BOISWOOD

GAS AND LIQUID CONTROL TECHNOLOGIES

Pressure & Vacuum

Flow

Level & Temperature

Tube & Fittings

HVAC/R

Custom Services

Pressure Regulators

Stock Listing and Enquiry Guide

WE'RE KNOWN FOR SELLING SOLUTIONS

Our journey started in 1989, when Boiswood was founded. As our knowledge and expertise grew, so did our vast range of products and services, and today, we are one of the country's most well respected and trusted suppliers of gas and liquid control technologies.

We are partnered with several high-quality, globally reputable manufacturers with a distinct range of products and services that offer unique features and benefits to EPC's, System Integrators, OEM's and End Users....our customers.

Our whole business culture centres around our genuine commitment to hands-on service and support, whenever and wherever this is required. We offer unparalleled advice and support, and our 'one stop shop' approach removes all the headache and hassle from our customers, ensuring you always get what you need on-time, on-budget and the perfect fit for your application.

We have over 30 years of successful experience in an extensive range of applications and processes within the markets we serve. Our visionary, technically astute and customer focused approach ensures we consistently add value. Working closely with our customers and supply partners ensures we stay up to date with the latest technologies, using our insight to facilitate the niche and specialist markets we serve.

You can rely on us to specify, supply and support all your gas and liquid control needs.

Our Markets:

Automotive & Aerospace

Chemical & Petrochemical

Cryogenics

Food & Beverage

HVAC/R

Marine & Defence

Medical & Pharmaceutical

Nuclear

Oil & Gas

Power & Utilities

Renewable Energy

Semiconductor

Our Mission & Values:

Our mission is to be the best supplier in the right first time specification, supply and support of gas and liquid control products, supported by a team who are customer driven, technically astute, and always of the highest integrity.

Our continued success is built on our own company core values of Continuous Improvement, Customer Focus, Integrity, and Respect.

30 BOISWOOD GAS AND LIQUID CONTROL TECHNOLOGIES 1989 - 2019 YEARS

CERTIFIED ISO 9001:2015 COMPANY

INVESTORS IN PEOPLE

Our Customers:

AIR PRODUCTS · P&O FERRIES · MICHELL Instruments · CERULEAN · EDWARDS

SAFC Hitech · SIEMENS · intel · GE Sensing · WÄRTSILÄ · EMERSON Network Power

diamond · Science & Technology Facilities Council · TOTAL · Swagelok · THALES

TPG Maritime · Cambridge Fluid Systems · smiths detection · AESSEAL

Stock Configurator

PR1 -

Body Material

1 316L Stainless Steel

Port Configuration

A “A” Style Porting
B “B” Style Porting
C “C” Style Porting
F “F” Style Porting
H “H” Style Porting
I “I” Style Porting
L “L” Style Porting

Port Types

1 1/4” Female NPT

Diaphragm Surface

1 < 25 Ra (Standard)

Seat Materials

A Tefzel® (3,600 PSIG Inlet)
Q PEEK™ (6,000 PSIG Inlet)
P PEEK™ (for High Temp.)

Flow Coefficient (Cv)

3 0.06 (Standard)
5 0.2
C 0.025
H 0.5

Special Options

A EB-33 Cleaning (For Oxygen)
E Pressure Test Certificate
F Certificate of Conformity

