



**SMC - Experts in the Beverage Industry**



■ Gain competitive advantage – discover some simple and effective ways to ensure operational savings and improve productivity

We are all being urged to save energy. Headlines remind us almost daily of the need to reduce our carbon footprint and adopt a greener lifestyle. It's an important issue and one we ignore at our peril. Growing customer expectations and increasing legislation also mean that businesses can no longer afford to ignore green issues.

By adopting an energy saving strategy as a part of your business efficiency programme, not only will you save money but you'll help make a sustainable lifestyle for future generations.

As world leaders in pneumatics, our experts have developed some of the most innovative ranges of energy saving products and activities for compressed air systems which will help you save money as well as helping in the fight to protect our environment.

If this sounds too good to be true, we'll be happy to share our energy efficiency knowledge and technology with you!



## SMC - Experts in the Beverage Industry

**Expert (noun) - a person who is very knowledgeable about or skilful in a particular area (Oxford English Dictionary)**

At SMC we recognise that an ability to fully understand the requirements and issues of any manufacturing process is the key to our future success.

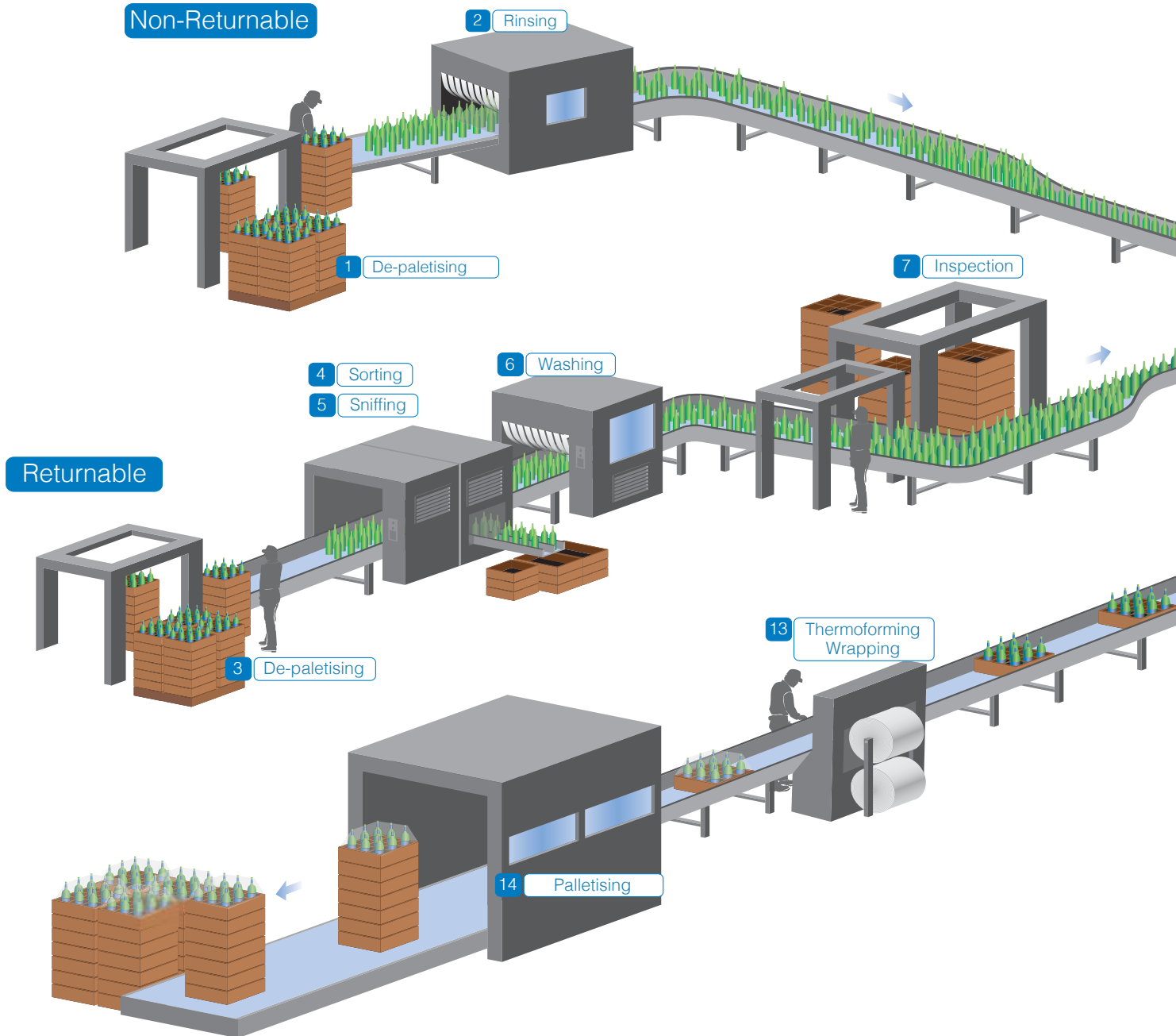
For this reason alone, we have developed specialist teams to work in all the major manufacturing industries throughout the world – our Industry Experts.

