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### **BALL VALVE WITH INTEGRATED HEATING JACKET**

Gastight and with metal-to-metal sealing.

Safe. Long-lasting. Low maintenance.





In special applications, the heating of fittings is necessary to keep the medium flowable. Due to the consistently low viscosity of the media, the pump performance can be reduced, and pipeline and valve damage, caused by solidifying particles, can be avoided. The heating technology is traditionally applied by welding double jackets onto the outer area of the valve body. The new ball valve design from Hartmann Valves integrates the heating jacket into the valve body. Welding on double jackets is no longer necessary.

Due to the integrated heating jacket and the resulting short distance between the heating medium and the process medium, the heat transfer can be significantly improved. The purely metallic seal also ensures that even if the medium contains solids (such as sulphur cement in the case of liquid sulphur), the essential sealings (seat rings) are not damaged or destroyed. The new design is space-saving and allows for easy mounting of the bolts and nuts on the connecting flanges.

#### **ADVANTAGES OF THE INTEGRATED HEATING JACKET DESIGN**

- Improved heat transfer between heating medium and process medium energy efficiency
- Metal-to-metal sealing system: Resistance to solids, e.g. sulphur cement for CLAUS systems
  - Easy installation: Sufficient space for bolting the flanges
  - Design flexibility due to complete in-house production

# **TECHNICAL CHARACTERISTICS**

#### **OPERATING RANGE**

Nominal bore: DN 25 to DN 150 (1" to 6") Pressures: up to PN 40/Class 300 Temperatures: from -10°C up to +300°C Media: Liquid sulphur, wax, refinery residues, polymers

#### **DESIGN CHARACTERISTICS**

- Split body
- Solid design; exclusive use of rolled and forged steel, no cast iron
- Floating ball design
- . Seat elements spring-loaded on both sides
- Metal-to-metal sealing (gastight)
- DIN/ISO connection for mounting drives/accessories
- . Maxi-heating (full heating integrated in the ball valve, heating of both moving parts and flanges)
- . Standard heating jacket connections: 2 x NPT female thread
- With standard or "oversized" flanges

#### **STANDARD WELDING NECK FLANGES**

DN BALL VALVE BORE	DN STANDARD FLANGES	PN   CI.
25   1"	25   1"	16 - 40   Cl. 150 - 300
40   1,5"	40   1,5"	16 - 40   Cl. 150 - 300
50   2"	50   2"	16 - 40   Cl. 150 - 300
80   3"	80   3"	16 - 40   Cl. 150 - 300
100   4"	100   4"	16 - 40   Cl. 150 - 300
150   6"	150   6"	16 - 40   Cl. 150 - 300

#### **"OVERSIZED" FLANSCHE**

<b>DN BALL VALVE BORE</b>	DN STANDARD FLANGES	PN   CI.
25   1"	50   2"	16 - 40   Cl. 150 - 300
50   2"	80   3"	16 - 40   Cl. 150 - 300
80   3"	100   4"	16 - 40   Cl. 150 - 300
100   4"	150   6"	16 - 40   Cl. 150 - 300



#### **DESIGN OPTIONS**

- Larger nominal bore (DN)
- Higher pressures (PN/Class)
- Higher temperatures (up to 450°C)
- Individual heating jacket connections
- Individual face-to-face dimensions
- Studded design with block flanges
- Midi-heating (partial heating integrated in the ball valve, heating of moving parts)
- Partially welded body
- Brass interior for further improved heat transfer between heating medium and process medium
- Heating jacket pressure optionally up to PN of the valve





#### **MIDI-HEATING DESIGN**

- High pressure and high temperature version (stem extension with integrated cooling fins)
- Separation of heating medium and process medium by seal welding
- Heating of moving parts
- Suitable for heating media with high pressure

#### STUDDED DESIGN WITH BLOCK FLANGES

- Short face-to-face dimensions possible
- Large part of the body heated despite block flanges



### WHAT DISTINGUISHES US?

#### **HARTMANN VALVES & WELLHEADS**

We start where others stop: Hartmann develops custom-build performance components of the highest quality.

Hartmann Valves is a leading manufacturer of ball valves, pigging valves and wellheads. Our worldwide experience lies in the fields of crude oil, natural gas, petrochemicals, power stations, geothermal and emerging renewables such as hydrogen. Our customers value and endorse our pure metallic sealing system. Design, assembly and tests are carried out solely in our facilities in Celle and Burgdorf-Ehlershausen, Germany.

Founded in 1946, this family-owned and managed company is in its third generation and continues to evolve as an international operating organization now with 200 employees.

#### INSIGHTS INTO OUR PRODUCTION

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Our project sales and engineering teams are eager to engage and collaborate with you in developing high performance solutions.

#### SOLUTIONS FOR EXTREME CONDITIONS

Hartmann ball valves and wellheads are designed for pressure ratings up to 690 bar, temperatures from -200 to +550°C (-328 to 1022 °F) as well as high cycle applications.



A long lasting product with low maintenance will fundamentally reduce the lifecycle cost of your plant. German product excellence through innovative engineering and excellence.

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## CONTACT

#### **HARTMANN VALVES GMBH**

Bussardweg 15 31303 Burgdorf-Ehlershausen Germany

Sales sales@hartmann-valves.com +49 5085 9801-59

Service service@hartmann-valves.com +49 5141 3841-10





www.hartmann-valves.com