



Burckhardt Poppet Valve™

Fully field repairable and cost-effective – for demanding applications

Application range

Industries

Oil refining, chemical and petrochemical industries, natural gas, industrial gases

Processes

Hydrocracking, hydrodesulphurization, fluid catalytic cracking, reforming, vent gas recovery, natural gas transport and storage, industrial gas production

Gases

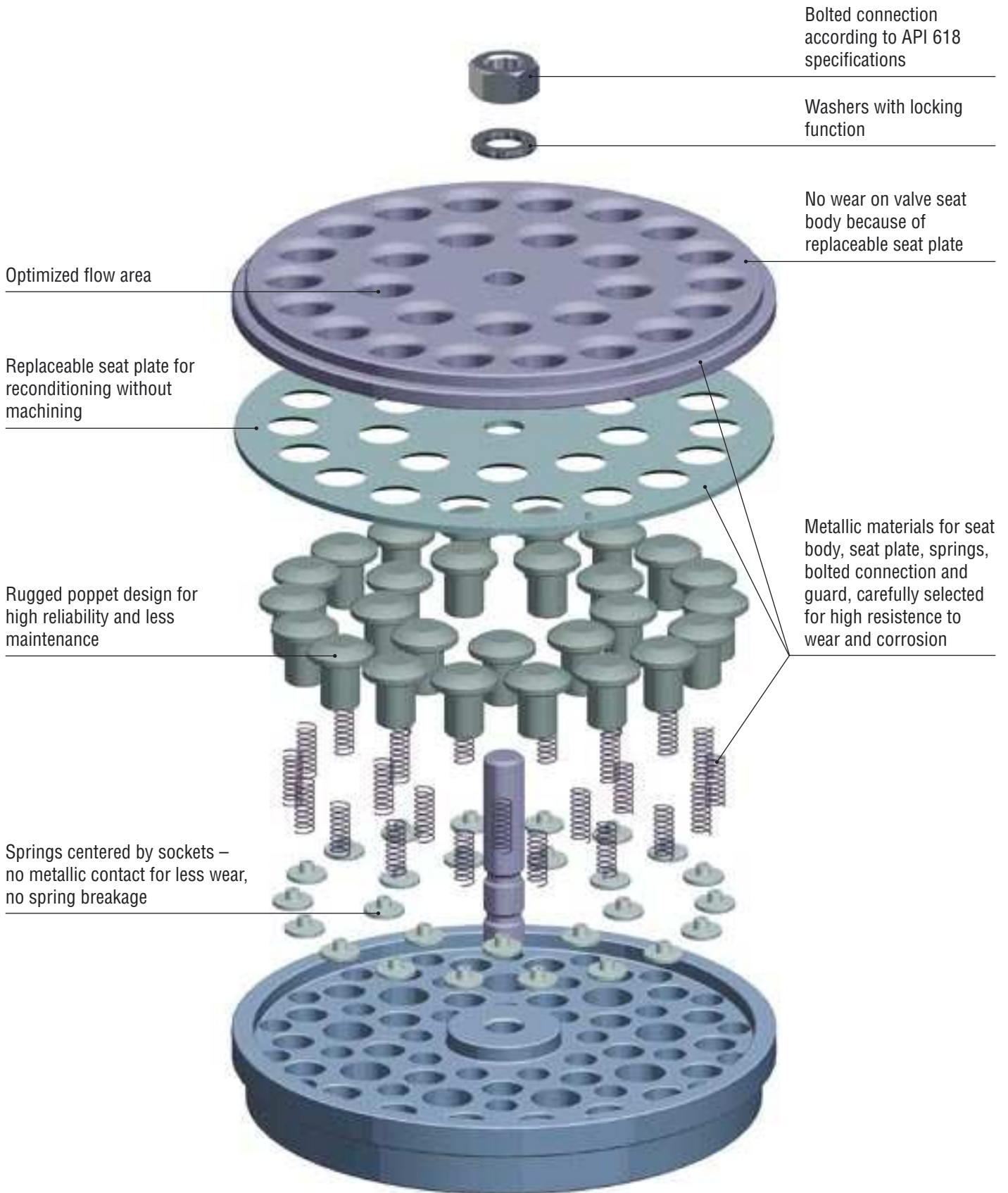
N_2 , C_nH_m , C_nH_m mix gases, and gases containing oil and/or particles

Why the poppet valve?

The Burckhardt Poppet Valve™ performs excellent in demanding applications with gases containing oil and particles. The optimized flow area results in less pressure drop and increases efficiency. The robust poppets are made of injection molded thermoplastics and minimize the risk of secondary damages to other parts of the

equipment. Furthermore, the Burckhardt Poppet Valve™ is designed for easy maintenance and has one enormous advantage: It is the only valve on the market which is fully field repairable because of the removable seat plate. This means no machining, grinding, lapping nor any other additional work has to be done on the components. The only tool needed is a wrench.

Design features Burckhardt Poppet Valves™



Technical specification

Operating conditions

Compressor speed	max. 1800 rpm
Pressure difference	max. 100 bar / 1450 psi
Temperature range	from -50 to +220 °C / -58 to +428 °F
Compressor lube	lube and non-lube

Materials

Guard and seat	X12CrS13 / AISI 416
Poppet materials	PEEK Nylon® PTFE

Dimensions

Min. diameter	68 mm / 2.68 inch
Max. diameter	323 mm / 12.72 inch

Capacity control

The Burckhardt Poppet Valve™ is suitable for compressors with variable speed drive or in combination with valve unloaders. The following types are available:

- Standard unloading device
 - For suction valve with gas or oil-actuated unloading device
- Unloading device for explosive and toxic gases
 - Bellows type for suction valve with gas or oil-actuated unloading device
 - Hermetic sealed control unit
- Unloading device for low temperature applications
 - For suction valve with gas-actuated unloading device
 - Integrated control unit – no freezing problems

Advantages of Burckhardt Poppet Valves™

- High efficiency and reliability
- Field repairable without special tools for minimized downtime and less costs
- If one poppet fails, valve does not require immediate replacement
- Full interchangeability of components to reduce inventory costs
- Insensitive to different thermal expansion of poppet and seat material
- PEEK and Nylon® poppets with high impact strength and resistance to possible effects of debris
- Ideal for dirty or wet gases where plate valves tend to clog
- No oil sticktion

The only valve that is fully field repairable!

Each valve is carefully selected and engineered for best efficiency in customer specific application.



**Burckhardt Compression:
compressors for a lifetime!**

Burckhardt Compression offers three types of custom-engineered valves for optimal performance in your application. These three types have proven successful over many decades:

- Burckhardt Plate Valves™
- Manley® valves, licensed by Burckhardt Compression
- Burckhardt Poppet Valves™

All three valve types have similar flow characteristics and are designed for full interchangeability if process operating conditions change.

**Burckhardt Compression has over 120 years experience in design
and manufacturing of compressor valves.**

**For best performance and longest service life –
Burckhardt Valve Service is a must.**

**Burckhardt Compression provides valves and valve service for all brands
of lubricated and non-lubricated compressors.**

Your local contact



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