

BOISWOOD

GAS AND LIQUID CONTROL TECHNOLOGIES

Pressure & Vacuum

Flow

Level & Temperature

Tube & Fittings

HVAC/R

Custom Services

Automotive & Aerospace
Products and Services Catalogue





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.

These markets are dependent on innovative design combined with state-of-the-art manufacturing. As companies involved in automotive and aerospace arenas demand to have high performance products, with no possible room for error, it is of paramount importance to select top quality and repeatable control and instrumentation products.

Also, with the demand to comply with global and regional regulatory requirements, such as those concerning safety and CO2 emissions, both industries must push the limits of technology using cutting-edge products and sometimes complex engineering.

PUTTING YOU BACK IN THE DRIVING SEAT

As with all the products we supply, durability is key in supporting rugged system applications. We supply mechanical based products such as cryogenic valves, filters, pressure regulators, fittings and valves. We can also supply/support various types of electrical instrumentation, such as pressure sensors, flow meters, temperature transmitters and more.

WE'RE TRUSTED BY...



Product Solutions

PR1 SERIES

Instrumentation Pressure Regulators



GO REGULATOR



The PR1 Series is a versatile pressure reducing regulator designed to fulfil a wide range of needs in instrumentation sample systems and other applications.

TECHNICAL DATA:

Gas or Liquid Service • Inlet Pressures up to 6,000 PSIG • Outlet Pressures from 10 to 750 PSIG • -40°C to +260°C Temperature Ranges • Five Seat Material Options • 20 Micron Inlet Filter • Range of CV values up to 0.50

FEATURES & BENEFITS:

Range of standard configurations in stock • Easily field maintainable • Long-life span • Training Services available

CYL-20 SERIES

Dual Stage Pressure Regulators



GO REGULATOR



The CYL-20 Series offers precision pressure control with less than 0.01% outlet pressure change with varying inlet pressures, and is designed for use in gas calibration systems and cylinder applications.

TECHNICAL DATA:

Gas or Liquid Service • Inlet Pressures up to 6,000 PSIG • Outlet Pressures from 10 to 500 PSIG • -40°C to +260°C Temperature Ranges • Five Seat Material Options • 20 Micron Inlet Filter • Range of CV values up to 0.50

FEATURES & BENEFITS:

Range of standard configurations in stock • Easily field maintainable • Long-life span • Training Services available

3100 SERIES

Thin Film Pressure Transducers



Gems
Sensors & Controls



The 3100 Series is ideal for OEMs that require consistent high levels of performance, reliability and stability utilising the sputtered thin film technology.

TECHNICAL DATA:

Pressure Ranges from 0 – 7 BAR up to 2,200 BAR • High Proof Pressures • Broad Choice of Outputs and Pressure Ports • Pressure and Temperature Measurement Combination • RoHS Compliant • From -40 to +125°C Temperature Ranges

FEATURES & BENEFITS:

Unbeatable Price/Performance Ratio • Compact Design • OEM Discount Available

125 SERIES Adjustable Flow Monitors



ChemTec

The 125 Series standard unobtrusive adjustable flow monitor for use on both corrosive and non-corrosive liquids and gases.

TECHNICAL DATA:

Gas or Liquid Service • Available in 316SS, Brass or Teflon • Broad Range of Adjustability • From 30 to 16,000 SCC/M (Air) or 1 to 500 ML/M (Water) • -17 to +104°C Temperature Ranges • From 80 to 3,000 PSIG Max. Operating Pressures

FEATURES & BENEFITS:

Unobtrusive right angle flow path • Operates via magnetic piston • Very low pressure drop • Compact Size and High Resolution • Special Designs available on request

DON SERIES Oval Wheel Flow Meters



KOBOLD

The DON Series oval wheel flowmeter is suitable for low and high viscous liquids and designed as a compact product to fit in tight spaces.

