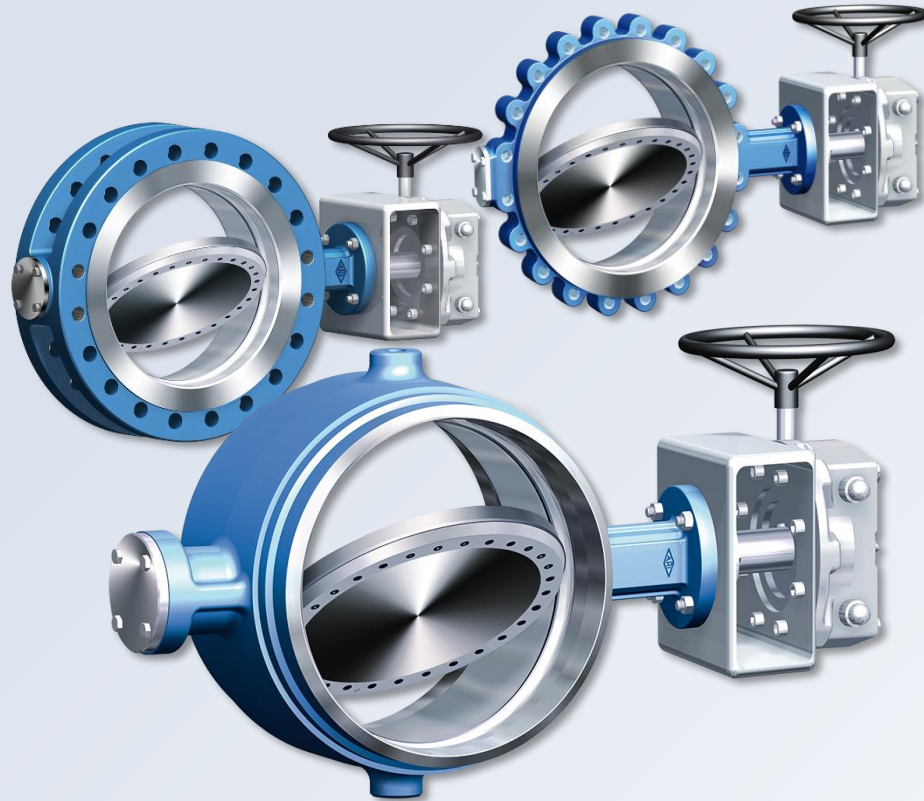


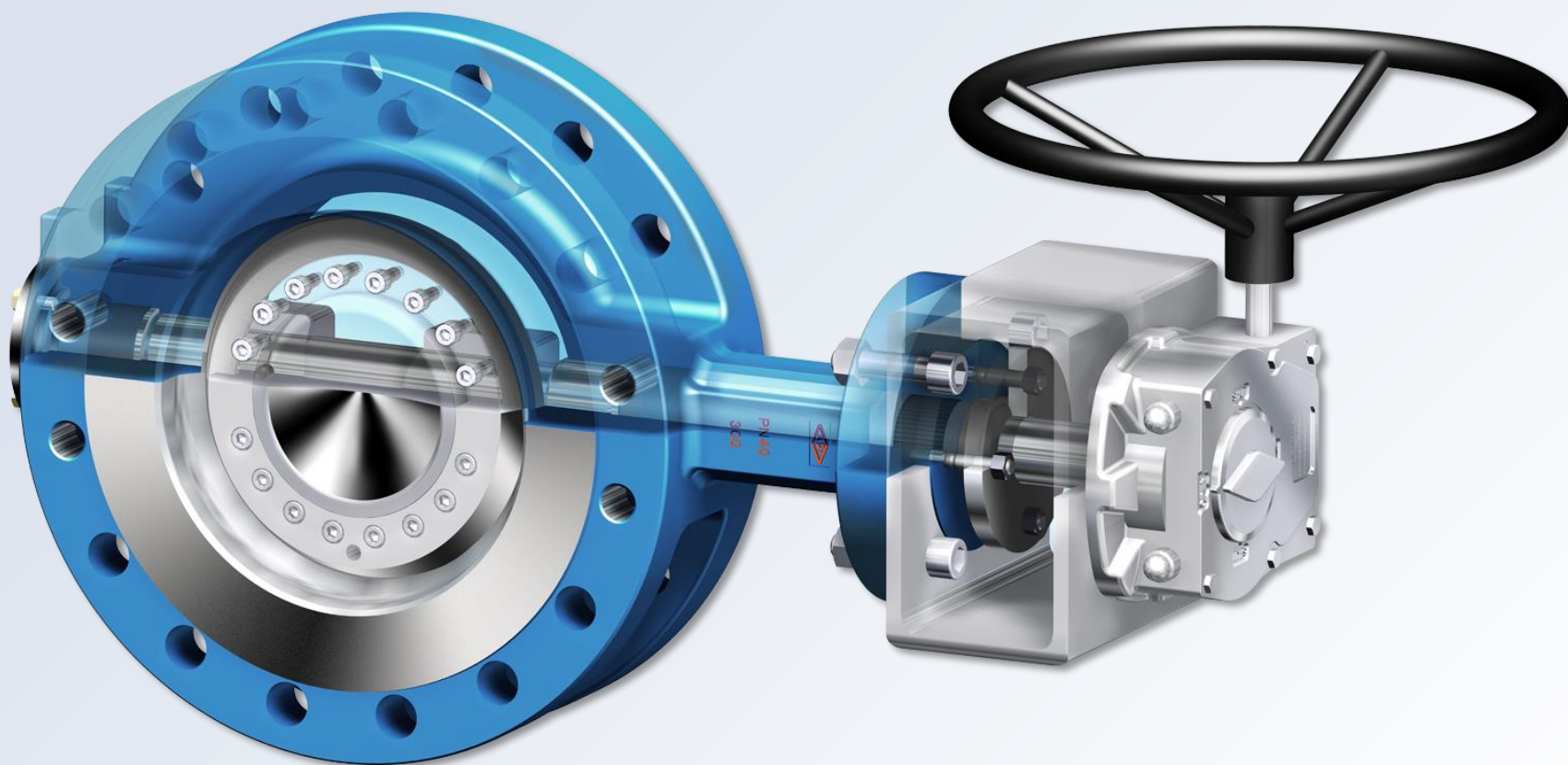
# ZETRIX®

Now also with butt weld ends or as a fully lugged, wafer flange version in Class 600 (PN 63/100)



- ▶ „Intelligenter“ Dichtring – selbstzentrierend
- ▶ Elastischer Edelstahl-Graphit-Dichtring
- ▶ Stellite-Sitz (Stellite 21)
- ▶ Metallisch dichtschießend, Leckrate A gem. EN 12266-1
- ▶ Absperr- u. Regelfunktion durch optimierte Kennlinie
- ▶ **Design** EN 12516, ASME B16.34, API 609
- ▶ **Type of connection** EN 1092, ASME 16.5, ASME 16.47
- ▶ **Nominal diameter**  
Double flange: DN 80-1200, 3" - 48"  
Lug type: DN 80-600, 3" to 24"  
butt-weld ends: DN 80-600, 3" to 24"
- ▶ **Nominal pressure** PN 10 to PN 40, Class 150, Class 300 / 600
- ▶ **Face-to-face**  
Double flange: DIN EN 558-1 series 13, ISO 5752, API 609  
Lug type: DIN EN 558-1 series 16, ISO 5752  
Butt-weld ends: DIN EN 558-1 series 14, ISO 5752
- ▶ **Material** Cast steel (1.0619 +N; SA216 WCB) Stainless steel (1.4408; SA351 CF8M)
- ▶ **Temperature** -60°C to +427°C
- ▶ **Approvals** firesafe, SIL, ATEX, ISO 15848-1, ATEX

