



ANDERSON GREENWOOD INSTRUMENTATION PRODUCTS



Instrument Valve Products Overview

World Leading Instrument Valve Solutions

Anderson Greenwood Instrumentation is the number one choice for Instrument Valves, Manifolds, and Instrument Enclosure Systems; number one for range of products and number one for quality of manufacture and performance. With more than 45 years of innovative engineering expertise, combined with the massive global presence of Tyco Valves & Controls, Anderson Greenwood Instrumentation is the world's single source for instrumentation solutions.



Built on a firm foundation of technical expertise, Anderson Greenwood Instrumentation sets the standard for instrumentation technology advancements in the 1950's with its precision valves for the flourishing Aerospace Industry. This knowledge has continually expanded, culminating in the company's present situation of manufacturing the broadest range of instrument valve products available anywhere. They are able to cater for a wide spectrum of industries and applications. In order to fulfill Anderson Greenwood Instrumentation's continuing commitment to providing customers with the complete product choice, they now offer a comprehensive range of isolation valves (including root and gauge models), instrument manifolds (for pressure, level and flow measurement) and purpose designed Instrument Enclosure Systems.

Total Quality Management

Anderson Greenwood Instrumentation has invested in innovative factory and manufacturing automation and is ISO 9001-2000 certified for all its manufacturing facilities. The continuous improvement inherent in the quality management process assures the greatest possible confidence in the integrity and performance of every single Anderson Greenwood Instrumentation product.

The complete range of Instrument Valve products

Engineering designs which achieve optimum quality and high performance, mean that Anderson Greenwood Instrumentation can supply the ideal valve for every application, from simple isolation to manifolds for pressure, flow or level measuring instruments.

In addition to its comprehensive range of standard valves and manifolds, Anderson Greenwood Instrumentation has also developed a number of exclusive products for special applications.

For example, when developing a compact design for their Keyblok double block and bleed isolation instrument valve, Anderson Greenwood Instrumentation successfully overcame the weight and space restrictions

normally associated with many traditional installations. The monoflange double block and bleed isolation instrument valve is engineered to mount directly to process flanges, providing maximum safety with minimum vibration concerns. The monoflange also combines compactness with easy access in the field, as a result of its versatile design that allows for horizontal or vertical mounting.

To protect process instrumentation from dirt, rain, accidental damage, extreme temperatures and other harsh environments, Anderson Greenwood Instrumentation's range of Enclosure systems fulfills the Industry's need for resilient, weatherproof instrument protection.

The Modular Mounting System provides a range of instrument installations for pressure level and flow measurement. To complete this versatile picture, all of Anderson Greenwood Instrumentation's valves and manifolds are complemented by a full range of accessories.

Anderson Greenwood Instrumentation - Global capabilities for your entire instrument valve and manifold application needs.



Coplanar™ is a trademark of Rosemount, Inc.
Hastelloy® is a registered trademark of Haynes International.
MoneI® is a registered trademark of Special Metals Corporation

Hand Valves

Anderson Greenwood hand valves are suitable for all instrument isolation duties, giving you bubble tight shut-off time after time. With metal or soft seats for gas, vapor or liquid applications, rated up to 10,000 psig [690 barg] and available in a range of standard and exotic materials there is a hand valve for even the most severe service.

Specifications

Materials	CS, SS, Monel®, Hastelloy®, Duplex and other exotic materials
Seat	Metal and Soft
Connections	1/4" to 1" threaded, welded and flanged also available
Orifice Sizes	1/8" [3 mm], 3/16" [4.7 mm], 1/4" [6.4 mm], 3/8" [9.5 mm], 5/8" [16 mm]
Pressure (max)	10,000 psig [690 barg]
Temperature (max)	1000°F [538°C]



Gauge Valves

Anderson Greenwood gauge valves include multi-port and block and bleed styles suitable for gauge isolation, calibration and venting with a choice of either globe pattern or straight-thru bore designs. A wide choice of end connections and comprehensive range of standard gauge accessories allows complete flexibility for individual installations

