



TF powerful four-finger gripper series

FOUK-TF

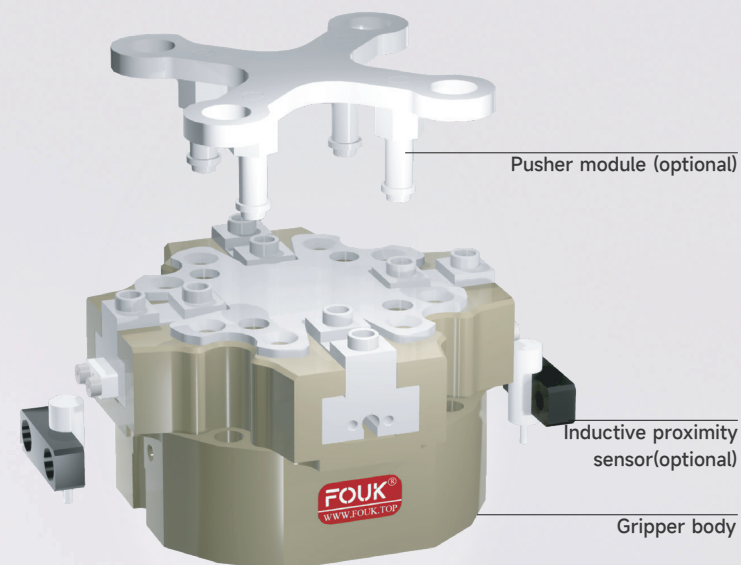
The pneumatic four-finger centering gripper, with the T-shaped load-bearing structure, supports different push plates. Its quenching spring has a service life of more than 500,000 times. The gripping force of the four-finger gripper is uniform, which can stably grip objects and prevent damage.



Usage Video of TF Series Products

Another option for gripping square products

For the gripping of square products with centering requirements, TF series is another preferred solution other than FR.



Structural Design of T-shaped Guide Rail

With the classic T-shaped guide rail structure, the hard rail surface has excellent bearing capacity

Wedge drive mode

Thanks to excellent drive structure, it has the characteristics of high load and high centering accuracy

Anodized aviation aluminum housing

By adopting the high-quality aviation aluminum housing, the gripper is ensured to have the characteristics of high load while minimizing the weight.



Single-finger stroke
4.13mm



Gripping force
74P..620P



Workpiece weight
1.5..14kg



Product weight
0.3..2.9kg



Specification
Quantity: 5

Product Code	Single stroke/mm	Open Gripping Force: N	Close Gripping Force: N	Workpiece weight/kg	Product weight/kg	Page
TF33-56	4	74 × P	68 × P	1.5	0.3	76
TF42-71	6	120 × P	108 × P	3	0.55	78
TF55-99	8	200 × P	186 × P	5	1.1	80
TF75-118	10	386 × P	370 × P	9	1.6	82
TF95-145	13	620 × P	590 × P	14	2.9	84

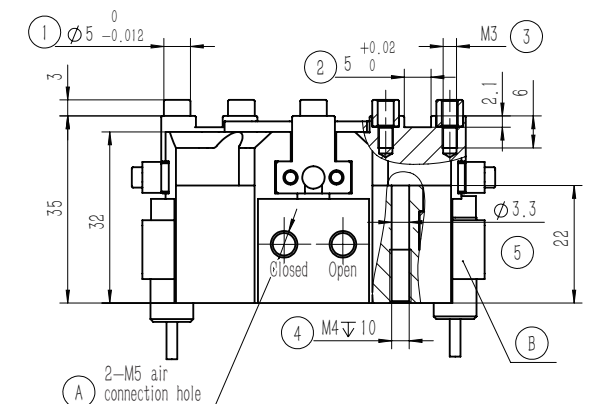
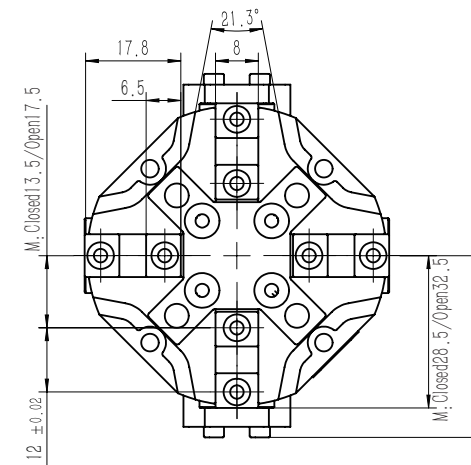
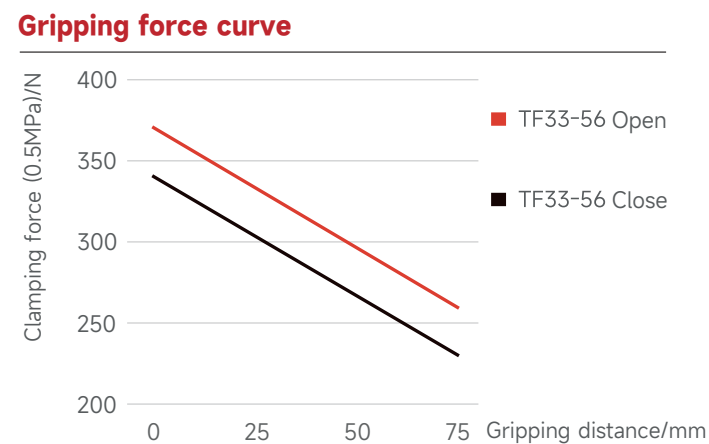
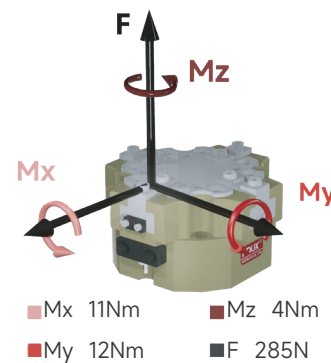
P: Compressed air pressure [bar]

