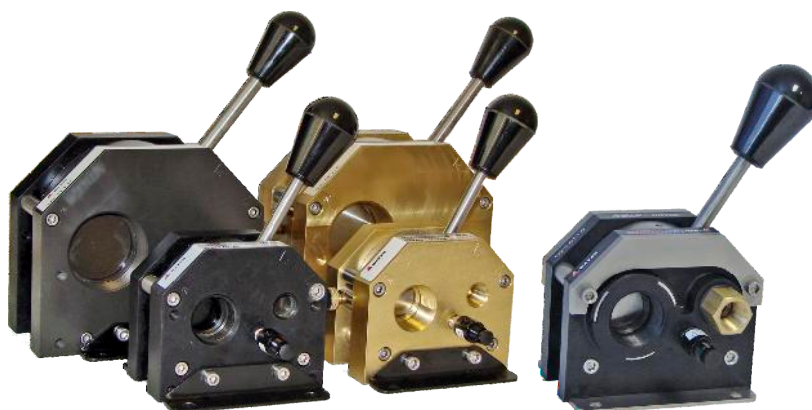


SMARTFLOW

Swap[®] Valve

Quickly purge Cooling Water using air



**Aluminium Body
With PTFE
Anodise**

**Brass Body
With Stainless
Disc**

**Aluminium Body
With PTFE
Anodise**

Available in three material choices:

1 and 2 inch sizes in Anodised aluminium or Brass with Stainless Steel Disc

Most economical option:

Reinforced moulded body, 1 inch size with Glass-filled nylon Outer Plates and Stainless Steel Disc.

The Smartflow SWAP Valve supplies cooling water to the mould during processing. Secondly, it supplies air to purge the water from the mould, cooling lines, as well as the supply and return manifolds before tool change. It also provides a manual vent to release built-up air pressure within the cooling water loop after purging.

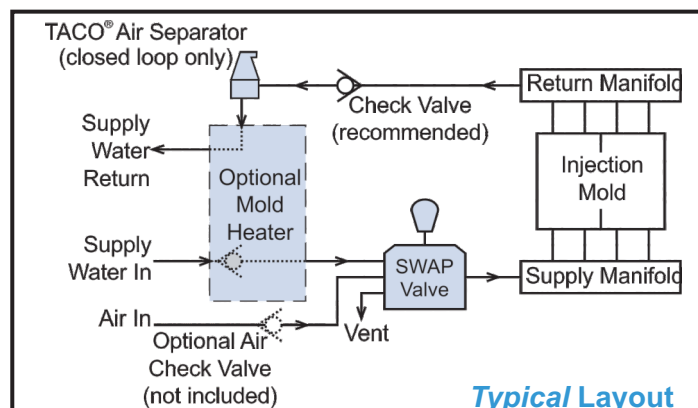
A check valve should be installed in the return line downstream from the return manifold to prevent back flow to the mould.

Tubing may be connected to the manual vent-drain port so that after the purge cycle, any residual water can be released into a container or drain.

An optional spring-loaded, locking pin is available for moulders who require a two-hand operation. This prevents accidental valve handle movement.

Benefits:

- **Implements SMED** by dramatically reducing tool change time
- **Identifies supply lines** by noting which manifold is connected to the SWAP valve
- **Full port design** provides maximum cooling water flow with minimum pressure drop
- **Prevents slip hazard** by keeping floors dry
- **Prepares Injection Mould** for preventative maintenance and storage
- **Optional Positive Locking Pin** prevents accidental valve handle movement.



Application:

The SWAP valve is well suited for cooling water supply lines up to 2" NPT. It is permissible to adapt 3/4", 1 1/4" and 1 1/2" line sizes providing adequate cooling water flow can be achieved.

Typical mounting is on the moulding machine or safety door frame. Mounting on any suitable surface such as a platen, mould or manifold stand is acceptable.

For Normal Processing	Select WATER Cooling water is available to the Supply Manifold. Purge air is blocked.
To Evacuate Cooling Water	Select PURGE Purge Air is available to the Supply Manifold. Cooling water is blocked.
To Bleed Trapped Pressure and Drain Residual Water	Select VENT Press Manual Vent-Drain Valve. Purge Air is blocked. Cooling water is blocked.

Note: Installation of an air separator in the return line of a closed loop cooling system is recommended. See the typical layout diagram (above) for location.



