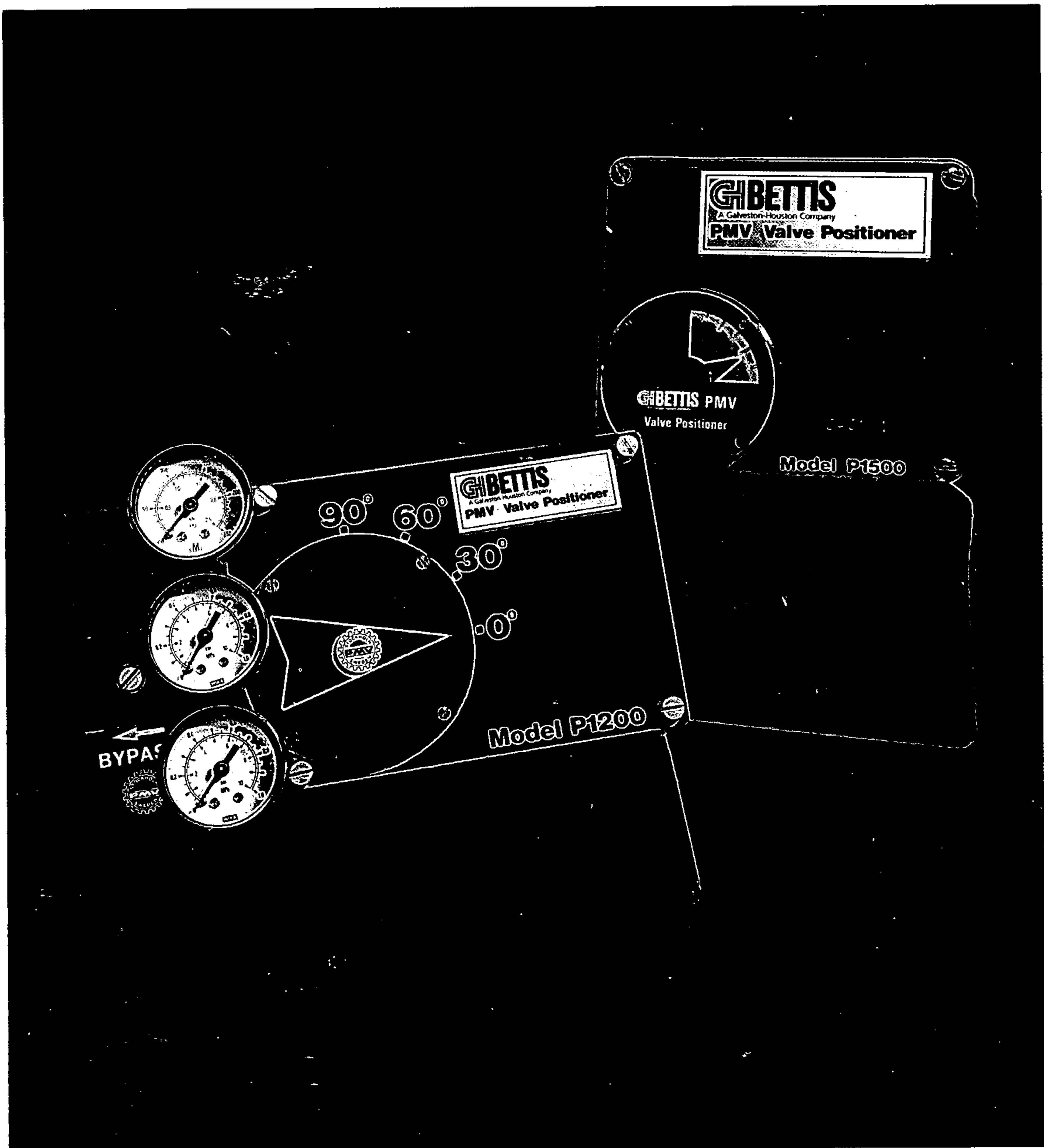
