





### **DATASHEETS**

### CATALOGUE







**BASIC EQUIPMENT** 



SENSORS



GRIPPERS



WORKSTATIONS



2

telestar
www.telestar-automation.it

**FAIRINO EUROPE · ROBOT** 



Intelligent human-robot cooperation system solutions

According to different payload and parameter, FAIRINO collaborative robots FR series are divided into nine models: FR3 Optional Mirror Version ,FR3-WMS, FR3-WML, FR5, FR10, FR16, FR20 and FR30.

To provide partners&customers with better quality assurance,FAIRINO has obtained a more comprehensive range of certificates through international certification organizations.

**Quality Management System: ISO 9001** 

Product Certification: CR, CE, KCs, NRTL, RoHS 2.0, NSF, SEMI, IP65
ISO Functional Safety Certification: ISO 10218, ISO 13849, ISO 15066

# BASIC EQUIPMENT

### **SMART TOOL**

The Fairino Smart Tool is a compact handheld controller designed for fast and intuitive teaching of FAIRINO collaborative robots. With dedicated keys for START, Auto/Manual mode, I/O, Undo, Delete, and five programmable hotkeys (A-E), it gives operators direct control without navigating complex menus. Its ergonomic, glove-friendly design allows single-handed operation, while the rugged housing and status LED ensure reliable use in industrial environments. Ideal for guiding the cobot into position or recording points, the Smart Tool simplifies everyday programming and process adjustments.

The Fairino Smart Tool makes cobot operation simple and intuitive, even for operators without programming skills. Programmable hotkeys (A–E) are set by a technician, while operators can easily guide the cobot, adjust trajectories, and start programs directly on the shop floor.

Typical uses include **welding**, **gluing**, **sealing**, **painting**, **polishing**, **and sanding** - wherever fast path adjustments are needed. For example, during welding, the operator can define the trajectory with the Smart Tool and immediately run the program without additional coding.



by combining ergonomic design, quick path teaching, and direct I/O control, the Smart Tool educes downtime and increases the efficiency of FAIRINO cobots in industrial environments.



#### **MAGNETIC BASE**

The magnetic base enables easy relocation of the cobot depending on the application, which is especially useful in research and development environments where setups frequently change. It can also be applied in demanding industrial tasks - for example, welding of ship components - or anywhere a cobot needs to be flexibly placed on a metal surface.

Compatible with FR3 (including FR3 model versions) and FR5, the solution comes with a tripod and robust metal structure, allowing quick and secure attachment of the holder to the surface.

5





#### **TEACH PENDANT**

The Fairino Teach Pendant is a rugged industrial tablet designed for intuitive operation and programming of FAIRINO collaborative robots. Featuring a durable housing with rugged glass and a capacitive multitouch screen, it combines robustness with user-friendly control. In addition to touch input, it provides dedicated side buttons for quick access to key cobot and program functions.

Beyond program creation, the Teach Pendant can be used for monitoring, real-time control, and as a flexible HMI device with customizable GUI interfaces. With its compact design, reliable RJ45 connection, and attractive price point, it offers a cost-efficient yet powerful alternative to conventional industrial PCs.

IP classification	IP54
Operating humidity	90%RH(non-condensing)
Display resolution	1280 x 800 pixels
L*W*H	268*210*88mm
Weight	1.6kg
Materials	ABS, PP
Cable length	5m

## SENSORS

### **FORCE SENSOR GZCX-6F-75A**

The GZCX-6F-75A is a compact six-axis force/torque sensor made of aluminum alloy. Based on strain gauge technology with multi-axis calibration, it delivers high accuracy and reliable performance. With a built-in signal acquisition module and RS485 interface, it provides direct force/torque output and ensures quick installation and seamless integration with all FAIRINO collaborative robots.

Thanks to its high accuracy and reliability, the sensor is also suitable for demanding industrial applications. It allows easy integration into existing systems and increases the efficiency of production processes.

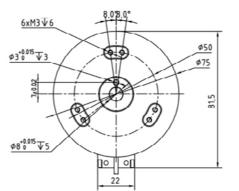


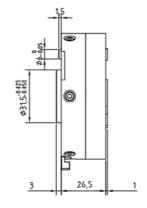
The GZCX-6F-75A force/torque sensor is designed for versatile us with FAIRINO collaborative robots wherever precise adjustment and control are required. Typical applications include drag teaching health & beauty solutions, safety monitoring, product inspection is automotive and 3C industries, as well as drilling, screwing, grinding and poliching.

