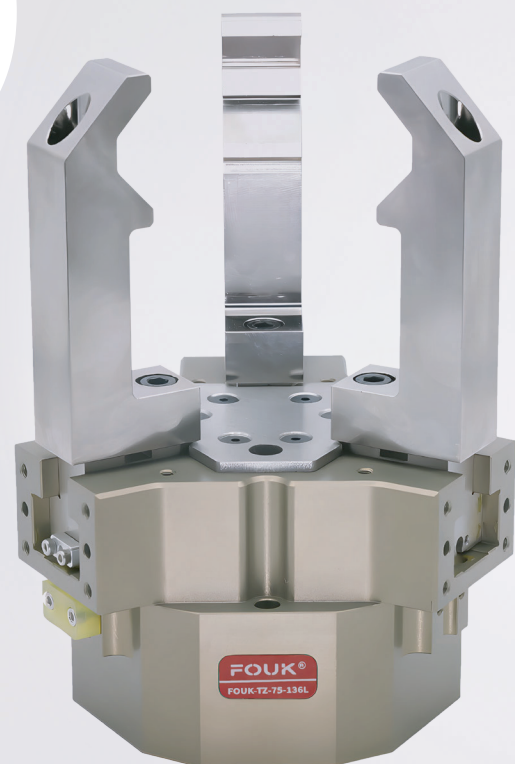




TZL three-finger gripper long stroke series

FOUK-TZL

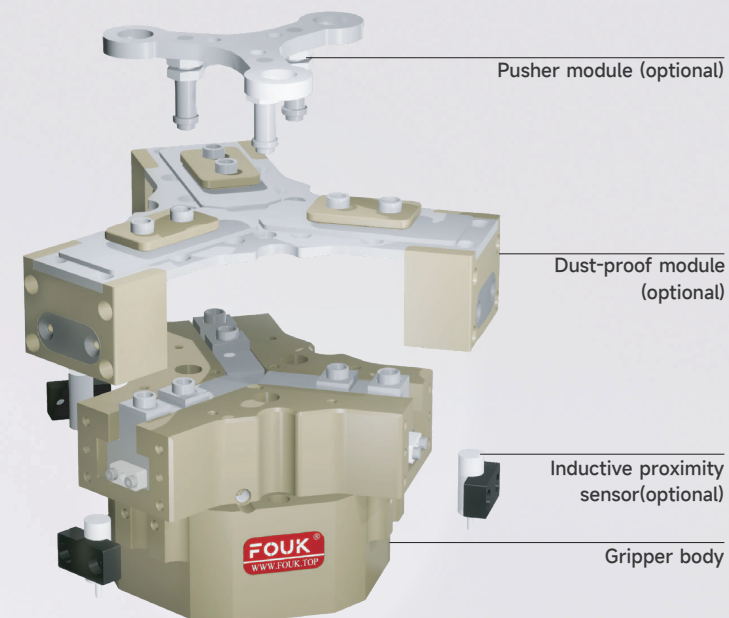
The long-stroke pneumatic three-finger gripper, with the T-shaped load-bearing structure, has floating thrust from the push plate. It has a service life of more than 500,000 times. With the dust-proof level of up to IP64 and the optional self-locking module, it can adapt to complex scenes and diversified requirements.



Usage Video of TZL Series Products

Higher possibility of workpiece compatibility

Compared with FZ series products with the same specification, it has larger opening and closing stroke, and it is more suitable for gripping workpieces with multiple specifications.



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
8..20mm



Gripping force
64P..330P



Workpiece weight
1.2..8kg



Product weight
0.4..2.1kg



Specification
Quantity: 4

Product Code	Single stroke/mm	Open Gripping Force: N	Close Gripping Force: N	Workpiece weight/kg	Product weight/kg	Page
TZ33-74-L	8	64 × P	60 × P	1.2	0.4	66
TZ42-90-L	11	104 × P	94 × P	2.5	0.7	68
TZ55-113-L	15	180 × P	168 × P	4.5	1.3	70
TZ75-136-L	20	330 × P	316 × P	8	2.1	72

P: Compressed air pressure [bar]

