## VS Series Safety Valves



Picture Shown: VSS Series Valve

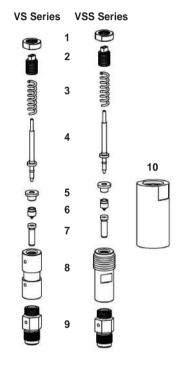
VS Series Safety Valves have been supplied globally and gained excellent reputation by its superb performance on marine propulsion and power generation diesel engines since 1976.

### **Features**

- High temperature application: up to 600 °C (1112 °F)
- Working pressure: up to 413 bar (6000 psig)
- Valve provides metal to metal sealing for high temperature application.
- Sealing cone and bush seat are constructed out of excellent creep-resistant exotic alloy.
- When system pressure overcomes the set pressure, the valve opens to relieve the system pressure to atmosphere so as to prevent excess pressure in the system.
- Repeatability of set pressure is not more than 5% above or below of each valve after initial cracking at room temperature.
- VSS Series is provided for extra safety with the deflector cap.

### **Technical Information**

- Working Pressure: 413 bar (6000 psig)
- Temperature Rating: -60 to 600 °C (-76 to 1112 °F)



### **Materials of Construction**

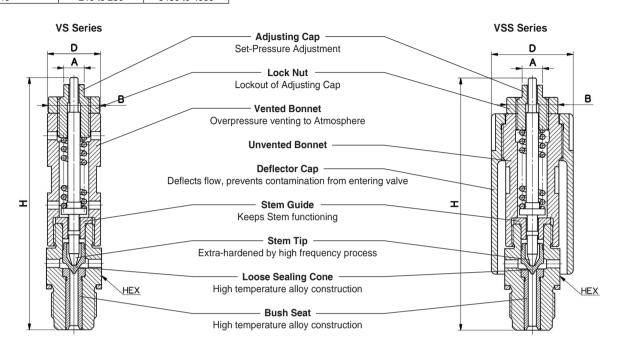
Components		Valve Body Material					
			SS304	SS316			
		VS Series VSS Series		VS Series	VSS Series		
		Material Grade /JIS, ASTM Standard					
1	Lock Nut	Black Phos	phate coated Steel	\$\$246/A\$TM A276 A470			
2	Adjusting Cap	S45C-N/JIS G4051		SS316/ASTM A276, A479			
3	Spring	SWOS	C-V/JIS G3561	SS17700 Type 631/ASTM A313			
4	Stem	SCM415/JIS G4053		CC24C/ACTNA ACTC A 470			
5	Stem Guide	SS304/A276, A479		SS316/ASTM A276, A479			
6	Sealing Cone	Allers OOA LINO NO		107000/A STM D627			
7	Bush Seat	Alloy 80A UNS N07080/ASTM B637					
8	Bonnet	VS Series: Vented Bonnet VSS Series: Unvented Bonnet					
		SS304/A276, A479		SS316/ASTM A276, A479			
9	Vented Body	SS304/A276, A479		SS316/ASTM A276, A479			
10	Deflector Cap		Black Phosphate coated Steel S20C/JIS G4051		SS316/ASTM A276, A479		

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# **VS Series Safety Valves**

## Set Pressure Range

Spring	Set Pressure Range			
Designator	bar	psig		
160	160 to 200	2320 to 2900		
200	200 to 240	2900 to 3480		
240	240 to 280	3480 to 4060		



## **Ordering Information and Dimensions**

Basic Ordering Number		End Connections Inlet	Orifice, mm (in.)	Dimensions, mm (in.)		Wrench Flat, mm (in.)		Net Weight,	
				Н	D	Hex	Α	В	gram
VS-	M22P15-	M22 x 1.5 Metric	4.0 (0.16)	4.0 (0.16) 123.20 (4.85)	25.0		10.0 (0.39)	22.0 (0.87)	388
	M8N-	1/2 in. Male NPT			(0.98)	27.0			
VSS-	M22P15-	M22 x 1.5 Metric			40.0	(1 1/16)			1040
	M8N-	1/2 in. Male NPT			(1.57)				

## **Ordering Steps**

- Step 1. Select basic ordering number. i.e., VS-M8N-
- Step 2. Insert the spring designator to the basic ordering number. VS-M-M8N-200-
- Step 3. Select valve body material designator. SS304: S4, SS316: SS i.e., VS-M-M8N-200-S4

#### **Factory Test**

Every valve is factory-tested for cracking and resealing performance.

## **Dimensions**

- All dimensions in this catalog are reference only and are subject to change.
- Dimensions with M Tube Fitting nuts are finger-tight position.

#### **Product Cleaning**

Valves are cleaned and packaged in accordance with HSME cleaning standard CS-01

#### Safe Valve Selection

The selection of a valve for any application or system must be considered to ensure safe performance. Valve rating, valve function, material compatibility, proper installation, operation and maintenance remain the sole responsibility of the system designer and the user. HSME Corporation accepts no liability for any improper selection, compatibility, installation, operation or maintenance.



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