



AQT

Automatic/Robotic Tool Changers

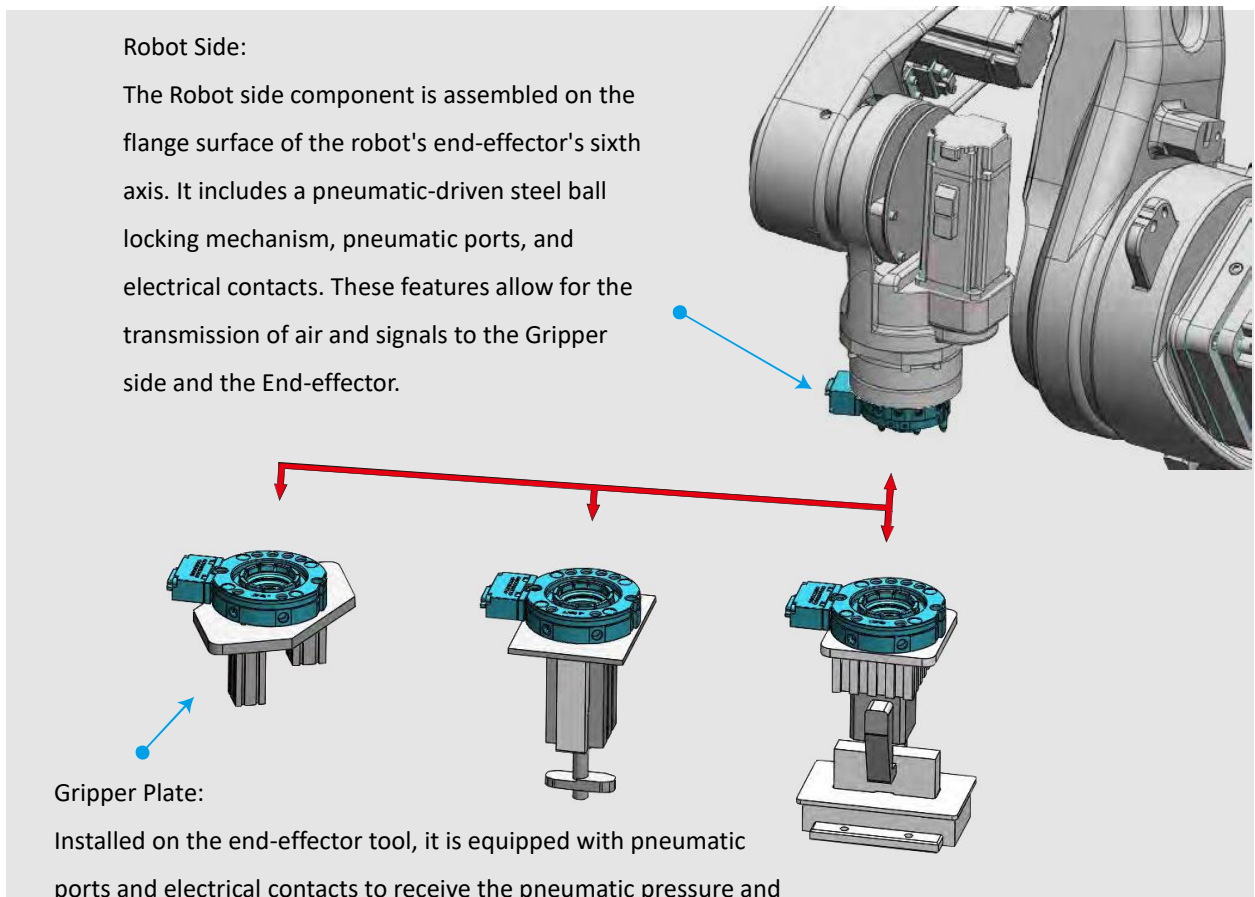


 <u>AQT-03</u>	 <u>AQT-05</u>	 <u>AQT-10</u>	 <u>AQT-20</u>
 <u>AQT-25</u>	 <u>AQT-40</u>	 <u>AQT-60</u>	 <u>AQT-75</u>
 <u>AQT-100</u>	 <u>AQT-120</u>	 <u>AQT-150</u>	 <u>AQT-200</u>
 <u>AQT-350</u>	 <u>AQT-650</u>	 <u>signal module</u>	 <u>Pneumatic Extension Module</u>

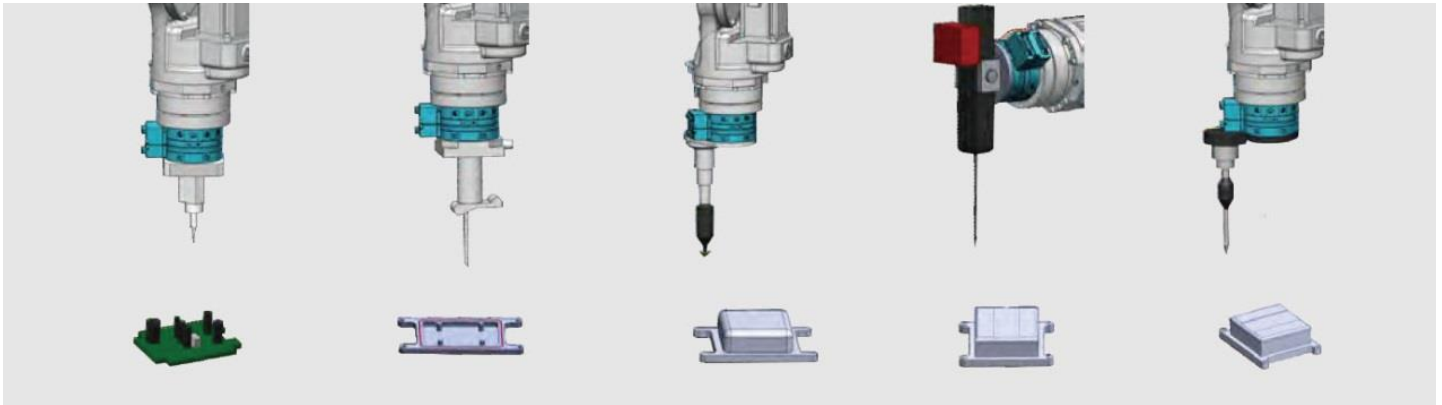


- The Quick Change Tool Unit enables greater versatility in the functions of the mechanical arm
- Capable of handling loads from 3 to 650 KG.
- Reduces the time and enhances the safety of tool changing.
- Improves production line efficiency.
- Utilizes a steel ball locking mechanism.
- Can be equipped with electronic signal connectors for standardized products.
- Employs a mechanical fault insurance mechanism, ensuring the main disc and tool disc remain connected even if the air pressure is disconnected.
- Primarily suitable for assembly operations, processing, material handling, deburring, polishing, welding, welding replacement, and special machines.

The product composition



Application Case



Welding

Sealing

Deburring

Screwing

Machining.

Specifications

AQT R - 35
 ① ② ③

①Model	②Installation Position	③Payload(kg)	
AQT	R : Robot side	3	100
	T : Gripper side	5	120
		10	150
		20	200
		25	350
		35	650
		60	
		75	

AQT-03



■ AQTR-3

Material : Superduralumin
 Weight : 125g
 Mounting position : robot side
 Weight capacity : ~ 3kg
 Thickness after connection : 38mm



■ AQTT-3

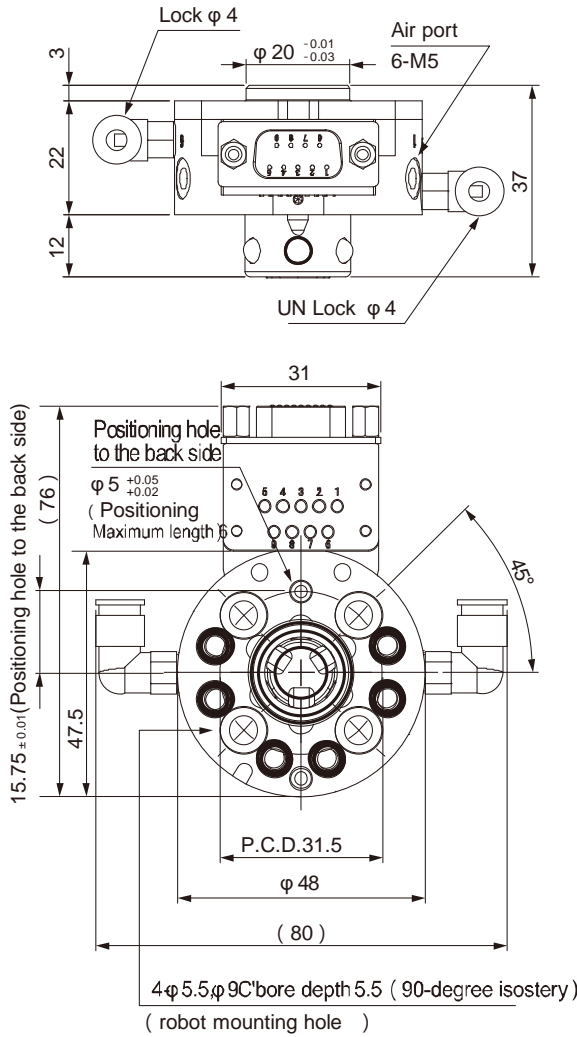
Material : Superduralumin
 Weight : 45g
 Mounting position : tool side
 Weight capacity : ~ 3kg
 Thickness after connection : 38mm

■ Specification

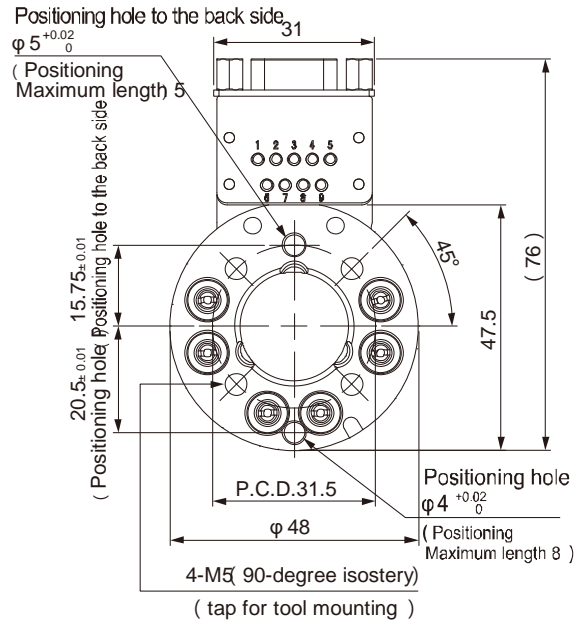
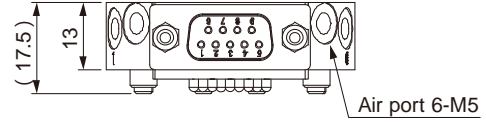
Model	AQT-3
Payload(kg)	3
Repeat accuracy(mm)	±0.02
Static Moment Capacity(N.m) <small>Bending moment(Tx.Ty)/Torque moment(Tz)</small>	7.5/12.6
Locking force(N)	370
Lock/Unlock Pressure(Mpa)	0.39-0.7
Permitted temperature and humidity	0-60°C/0-95%
Material	Aluminum <small>Detachable and attachable section/Made of steel</small>
Weight(g)Robot side/Gripper side	125/45
Size(mm) <small>Locking does not include Signal Moudle</small>	Ø47*38
Pneumatic Transmission (unit)	M5*6
Electrical Transmission	Optional features



■ Dimensional Drawing



AQR-3



AQT-3

AQT-05



■ **AQTR-5**

Material : Superduralumin
 Weight : 250g
 Mounting position : robot side
 Weight capacity : ~ 5kg
 Thickness after connection : 38mm

■ **AQTT-5**

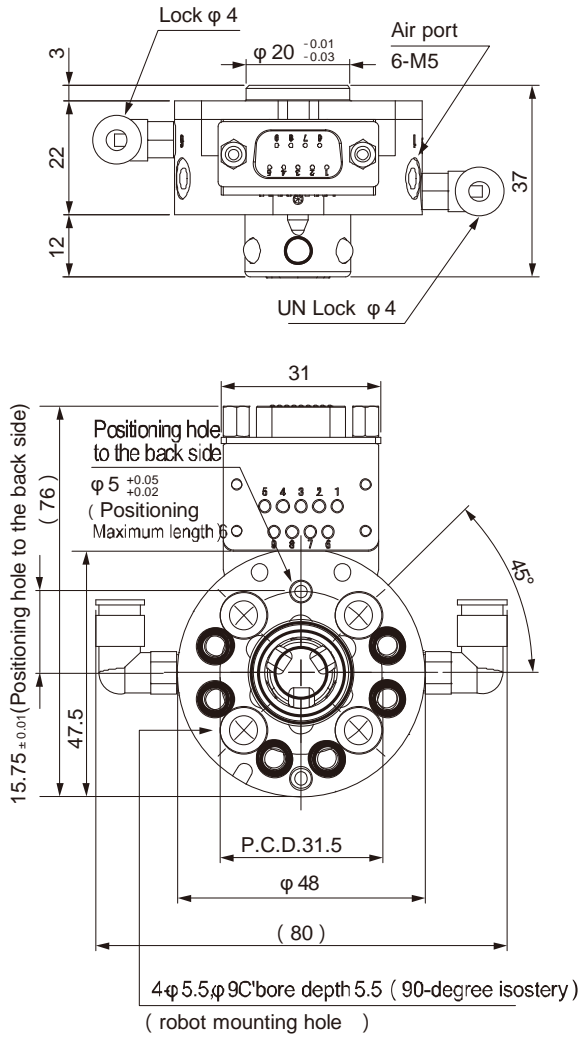
Material : Superduralumin
 Weight : 115g
 Mounting position : tool side
 Weight capacity : ~ 5kg
 Thickness after connection : 38mm

■ **Specification**

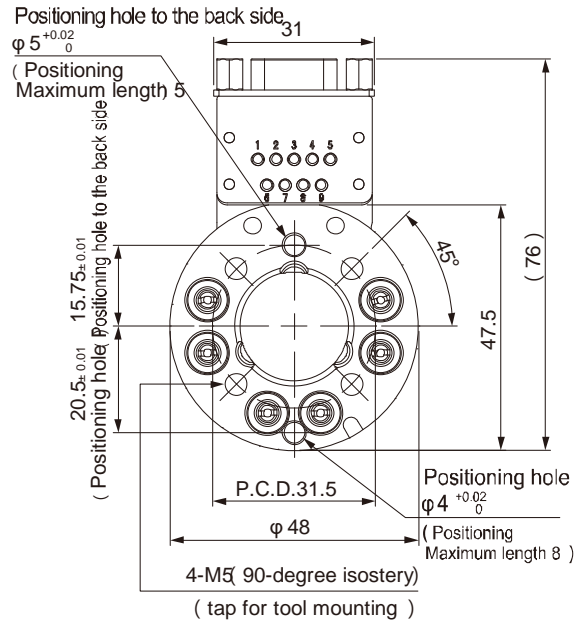
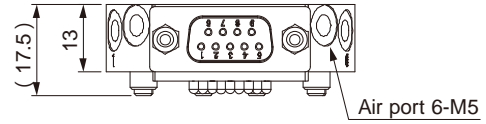
Model	AQT-5
Payload(kg)	5
Repeat accuracy(mm)	±0.02
Static Moment Capacity(N.m) Bending moment(Tx.Ty)/Torque moment(Tz)	12.7/16.6
Locking force(N)	550
Lock/Unlock Pressure(Mpa)	0.39-0.7
Permitted temperature and humidity	0-60°C/0-95%
Material	Aluminum Detachable and attachable section/Made of steel
Weight(g)Robot side/Gripper side	250/115
Size(mm) Locking does not include Signal Mouldle	Ø47*38
Pneumatic Transmission (unit)	M5*6
Electrical Transmission	Optional features



Dimensional Drawing



AQTR-5



AQTT-5

AQT-10



■ **AQTR-10**

Material : Superduralumin
 Weight : 199g
 Mounting position : robot side
 Weight capacity : ~ 10kg
 Thickness after connection : 43mm



■ **AQTT-10**

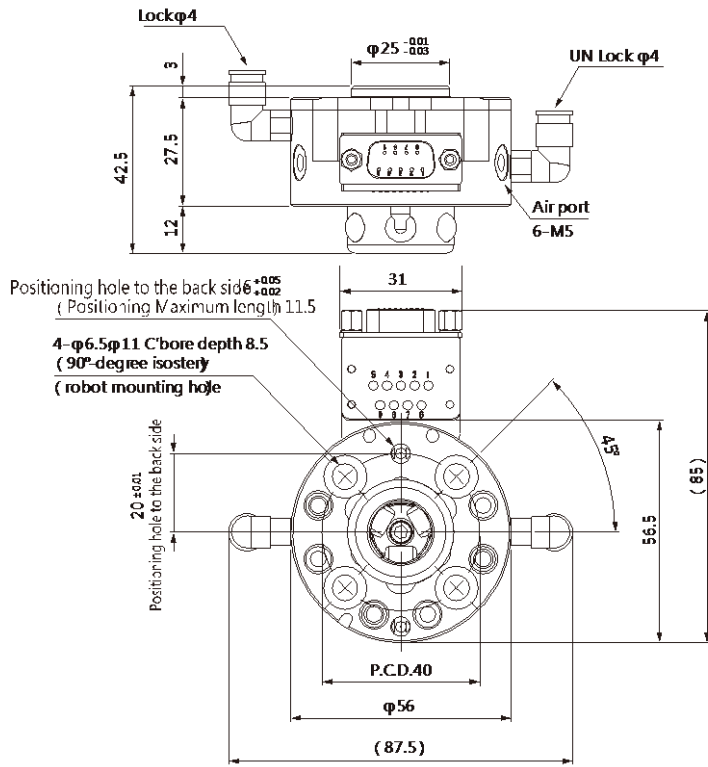
Material : Superduralumin
 Weight : 115g
 Mounting position : tool side
 Weight capacity : ~ 10kg
 Thickness after connection : 43mm

■ **Specification**

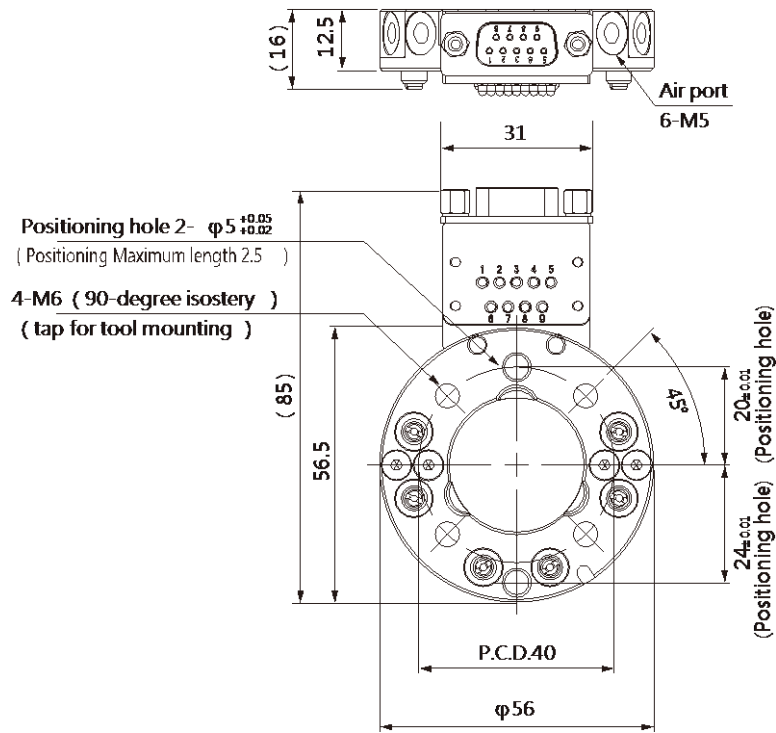
Model	AQT-10
Payload(kg)	10
Repeat accuracy(mm)	±0.02
Static Moment Capacity(N.m) Bending moment(Tx.Ty)/Torque moment(Tz)	24.5/34.3
Locking force(N)	968
Lock/Unlock Pressure(Mpa)	0.39-0.7
Permitted temperature and humidity	0-60°C/0-95%
Material	Aluminum Detachable and attachable section/Made of steel
Weight(g)Robot side/Gripper side	199/115
Size(mm) Locking does not include Signal Moudle	Ø56*43
Pneumatic Transmission (unit)	M5*6
Electrical Transmission	Optional features



■ AQTR-10 Dimensional Drawing



■ AQT-10 Dimensional Drawing



AQT-20



■ AQR-20

Material : Superduralumin
 Weight : 507g
 Mounting position : robot side
 Weight capacity : ~ 20kg
 Thickness after connection : 47mm



■ AQTT-20

Material : Superduralumin
 Weight : 226g
 Mounting position : tool side
 Weight capacity : ~ 20kg
 Thickness after connection : 47mm

■ Specification

Model	AQT-20
Payload(kg)	20
Repeat accuracy(mm)	±0.02
Static Moment Capacity(N.m) Bending moment(Tx.Ty)/Torque moment(Tz)	113/156
Locking force(N)	2058
Lock/Unlock Pressure(Mpa)	0.39-0.7
Permitted temperature and humidity	0-60°C/0-95%
Material	Aluminum Detachable and attachable section/Made of steel
Weight(g)Robot side/Gripper side	561/229
Size(mm)Locking does not include Signal Moudle	Ø80*47
Pneumatic Transmission (unit)	M5*6/M5*11
Electrical Transmission	Optional features

