

TDC SERIES

AUTOMATIC RECIRCULATION VALVE FOR PUMP PROTECTION DESCALING APPLICATIONS

FEATURES:

- › **Robust construction** designed to withstand descaling operations
- › **Automatically modulating** bypass function
- › **Quick** acting main valve
- › **Forged housing material** in either carbon steel or stainless steel
- › **Flow controlled operation** – no external energy source required

BUILT TO LAST. BUILT TO PROTECT.

The **wear resistant TDC Series ARVs** withstand the abrasive and high-pressure conditions of descaling applications while delivering superior protection to your centrifugal pumps.



DESIGNED TO EXTEND LIFE AND REDUCE DOWNTIME.

The **TDC Series valves feature a built-in bypass check valve**, which reduces installation time. In addition, the special bypass plug is multi-layered hard facing with coated treads to ensure longer life.

WITHSTANDS SWITCHING CYCLES

Frequently switching cycles can shorten a valve's lifetime. But with their durable components, **the TDC Series valves are designed to withstand cycle by cycle.**



Easy to install



Optimized for
frequent switching

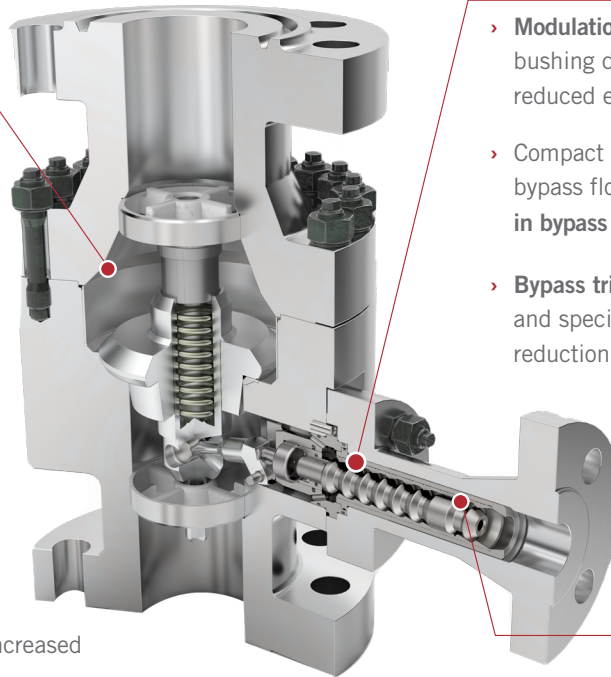


Low Maintenance



Low noise level

› Available in **carbon steel, stainless steel and super duplex** to fit your needs



› **Modulation bypass function** with a robust control bushing design allows partial load operation with reduced energy consumption

› Compact machined housing design for high bypass flow offers **maximum flexibility in bypass trim sizes**

› **Bypass trim with multi stage pressure** reduction and special surface preparation for high pressure reduction and a maximum erosion resistance.

› Low valve hysteresis promotes increased and reliable pump performance

› **Bypass check valve** prevents reverse pump flow and allows for parallel pump installations

TECHNICAL DATA

NOMINAL DIAMETER	DN 80 – 250 / NPS 3 – 10
PRESSURE CLASS	PN 100 – 400 / Class 600 – 2500
TEMPERATURE (MAX.)	Up to 230 °C / 446 °F (other temperatures on request)
HOUSING MATERIAL	1.0460 / A105, 1.0571 / LF2, 1.4404 / F316L, 1.4462 / F51, 1.4501 / F55
HOUSING TYPE	Forged
MEDIA	Descaling water (other liquids possible)
FLANGES	EN 1092-1, ASME B16.5, ISO 7005, JIS, JPI, welding ends on request
DESIGNS	Vertical installation, horizontal installation, manual start-up, enlarged nominal width of the bypass
NUMBER OF STAGES (MAX.)	8
NUMBER OF CONTROLLED STAGES (MAX.)	8
OTHER	Bypass differential pressure 20–250 bar

FIND OUT MORE

Learn more about the TDC Series Automatic Recirculation Valves and what they can do for your operation at [circor.com](https://www.circor.com)