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

Parallel gripper long stroke series FOUK-TF

TF33-56

TF33-56



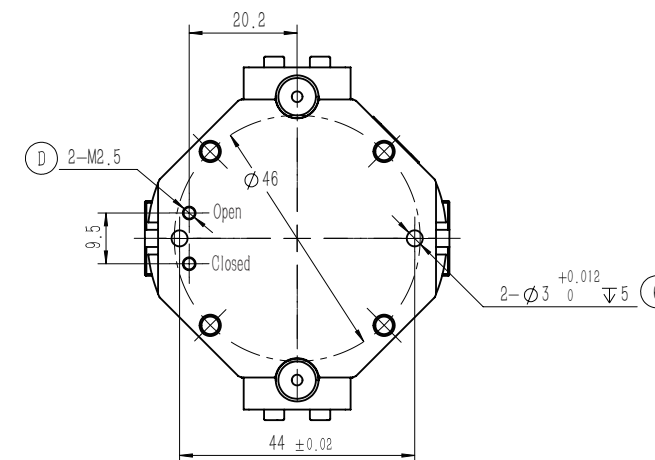
TF 33 - 56 - B - C18 - H

Serial No.	Cylinder bore	Maximum shell diameter	Ventilation at bottom	Length of push rod	High temperature resistance
TF	Four-finger gripper		/ Ventilation on the side	C18 18.5mm	H -5~240°C

Inductive proximity sensor

IPSD-2NS-0818-L3	Inductive, NPN, 3-core3m
IPSD-2PS-0818-L3	Inductive, PNP, 3-core3m

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

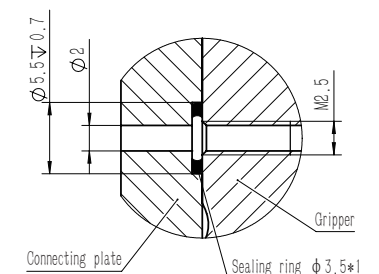
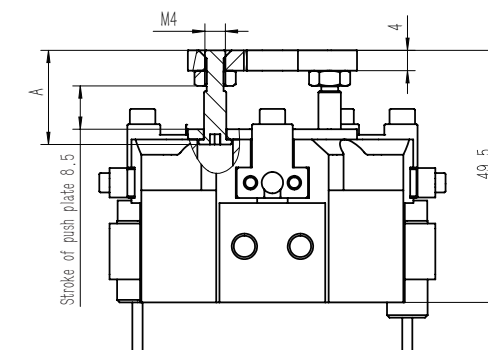
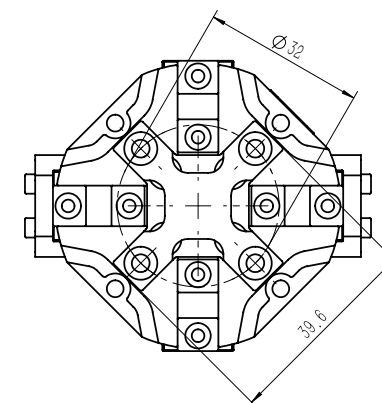