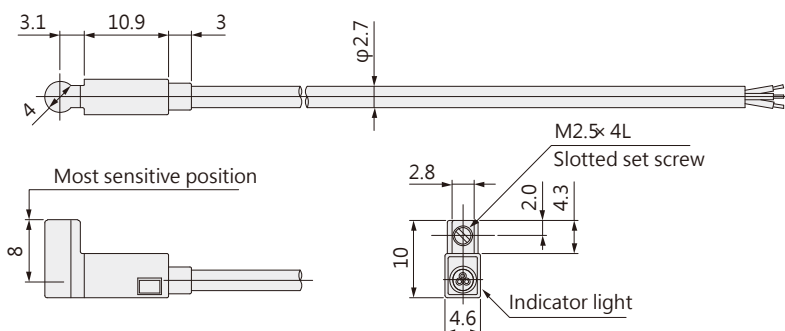
▶ Auto switch · contactless

Auto switch

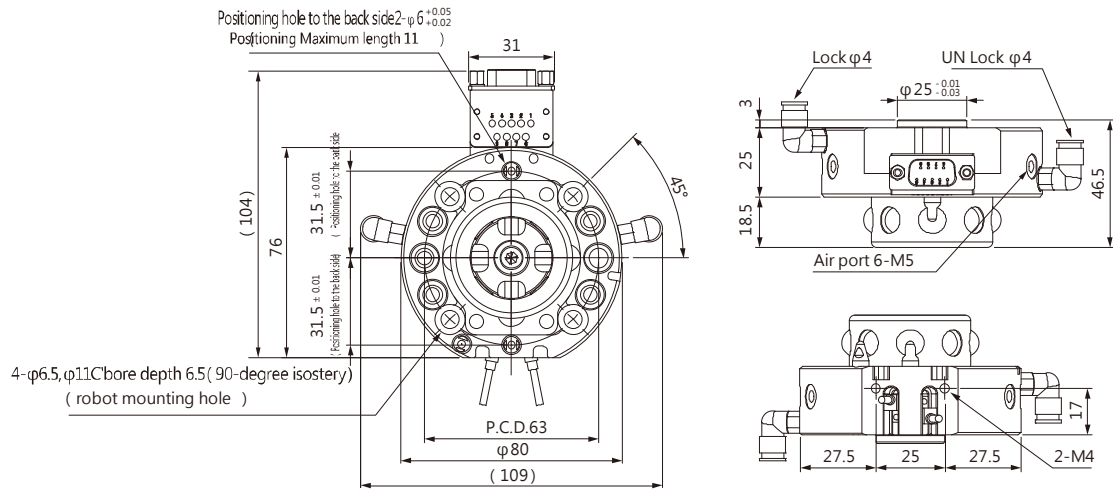


TYPE	D-F8N
Weight	7g

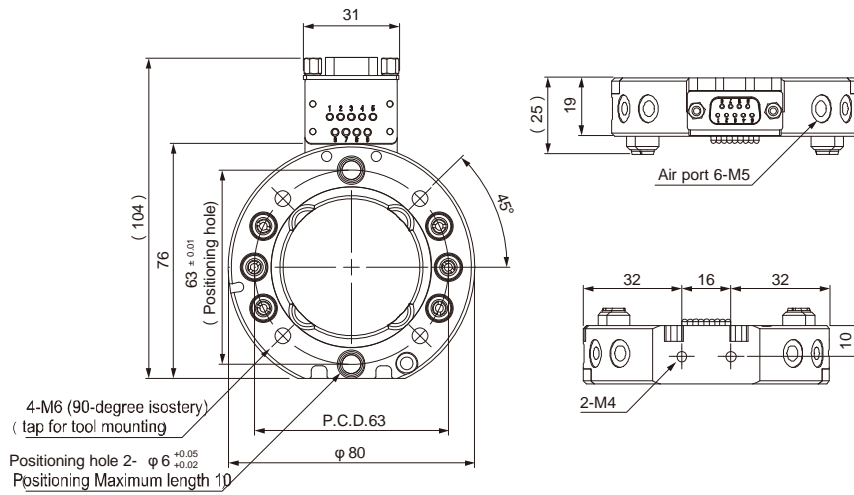
- Applied loadrelay PLC
- Load voltage: DC24V
- Load electric current5~40 mA
- W/ indicator lamp
- Cable Length: 0.5m



■ AQTR-20 Dimensional Drawing



■ AQTT-20 Dimensional Drawing



AQT-25

■ **AQTR-25**



■ **AQTT-25**

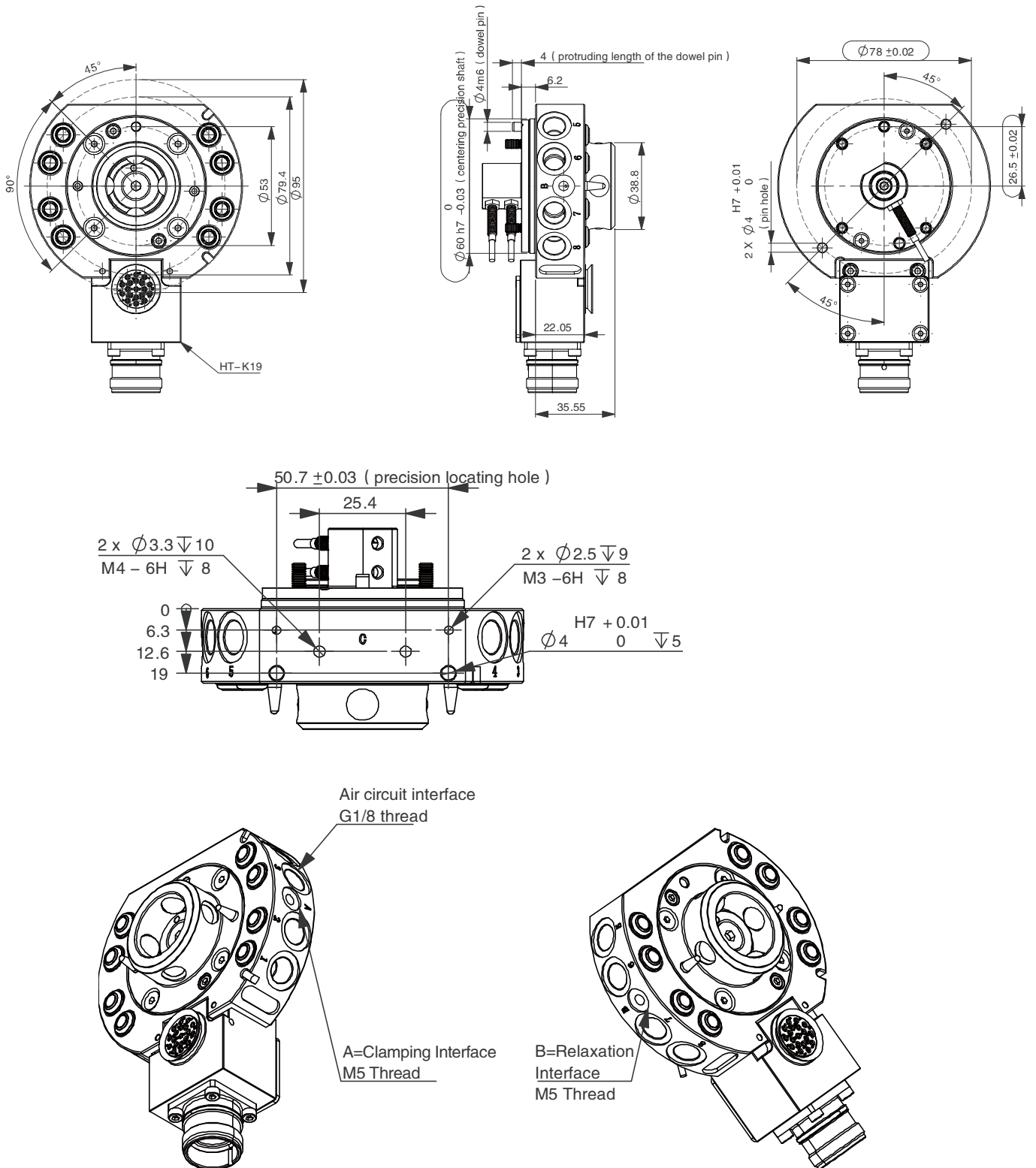


- Air pressure unlocking, clamping;
- Material: hardened stainless steel;
- Repeated positioning accuracy < +0.015mm;
- Various power supply, liquid and gas modules can be selected;
- Special insurance institutions to prevent the risk of accidental gas cut-off;
- Standard configuration can quickly connect to the gas source.
- Suitable for automatic handling, assembly operations;
- Suitable for automatic stamping, deburring and other processing operations.

■ **Specification**

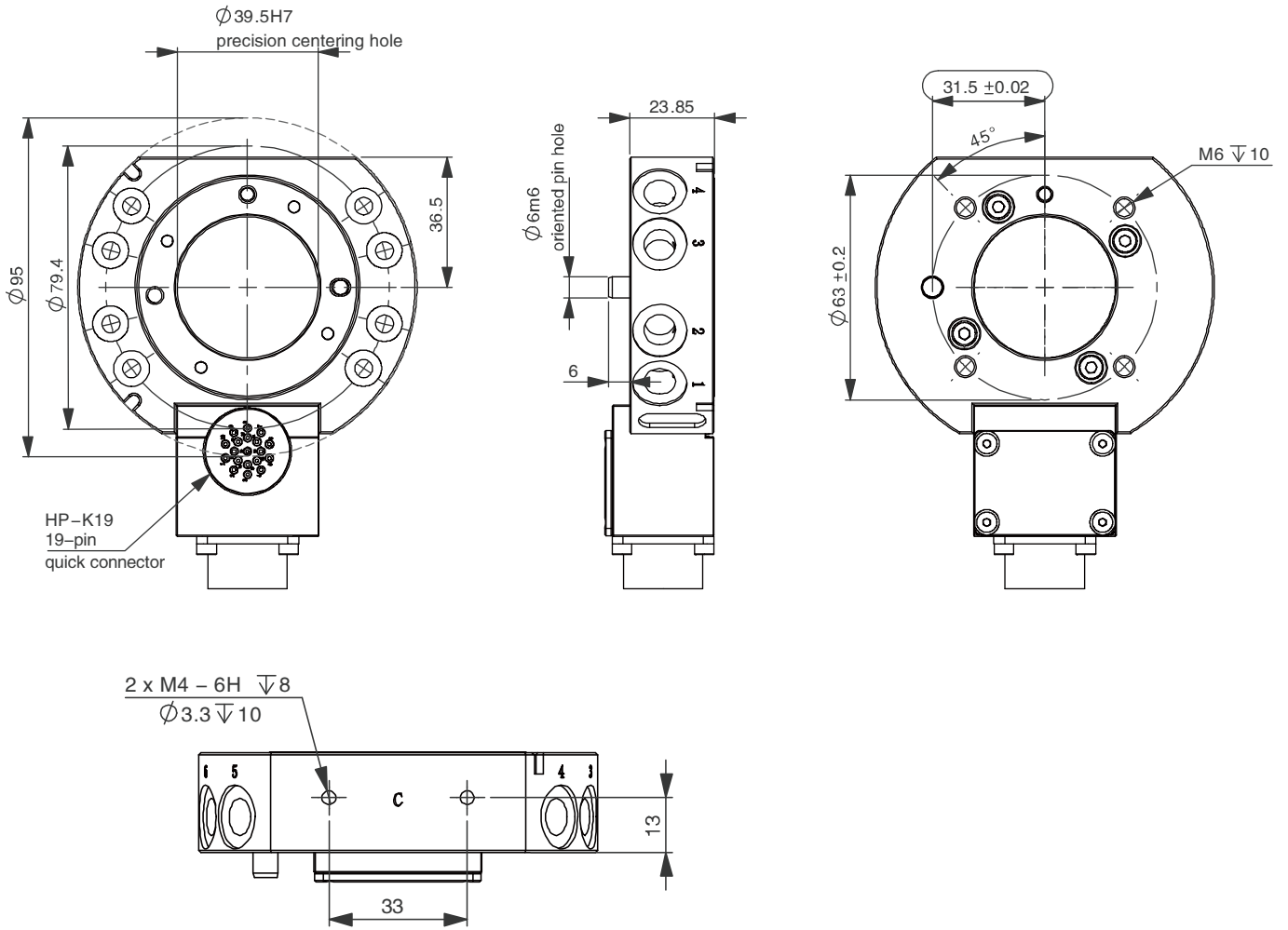
Model	AQT-25
Transportable weight kg	25
Torque Mx(max) Nm	169.5
Torque My(max) Nm	169.5
Torque Mz(max) Nm	230
Locking force N	2300
Repeated positioning accuracy mm	±0.015
Weight kg	0.3
Maximum distance when locking mm	3
Thread of air connection in air passage	8*G1/8"
Maximum allowable X,Y axis deviation mm	±1
Maximum permissible angular deviation °	±1
Minimum ambient temperature °C	5
Maximum ambient temperature °C	60
Minimum working pressure bar	4.5
Maximum working pressure bar	6.9

■ AQTR-25 Dimensional Drawing

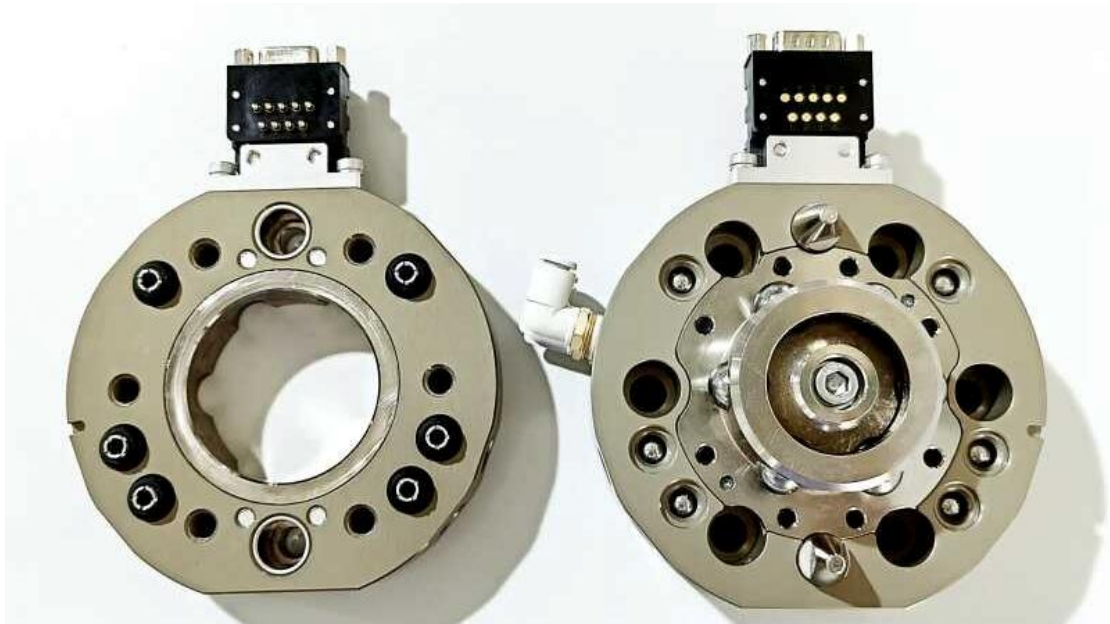




■ AQT-25 Dimensional Drawing



AQT-40



■ **AQTR-40**

Material : Superduralumin
 Weight : 1225g
 Mounting position : robot side
 Weight capacity : ~ 40kg
 Thickness after connection :
 60mm

■ **AQTT-40**

Material : Superduralumin
 Weight : 545g
 Mounting position : tool side
 Weight capacity : ~ 40kg
 Thickness after connection :
 60mm

■ **Specification**

Model	AQT-40
Payload(kg)	40
Repeat accuracy(mm)	±0.02
Static Moment Capacity(N.m) Bending moment(Tx.Ty)/Torque moment(Tz)	150/203
Locking force(N)	3600
Lock/Unlock Pressure(Mpa)	0.39-0.7
Permitted temperature and humidity	0-60°C/0-95%
Material	Aluminum Detachable and attachable section/Made of steel
Weight(g)Robot side/Gripper side	1255/545
Size(mm)Locking does not include Signal Mouldle	Ø110*60
Pneumatic Transmission (unit)	RC 1/8*6
Electrical Transmission	Optional features

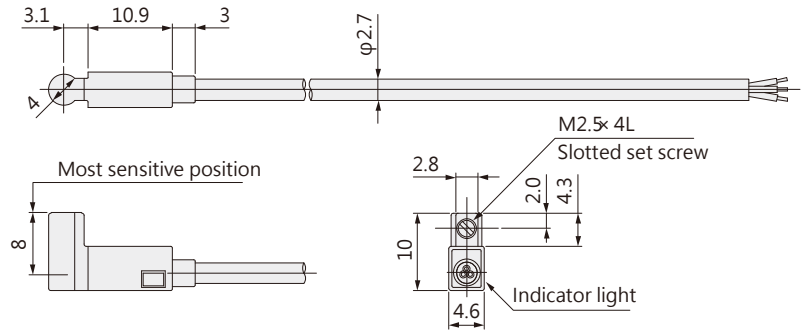
▶ Auto switch · contactless

Auto switch

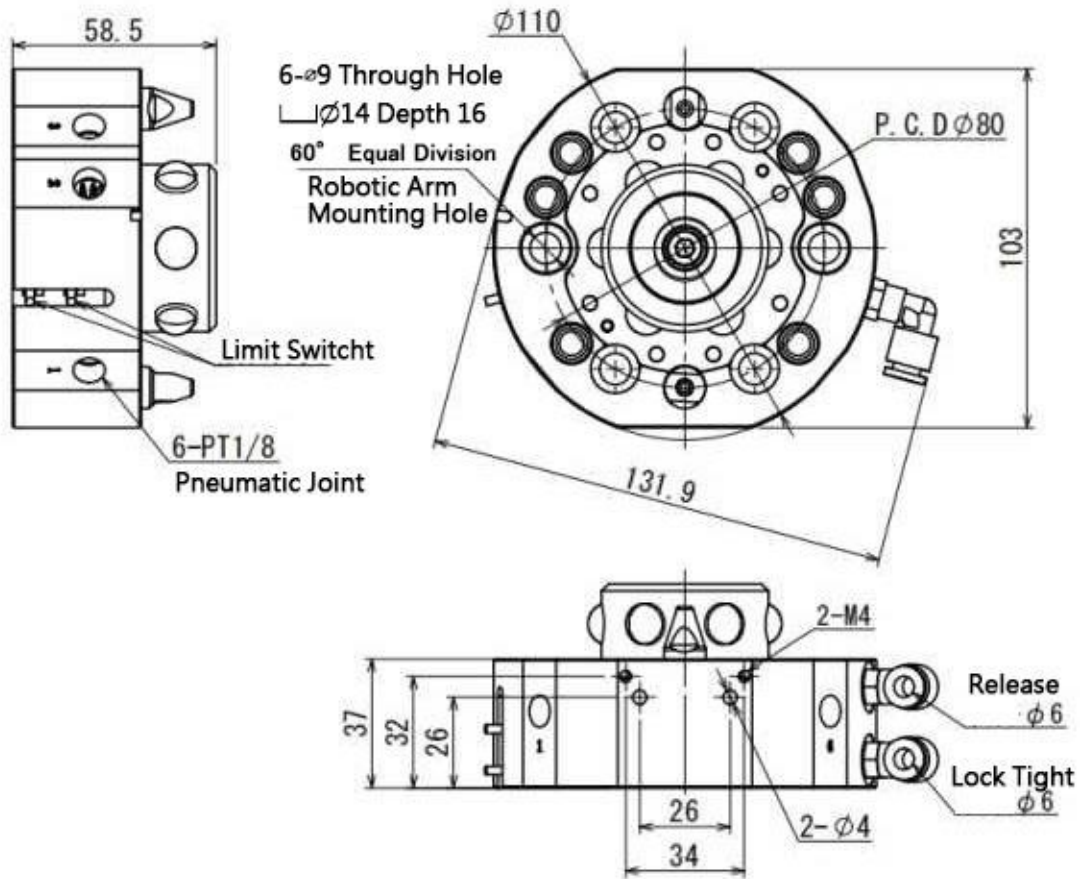


TYPE	D-F8N
Weight	7g

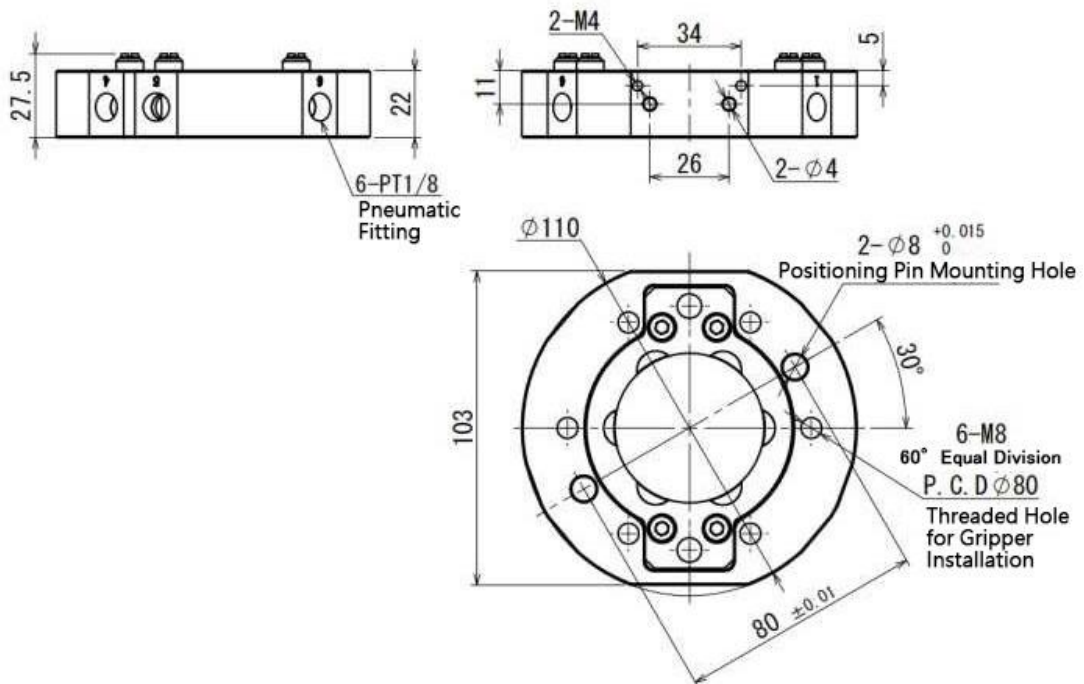
- Applied load: relay PLC
- Load voltage: DC24V
- Load electric current: 5~40 mA
- W/ indicator lamp
- Cable Length: 0.5m



■ AQTR-40 Dimensional



■ AQTT-40 Dimensional



AQT-60



■ **AQTR-60**

Material : Superduralumin
 Weight : 1440g
 Mounting position : robot side
 Weight capacity : ~ 60kg
 Thickness after connection : 56mm



■ **AQTT-60**

Material : Superduralumin
 Weight : 734g
 Mounting position : tool side
 Weight capacity : ~ 60kg
 Thickness after connection : 56mm

■ **Specification**

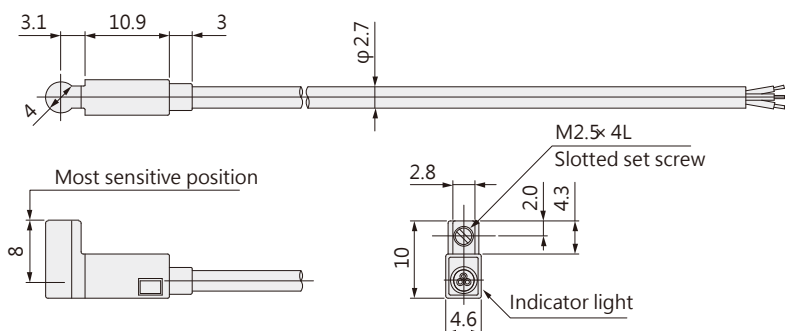
Model	AQT-60
Payload(kg)	60
Repeat accuracy(mm)	±0.02
Static Moment Capacity(N.m) Bending moment(Tx.Ty)/Torque moment(Tz)	388/588
Locking force(N)	6470
Lock/Unlock Pressure(Mpa)	0.39-0.7
Permitted temperature and humidity	0-60°C/0-95%
Material	Aluminum Detachable and attachable section/Made of steel
Weight(g)Robot side/Gripper side	1440/734
Size(mm) Locking does not include Signal Mouldle	Ø125*56
Pneumatic Transmission (unit)	PT 1/8*8
Electrical Transmission	Optional features