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

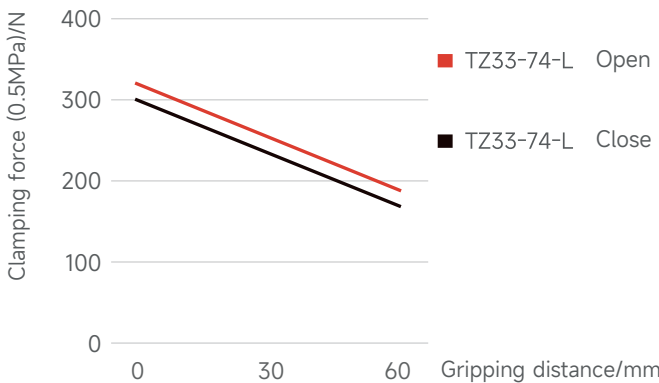
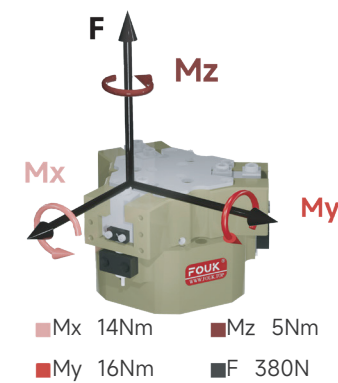
Three-finger gripper long stroke series FOUK-TZL

TZ33-74-L

TZ33-74-L

Static load-bearing torque

Gripping force curve



TZ 33 - 74 - L - B - C18 - P - H

Serial No.	Cylinder bore	Maximum shell diameter	Stroke extension	Ventilation at bottom	Length of push rod	Dust cover IP64	High temperature resistance
TZ T-shaped three-finger gripper				/ Ventilation on the side	C18 18.5mm C26 26.5mm / Without push plate	/ Without dust cover	H -5~240°C / 0~60°C

Inductive proximity sensor

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

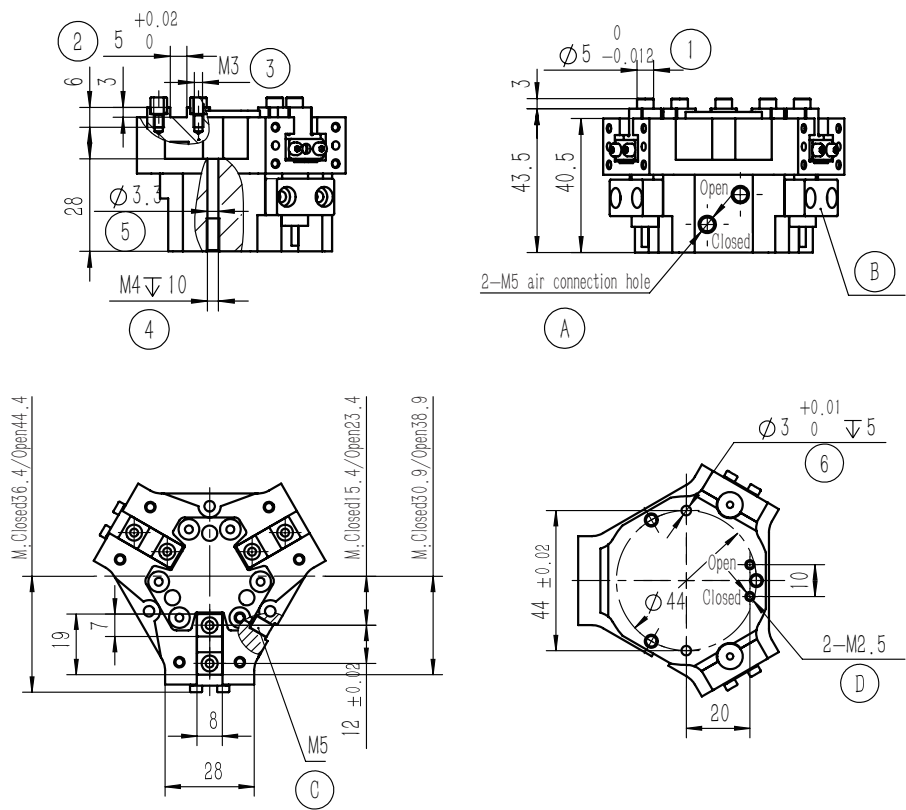
*Two sensors are required for each gripper. For the detailed monitoring of two positions, see the sensor appendix.

