DIENES

DICRON

Data required for valve determination — Computer programming

1. The valves are required for one of the below stated machines (please circle) of _____ new / existing _____ design

   with _____ compression stages (machine maker is _____)
   Air compressors, gas compressors, refrigeration compressors, vacuum pumps, scavenge pumps for Diesel engines, liquid pumps, rotating piston compressors with working valves, screw-, rotary- and turbo compressors with non-return valves.

2.

MEDIUM:		
Gas analysis:		
Density (standard state)	kg/Nm³	
Adiabatic exponent	—	
Pol. Exp.-Compression	—	
Pol. Exp.-Expansion	—	

   Cylinder lubrication with: oil or non-lubricated machine _____ ,

   Cylinder cooling: water, air, _____ intercooling: water, air _____

3. **CONTROL** **(or regulation)** for a range of 100 up to _____ % — intermittent — stepless — gradually in _____ steps

4.

MACHINE-DATA

Speed of the machine _____ r.p.m.

Piston stroke _____ mm

Compression stage		1.	2.	3.	4.	5.	6.
Number of cylinders							
Single or double acting*)							
Cylinder bore:	mm						
Rod diameter:	mm						
Cylinder-clearance volume:	cm³						
Connecting rod length:	mm						
Suction pressure:	bar.						
Suction temperature:	°C						
Final pressure:	bar.						
Number of valves each	suction						
piston side (cylinder end)	discharge						
Valve arrangement (see below)							
Clamping of valves (radial or center screw)							

*) If multi-stage compressors are concerned, please send us a sketch of the cylinder arrangement and the existing stage pistons.
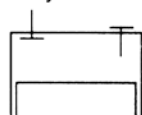
5. Additional information: _____

   _____

   _____

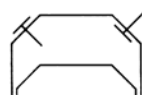**Valve arrangement of: Single valves**
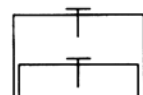
1. laterally in cylinder cover
2. parallel in cylinder cover
3. inclined in cylinder cover
4. in piston and cylinder cover

Concentric valves
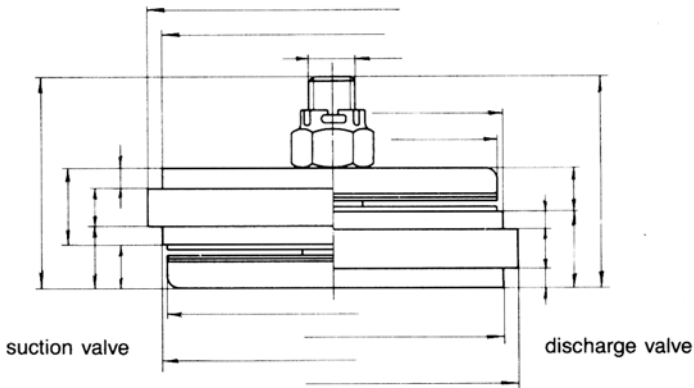
5. with inside suction valve

6. with inside discharge valve
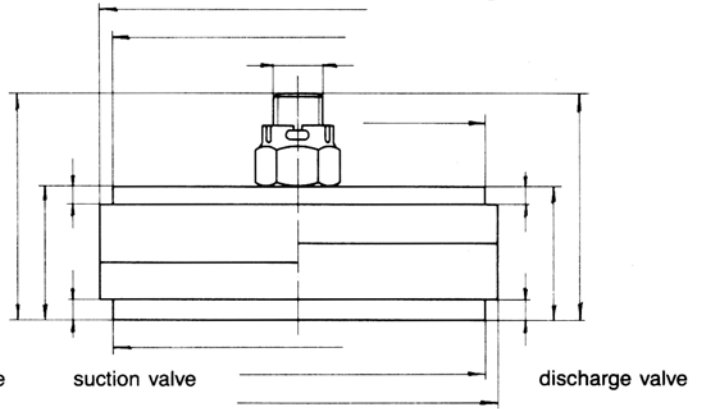
Required valve dimensions

