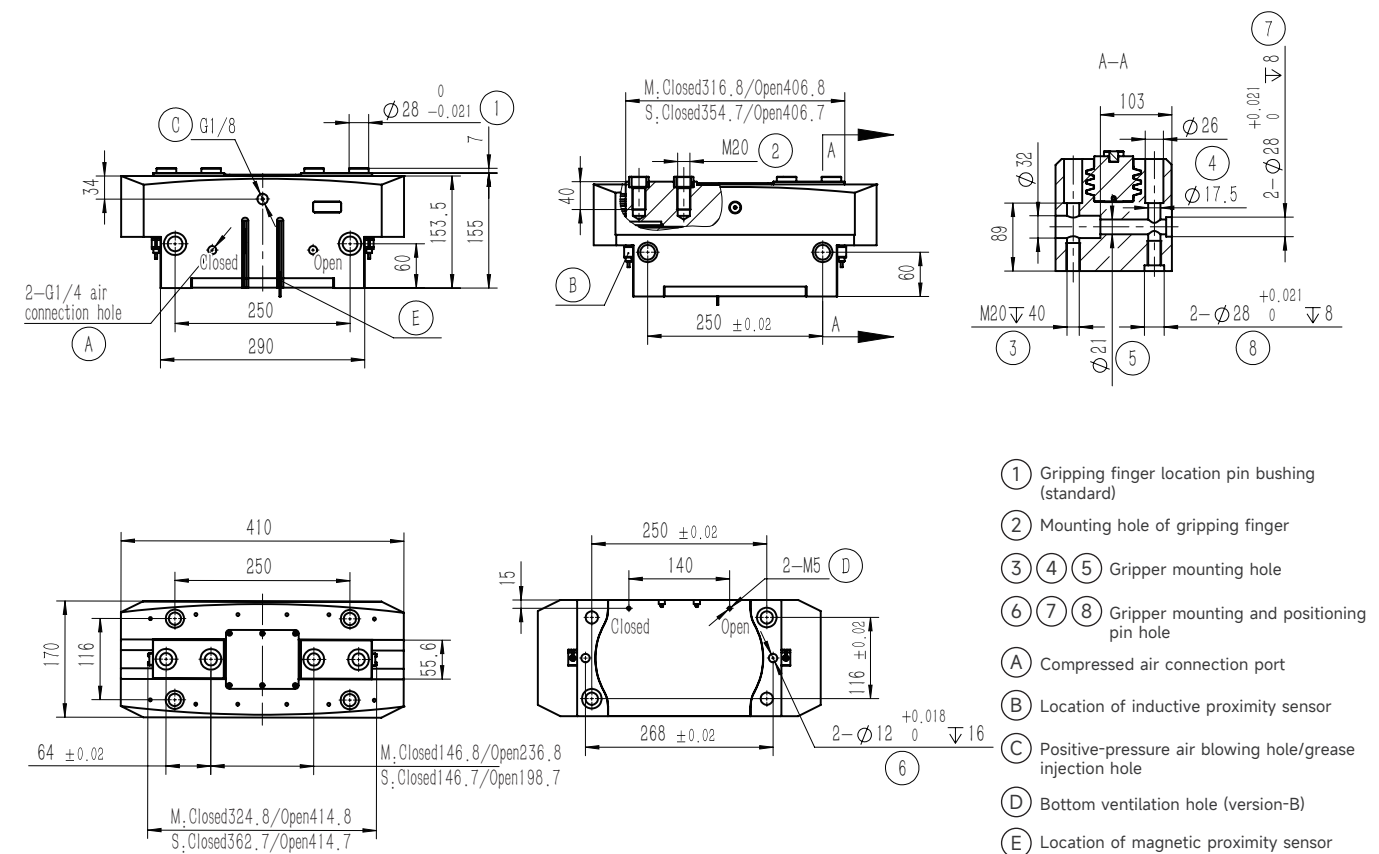
| Product attributes                                  | FR175-410   | FR175-410-NO | FR175-410-NC | FR175-410-S | FR175-410-S-NO | FR175-410-S-NC | Unit |
|-----------------------------------------------------|-------------|--------------|--------------|-------------|----------------|----------------|------|
| Single stroke                                       | 45          | 45           | 45           | 26          | 26             | 26             | mm   |
| Product weight                                      | 27.5        | 35.5         | 36           | 28          | 36             | 36.5           | kg   |
| Maximum allowable gripping distance                 | 320         | 320          | 320          | 280         | 280            | 280            | mm   |
| Theoretical maximum gripping force: opening/closing | 1690P/1610P | 1690P/-      | -/1610P      | 2900P/2760P | 2900P/-        | -/2760P        | N    |
| Minimum Spring Locking Force                        |             | 2700         | 2700         |             | 4500           | 4500           | N    |
| Workpiece weight                                    | 55          | 55           | 55           | 95          | 95             | 95             | kg   |
| Opening/closing time                                | 0.6/0.6     | 0.5/0.8      | 0.8/0.5      | 0.6/0.6     | 0.5/0.8        | 0.8/0.5        | s    |
| Gas consumption of single opening and closing cycle | 13          | 18           | 14.5         | 13          | 18             | 14.5           | L    |

P: Compressed air pressure [bar]

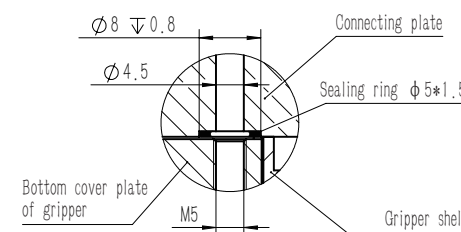
Gas consumption: volume of gas consumed at normal pressure (0.5MPa)

|                                  |        |                                                    |       |
|----------------------------------|--------|----------------------------------------------------|-------|
| Repeated gripping accuracy/mm    | ± 0.04 | Specification of air connection port               | G1/4  |
| Operating air pressure range/bar | 3~8    | Temperature range of application/°C                | -5~60 |
| IP rating                        | 40     | Maximum allowable single-finger gripping weight/kg | 18    |

## FR175-410-M/S

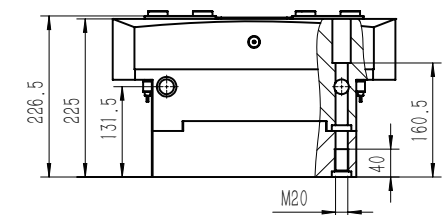


### FR175-410-B Ventilation at bottom



## FR175-410-NC/NO Self-locking

Built-in spring, mechanical self-locking



## FR175-410-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