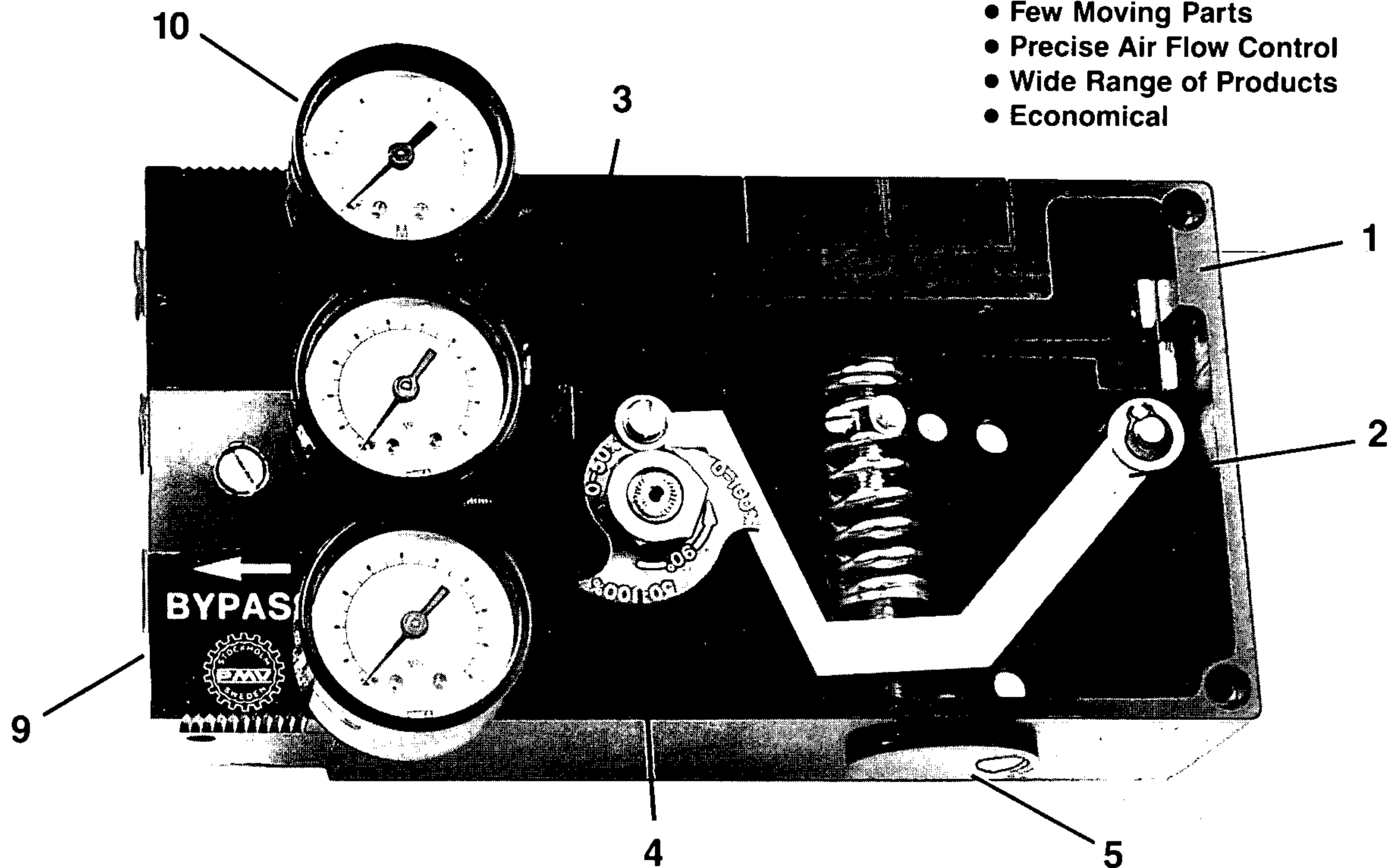


