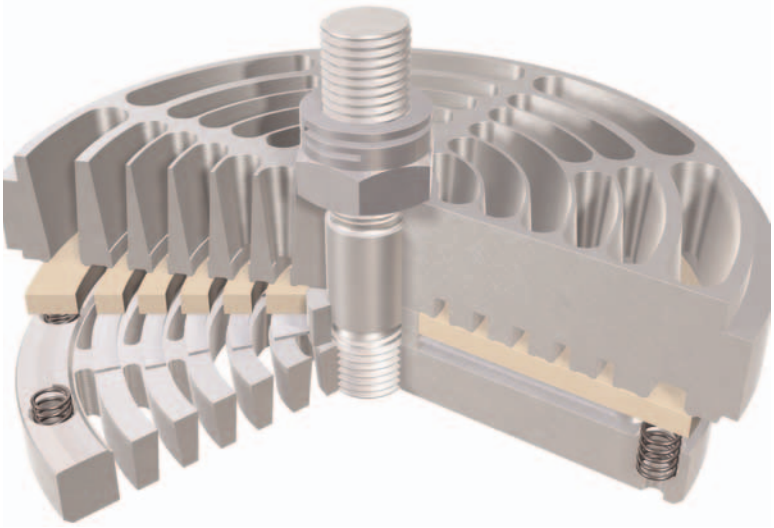
CT VALVE



Proven Performance in High Speed Gas Compressors

HOERBIGER
COMPRESSION TECHNOLOGY

For gas gathering and gas processing compressors

High speed compressors require a radically different compressor valve design. The CT valve offers high-speed compressors the same reliable operation and maintenance costs as lower speed units.

The challenges that high speed compressors pose to valve designers are that they must withstand higher impact rates and resist the sticking effect that occurs when liquids are caught between the sealing elements.

The CT Valve uses a webbed valve plate design. The valve plate is made from a high-temperature, high-strength polymer. The spring load is distributed evenly through coil springs located around the outer circumference of the plate. All springs conform to the same spring load which reduces service costs significantly.

To prevent stiction, a wafer plate containing inflexions, is positioned against the guard. The sticking effect is virtually eliminated through the use of this wafer and the flexibility of the non-metallic plate. In the field, the CT Valve has proven its advantages; namely good flow characteristics, high reliability, long life, and simple maintenance.

The valve has been a phenomenal success in the field. Over 300,000 CT valves are operating successfully in gas gathering and gas process compressors, allowing compressor speeds to match the latest engine technology for remote field applications.

Recommended operating conditions	
Speed (RPM)	1800
Max. Working Pressure (psi)	5000
Max. Differential Pressure (psi)	2200
Compression Ratio	<3.5
Maximum Valve Lift (inches)	0.110
Special designs and application constraints may alter valve operating parameters.	
HOERBIGER will optimize the design for special applications.	