TECHNICAL DATA:

Measuring ranges from 0.5 – 36 L/hr up to 150 – 2,500 L/min • Up to 1000 cP Viscosity Range • G1/2 to G4" Connections (DN25 to DN100 or ASME 1 to 4") • Up to 400 BAR Pressure • Up to +120°C Temperature • Accuracy of ±0.2%

FEATURES & BENEFITS:

Compact Design • Available with Pulse Output, LCD Display and Alarms

ASM SERIES High Accuracy Pressure Transducers



setra

The ASM series is the highest accuracy transducer for measuring gauge, absolute, compound and vacuum pressure in the AccuSense™ product line.

TECHNICAL DATA:

Pressure Ranges from -1 to 68 BAR • Gauge, Compound, Absolute & Vacuum Pressure Types • Voltage and Analogue Outputs • High Accuracy Down to ±0.05% FS RSS • -40 to +85°C Operating Temperatures

FEATURES & BENEFITS:

Very High Accuracy • End Point Method Linearity • High Overpressure Capability • Low Thermal Error • Excellent Stability • Reduces Calibration Time • Minimises Downtime

Product Solutions

2200/2600 SERIES

Industrial Pressure Transducers



The 2200 and 2600 Series features stability and accuracy in a variety of enclosure options with an all welded stainless steel back end for demanding submersible and industrial applications.

TECHNICAL DATA:

From 1 to 400 BAR Pressure Ranges • Gauge, Absolute, Vacuum and Compound Pressure Types • Millivolt, Voltage and Current Output Models • ATEX and CSA models available • -40 to +125°C Temperature Ranges

FEATURES & BENEFITS:

Unbeatable Price/Performance Ratio • OEM Discount Available • High Stability achieved through CVD Sensing Element • Submersible, General Purpose and Wash Down Enclosures

EFV SERIES

Automatic Excess Flow Valves



The EFV adjustable excess flow valve is perfect for preventing uncontrolled flows of liquids and gases. Using a controlled bleed it can reset automatically and can restrict or shut off flow completely.

TECHNICAL DATA:

Available from 0.5 up to 3681 SLPM (Air) or 0.015 to 75.7 LPM (Water) • 1/8" – 3/4" FNPT Ports (as Standard) • Stainless Steel or Brass Construction • Positive Shut Off Available • Fully custom models can be quoted on request

FEATURES & BENEFITS:

Unobtrusive right angle flow path to prevent blockage in the line • Operates via magnetic piston rather than spring design • Very low pressure drop • Adjustable flow range (not fixed)

239 SERIES

Differential Pressure Transducers



The 239 is the "standard" for measuring low differential pressure in the Test & Measurement industry, with decades worth of installation helping build a reputation as the first-choice for critical applications.

TECHNICAL DATA:

High Accuracy down to $\pm 0.073\%$ • Fast Response Times down to <10ms • From 125 up to 7,500 Pa Pressure Ranges • Available in "WC and PSID • Variation of Outputs, Terminations and Special Options

FEATURES & BENEFITS:

Captures Dynamic Pressure Changes • Small Footprint • Low Thermal Error • CE & RoHS Compliant • Fast Warm Up and Response Times

CAP-300 SERIES Capacitive Level Sensors



The CAP-300 capacitive level sensor is one of our most durable and reliable point level sensors, designed as a versatile OEM solution for specialty and off-highway vehicles.

TECHNICAL DATA:

Pre-set based on required actuation condition (Wet/Dry Sink/Source)

- Brass or 316L Stainless Steel
- Range of Port Threads and Electrical Connections
- -40°C to +125°C Temperature
- Up to 100 PSIG Operating Pressure
- IP67 Rated Seal Design

FEATURES & BENEFITS:

- Cost-Effective Solution
- Tolerates Coolant Coating
- Developed for rugged aqueous applications
- Zero Maintenance
- Mount in Any Position
- Non-Contact Versions Available

LOCK SERIES Tank Globe Valves



The Locks Series tank bellows-sealed globe valve was designed for use on gas cylinders and pressure vessels whilst transporting containers of hazardous goods.

