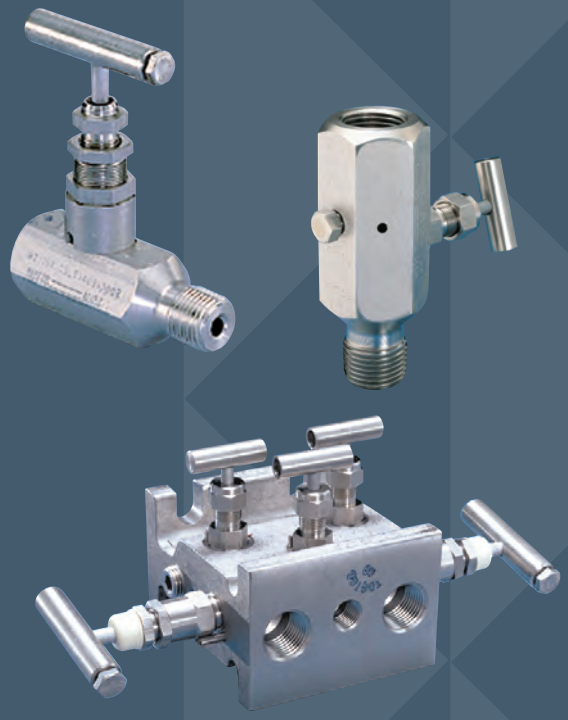
PENTAIR

VALVES & CONTROLS



ANDERSON GREENWOOD INSTRUMENTATION PRODUCTS

INSTRUMENT VALVES PRODUCT OVERVIEW

ISSUED NOVEMBER 2012

Leading Instrument Valve Solutions

Anderson Greenwood Instrumentation is your best choice for Instrument Valves, Manifolds, and Instrument Enclosure Systems. We offer a full range of products that are manufactured and built to perform. With more than four decades of innovative engineering expertise, combined with the trusted global presence of Pentair Valves & Controls, Anderson Greenwood Instrumentation is one of the world's single sources for instrumentation solutions.

Built on a firm foundation of technical expertise, Anderson Greenwood Instrumentation helped set the standard for instrumentation technology advancements in the 1950s in precision valves for the flourishing Aerospace Industry. This knowledge has continually expanded, culminating in the company's present position of manufacturing the broadest range of instrument valve products available. Anderson Greenwood Instrumentation serves many industries and applications. In order to fulfill our continuing commitment of providing customers with complete product choices, we 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 invests in innovative factory and manufacturing automation processes. The continuous improvement inherent in the quality management process helps ensure the integrity and performance of every Anderson Greenwood Instrumentation product.

Complete Product Range

Engineering designs capable of achieving 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 family of standard valves and manifolds, Anderson Greenwood Instrumentation can also develop 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 solved 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 on process flanges, helping provide maximum safety with minimum vibration. The monoflange also combines compactness with easy access in the field, as a result of its versatile design allowing for horizontal or vertical mounting.

To help 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 helps provide a range of instrument installations for pressure level and flow measurement. All Anderson Greenwood Instrumentation valves and manifolds are also complemented by a full suite of accessories.

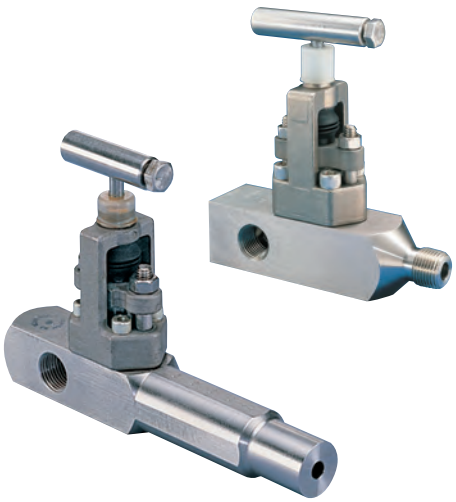
Hand Valves

Features:	Anderson Greenwood hand valves are suitable for all instrument isolation duties, helping provide 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], there is a hand valve for even the most severe service, available in standard or exotic materials.
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

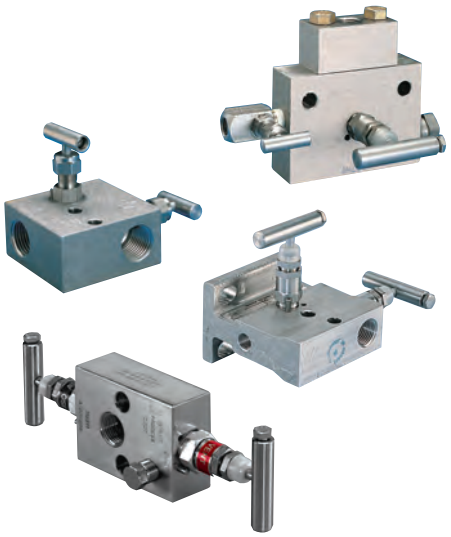
Features:	Anderson Greenwood gauge valves include multi-port and block and bleed styles suitable for gauge isolation, calibration and venting with a choice of either a globe pattern or straight-through bore design. A wide choice of end connections and comprehensive range of standard gauge accessories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

