



Instruments

Pls contact KentIntrol@unitconcept.com for more details and pricing

kentintrol

PNEUMATIC AND ELECTRO-PNEUMATIC

Our two valve positioners are designed to move actuators, in accordance with a control signal, when used with a control valve. Options include pneumatic and electro-magnetic, both of which are built to withstand rough handling and vibration.



PNEUMATIC AND ELECTRO-PNEUMATIC OPTIONS

Both versions of our valve positioners come with a robust, rugged case. Depending on the specification, this is made from either aluminium or stainless steel. It is then mounted on a heavy-duty plate, enabling it to operate reliably and effectively, even in the presence of significant vibration.

P3300 PNEUMATIC VALVE POSITIONER

The P3300 can be made of either aluminium or stainless steel. It operates at temperatures as low as -20°C as standard, but can be adapted to operate as low as -40°C where required by the specification. It operates with very high levels of accuracy and repeatability, with very low levels of hysteresis.

P3300i ELECTRO-PNEUMATIC VALVE POSITIONER

The P3300i is a milliampere signal version, which includes all of the main features of the P3300, but can operate from a standard 4-20mA signal.

PERFORMANCE SPECIFICATIONS

REPEATABILITY	<0.3%
ACCURACY	+/-1%
HYSTERESIS	<0.5%
TEMPERATURE RANGE (OPERATING)	-20°C to 60°C (or -40°C to specification)
ENVIRONMENTAL PROTECTION	IP55
CONSTRUCTION (CASE)	Epoxy-painted aluminium as standard (stainless steel option). Aluminium/Belzona P65 (NEMA 4X)
CONSTRUCTION (COVERS)	Epoxy-painted polyester/aluminium as standard (stainless steel option)
CONSTRUCTION (INTERNALS)	Brass/steel/aluminium (all stainless steel option)
ADJUSTMENTS	Zero and span adjustments on the I/P module are easily accessible and non-interactive. Intelligent electro-pneumatic positioner, TZID-C
INPUT	4-20mA with connector plug for LKS adaptor. FSK module for frequency shift keying.
OPTIONS	4-20mA with connector plug for LKS adaptor. FSK module for frequency shift keying.

SERIES A VALVE AIRSETS

Our Valve Airsets and Air Filters are designed to work with control valves and actuators. They are lightweight, durable and can operate in even the most hostile service conditions and environments. The Series A Airset range consists of three airsets with different port sizes and flow rates to suit different applications. They share a number of common features and are designed to offer long-life performance even in hostile environments.

All are provided with an epoxy-coated bracket and feature a metal bowl, which is easy to remove.



TECHNICAL SPECIFICATION

BODY/BOWL MATERIAL	Epoxy-coated aluminium
MAXIMUM SUPPLY PRESSURE	15 bar
MAXIMUM OPERATING PRESSURE	10 bar
AMBIENT AND MEDIA TEMPERATURE	5 - 60°C
DRAIN	Manual

SERIES A11	<ul style="list-style-type: none">Inlet/outlet ports: 1/4" NPTFFlow rate: 2,000 normal litres per minute
SERIES A12	<ul style="list-style-type: none">Inlet/outlet ports: 1/2" NPTFFlow rate: 5,000 normal litres per minute
SERIES A13	<ul style="list-style-type: none">Inlet/outlet ports: 1" NPTFFlow rate: 8,000 normal litres per minute

316 STAINLESS STEEL FILTER REGULATOR

This stainless steel combination unit is used for filtration and pressure regulation of compressed air. It is widely used for the offshore, food, pharmaceutical and other manufacturing applications. It is manufactured from 316 aluminium throughout and has large flow paths to minimise pressure drops. Its rolling diaphragm design allows for very precise adjustments.



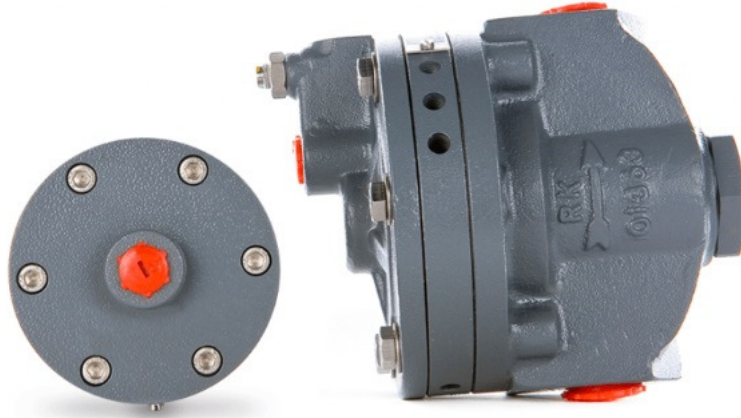
TECHNICAL SPECIFICATION

INLET/OUTLET PORTS	1/4" and 1/2" NPTF
FLOW CAPACITY	1/4" - 130 SCFM, 1/2" - 212 SCFM
MAXIMUM INLET PRESSURE	20 Bar
REGULATED PRESSURE	0.50 to 12 Bar
WORKING TEMPERATURE	-20°C to 80°C (low temperature version to -50°C)
DRAIN	Manual

SERIES 1000 AND SERIES 3000

Our Series 1000 and Series 3000 Valve Volume Boosters can help improve the stroking speed of an actuator, or increase the flow capacity. They reproduce pneumatic signals in a 1:1 ratio. For maximum performance, when used on diaphragm actuators, the volume booster unit should be installed as close as possible to the actuator.