Product attributes	TZ33-74-L	Unit
Single stroke	8	mm
Product weight	0.4	kg
Maximum allowable gripping distance	60	mm
Theoretical maximum gripping force: opening/closing	64P/60P	N
Workpiece weight	1.2	kg
Opening/closing time	0.05/0.05	s
Gas consumption of single opening and closing cycle	0.1	L

P: Compressed air pressure [bar]

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

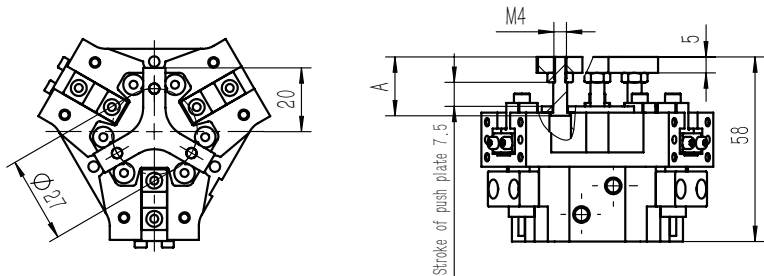
Repeated gripping accuracy/mm	± 0.02	Specification of air connection port	M5
Operating air pressure range/bar	3~7	Temperature range of application/°C	-5~60
IP rating	40	Maximum allowable single-finger gripping weight/kg	0.15



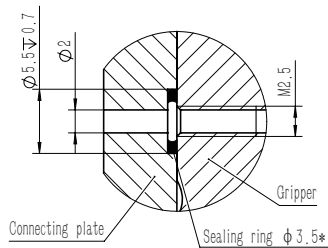
- ① Gripping finger location pin bushing (standard)
- ② Gripping finger positioning groove
- ③ Mounting hole of gripping finger
- ④ ⑤ ⑥ Gripper mounting hole
- ⑥ Gripper positioning hole
- A Compressed air connection port
- B Location of inductive proximity sensor
- C Positive-pressure air blowing hole/grease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

TZ33-74-L-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 12N. If it is dust-proof and provided with the push plate, the stroke is 3.5.