- ① Gripping finger location pin bushing (standard)
- ② Gripping finger positioning groove
- ③ Mounting hole of gripping finger
- ④ ⑤ ⑥ Gripper mounting hole
- ⑦ Gripper mounting and positioning
- ⑧ Compressed air connection port
- ⑨ Location of inductive proximity sensor
- ⑩ Positive-pressure air blowing hole/grease injection hole
- ⑪ Bottom ventilation hole (version-B)

Product attributes	TF33-56		Unit
Single stroke	4		mm
Product weight	0.3		kg
Maximum allowable gripping distance	75		mm
Theoretical maximum gripping force: opening/closing	74P/68P		N
Workpiece weight	1.5		kg
Opening/closing time	0.02/0.02		s
Gas consumption of single opening and closing cycle	0.06		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	3~7	Temperature range of application/°C	-5~60
IP rating	40	Maximum allowable single-finger gripping weight/kg	0.2

TF33-56-C18 Pushing

The length A of the push rod can be of the standard version or the extended version, with loading function, and the minimum thrust of the push plate is 16N.



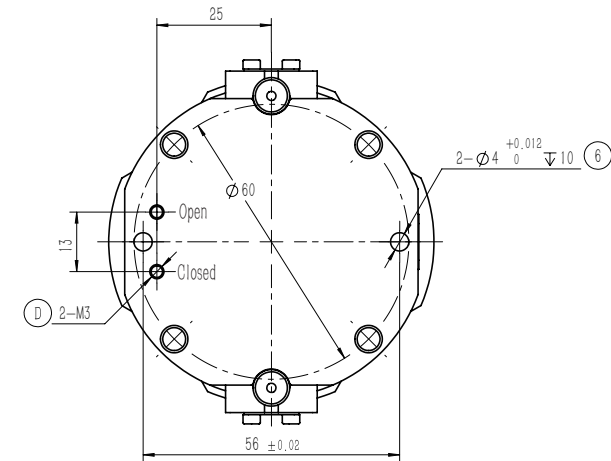
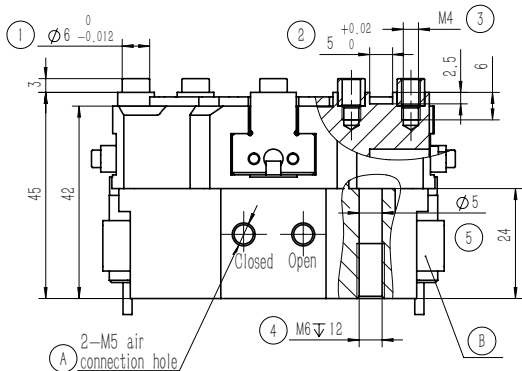
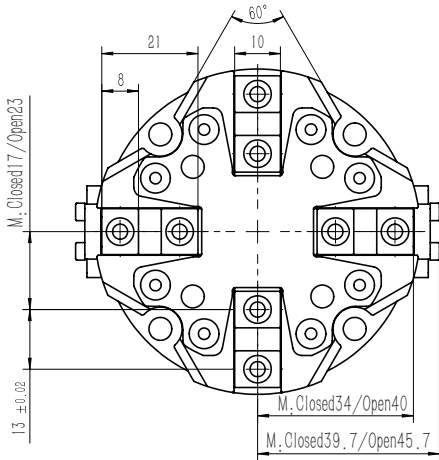
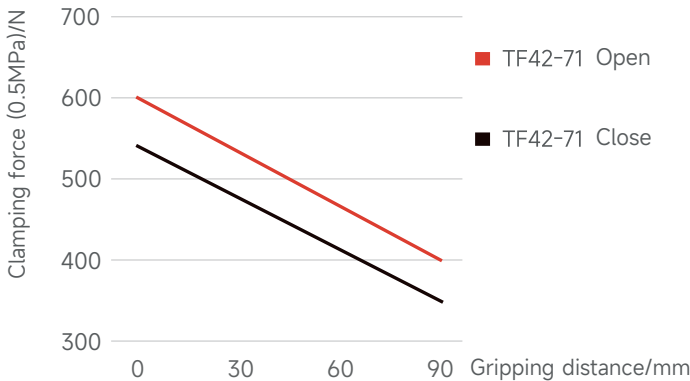
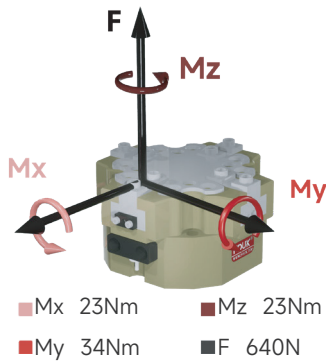
Parallel gripper long stroke series FOUK-TF

