### Product indications

- **New Products** – Symbol for all new products launched to the market in the past 2 years.
- **Energy efficiency** – Symbol for those products that save energy and, more importantly, save money.
- **Enhanced products** – These are improved versions of existing products. Products that our engineers have made more compact, lighter, with improved materials.
- **Range extensions** – This includes products that incorporate added features to cover more of your applications. New sizes, more mounting options, further communication protocols.

### QR Codes

Look for the QR Code to access additional product information via your smartphone quickly and comfortably.

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**Bar type ionizer**
IZS40/41/42 Series

- Standard type Series IZS40
  - Simple operation. Only power ON/OFF required
- Feedback sensor type Series IZS41
  - Feedback sensor enables the rapid elimination of static electricity
  - Energy saving run mode
  - Continuous neutralization run mode
- Dual AC type Series IZS42
  - Reduced potential amplitude: 25 V or less
  - Reduction of adjustment and maintenance time using an auto balance sensor
- Built-in type (Standard): The sensor is installed within the ionizer body
- High accuracy type (Option): "Ion balance adjustment at external signal input" or "Ion balance adjustment at any time" can be selectable
- Setting ionizer with remote control
  - Can recognize and control up to 16 ionizers through address setting
- Low maintenance electrode cartridges
- Transition wiring may be used.

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**Separate controller bar type ionizer**
IZT40/41/42 Series

- Standard type IZT40 Series.
  - Simple operation. Can be controlled by powering the ionizer ON.
- AC Type IZT41 Series.
  - Rapid neutralisation of static electricity, as fast as 0.1 s
- Dual AC type IZT42 Series.
  - Reduced potential amplitude: 25 V or less
- Ion balance: Within ±30 V
- Separate controller and bar
  - Bar can be mounted in a limited space
  - Easily monitor and adjust bars installed in a place which cannot be accessed
  - Up to 4 bars can be connected to one controller
  - Compact design (Height x Width): 37 mm x 30 mm
- Multiple alarms, functions, and LED display (IZT41/42)
- Low maintenance electrode cartridges.
Air cylinder
CG1 Series
- Clean line
- A substantial reduction in overall length compared to tie rod designed cylinders
- Male and female rod end available as standard

Stainless steel cylinder
CJ5/CG5 Series
- SUS304 - stainless steel
- Special scrapers provide optimum piston rod sealing
- Seats either NBR or FKM
- FDA approved grease suitable for food processing applications
- CG5 can be disassembled, therefore maintenance-friendly ø50x40

Centring unit
MACM Series
- Heavy workpieces can be aligned and positioned with small cylinders
- Max. allowable load weight up to 1000 kg
- Workpieces can be moved in any direction and even rotated 360°
- Built-in air locking mechanism
- External photo sensor can be mounted
- 4 types of table material can be selected
- Table centre movable range up to ø 100 mm

Compact guide water resistant cylinder
MGPM Series
- Ideal for use in a machine tool environment exposed to coolants
- Applicable for use in an environment with water splashing such as food processing and car wash equipment, etc.
- SLIDE BEARING MGPM Series
- Suitable for lateral load applications such as a stopper where shock is applied

Hygienic Design Cylinder
HY Series
- Grease for food (NSF-H1 certified) is available
- External seal material. Choice of NBR or FKM
- Mounting section: Conforms to ISO/TS152 standard (Simas HYC)
- Water resistant cylinder
- Five times increase in service life compared to conventional model

Fan type ionizer
IZF10/10R Series
- Offset voltage (ion balance): Within ±13 V
- Compact design (Depth x Width x Height): 39 mm x 80 mm x 110 mm
- Weight: 290 g (IZF10), 260 g (IZF10R)
- 2 types of fans available (IZF10):
  - Fast deionising type: 1.5 seconds deionising time
  - Low noise type: 48 dB(A)
- Alarm functions: high-voltage error, electrode needle contamination detector
- Flow rate adjustment function (IZF10R)

Fan type ionizer
IZF21/31 Series
- Offset voltage (ion balance): ±5 V
- Extensive and rapid static neutralisation:
  - ZF21: up to 1900 l/min (flow rate), as little as 1.0 s (discharge time)
  - ZF31: up to 4400 l/min (flow rate), as little as 0.5 s (discharge time)
- An optional adjustable louver allows for adjusting the static neutralisation area
- Improved performance and easier maintenance through several functions and features
- Modular, compact and slim design: 40 mm thickness

Electrostatic sensor
IZD10 Series
- Potential measurement:
  - ±20 kV (detected at a 50 mm distance)
  - ±4 kV (detected at a 25 mm distance)
- Detects the electrostatic potential and outputs an analogue voltage
- Small and easy to mount