PMV Pneumatic Positioners



Design and Construction

- Simple Dependable Design
- Few Moving Parts
- Precise Air Flow Control
- Wide Range of Products
- Economical



Mechanical Components

GH-Bettis/PMV Pneumatic Positioners offer a wide range of unique products which provide rugged construction and design features for the most demanding positioning applications. These positioners complement the GH-Bettis actuator product line but can conform to any actuator performance requirements.

Two simple yet rugged design concepts can solve positioning problems by utilizing one of two GH-Bettis standard construction models — Single Acting, Model P-1200, or Double Acting, Model P-1500.

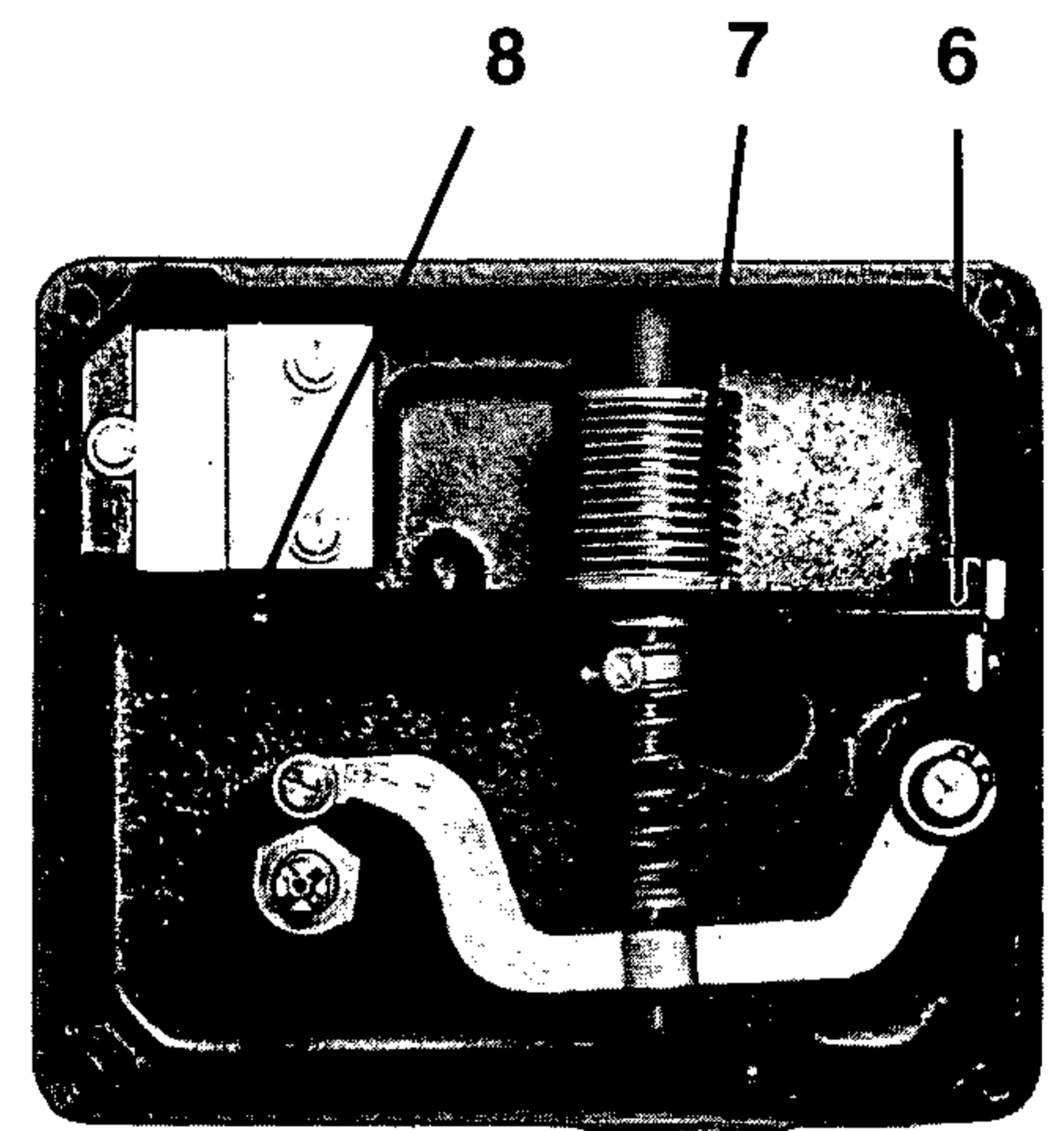
Both Models are rigidly constructed of long lasting rugged materials to insure a dependable life cycle, even in extreme environments. Standard model construction includes: (1) complete mechanism protection by a heavy duty corrosive resistant housing and cover; (2) stainless steel and corrosive resistant components which insure accurate and dependable performance. Special models can be provided in stainless steel or marine bronze construction.