Other features of our volume boosters include:



FAST RESPONSE

This can greatly increase actuator stroking speeds



HIGH STABILITY

Allow a normal slow actuator response to small signal changes



LOW AIR CONSUMPTION

The soft seat enables a tight shut-off, reducing air consumption

Both of our volume boosters can be made from either aluminium or stainless steel. They can also operate in temperatures as low as -40°C. The more detailed technical specification of each is as follows:

SERIES 1000 TECHNICAL SPECIFICATION

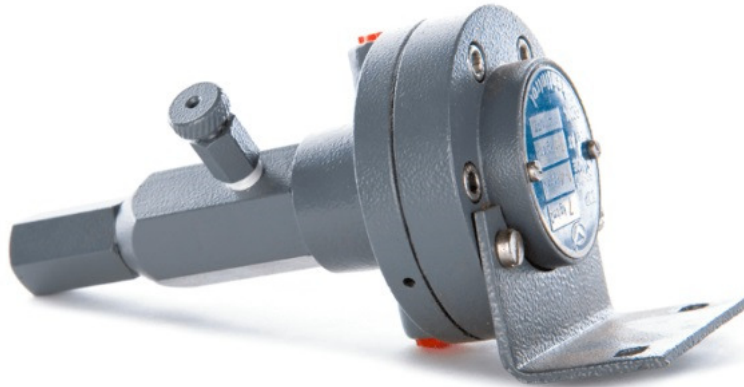
PORT SIZE	¼" NPTF
MAXIMUM SUPPLY	100 psi (6.9 Bar)
INPUT/OUTPUT RATIO	1:1
LINEARITY	0.4%
TEMPERATURE	-40°C to 70°C
FLOW CAPACITY	10 SCFM
MATERIALS	Aluminium & 316 Stainless Steel

SERIES 3000 TECHNICAL SPECIFICATION

PORT SIZE	½" NPTF
PIPE CONNECTION SIZE	¾" NPTF
MAXIMUM SUPPLY	150 psi (10.3 Bar)
INPUT/OUTPUT RATIO	1:1
LINEARITY	0.4%
TEMPERATURE	-40°C to 70°C
FLOW CAPACITY	43 SCFM
MATERIALS	Aluminium & 316 Stainless Steel

PA SERIES

Our PA Series valve airlocks are designed to help actuators to work more effectively. They do so by blocking the pressure in the diaphragm chamber of the actuator when the air pressure falls below the desired set value (1.0 - 4.0 kg/cm²). The design of the PA Series features a built-in relief valve which exhausts air from the diaphragm chamber if there is a need to manually operate the actuator. This prevents damage to the diaphragm. The PA Series airlocks form part of our wide range of instruments which also includes actuators, positioners, volume boosters, air filters and airsets.



FEATURES

FEATURES

FEATURES OF THE PA SERIES INCLUDE:

- Robust construction for long-life performance
- Compact, lightweight design
- Available in epoxy-painted aluminium or stainless steel
- Easily adjustable
- Mounting bracket supplied as standard
- Connector - 1/4" NPT

SERIES G,C & D

Our range of Pneumatic Actuators have been designed to meet the needs of all applications. Typical users include onshore, offshore and power applications. They have been used effectively and reliably for many years in each of these applications. Whilst the specifications vary, they all give you the peace of mind of knowing that they have been professionally designed and manufactured. We use high quality materials, with full traceability through all stages of the manufacturing process.

Every actuator is manufactured within our BS/EN 9001 quality-assured environment and comprehensively tested at our dedicated in-house testing facility. We also offer a wide range of instruments to help complete the installation.



SERIES G

Pneumatically-operated, spring-opposed diaphragm actuators

Our Series G actuators use an involute rolling diaphragm, which permits long travels without the expensive hardware normally associated with rolling diaphragms. It uses a modular design, which allows for optional extras to be easily retrofitted, without modifying the basic unit.

SIZES	75, 150 and 300sq in
TRAVELS	¾" to 12" (19mm to 300mm)
MINIMUM WORKING TEMPERATURE	90C (Standard), -50C (Where required)

FEATURES

OTHER FEATURES OF THE SERIES G DIAPHRAGM ACTUATOR INCLUDE:

- Simple cost-effective design
- Long life and reliability
- Low cost, simple maintenance
- High-performance, low-friction rolling diaphragm delivers low levels of hysteresis, comparable with piston actuators



SERIES C

Pneumatically-operated, spring-return piston actuators

The piston is fitted with seals and operates in a 'honed' steel cylinder, delivering smooth travel and minimising hysteresis and wear. Designed without linkages and with minimal working parts, this actuator offers built-in reliability and low maintenance costs.

Series C actuators are always operated through a valve positioner, with two types available to suit different applications.

The frequency response of this piston actuator is extremely high, and is superior to comparable diaphragm units. Its linear response to a signal change is unaffected by increasing or decreasing pressure, with sensitivity being maintained over the working range.

SIZES	300sq in
TRAVELS	¾" to 12" (19mm to 300mm)
MINIMUM WORKING TEMPERATURE	90C (Standard), -50C (Where required)



SERIES D

Double-acting, pneumatically-operated piston actuators

Series D actuators are created by removing the spring return feature from a Series C actuator and inserting a seal plate, providing a double-acting piston. Extra power may be obtained for the air fail action by releasing a stored volume of air contained in a separate tank.

Ancillary equipment comprising a three-way switching valve, lock-up valve and a check valve is required, in addition to the volume tank and pipework. The existing positioner must be set for double-action operation.

SIZES	300sq in
TRAVELS	¾" to 12" (19mm to 300mm)
MINIMUM WORKING TEMPERATURE	90C (Standard), -50C (Where required)