TECHNICAL DATA:

- Manual Operation
- -40°C to +65°C Operating Temperature Range
- Up to 24 BAR Nominal Pressure
- Available with completely customised connections
- Variety of service fluids

FEATURES & BENEFITS:

- Stainless Steel bellows allows for a long life span
- High leak-tightness to atmosphere
- Valve body is machined from one solid piece of stainless steel
- TPED, ADR, RID, IMDG and TA Luft certified

3600 SERIES Electronic Pressure Switches



The 3600 series solid-state pressure switches offer exceptional stability with all welded stainless steel housing to handle rough environments, ideal for demanding off-highway vehicle applications.

TECHNICAL DATA:

- From 0 – 7 up to 0 – 100 BARG Pressure Ranges
- Range of Pressure Ports and Electrical Connections
- 17-4 PH Stainless Steel
- -40°C to +105°C Temperature
- ±0.5% Accuracy
- Factory pre-set switch calibration

FEATURES & BENEFITS:

- Long Cycle Life
- No Moving Parts
- Fully Hermetically Sealed
- Exceptional stability through Sputtered Thin Film Technology
- Cost-Effective OEM Pricing
- Optional Communication Interface

Product Solutions

LNGBV SERIES

Pressure Regulators for LNG Applications



METATRON
Powertronic Design Gas Technologies



The LNG1 and LNG1-BV series is an over-pressure regulator designed and manufactured for liquid methane applications.

TECHNICAL DATA:

Piston operated with dynamic seals • 5 to 25 BARG Inlet Pressure • 3.9 to 9 BARG Outlet Pressure • 58 Kg/hr (CH₄) @ 15 BARG • -40 to +120°C Temperature • Aluminium Body Material • Particle Protection Screen Available

FEATURES & BENEFITS:

ECE-R110 Approved • “First of it’s kind” for OEM applications • High reliability and durability for installation on LNG vehicles • Ease of installation • Cost-Effective • Custom designed solutions on request

UNIVERS 1200 SERIES

Cryogenic Globe Valves



STÖHR
VALVES



The Univers 1200 is a high quality stainless steel valve designed for gaseous and liquid media. Straight or angle configuration is available with a wide range of end connections suited for your application.

TECHNICAL DATA:

Available in Manual, Pneumatic and Electric versions • -269°C to +50°C Operating Temperature Range • Up to 40 BAR Nominal Pressure • Available in DN10 – DN300 • Variety of service fluids • Position Indicators, IP Regulators and Limit Switches Optional

FEATURES & BENEFITS:

Stainless Steel bellow allows for a long life span • High leak-tightness to atmosphere • Valve body machined from one piece of stainless steel • Fully Customisable • Check Valve and Filter Versions Available

TB SERIES

Trunnion Ball Valves



SSP

The TB Series trunnion ball valve family provides positive shut-off and directional flow control for systems with high working pressures and temperatures.

TECHNICAL DATA:

Pressures up to 10,000 PSIG (689 BAR) • Temperatures from -40 to +232°C • Available in 316SS and Alloy 400 • 2-Way, 3-Way and Actuated Versions Available • Range of Seat and Packing Materials • From 1/8 to 1/2” Sizes

FEATURES & BENEFITS:

Spring-Loaded Seats provide Leak-Tight Seal • Springs Compensate for Seat Wear • Bottom-Loaded Blowout-Proof Ball and Stem for Safety, Reliability and Easy Maintenance

XLS-1 SERIES Ultrasonic Level Sensors



The XLS-1 ultrasonic level sensors are compatible with water and hydrocarbon based liquids, and are perfect for applications where condensation may affect other sensing technologies.

TECHNICAL DATA:

Pre-set based on required actuation condition (Wet/Dry Sink/Source)

- 316L Stainless Steel Housing
- Range of Port Threads and Electrical Connections
- -40°C to +125°C Temperature
- Up to 250 PSIG Operating Pressure
- Range of Seal Materials

FEATURES & BENEFITS:

- Ignores Condensation on Sensor
- Zero Maintenance
- Solid-State with No-Moving-Parts
- Will Not Sense Foam as Liquid
- Microcontroller-Based Electronics

XM/XT-800 SERIES Compact Analogue Level Sensors



The XM/XT-800 Series compact level transmitters provide an analogue output and feature the rugged durability of stainless steel or brass construction.

