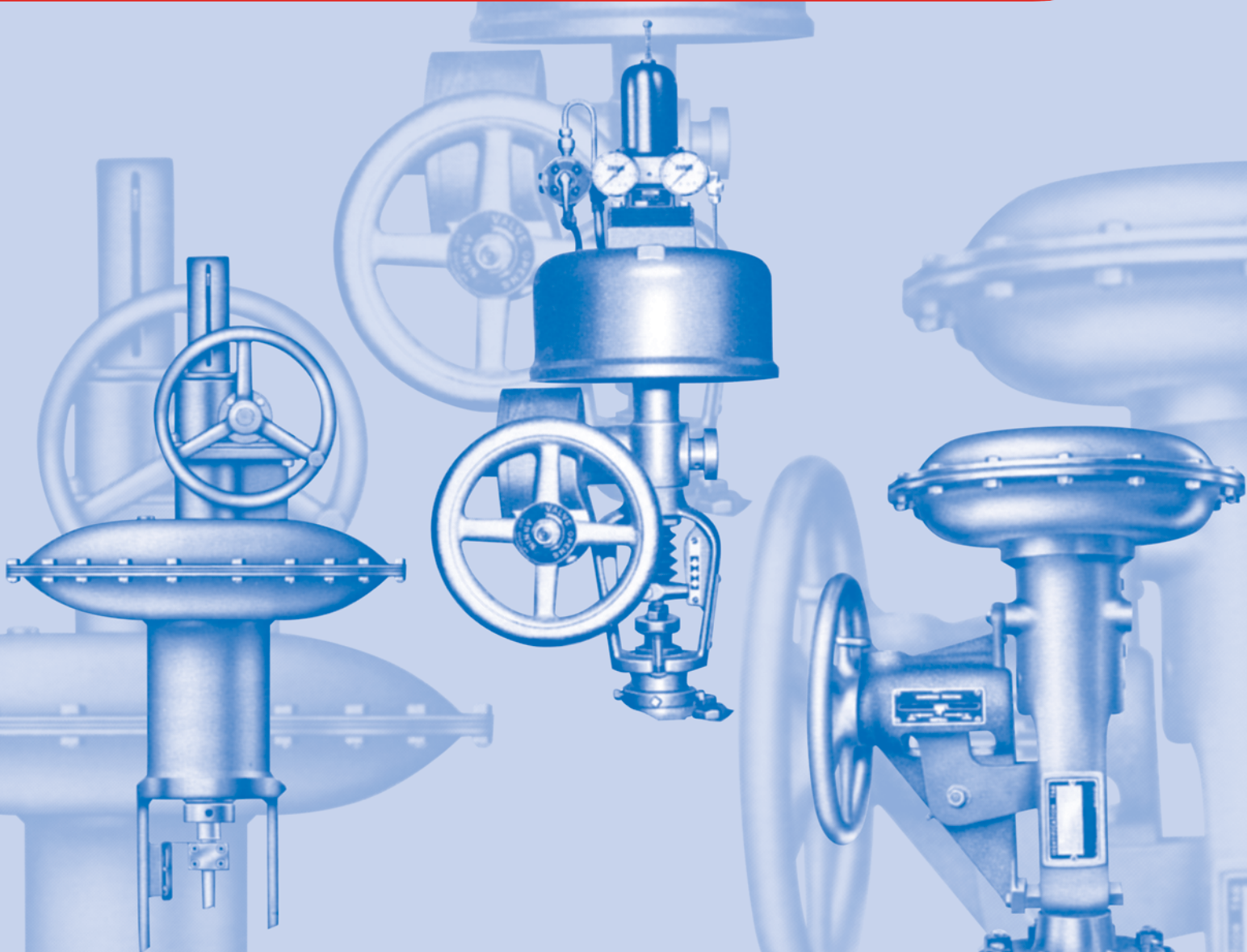


Auxiliary Handwheels for Masoneilan® Control Valves

Specification Data

CS8000

12/87



**Auxiliary Manual
Power for Spring-
Diaphragm,
Domotor and
Cylinder Operated
Control Valves**



Provide a means of manually operating control valves in emergency, during start-up, and in the event of air failure

Masoneilan side-mounted handwheels

Side-mounted continuously connected handwheels are operated without the use of clutches of any kind. Handwheel position indicators are provided. Five sizes are available, combining compactness with adequate power to operate the valves for which each handwheel is designed. They are not available on valves with bellows seal bonnets.