Simplicity of design is GH-Bettis/PMV Positioner's strongest feature. All Models are designed to provide few moving parts, rigid beams and precise

air flow control in an economical package. Each model is provided with a large easy to read positioner indicator. (3) Units are designed to provide high air delivery capacity yet utilize low air consumption with a unique stainless steel gold plated high capacity or low capacity pilot valve. (4) Interchangeable cams offer precise positioning ranges to meet customer requirements and (5) external zero adjustment allows easy access calibration. Few working parts make the GH-Bettis/PMV Positioner easy to maintain and service.

The Positioner is also vibration resistant. A balance arm (6), bellows (7) and spool (8) are so constructed that vibrations from pipes or pumps will have minimum effect on the positioner performance. Extreme vibration resistance can be handled by a special high vibration model.

Single acting models can be provided with the following optional equipment: (9) an integral by-pass valve which connects the instrument air directly to the actuator (10) gauges which are mounted directly to the positioner, and mounting kits for Bettis Actuators.

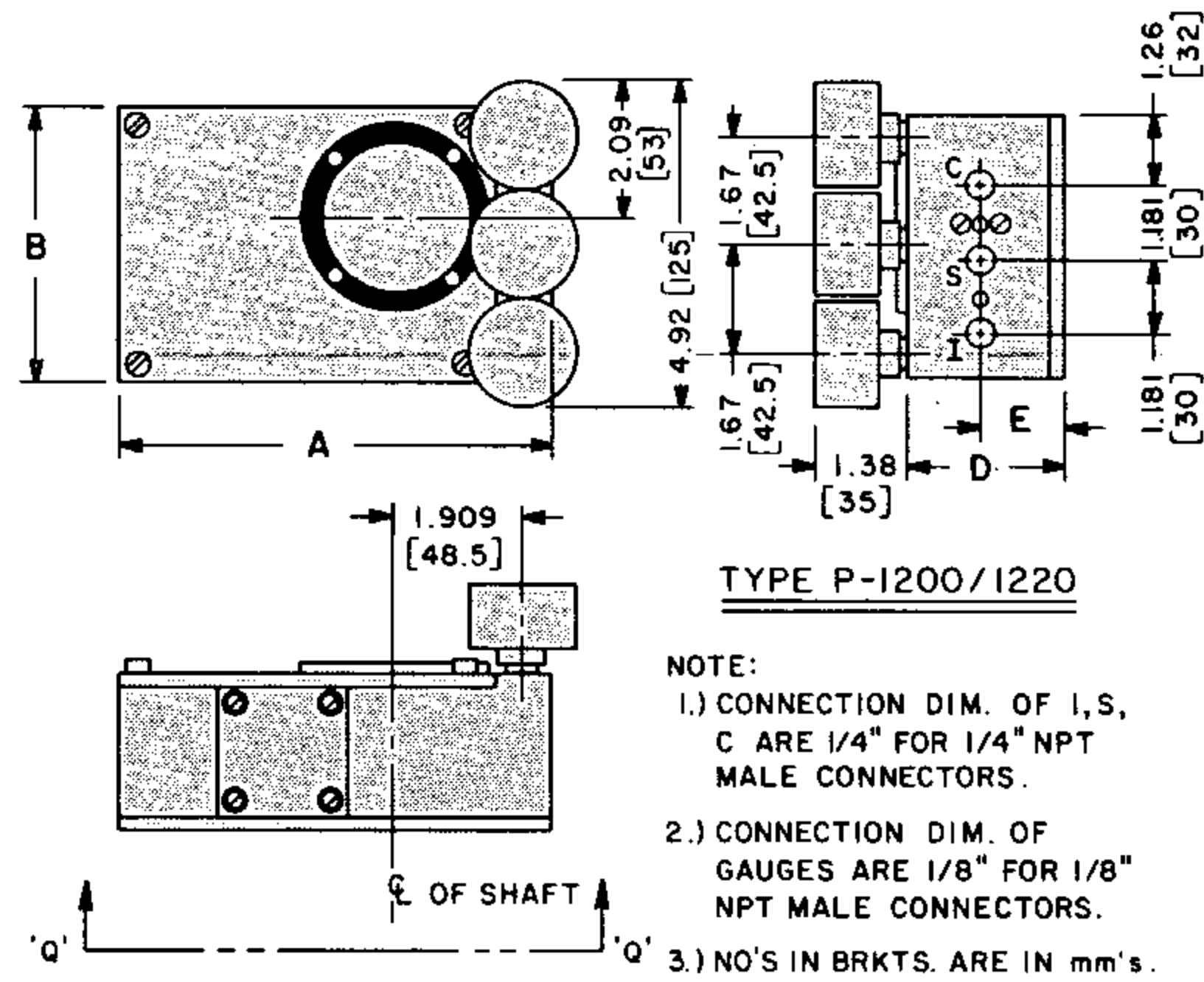


Double Acting

Double acting models are ideally suited for quarter turn actuators but can also position 20-360 degree movements. This model can be changed from a direct to reverse acting positioner — depending upon customer requirements and may also be modified to function as a single acting unit. Optional equipment includes gauges and mounting kits for Bettis Actuators.