TECHNICAL DATA:

- Lengths up to 144 inches (366cm)
- Stainless Steel or Brass Construction
- Range of Mounting Types, Floats & Signal Conditioners
- From -40 to +110°C Temperature Ranges
- Up to 21 BAR Pressure

FEATURES & BENEFITS:

- Broad Choice of Custom Configurations
- Compact Design
- High Resolution of 1/4"
- OEM Configurations Available

B SERIES Modular Solenoid Valves



The B Series is a direct acting solenoid valve, available in 2 or 3-way functionality, with a bubble tight plunger construction designed to last for millions of cycles in general purpose gas & liquid applications.

TECHNICAL DATA:

- MOPD of 400 PSI (28 BAR)
- Cv Range of 0.018 to 0.430
- 7 Watts Power Consumption
- Stainless Steel or Brass Construction
- Wide Range of Seal and O-Ring Materials
- Choice of Port Configurations and Special Options

FEATURES & BENEFITS:

- OEM Pricing Available
- Very High Cycle Life
- Suitable for a vast range of applications

Product Solutions



PRESSURE GAUGES

Including Mechanical and Digital Pressure Gauges and Indicators



INSTRUMENTATION VALVES

Including Ball, Needle, Plug, Check, Toggle, Relief and Quick Connects



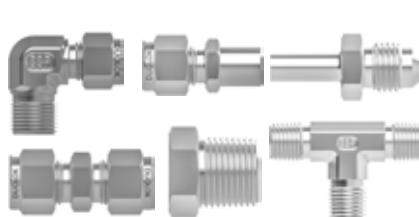
MANIFOLD VALVES

Including Block, Bleed, Vent and Gauge Manifolds



CONTROL VALVES

A range of pneumatic and electric Globe, Bellows and Control Valves



INSTRUMENTATION FITTINGS

Including Twin Ferrule Compression Tube, Pipe and Weld Fittings



HIGH PURITY FITTINGS

Including FaceSeal™, Microweld and PFA/PTFE Fittings



FILTERS, STRAINERS & SEPARATORS

A range of filters, strainers and separators for process and vacuum



BURSTING DISKS

Including forward and reverse acting bursting disks and holders



TUBING, PIPING AND HOSES

A selection of metal tubing, hoses and PTFE/PFA piping.



PRESSURE SWITCHES

Including Mechanical and Digital Pressure Switches and Sensors



SOLENOID VALVES

Including miniature, latching and cryogenic versions.



WIRES & SEALS

Including feedthroughs, sealing glands and packing glands.



CUSTOM SOLUTIONS

Boiswood have been involved in several custom build projects to meet our customers' specific requirements, please visit our website to read our application successes or feel free to ask for more details.

Many of our customers call upon us for subassembly, service, repair and testing solutions from within our manufacturer-certified headquarters.

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.



Products in Focus

How to Switch Fitting Supplier

Customers seek out new tube fitting suppliers for many reasons such as delays, the inability to meet production specifications and inconsistent product performance. When deciding to switch, effective evaluation of other suppliers and switching seamlessly can be difficult. Selecting the correct

supplier that you trust is important to keeping your instrumentation systems running smoothly. In this short article, we will guide you in the right direction on how to assess tube fitting suppliers based on their resource availability, product performance, safety assurance and overall reliability.



1. Assess Safety and Resource Availability

Safety should be your top priority when looking to switch suppliers. Material quality and ample resources to help with the right installation of tube fittings are some of the considerations that should be made.

Make sure that there are clear and easy instructions for the installation of each tube fitting that include the product's material, size and type. These instructions should avoid malfunctions or leaks. Your supplier should assist you from start to finish to guide you through the installation process.

The supplier should provide installation courses and data sheets that provide some additional help and training, along with more in-depth explanations.

It is important that you go for a supplier who are flexible and offer fittings that are exact to each of your design specifications and materials. The supplier must meet high production standards, such as maintaining a low Defects Per Million Opportunities (DPMO) count across individual product lines, having top quality safety protocols and benchmarking quality to six sigma measurements.