# ZETRIX®



# ZETRIX®

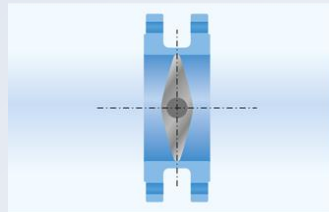
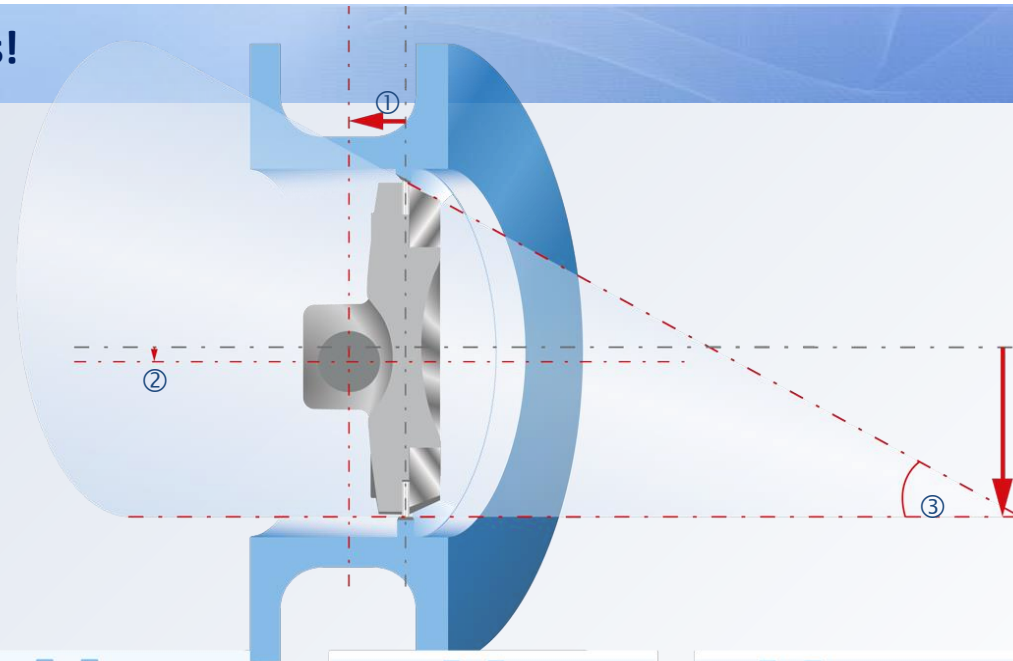
## Triple offset for challenging applications!

### What is “triple offset”?

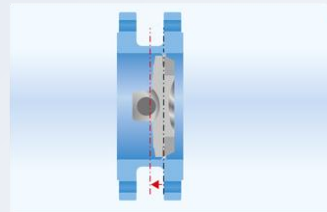
The pivot point of the disc is displaced both from the plane of the seat along the pipe axis (first offset) and from the pipe's centre line (second offset). With triple offset process valves, the seat's axis of rotation is also asymmetrically disposed to the pipe axis.

### Benefits for you

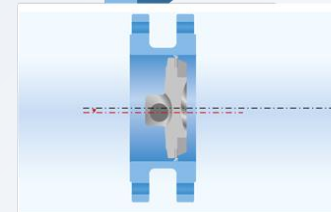
- Frictionless swivel movement
- Permanently leakproof by the metal seal principle
- Versatile applications with regard to media and temperature



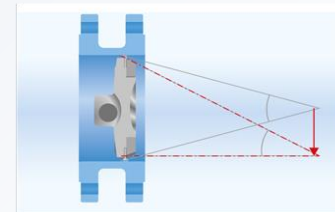
Centric disc design –  
The pivot point is centrally disposed  
to both the seat and the pipe.



① First offset –  
The pivot point of the disc is  
displaced from the plane of the  
seat along the pipe axis.