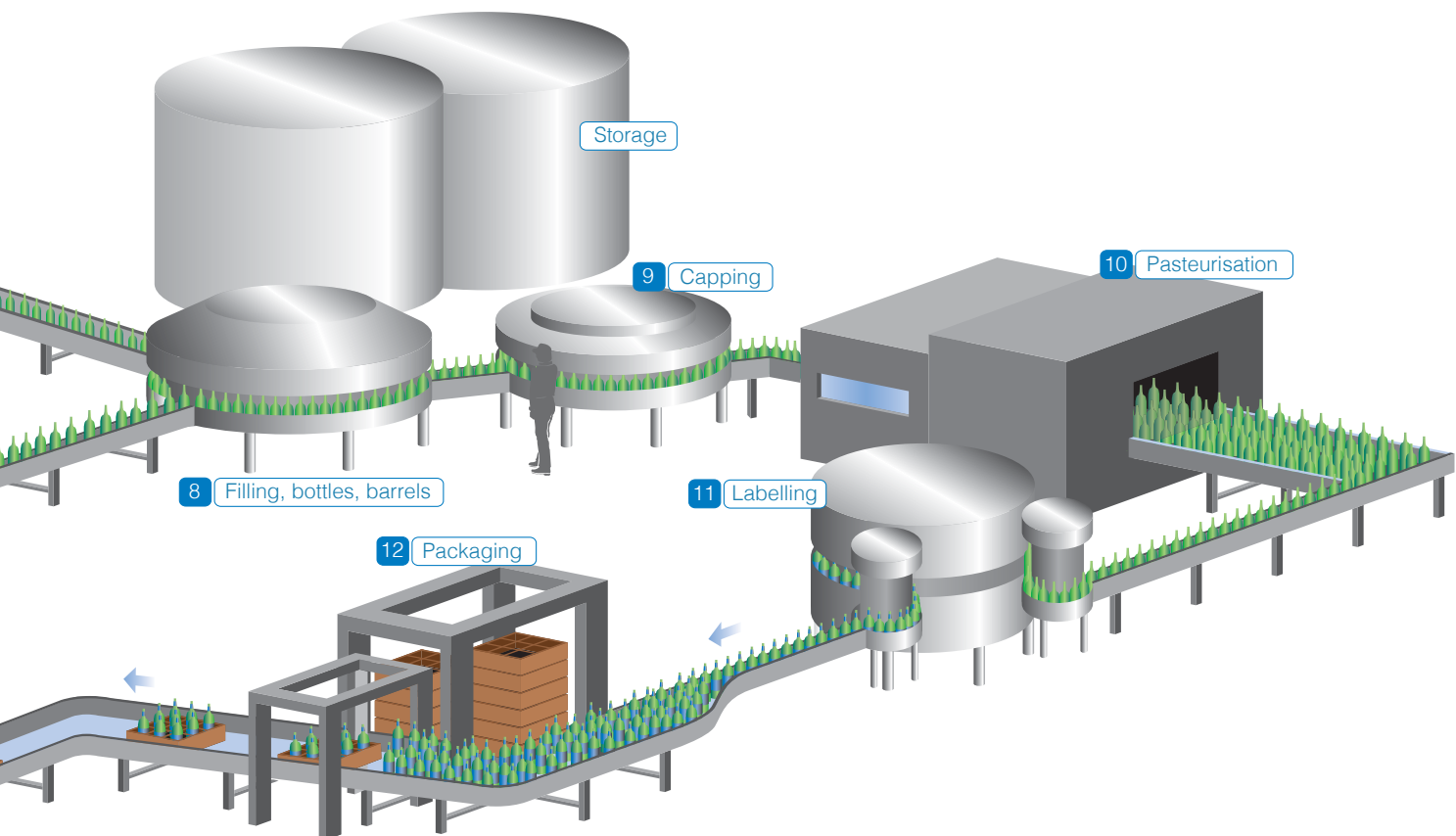
In the case of the Beverage Industry our experts know the stringent requirements that need to be met and all have extensive knowledge of both your production process and your business needs.

