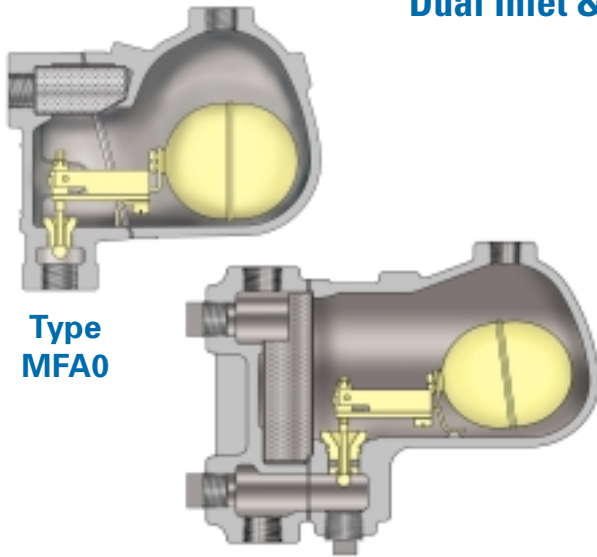


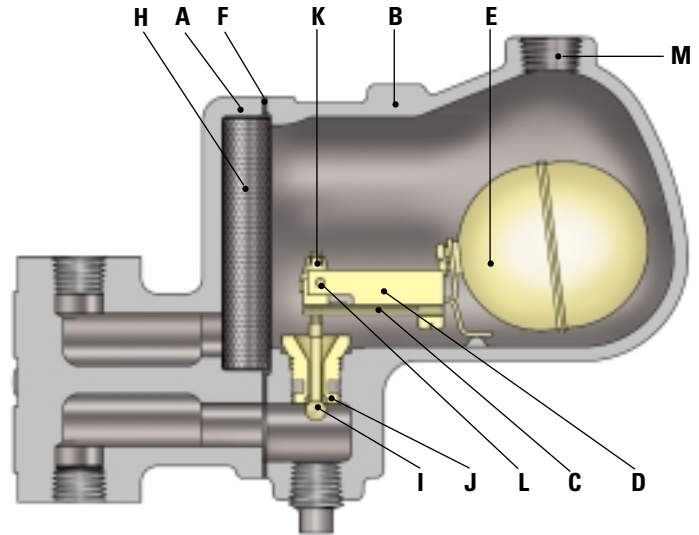
# VELAN COMPRESSED AIR DRAIN TRAPS

## Type MFA/MFAS For Pneumatic Use – Power Tools Blowing Moulds & Paint A Complete Unit: Built-In Strainer, Check Valve & Air Vent with Dual Inlet & Outlet Connections



Type  
MFA0

Type MFA1 & 2



Type MFAS

### COMPRESSED AIR DRAINAGE

In much the same way as steam, but for quite different reasons, compressed air gives up moisture as it cools. The act of compression raises the temperature of the air and even when passed through an after-cooler, it still has heat to loose before reaching the point at which it is used.

Water vapor carried in compressed air condenses and collects in the bottom of receivers, tanks or separators, and in low points of compressed air lines. If such accumulations are not removed, the passing air will pick up moisture, which may cause rusting, sticking or spoiled work.

### TYPE MFA & MFAS DESIGN FEATURES

The Velan Type MFA float trap automatically removes accumulated water from compressed air systems. Construction is similar to the Type MFT Steam Trap except that there is no thermostatic element. A boss is provided on top of the cover, tapped for a  $\frac{3}{8}$ " (10 mm) air circulating pipe which is necessary unless the trap is fitted directly under and so close to the drain point that air entering the trap can escape back through the inlet.

- **Stainless Steel Float & Trim**
- **Simple Installation**  
Multiple inlet and outlet connections facilitate horizontal, vertical or angle installation.

- **Integral strainer**  
Stainless steel screens are integral to protect the trap operating mechanism from damage by dirt or scale. No extra fittings or installation costs are required. Free strainer area minimum 5 to 1. Perforation is 0.031" (0.8 mm).
- **Integral check valve operation**  
The main valve acts as a check valve preventing back flow.
- **Stainless steel pivots**  
Assure adequate protection against wear.
- **Seat Stellite faced**  
to increase resistance to the high degree of wear through velocity of flow, dirt and scale.
- **Freezeproof installation**  
Freezeproof without insulation  
– complete drainage when cold.