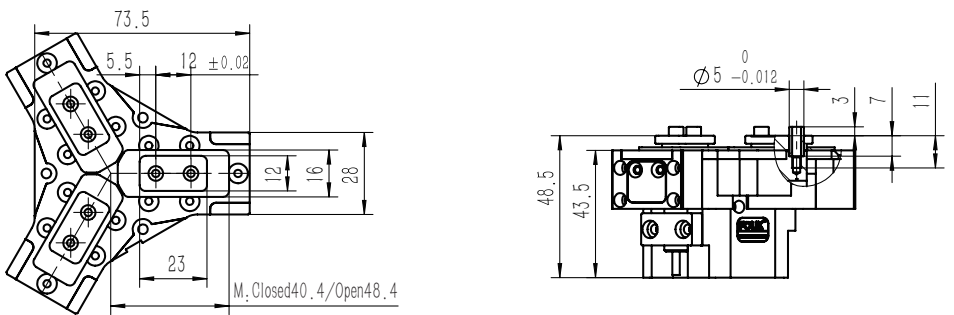


TZ33-74-L-B Ventilation at bottom



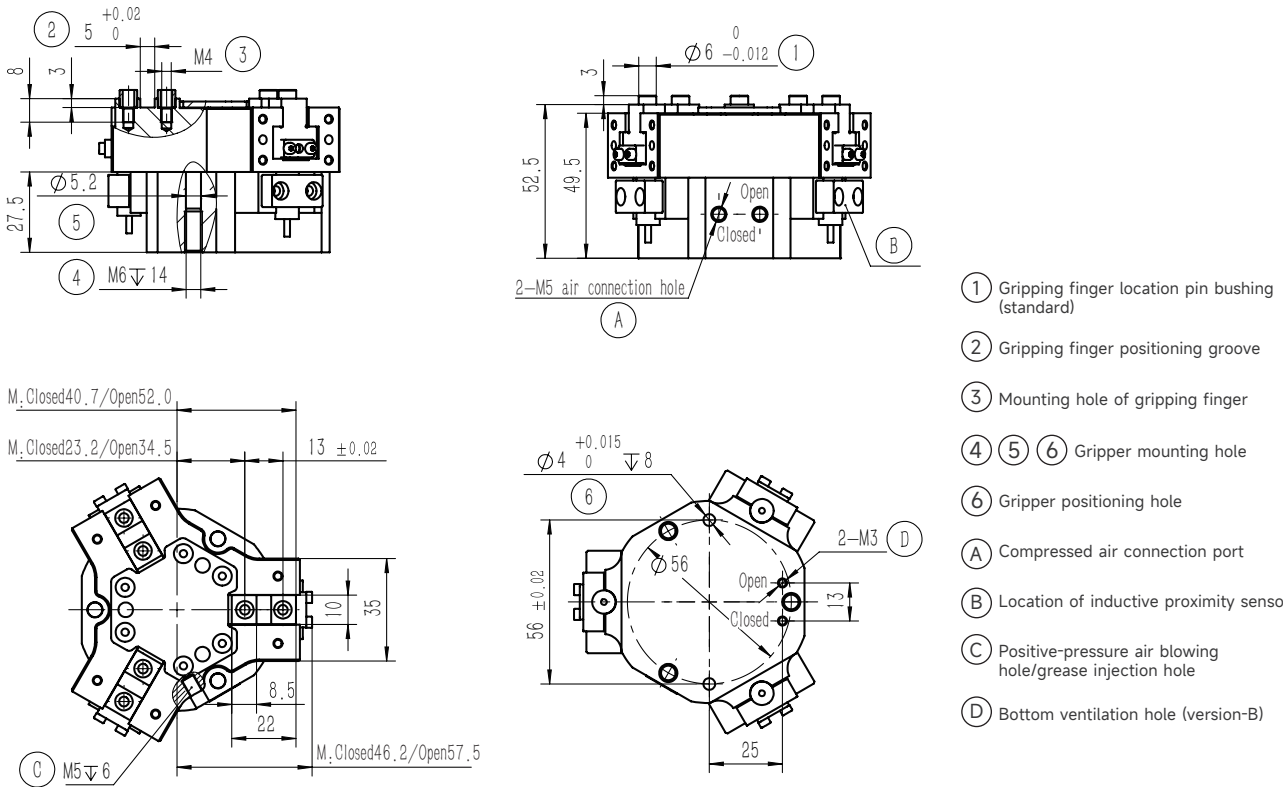
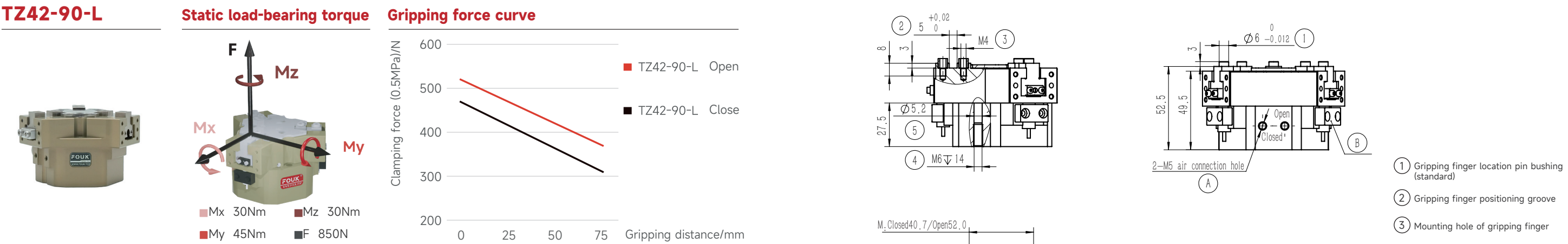
TZ33-74-L-P Dust-proof

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



Three-finger gripper long stroke series FOUK-TZL

TZ42-90-L



TZ 42 - 90 - L - B - C20 - P - H

Serial No. Cylinder bore Maximum shell diameter Stroke extension Ventilation at bottom Length of push rod Dust cover IP64 High temperature resistance