We understand the important issues such as continuous 24/7 operation, the latest up-to-the-minute hygiene regulations, the continual wash down and the extremes of heat and cold.

Our experts recognise that maximum operator health and safety is a MUST and with energy costs increasing at an alarming rate, even the smallest saving can have a real impact on a business's bottom line as well as the environment.

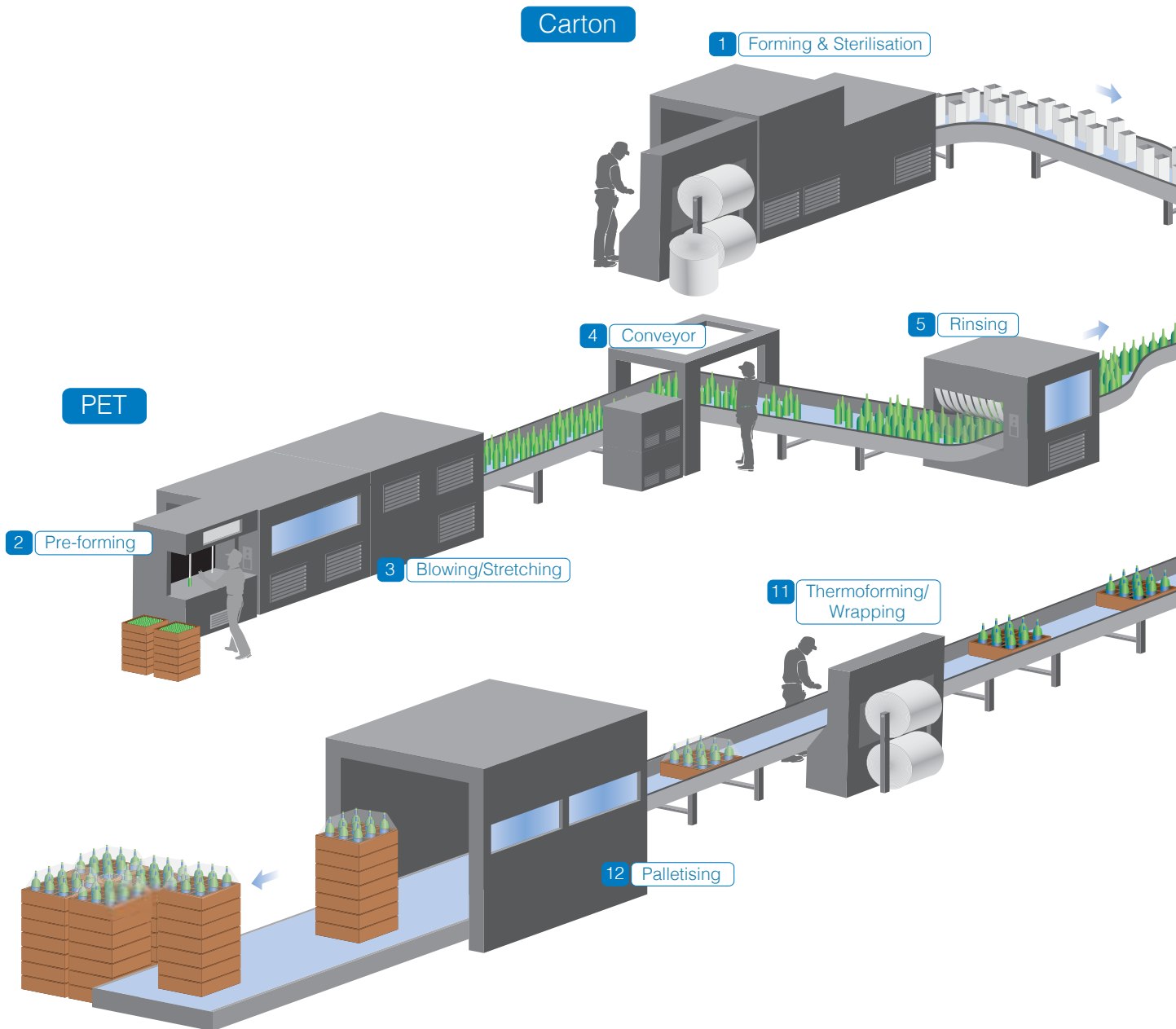






	A	B	C	D	E	F	G	H	I
	Heat Resistant	Corrosion Resistant	Hygienic Design	High Pressure	High Frequency	Long Life	Electrostatic Removal	Electric Actuators	Standard Components
	▶ P.8	▶ P.8,9	▶ P.10	▶ P.10	▶ P.10	▶ P.11	▶ P.11	▶ P.11	
<b>Non-Returnable</b>									
1 De-palletising									
2 Rinsing									
<b>Returnable</b>									
3 De-palletising									
4 Sorting									
5 Sniffing									
6 Washing									
7 Inspection									
<b>Packaging</b>									
8 Filling, bottles, barrels									
9 Capping									
10 Pasteurisation									
11 Labelling									
12 Packaging									
13 Thermoforming/Wrapping									
14 Palletising									