TF42-71

TF42-71

Static load-bearing torque

Gripping force curve



- ① Gripping finger location pin bushing (standard)
- ② Gripping finger positioning groove
- ③ Mounting hole of gripping finger
- ④ ⑤ ⑥ Gripper mounting hole
- ⑥ Gripper mounting and positioning
- A Compressed air connection port
- B Location of inductive proximity sensor
- C Positive-pressure air blowing hole/grease injection hole
- D Bottom ventilation hole (version-B)

TF 42 - 71 - B - C20 - H

Serial No. Cylinder bore Maximum shell diameter Ventilation at bottom Length of push rod High temperature resistance

TF Four-finger gripper / Ventilation on the side

C20	20.5mm
C30	30.5mm
/	Without push plate

H	-5~240°C
/	0~60°C

Inductive proximity sensor

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

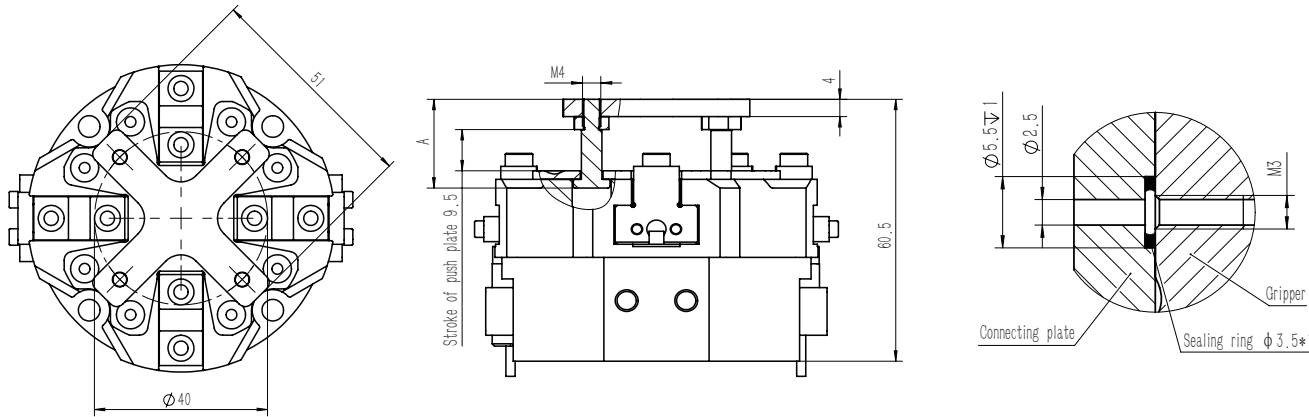
*Two sensors are required for each gripper. For the detailed monitoring of two positions, see the sensor appendix.

Product attributes	TF42-71	Unit
Single stroke	6	mm
Product weight	0.6	kg
Maximum allowable gripping distance	90	mm
Theoretical maximum gripping force: opening/closing	120P/108P	N
Workpiece weight	2.5	kg
Opening/closing time	0.02/0.02	s
Gas consumption of single opening and closing cycle	0.18	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
Operating air pressure range/bar	3~7	Temperature range of application/°C
IP rating	40	Maximum allowable single-finger gripping weight/kg

TF42-71-C20 Pushing

The length A of the push rod can be of the standard version or the extended version, with loading function, and the minimum thrust of the push plate is 48N.