② Second offset –  
The pivot point is also displaced  
from the pipe's centre line.



③ Third offset –  
The seat's axis of rotation is also  
asymmetrically disposed to the  
pipe axis.

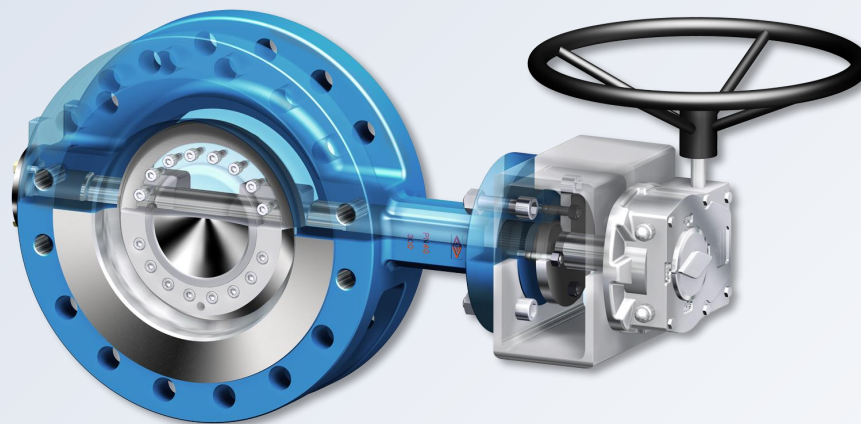
# ZETRIX®



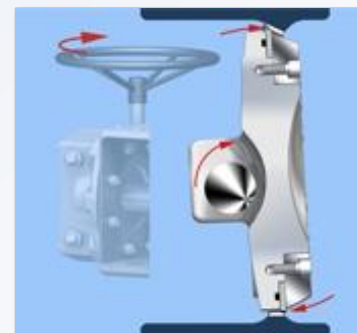
Laminated stack made of stainless steel and graphite lends additional elasticity to the sealing ring



Triple offset design guarantees a frictionless swivel movement of the sealing ring into the seat



The ZETRIX® seals according to the area seating principle; the required contact pressure is applied via the actuator

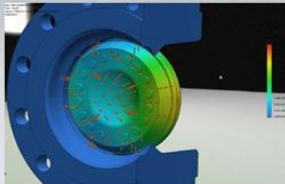


Maximum closing force with minimum effort because of optimised contact angles

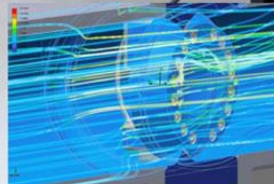


# ZETRIX®

Modern development methods, tested in our own experimental lab



Finite element method



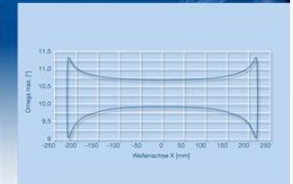
State-of-the-art flow simulations



Rigorous tests (here: firesafe)



Characteristic measurements



Contact angle calculation

# ZETRIX®

## High-precision manufacturing



The valve bodies are manufactured on fully automatic, CNC controlled machining centres



