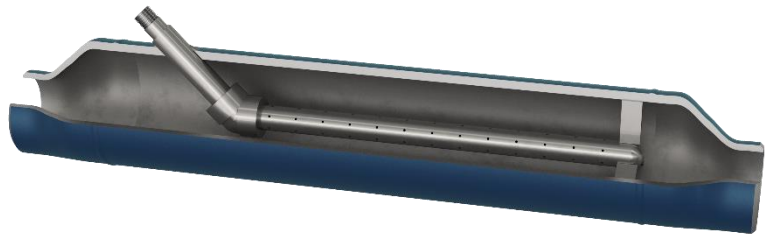


FA Series Flash Arrestor Installation & Maintenance Manual

TYPICAL APPLICATIONS

The FA Series Flash Arrestors are installed in condensate return systems when introducing high pressure condensate into low pressure return piping. The integral sparge pipe is used to diffuse the incoming condensate from a steam trap to reduce the effects of water hammer, significantly improving return system operation.



A flash arrestor can also mitigate water hammer and elevated return pressures and temperatures in overstressed or flooded return lines. Standard design is Carbon Steel Schedule 80 shell and SST HP inlet pipe.

FA Series Flash Arrestor								
Material Specification		Std Model	Inlet/Outlet		Shell		HP Inlet	
			Size	Type	Size	Size	Type	
Body	Carbon Steel (Std) 316SS (Opt)	FA-16-BW-20-14-N-SS	1-1/2		4			
Technical Specification		FA-17-BW-20-14-N-SS	2		4			
		FA-18-BW-20-14-N-SS	2-1/2	Butt Weld	4	1	MNPT	
Inlet/Outlet Sizes	1-1/2, 2, 2-1/2, 3, 4	FA-19-BW-20-14-N-SS	3		4			
Connection	Butt Weld (Std) NPT, Flanged 150#/300# (Opt)	FA-19-BW-22-14-N-SS	3		6			
PMO	up to 300 psig	FA-20-BW-22-14-N-SS	4		6			

HOW TO SIZE/ORDER

Many applications of the flash arrestor allow sizing to match the shell end connections to condensate piping diameter and the high pressure inlet tube to the discharge connection size of the steam trap. To confirm appropriate sizing, consult factory with Steam Trap Inlet Pressure, Steam Trap Size, Condensate Pipe Diameter, and Condensate Return Pressure. Optional ASME UM Stamp available for flanged units.

Part Number Configuration													
Model		Inlet/Outlet Connection				Shell		HP Inlet Connection				HP Inlet Material	
Code	Type	Code	Size	Code	Type	Code	Size	Code	Size	Code	Type	Code	Type
FA	CS Shell Sch 80	14	1	N	NPT	20	4	12	1/2	N	NPT	CS	CS Sch 80
FASS	SS Shell Sch 40	15	1-1/4	BW	Butt Weld	21	5	13	3/4	BW	Butt Weld	SS	SS Sch 80
		16	1-1/2	F150	150# Flg	22	6	14	1	F150	150# Flg		
		17	2	F300	300# Flg	23	8	15	1-1/4	F300	300# Flg		
		18	2-1/2			24	10	16	1-1/2				
		19	3					17	2				
		20	4										
		21	5										
		22	6										

Manufacturer of:

PRESSURE & TEMPERATURE REGULATORS • RELIEF VALVES • FLOAT & LEVER VALVES • STEAM TRAPS
 CLEAN STEAM PRODUCTS • LIQUID DRAINERS • PRESSURE PUMPS • EJECTORS • SPECIALTY PRODUCTS