TF42-71-B Ventilation at bottom



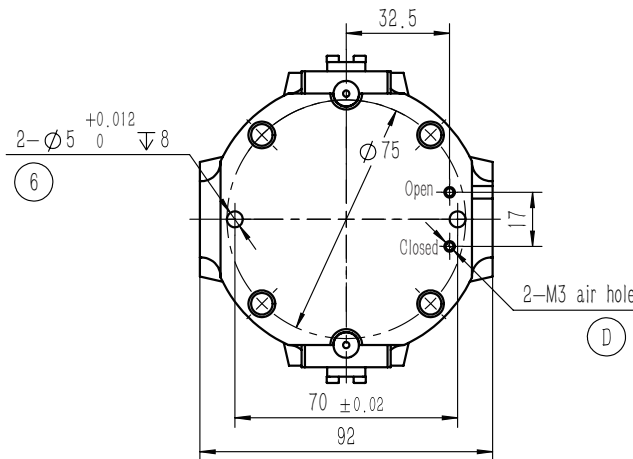
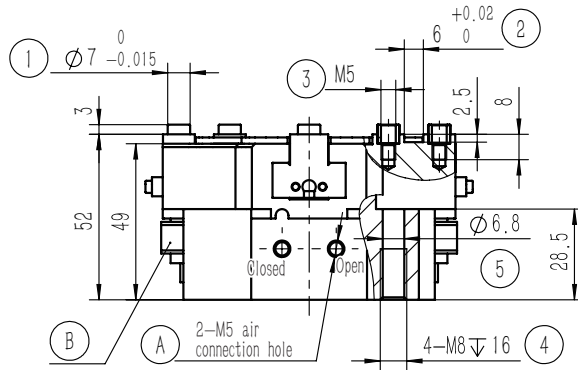
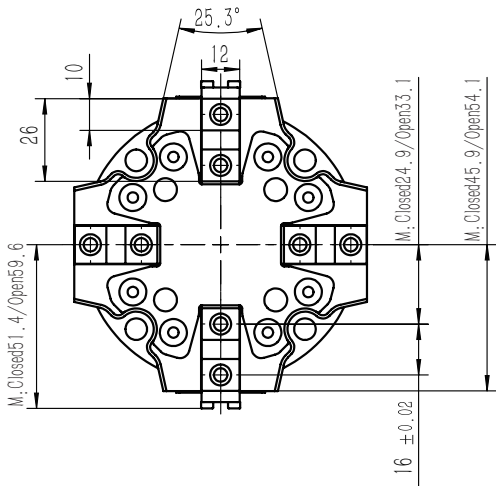
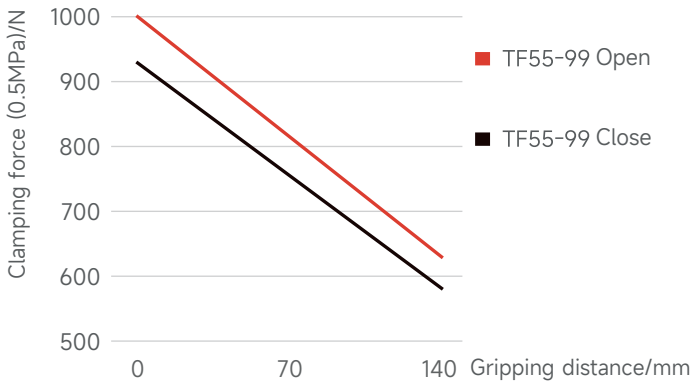
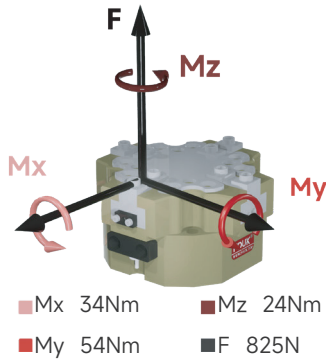
Parallel gripper long stroke series FOUK-TF

TF55-99

TF55-99

Static load-bearing torque

Gripping force curve



- ① Gripping finger location pin bushing (standard)
- ② Gripping finger positioning groove
- ③ Mounting hole of gripping finger
- ④ ⑤ ⑥ Gripper mounting hole
- ⑥ Gripper mounting and positioning
- A Compressed air connection port
- B Location of inductive proximity sensor
- C Positive-pressure air blowing hole/grease injection hole
- D Bottom ventilation hole (version-B)

TF 55 - 99 - B - C28 - H

Serial No. Cylinder bore Maximum shell diameter Ventilation at bottom Length of push rod High temperature resistance