▶ Auto switch · contactless

Auto switch

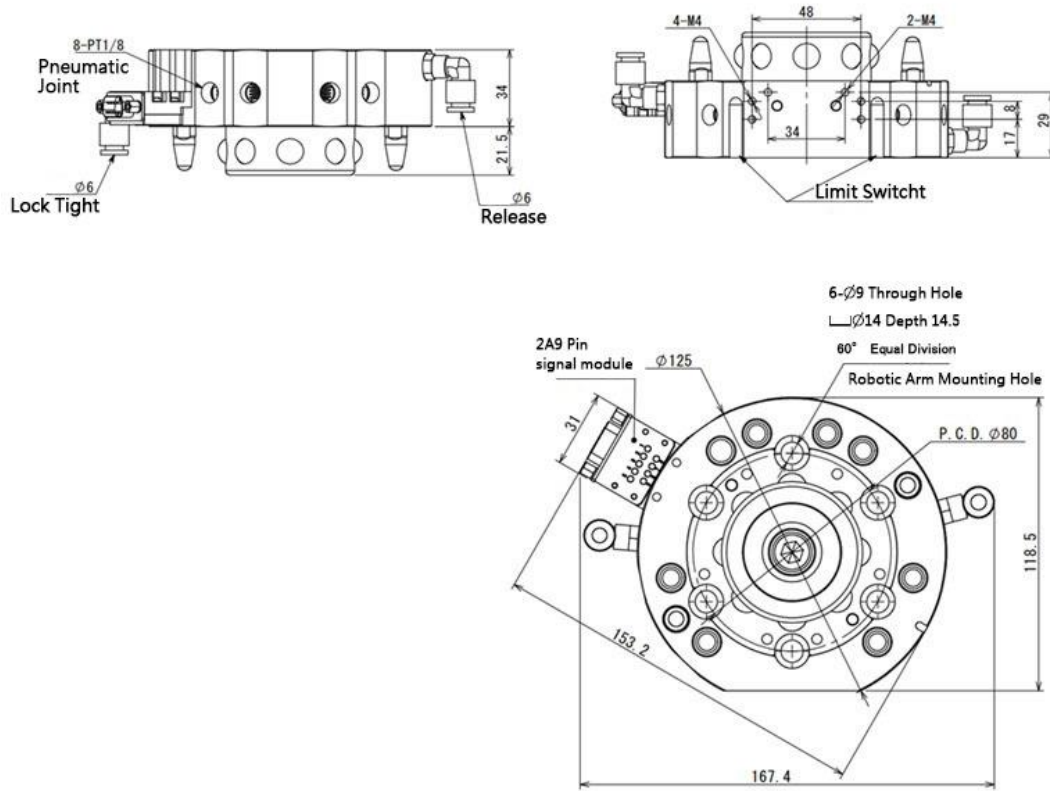
	TYPE	D-F8N
	Weight	7g

- Applied loadrelay PLC
- Load voltage: DC24V
- Load electric current5~40 mA
- W/ indicator lamp
- Cable Length: 0.5m

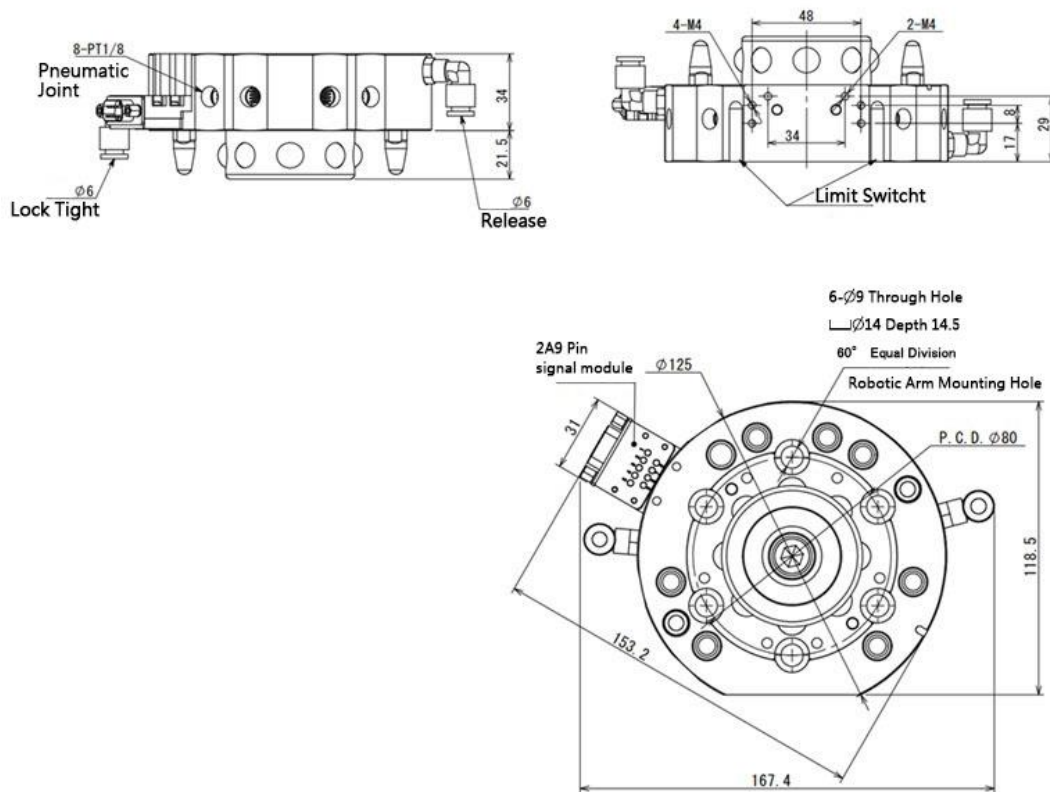




■ AQTR-60 Dimensional Drawing



■ AQTT-60 Dimensional Drawing





AQT-75

■ **AQTR-75**



■ **AQTT-75**

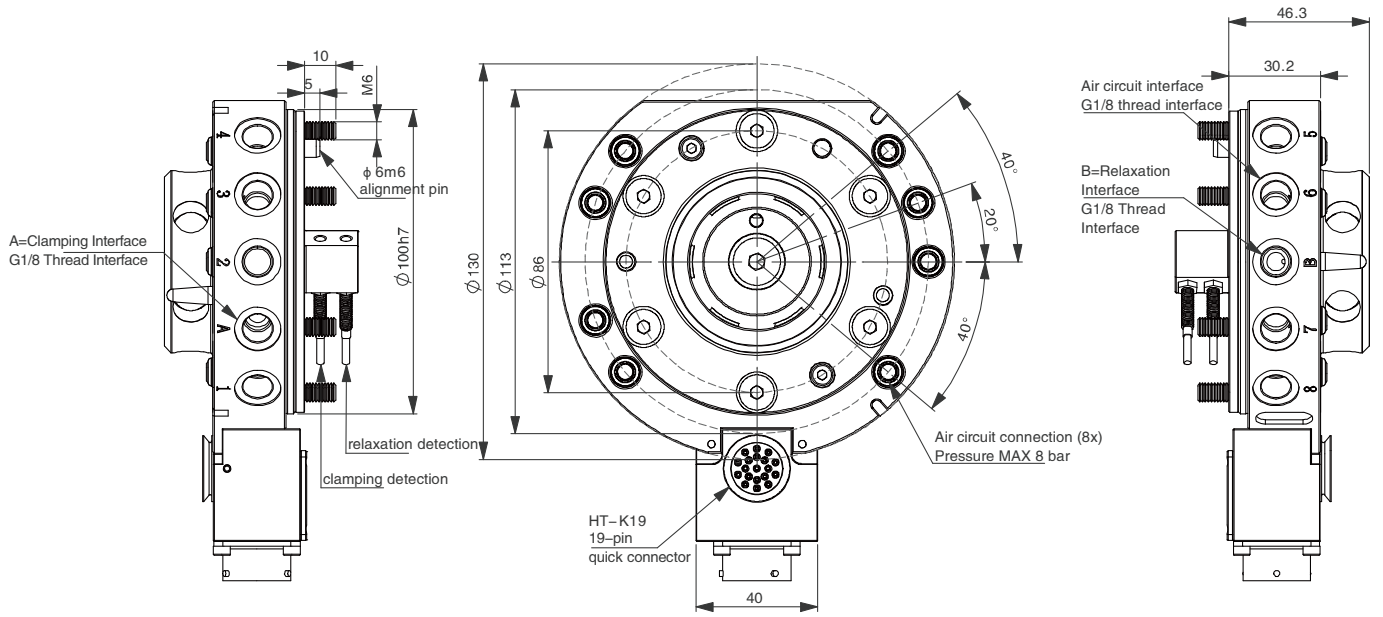


- Air pressure unlocking, clamping;
- Material: hardened stainless steel;
- Repeated positioning accuracy < +0.015mm;
- Various power supply, liquid and gas modules can be selected;
- Special insurance institutions to prevent the risk of accidental gas cut-off;
- Standard configuration can quickly connect to the gas source.
- Suitable for automatic handling, assembly operations;
- Suitable for automatic stamping, deburring and other processing operations.

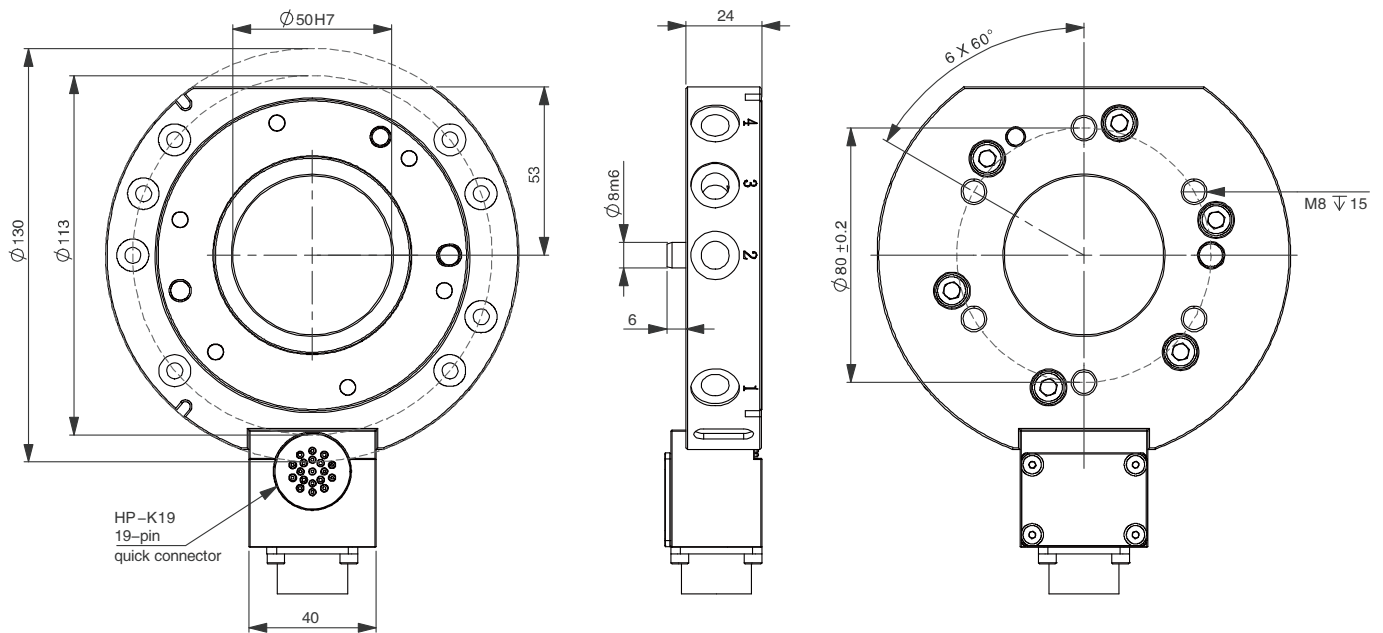
■ **Specification**

Model	AQT-75
transportable weight(kg)	75
Repeat accuracy(mm)	±0.02
Torque Mx (max) (Nm)	591
Torque My (max) (Nm)	591
Torque Mz (max) (Nm)	326
Locking force(N)	7400
Minimum working pressure(bar)	4.5
Maximum working pressure(bar)	6.9
Permitted temperature	5-60°C
Material	hardened stainless steel
Weight(g)	700
Size(mm) <small>Locking does not include Signal Moudle</small>	Ø130
Pneumatic Transmission (unit)	G 1/8*8
Electrical Transmission	Optional features

■ AQTR-75 Dimensional Drawing



■ AQTT-75 Dimensional Drawing



AQT-100

■ **AQTR-100**

■ **AQTT-100**



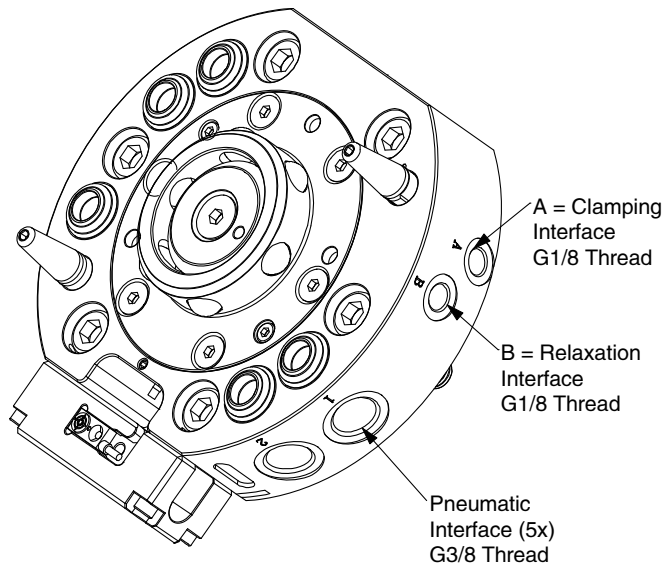
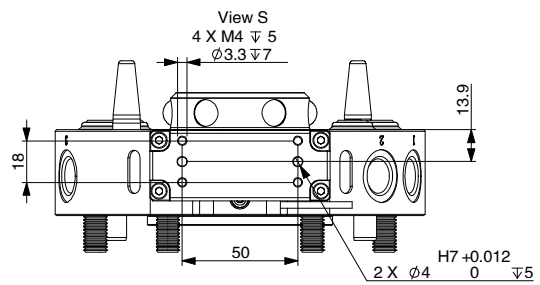
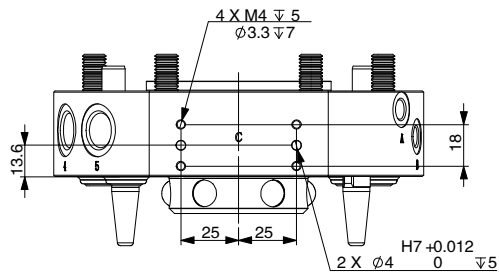
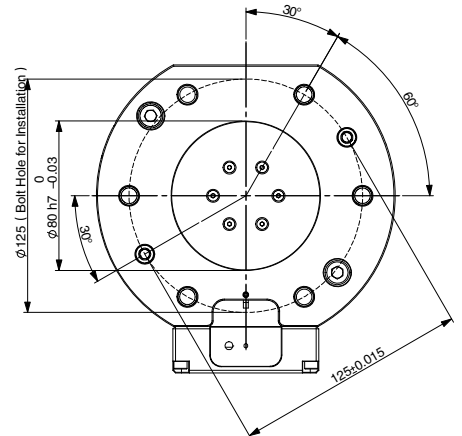
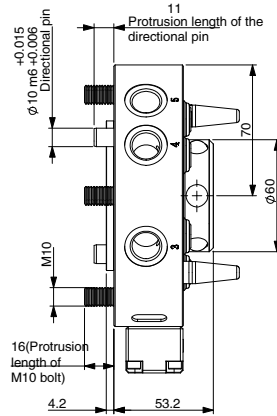
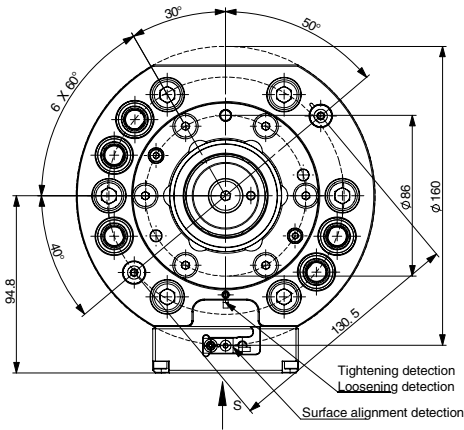
- Air pressure unlocking, clamping;
- Material: hardened stainless steel;
- Repeated positioning accuracy < +0.015mm;
- Various power supply, liquid and gas modules can be selected;
- Special insurance institutions to prevent the risk of accidental gas cut-off;
- Standard configuration can quickly connect to the gas source.
- Suitable for automatic handling, assembly operations;
- Suitable for automatic stamping, deburring and other processing operations.

■ **Specification**

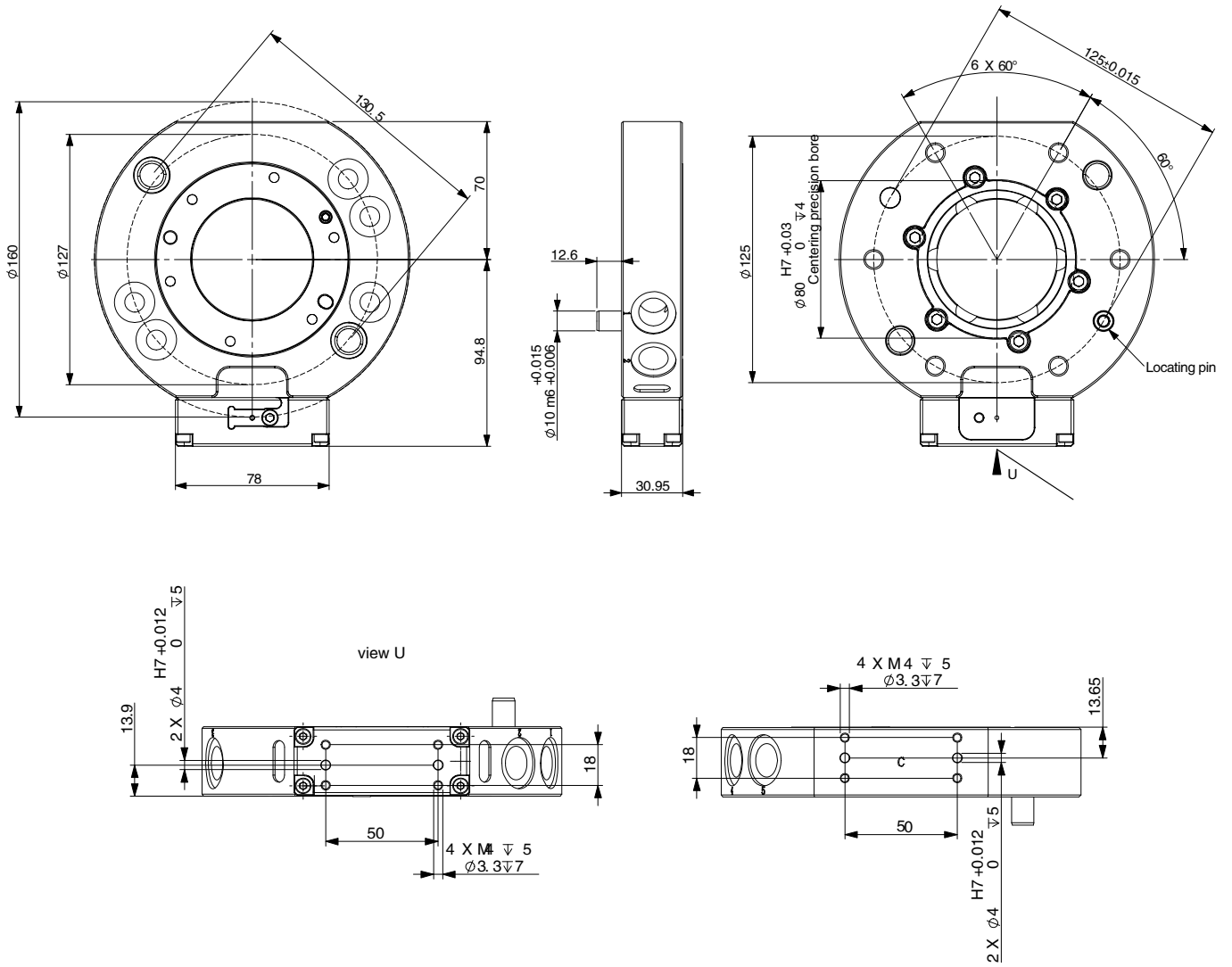
Model	AQT-100
ransportable weight(kg)	100
Repeat accuracy(mm)	±0.02
Torque Mx (max) (Nm)	1626
Torque My (max) (Nm)	1626
Torque Mz (max) (Nm)	2103
Locking force(N)	12000
Minimum working pressure(bar)	4.5
Maximum working pressure(bar)	6.9
Permitted temperature	5-60°C
Material	hardened stainless steel
Weight(g)	700
Size(mm) Locking does not include Signal Mouldle	Ø130
Pneumatic Transmission (unit)	G 1/8*8
Electrical Transmission	Optional features



■ AQTR-100 Dimensional Drawing



■ AQT-100 Dimensional Drawing



AQT-120

■ **AQTR-120/ AQTT-120**

- Payload 120kg.
- Steel ball lock system.
- 3 kinds of option module installation.
- ATC condition display panel.
- With the mechanical locking mechanism.