Moulded Body, Stainless Steel Disc (1" only)

Specifications:

Maximum Pressure	150psi, 10.3 bar
Maximum Operating Temperature	250° F, 121° C
Normal Working Air Pressure	80 - 100 psi
Pressure Drop across Purge Valve	1 psi at 50gpm

Wetted Parts:

Body	Glass-Filled Nylon
Valve Disc	Stainless Steel
O-Rings	EPDM
Check Valve (recommended)	Brass



MODEL NUMBERS WITH CHECK VALVES (Recommended)

Model	Thread Size	Locking Pin	Weight
SPV8-A-M	1" NPT	NO	2.5 Kg 5.5 lbs
SPV8-L-M	1" NPT	YES	
SPV8B-A-M	1" BSPP	NO	
SPV8B-L-M	1"BSPP	YES	

MODEL NUMBERS WITHOUT CHECK VALVES

Model	Thread Size	Locking Pin	Weight
SPV8-A-MN	1" NPT	NO	2.5 Kg 5.5 lbs
SPV8-L-MN	1" NPT	YES	
SPV8B-A-MN	1" BSPP	NO	
SPV8B-L-MN	1"BSPP	YES	

Brass Body, Stainless Steel Disc (1" or 2" models)

Specifications:

Maximum Pressure	150psi, 10.3 bar
Maximum Operating Temperature	250° F, 121° C
Normal Working Air Pressure	80 - 100 psi
Pressure Drop across Purge Valve	1 psi at 50gpm

Wetted Parts:

Body	Brass
Valve Disc	Stainless Steel
O-Rings	EPDM
Check Valve (recommended)	Brass



MODEL NUMBERS WITH CHECK VALVES (Recommended)

Model	Thread Size	Locking Pin	Weight
SPV8-A-B	1" NPT	NO	5.4 Kg 12 lbs
SPV8-L-B	1" NPT	YES	
SPV8B-A-B	1" BSPP	NO	
SPV8B-L-B	1"BSPP	YES	
SPV16-A-B	2" NPT	NO	14.5 Kg 32 lbs
SPV16-L-B	2" NPT	YES	
SPV16B-A-B	2" BSPP	NO	
SPV16B-L-B	2" BSPP	YES	

MODEL NUMBERS WITHOUT CHECK VALVES

Model	Thread Size	Locking Pin	Weight
SPV8-A-BN	1" NPT	NO	5.4 Kg 12 lbs
SPV8-L-BN	1" NPT	YES	
SPV8B-A-BN	1" BSPP	NO	
SPV8B-L-BN	1"BSPP	YES	
SPV16-A-BN	2" NPT	NO	14.5 Kg 32 lbs
SPV16-L-BN	2" NPT	YES	
SPV16B-A-BN	2" BSPP	NO	
SPV16B-L-BN	2" BSPP	YES	



Aluminium Body and Disc, PTFE Imprgnated Anodize (1" or 2" models)

Specifications:

Maximum Pressure	150psi, 10.3 bar
Maximum Operating Temperature	250° F, 121° C
Normal Working Air Pressure	80 - 100 psi
Pressure Drop across Purge Valve	1 psi at 50gpm

A Dielectric Fitting is included with all Aluminium SWAP Valves



Wetted Parts:

Body	Aluminium, PTFE Impregnated
Valve Disc	Hard Anodize Coating
O-Rings	EPDM
Check Valve (recommended)	Brass

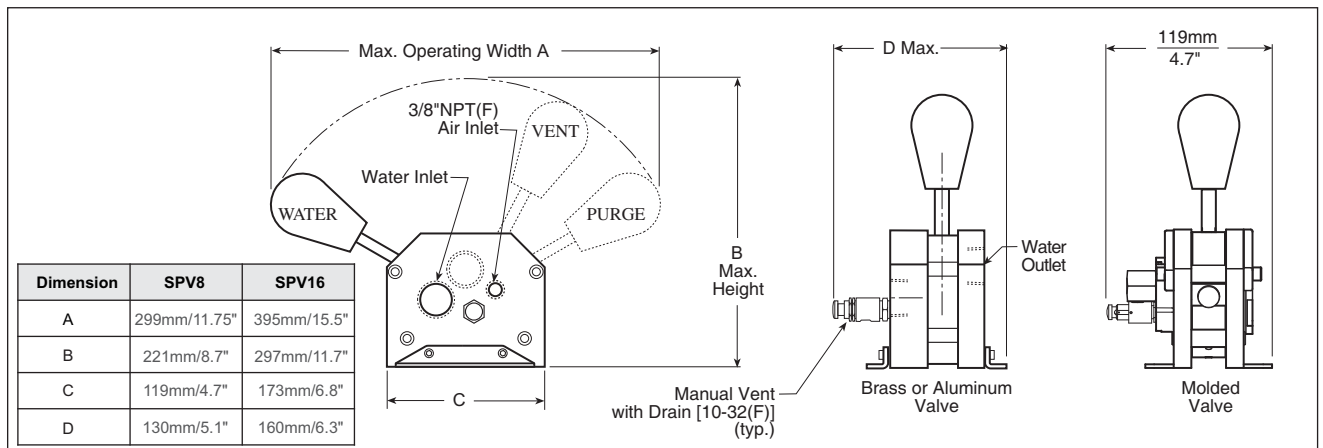
MODEL NUMBERS WITH CHECK VALVES (Recommended)