Specifications

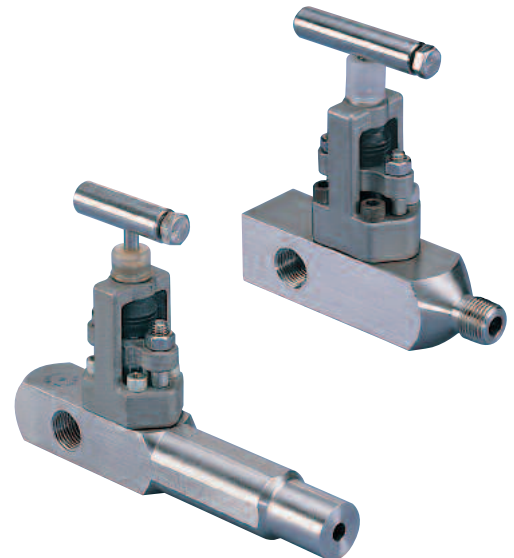
Materials	CS, SS, Monel®, Hastelloy®, Duplex and other exotic materials
Seat	Metal and Soft
Connections	1/2" to 3/4" threaded, welded and flanged also available
Orifice Sizes	1/8" [3 mm], 3/16" [4.7 mm], 1/4" [6.4 mm], 3/8" [9.5 mm]
Pressure (max)	10,000 psig [690 barg]
Temperature (max)	1000°F [538°C]



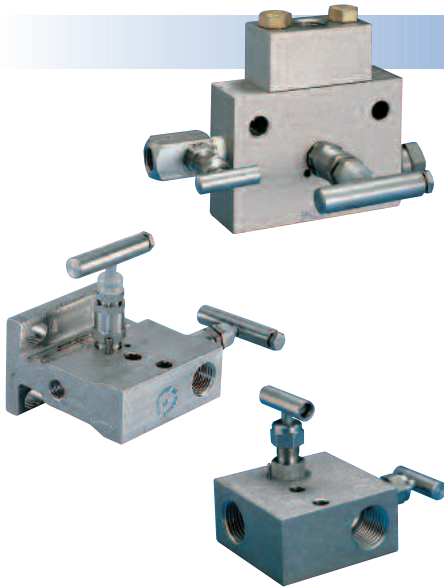
M5K root valves are available in two standard designs, multi-port with three instrument/vent connections and also a unique dual-port design for primary isolation on gauge or orifice tap applications. All root valves have a four bolt outside screw and yoke (OS&Y) bonnet design for added strength and reliability. Meets ANSI B31.1 and ANSI B31.3 codes.

Specifications

Materials	CS, SS, Monel®, Hastelloy®, Duplex and other exotic materials
Seat	Metal, Soft and Stellite
Connections	1/2" to 3/4" threaded, welded and flanged
Orifice Sizes	3/16" [4.7 mm], 1/4" [6.4 mm], 3/8" [9.5 mm]
Pressure (max)	6000 psig [414 barg]
Temperature (max)	1000°F [538°C]



Pressure Manifolds

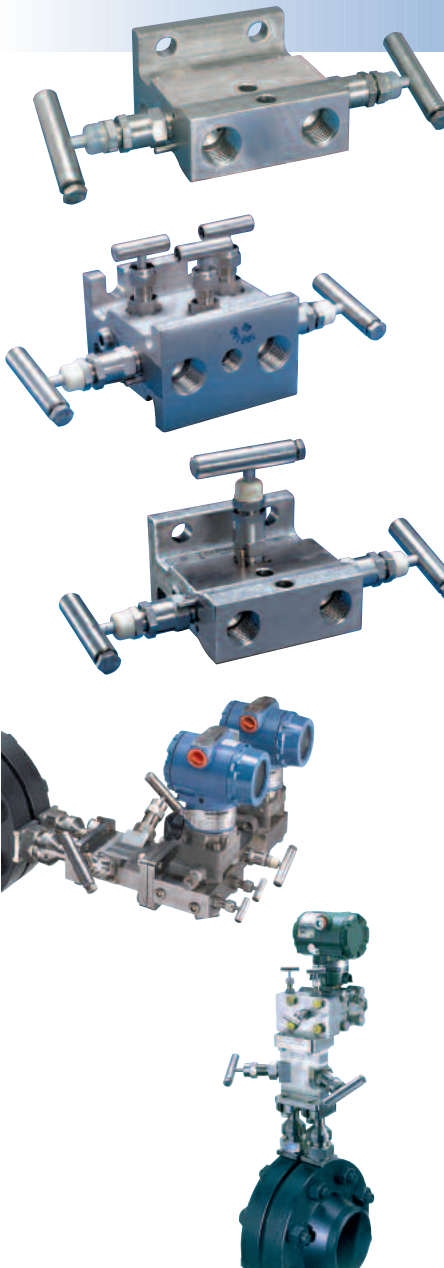


The range of pressure manifolds is suitable for all types of static pressure instruments from gauges to 'smart' pressure transmitters. Available for direct or remote mounting, the pressure manifolds enable isolation, calibration and venting in a single unit.