TZ T-shaped three-finger gripper

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

/ Ventilation on the side

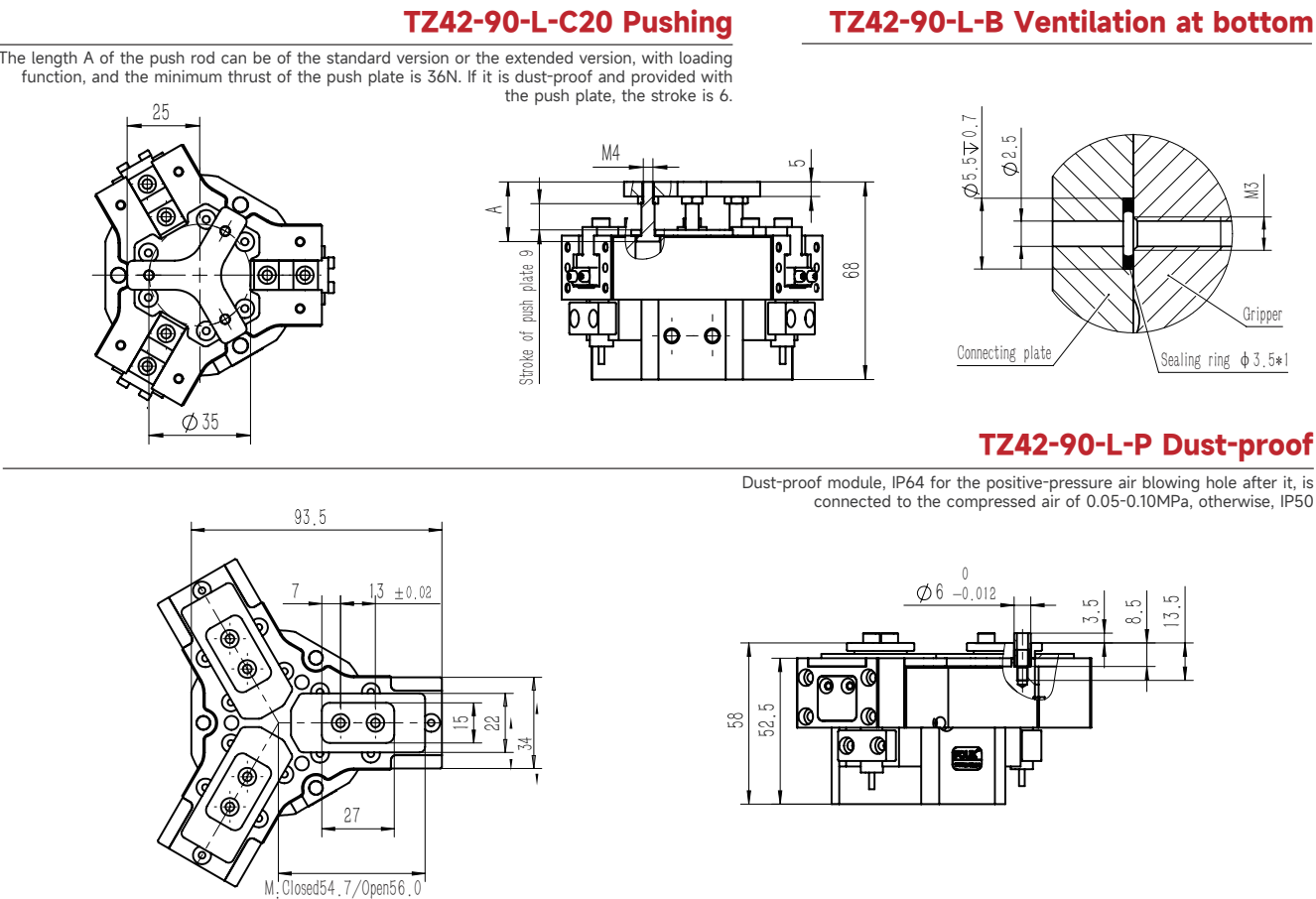
C20	20.5mm
C30	30.5mm
/	Without push plate

/ Without dust cover

H	-5~240°C
/	0~60°C

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

Product attributes	TZ42-90-L		Unit
Single stroke	11		mm
Product weight	0.7		kg
Maximum allowable gripping distance	75		mm
Theoretical maximum gripping force: opening/closing	104P/94P		N
Workpiece weight	2.5		kg
Opening/closing time	0.06/0.06		s
Gas consumption of single opening and closing cycle	0.25		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	0.35



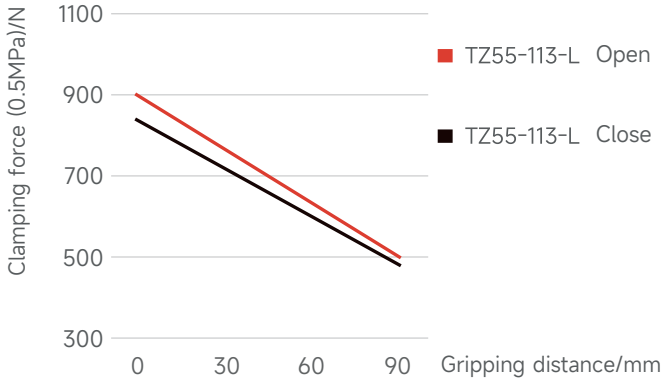
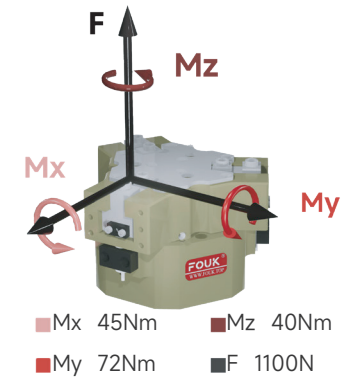
Three-finger gripper long stroke series FOUK-TZL

