# OSHA COMPRESSED AIR SAFETY SHUT-OFF VALVE

#### PREVENTS DANGEROUS HOSE WHIP

Protect your most important assets: Your employees and their equipment!

#### OSHA safety STANDARD regulation 29CFR CHXVII PARAGRAPH 1926.302(b)(7) STATES:

All hoses exceeding 1/2-inch inside diameter shall have a safety device at the source of supply or branch line to reduce pressure in case of hose failure.

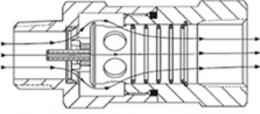
**OSHA COMPRESSED AIR SAFETY SHUT-OFF VALVES** offers simple but efficient protection to pneumatic systems in the event of a broken compressed air hose or pipe.

# HOW THE COMPRESSED AIR SAFETY SHUT-OFF VALVE WORKS:

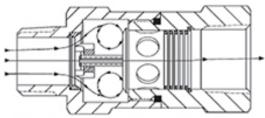
The air supply is immediately shut off by the **OSHA COMPRESSED AIR SAFETY SHUT-OFF VALVES**, should the volume of air exceed a preset value.

This "value" is factory preset and is set to allow normal air consumption when using air tools. Should the air consumption exceeds the set value, or the air-line is severed, then the internal piston instantly shuts off the main flow.

An integral bleed hole allows some air to flow though. This enables the line pressure to automatically reset the **OSHA COMPRESSED AIR SAFETY SHUT-OFF VALVES** once the main break is repaired.



Check Valve In Open Position



Check Valve In Closed Position

# SELECTING AN OSHA COMPRESSED AIR SAFETY SHUT-OFF VALVE:

- What is the hose ID size you are using?
- What is the operating pressure of the compressor, in PSI?
- What is the SCFM of your compressor?
- How much air flow, in SCFM, does the tool(s) require?
- What is the maximum air flow possible, in SCFM, through your air hose, at the end of the length of the hose?
- See chart below for OSHA COMPRESSED AIR SAFETY SHUT-OFF VALVES needed.

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Safety Shut-off Valve Cut-off Rates at PSI's Other Than 90					
Inlet pressure (PSI)	25	50	75	100	125
Flow rate multiplier	.62	.79	.93	1.05	1.16

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

#### INSTALLATION

An **OSHA COMPRESSED AIR SAFETY SHUT-OFF VALVES** should be placed immediately after the air control shut off valve and before the hose on a compressor, and after each discharge port that a hose is connected to.

#### **OPERATION:**

Before starting the compressor the air control valve should be closed completely. When the compressor unloads, open the air shut off control valve *very slowly*. Full port ball valves tend to work better than gate or butterfly type valves.

The air shut off control valve must be fully open for the **OSHA COMPRESSED AIR SAFETY SHUT-OFF VALVES** to work. Some portable air compressor manufacturers recommend start-up with the air control valve slightly open. In this case you may have to close the valve and reopen it slowly to the full open position, or wait for the safety shut-off valve to reset itself.

If the **OSHA COMPRESSED AIR SAFETY SHUT-OFF VALVES** fails to operate despite meeting all conditions, check the hose line for obstructions or a hose mender restricting normal air flow.

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## **VERIFYING OPERATIONS:**

- Install OSHA COMPRESSED AIR SAFETY SHUT-OFF VALVES following the instructions supplied.
- Connect tool or equipment to air-line hose to complete circuit to the air line
- Switch on operation to ensure a complete cycle is performed.
- If tool or equipment starts and runs satisfactorily, stop operation and depressurize air airline.
- Disconnect hose from tool or circuit and secure hose end.
- Turn on air supply progressively (to avoid decompression effect). Prior to fully reaching operation conditions, the **OSHA COMPRESSED AIR SAFETY SHUT-OFF VALVES** should suddenly activate and cut off the flow.
- A slight air flow will remain as part of the automatic re-set function. If the OSHA COMPRESSED AIR SAFETY SHUT-OFF VALVE is not activated the unit should be disconnected and the lower flow range OSHA COMPRESSED AIR SAFETY SHUT-OFF VALVES should be used.

#### **OPERATING PRESSURE:**

- Maximum 232 PSIG
- Minimum according to hose length
- Drop pressure at shut-off flow. 2 TO 5 PSIG

#### **OPERATING TEMPERATURE:**

- -4°F\* to +250°F
- Consult our Technical Service for use below +35°F
- At low temperature ensure OSHA COMPRESSED AIR SAFETY SHUT-OFF VALVES is not subject to ice conditions which may prevent function.

# **MATERIALS:**

Aluminum or brass body, brass internal parts, stainless steel spring

# **PRODUCT FEATURES:**

- Protects personnel, machinery and plant
- Maintenance friendly repair possible while plant is still working
- Economic: competitive pricing, no un-necessary repairs
- Complies with EN ISO 4414/ISO 4414 § 5.4.5.11.1 Machine Directive 2006/42/EG
- Complies with OSHA USA: 1926 Safety & Health Regulations for Construction Power-operated hand tools - 1926.302/b.7 OSHA regulations (Standards - 29 CFR)
- MSHA (Mine Safety and Health Administration) Regulations: 30 CFR Sections §56.13021 Hihgpressure hose connection states: 30 CFR Sections §57.1730. Compressed air; general; compressed air systems
- Reliable and tamperproof, no adjustment necessary
- compact size
- Compatible with all pneumatic systems

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## **APPLICATIONS:**

- Suitable for every application where compressed air is used
- Compressed air hoses and systems in chemical and pharmaceutical industries
- Cleanrooms to laboratory to production assembly lines
- Off- and On-Shore

Mounting examples

- Assists in complying with safety regulations
- Tamper proof
- Compact and safe design
- Low pressure drop
- Automatically resets after failure correction
- High corrosion resistance
- High air pressure rating