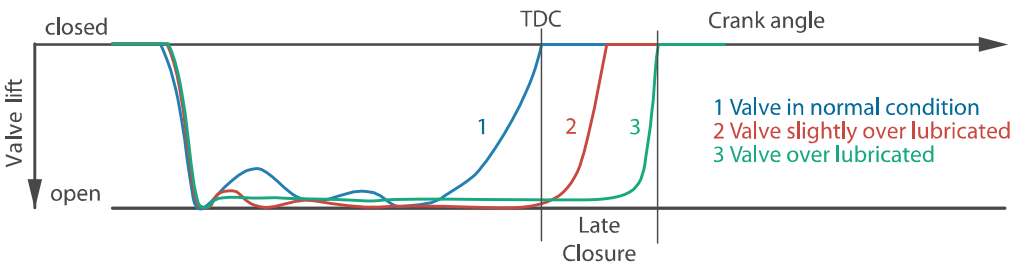
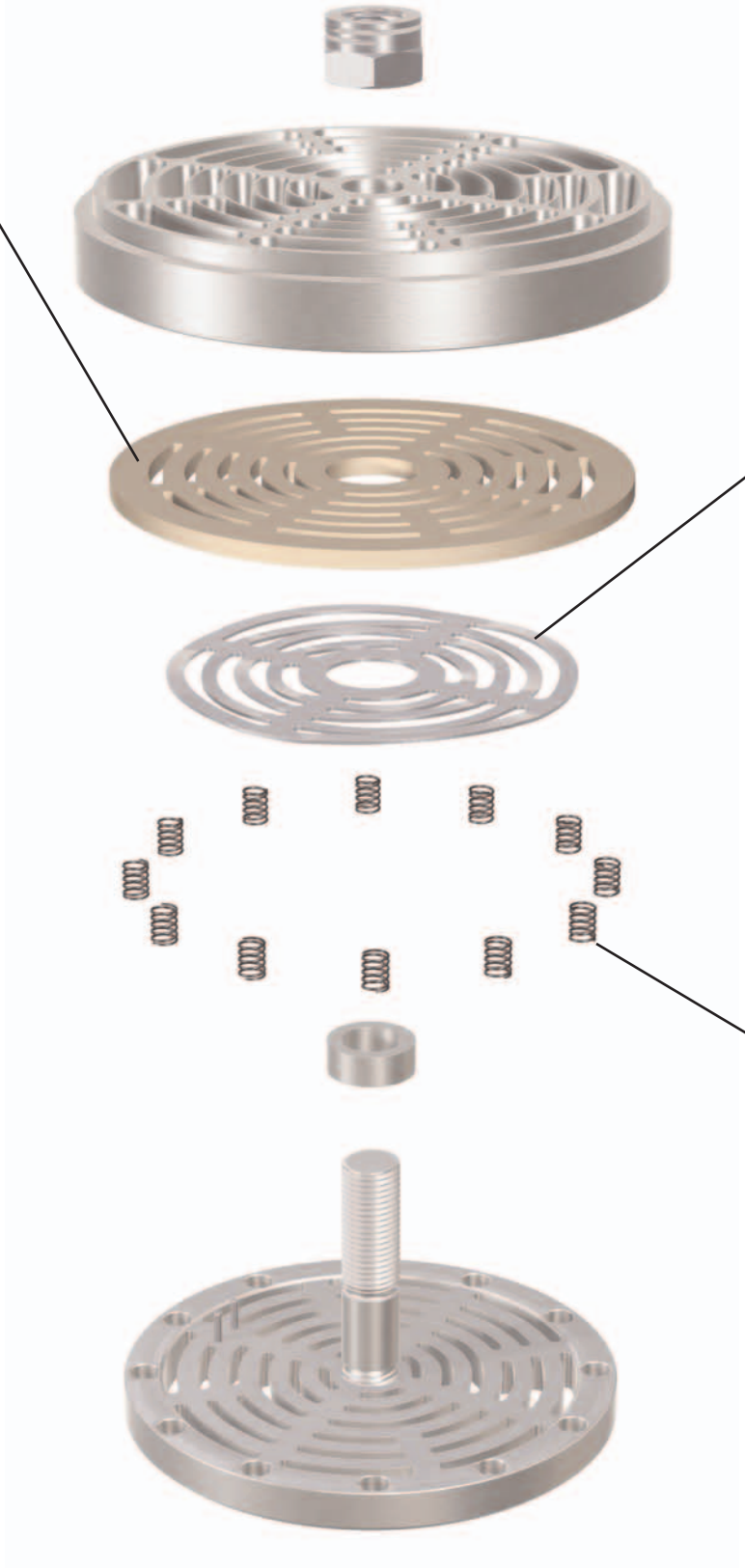


Plate motion of a suction valve. If valves are over lubricated, it can delay their closure. The sticking effect normally encountered with liquids and lube oil is detrimental at high speed. The CT valve is designed to prevent failure due to oil stiction.

Why choose the CT Valve?

Durable plate materials made from high temperature, high strength polymer that holds up under high, localized stress. It effectively absorbs foreign particles and its flexibility allows it to cope well with the sticking effects caused from liquids and oils.



Oil stiction eliminated with the combination of a flexible, non-metallic valve plate and this wafer plate resting against the retainer. It substantially improves the separation of the plate during valve closure.

Ideal valve dynamics due to the positioning of the coil springs on the outer perimeter. Valve motion is stable with no valve plate wobble. Spring load is evenly distributed which reduces the effects of the opening and closing impacts forces.