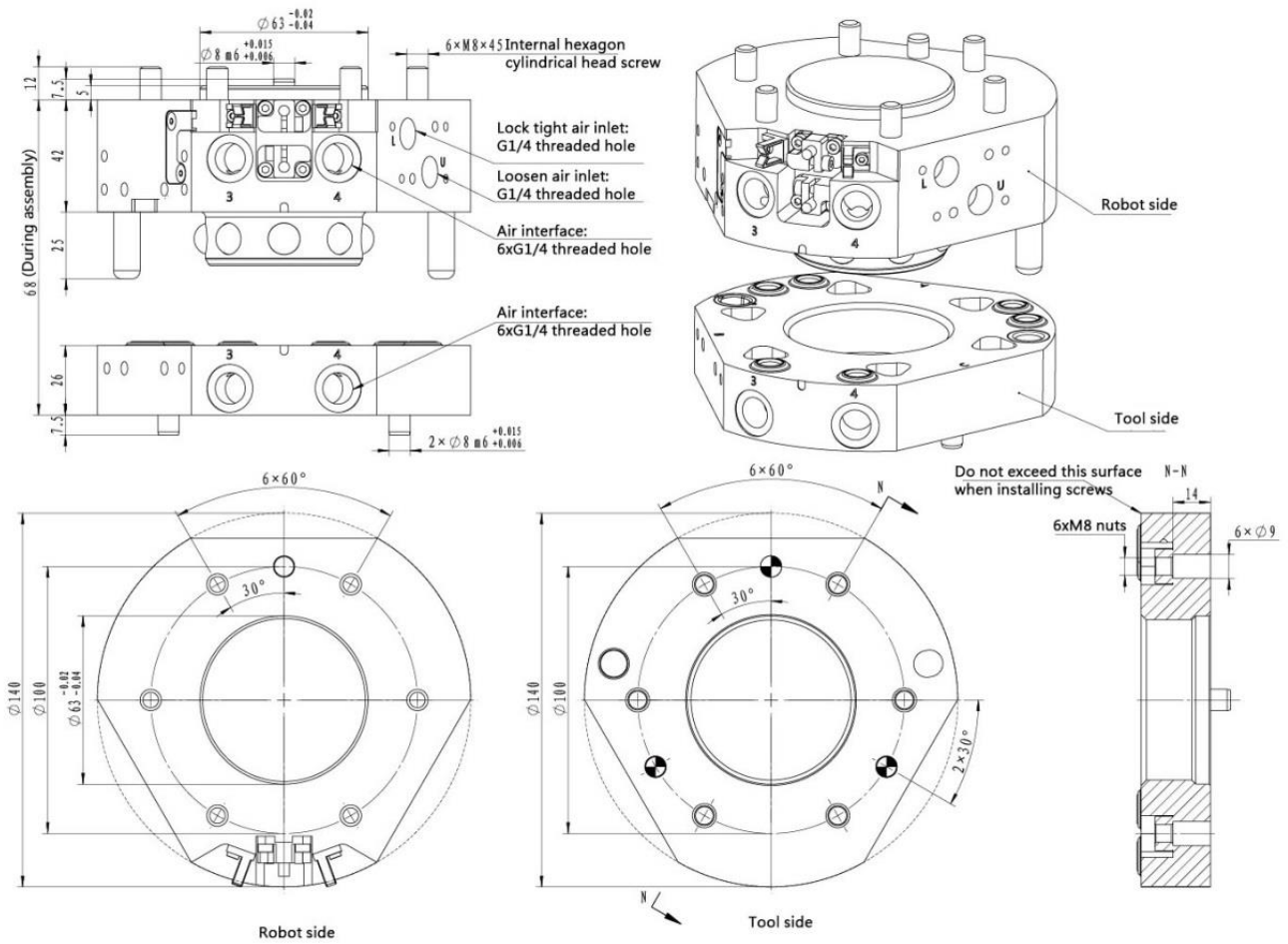


■ **Specification**

Model	AQT-120
Payload(kg)	120
Repeat accuracy(mm)	±0.02
Static Moment Capacity(N.m) Bending moment(Tx.Ty)/Torque moment(Tz)	962/962
Locking force(N)	9700
Lock/Unlock Pressure(Mpa)	0.45-0.8
Permitted temperature and humidity	0-55°C/0-95%
Material	Aluminum Detachable and attachable section/Made of steel
Weight(g)Robot side/Gripper side	2345/685
Size(mm)Locking does not include Signal Moudle	Ø140*68
Pneumatic Transmission (unit)	G 1/4*6(Non-self-sealing)
Electrical Transmission	Optional features



Dimensional Drawing



AQT-150

■ **AQTR-150/ AQTT-150**

- Payload 150kg.
- Steel ball lock system.
- 3 kinds of option module installation.
- ATC condition display panel.
- With the mechanical locking mechanism.

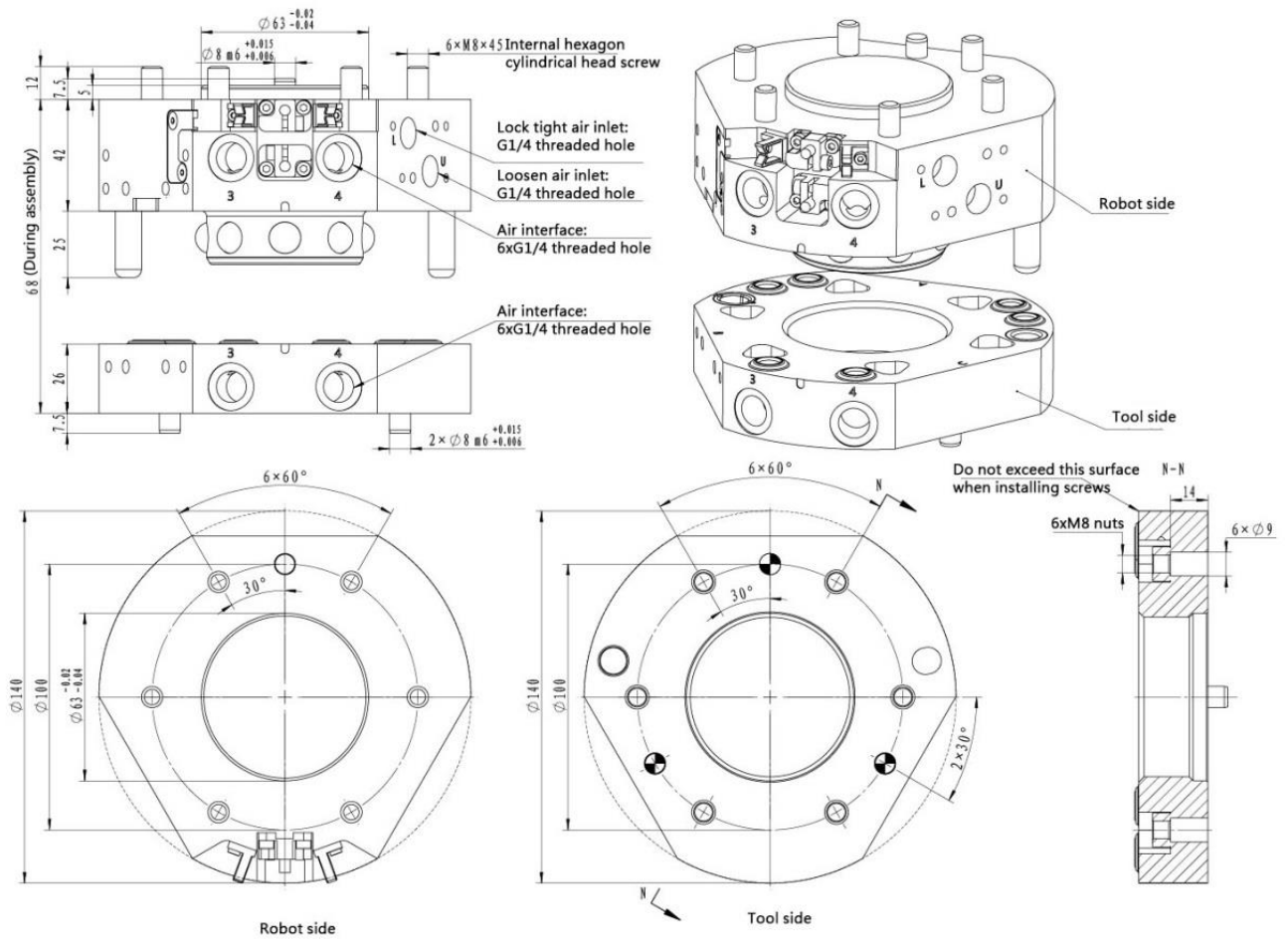


■ **Specification**

Model	AQT-150
Payload(kg)	150
Repeat accuracy(mm)	±0.02
Static Moment Capacity(N.m) Bending moment(Tx.Ty)/Torque moment(Tz)	1260/1260
Locking force(N)	9700
Lock/Unlock Pressure(Mpa)	0.45-0.8
Permitted temperature and humidity	0-55°C/0-95%
Material	Aluminum Detachable and attachable section/Made of steel
Weight(g)Robot side/Gripper side	2345/800
Size(mm)Locking does not include Signal Mouldle	Ø140*68
Pneumatic Transmission (unit)	G 1/4*6(Non-self-sealing)
Electrical Transmission	Optional features



■ Dimensional Drawing



AQT-200

- AQTR-200-SP(PNP)
AQTR-200-SN(NPN)

- AQTT-200

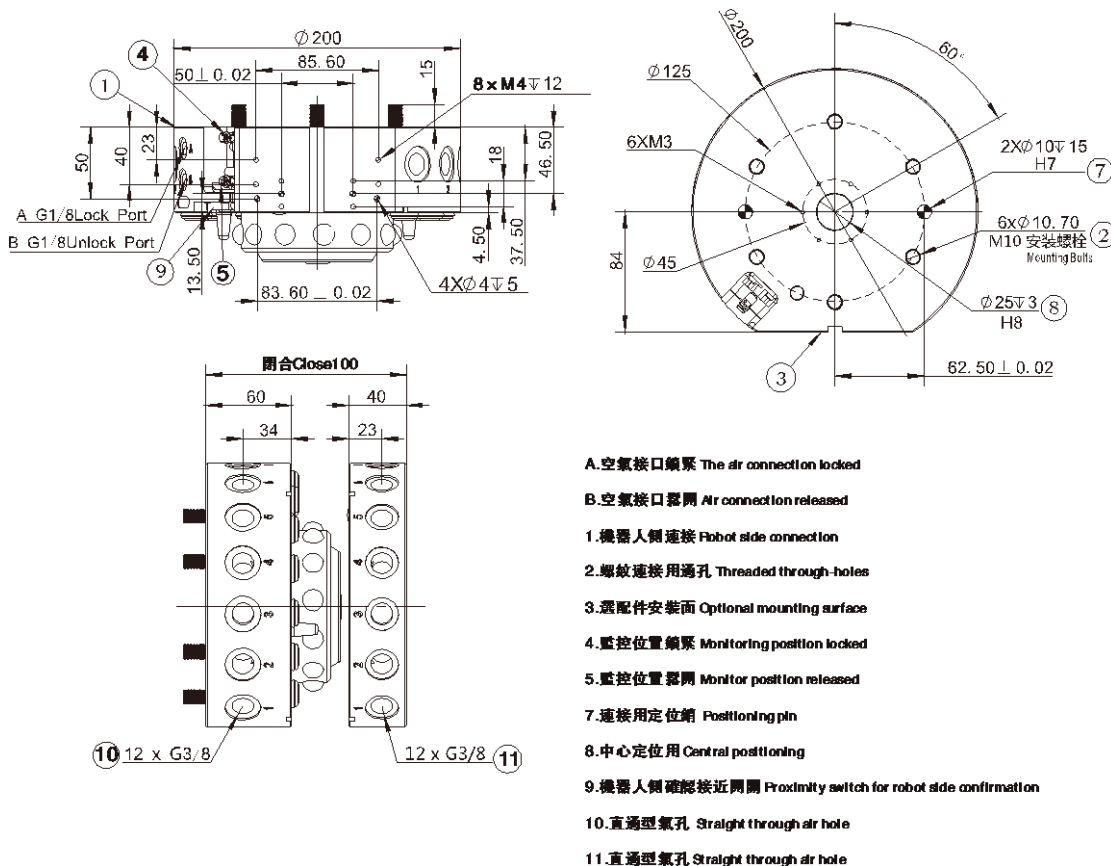


■ Specification

Model	AQT-200
Payload(kg)	200
Repeat accuracy(mm)	±0.015
Static Moment Capacity(N.m) Bending moment(Tx.Ty)/Torque moment(Tz)	1360/1130
Locking force(N)	16000
Weight(g)Robot side/Gripper side	6200/2800
Size(mm) Locking does not include Signal Moudle	Ø200
Pneumatic Transmission (unit)	G 3/8*12
Electrical Transmission	Optional features

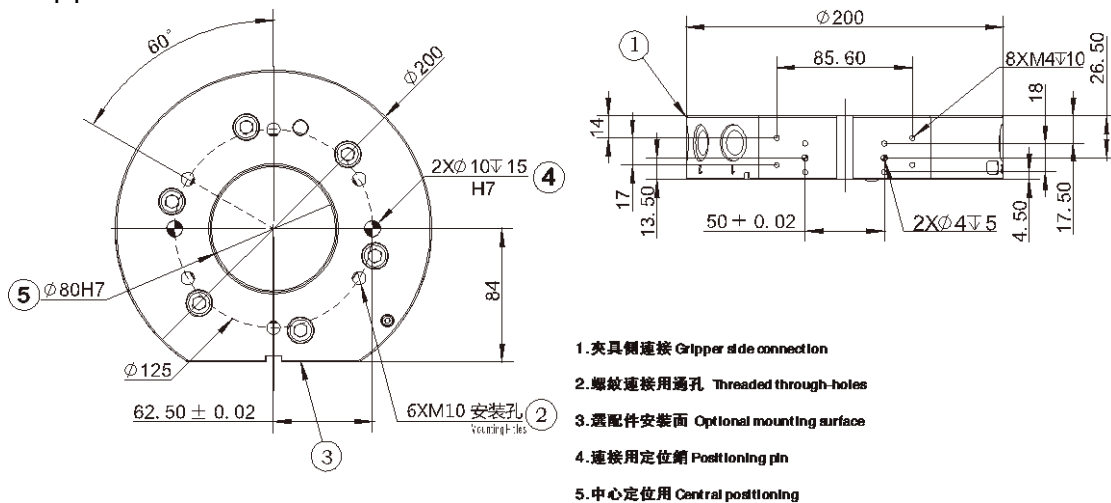
■ AQTR-200 Dimensional Drawing

Robot side



■ AQTT-200 Dimensional Drawing

Gripper side



AQT-350

■ **AQTR-350/ AQTT-350**



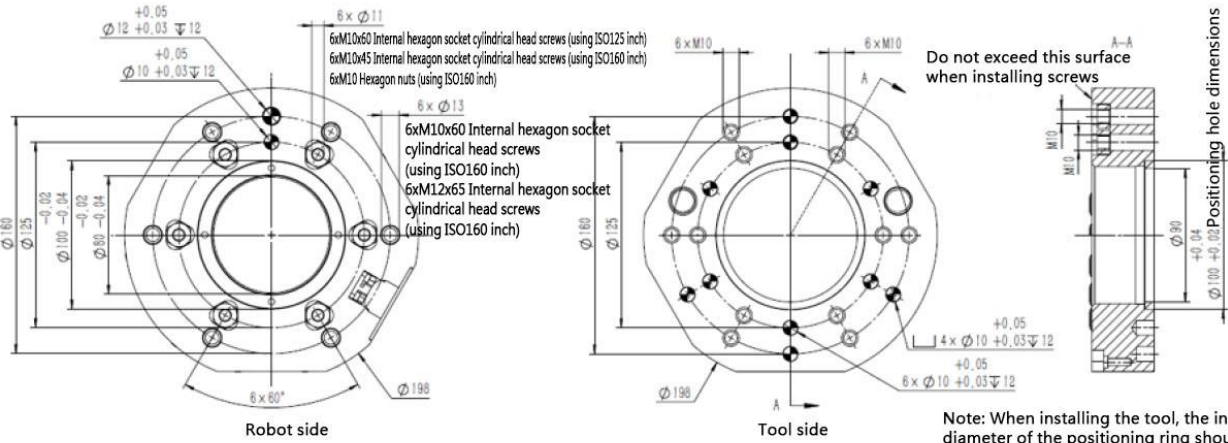
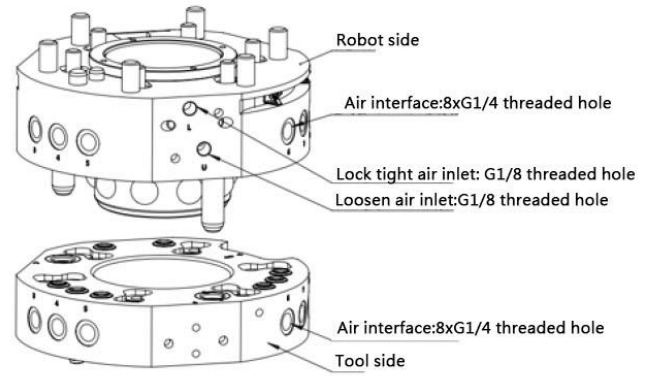
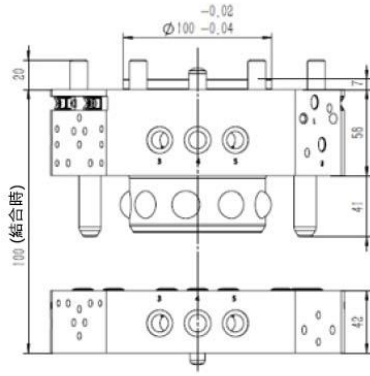
- Payload 350kg.
- Mechanical anti falling structure, safety when accidental pneumatic and power failure.
- Intergrated LOCK、 UNLOCK and Face Fitting Senors .
- Inserted pin modules ; ensure the stability of signal connection effectively.
- Highest safety level; Level C.
- Intergrated 8 X G1/4 pneumatic ports.
- Suitable for flange according to ISO-125,ISO-160.
- Support Handing、 Ultrasonic Welding, etc.

■ **Specification**

Model	AQT-350
Payload(kg)	350
Repeat accuracy(mm)	±0.02
Static Moment Capacity(N.m) <small>Bending moment(Tx.Ty)/Torque moment(Tz)</small>	2800/2800
Locking force(N)	38.8kN
Lock/Unlock Pressure(Mpa)	0.45~0.8
Permitted temperature and humidity	0-55°C/0-95%
Material	Aluminum <small>Detachable and attachable section/Made of steel</small>
Weight(g)Robot side/Gripper side	2345/800
Size(mm)Locking does not include Signal Moudle	Ø140*68
Pneumatic Transmission (unit)	G 1/4*6(Non-self-sealing)
Electrical Transmission	Optional features

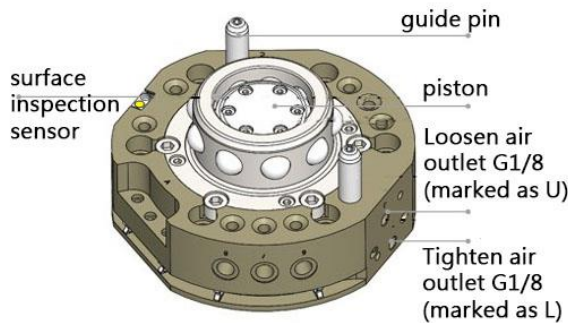
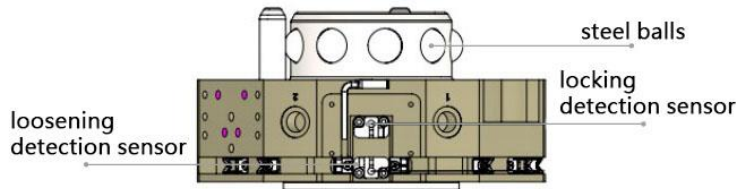


■ Dimensional Drawing



QT-350 complies with ISO125/160 standard adaptations.

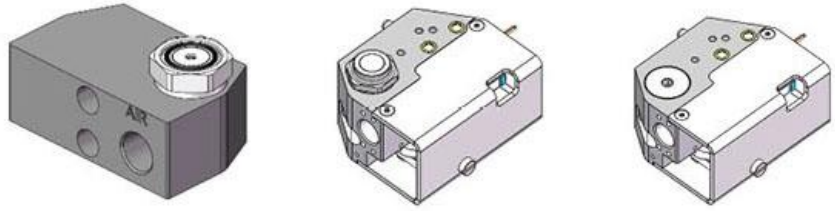
Note: When installing the tool, the inner diameter of the positioning ring should be a minimum of 90mm and a maximum height of 6mm.





■ AQT-350 accessory

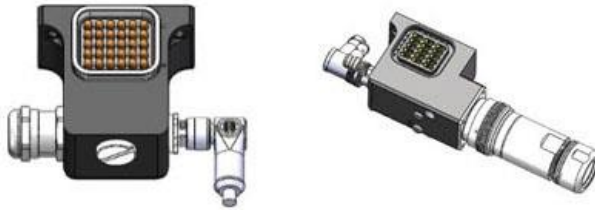
control module



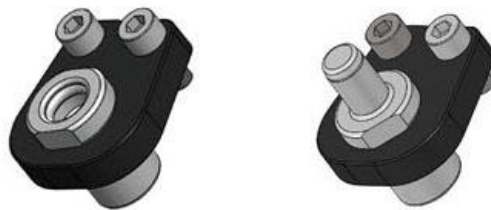
C38 electronic module



T30 electronic module



650 shielded ground module





G01
high-frequency
module



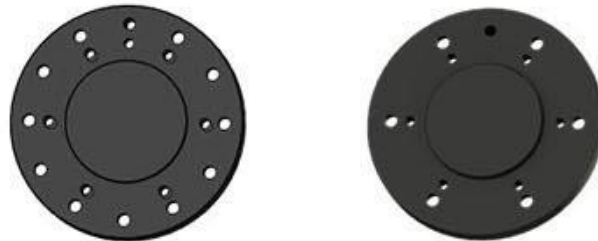
S32 fluid module



Q24-B air module



robot-side
rotating adapter
flange

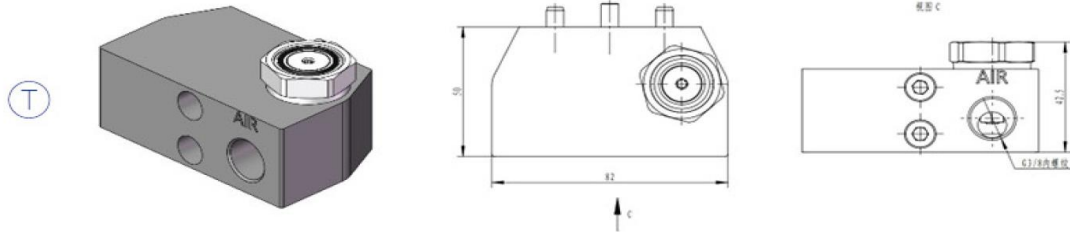




control module

Technical Features:

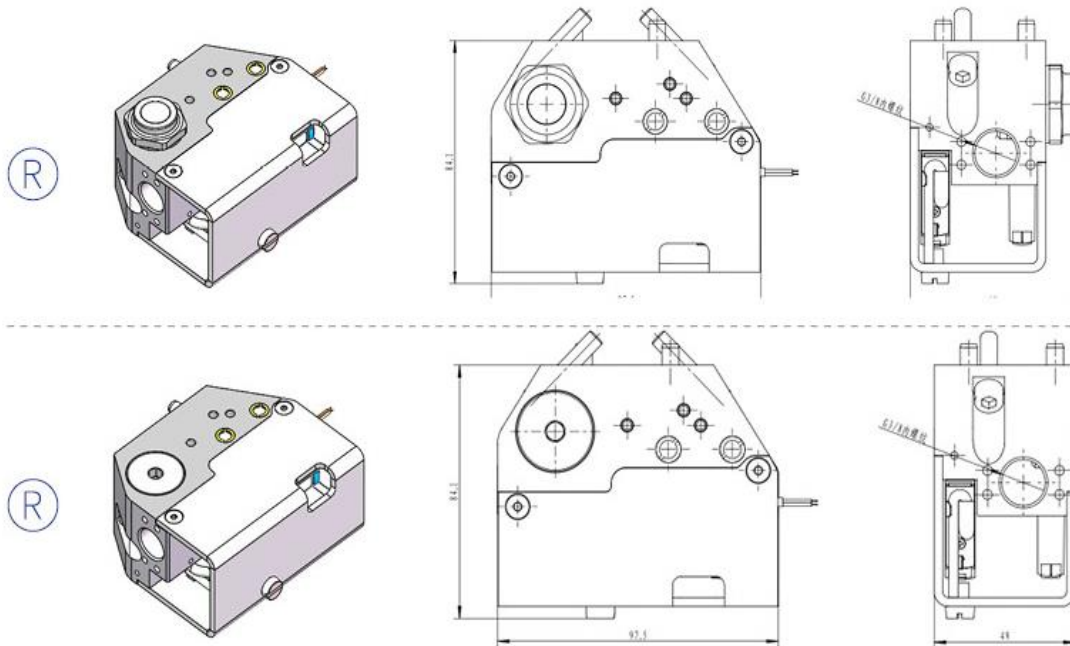
- The valve body can be equipped with a tool air supply option, requiring only one air source for tool change and tool air supply.
- The valve body connector features a one-way pressure retention function, ensuring no leakage after separation.