Model	Thread Size	Locking Pin	Weight
SPV8-A-A	1" NPT	NO	2.7 Kg 6 lbs
SPV8-L-A	1" NPT	YES	
SPV8B-A-A	1" BSPP	NO	
SPV8B-L-A	1"BSPP	YES	
SPV16-A-A	2" NPT	NO	6.1 Kg 13.5 lbs
SPV16-L-A	2" NPT	YES	
SPV16B-A-A	2" BSPP	NO	
SPV16B-L-A	2" BSPP	YES	

MODEL NUMBERS WITHOUT CHECK VALVES

Model	Thread Size	Locking Pin	Weight
SPV8-A-AN	1" NPT	NO	2.4 Kg 5.2 lbs
SPV8-L-AN	1" NPT	YES	
SPV8B-A-AN	1" BSPP	NO	
SPV8B-L-AN	1"BSPP	YES	
SPV16-A-AN	2" NPT	NO	5 Kg 11.1 lbs
SPV16-L-AN	2" NPT	YES	
SPV16B-A-AN	2" BSPP	NO	
SPV16B-L-AN	2" BSPP	YES	

All Models, Maximum Dimensions



Part Number	Description
DN-8*	Dielectric Fitting 1" NPT
DN-8B*	Dielectric Fitting 1" BSPT
DN-16*	Dielectric Fitting 2" NPT
DN-16B*	Dielectric Fitting 2" BSPT

Part Number	Description
PVCV-100	Brass Check Valve 1" NPT
PVCV-200	Brass Check Valve 1" NPT
PVCV-100B	Brass Check Valve 1" BSPP
PVCB-200B	Brass Check Valve s" bspp
PVCV-3	Air Check Valve 3/8" NPT

*Included with new Aluminium SWAP Valve only



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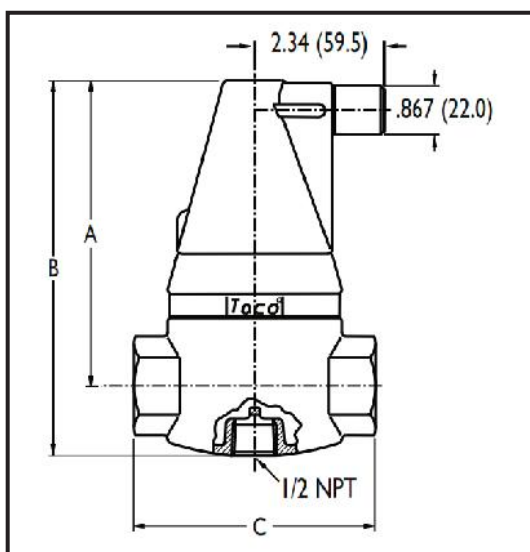
TACO® 4900 Series Air Separators

TACO 4900 Series Air Separators are designed for the complete elimination of air from closed loop water circulating systems. Small air bubbles and micro-bubbles adhere to surfaces on pall rings in the water path and join together to form larger air bubbles. The combined bubbles travel up through the water and into the conical air chamber to be released by the vent at the top.

Recommended for Use with the SMARTFLOW SWAP Valves in a closed loop cooling water system.

Specifications:

Connection Sizes	1" & 2" NPT (F)
Housing Material	Brass
Pall Ring Material	Stainless Steel
Venting Unit Materials	Stainless Steel, EDPM, Viton, Engineered Plastics
Operating Pressure Max.	150psi (10 bar)
Operating Temperature Max.	240°F (115°C)
Operating Temperature Min.	25°F (-4°C)
Media	Water or Water/Glycol
Max. Velocity	5ft/sec (1.5m/sec)



Model Number	Connection Size	A	B	C	Weight	
					Kg	lbs
49 - 100	1 "	5 1/2" 139mm	6 3/4" 171mm	4 3/8" 111mm	2	4.5
49 - 200	2"	6 5/8" 169mm	8 7/16" 214mm	5 3/16" 13mm	2.7	6.0

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