TF Four-finger gripper

/ Ventilation on the side

C28	28mm
C38	38mm
/	Without push plate

H	-5~240°C
/	0~60°C

Inductive proximity sensor

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

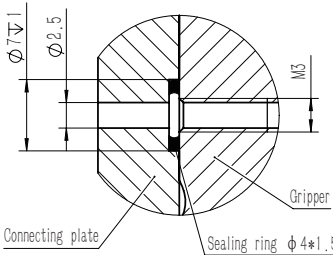
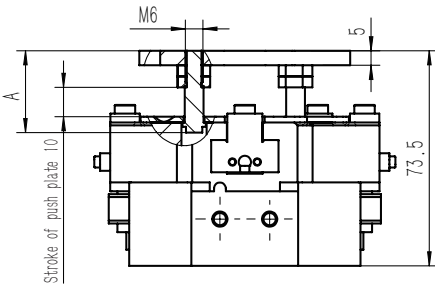
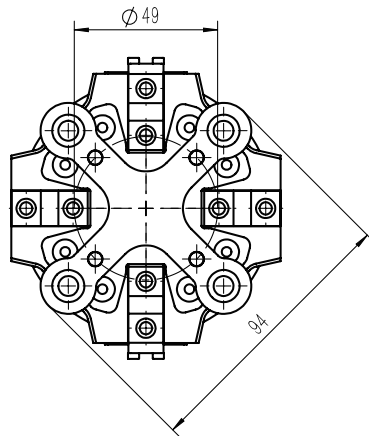
*Two sensors are required for each gripper. For the detailed monitoring of two positions, see the sensor appendix.

Product attributes	TF55-99	Unit
Single stroke	8	mm
Product weight	1.1	kg
Maximum allowable gripping distance	140	mm
Theoretical maximum gripping force: opening/closing	200P/186P	N
Workpiece weight	4.5	kg
Opening/closing time	0.04/0.04	s
Gas consumption of single opening and closing cycle	0.3	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
Operating air pressure range/bar	3~7	Temperature range of application/°C
IP rating	40	Maximum allowable single-finger gripping weight/kg

TF55-99-C28 Pushing

The length A of the push rod can be of the standard version or the extended version, with loading function, and the minimum thrust of the push plate is 16N.

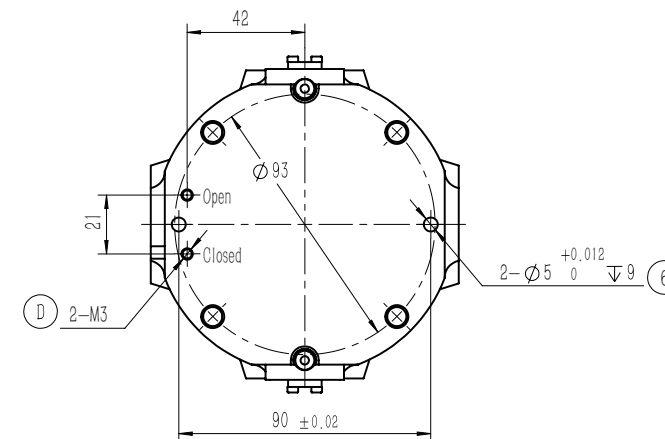
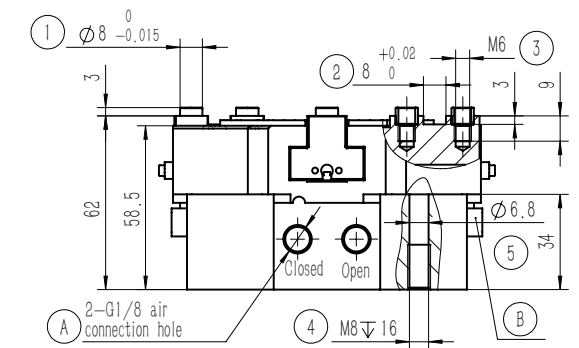
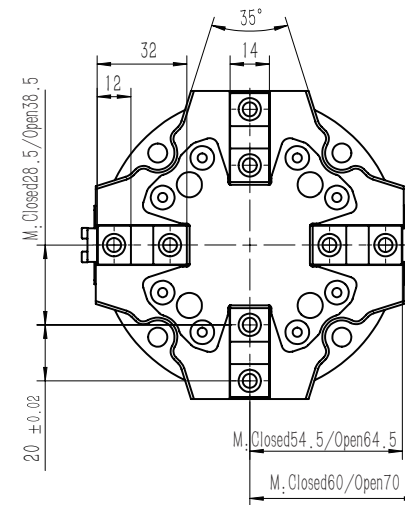
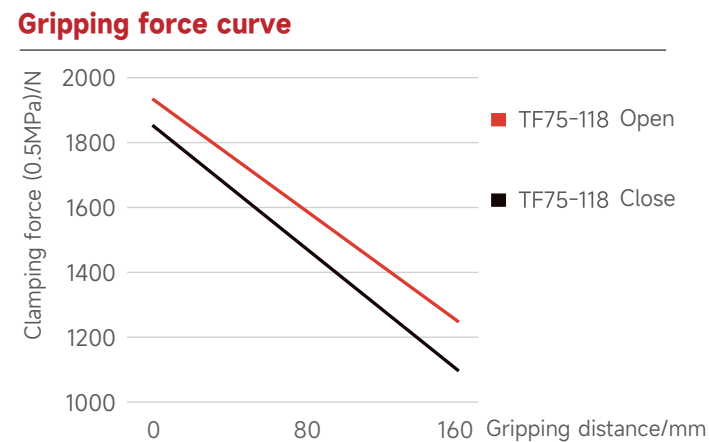
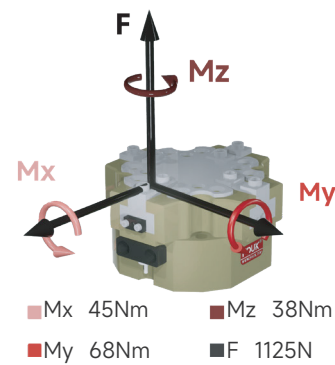
TF55-99-B Ventilation at bottom