Cap Assembly

1 Standard
4 Panel Mount
8 Tamper-Proof
G Metal Knob (for High Temp.)
E Tamper-Proof, Panel Mount

Diaphragm Materials

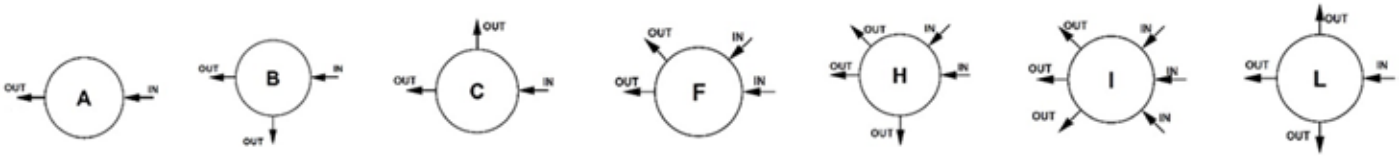
1 PTFE/Stainless Steel

Diaphragm Type

1 Standard (Non-Relieving)

Outlet Range

C 0 – 10 PSIG
D 0 – 25 PSIG
E 0 – 50 PSIG
G 0 – 100 PSIG
I 0 – 250 PSIG
J 0 – 500 PSIG
W 0 – 750 PSIG



T: 01452 330011 | info@boiswood.co.uk | www.boiswood.co.uk

BP3 -

Body Material

1 316L Stainless Steel

Port Configuration

A "A" Style Porting
D "D" Style Porting
G "G" Style Porting

Port Types

1 1/4" Female NPT

Diaphragm Surface

1 < 25 Ra (Standard)

Actuator Materials

I High Density PTFE (500 PSIG Max. Control)
D Viton® (250 PSIG Max. Control)

Flow Coefficient (Cv)

5 0.2 (Standard)

Special Options

A EB-33 Cleaning (For Oxygen)
E Pressure Test Certificate
F Certificate of Conformity

Cap Assembly

1 Standard
4 Panel Mount
8 Tamper-Proof
G Metal Knob (for High Temp.)
E Tamper-Proof, Panel Mount

Diaphragm Materials

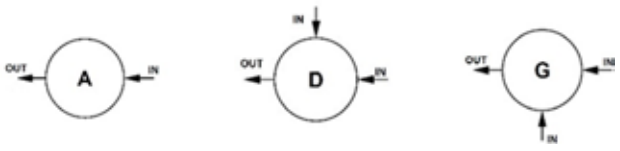
1 PTFE/Stainless Steel

Diaphragm Type

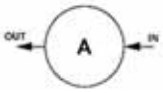
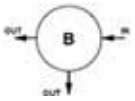
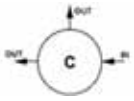
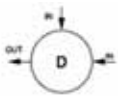
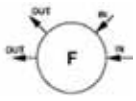
1 Standard (Non-Relieving)

Control Range

C 0 – 10 PSIG
D 0 – 25 PSIG
E 0 – 50 PSIG
G 0 – 100 PSIG
I 0 – 250 PSIG
J 0 – 500 PSIG

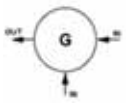
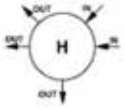
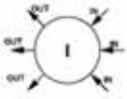
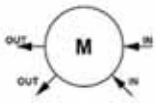
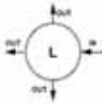


