



Uniquely designed for Hot Reheat Bypass

- **Tight Shut-Off**
- **Full bore**
- **Cavity Free**
- **Bi-directional**
- **Engineered for Critical Applications**

Hot Reheat Bypass

Valves which isolate the Hot Reheat Bypass protect turbines and plant equipment, reduce fuel consumption, and enable faster startups. They prevent water carryover and thermal transients while turbine bypass systems control boiler pressure and temperature for efficient operation.

OMB DuEX eccentric ball valve, with its simple and robust ¼ turn design and repeatable tight shut-off performance provides reliable and repeatable bypass isolation for steam turbines, boilers and protects against large temperature transients for quick plant startup times.

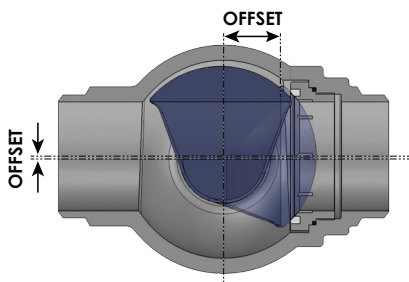


Design

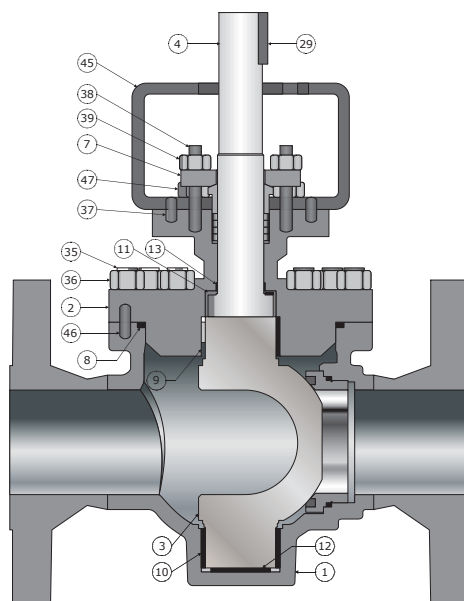
Design to ASME B16.34 &
ASME VIII Div.1
ATEX EX II 2G
PED Certificate III Cat.
Firesafe to API 607, ISO 10497

Construction

Top Entry Construction
DN from ½" to 24"
ASME Class 150 to 2500
(Special cl. on request)
Flanged & BW ½" to 24", SW ½" to 2"
Manual or easily actuated with standard
readily available actuators.



Materials



Part	Description	Carbon Steel Chrome CS
1	Body	WCB or WC9
2	Bonnet	WCB or WC9
3	Ball	410SS+CCC
4	Stem	410SS
5A	Seat Ring	410SS+CCC
5C	Seat Seal	Graphite
8	Gaskets	Graphite
9,10	Bearings	316SS+HF
12	Thrust Bearing	316SS+HF
14	Packing	Graphite
38, 39	External Fasteners	B7/2H



CCPP

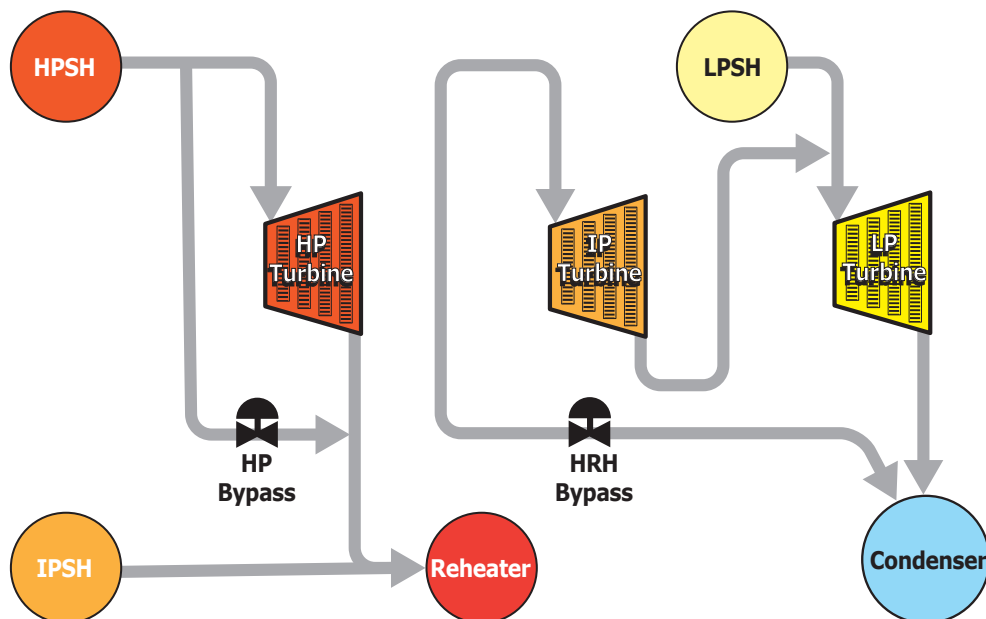
Hot Reheat Attenuator By-Pass

Key concerns for the Hot Reheat Bypass include:

- Noise from the pressure letdown of 550-650 psig to vacuum in the condenser. The high pressure drop from the hot reheat section to the condenser can cause excessive noise and vibration.

- Temperature control also must be accounted for as the steam drops from 1050 degrees to near saturated conditions at the condenser to protect it from thermal fatigue while ensuring efficient heat transfer.

Valves in this application must be extremely robust and have repeatable high performance.



Historical Valve Type Used	Trunnion Ball or Gate Valve
Weakness/ Failure Point	Continuous friction through 90 degree travel wears the seat to ball interface allowing excessive leakage.

OMB Solution	DuEX Eccentric Ball Valve
Typical BOM	Body: Carbon Steel or Chrome CS Trim: 12 Chrome + HF
Typical Sizes	4"-12" Class 1500
Typical Figure Number	DuEX® ACT-D-5TCF-RF WCB/F6a Cl.2/CA15/F6a Cl.2+CCC
Automation Type	Pneumatic Spring Return Fail Close

Features	DuEX	Trunnion Ball or Gate Valve
Cavity Free	✓	
Easy Maintenance	✓	
Eccentric/Non-Rubbing	✓	
Torque Seated	✓	
Simple Automation	✓	✓
Simple Design	✓	✓
Control Ability	✓	
Low Running Torque	✓	



Made in Italy

OMB Valves s.p.a.
Cenate Sotto, BG

www.ombvalves.com
a company of OMB group

Made in USA

OMB Valves Inc.
Stafford, Tx

Sales office and service

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Dammam, Saudi Arabia	Seoul, Korea
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