

Safety Check Valves

Applications

- Used in temporary plant/factory air lines, construction sites, shipyards, or utilities
- Not for use in applications where 100% of the available air is required, i.e. sand blast, pile driving rigs, expansion joint blow down pipes, etc.



Features

- High-flow valve provides optimum performance
- Controls excess air flow (SCFM) in only one direction
- Automatically senses change in air flow and shuts off the flow in the event of a surge in excess of valve flow rating thus preventing hose whip
- Does not prevent backflow
- Interchanges with Hansen FS-Series

Materials

- Body and valve: solid brass
- Spring and roll pin: stainless steel

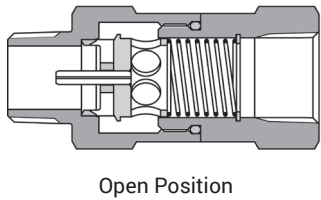
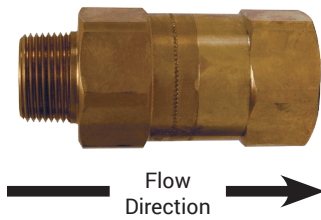
Specifications

- Conforms to OSHA regulation 1926.302 (b) (7) requiring a safety device at the source of the air supply and at branch air lines
- Maximum operating pressure: **350 PSI**
- Maximum temperature: **250°F (121°C)**

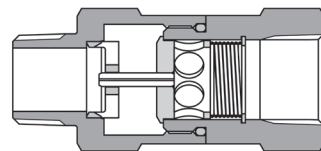
How It Works

- Safety check valves utilize the pressure differential across the valve to operate the valve and spring assembly. The pressure differential is directly related to the flow of air (SCFM) through the valve.
- When the pressure differential is within the operating limits - below the cutoff flow - of the unit, the force on the valve exerted by the spring is greater than that caused by the pressure differential (see "Open Position" graphic). The valve remains open and normal operation continues.
- When the pressure differential is above the cutoff limit, the force on the valve exerted by the pressure differential is greater than the force exerted by the spring, and the valve closes (see "Closed Position" graphic).
- After the repair is made, normal operation is automatically enabled when pressure across the valve equalizes through the bleeder hole.
- The valve spring size can be specified by determining the air flow during normal operation and by estimating the air flow if a failure or rupture occurs.

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Open Position



Closed Position

NPT & Hose I.D. Size	Cut-off Flow Rate (SCFM at 90 PSI)	Brass Part #	NPT & Hose I.D. Size	Cut-off Flow Rate (SCFM at 90 PSI)	Brass Part #	
1/4"	23-29	SCVL2	1-1/4"	260-290	SCVL10	
	30-36	SCVL3		300-340	SCVM10	
3/8"	39-47	SCVM3		440-500	SCVS10	
	52-65	SCVS3		570-630	SCVH10	
1/2"	70-78	SCVM4		1-1/2"	300-360	SCVL12
	80-96	SCVS4			470-530	SCVM12
3/4"	72-88	SCVL6	564-602		SCVX12	
	92-108	SCVM6	640-720		SCVS12	
	112-128	SCVR6	750-830		SCVH12	
	132-148	SCVJ6	2"		510-590	SCVL16
	160-180	SCVS6		725-825	SCVM16	
	180-200	SCVH6		900-1050	SCVS16	
1"	165-195	SCVL8		3"	1100-1200	SCVH16
	220-260	SCVM8	1200-1400		SCVL24	
	280-320	SCVS8	2400-2700		SCVS24	
	310-340	SCVH8	2850-3050		SCVH24	