Summary Benefits

- ✔ Excellent flow efficiency for low horsepower consumption per cubic foot delivered
- ✔ Long life even in difficult and contaminated conditions
- ✔ Operates well in lube and non-lube conditions
- ✔ Performs in a wider range of operating conditions

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Better with HOERBIGER

HOERBIGER
COMPRESSION TECHNOLOGY

Valve Design CT
High Endurance Valve with Non-Metallic Valve Plates For High Piston Velocity Applications on Lubricated Air and Gas Compressors

VALVE TYPES:

64	CET	137	CHT
75	CFT	148	CHT
88	CFT	158	CJT
100	CGT	169	CJT
116	CGT	179	CKT
127	CGT		

This newest valve design is a development to cope with conditions in the latest high speed Air and Gas cylinders (piston velocities of up to 6 m/s).

The design is available with non-metallic valve plates only. It uses a unique steel cushion plate to enhance the life of the valve plate.

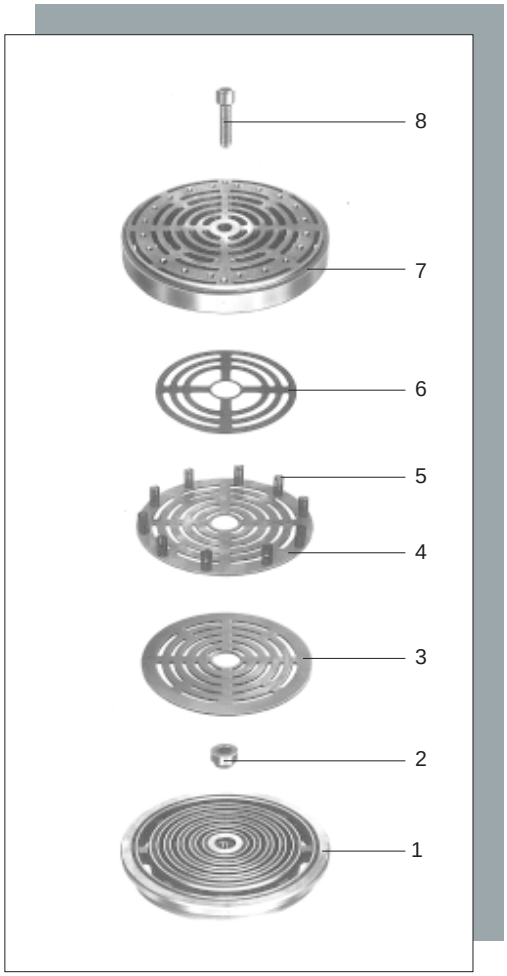
On valve types 116CGT and larger, coil springs are positioned on the outer perimeter of the plate to cushion the opening and closing motion and to stabilize the plate against wobbling.

A slightly curved wafer plate located between guard and cushion plate adds not only an additional dampening element but prevents damaging sticking of plates in lubricated service.

The valve is designed with flow efficiency in mind, and seat and guard areas are liberal and balanced with the increased free lift areas.

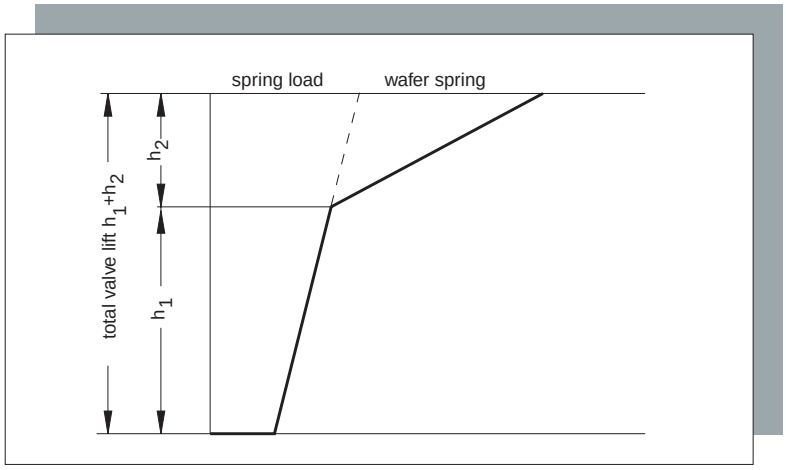
This is a true **"long life - high performance"** valve available in sizes up to 190 mm diameter.

Every HOERBIGER valve is adaptable to existing pocket dimensions and designed to attain the optimum valve lift, spring load, plate thickness and total valve height, based on the operational data of the individual compressor cylinder.



DISCHARGE VALVE ASSEMBLY

1 Valve seat
2 Guide ring
3 Valve plate
4 Cushion plate
5 Closing springs
6 Wafer plate
7 Guard
8 Stud



FIRST IN QUALITY AND DESIGN

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