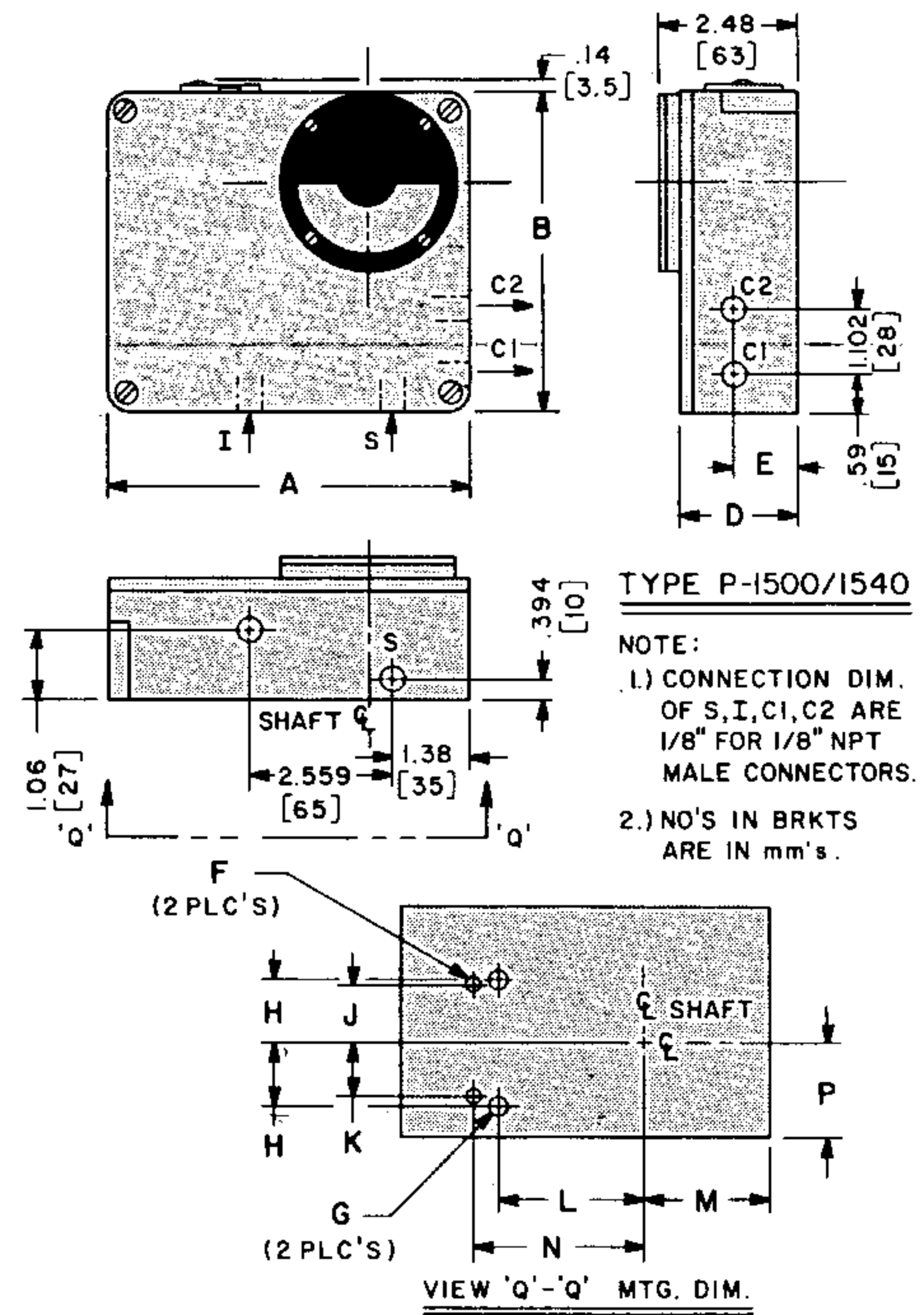
Engineering Data

Single Acting Unit



PMV ROTARY POSITIONERS													
TYPE	A	B	D	E	F	G	H	J	K	L	M	P	
P-1200 /1220	6.50 [165]	4.06 [103]	2.28 [58]	1.18 [30]	.280 DIA. [7.1]φ	5/16" -UNC	1.114 [28.3]	1.024 [26]	.945 [24]	2.531 [64.3]	2.24 [57]	2.992 [76]	1.65 [42]
P-1500 /1540	6.42 [163]	5.51 [140]	2.09 [53]	1.06 [27]							1.69 [43]	1.57 [40]	

Double Acting Unit



Performance Data

SPECIFICATION	DOUBLE ACTING	SINGLE ACTING
Air Consumption		
30 PSI Supply	0.16 SCFM	0.25 SCFM
60 PSI Supply	0.28 SCFM	0.35 SCFM
85 PSI Supply	0.35 SCFM	0.42 SCFM
Air Delivery		
85 PSI Supply	8.5 SCFM	8.5 SCFM
High Capacity	—	15.9 SCFM
Air Supply (max)	150 PSI	150 PSI
Amplification Factor at 85 PSI Supply	250	125
High Capacity	—	155
Cam Rotation Angle	90°, Linear characteristic is standard, split range, linear or non-linear characteristics are also available.	90° is standard
Connections	1/8" NPT	1/4" NPT
Gauges	Four with tee's	3 No Tees
Hysteresis	Less than 0.5%	Less than 0.5%
Input Signal	3-15 PSI Standard 3-9 PSI Splint Range Option 9-15 PSI Standard Cam	3-15 PSI Standard 3-9 PSI
Linearity	Greater than 99.5%	Greater than 99.5%
Repeatability	Greater than 99.7%	Greater than 99.7%
Sensitivity	Greater than 99.8%	Greater than 99.8%
Temperature Limit	0-200°F Standard Specials Available	5-175°F Standard
Weight	4 pounds	4.95 Pounds
Zero Adjustment	External Access	External Access

Other Products

- GH-Bettis offers a wide range of pneumatic valve positioners designed to meet the specific needs of the customer.
- P-1000 Provides a double acting linear positioner for pneumatic cylinders.
 - P-1220 Provides the same single acting service as M-1200 but with a higher air delivery capacity.
 - P-1520 Provides the same double acting service as M-1500 but with a higher air delivery capacity.
 - P-1540 Provides a special high vibration resistance model for pneumatic double acting rotary actuators and cylinders.
 - P-1560 Provides a special construction with built-in pneumatic or electric limit switches in a double acting rotary positioner for pneumatic actuators and cylinders.
 - P-1600 Provides a special construction double acting rotary actuator of marine bronze, brass and stainless steel for pneumatic actuators and cylinders.
 - P-1620 Provides the same quality design as the M-1600 but can supply higher air delivery capacity.
 - P-1700 Provides a special construction of all stainless steel (316 SS).
 - P-2000 Provides electro-pneumatic double acting rotary positioner service for pneumatic actuators and cylinders.
 - P-2020 Provides the same quality construction as M-2000 but with high air delivery capacity.