TZ55-113-L

TZ55-113-L

Static load-bearing torque

Gripping force curve



TZ 55 - 113 - L - B - C28 - P - H

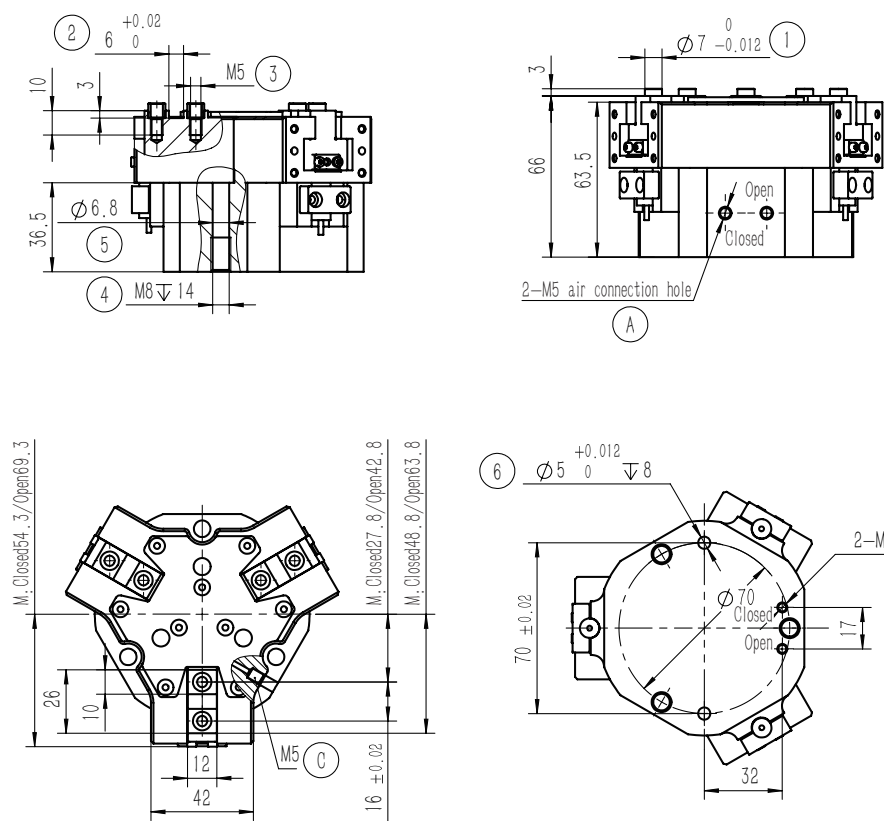
Serial No.	Cylinder bore	Maximum shell diameter	Stroke extension	Ventilation at bottom	Length of push rod	Dust cover IP64	High temperature resistance
TZ T-shaped three-finger gripper				/ Ventilation on the side	C28 28mm C38 38mm / Without push plate	/ Without dust cover	H -5~240°C / 0~60°C

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.

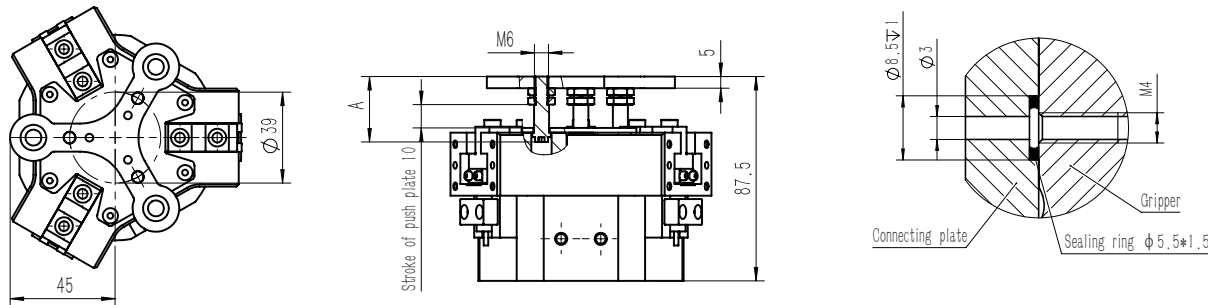
Product attributes	TZ55-113-L		Unit
Single stroke	15		mm
Product weight	1.3		kg
Maximum allowable gripping distance	90		mm
Theoretical maximum gripping force: opening/closing	180P/168P		N
Workpiece weight	4.5		kg
Opening/closing time	0.1/0.1		s
Gas consumption of single opening and closing cycle	0.6		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	0.6