# PET Bottle and Carton Filling

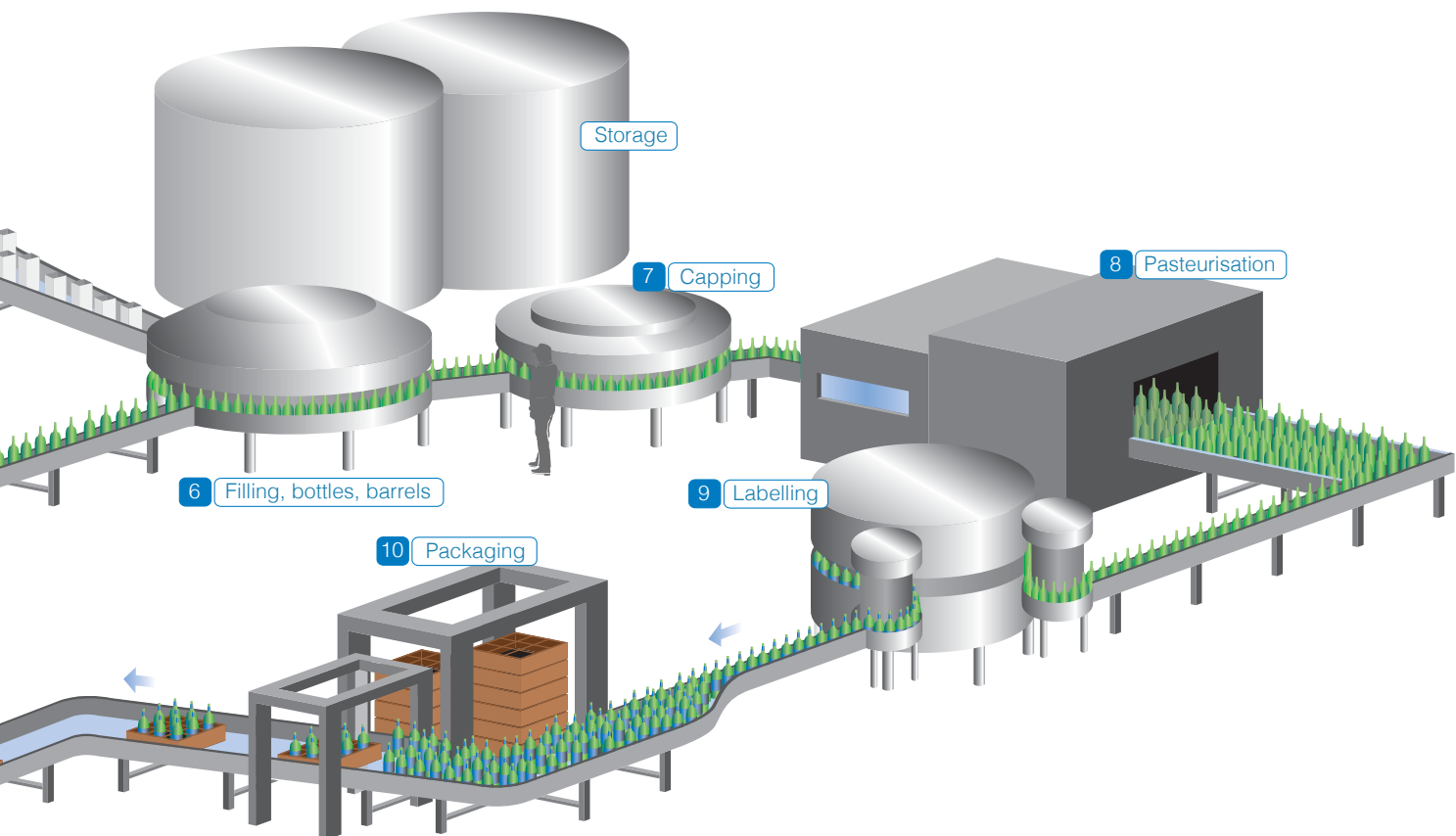


Note:

a) In some cases, different applications are combined in a single machine.

b) Some of the process shown in the above illustration are not needed for every product.





	A	B	C	D	E	F	G	H	I
	Heat Resistant ▶ P.8	Corrosion Resistant ▶ P.8,9	Hygienic Design ▶ P.10	High Pressure ▶ P.10	High Frequency ▶ P.10	Long Life ▶ P.11	Electrostatic Removal ▶ P.11	Electric Actuators ▶ P.11	Standard Components
Carton									
1 Forming & Sterilisation	■	■							■
PET									
2 Pre-forming	■						■		
3 Blowing/Stretching				■	■	■			
4 Conveyor							■		■
5 Rinsing		■	■						
Packaging									
6 Filling, bottles, barrels	■	■	■		■	■			
7 Capping							■		■
8 Pasteurisation	■	■							
9 Labelling							■		
10 Packaging								■	■
11 Thermoforming/Wrapping							■		
12 Palletising									■

## A Heat Resistant

### ■ Guide Cylinder

- Compact Guide Cylinder..... **Series MGP-Z-XB6 (-10~+150°C)**



Series MGP-Z

### ■ Standard Air Cylinder (Compact Style)

- Compact Cylinder..... **Series CQ2-Z-XB6 (-10~+150°C)**
- Compact Cylinder..... **Series CQS-XB6 (-10~+150°C)**



Series CQ2-Z



Series CQS

### ■ Specialty Cylinder

- Stainless Steel Cylinder..... **Series CG5-XB6 (-10~+150°C)**



Series CG5

### ■ Modular FRL Combination/Air Preparation

- High Temperature Environments..... **Series AF/AR/AW-X440**