6A series These bell crank lever types are externally mounted on the yoke. They provide adjustable stops to limit the extent of valve travel in either direction, but not both. A pad cast on the side of the handwheel bracket provides for the attachment of an air supply valve.

6A series handwheels are designed for operation of 3-15 psi actuators. On valves with 6-30 psi spring range they are recommended for setting limit stops, or for occasional emergency manual operation. This type of handwheel may be used on direct and reverse actuators.

8A series 8A series handwheels are designed with a worm gear drive to provide the extra power required by large-size valves. The gears are contained in a permanently lubricated gear box. The high quality of material and the precise construction used in the manufacture of the gears, power screw and thrust bearings assure trouble-free operation and minimum effort to operate. Clockwise rotation of the handwheel normally moves the stem upward.

The 8A series handwheel is available on either direct or reverse actuators. It may also be used as an adjustable up-travel stop on the direct actuator, or an adjustable down-travel stop on the reverse.

Limit stops On top- and bottom-guided valves, an adjustable limit stop can be supplied in the bottom flange. It can be used to maintain minimum flow on fuel gas heater service or where it is desirable to limit plug travel in either the closing direction (air-to-close) or opening direction (air-to-open). Non-adjustable stops can also be supplied in the actuator case for special applications.

Auxiliary handwheel (Domotor and cylinders)

The side-mounted, auxiliary handwheel is available with A, B, C and D Domotor and cylinder-actuated control valves. It provides manual operation by direct declutchable connection to the actuator stem. A bypass valve is installed with the handwheel to equalize pressure across the piston. The handwheel is designed to handle with ease high plug off-balance force, plus the force supplied by fail safe springs in the actuator. The handwheel unit operates independently of the actuator and therefore all normal maintenance of Domotor or cylinder may be performed with the valve in service.

Available sizes

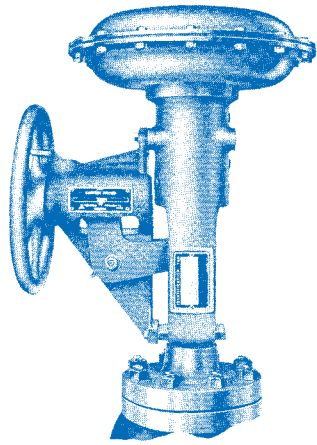
Side-Mounted

Type	Actuator Size	Maximum Stroke (in.)	Actuator Spring Range (psi)
6A1	9	¾	3-15, 6-30
	11	1	3-15, 6-30*
6A2	13	1½	3-15, 6-30*
	13	2	3-15, 6-30*
6A3	15	2	3-15, 6-30*
	18	2½	3-15, 6-30*
8A	18	4	†
8A	24	4	†

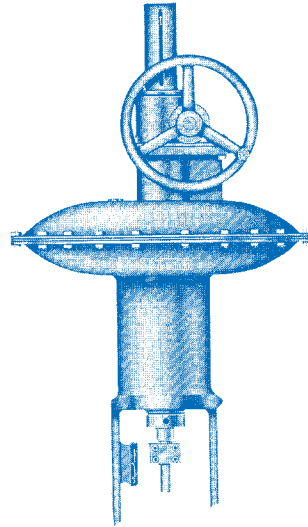
* For 35 psi supply to the actuator, handwheels should only be used as a limit stop, or for occasional emergency manual operation.

† Consult your Masoneilan Representative.

