

# Air Reservoirs

# M/163, M/164

Port sizes: M/163  $1\frac{1}{8}$ " BSP

M/164  $1\frac{1}{4}$ " BSP

Bore: M/163 63.5mm

M/164 102mm

Operating pressure: 0-10 bar

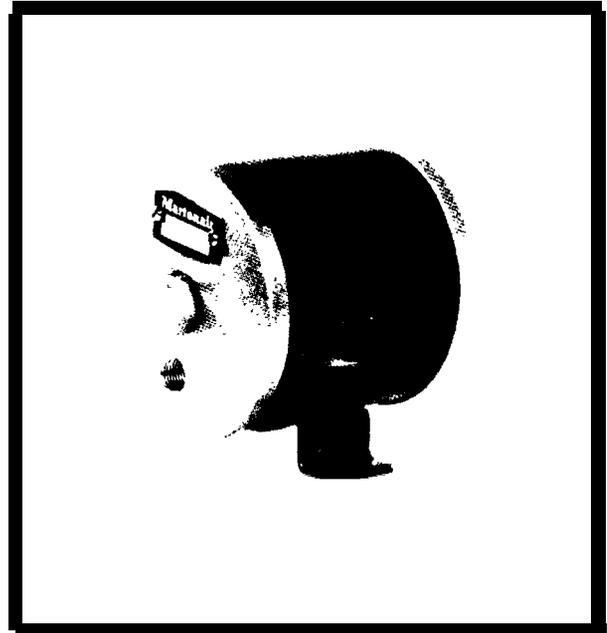
Operating temperature: -20°C to +80°C

**\*Important: Refer to leaflet F1.**

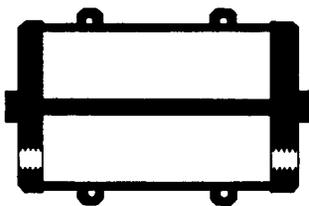
Reservoirs are primarily intended for use in delay circuits in conjunction with flow regulators and pressure-sensitive valves.

The circuit is usually arranged so that the reservoir is connected to the inlet port of an S/151 pilot sequence valve (see sheet B96 page 13) and is slowly charged with pressure air admitted by a flow regulator S/650 (sheet B87). When the pressure in the reservoir has built up to a percentage of the supply pressure, the pilot sequence valve opens to admit a pilot signal to the valve controlling the cylinder or other pneumatic device. The timing ranges quoted are necessarily modified by the volume of the associated piping.

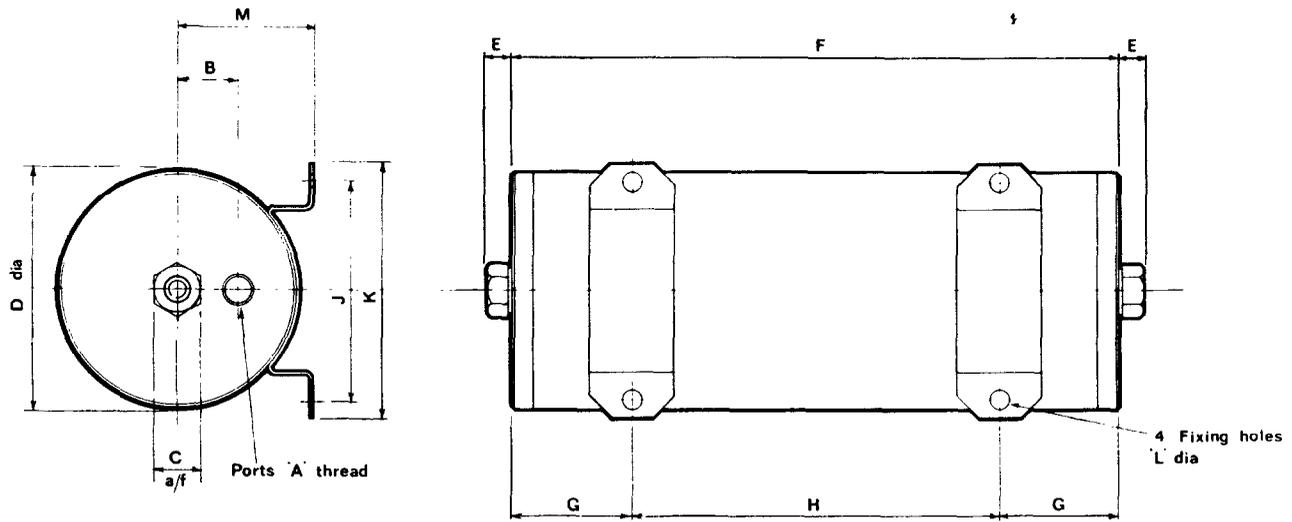
The circuits described are intended to provide a *delay*, not an accurate timing. The repeat accuracy is approximately  $\pm 5\%$ .



Type	Description
M/163	Air reservoir
M/164	Air reservoir

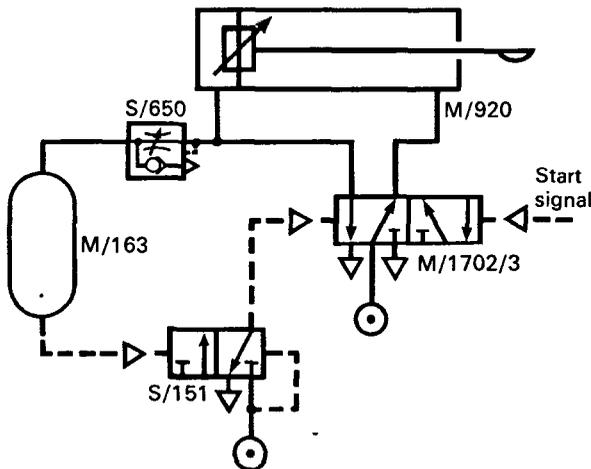


Type	Reservoir bore in mm	Volume in dm <sup>3</sup>	Maximum delay in seconds
M/163/15	63.5	0.15	18
M/163/50	63.5	0.50	60
M/163/100	63.5	1.00	120
M/164/200	102	2.00	240



Type	A	B	c	øD	E	F	G	H	J	K	øL	M
M/163/15	G1/8"	19	13	70	7,5	71	35,5	—	68	81	7	40
M/163/50	G1/8"	19	13	70	7,5	176,5	35,5	105,5	68	81	7	40
M/163/100	G1/8"	19	13	70	7,5	334,5	35,5	263,5	68	81	7	40
M/164/200	G1/4"	27	19	108	10	274	54	166	98,5	114	9	60

Note: On M/163/15, there is only one bracket containing 2 fixing holes 'L' dia. fitted.



The circuit illustrated above is a typical time-delay circuit using the M/163 reservoir in conjunction with an air flow regulator and a pressure-sensitive valve, the S/151. The cylinder will outstroke when the start signal is received, and will return after the delay period to the 'in' position. The degree of delay obtained can be varied by adjusting the flow regulator.