Series AF/AR/AW

## B Corrosion Resistant

### ■ Cylinder

- Stainless Cylinder..... **Series CJ5-S/CG5-S**



Series CJ5/CG5

### ■ Special Environments Fittings

- Stainless Steel 316 One-touch Fittings..... **Series KQG2**
- Stainless Steel 316 Insert Fittings..... **Series KFG2**
- S Couplers/Stainless type..... **Series KKA**
- Stainless Steel 316 Miniature Fittings..... **Series MS**
- Stainless Speed Controller..... **Series ASG**



Series KQG2



Series KFG2



Series KKA



Series MS



Series ASG

### ■ 2/3 Port Valves for Fluid Control

- Air Operated Chemical Valve/  
Integral Fitting..... **Series LVC**
- Air Operated Chemical Valve/  
Threaded Type..... **Series LVA**



Series LVC



Series LVA



## ■ Digital Flow Switch

- Digital Flow Switch for Deionized Water and Chemicals..... **Series PF2D**



Series PF2D

## ■ Fitting and Tubing

- High Fluoropolymer Tubing (Super PFA).... **Series TL/TIL**
- Soft Fluoropolymer Tubing (Modified PTFE).... **Series TD/TID**
- Fluoropolymer Tubing (PFA)..... **Series TLM/TILM**
- Clean One-Touch Fittings and Tubing..... **Series KP**



Series TL/TIL



Series KP



Series TLM/TILM



Series TD/TID

## ■ Modular FRL Combination/Air Preparation

- Epoxi Coating ..... **Series AC/AF/AR/AL/AW/AFM/AFD-X480**
- Stainless Steel 316 Filter Regulator..... **Series AW-X2622**