Fully automatic welding robot with an integrated measuring system

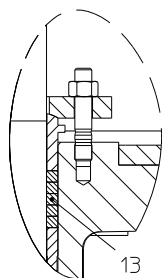


The three-dimensional measuring system allows the comparison with 3D data

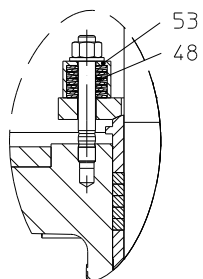


Computer aided leak test according to DIN EN 12266, leakage rate A

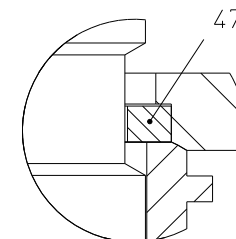
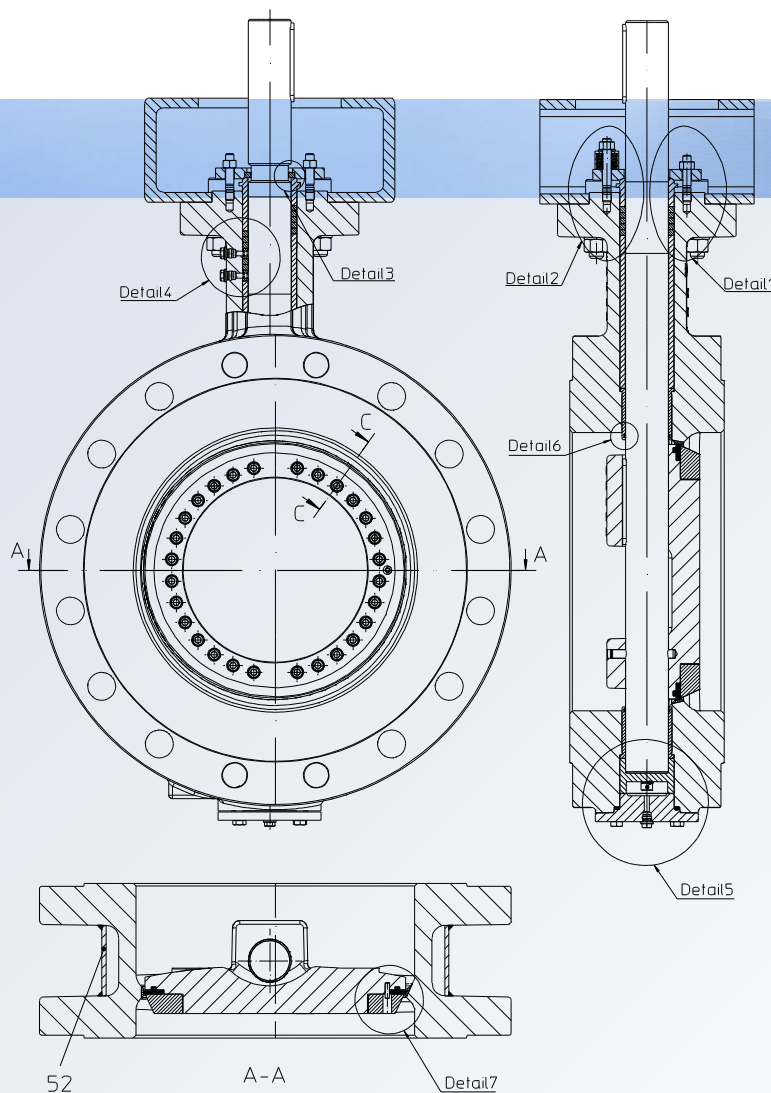
# ZETRIX®