### APPLICATIONS

Pneumatic power tool operation:

- Air operated chucks,
- Air operated cutters

Pneumatic blowing operation:

- Foundry mould blowing,
- Paint shop spraying

# VELAN COMPRESSED AIR DRAIN TRAPS

## STANDARD MATERIALS

PART		MATERIALS	
		MFA-0,1,2	MFA-S
A	Body	Cast iron Gr. 220 <sup>(1)</sup>	Cast steel WCB
B	Cover	Same as body material	
C	Plate	Stainless steel 1/8" thick	
D	Holder	Stainless steel	
E	Float	Stainless steel	
F	Cover gasket	Stainless steel with non-asbestos filler	
G	Cover screw	High tensile steel Gr. S	
H	Strainer	Stainless steel	
I	Stem & ball	Stainless steel	
J	Seat <sup>(2)</sup>	SS hardfaced with Stellite 6	
K	Self-lock adjusting nut	Stainless steel	
L	Pivot Plug	Stainless steel	
M	Connection for balance pipe	3/8" NPT	

(1) Cast Iron Gr. 250 for MFA0 (2) MFA0: hardened seat.

## ENGINEERING DATA

TYPE	PRESSURE RANGE psi/bar	MATERIAL	MAX. TEMP. °F/°C	ORIFICE in/mm	MAX. CAPACITY lb/h kg/h
MFA0	0-125	Cast Iron Gr.250	428 220	7/32 5.5	4,500 2,045
MFA1	0-8.5				4,500 2,045
MFA2	0-200 0-14	Cast Carbon Steel	650 343		6,000 2,727
MFAS	0-150 0-10.5				3,000 1,364
	0-230 0-16	3,500 1,590			
	0-300 0-21	4,000 1,818			

MFA0, 1, 2: Screwed connection only.  
MFAS: Screwed, Socketweld,  
Buttweld & Flanged connections.

## DIMENSIONS & WEIGHTS

TYPE	SIZE in/mm	A Height	B <sup>(1)</sup> Center to Face	C <sup>(2)</sup> Center to Face	D Length	Weight lb/kg
MFA0	1/2	6 1/8	4 3/8	1 1/8	6 3/4	8.75
	3/4	156	111	29	171	4

(1) Center of inlet to outlet face. (2) Center of outlet to inlet face.

TYPE	SIZE in/mm	A <sup>(1)</sup> Face to Face	B <sup>(2)</sup> Center to Center	C <sup>(3)</sup> Center to Face	D Length	Weight lb/kg
MFA1	1/2	6 5/8	3 15/16	1 3/8	8 5/16	12
	3/4	168	100	35	211	5.5
MFA2	1/2	7 11/16	4 3/4	1 7/16	9 3/8	15
	3/4	195	121	37	238	7
MFA2	1 1/4	8	4 1/2	1 3/4	10 3/8	17
	1 1/2	203	114	44	264	8

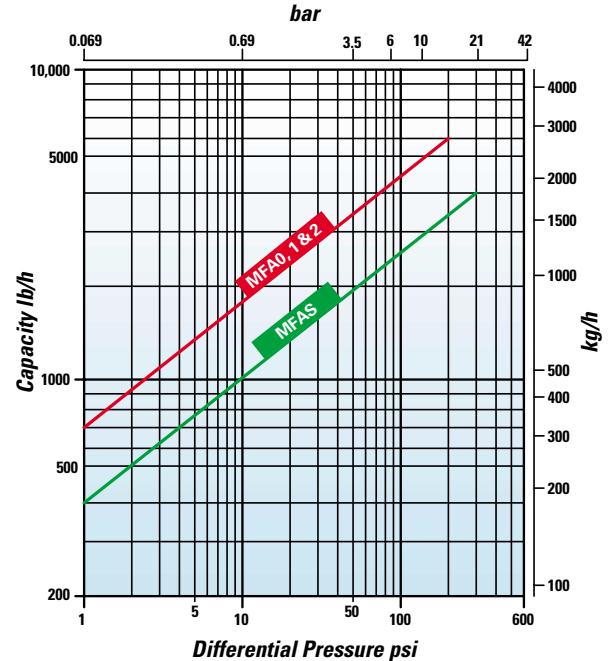
(1) Vertical connection. (2) Horizontal connection.  
(3) Center of vertical outlet to face of horizontal outlet.

TYPE	SIZE in/mm			A Face to Face			B Center to Top	C Overall Length	Weight lb/kg		
				SCR/SW	BW	FLG			SCR/SW	BW	FLG
MFAS	1/2	3/4	1	3 11/16	9 11/16	6	5 1/4	9 1/4	18	20	30
	15	20	25	94	246	152	133	235	8	9	14

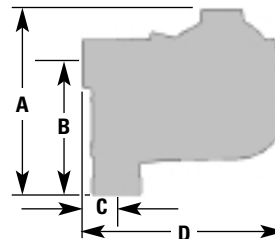
## CAPACITY

The performance graph indicates the continuous discharge capacities of condensate per hour at various pressure differentials across the trap.

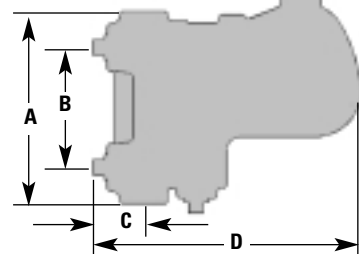
## TYPE MFA0, 1, 2 & MFAS



Type MFA0



Type MFA1, 2



Type MFAS