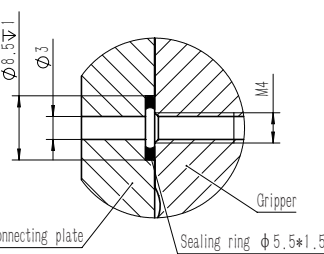
- ① Gripping finger location pin bushing (standard)
- ② Gripping finger positioning groove
- ③ Mounting hole of gripping finger
- ④ ⑤ ⑥ Gripper mounting hole
- ⑥ Gripper positioning hole
- A Compressed air connection port
- B Location of inductive proximity sensor
- C Positive-pressure air blowing hole/grease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

TZ55-113-L-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 12N. If it is dust-proof and provided with the push plate, the stroke is 5.5.

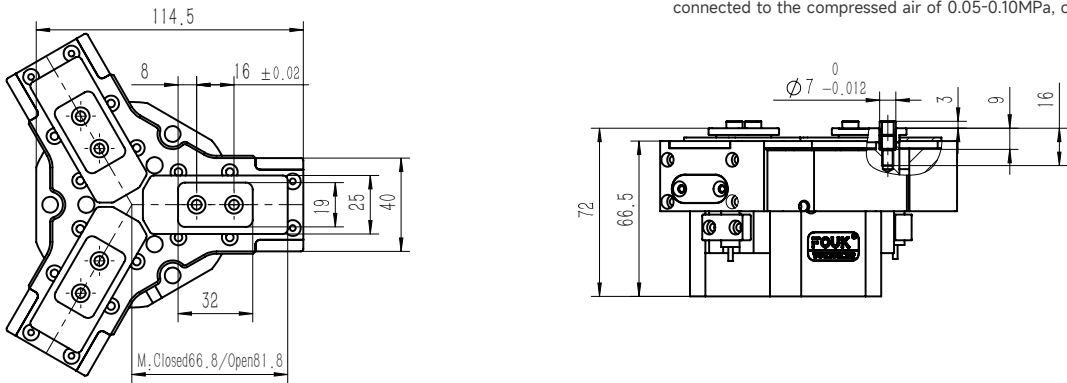


TZ55-113-L-B Ventilation at bottom



TZ55-113-L-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



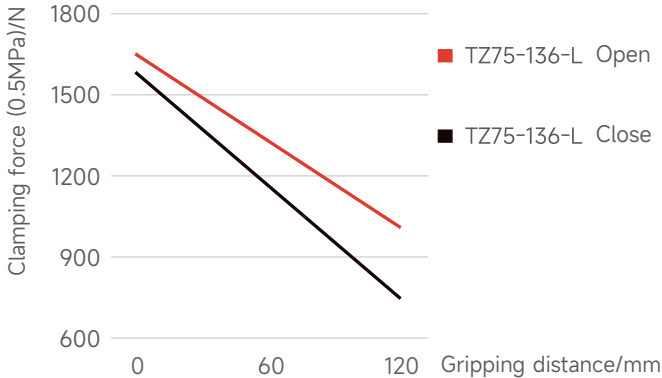
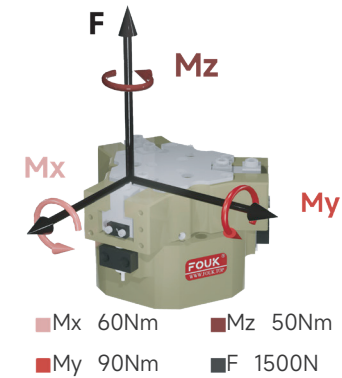
Three-finger gripper long stroke series FOUK-TZL