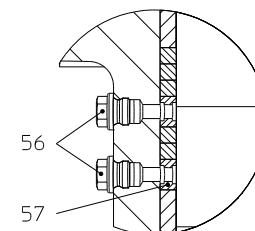
► Detail 1: stuffing box standard



► Detail 2: spring loaded stuffing box

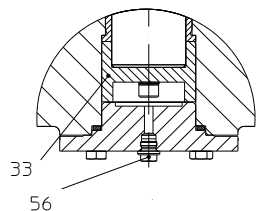
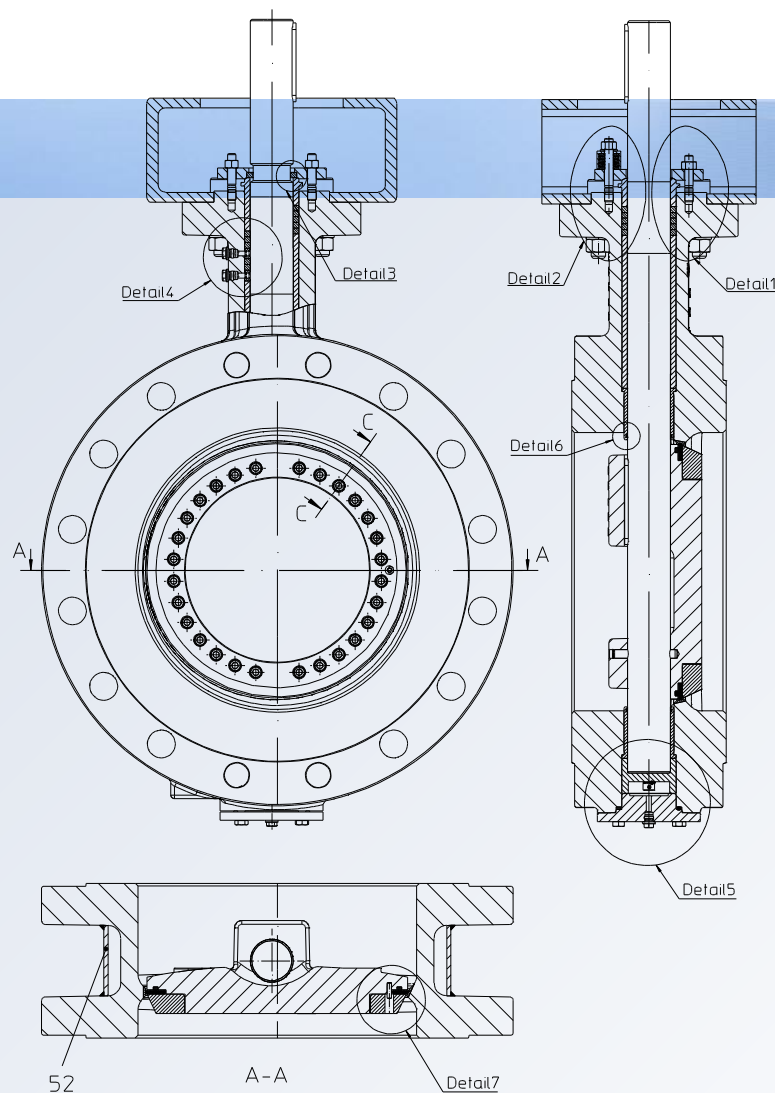


► Detail 3: blowout protection acc. to API 609

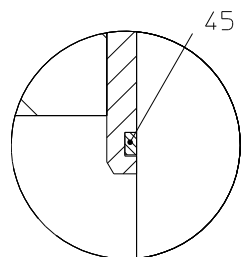


► Detail 4: leak-off and flush connection

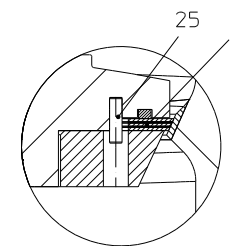
# ZETRIX®



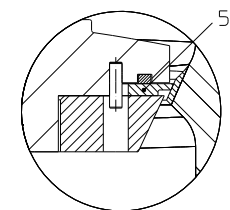
► Detail 5: leak-off connection for bottom flange