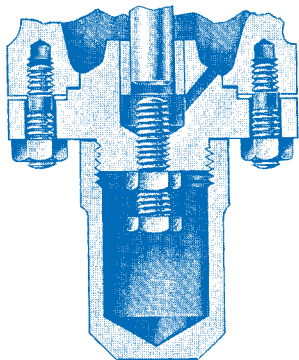
Dimensions



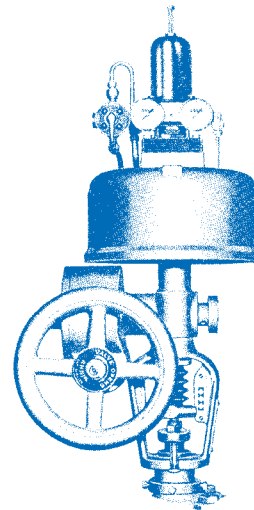
6A Series Side-Mounted



8A Series Side-Mounted



Bottom Flange Limit Stop

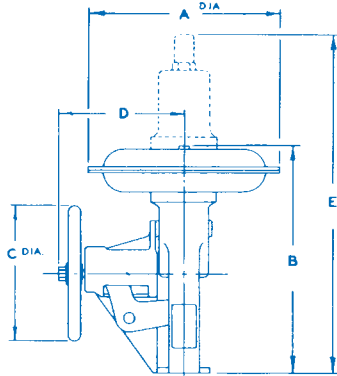


Side-Mounted Handwheel
for Annin
Domotors and Cylinders

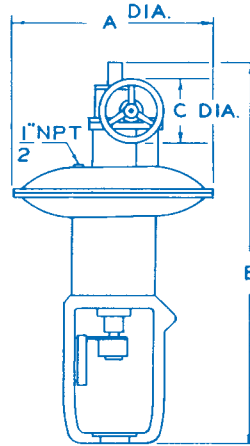
Dimensions

Side-mounted handwheels

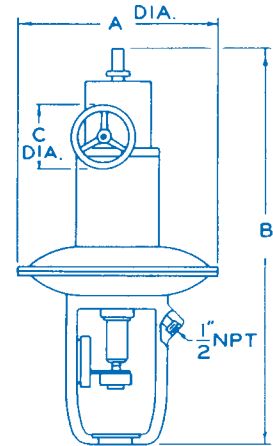
Type	Actuator Size	A	B	C	D	E
6A1	9	11	16 $\frac{1}{8}$	9	8 $\frac{3}{4}$	23 $\frac{3}{4}$
	11	13	16 $\frac{1}{8}$	9	8 $\frac{3}{4}$	24 $\frac{1}{8}$
6A2	13	15	20 $\frac{1}{8}$	12	10 $\frac{7}{8}$	29 $\frac{1}{8}$
6A3	15	17 $\frac{1}{2}$	25 $\frac{1}{8}$	18	15	35 $\frac{1}{2}$
	18	20 $\frac{3}{4}$	26 $\frac{1}{8}$	18	15	36 $\frac{1}{4}$
8A	18	20 $\frac{3}{4}$	53	8	—	—
8A	24	27 $\frac{1}{2}$	58	12	—	—



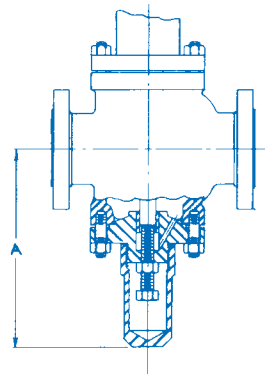
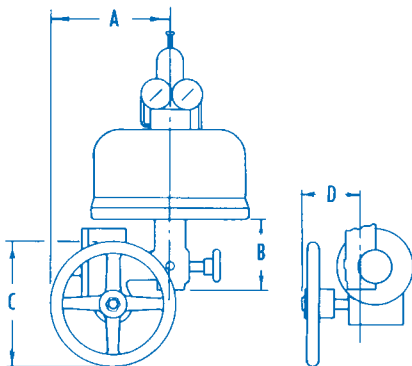
Type 6A



Type 8A



Domotor



Annin side-mounted handwheels

Domotor or Cylinder Series	A	B*	C	D
A	6 $\frac{1}{4}$	4 $\frac{1}{2}$	6	4
B	7 $\frac{3}{4}$	5 $\frac{1}{4}$	8	4 $\frac{1}{2}$
C	9 $\frac{1}{2}$	6	10	5
D	13 $\frac{3}{8}$	18	18	10

* Add dimension B to overall height dimensions listed in Bulletins 358E, 325E and 334E.

Limit stops

Valve Size	A	Valve Size	A
$\frac{3}{4}$, 1	7 $\frac{3}{4}$	2 $\frac{1}{2}$	10 $\frac{3}{4}$
1 $\frac{1}{4}$	9 $\frac{1}{8}$	3	11 $\frac{1}{4}$
1 $\frac{1}{2}$	8 $\frac{1}{4}$	4	11 $\frac{1}{2}$
2	10 $\frac{1}{4}$	6	15 $\frac{1}{4}$

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