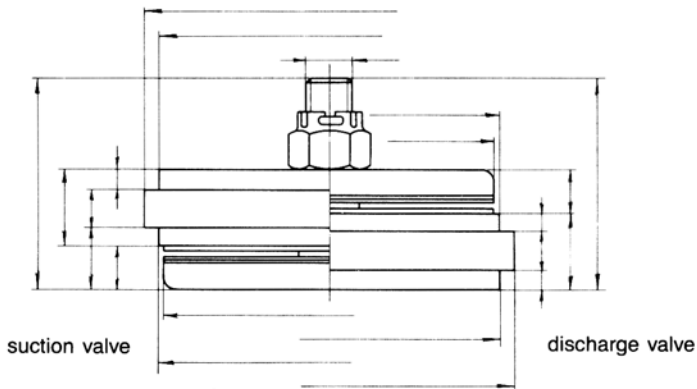**Standard valve design**

valve design with safety guards
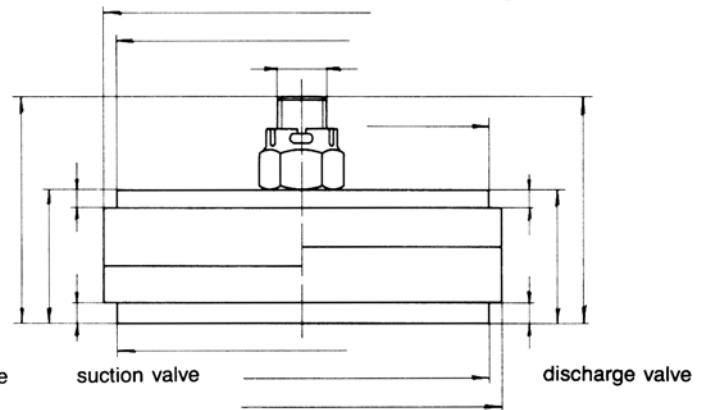
valve dimensions **1st stage**

suction valve   discharge valve

valve dimensions **1st stage**

suction valve   discharge valve

Valve dimensions **2nd stage**

suction valve   discharge valve

valve dimensions **2nd stage**

suction valve   discharge valve

Valve dimensions **3rd stage**

suction valve   discharge valve

valve dimensions **3rd stage**
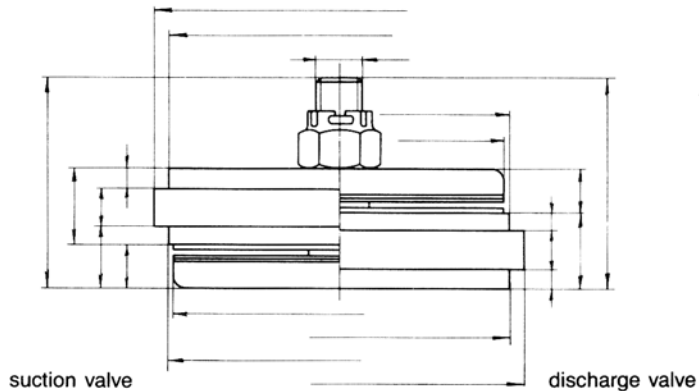
suction valve   discharge valve
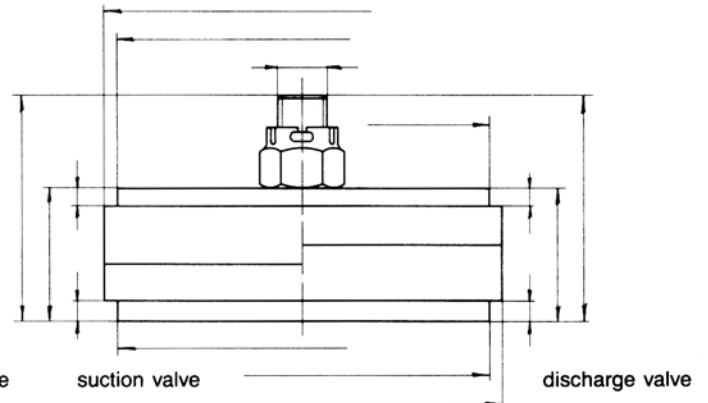
gas contacted valves must be a) acid-resisting, b) rust-resisting, c) non-rust-resisting

Notes: _____

_____

Name: _____ Date: _____