	Model	Name	interface	remark
T	A05000002	F25-6control module T-side	G3/8 internal thread	tool air supply (optional)

Technical Features:

- Optional interlock safety switch for mounting.
- Integrated pressure switch for detecting air supply pressure.
- The valve body can be equipped with a tool air supply option, requiring only one air source for tool change and tool air supply.



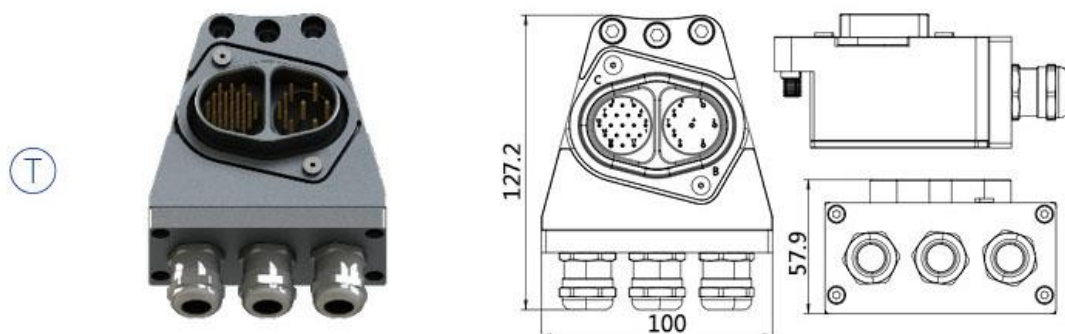
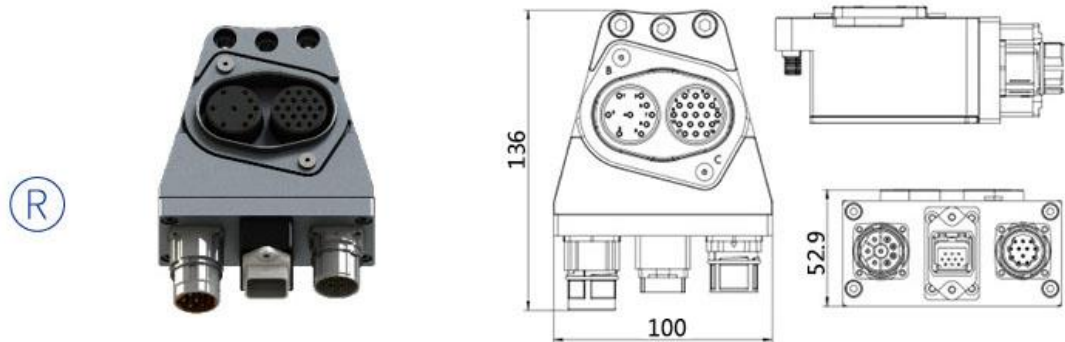


	Model	Name	interface	remark
R	A05000003	F25-7 control module (with tool air supply) R-side	G3/8 internal thread	tool air supply (optional)
R	A05000007	F25-7 control module (no tool air supply) R-side	G3/8 internal thread	

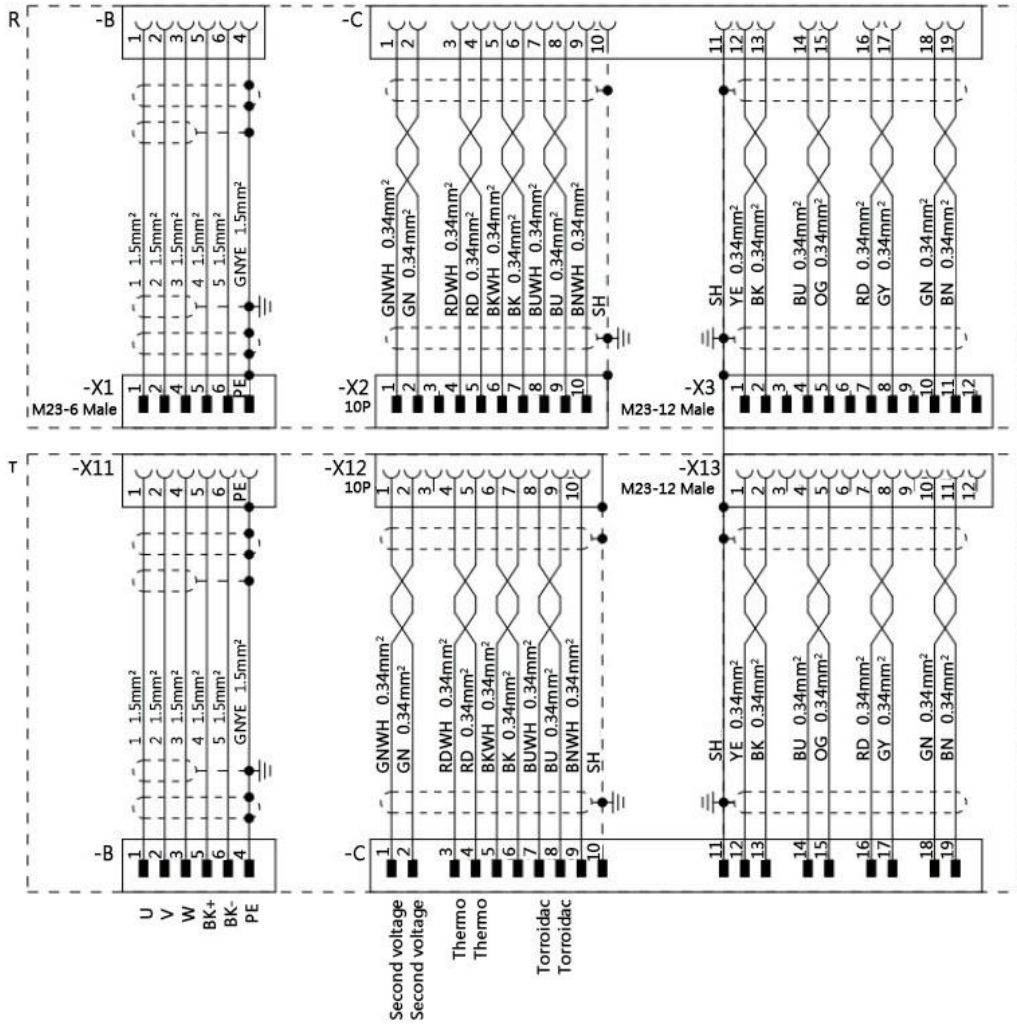
C38 electronic module

Technical Features:

- Specialized modules for servo and signal transmission.
- Strong signal transmission stability.
- Excellent resistance to interference.
- Flexible docking technology.
- Protection rating: IP65 (when connected).



	Model	pin	Voltage/Current (Maximum)	interfac
R	Q070600001	19+19	6芯16A/380V+ 22芯3A/24V+PE	M23-6 Male, M23-12 Male, IE-BSS-V14M-HYB-10P-FJ
T	Q070600002	19+19	G3/8 internal thread	M23-6 Female, M23-12 Female, IE-PS-V14M-HYB-10P

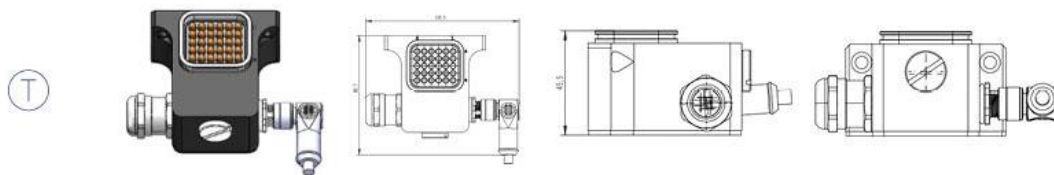
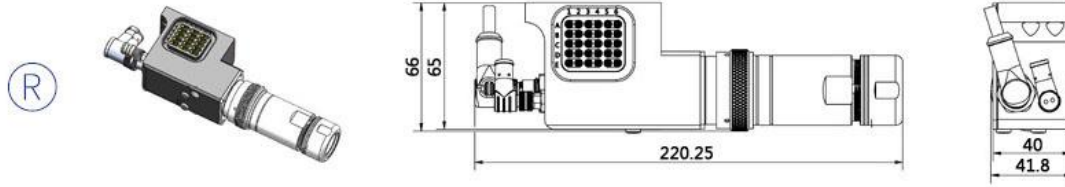




T30 electronic module

Technical Features:

- Equipped with an internal control module.
- Can transmit up to 30 channels of I/O signals



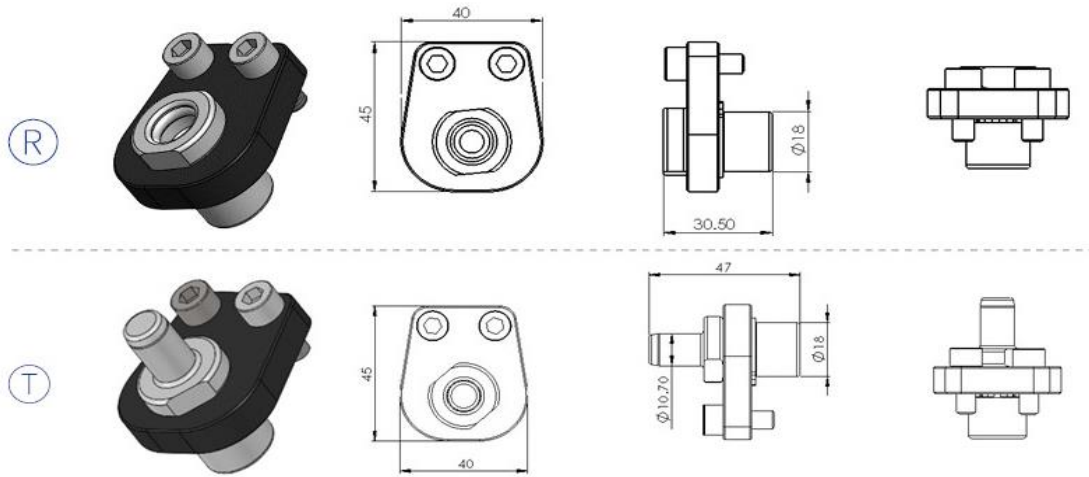
	Model	pin	Voltage/Current (Maximum)	interfac
R	007020018	30	3A/24V	38-pin connector, standard with the reverse side
T	007020022	30	3A/24V	bare wire 1 meter
R	007020014	16	3A/24V	38-pin connector, standard with the reverse side
T	007020006	16	3A/24V	bare wire 1 meter



shielded ground module

Technical Features:

- Small size, easy installation, simple structure.
- Low failure rate, low replacement cost.
- Silver-plated surface for enhanced conductivity.



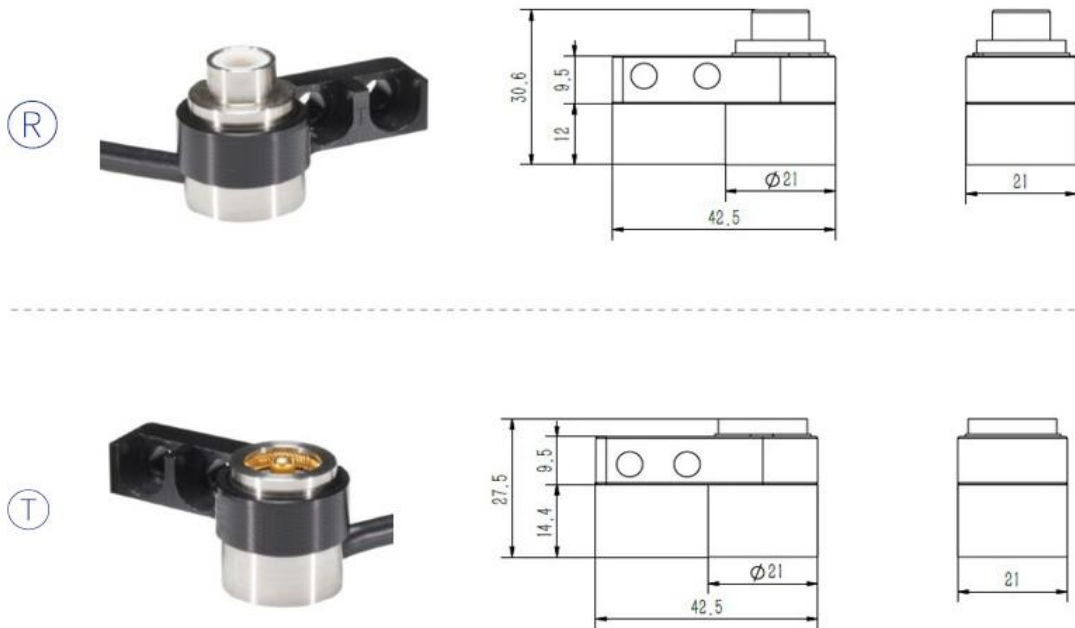
	Model	Name	pin	Voltage/ Current	interfac	cable cross- section
1	QT07080001	650 shielded ground module	1	75A/55VAC	M8-16mm ²	16mm ²
2	QT07080002	650 shielded ground module	1	75A/55VAC	M8-16mm ²	16mm ²



G01 high-frequency module

Technical Features:

- High-strength shielding grade, interference resistance.
- High-frequency pin life of up to 300,000 cycles, replaceable individually.
- The body comes with floating and sleeve design, allowing for 360-degree rotation.



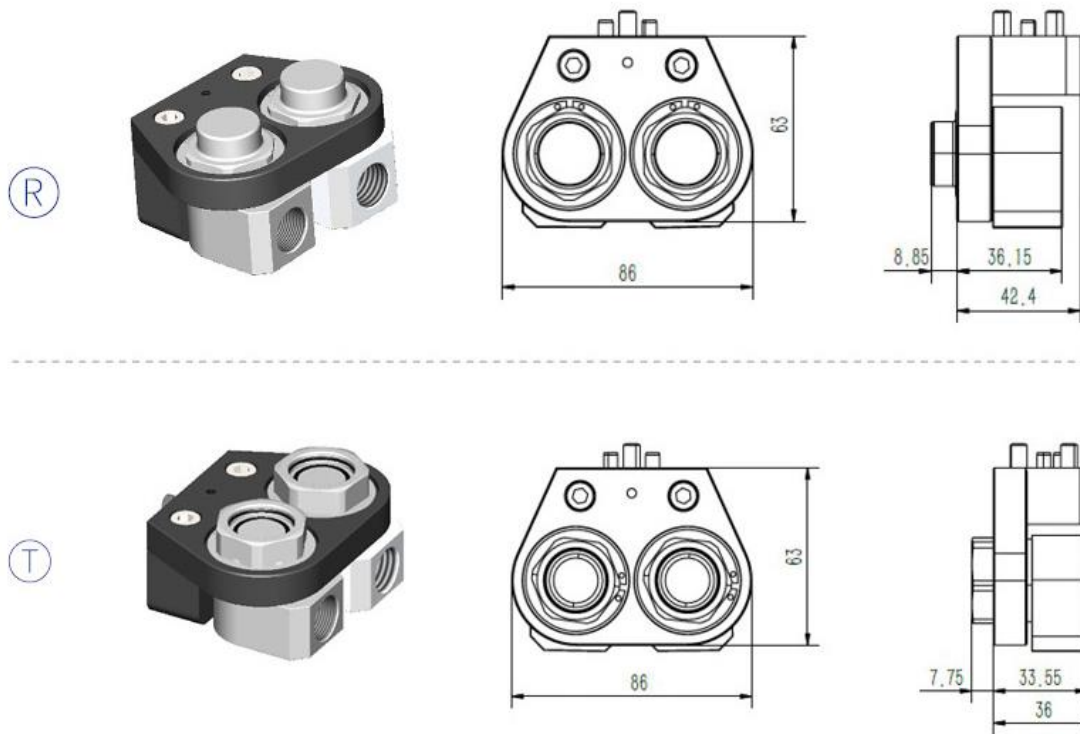
	Model	Name	interface	remark
R	M180549	G01 high-frequency module R-side	bare wire 1 meter	robot side
T	M180550	G01 high-frequency module T-side	bare wire 1 meter	tool side
R	T03990021	R-side connecting board	/	mandatory
T	T03990022	T-side connecting board	/	mandatory



S32 fluid module

Technical Features:

- Two built-in fluid channels.
- Self-sealing upon disconnection, suitable for safe, media-free transmission.
- Automatic self-alignment during docking (with floating).
- Modular design for convenient and quick maintenance.
- Easier external connections (rotatable interface).
- Lower machining accuracy requirements for the base, high fault tolerance.

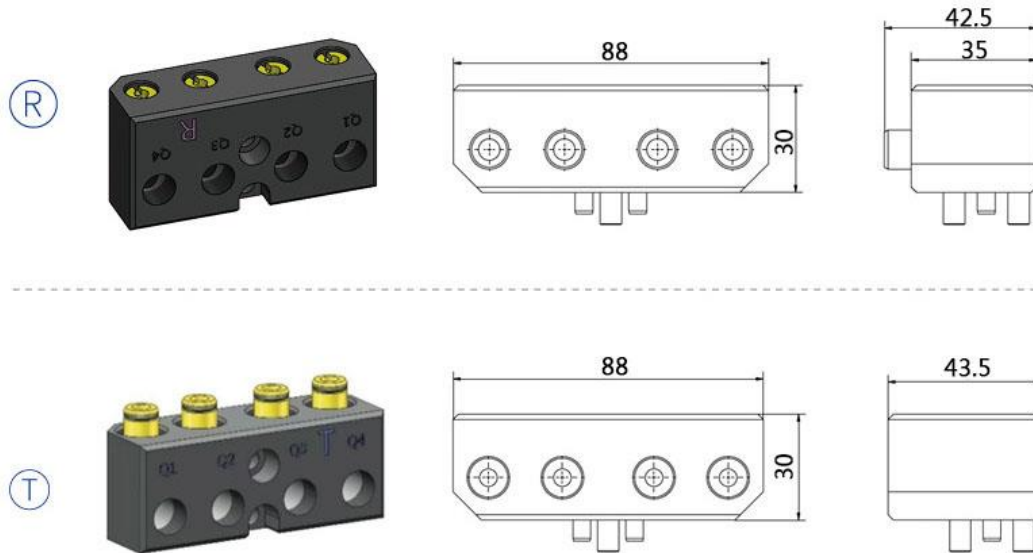


	Model	Name	interface	remark
R	M6589	S32 fluid module Type B R-side	2XG1/8	robot side
T	M6590	S32 fluid module Type B T-side	2XG1/8	tool side

air module

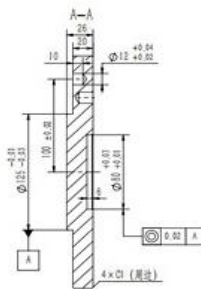
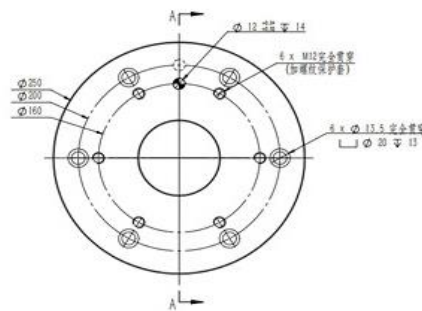
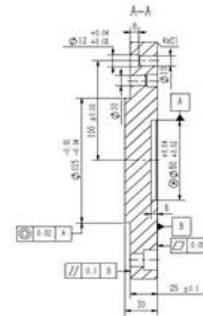
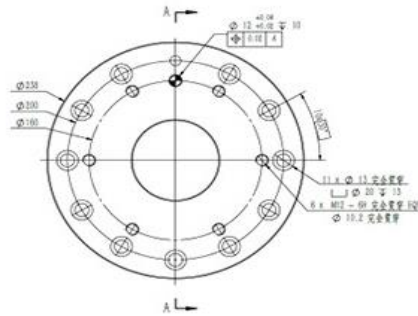
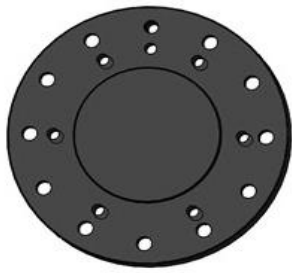
Technical Features:

- All pneumatic channels support self-sealing function.
- High flow rate: G1/4 pneumatic channels, maximum diameter of 5mm.
- Maximum usage life cycles of up to 100,000 times.



	Model	Name	interface	remark
R	M6367	Q24-B air moduleR-side	4XG1/4	robot side
T	M6368	Q24-B air moduleT-side	4XG1/4	tool side

robot-side rotating adapter flange



	Model	fitting	zero offset
R	Q11030006	ISO 9409-1-200-11-M12	0°
T	Q11030007	GB/T 14468.1-250-6-M12	0°



AQT-650

■ **AQTR-650/ AQTT-650**



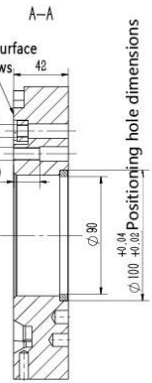
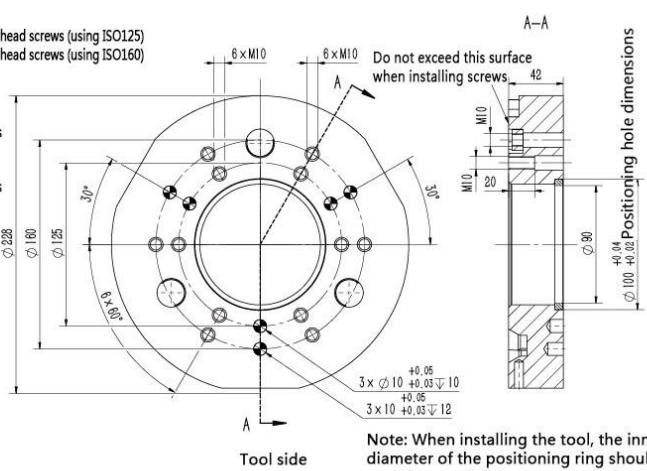
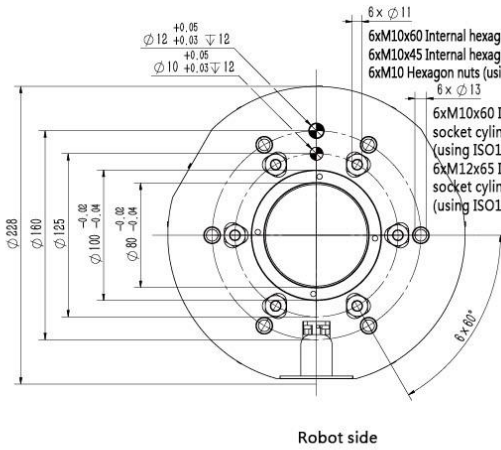
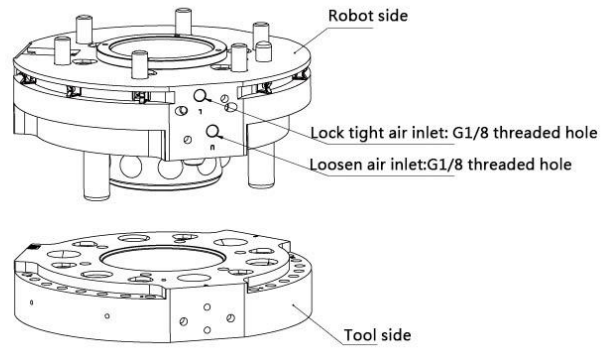
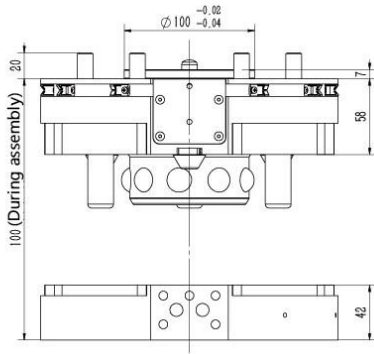
- Modular design, circular layout and simple selection.
- Mechanical anti falling structure, safety when accidental pneumatic and power failure.
- Highest level; Level d, Category 3.
- Inserted pin; million times life, easy to replace each pin.
- Good expansibility; Support Screw/Handling/welding 、 FDS 、 SPR 、 Vision, etc.