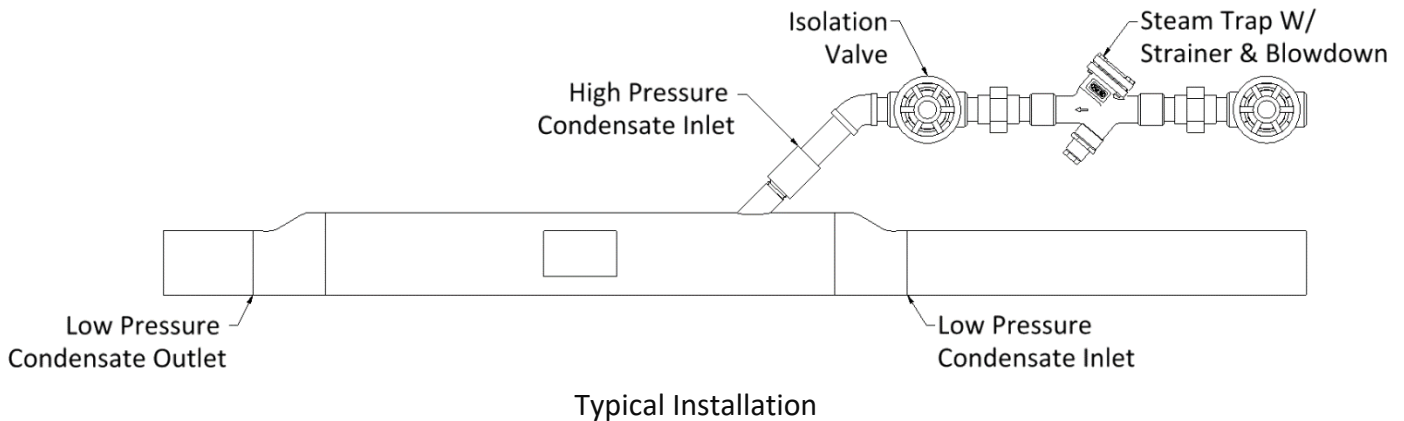
SAFETY AND INSPECTION

Inspect product thoroughly to ensure it was not damaged during shipping. Flash arrestors are shipped with a coupling or cap to protect external threads.

WARNING	When servicing or installing this product in systems, all steam and/or pressure must be turned off and any fluids must be drained completely. Lines must be free of pressure and cooled to room temperature.
WARNING	Do not use this product outside of the operating pressure, temperature or range.
WARNING	Installation and maintenance shall only be performed by a trained professional.

INSTALLATION

1. Before installing the flash arrestor, blow out piping thoroughly to remove loose scale and dirt. Buttweld end connections should be inspected for defects and cleanliness. Correct any conditions that may interfere with welding.
2. Ensure proper alignment to prevent excessive external stress. For buttweld connections, the pipe, flash arrestor body, and weld rod must be of compatible materials. Welding shall be performed by a certified welder using qualified welding procedures. Welds must be inspected as required by all applicable local/national codes and specifications. The system owner is responsible for all inspections. When installing flange connections, verify the proper gasket is used. Do not over torque connection bolts. Evenly divide bolt torque over the whole flange face. For threaded connections, use pipe dope or Teflon tape sparingly.
3. Discharge piping should be amply sized to avoid excessive back pressures.
4. Priming is not required. Slowly open isolation valves for startup.



MAINTENANCE

1. Inspect the flash arrestor and associated piping periodically. Leakage should not be tolerated.

Each Watson McDaniel Company Product is warranted against defects in material and workmanship for one year from date of shipment. This warranty extends to the first retail purchaser only. All defective material must be returned to the person from whom you purchased the Product, transportation prepaid, free of any liens or encumbrances, and if found to be defective will be repaired free of charge or replaced, at the warrantor's or seller's option. If the material is replaced, any replacement will be invoiced in the usual manner and after inspection of alleged defective material an adjustment will be made for depreciation caused by purchaser's use. In no event will Watson McDaniel Company be liable to do more than refund the original contract price. Incidental and consequential damages are excluded, whether under this warranty or otherwise. All implied warranties, including warranties of merchantability and fitness for a particular purpose, are disclaimed and excluded. Details provided in this manual are approximate and are subject to change without notice. Contact the factory for more information.