Regulator Selection Guide

Model	PR1/PR2	PR7	PR7LF	MR1	PR50	PR56/PR57
Description	Standard Pressure Reducing Regulator	High Flow Pressure Reducing Regulator	High Sensitivity Pressure Reducing Regulator	Ultra Miniature Pressure Reducing Regulator	High Pressure Reducing Regulator	Ultra High Pressure Reducing Regulator
Body Materials	**316L Stainless Steel** **Brass** Monel® Hastelloy® B or C 6MO Titanium	**316L Stainless Steel** **Brass** Monel® Hastelloy® C Chrome-Plated Brass	316L Stainless Steel Brass Monel® Hastelloy® C	**316L Stainless Steel**	**316L Stainless Steel** **Brass** Monel®	**316L Stainless Steel** **Brass** Monel®
Port Configurations						
Port Types	**1/4" FNPT** 3/8" FNPT	**1/4" FNPT** 3/8" FNPT **1/2" FNPT**	**1/4" FNPT** 3/8" FNPT **1/2" FNPT**	1/16" FNPT **1/8" FNPT** Surface Mount	**1/4" FNPT** 3/8" FNPT	**1/4" FNPT** 3/8" FNPT
Seat/Actuator Materials	**Tefzel®** CF PTFE Polyimide PCTFE High Density PTFE **PEEK™**	**Viton®** PTFE Kalrez® PEEK™	Tefzel® **Viton® (0.2 CV Only)** PCTFE **High Density PTFE** Kalrez® (0.2 CV Only)	**Tefzel®** PCTFE PEEK™	**Tefzel®** Polyimide PCTFE High Density PTFE **PEEK™**	Polyimide **PEEK™**
Flow Coefficients (Cv)	**0.06** 0.2 0.025 0.5	**1.10**	0.06 **0.2** 0.025 0.5	**0.06** 0.025	**0.06** 0.2 0.025	
Outlet/Control Ranges	0 – 10 PSIG 0 – 25 PSIG 0 – 50 PSIG 0 – 100 PSIG 0 – 250 PSIG 0 – 500 PSIG 0 – 750 PSIG	0 – 1 PSIG 0 – 10 PSIG 0 – 25 PSIG 0 – 50 PSIG 0 – 100 PSIG 0 – 150 PSIG 0 – 250 PSIG 0 – 500 PSIG	0 – 6 PSIG 0 – 25 PSIG 0 – 50 PSIG 0 – 75 PSIG 0 – 125 PSIG 0 – 250 PSIG	0 – 10 PSIG 0 – 25 PSIG 0 – 50 PSIG 0 – 100 PSIG 0 – 250 PSIG 0 – 500 PSIG	0 – 500 PSIG 0 – 1,000 PSIG 0 – 2,000 PSIG	0 – 1,000 PSIG 0 – 2,000 PSIG 0 – 4,000 PSIG 0 – 6,000 PSIG 0 – 7,500 PSIG 0 – 10,000 PSIG
Diaphragm Types	**Standard** Tied Diaphragm Self-Relieving Vacuum Assist Spring	**Standard** Self-Relieving	**Standard** Tied Diaphragm Self-Relieving	**Standard**	**Standard** Self-Relieving	**Standard (Piston)** Self-Relieving (Piston)
Diaphragm Materials	**PTFE/Stainless Steel** PTFE/Inconel® PTFE/Hastelloy®	**PTFE/Stainless Steel** PTFE/Viton® PTFE/Inconel® PTFE/Hastelloy®	**PTFE/Stainless Steel** PTFE/Viton® PTFE/Inconel® PTFE/Hastelloy®	**PTFE/Stainless Steel** PTFE/Viton® PTFE/Inconel®	**Stainless Steel** Nylon/Stainless Steel Viton/Stainless Steel PTFE/Stainless Steel	**Stainless Steel** Monel®
Cap Assemblies	**Standard** Panel Mount Captured Vent Tamper-Proof Metal Knob Dome-Loaded	**Standard** Panel Mount Captured Vent Tamper-Proof Fine Adjust Handle T-Handle	**Standard** Panel Mount Captured Vent Tamper-Proof Fine Adjust Handle T-Handle Dome-Loaded	**Standard** Panel Mount Tamper-Proof T-Handle	**Standard** Panel Mount Captured Vent	**Standard** Panel Mount