Electrostatic sensor monitor
IZE11 Series
- Output: switch output x 2 + Analogue output (1 to 5 V, 4 to 20 mA)
- 2-colour display (red and green)
- Display accuracy: ±0.5 % F. S. ±1 digit or less
- Detection distance correction function (adjustable in 1 mm increments)
- Supports two types of sensors
- Connection by connector
- Connector for power supply/output
- E-con connector: Connector to sensor

Handheld electrostatic meter
IZH10 Series
- Easy to use
- Compact and lightweight
- Rated charge amount range: ±20 kV
- Functions:
  - Peak and bottom display function
  - Zero clear function
  - Auto power off function
  - Low battery indication
  - Backlight

Nozzle type ionizer
IZN10E Series
- Different nozzles to adapt several applications: IZN10E (standard type) and IZNS3-X67 (with right angles and 360° rotation)
- Energy saving static electricity elimination nozzle
- High flow static electricity elimination nozzle
- Offset voltage (ion balance): ±10 V (Energy saving), ±15 V (Large flow)
- Compact and slim design
- With built-in power supply substrate
- Easy maintenance: electrode needle contamination detector with easy replacement of the cartridge
- Mounting variations: direct mount, bracket mount
- External switch input function (2 inputs): Switch output: PNP/NPN
Polyurethane tubing
TU Series
- Tube: 0.4 to 1.0 mm
- Size: 10 x 1.3
- Colour: Black, red, blue, yellow, green, and clear
- 10 mm size available

Customer benefits
- Maximum design flexibility thanks to a wide range of colours
- Easy-use in narrow spaces due to the flexibility
- Length per roll
  - Symbol: Length
  - 20 m or 100 m

Vacuum unit
ZK2 Series
- Energy saving switch turns off supply valve when vacuum level is reached reducing air consumption. Vacuum level is kept by check valve. Supply valve is turned on again when the vacuum lowers to the set pressure.
- Two stage ejector reduces air consumption and increases suction flow rate.
- Supply valve with self-holding function
- Interlink between supply valve and release valve
- High noise reduction silencer:
  - Noise: As low as 40 dB
  - Suction flow rate: Improved by up to approx. 20 %

Multistage ejector
ZL Series
- Compact design
- 3 different pressure sensor options
  - Ejector + vacuum switch (digital)
  - Ejector + vacuum gauge
  - Vacuum port adapter
- 3 stage ejector with 10% less air consumption
- Nozzle diameter 1.2 mm
- Suction capacity 100 mm or 200 mm (100 CFM)
- Different mounting options

Blow gun
VMG Series
- Ergonomically designed body with patented valve design and KN nozzle produces considerable reduction in pressure losses.
- 20% reduction in power consumption with the SMG “Blow gun” + "S coupler" + "Coil tube"
- 2 connection options
- Minimum actuation force required.

Air nozzles
KN Series
- Wide range of various blow nozzles
- Designed for use with compressed air and cutting oils

Flat type vacuum pad
ZP3P Series
- Pad style: Good for film packaging applications where the shape of the workplaces changes easily when being lifted. Reduced leakage. Sealing skirt design has better performance even for thin films. Reduction of wrinkles made on thin workpieces (film, vinyl, etc.) during adhesion.
- Applications: Food/beverage, medical/pharmaceutical and packaging industries.

5 port solenoid valve, manifold type
SY3000/5000/7000 Series
- Energy efficiency: 0.1 W with power saving circuit, 0.35 W standard
- Space saving: 10 mm width (SY3000)
- Top, bottom, side ported available
- Wiring, piping and operation are integrated in one side
- Direction, size and type of the piping can be changed
- Applicable to various types of serial wiring
- Slide manual override provides better visibility
- Vacuum release valve with restrictor - allows control of both vacuum suction and release with a single valve unit

5 port solenoid valve, plug-in sub-plate
SY3000/5000 Series
- Possible to be used independently
- Energy efficiency: 0.1 W with power saving circuit
- 0.35 W standard
- Space saving: 10 mm width (SY3000)
- Top, bottom, side ported available
- Size SY3000 available
- Easy attach/detach and wiring: M12 waterproof connector type
- IP67 enclosure

5 port solenoid valve, body ported bar stock type; Individual wiring
SY3000/5000/7000/9000 Series
- Superior service life - at least 50 m. switching cycles
- Pilot air model available
- Body ported type
- With changeable fittings set for port A and B
- Low power consumption 0.35 W with 24 VDC
- Can be directly controlled by SPS
- 10 ms response time
- Plug combinations: 2 pin plug module with light-surge voltage suppressor integrated into plug body (recessing protection) DIN connector for IP65 (only with valve size 5000/7000/9000)