Primary Isolation Gauge Root Valves



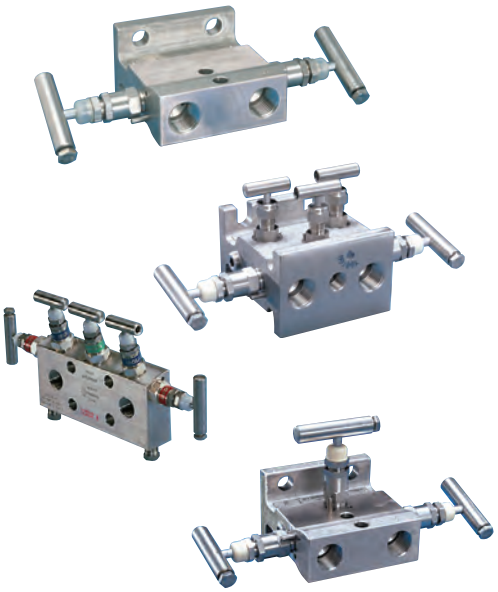
Features:	M5K root valves are available in two standard designs, multi-port with three instrument/vent connections and a unique dual-port design for primary isolation on gauge or orifice tap applications. All root valves have a four bolt outside screw and yoke (OS&Y) bonnet design for added strength and reliability. Meets ANSI B31.1 and ANSI B31.3 codes.
Materials:	CS, SS, Monel®, Hastelloy®, Duplex and other exotic materials
Seat:	Metal, Soft and Stellited
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



Features:	Our 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.
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

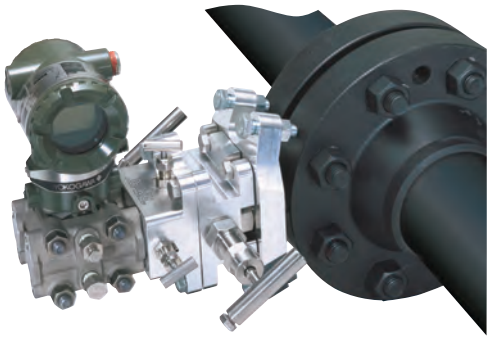


Features:	Anderson Greenwood has the largest and most innovative range of "differential pressure" flow and level manifolds available with models for virtually every type of D/P instrument. These include conventional three and five valve manifolds as well as purpose-designed models for special applications.
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]

IntelliMount™ Systems

Features:	We offer close couple or remote mounting of differential pressure transmitters. Patented unique two-piece design helps allow transmitter removal for calibration. Block module provides process isolation. Suitable for connection of Coplanar™ and biplanar style transmitters. For gas or liquid service.
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



Features:	Close coupling of differential pressure transmitters; close couples on to orifice flange unions. Patented design does not require impulse lines or mounting brackets. Allows for substantial cost savings over conventional installations. Enhanced transmitter performance with 3/8'' [9.5 mm] bore. For gas or liquid service.
Materials:	SS, Monel®, Hastelloy®, Duplex and other exotic materials
Seat:	Metal and Soft
Instrument Connections:	Flanged Coplanar™ or biplanar
Process Connections:	Direct mount with 1/2'' MNPT or 1/2'' Socketweld
Pressure (max):	6000 psig [414 barg]
Temperature (max):	1000°F [538°C]

Keyblok Manifolds

Features:	Our 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. They are also available with a full range of threaded and flanged connections up to API 10K.
Materials:	CS, SS, Duplex and other exotic materials
Seat:	Metal and Soft, firesafe as standard
Connections:	Threaded, flanged 1/2'' to 2'' ANSI, DIN and API 10K, other specialist bolted connections also available
Orifice Sizes:	0.39'' [10 mm] – Ball Valves 1/4'' [6.4 mm] – OS&Y Valve Bonnet 3/16'' [4.7 mm] – Instrument Valve Bonnet
Pressure (max):	10,000 psig [690 barg]
Temperature (max):	1000°F [538°C]

Monoflange

Features:	Monoflange manifolds can be mounted directly on 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 design incorporates safety features that help limit vibration and reduce the overall height of a gauge installation.
Materials:	CS, SS, Duplex and other exotic materials
Seat:	Metal
Instrument Connections:	Threaded, 360° swivel connection and flanged
Process Connections:	Flanged 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

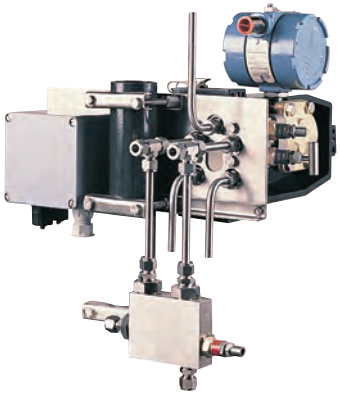
Features: Anderson Greenwood instrument protection systems help provide a strong weatherproof barrier for every type of instrument installation, both on and offshore. They have even been installed in some of the harshest industrial climates in the world. Instrument enclosures are designed to prevent 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 enclosures and integrated manifolds, heaters and accessories, this unique system helps set the standard in instrument protection.

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

Features: 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.

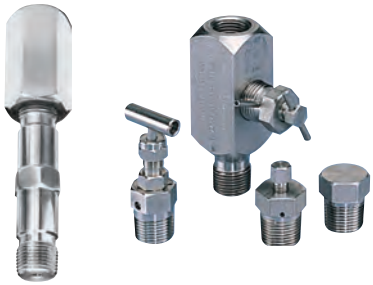


ACCU-Mount™ Systems

Features:

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 help reduce any possible measurement inaccuracy through induced square root error. The system also has a range of other components to help ensure the complete installation has full porting and the flexibility for single or multiple instrument mounting.

Accessories



Features:

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

PENTAIR

VALVES & CONTROLS

5500 WAYZATA BLVD # 800, MINNEAPOLIS, MN 55416 WWW.PENTAIR.COM/VALVES