**Most common selections have been highlighted bold.*
For special options not listed please contact us.

Regulator Selection Guide

Model	PR59	CYL20	BP3	BP8	BP8LF	BP66
Description	High Pressure High Flow Pressure Reducing Regulator	Dual Stage Cylinder Pressure Reducing Regulator	Standard Back Pressure Regulator	High Flow Back Pressure Regulator	High Sensitivity Back Pressure Regulator	Ultra High Back Pressure Regulator
Body Materials	316L Stainless Steel Brass Monel®	**316L Stainless Steel** **Brass**	**316L Stainless Steel** Brass Monel® Hastelloy® B or C	**316L Stainless Steel** Brass Monel® Hastelloy® C	**316L Stainless Steel** Brass Monel®	**316L Stainless Steel** Monel® Titanium
Port Configurations						
Port Types	1/2" FNPT 3/4" FNPT	**1/4" FNPT** 3/8" FNPT	**1/4" FNPT** 3/8" FNPT	**1/4" FNPT** 3/8" FNPT **1/2" FNPT**	**1/4" FNPT** 3/8" FNPT **1/2" FNPT**	**1/4" FNPT** 3/8" FNPT
Seat/Actuator Materials	PCTFE Teflon®	Tefzel® PCTFE **High Density PTFE** PEEK™	CF PTFE Polyimide **Viton®** **High Density PTFE** Kalrez®PEEK™	**Viton®** **Glass-Filled PTFE** PEEK™	CF PTFE Polyimide Viton® **High Density PTFE** Kalrez®	Polyimide **PEEK™**
Flow Coefficients (Cv)	1.20	**0.06** 0.2 0.025 0.5	**0.2** 0.04 0.3 0.005	**1.2** 0.7 0.4	**0.2** 0.04 0.3 0.005	0.12 **0.04** 0.01
Outlet/Control Ranges	0 – 250 PSIG 0 – 500 PSIG 0 – 750 PSIG 0 – 1,000 PSIG 0 – 2,000 PSIG 0 – 4,000 PSIG	0 – 10 PSIG 0 – 25 PSIG 0 – 50 PSIG 0 – 100 PSIG 0 – 250 PSIG 0 – 500 PSIG	0 – 6 PSIG 0 – 10 PSIG 0 – 25 PSIG 0 – 50 PSIG 0 – 100 PSIG 0 – 250 PSIG 0 – 500 PSIG 0 – 1,000 PSIG	0 – 10 PSIG 0 – 25 PSIG 0 – 50 PSIG 0 – 100 PSIG 0 – 250 PSIG 0 – 500 PSIG	0 – 6 PSIG 0 – 25 PSIG 0 – 50 PSIG 0 – 75 PSIG 0 – 125 PSIG 0 – 250 PSIG 0 – 500 PSIG	0 – 2,000 PSIG 0 – 4,000 PSIG 0 – 6,000 PSIG 0 – 7,500 PSIG 0 – 10,000 PSIG
Diaphragm Types	Standard (Piston) Self-Relieving (Piston)	**Standard** Tied Diaphragm Self-Relieving	**Standard** Vacuum Assist Spring	**Standard**	**Standard**	**Standard (Piston)**
Diaphragm Materials	Stainless Steel Monel®	**PTFE/Stainless Steel** PTFE/Inconel®	**PTFE/Stainless Steel** PTFE/Viton® PTFE/Inconel® PTFE/Hastelloy®	**PTFE/Stainless Steel** PTFE/Viton® PTFE/Inconel® PTFE/Hastelloy®	**PTFE/Stainless Steel** PTFE/Viton® PTFE/Inconel®	**Stainless Steel** Monel® Titanium
Cap Assemblies	**Standard** Panel Mount	**Standard** Panel Mount Tamper-Proof	**Standard** Panel Mount Tamper-Proof Dome-Loaded T-Handle	**Standard** Panel Mount Captured Vent Tamper-Proof T-Handle Dome-Loaded	**Standard** Panel Mount Captured Vent Tamper-Proof T-Handle Fine Adjust Handle Dome-Loaded	**Standard** Panel Mount Captured Vent

Product images are not shown to scale

How to Specify

1	Pressure Regulated	☐ Pressure Reducing ☐ Back Pressure/Overflow			
2	Type of Regulation	☐ Line ☐ Bottle			
3	Preferred Material	☐ 316L SS ☐ Brass ☐ Monel® ☐ Hastelloy® ☐ Other			
		MIN	**NORM**	**MAX**	**UNITS**
3	Upstream Pressure (P1)				PSIG/BARG
4	Downstream Pressure (P2)				PSIG/BARG
5	Flow Rate (Q)				SCFM/LPM
6	Temperature (T)				°C/°F
7	Media (M)				
8	Pipework Size	_____ in / DN _____			
9	Pipework Material	☐ 316L SS ☐ Brass ☐ Monel® ☐ Hastelloy® ☐ Other			
10	Flow Direction	☐ Left to Right ☐ Right to Left ☐ Top to Bottom			
10	Preferred Connection Size	_____ in / DN _____			
11	Preferred Connection Type	☐ NPT ☐ BSPP ☐ BSPT ☐ Tube OD Compression ☐ VCR ☐ DN Flanged ☐ ANSI Flanged ☐ Socket Weld ☐ Butt Weld ☐ Other (Please Specify)			
12	Pressure Gauges	☐ Inlet Only ☐ Outlet Only ☐ Inlet & Outlet ☐ No Gauges			
13	Adapter Fittings	☐ Yes, I need _____ ☐ Not Required			
14	Cylinder Connectors	☐ Yes (For Media Listed) ☐ Not Required			
15	Flexible Hose	☐ Yes, I need _____ ☐ Not Required			
16	Relief Valve	☐ Yes, I need _____ ☐ Not Required			
17	Upstream Filter	☐ Yes, I need _____ ☐ Not Required			
18	Mounting	☐ Base Mounting ☐ Panel Mounting ☐ Not Applicable			
19	Application Details				
20	Special Notes/Requirements				