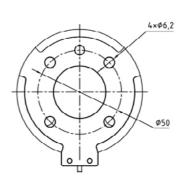
In practice, the sensor also supports advanced functions such as edge detection for welding or manual positioning of larger FAIRINO models (FR10-FR30). By compensating for the robot's own weight and rigidity, it makes drag teaching and manual adjustments faster, easier, and more intuitive for the operator.

Performance parametr		Product model
		GZCX-6F-75A
Fx, Fy	N	50
Fz	N	50
Mx, My	Nm	2.5
Mz	Nm	2.5
Diameter	mm	75
Height	mm	30.5
Resolution	%FS	0.1
Repeatability	%FS	0.2
Comprehensive accuracy*	%FS	≤1
Zero temperature drift	%FS/10°C	0.3
Overload level	%	200
Level of protection		IP64
Operating temperature	°C	-20~80
Sampling frequency	Hz	1000
Cable length	m	0.25(customizable)
Supply voltage	VDC	12~24
Communication mode		RS422/RS485/Industrial Ethernet
Weight including cable	kg	0.2
Material		Aluminium alloy

\*The comprehensive accuracy includes measurement errors caused by cro







### **INSPECTORP61X**



The SICK InspectorP61x is a compact, smart vision sensor designed for reliable inspection, positioning, and quality control in collaborative automation. With integrated lighting, autofocus, and onboard processing, it delivers high image quality in a small housing that easily mounts to FAIRINO cobots. Offering a cost-effective solution for machine vision tasks, the InspectorP61x is particularly well-suited for flexible automation setups where space and budget are limited.

#### APPLICATIONS

The InspectorP61x can be used across a wide range of vision-guided tasks with FAIRINO collaborative robots. Typical applications include:

- Bin Picking cost-effective solutions when combined with the FAIRINO Smart Electric Gripper EPG40-050.
- Object localization and positioning guiding cobots to precisely pick, place, or assemble parts.
- Quality inspection verifying presence, orientation, and surface quality of components.
- O Logistics and packaging detecting items for sorting, packing, or labeling tasks.

By enabling fast and accurate visual feedback, the camera improves cobot flexibility and ensures stable processes even in dynamic environments.











### **FEATURES**

- ♥ Compact design with integrated lighting and autofocus.
- ✓ High image quality and onboard processing for standalone operation.
- **⊘** Easy integration with FAIRINO cobots and automation systems
- ✓ Supports a wide range of machine vision and inspection tasks.
- Cost-effective alternative to complex 2D vision systems ideal for bin picking with FAIRINO EPG40-050.
- ♥ Flexible mounting options for space-constrained environments.

## GRIPPERS

### **SOFT GRIPPERS**



Soft Grippers are designed for safe and flexible handling with FAIRINO collaborative robots. Their adaptive fingers enable gentle gripping of fragile items as well as secure handling of irregularly shaped objects, making them ideal for collaborative environments in manufacturing, logistics, and sensitive industries such as food, cosmetics, and health & beauty. Lightweight yet durable, they minimize load on the cobot arm while ensuring reliable performance in daily industrial use.

Soft grippers expand the capabilities of cobots and open the door to new applications. They provide a simple, efficient, and safe solution for automated handling.



9 9110
2 6

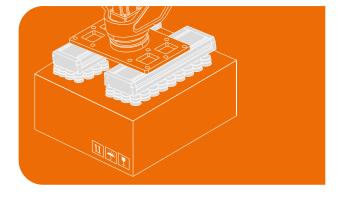
			Four-finger / Cross Four-finger	
	Two-finger	Three-finger		
		Pneumatic		
Height	158 mm	159 mm	159 mm	
Mounting dimensions	⊗ 63 mm	⊗ 63 mm	Ø 63 mm	
Weight	240 g	300 g	350 g	
Gripping range	10-120 mm	10-120 mm	10-120 mm	
Gripping Weight	0.6 kg	1 kg	1.5 kg	
Operating pressure	0.2-0.6 MPa	0.2-0.6 MPa	0.2-0.6 MPa	
Gripping Frequency	< 100 CPM	< 100 CPM	< 100 CPM	

	Two-finger	Three-finger	Four-finger / Cross Four-finger	
		Electric		
Height	165.5 mm	165.5 mm	165.5 mm	
Mounting dimensions	⊗ 63 mm	⊗ 63 mm	Ø 63 mm	
Weight	370 g	420 g	510 g	
Gripping range	10-120 mm	10-120 mm	10-120 mm	
Gripping Weight	0.6 kg	1 kg	1.5 kg	
Operating pressure	DC12-24 V	DC12-24 V	DC12-24 V	
Gripping Frequency	< 40 CPM	< 40 CPM	< 40 CPM	