■ **Specification**

Model	AQT-650
Payload(kg)	650
Repeat accuracy(mm)	±0.02
Static Moment Capacity(N.m) Bending moment(Tx.Ty)/Torque moment(Tz)	5000/5000
Locking force(N)	38.8kN (when air pressure is 0.5MPa)
Lock/Unlock Pressure(Mpa)	0.45~0.8
Permitted temperature and humidity	0-55°C/0-95%
Material	Aluminum
Weight(g)Robot side/Gripper side	7750/4450
Size(mm) Locking does not include Signal Mouldle	Ø228*H100
Pneumatic Transmission (unit)	Optional features
Electrical Transmission	Optional features

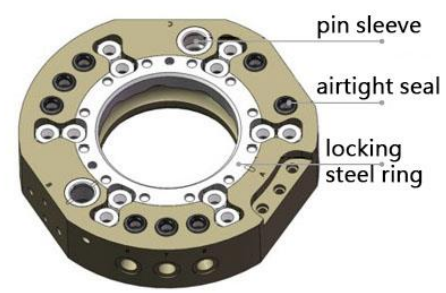
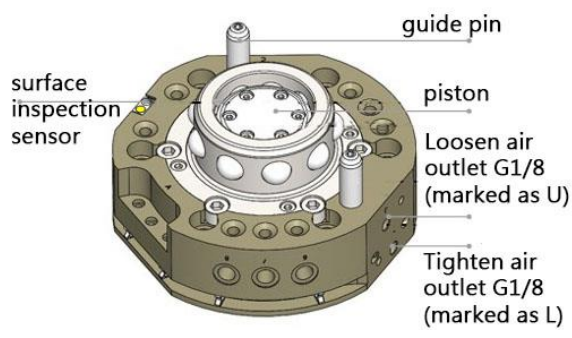
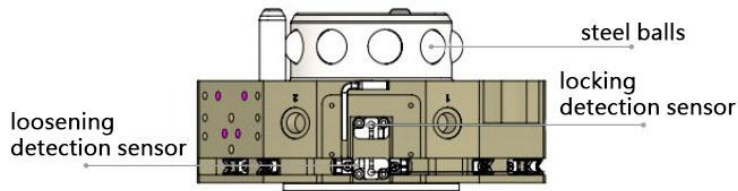


■ Dimensional Drawing



QT-650 complies with ISO125/160 standard adaptations.

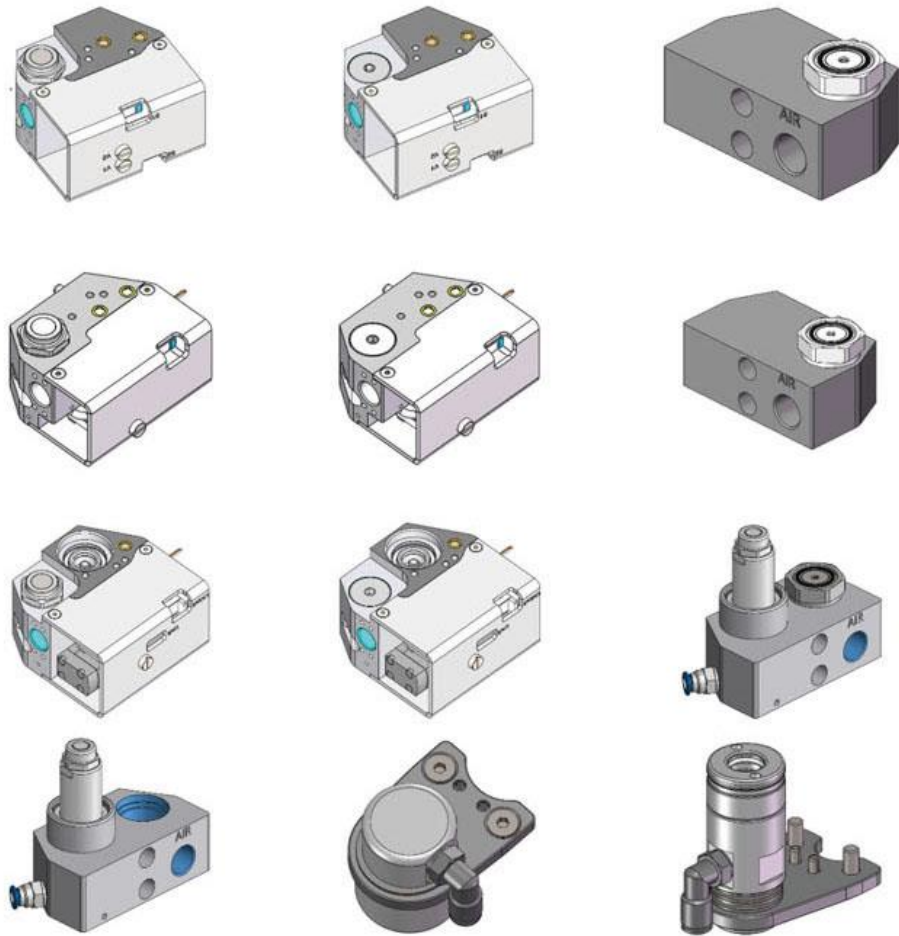
Note: When installing the tool, the inner diameter of the positioning ring should be a minimum of Ø90mm and a maximum height of 6mm.





■ AQT-650 accessory

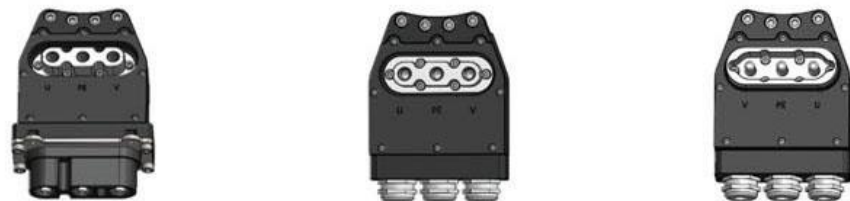
control module



C38 electronic module

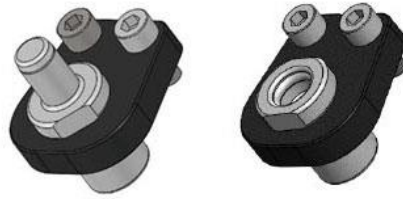


H3M-51
high-voltage module





shielded ground module



safety switch



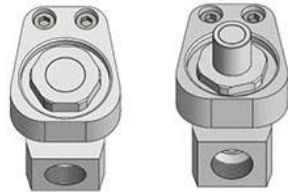
fluid module



robot-side front-end filter



hydraulic module



air module



robot-side rotating adapter flange



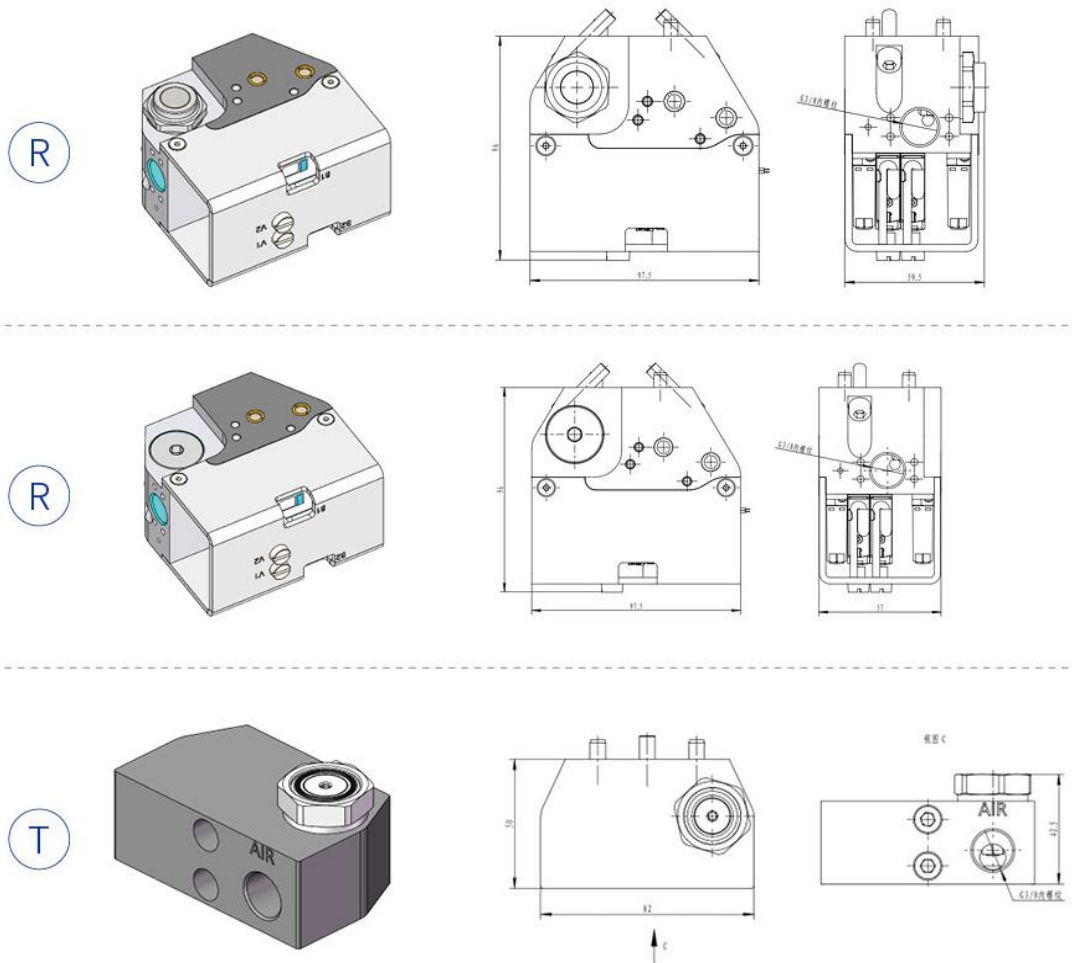
nail feeding module





control module

- Technical Features:
- Dual-valve design, no impact on locking reliability if either electromagnetic valve fails.
- Integrated two pressure switches for locking pressure and valve core status detection.
- The valve body can be equipped with a tool air supply option, requiring only one air source for quick tool change and tool air supply.



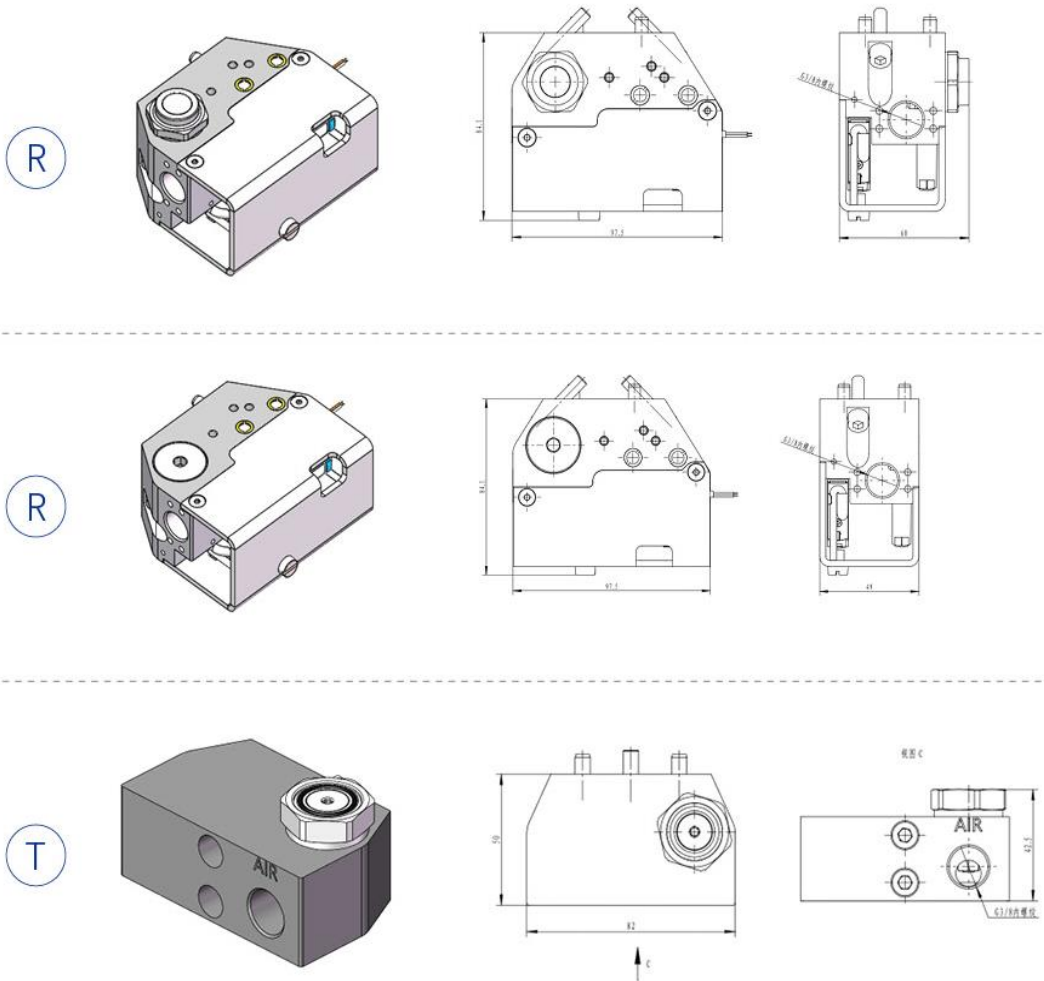
	Model	Name	interface	remark
R	Q05010007	F25-6 control module (with tool air supply)R-side	G3/8 internal thread	used in conjunction with EUCHNER, tool air supply (optional)
R	Q05010008	F25-6 control module (no tool air supply)R-side	G3/8 internal thread	used in conjunction with EUCHNER
T	A05000002	F25-6 control module T-side	G3/8 internal thread	tool air supply(optional)



control module

Technical Features:

- Optional interlock safety switch for mounting.
- Integrated pressure switch for detecting air supply pressure.
- The valve body can be equipped with a tool air supply option, requiring only one air source for quick tool change and tool air supply.



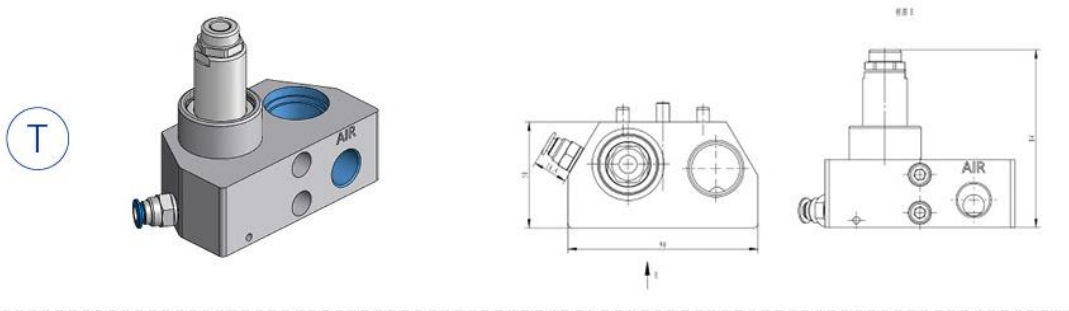
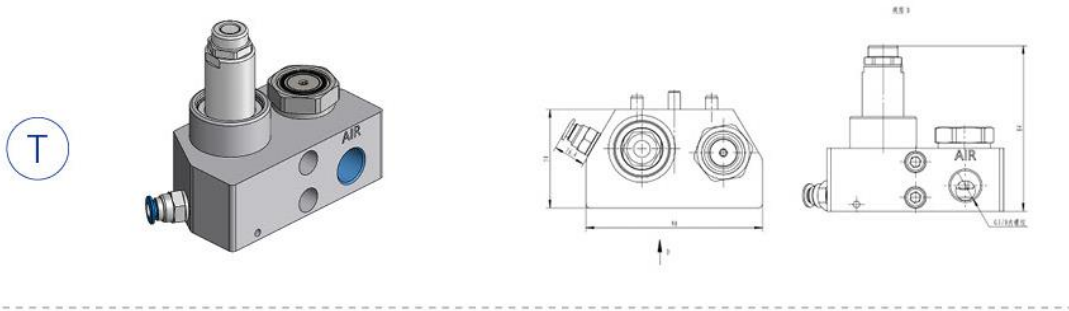
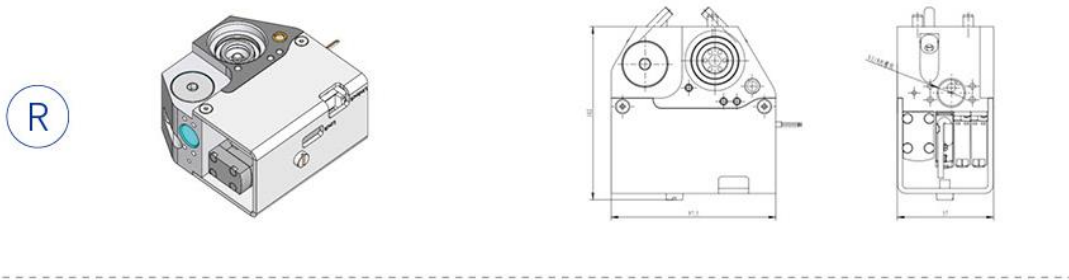
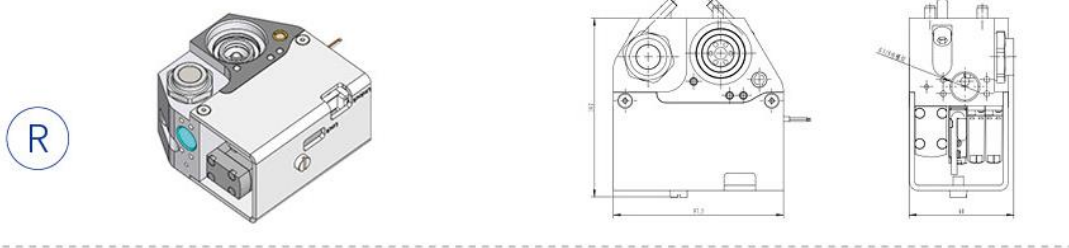
	Model	Name	interface	remark
R	Q05010003	F25-7 control module (with tool air supply)R-side	G3/8 internal thread	tool air supply (optional)
R	Q05010004	F25-7 control module (no tool air supply)R-side	G3/8 internal thread	
T	A05000002	F25-7 control module T-side	G3/8 internal thread	tool air supply (optional)



control module

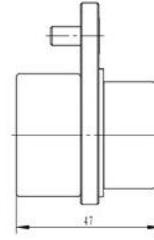
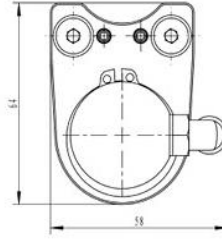
Technical Features:

- Inlet air can only be supplied from the docking station.
- Independent safety system with safety functions separate from circuit control.
- Integrated 2 pressure switches for detecting air pressure for both the robot and the docking station.
- The valve body can be equipped with a tool air supply function, requiring only one air source for quick tool change and tool air supply.

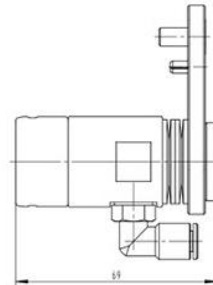
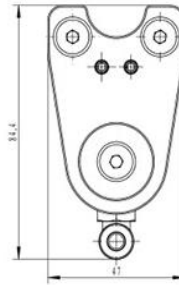
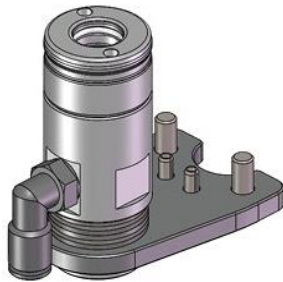




T



S

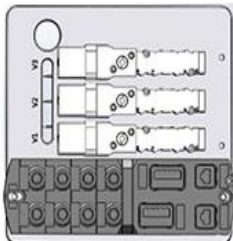


	Model	Name	interface	remark
R	Q05010013	F25-8 control module (with tool air supply)R-side	M22X1.5 adapter	tool air supply (optional)
R	Q05010014	F25-8 control module (no tool air supply)R-side	M22X1.5 adapter	
T	A05000008	F25-8 control module (with tool air supply)T-side	G3/8 internal thread	tool air supply (optional)
T	A05000009	F25-8 control module (no tool air supply)T-side		
S	Q05010015	F25-8 control module S-side	G3-8 internal thread	docking station side

safety air circuit module

Technical Features:

- Integrated high-reliability solenoid valves.
- Integrated pressure sensing sensor.