Calculation Tools

Our calculation tools allow you to correctly select the required flow coefficient (Cv) value for your pressure reducing or back pressure regulator. These software tools will utilise your process data to calculate the Cv so that you can achieve your required flow rate. Basic operating parameters you will need to have on hand are as follows:

- Inlet/Supply Pressure
- Outlet/Control Pressure
- Flow Rate (Maximum in SCFM)
- Media
- Temperature

GO Regulator Calculation Tool

From entering the above required information, this calculation tool will produce a recommend Cv value (that must be doubled as a safety factor) for your pressure.

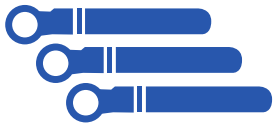
The calculation software can also do the reverse of this – allowing you to use a pre-selected Cv value to calculate your maximum possible flow rate.

ValvePilot by Mankenberg

This calculation and design software calculates KV/ KVS values, as well as indicating noise pressure level, nominal diameter, reduction ratio and velocity limits.

The software can also provide warnings about potential hazards such as cavitation, flashing or excess noise pressure levels. You will also receive recommends surrounding pipe size extensions.

Value Added Services



In-House Service Centre

We can offer manufacturer certified in-house evaluation, repair, testing, servicing and assembly of our products from within our Boiswood HQ.

Local Technical Support

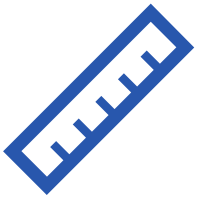
We offer a technical helpline from our HQ as well as having a “man on the ground” for on-site support whenever and wherever this is required.

Fast Turnaround

Our local stocks allow us to quickly respond to requirements. We hold a vast range of products in stock so that they’re always readily available.

Training Services

We provide a range of educational classes and training seminars that can be delivered from Boiswood HQ or on-site.



Design Services

Over the years we have been involved in many bespoke product designs and system build solutions for our customer base.

Response Times

We endeavour to provide all our customers with unrivalled service with quick responses to both technical and commercial queries.

Custom Solutions

Assembly & Testing
Our stocks allow us to assemble and test a variety of pressure regulators on a next-day delivery services.

Service & Repair
We can offer manufacturer certified service, repair and certification for our range of pressure regulators.

Subassembly
We can take special requests for component subassembly and control panel design solutions according to your requirements.