5 port solenoid valve, base mounted. Manifold type, stacking type, individual wiring
SY3000/5000/7000/9000 Series
- Body design for base mounting
- Low power consumption 0.35 W with 24 VDC
  - With indicator light (0-1 W)
  - Can be directly controlled by PLC
  - 35 ms response time (2 position with light-surge voltage suppressor)
  - 2 pin miniature socket protects against mewing
  - Long service life of at least 50 million switching cycles

5 port solenoid valve, cassette type
SY3060/5060/7060 Series
- Valve block easy to expand and disassemble
- Reduced cost through a combination of valve and manifold
- Valve width: 10.5/16/19 mm
- Minimal weight means it can be mounted directly to the consumer
- 0.35 W power consumption (with indicator light: 0.4 W)
- Can be directly controlled by PLC
- 10 ms response time (SY3060)
- New gasket provides superior condensate resistance
- Manual override non-leaking type as standard
- Replacement fittings mean cylinder ports are easy to change
- Minimum operating life of 50 million switching cycles
- Common exhaust type pilot air, individual SUP/SEP block assembly
- SURF/SURF passage block
- Modern design
Refrigeration air dryer
IDFA Series
- State of the art design ensures a constant 3 °C pressure dew point
- High efficiency heat exchanger
- Environmentally ozone friendly R134a and R407C refrigerant
- Complies to stringent ISO 6873-1 standards (A, B, C)
- Simple control system, incorporating an easy to read evaporator gauge
- Stainless steel heat exchanger providing long life and low pressure drops
- Compact design for ease of installation

Circulating fluid temperature controller, thermo-chiller
compact type
HRS Series
- Temperature stability: ±0.1 °C
- Temperature range setting: 5 to 40 °C
- Lightweight: 43 to 70 kg
- Easy maintenance, tool-less maintenance of filter
- Self-diagnosis function and check display
- Convenient functions:
  - Timer operation function
  - Low tank level detecting function
  - Power failure auto-restart function
  - Anti-freeze operation function
- Communication function: RS232C, RS485 and contact I/Os as standard
- HRS030 and HRS030 models now available

Air filter + Regulator + Lubricator
AC Series
- New and existing modular types can be connected
- Reduced time for mounting
- Interchangeable with the previous model
- Transparent bowl protection for a better visibility and security
- Bowl variations: polycarbonate, nylon, metal and metal with level gauge
- Max. operating pressure: 1.0 MPa
- Temperature range: -5 to 60 °C
- High and low temperature, high pressure and other options available

Filter-regulator + Lubricator
AC□□A Series
- New and existing modular types can be connected
- Reduced time for mounting
- Interchangeable with the previous model
- Transparent bowl protection for a better visibility and security
- Bowl variations: polycarbonate, nylon, metal and metal with level gauge
- Max. operating pressure: 1.0 MPa
- Temperature range: -5 to 60 °C
- Increases the main circuit pressure by up 4 times
- No cooling required
- Easy installation
- No other energy source required (no power supply)
- Operating temperature: 2 to 50 °C
- Input pressure: 0.1 to 1.0 MPa
- Mounting position: horizontal

Stainless steel 316 insert fittings
KFG2 Series
- Material: Stainless steel 316
- Operating fluid temperature: -65 to 260 °C
- Can be used with steam
- Grease-free
- Applicable tubing material: FEP, PFA, modified PTFE, nylon, soft nylon, polyethylene, soft polyethylene, hard polyethylene, soft polyolefin, antistatic soft nylon, antistatic polyethylene
- Swivel elbow rotary steel, Special FKM
- Operating pressure range: -100 KPa to 1 MPa

Stainless steel 316 insert fittings
KQB2 Series
- Material: Stainless steel 316, C3004, brass, seal parts: Special FKM
- Can be used with air, water
- Operating fluid temperature: -5 to 150 °C
- Grease-free
- Applicable tubing material: FEP, PFA, nylon, soft nylon, polyethylene, polyolefin

Stainless steel 316 one-touch fittings
KQG2 Series
- Material: Stainless steel 316, seal parts: Special FKM
- Can be used with air, water and steam
- Operating fluid temperature: -5 to 150 °C
- Grease-free
- Applicable tubing material: FEP, PFA, nylon, soft nylon, polyethylene, polyolefin
- Operating pressure range: 100 KPa to 1 MPa

Fluoropolymer tubing (PFA) metric size
TLM Series
- Chemically compatible with more than 250 fluids
- Compatible with the ISO 177-1550 solution list approved by the United States FDA
- Max. operating temperature: 260 °C
- 13 size variations (metric size)
- 4 Color variations
- A simple and visual solution to the maintenance works