Specifications

Materials	CS, SS, Monel®, Hastelloy®, Duplex and other exotic materials
Seat	Metal and Soft
Connections	1/4" to 1/2" threaded, flanged, also suitable for direct mounting
Orifice Sizes	1/8" [3 mm], 3/16" [4.7 mm]
Pressure (max)	6000 psig [414 barg]
Temperature (max)	1000°F [538°C]

Flow and Level Manifolds



Anderson Greenwood has the largest and most innovative range of 'differential pressure' flow and level manifolds available in the world with models available for every kind of D/P instrument. These include conventional three and five valve manifolds as well as purpose-designed models for special applications.

Specifications

Materials	CS, SS, Monel®, Hastelloy®, Duplex and other exotic materials
Seat	Metal and Soft
Instrument Connections	1/4" to 1/2" threaded or flange mounting
Process Connections	1/4" to 1/2" threaded or flange mounting
Orifice Sizes	1/8" [3 mm], 3/16" [4.7 mm], 1/4" [6.4 mm], 3/8" [9.5 mm]
Pressure (max)	6000 psig [414 barg]
Temperature (max)	1000°F [538°C]

Close couple or remote mounting of differential pressure transmitters. Patented unique two-piece design allows removal of transmitter for calibration. Block module provides process isolation. Suitable for connection of Coplanar™ and biplanar style transmitters. For gas or liquid service.

Specifications

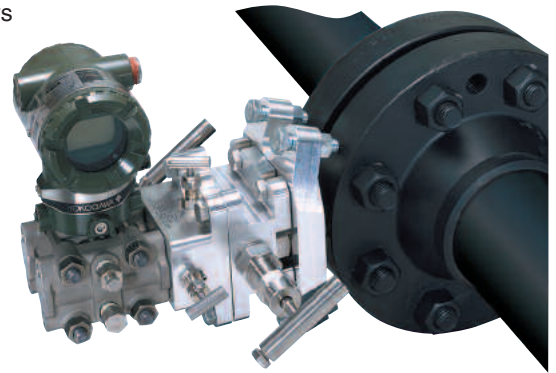
Materials	SS, Monel®, Hastelloy®, Duplex and other exotic materials
Seat	Metal and Soft
Instrument Connections	Flange Coplanar™ or biplanar
Process Connections	1/2" and suitable for direct flange mounting
Orifice Sizes	3/16" [4.7 mm], 1/4" [6.4 mm], 3/8" [9.5 mm]
Pressure (max)	6000 psig [414 barg]
Temperature (max)	1000°F [538°C]

SaddleMount

Close coupling of differential pressure transmitters; close couples on to orifice flange unions. Patented design does not require impulse lines or mounting brackets. Allows substantial cost savings over conventional installations. Enhanced transmitter performance with $\frac{3}{8}$ " [9.5 mm] bore. For gas or liquid service.

Specifications

Materials	SS, Monel®, Hastelloy®, Duplex and other exotic materials
Seat	Metal and Soft
Instrument Connections	Flanged Coplanar™ or biplanar
Process Connections	Direct mount with $\frac{1}{2}$ " MNPT or $\frac{1}{2}$ " Socketweld
Pressure (max)	6000 psig [414 barg]
Temperature (max)	1000°F [538°C]



Keyblok Manifolds

The range of primary isolation double block and bleed valves meets both instrument and piping engineers' specifications, offering significant savings on space, weight, installation and cost. Suitable for line isolation, sample connectors and chemical injection service, KEYBLOK manifolds use ball valves, outside screw and yoke (OS&Y) bonnets and threaded bonnet instrument valves, and are available with a full range of threaded and flanged connections up to API 10K.

Specifications

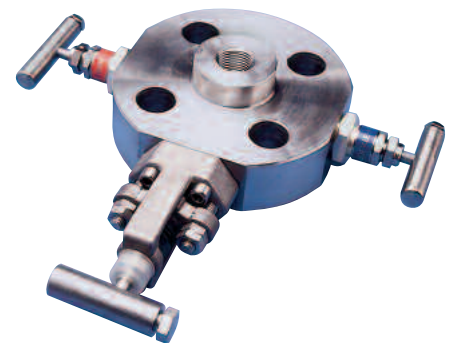
Materials	CS, SS, Duplex and other exotic materials
Seat	Metal and Soft, firesafe as standard
Connections	Threaded, flanged $\frac{1}{2}$ " to 2" ANSI, DIN and API 10K, other specialist bolted connections also available
Orifice Sizes	0.39" [10 mm] - Ball Valves $\frac{1}{4}$ " [6.4 mm] - OS&Y Valve Bonnet $\frac{3}{16}$ " [4.7 mm] - Instrument Valve Bonnet
Pressure (max)	10,000 psig [690 barg]
Temperature (max)	1000°F [538°C]