Pressure Regulators and Valve Selection Seminar

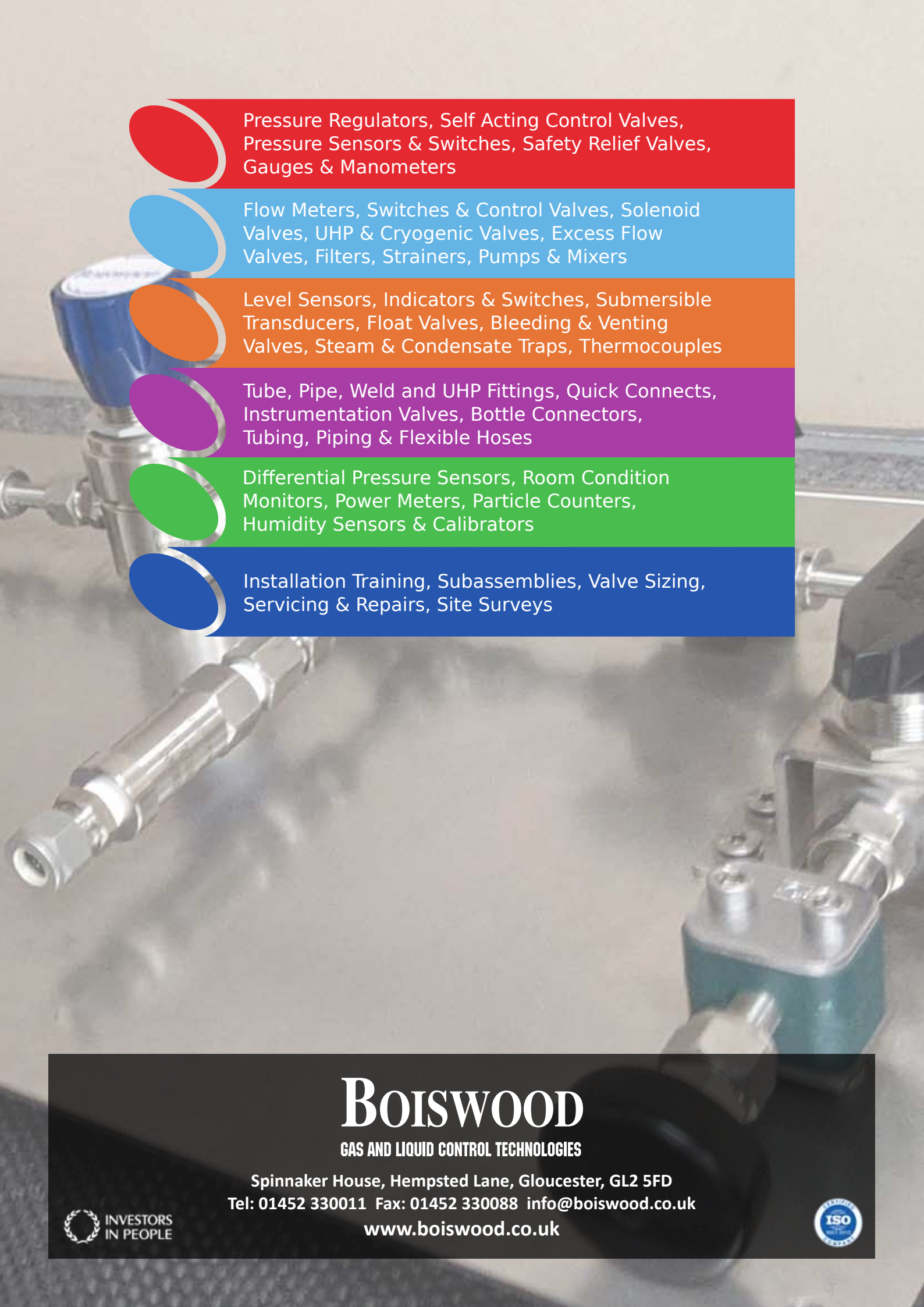
Selecting the correct pressure regulators and instrumentation valves to suit your needs can be a complex exercise with several factors to consider. Our seminar has been developed to help you understand more about our products and during this you will learn more about:

- The basic functions of pressure regulators and valves
- Analysis of different models and types
- How to correctly size and specify units
- Identifying problems and ways to rectify performance issues
- Build and repair training exercises

Tube Fittings Safe Installation Course

This challenging course will explore the many benefits of our tube fittings range and focuses on each aspect needed to achieve right-first-time installations. You will typically learn more about:

- How the Tube Fitting works
- Hands-on Tube Fitting Installation Exercises
- Typical Health & Safety Considerations
- How to Avoid Installation Problems
- Selection and Correct Handling of Tubing
- Tube Burst and Bending Exercises (Practical and Theoretical Examinations)



Pressure Regulators, Self Acting Control Valves, Pressure Sensors & Switches, Safety Relief Valves, Gauges & Manometers

Flow Meters, Switches & Control Valves, Solenoid Valves, UHP & Cryogenic Valves, Excess Flow Valves, Filters, Strainers, Pumps & Mixers

Level Sensors, Indicators & Switches, Submersible Transducers, Float Valves, Bleeding & Venting Valves, Steam & Condensate Traps, Thermocouples

Tube, Pipe, Weld and UHP Fittings, Quick Connects, Instrumentation Valves, Bottle Connectors, Tubing, Piping & Flexible Hoses

Differential Pressure Sensors, Room Condition Monitors, Power Meters, Particle Counters, Humidity Sensors & Calibrators

Installation Training, Subassemblies, Valve Sizing, Servicing & Repairs, Site Surveys

BOISWOOD

GAS AND LIQUID CONTROL TECHNOLOGIES

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INVESTORS IN PEOPLE

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