#### **VACUUM GRIPPER**

The Fairino Foam Vacuum Gripper is a lightweight end-of-arm tool designed for secure handling of flat, smooth objects up to 5 kg. With an integrated vacuum generator and a 130  $\times$  190 mm foam surface, it provides strong suction on cartons, glass, plastics, or metal sheets without leaving marks. Compact and easy to install on FAIRINO cobots, it connects directly to an external air supply. As no valve is included, the air flow must be controlled externally, giving integrators flexibility in system design.





#### TYPE OF GRIPPER: WJF-SVK-200x271-4R45-D40

WJF: Built-in vacuum generator,

(WJFM - external vacuum generator)

**SVK:** With check valve (SV - throttle valve)

**200:** Gripper width = 200 mm (4 rows of suction cups)

**271:** Gripper length = 271 mm

**4R:** Number of rows = 4

45: Row spacing / angle (depending on configuration)

**D40:** Suction cup diameter = 40 mm

Easily adapts to uneven workpiece surfaces and provides a certain damping effect. Suction cups are made of food-grade silicone, Ø40 mm (available in Ø20-50 mm).



### **SMART ELECTRIC GRIPPER**

The EPG40-050 Smart Electric Gripper is designed for precise and flexible mandling with FAIRINO collaborative robots. Offering adjustable gripping force, troke, and speed, it covers a wide range of applications - from delicate maniputation of sensitive parts to secure handling of robust components. With easy integration, support for standard communication protocols, and high epeatability, the gripper ensures reliable performance. Intelligent drop detection, quiet operation, and user-friendly programming make it a safe and efficient thoice for modern automation.rt.



The following technical specifications are common to all gripper models. They offer a position repetition accuracy of  $\pm 0.02$  mm and support drop detection. Designed for operating environments with temperatures between 5-40°C and relative humidity below 85%, they maintain a running noise level under 40 dB. The grippers operate on a DC 24V  $\pm 10\%$  power supply and are fully compliant with CE and RoHS standards, ensuring safe and reliable performance across various industrial applications.

	EPG26-006	EPG26-015	EPG30-150	EPG40-050	EPG40-100	EPG50-060	EPG50-100
Adjustable stroke	0-26mm	0-26mm	0-30mm	0-40mm	0-40mm	0-50mm	0-50mm
Opening/closing time	0.25s	0.3s	0.3s	0.5s	0.9s	0.6s	1.1s
Single finger gripping force	1-6N	1-15N	50-150N	2-50N	40-100N	2-60N	40-100N
Maximum recommended load	0.1kg	0.3kg	3kg	0.8kg	2kg	1.0kg	2kg
Body weight	0.18kg	0.25kg	0.32kg	0.36kg	0.37kg	0.57kg	0.53kg
IP level	IP40	IP40	IP40	IP40, IP65 optional	IP40, IP65 optional	IP40, IP65 optional	IP40, IP65 optional
Maximum current	0.85A	0.85A	0.85A	0.85A	0.85A	0.85A	0.6A
Rated current	0.4A	0.4A	0.4A	0.4A	0.4A	0.4A	0.25A
Communication protocol	Modbus RTU (RS485)	Modbus RTU (RS485)	Modbus RTU (RS485)	Modbus RTU (RS485), Digital I/O optional			
Vertical allowable static load Fz	100N	100N	150N	200N	200N	200N	200N
Permissible static moment of slider Mx	0.8N·m	1.2N·m	2N·m	2N∙m	2N∙m	2N·m	2.5N·m
The allowable static moment of the slider My	0.6N·m	0.9N·m	1.5N·m	1.5N·m	1.5N·m	1.5N·m	2N·m
The allowable static moment Mz of the slider	0.5N·m	0.55N·m	2N·m	2N·m	2N·m	2N·m	2.8N·m

10

## WORKSTATIONS

**CNC WORKSTATION** 

The FAIRINO CNC Workstation is a turnkey solution designed to simplify automation in the CNC industry. By combining a robust workstation frame, drawer shelves for parts handling, and seamless integration with FAIRINO collaborative robots, it accelerates setup and ensures reliable operation. The system supports easy programming, fast deployment, and high safety standards, helping manufacturers increase production flexibility and adapt quickly to changing demands.