Before finalising your decision, look at the supplier's interchange and intermix policy.



TREATMENT PROCESSES 1

Patented and proprietary Expanite surface treatment process.



LOWER MAKE-UP TORQUE 2

Lower initial make-up torque versus leading competitor brands.



MARKING OF NUTS 3

All nuts are marked with the tubing size to avoid mixing imperial and metric.



PRODUCT PACKAGING 4

Fittings individually bagged for cleanliness and quality control.



LIFETIME WARRANTY 5

Guarantee that every single component is free from defects in material.



PROVEN TO INTERCHANGE 6

Designed to be totally interchangeable with competitor brands.

2. Product Quality

Look for these indications of high-quality production:

- In-house testing to find and remove poor quality products or designs.
- Full reports of products performance during endurance tests, pressure tests, hydraulic impulse pressure tests and vibration stress tests.
- Internal, in-house resolution processes, such as tracking RMA response times and corrective action reports to improve production and raise standards.
- Have third-party testing services.
- Trusted companies always have testimonials and references to prove and support their track record.

3. Evaluate Reliability

Finally, it is important to consider whether a supplier offers quick and reliable delivery and can help answer your questions in a timely manner.

Businesses that need consistency and transparency should be going with a supplier who can meet delivery targets.



Product Gaugeability

Consistently gaugeable and work to geometry to ensure each fitting installed is completely leak-tight.



Heatcode Traceability

All of our tube fittings are fully traceable with each component marked with a 3-digit code.



Valve End Connections

All tube fitting end connections are available on our full range of instrumentation valves.



Working Pressures

When correctly installed, our tube fittings will hold the burst pressure of your tubing without leakage.

I SS D 4 UT

I (Instrumentation), SS (Stainless Steel), D (Duolok Twin Ferrule), 4 (1/4" Size), UT (Union Tee)

Easy Part Numbering

Ordering our tube fittings with part numbers is easier and more logical than leading competitor brands.



Applied Teflon Tape

All tube fittings with male tapered threads are available to purchase with pre-applied factory PTFE tape.



MAKE YOUR SWITCH TO BOISWOOD

Safety, product quality and reliability are the three most important factors Boiswood provides. Our ethos is based on a genuine commitment to hands-on service and support, whenever and wherever this is required. We work hard to provide high-quality services whilst being transparent and connected to our clients.

Products in Focus



Our partner, Metatron, are a globally expanding company based in Italy who specialise in powertrain clean gas technologies focusing on the research, development and production of electronic pressure regulators and engine control units for alternative fuels.

Product Overview

Our partnership with Metatron focuses on products for the use on CH₄ (Methane) Natural Gas Vehicles and H₂ (Hydrogen) Fuel Cell Vehicles. The unit we have had the most success with is the Meta LNG1-BV over pressure regulator.

The LNG1-BV has been manufactured for methane applications and it has been designed to guarantee durability, reliability and ease of installation with its piston technology. The LNG1-BV holds ECE-R110 approval and is the first regulator of its kind designed for OEM applications.

Its applications include medium to high performance trucks with maximum power of 338 kW.

Our Aim for the Environment

Our aim is to expand in the clean powertrain sectors with the help of our partner. The aim is to decrease the negative impact on the environment by providing products that are part of a global solution for clean transportation. As well as following laws and environmental regulations, Metatron also holds a strict Code of Ethics for its employees.



High Tech Aerospace System Facility

The customer is a leading provider to the aerospace and defence markets across the globe. Their application required a “plug and play” solution to control their onsite air and water supply feeds with portable control box assemblies.

Customer Requirements

4 bespoke control box assemblies, designed, built and tested according to their specifications. Each mountable control box was fitted with 2 pressure reducing regulators, gauges, relief valves, flexible hoses and piped away with tube fittings.

Why Boiswood Was Successful

We offered the customer a one-stop solution – to procure, supply, assemble and test the control boxes all in-house at our headquarters. Utilising our supply channels, product expertise and workshop facilities at Boiswood we were able to provide the customer with a cost-effective “fit and forget” solution.






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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