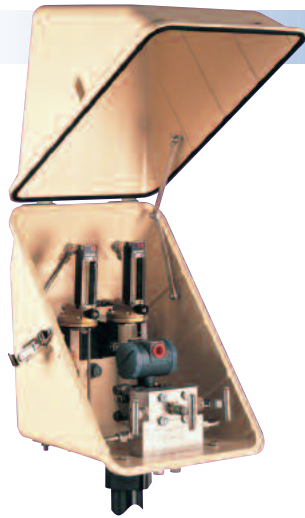


The Monoflange manifolds can be mounted directly onto vertical or horizontal flanged connections, allowing a gauge to be kept in an upright position. Suitable for both primary isolation (double block and bleed) and instrument (block and bleed) duties. Monoflange provides isolation, venting and instrument mounting in a single compact unit. The designs incorporate safety features that limit vibration and reduce the overall height of a gauge installation.

Specifications

Materials	CS, SS, Duplex and other exotic materials
Seat	Metal
Instrument Connections	Threaded, 360° swivel connection and flanged
Process Connections	Flanged $\frac{1}{2}$ " to 2" ANSI, DIN and API 10K
Pressure (max)	10,000 psig [690 barg]
Temperature (max)	1000°F [538°C]



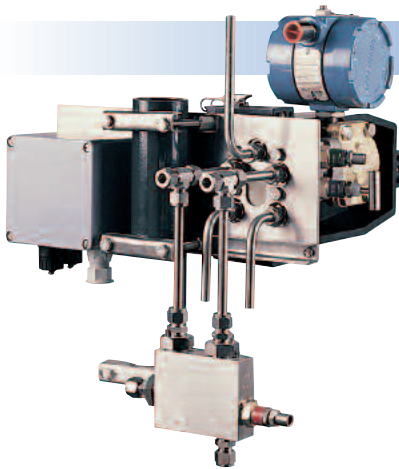


Instrument Protection Systems

Anderson Greenwood instrument protection systems provide a strong weatherproof barrier for every type of instrument installation, both on and offshore, and have been installed in some of the harshest industrial climates in the world. Instrument enclosures prevent exposure to harmful UV rays and can be supplied for temperatures from -70°F to +176°F [-70°C to +80°C]. With a range of three standard sizes of enclosures and a purpose designed range of integrated manifolds, heaters and accessories, this unique system sets the standard in instrument protection.

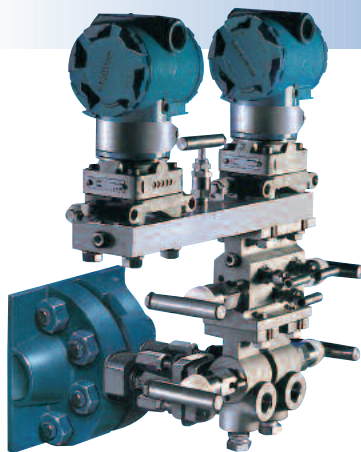
Specifications

- Enclosures** Manufactured from tough fire retardant GRP, weatherproof to IP66, anti-static and insulated options available.
- Manifolds** A complete range of integral base and back mounted 2, 3 and 5 valve manifolds suitable for liquid and gas service are available.



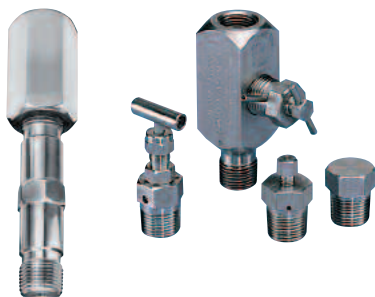
Modular Mounting Systems

The Modular Mounting System for instrument impulse line installations has been developed in conjunction with Shell International (SIPM) and has particular applications in the petrochemical and refining industries. Based on a standard mounting plate, it allows components to be either pre-assembled in the workshop or assembled at a later stage providing maximum flexibility without compromising quality and safety. The Modular Mounting System has a full range of manifolds for differential pressure, pressure and gauge applications and accessories including GRP enclosures, heating blocks, seal pots, purge blocks and test connection boxes.



ACCU-Mount™ Systems

Anderson Greenwood's ACCU-Mount™ system is designed for the installation of instruments on fiscal metering applications. The system provides close coupling to the orifice tap and full porting to reduce any possible measurement inaccuracy through induced square root error. The system also has a range of other components to ensure the complete installation has full porting and the flexibility for single or multiple mounting of instruments.



A range of accessories complementary to instrument valves and manifolds allow maximum versatility and flexibility. Accessories include bleeder valves, bleed plugs and bleed tees, gauge adapters and gauge syphon, kidney flanges (futbols) and air distribution manifolds.

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Instrument Valve Products Overview

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