The workstation is a complete solution featuring integrated drawer shelves and a robust frame, designed for seamless integration with FAIRINO collaborative robots. It enables easy programming and fast deployment through a web-based teach pendant, ensuring quick setup and operation. The system supports a 110-220 VAC power supply, allowing flexible installation in various environments. Built to meet high safety standards and CE compliance for the European market, it provides reliable and secure operation. Optimized for repetitive CNC loading and unloading of multiple parts, the workstation combines a compact footprint with durable construction, making it ideal for industrial applications.





#### **Main Components**

- 1 Drawer shelf
- ${\Large \textcircled{2}} \ {\it Workstation} \ {\it main} \ {\it body}$
- ③ FR10 robot
- 4 45-degree mounting adapter
- ⑤ Robot mounting base
- **6** Teach pendant
- ⑦ Controller box access port

#### **Technical Specification**

Workstation dimensions 1100mm\*790mm\*1010mm

Fixed table dimensions 1100mm\* W600mm

Weight 280kg (excluding robot)

Power specifications 110-220VAC

Operation methods Web-based teach pendant

#### **APPLICATIONS**

The CNC Workstation provides an efficient way to automate repetitive  $% \left( 1\right) =\left( 1\right) \left( 1\right$ 

loading and unloading tasks around CNC machines. Typical use cases include

- ${\color{red} \bullet}$  Automated machine tending consistent loading and unloading of parts.
- OBatch production drawer shelves enable smooth operation with multiple workpieces.
- Flexible manufacturing quick changeovers for different part types and volumes.
- Operator support cobot handles repetitive tasks, freeing operators for higher-value work.

By combining FAIRINO cobots with drawer-based storage, the workstation delivers a cost-effective and scalable automation platform for CNC shops of all sizes.

TELESTAR SRL Sede Legale e Operativa: Via Novara, 35 - 28010 Vaprio d'Agogna (NO) Tel. (+39) 0321966768 - Web <a href="https://www.telestar-automation.it">www.telestar-automation.it</a>
TELESTAR SRL Sede Legale e Operativa: Via Novara, 35 - 28010 Vaprio d'Agogna (NO) Tel. (+39) 0321966768 - Web <a href="https://www.telestar-automation.it">www.telestar-automation.it</a>

11



### **PALLETIZING WORKSTATION**

The FAIRINO Palletizing Workstation is a modular and cost-effective solution for automating palletizing tasks with FAIRINO collaborative robots. Prepared and adapted by FAIRINO Europe for the European market in compliance with EU safety standards, including CE certification, it provides a reliable entry point into palletizing automation.

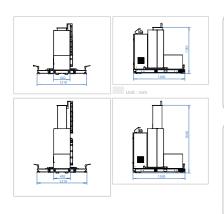
With a compact footprint and plug-and-play setup, the workstation allows quick deployment and easy reconfiguration. It can be combined with different FAIRINO cobot models and grippers to match specific production and logistics needs. FAIRINO Europe also offers its own graphical interface, tailored to the most common requirements of our customers and partners, ensuring even more intuitive operation.

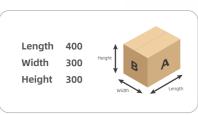
#### **APPLICATIONS**

The Palletizing Workstation is designed for a wide range of palletizing and packaging tasks, including:

- Ocarton palletizing flexible handling of boxes of different sizes.
- Production and packaging lines stacking finished goods directly from conveyors.
- ${\color{red} \bullet}$  Logistics and warehousing streamlining order handling and pallet preparation.
- Custom solutions scalable setups with different FAIRINO cobots and end-effectors.

With adjustable lifting columns and user-friendly software, the system supports pallet heights up to 1800 mm and adapts quickly to changing product and batch requirements.









#### **FEATURES**

- Modular design compatible with different FAIRINO cobots and grippers.
- Fast installation and setup with plug-and-play integration.

Length 1200 Width 1200

Width 1200 Height 1800

- Cost-effective alternative to conventional palletizing systems.
- Adjustable lifting column with stacking height up to 1800 mm.
- Compact footprint and easy mobility for flexible deployment.
- CE-certified and fully compliant with EU standards.
- FAIRINO Europe customized graphical interface for intuitive operation.

TELESTAR SRL Sede Legale e Operativa: Via Novara, 35 - 28010 Vaprio d'Agogna (NO) Tel. (+39) 0321966768 - Web www.telestar-automation.it