Series AC/AF/AR/AL/AW/AFM/AFD-X480



Series AW-X2622

## ■ Actuators

- Piston Rod and Rod End Nut Made of Stainless Steel..... **Series -XC6**

## ■ Sensor

- 2-Colour Display Digital Pressure Switch.... **Series ISE70/75(H)**
- 2-Colour Display Digital Pressure Switch.... **Series ZSE/ISE80**



Series ISE70/75(H)



Series ZSE/ISE80

## ■ Guide Cylinder

- Compact Guide Cylinder..... **Series MGP-Z-XC6**



Series MGP-Z

## ■ Standard Air Cylinder (Compact Style)

- Compact Cylinder..... **Series CQ2-Z**
- Compact Cylinder/Guide Rod Type..... **Series CQM**
- Compact Cylinder..... **Series CQS**
- Compact Cylinder Plate Type..... **Series CQU**



Series CQ2-Z



Series CQM



Series CQS



Series CQU

## ■ Specialty Cylinder

Water Resistant

- Stainless Steel Cylinder..... **Series CG**



Series CG

## ■ Serial Transmission System

- M8/M12 Connector ..... **Series PCA/EX**



## C Hygienic Design

### ■ Actuators

- Round Tube Type..... **Series HYB**
- Guide Rod Type..... **Series HYG**
- ISO Type..... **Series HYC**
- Compact Type..... **Series HYQ**



### ■ Pneumatic Solenoid Valve

- Hygienic Design Valve..... **Series SY3000/5000**
- Hygienic NAMUR Interface Valve  
3/5 Port Solenoid Valve..... **Series VFN (-X36)**



## D High Pressure

### ■ High Pressure Equipment

- Pilot Operated 2, 3 Port Solenoid Valve..... **Series VCH**
- Check Valve..... **Series VCHC**
- Direct Operated Regulator (Relieving Type)..... **Series VCHR**
- Silencer..... **Series VCHN**
- Mist Separator..... **Series VCHF-X16**



### ■ Sensor

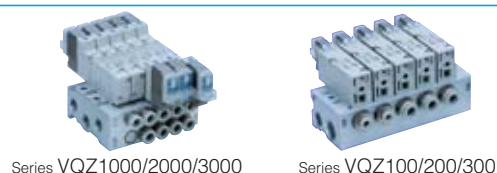
- 2-Colour Display Digital Pressure Switch... **Series ISE75**



## E High Frequency

### ■ Pneumatic Solenoid Valve

- 3 Port Solenoid Valve..... **Series VQZ1000/2000/3000**
- 5 Port Solenoid Valve..... **Series VQZ100/200/300**



### ■ Actuators

- Low Friction Cylinder/Metal Seal..... **Series MQQ/MQM/MQP**

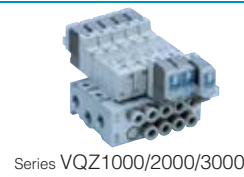


## F Long Life

### ■ Pneumatic Solenoid Valve

Metal Seal

- 3 Port Solenoid Valve..... **Series VQZ1000/2000/3000**
- 5 Port Solenoid Valve..... **Series VQZ100/200/300**
- 5 Port Solenoid Valve..... **Series VQC1000/2000/3000**



## G Electrostatic Removal

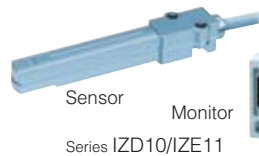
### ■ Ionizers

- Ionizer (Bar)..... **Series IZS40/41/42**
- Ionizer (Nozzle)..... **Series IZN10**
- Ionizer (Fan)..... **Series IZF10/21/31**



### ■ Measuring Instruments

- Electrostatic Sensor/Monitor..... **Series IZD10/IZE11**
- Handheld Electrostatic Meter..... **Series IZH10**



## H Electric Actuator

- High Rigidity Electric Actuator Slider Type... **Series LEJ**
- Electric Actuator Slider Type ..... **Series LEF**
- Electric Actuator Slider Type Low Profile... **Series LEM**
- Electric Actuator Guide Rod Slider..... **Series LEL**
- Electric Actuator Rod Type..... **Series LEY**
- Guide Rod Type Electric Actuator..... **Series LEYG**
- Electric Slide Table..... **Series LES**
- Electric Miniature Actuator..... **Series LEP**
- Electric Rotary Table..... **Series LER**
- Electric Grippers..... **Series LEH**
- Electric Cylinder..... **Series LZ**





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