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Data Sheet for Valve Design

Customer

Type of compressor			
Stages			
No. of Cylinders			
Speed RPM			
Existing service	<input type="radio"/> Lube	<input type="radio"/> Mini Lube	<input type="radio"/> Non Lube

Compressor data			
Dimensions in	<input type="radio"/> INCHES	<input type="radio"/> MM	
	<input type="radio"/> PSI	<input type="radio"/> BARG	
	<input type="radio"/> °F	<input type="radio"/> °C	

Stage	1	2	3	4	5	6
Cylinder Ø						
Rod Ø						
Stroke						
death volume %						
"S"ingle or "D"ouble act.						
No. of suct.valves / cyl-end						
No. of disc.valves / cyl-end						
Total No. of valves / cylinder						
No. of suct. valves unloaded						
Suction damper Y / N						
Discharge damper Y / N						
Separator Y / N						
Suction pressure						
Suction temperature						
Discharge pressure						
Discharge temperature						

GAS		MW	%	GAS		MW	%
Air		28.97		Propane	C ₃ H ₈	44.09	
Argon	Ar	39.95		I-Butane	C ₄ H ₁₀	58.12	
Helium	He	4.00		n-Butane	C ₄ H ₁₀	58.12	
Oxygen	O ₂	32.00		I-Pentane	C ₅ H ₁₂	72.14	
Nitrogen	N ₂	28.02		n-Pentane	C ₅ H ₁₂	72.14	
Water vapor ¹	H ₂ O	18.02		Hexane	C ₆ H ₁₄	84.16	
Carbon dioxide	CO ₂	44.01		Ammonia	NH ₃	17.03	
Hydrogen sulfide	H ₂ S	34.08		Hydrogen chloride	HCl	36.46	
Hydrogen	H ₂	2.02		Chlorine	Cl ₂	70.91	

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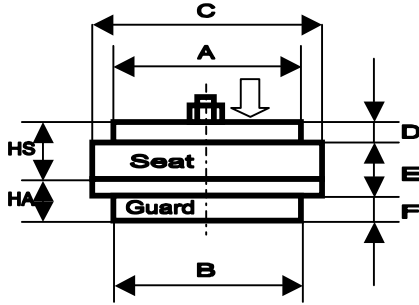
Data Sheet for Valve Design

Methane	CH ₄	16.04		Chloride-traces ¹			
Ethylene	C ₂ H ₄	28.05		Vinylchloride	C ₂ H ₃ Cl	62.5	
Ethane	C ₂ H ₆	30.07		Butadiene	C ₄ H ₆	54.1	
Propylene	C ₃ H ₆	42.08		Methylchloride	CH ₃ Cl	50.5	
Calculated Mol Wt.				Cp/Cv (20°C)			
Corrosives	oYes / oNo			Liquids	oYes / oNo		
Sticky built-up	oYes / oNo			Solid debris	oYes / oNo		
¹ If water Vapor and/or chlorides are present, even in minute traces, it <u>must</u> be included above							

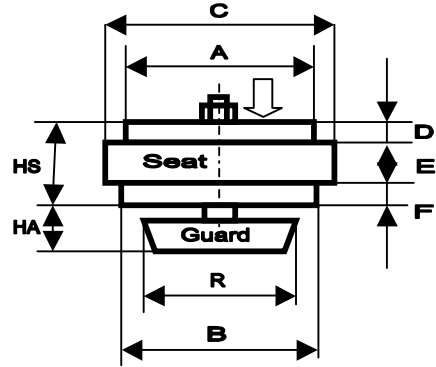
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Dimensions for Valve Design

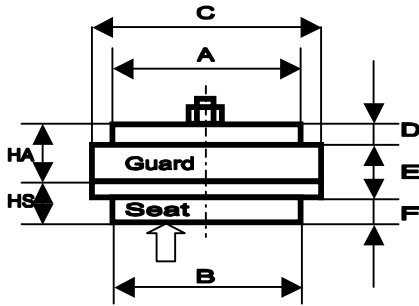
Suction Valve with safety Guard



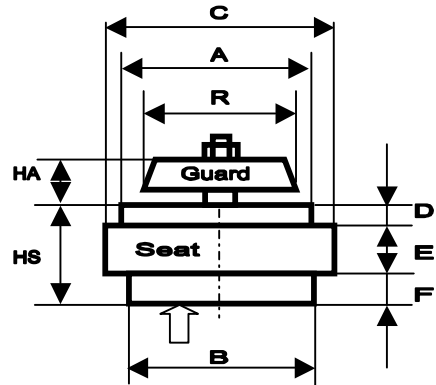
Suction Valve with hanging Guard



Discharge Valve with safety Guard



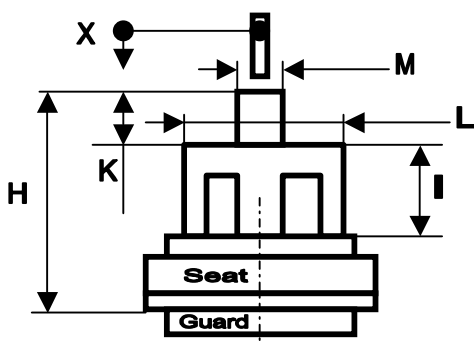
Discharge Valve with hanging Guard



Existing Valve Design

Stage	A	B	C	D	E	F	R	HA	HS
1S									
1D									
2S									
2D									
3S									
3D									

Existing Unloader Design



Stage	H	I	K	L	M	X
1						
2						
3						