Parallel gripper long stroke series FOUK-TF

TF75-118

TF75-118



- ① Gripping finger location pin bushing (standard)
- ② Gripping finger positioning groove
- ③ Mounting hole of gripping finger
- ④ ⑤ ⑥ Gripper mounting hole
- ⑥ Gripper mounting and positioning
- ⑦ Compressed air connection port
- ⑧ Location of inductive proximity sensor
- ⑨ Positive-pressure air blowing hole/grease injection hole
- ⑩ Bottom ventilation hole (version-B)

TF 75 - 118 - B - C30 - H

Serial No.	Cylinder bore	Maximum shell diameter	Ventilation at bottom	Length of push rod	High temperature resistance										
TF	Four-finger gripper		/ Ventilation on the side	<table border="1"> <tr> <td>C30</td> <td>30mm</td> </tr> <tr> <td>C40</td> <td>40mm</td> </tr> <tr> <td>/</td> <td>Without push plate</td> </tr> </table>	C30	30mm	C40	40mm	/	Without push plate	<table border="1"> <tr> <td>H</td> <td>-5~240°C</td> </tr> <tr> <td>/</td> <td>0~60°C</td> </tr> </table>	H	-5~240°C	/	0~60°C
C30	30mm														
C40	40mm														
/	Without push plate														
H	-5~240°C														
/	0~60°C														

Inductive proximity sensor

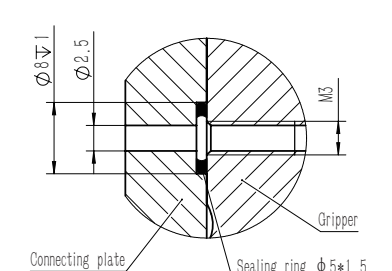
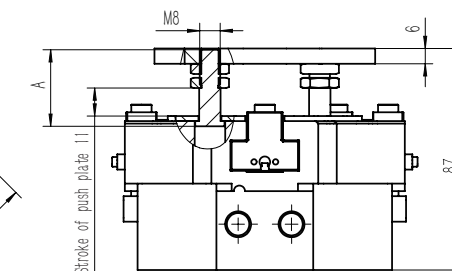
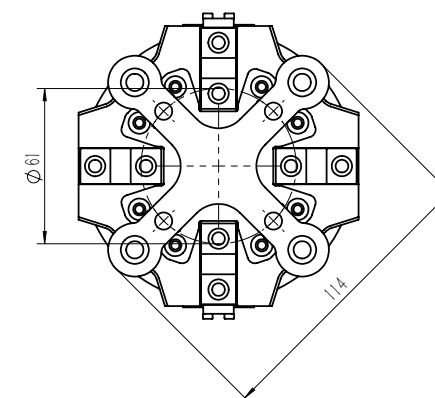
IPSD-2NS-0823-L3	Inductive, NPN, 3-core3m
IPSD-2PS-0823-L3	Inductive, PNP, 3-core3m

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

Product attributes	TF75-118		Unit
Single stroke	10		mm
Product weight	1.6		kg
Maximum allowable gripping distance	160		mm
Theoretical maximum gripping force: opening/closing	386P/370P		N
Workpiece weight	8.5		kg
Opening/closing time	0.1/0.1		s
Gas consumption of single opening and closing cycle	0.8		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	G1/8
Operating air pressure range/bar	3~7	Temperature range of application/°C	-5~60
IP rating	40	Maximum allowable single-finger gripping weight/ka	1

TF75-118-C30 Pushing

The length A of the push rod can be of the standard version or the extended version, with loading function, and the minimum thrust of the push plate is 100N.