► Detail 6: bearing protection



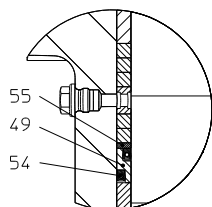
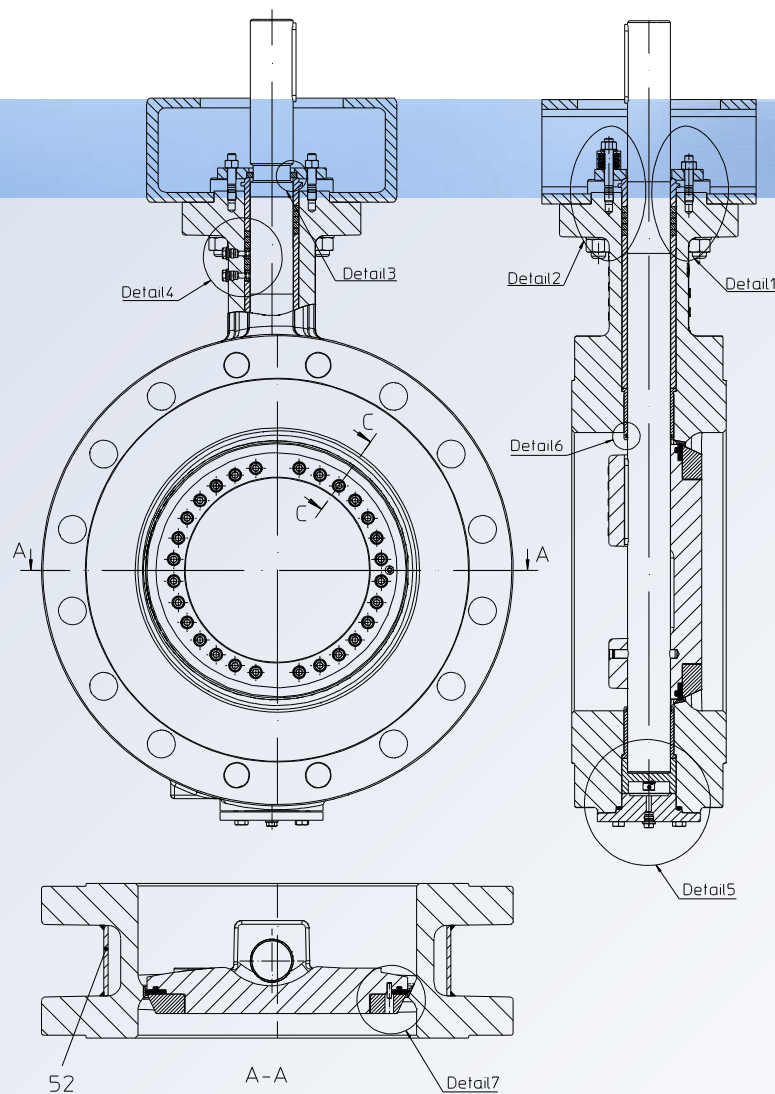
► Detail 7: seal ring (Standard)



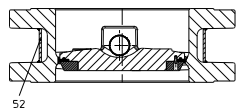
► Detail 7: massive seal ring (Option)



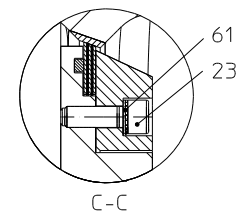
# ZETRIX®



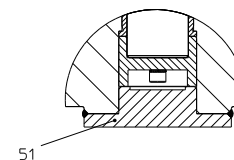
► Detail: test connection (Option)



► Detail: heating jacket

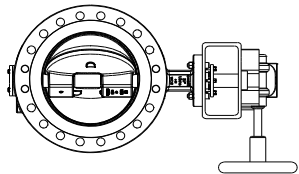


► Detail: self-retaining washer

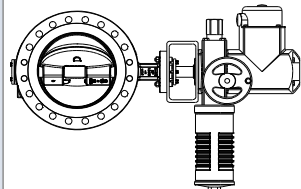


► Detail: welded bottom flange

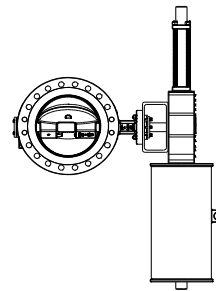
# ZETRIX®



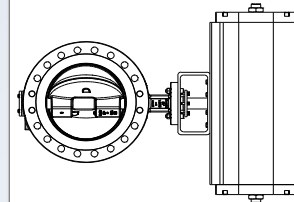
► ZETRIX with worm gear



► ZETRIX with electric rotary actuator



► ZETRIX with hydraulic actuator



► ZETRIX with pneumatic actuator