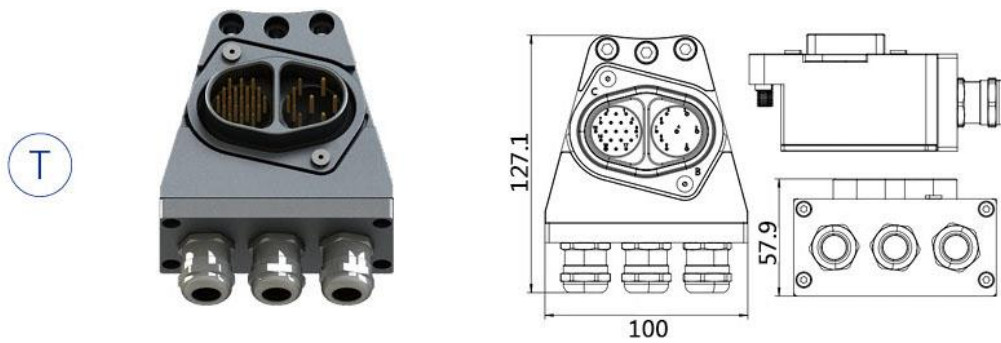
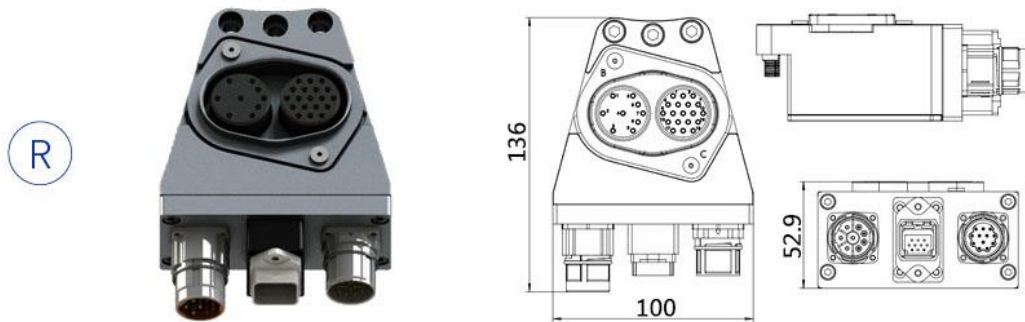




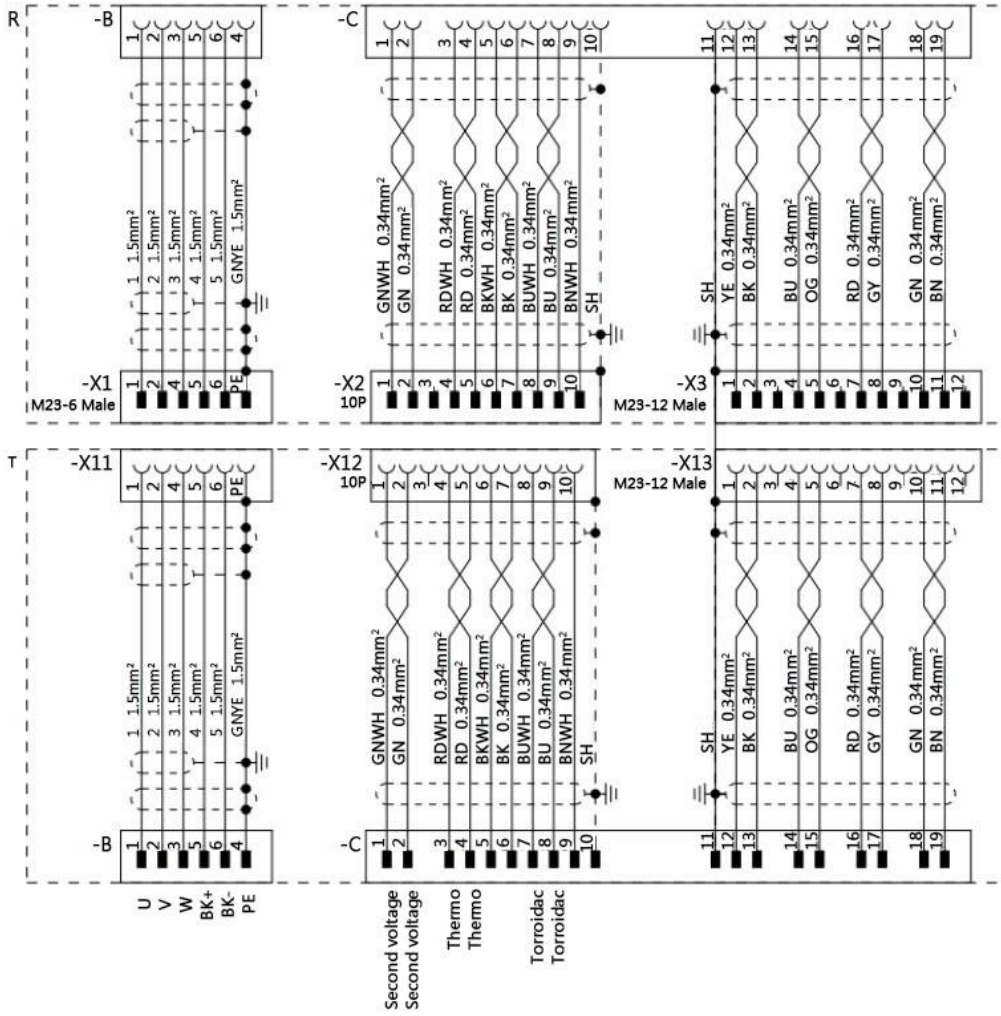
C38 electronic module

Technical Features:

- Specialized modules for servo and signal transmission.
- Strong signal transmission stability.
- Excellent resistance to interference.
- Flexible docking technology.
- Protection rating: IP65 (when connected).



	Model	pin	Voltage/Current (Maximum)	interfac
R	Q07060001	19+19	6 pin 16A/380V+22 pin 3A/24V+PE	M23-6 Male M23-12 Male IE-BSS-V14M-HYB-10P-FJ
T	Q07060002	19+19	6 pin 16A/380V+22 pin 3A/24V+PE	M23-6 Female M23-12 Female IE-PS-V14M-HYB-10P

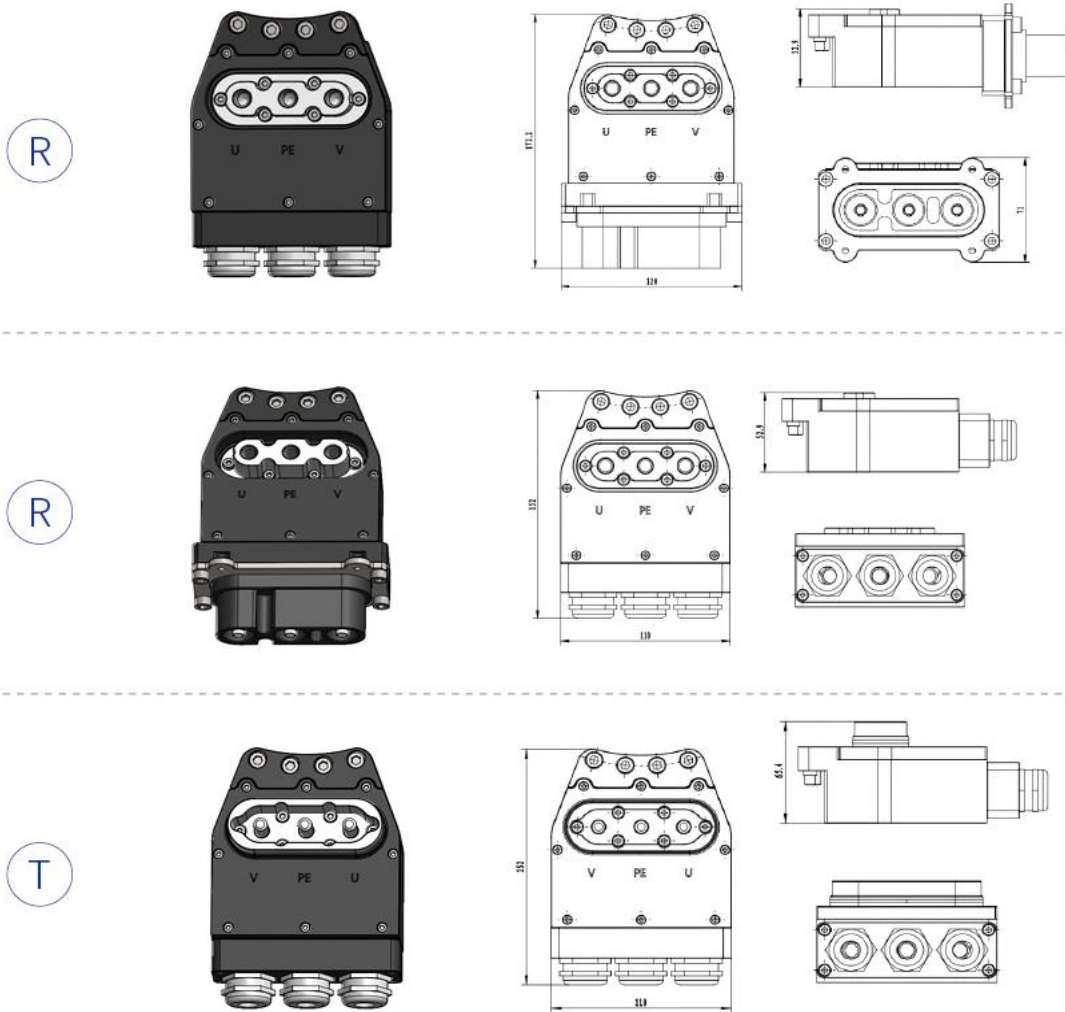




H3M-51 high-voltage module

Technical Features:

- Suitable for high-frequency transmission up to 10kHz in high-frequency cables.
- Quick and easy pin replacement without the need for rewiring.
- Protection rating: IP65 (when connected).



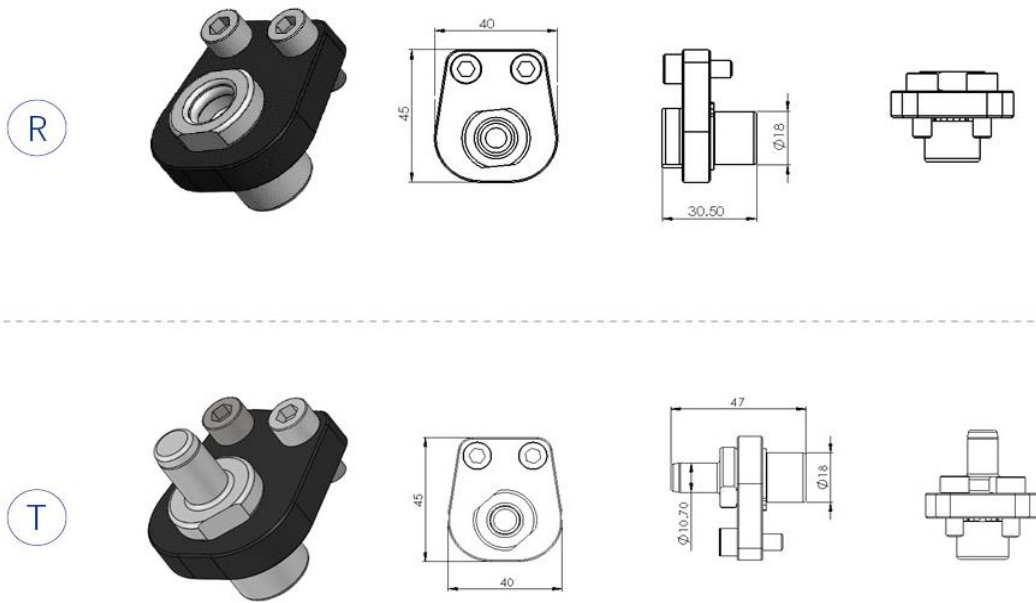
	Model	Name	pin	Voltage/ Current	interfac	cable cross- section	
1	Q07070001	H3M-51 electronic module R-side	2+PE	150A/380V	robofix		R
2	Q07070002	H3M-51 electronic module R-side	2+PE	150A/380V	3-M25X 1.5	35mm ²	R
3	Q07070003	H3M-51 electronic module T-side	2+PE	150A/380V	3-M25X 1.5	35mm ²	T



shielded ground module

Technical Features:

- Small size, easy installation, simple structure.
- Low failure rate, low replacement cost.
- Silver-plated surface for enhanced conductivity.

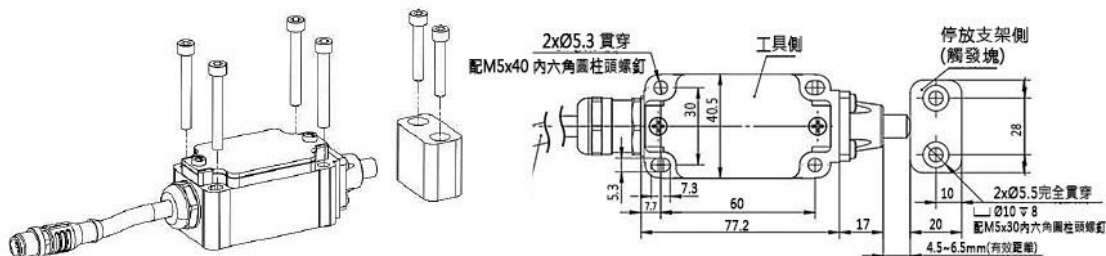


	Model	Name	pin	Voltage/ Current	interfac	cable cross- section
1	QT07080001	650 shielded ground module	1	75A/55VAC	M8-16mm ²	16mm ²
2	QT07080002	650 shielded ground module	1	75A/55VAC	M8-16mm ²	16mm ²

safety switch module

Technical Features:

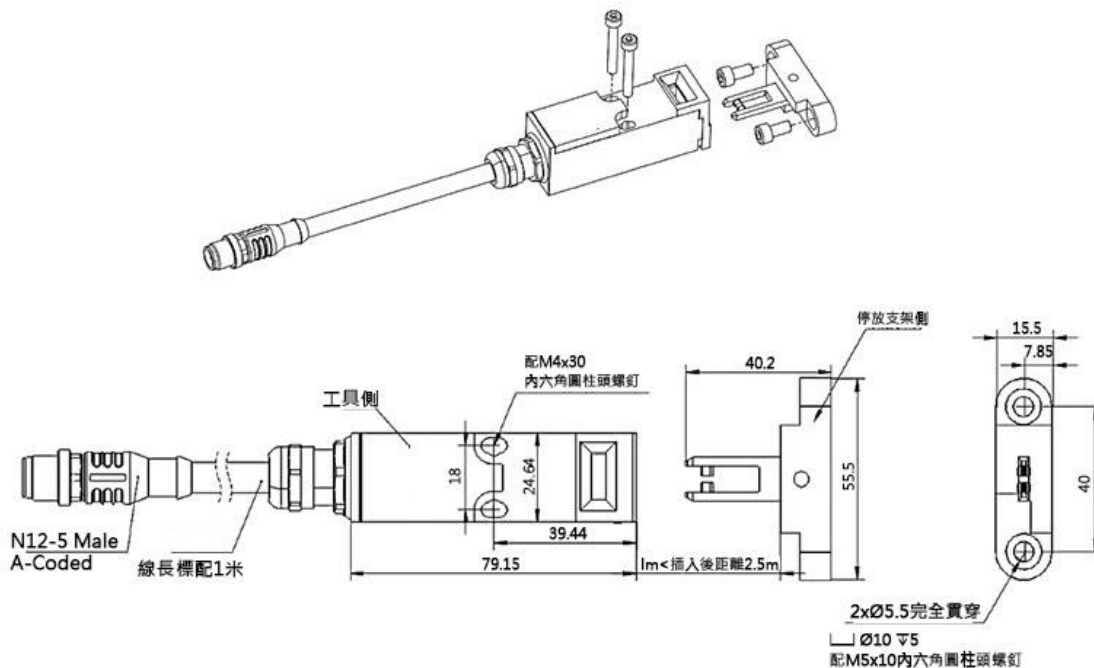
- Plunger touch-type mechanical safety switch.
- Contacts: 1 normally closed (NC) + 1 normally open (NO).
- Achieves secure interlocking between the tool and the docking station.



	Model	Name	interfac	remark
T	M6375	MS01 safety module	/	plunger-type

Technical Features:

- Plug-type mechanical safety switch.
- Contacts: 1 normally closed (NC) + 1 normally open (NO).
- Achieves secure interlocking between the tool and the docking station.



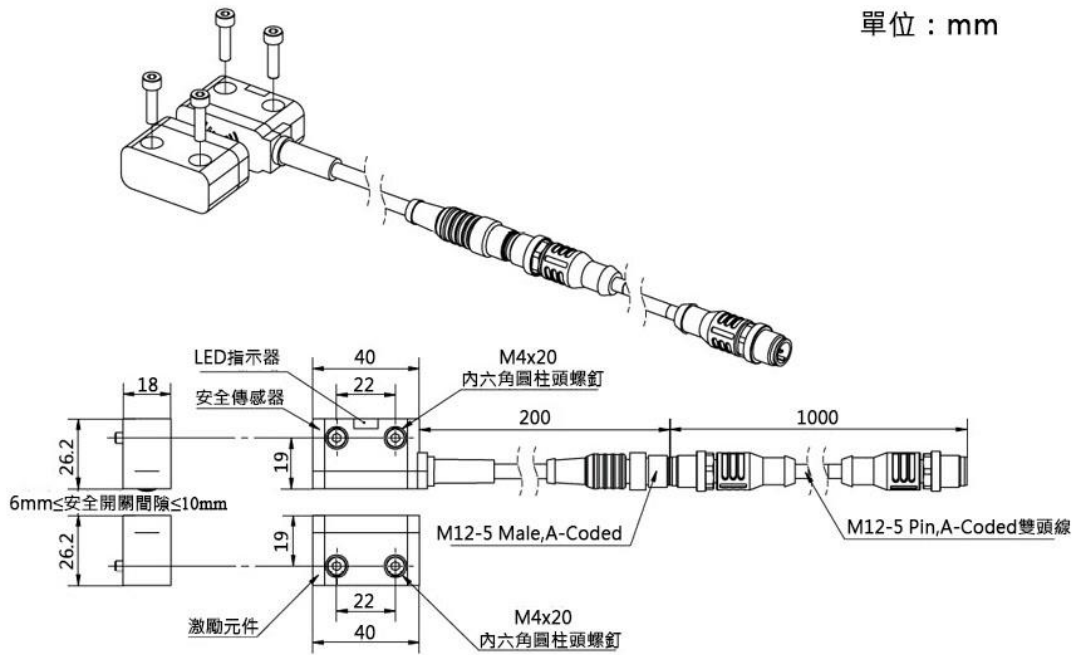
	Model	Name	interfac	remark
T	M6608	MS02 safety module	/	plug-type



safety switch module

Technical Features:

- Non-contact electronic safety switch.
- 2 channels of safety output.
- Achieves secure interlocking between the tool and the docking station.



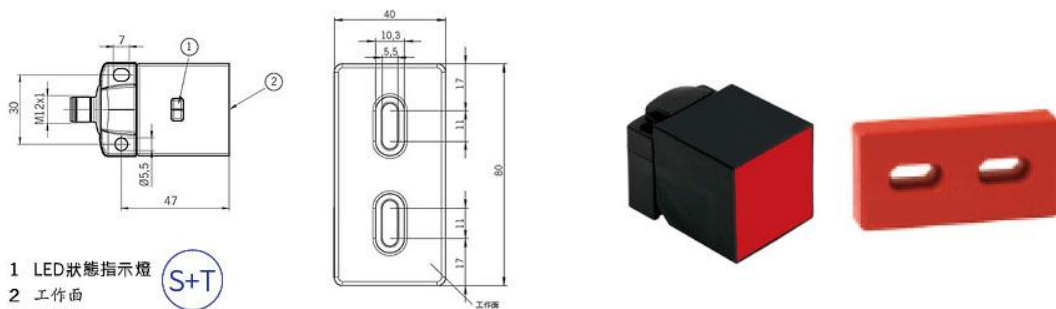
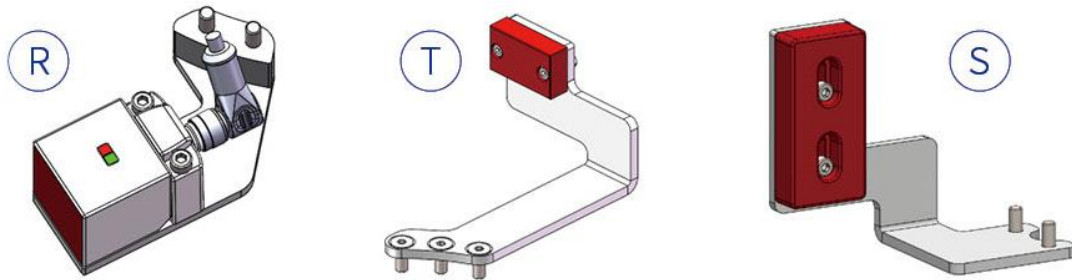
	Model	Name	applicable screw specifications	interfac	remark
T	Q11020002	EW3 safety switch module	M4X20	/	radio frequency (RF) type



safety switch module

Technical Features:

- Non-contact electronic safety switch.
- 2 channels of safety output.
- Achieves secure interlocking between the tool and the docking station.



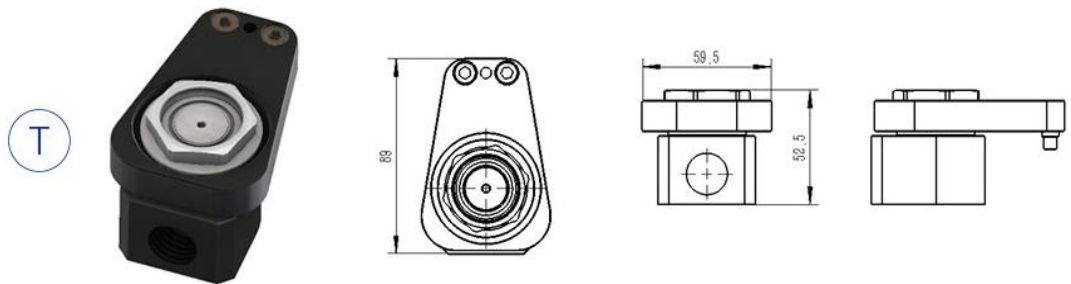
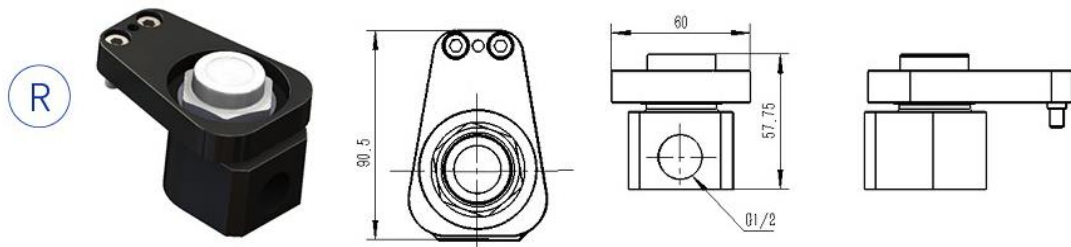
	Model	Name	interfac	remark
R	A11000001	EUCHNEREUCHNER safety switch assembly R-side	/	robot side
T	A11000002	EUCHNER safety switch assembly T-side		tool side (to be selected based on actual working conditions)
S	A11000003	EUCHNER EUCHNER safety switch trigger block S-side		docking station side (when selecting the standard docking station)
T+S	A11000004	UCHNER safety switch assembly T+S-side		tool+docking station side (to be selected based on actual working conditions)



fluid module

Technical Features:

- Self-sealing upon disconnection.
- Automatic self-alignment during docking (with floating).
- Modular design for convenient and quick maintenance.
- Easier external connections (rotatable interface).
- Lower machining accuracy requirements for the base, high fault tolerance.



