

Pneumatic Couplings: SCV-Series

Interchange Data

- Hansen FS-Series

Materials


- Machined components are manufactured using solid brass bar stock
- Stainless steel springs and roll-pins maximize corrosion resistance and extend service life

Seal Components

- Nitrile (Buna-N) seals are standard, providing a temperature range of **-40°F to 250°F (-40°C to 121°C)**

Features

- Does not prevent backflow
- High flow design results in maximum flow with minimal pressure drop
- Automatically and instantly protects the operator against hose whip in the event of a damaged hose or coupling
- In the event of a hose rupture or coupling failure, the valve will automatically reset after the problem is fixed
- SCV-Series is available in a large selection of sizes ranging from 1/4" to 3", NPTF (BSPP/BSPT threads on request)
- Valve operation is fully compliant with OSHA Safety Regulation 1926.302(b)(7), as shown on page 11

 Not recommended for applications requiring 100% of the available air supply. These applications include, but are not limited to, sand blast equipment, pile driving rigs, and expansion joint blow down pipes. It is recommended to install auxiliary safety devices, including safety cables, to ensure optimum safety for the operator in the event of a coupling failure or hose rupture.

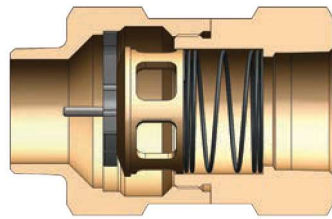
Use

- Safety check valves operate by using 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 on next page). 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 on next page).
- 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.

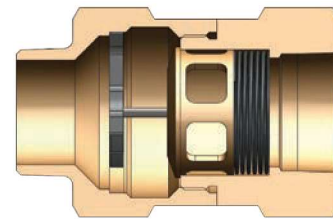
Technical Specifications

Performance Specifications	Maximum Operating Pressure - Bar (PSI)	Minimum Burst Pressure - Bar (PSI)	Air Flow ¹ 30.5m (100')
1/4"	24 (350)	138 (2,000)	17 SCFM
3/8"	24 (350)	138 (2,000)	41 SCFM
1/2"	24 (350)	138 (2,000)	77 SCFM
3/4"	24 (350)	138 (2,000)	178 SCFM
1"	24 (350)	138 (2,000)	340 SCFM
1-1/4"	24 (350)	138 (2,000)	620 SCFM
1-1/2"	24 (350)	138 (2,000)	940 SCFM
2"	24 (350)	138 (2,000)	1,760 SCFM
2-1/2"	24 (350)	138 (1,500)	2,800 SCFM
3"	24 (350)	138 (1,200)	4,200 SCFM

¹Air flow rating is based upon calculated values using unobstructed air flow for the applicable hose size.



Open



Closed

Body Size	SCV-Series Excessive Flow Sensor (Male to Female Threads)			
	Part Detail			Cutoff Flow - SCFM ¹ (90 PSI Inlet Pressure)
	Part #	Threads	Material	
1/4"	SCVL2	1/4" - 18 NPTF	brass	23-29
	SCVL3	3/8" - 18 NPTF	brass	30-36
3/8"	SCVM3	3/8" - 18 NPTF	brass	39-47
	SCVS3	3/8" - 18 NPTF	brass	52-65
1/2"	SCVM4	1/2" - 14 NPTF	brass	70-78
	SCVS4	1/2" - 14 NPTF	brass	80-96
3/4"	SCVL6	3/4" - 14 NPTF	brass	72-88
	SCVM6	3/4" - 14 NPTF	brass	92-108
	SCVR6	3/4" - 14 NPTF	brass	112-128
	SCVJ6	3/4" - 14 NPTF	brass	132-148
	SCVS6	3/4" - 14 NPTF	brass	160-180
	SCVH6	3/4" - 14 NPTF	brass	180-200
1"	SCVL8	1" - 11-1/2 NPTF	brass	165-195
	SCVM8	1" - 11-1/2 NPTF	brass	220-260
	SCVS8	1" - 11-1/2 NPTF	brass	280-320
	SCVH8	1" - 11-1/2 NPTF	brass	310-340
1-1/4"	SCVL10	1-1/4" - 11-1/2 NPTF	brass	260-290
	SCVM10	1-1/4" - 11-1/2 NPTF	brass	300-340
	SCVS10	1-1/4" - 11-1/2 NPTF	brass	440-500
	SCVH10	1-1/4" - 11-1/2 NPTF	brass	570-630
1-1/2"	SCVL12	1-1/2" - 11-1/2 NPTF	brass	300-360
	SCVM12	1-1/2" - 11-1/2 NPTF	brass	470-530
	SCVX12	1-1/2" - 11-1/2 NPTF	brass	564-602
	SCVS12	1-1/2" - 11-1/2 NPTF	brass	640-720
	SCVH12	1-1/2" - 11-1/2 NPTF	brass	750-830
2"	SCVL16	2" - 11-1/2 NPTF	brass	510-590
	SCVM16	2" - 11-1/2 NPTF	brass	725-825
	SCVS16	2" - 11-1/2 NPTF	brass	900-1050
	SCVH16	2" - 11-1/2 NPTF	brass	1100-1200
3"	SCVL24	3" - 11-1/2 NPTF	brass	1200-1400
	SCVS24	3" - 11-1/2 NPTF	brass	2400-2700
	SCVH24	3" - 11-1/2 NPTF	brass	2850-3050

¹Contact Dixon for cutoff flow values at other inlet pressures.