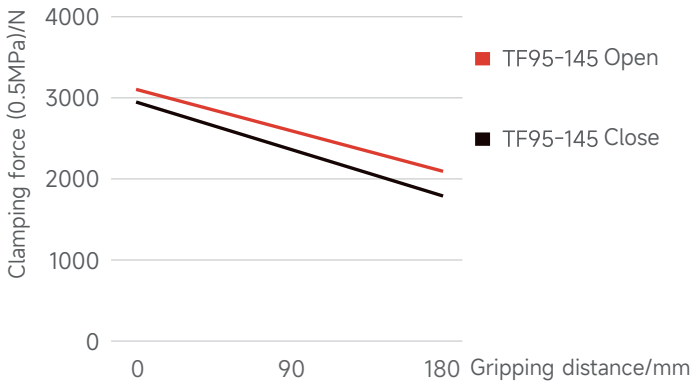
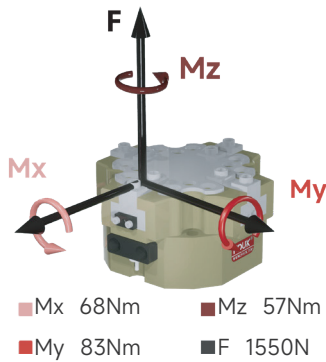
Parallel gripper long stroke series FOUK-TF

TF95-145

TF95-145

Static load-bearing torque

Gripping force curve



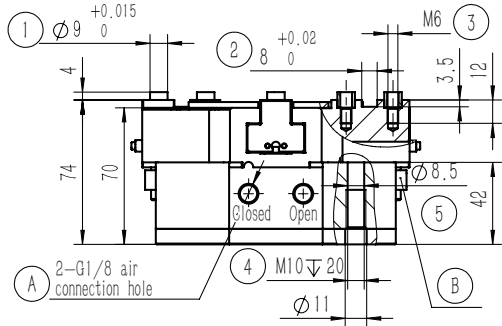
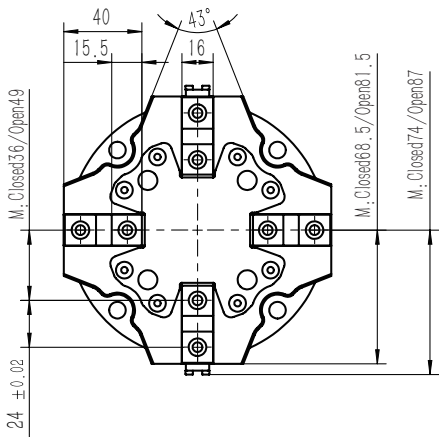
TF 95 - 145 - B - C40 - H

Serial No.	Cylinder bore	Maximum shell diameter	Ventilation at bottom	Length of push rod	High temperature resistance
TF Four-finger gripper			/ Ventilation on the side	C40 40mm C50 50mm / Without push plate	H -5~240°C / 0~60°C

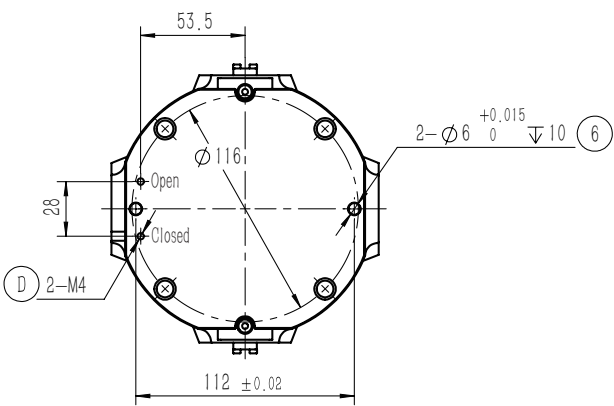
Inductive proximity sensor

IPSD-2NS-0831-L3	Inductive, NPN, 3-core3m
IPSD-2PS-0831-L3	Inductive, PNP, 3-core3m

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



- ① Gripping finger location pin bushing (standard)
- ② Gripping finger positioning groove
- ③ Mounting hole of gripping finger
- ④ ⑤ ⑥ Gripper mounting hole
- ⑥ Gripper mounting and positioning
- A Compressed air connection port
- B Location of inductive proximity sensor
- C Positive-pressure air blowing hole/grease injection hole
- D Bottom ventilation hole (version-B)



TF95-145-C40 Pushing

TF95-145-B Ventilation at bottom

The length A of the push rod can be of the standard version or the extended version, with loading function, and the minimum thrust of the push plate is 220N.