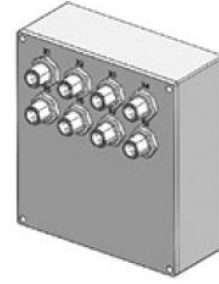
	Model	nominal diameter	pressure (maximum)	flow rate	interfac	water quality tolerance rate	pipe bend angle	docking flexibility
1	Q06010001	12mm	1.0Mpa	5m/s ≥25 L/min	G1/2 internal thread	<120μm	±750°	Z-direction: 2mm X&Y-direction: 0.3mm Deflection angle: 1.5°
2	Q06010002	12mm	1.0Mpa	5m/s ≥25 L/min	G1/2 internal thread	<120μm	±750°	Z-direction: 2mm X&Y-direction: 0.3mm Deflection angle: 1.5°



safety box

Technical Features:

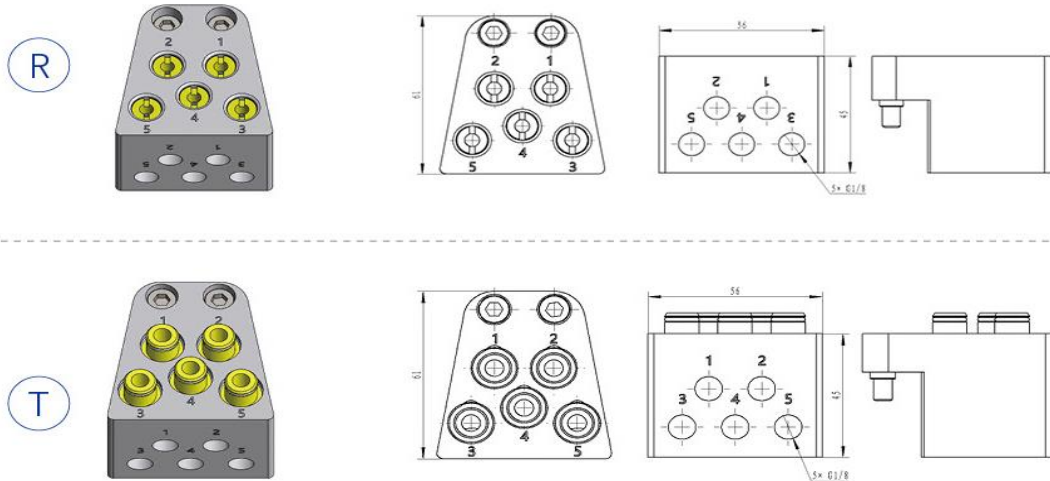
- Requires use in conjunction with Allen-Bradley switches and safety valve group modules.
- Protection rating: IP65.
- Achieves safety level up to PL3.



Q15 air module

Technical Features:

- After disconnection, one-way self-sealing on the R side.
- Modular design for easy and quick maintenance.
- Each individual module provides 5 air channels.



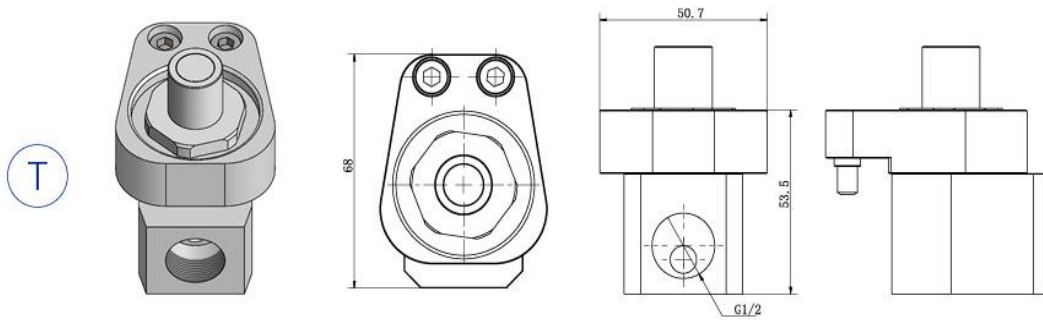
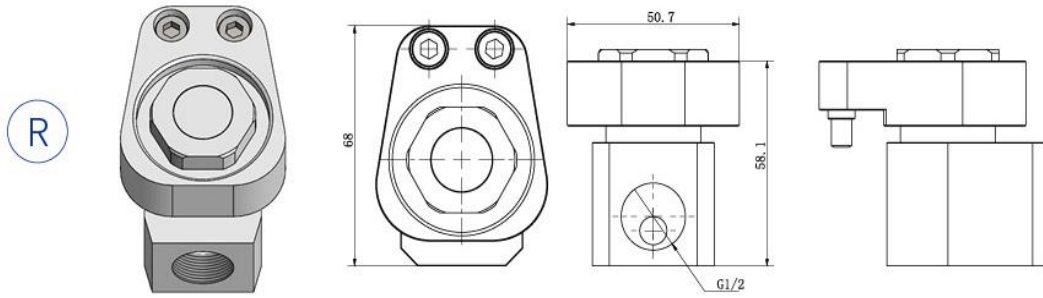
	Model	Name	nominal diameter	pressure (maximum)	interfac
R	A06000023	Q15 air module R-side	6mm	1.0MPa	G1/8 internal thread
T	A06000024	Q15 air module T-side	6mm	1.0MPa	G1/8 internal thread



hydraulic module

Technical Features:

- Self-sealing upon disconnection for safe and leak-free media transfer.
- Modular design for easy and quick maintenance.
- High flow rate with low flow resistance.



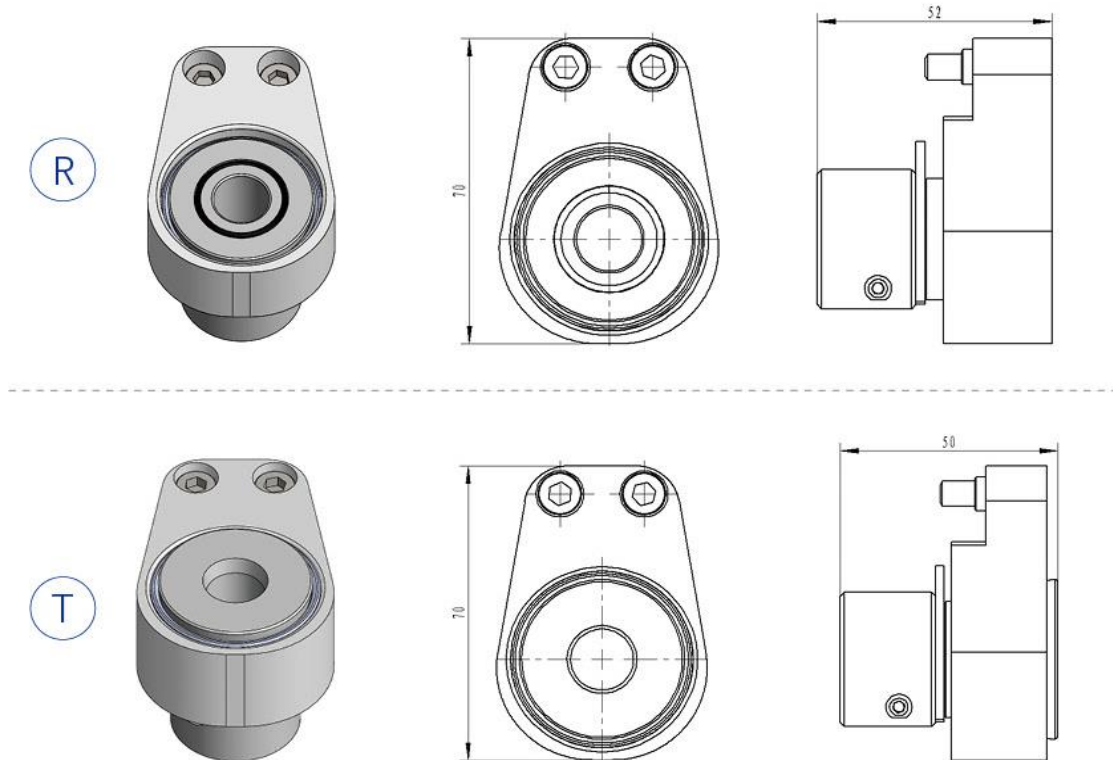
	Model	Name	nominal diameter	flow rate	pressure (maximum)	interfac
R	A06000025	08 hydraulic module R-side	8mm	5m/s>15l/min	16MPa	G1/2 internal thread
T	A06000026	08 hydraulic module T-side	8mm	5m/s>15l/min	16MPa	G1/2 internal thread



FDS nail feeding module

Technical Features:

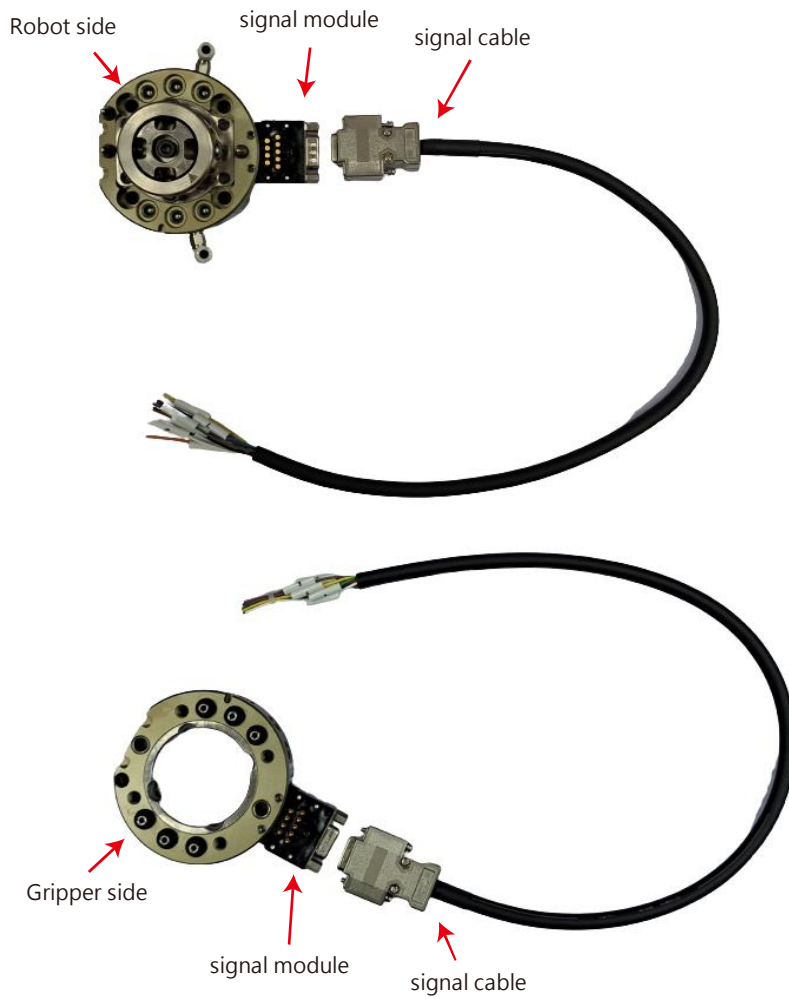
- Used for screw transmission in the FDS heat-melting self-tapping process.
- Modular design for easy and quick maintenance.
- Plug-and-play design, can be directly connected to the nail pipe connector.



	Model	Name	applicable screw specifications	interfac	remark
R	A06000028	FDS nail feeding module R-side	M5	compatible with FDS nail pipe connector	For compatibility with other specifications, please inquire for details
T	A06000029	FDS nail feeding module T-side	M5	compatible with FDS nail pipe connector	For compatibility with other specifications, please inquire for details





Rich selection of optional signal module and Pneumatic Module





■ signal module : 2A9 Pin

	Model	Product name	Current	Voltage	Pins	Weight(g)
	ESR-2-09	signal module Robot side	2A	DC24V	9 Pin	25
	EST-2-09	signal module Gripper side	2A	DC24V	9 Pin	25
	Model	Product name	Cable Length(m)	Pins	Weight(g)	
	CBR-2-09-0.5M	signal cable Robot side	0.5	9 Pin	60	
	CBT-2-09-0.5M	signal cable Gripper side	0.5	9 Pin	60	
	CBR-2-09-1.5M	signal cable Robot side	1.5	9 Pin	138	
	CBT-2-09-1.5M	signal cable Gripper side	1.5	9 Pin	140	

■ signal module : 2A12 Pin





	Model	Product name	Current	Voltage	Pins	Weight(g)
	ESR-2-12-DP-1M	signal module Robot side (1M cable)	2A	DC24V	12 Pin	145
	ESR-2-12-DP-2M	signal module Robot side (2M cable)	2A	DC24V	12 Pin	175
	EST-2-12-DP-1M	signal module Gripper side (1M cable)	2A	DC24V	12 Pin	145
	EST-2-12-DP-2M	signal module Gripper side (2M cable)	2A	DC24V	12 Pin	175

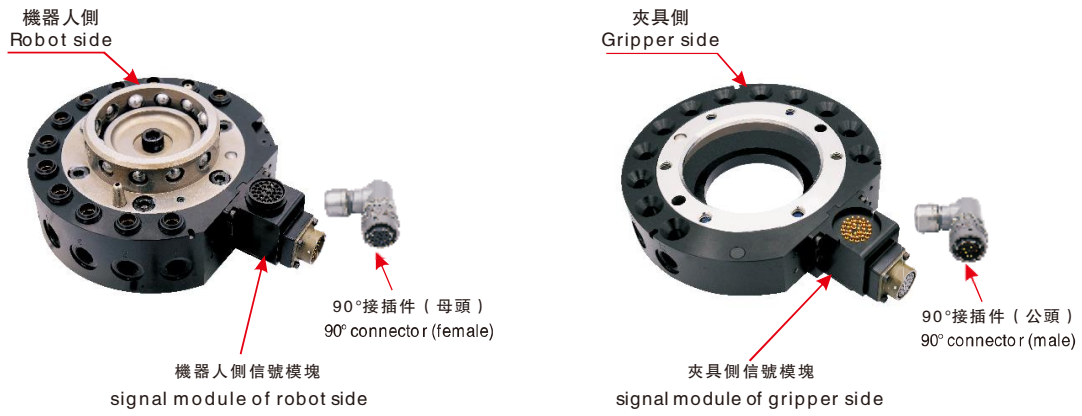
■ signal module : 2A16 Pin

	Model	Product name	Current	Voltage	Pins	Weight(g)
	ESR-2-16-DP-1M	signal module Robot side (1M cable)	2A	DC24V	16 Pin	145
	ESR-2-16-DP-1.5M	signal module Robot side (1.5M cable)	2A	DC24V	16 Pin	165
	EST-2-16-DP-1M	signal module Gripper side (1M cable)	2A	DC24V	16 Pin	145
	EST-2-16-DP-1.5M	signal module Gripper side (1.5M cable)	2A	DC24V	16 Pin	165







■ signal module : 2.5A15 Pin







	Model	Product name	Current	Voltage	Pins	Weight(g)
	ESR-2.5-15	signal module Robot side	2.5A	24V	15 Pin	30.5
	EST-2.5-15	signal module Gripper side	2.5A	24V	15 Pin	29.8
	Model	Product name	Cable Length(m)		Pins	Weight(g)
	CBR-15-1M	signal cable Robot side	1		15 Pin	125.7
	CBT-15-1M	signal cable Gripper side	1		15 Pin	123.7



■ signal module : 3A19 Pin



	Model	Product name	Current	Voltage	Pins	Weight(g)
	ESR-3-19	signal module Robot side	3A	220V	19 Pin	178.3
	EST-3-19	signal module Gripper side	3A	220V	19 Pin	130.7
	Model	Product name	Pins		Weight(g)	
	MS-19S	straight connector Robot side	19 Pin		36.8	
	MS-19P	straight connector Gripper side	19 Pin		36.8	
	MB-19S	90°connector Robot side	19 Pin		81.1	
	MB-19P	90°connector Gripper side	19 Pin		79.2	

■ signal module : 3A26 Pin



	Model	Product name	Current	Voltage	Pins	Weight(g)
	ESR-3-26	signal module Robot side	3A	220V	26 Pin	198.5
	EST-3-26	signal module Gripper side	3A	220V	26 Pin	178.2
	型號	品名	電氣接點		重量(g)	
	MS-26S	straight connector Robot side	26 Pin		44.8	
	MS-26P	straight connector Gripper side	26 Pin		44.8	
	MB-26S	90°connector Robot side	26 Pin		99.5	
	MB-26P	90°connector Gripper side	26 Pin		96.4	





■ signal module : 5A4 Pin

	Model	Product name	Current	Voltage	Pins	Cable Connect	Weight(g)
	ESR-5-04	signal module Robot side	5A	DC 24V	4 Pin	M12-4,D/ Female	140
	EST-5-04	signal module Gripper side	5A	DC 24V	4 Pin	M12-4,D/ Female	140



■ signal module : 10A4 Pin

	Model	Product name	Current	Voltage	Pins	Cable Length(m)	Weight(g)
	ESR-10-04	signal module Robot side (1M cable)	10A	AC220V	4 Pin	1	140
	EST-10-04	signal module Gripper side (1M cable)	10A	AC220V	4 Pin	1	140

■ signal module : 10A8 Pin



	Model	Product name	Current	Voltage	Pins	Cable Length(m)	Weight(g)
	ESR-10-08	signal module Robot side (1M cable)	10A	AC220V	8 Pin	1	140
	EST-10-08	signal module Gripper side (1M cable)	10A	AC220V	8Pin	1	140

■ signal module : 20A4 Pin





	Model	Product name	Current	Voltage	Pins	Cable Length(m)	Weight(g)
	ESR-20-04	signal module Robot side (1M cable)	20A	AC220V	4 Pin	1	140
	EST-20-04	signal module Gripper side (1M cable)	20A	AC220V	4 Pin	1	140






■ signal module : 24A8 Pin

	Model	Product name	Current	Voltage	Pins	Weight(g)
	ESR-24-8	signal module Robot side (With 1-meter cable)	24A	450V	8 Pin	468
	EST-24-8	signal module Gripper side (With 1-meter cable)	24A	450V	8 Pin	487





■ signal module : 30A8 Pin

	Model	Product name	Current	Voltage	Pins	Weight(g)
	ESR-30-8	signal module Robot side	30A	380V	8 Pin	434.7
	EST-30-8	signal module Gripper side	30A	380V	8 Pin	330
	Model	Product name	Pins		Weight(g)	
	MB-08S	90°connector Robot side	8 Pin		81.1	
	MB-08P	90°connector Gripper side	8 Pin		79.2	

■ Pneumatic Extension Module : 20、35、60KG

	Model	Product name	Applies	quantity of air holes	Weight(g)
	AESR-20-05	Pneumatic Extension Module Robot side	20KG	5	12
	AEST-20-05	Pneumatic Extension Module Gripper side	20KG	5	7
	AESR-35/60-04	Pneumatic Extension Module Robot side	35/60KG	4	147
	AEST-35/60-04	Pneumatic Extension Module Gripper side	35/60KG	4	80

■ Pneumatic Extension Module : 75、100、200KG

	Model	Product name	Applies	quantity of air holes	Weight(g)
	AESR-75/100/200-06	Pneumatic Extension Module Robot side	75/100/200KG	6	141.4
	AEST-75/100/200-06	Pneumatic Extension Module Gripper side	75/100/200KG	6	140.9
	AESR-75/100/200-10	Pneumatic Extension Module Robot side	75/100/200KG	10	152
	AEST-75/100/200-10	Pneumatic Extension Module Gripper side	75/100/200KG	10	150

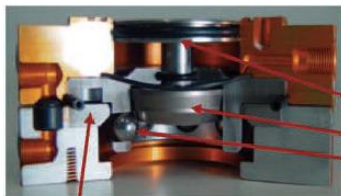


loading and unloading mechanism

It has adopted a fail-safe mechanism, so even if the air pressure supply is interrupted, the main plate and the tool plate will not separate.

Disengagement State

The air is supplied to the disengagement hole, and the piston and cam are in the compressed state, while the steel ball returns to the inside.

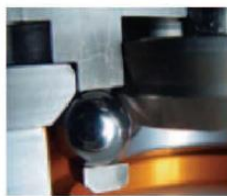


piston
cam
steel ball

steel ball seat

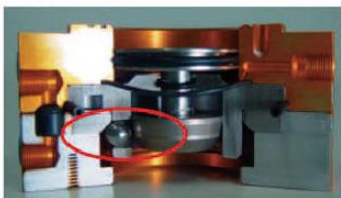
In the engaged state

Air is supplied to the clamping hole, and the piston and cam are pressed down, causing the steel ball to be pushed outward by the cam.



Linked state

The piston and cam continue to be pressed downward, and the steel ball firmly links the steel ball seat to the Robot Side using greater connecting force on the second taper of the cam.



The contact point between the steel ball and the cam.



Fault-safe state

Due to the steel ball being held between two tapered sections, it remains in the parallel portion. Even if the air supply to the clamping hole is stopped, the Gripper Side will not detach from the Robot Side.



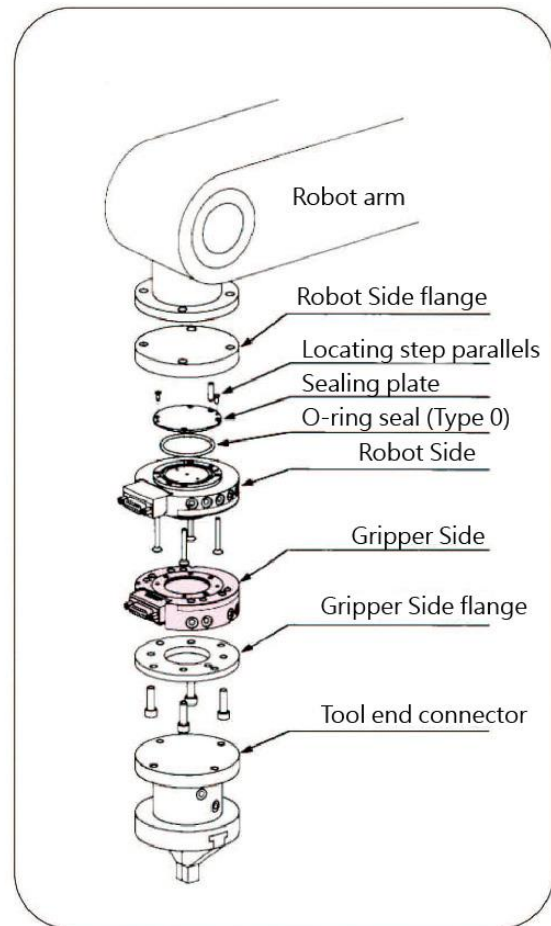
The contact point between the steel ball and the cam.





Assemble on the robotic arm

- **Assemble Robot Side** - The Robot Side is assembled using a flange. Please use sealing plates/locating step parallels and bolts to assemble the Robot Side and Gripper Side flanges. (If the locating pin is not used to assemble the Robot Side, it may not always guarantee the static allowable torque as stated in the product catalog. Therefore, it is essential to use the locating pin).
- **Assemble Gripper Side** - The Gripper Side is assembled using a flange. Please use the screw holes and locating pin holes beneath the Gripper Side to install it onto the flange.



Gripper Side for Tool Plate

- The Tool Plate Holder/Rack is custom-made according to customer requirements.