TZ75-136-L

TZ75-136-L

Static load-bearing torque

Gripping force curve



TZ 75 - 136 - L - B - C30 - P - H

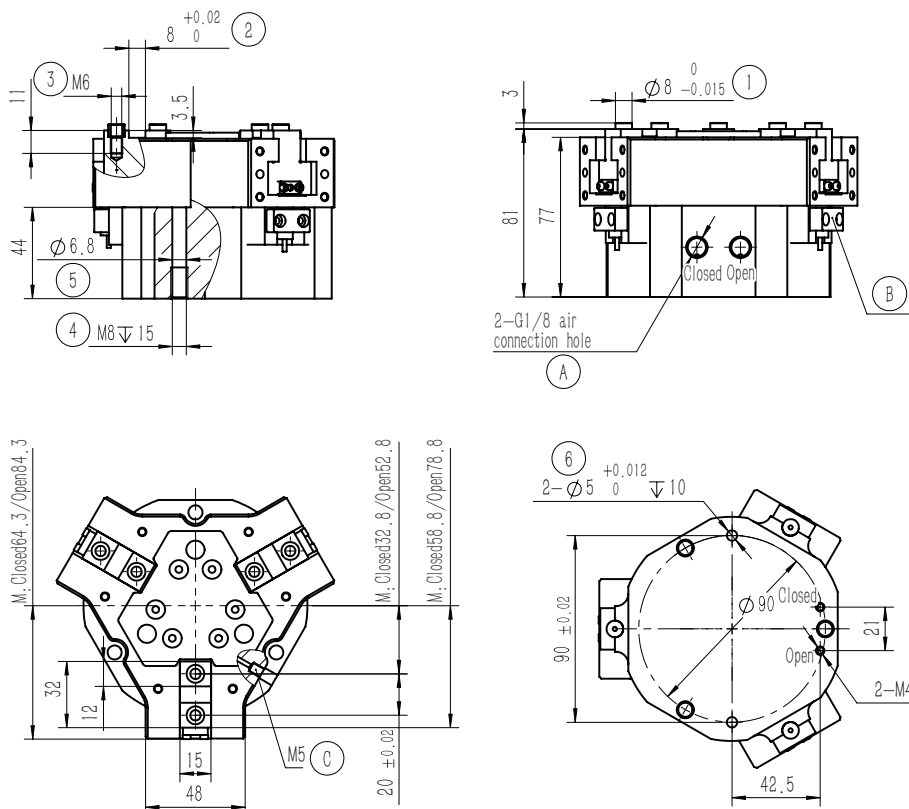
Serial No.	Cylinder bore	Maximum shell diameter	Stroke extension	Ventilation at bottom	Length of push rod	Dust cover IP64	High temperature resistance
TZ T-shaped three-finger gripper				/ Ventilation on the side	C30 30mm C40 40mm / Without push plate	/ Without dust cover	H -5~240°C / 0~60°C

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.

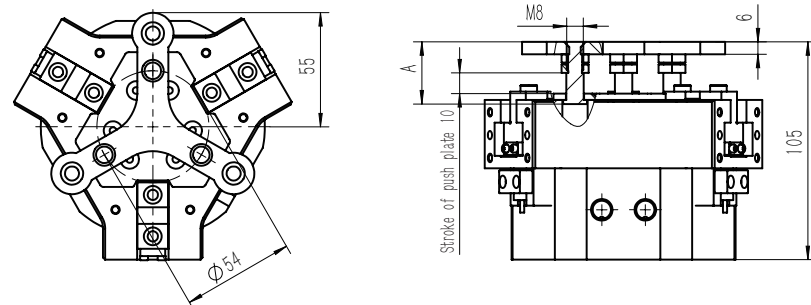
Product attributes	TZ75-136-L		Unit
Single stroke	20		mm
Product weight	2.1		kg
Maximum allowable gripping distance	120		mm
Theoretical maximum gripping force: opening/closing	330P/316P		N
Workpiece weight	8		kg
Opening/closing time	0.2/0.2		s
Gas consumption of single opening and closing cycle	1.2		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/kg	1



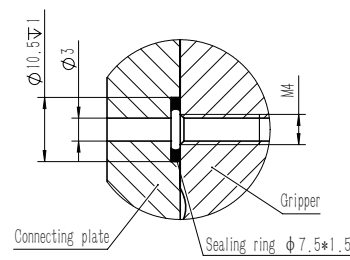
- ① Gripping finger location pin bushing (standard)
- ② Gripping finger positioning groove
- ③ Mounting hole of gripping finger
- ④ ⑤ ⑥ Gripper mounting hole
- ⑥ Gripper positioning hole
- A Compressed air connection port
- B Location of inductive proximity sensor
- C Positive-pressure air blowing hole/grease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

TZ75-136-L-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 75N. If it is dust-proof and provided with the push plate, the stroke is 6.



TZ75-136-L-B Ventilation at bottom



TZ75-136-L-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

