

DOUBLE-ECCENTRIC BUTTERFLY VALVES

ERHARD RANGE

ROCO WAVE

ROCO wave is the newest generation of double-eccentric butterfly valves. With its flow-optimized "Wave" design, this isolation valve offers outstanding features for a sustainable future. Minimized pressure losses and high energy-efficiency are two key properties for which this valve was developed. The patented polygon connection of shaft and disc provides uninterrupted corrosion protection and optimal torque transmission at the same time. The use of a slider crank gearbox allows safe operation of butterfly valves with minimized pressure surges. The valve is suitable for bidirectional use and tight in both directions.



MARKETS



Water treatment



Water transmission



Water distribution network



Dams and hydro power



Irrigation



Desalination



Industrial water applications

TECHNICAL DATA

Double-flange design
acc. to EN593

Face-to-face dimension
acc. to EN558 series 14

Nominal Diameter (DN):
DN150 – DN1600

Nominal Pressure (PN):
PN10 to PN40

Fully coated
IP68 rating

Medium Temperature: Up to 60°C

APPROVALS

DVGW, GOST, AC S, WRAS
According to type of coatings

ADVANTAGES

ENERGY EFFICIENT

Flow-optimized design for energy savings.

CLEAN

Polygon connection for clean potable water.

SAFE

Water hammer prevention and system protection.

CHARACTERISTICS

└ **Double-eccentric design** acc. to EN593 ensures minimal stress on the sealing after unseating the valve. This results in a long service life of the valve.

└ **High quality coating** is selected and applied to the valve according to the application in order to provide the best possible corrosion protection.

└ **Flexibility** – Standard ISO 5211 connection flange allows use of all different kinds of actuators.

└ **High protection degree** means that the standard valve can be flooded or used in buried service without additional effort.

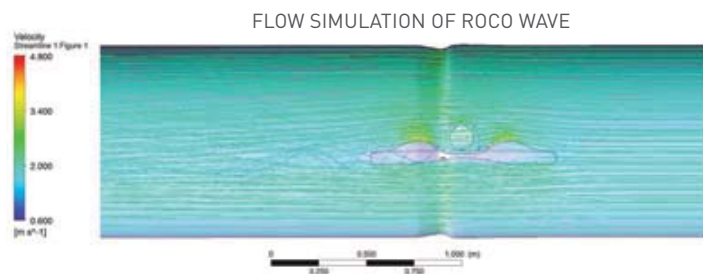
STANDARD COATING PROPOSITIONS

- └ Full epoxy
- └ Enamel inside / epoxy outside
- └ Full enamel
- └ Rubber-lining inside / epoxy outside
- └ EPC inside / epoxy outside

FEATURES AND BENEFITS

OPTIMIZED DISC IN WAVEFORM

Highest stability and economic efficiency optimized to allow for excellent flow characteristics.



OPTIMAL RIGIDITY

At high pressure ratings and large nominal diameters, the “Skeleton” design ensures optimal rigidity without narrowing the cross section.

VALIDATION OF THE STRUCTURE BY MECHANICAL SIMULATION



THE POLYGON PLUG

The highest level of precision in the manufacturing process allows better local force distribution and a connection absolutely free from play.



SKG - SLIDER CRANK GEARBOX

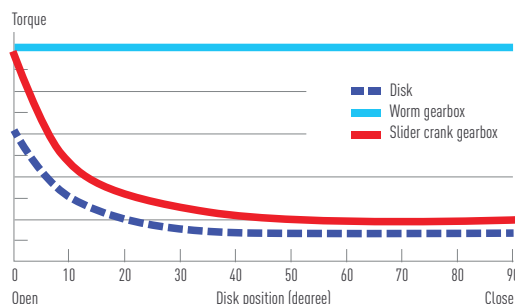
The optimum solution offering high precision for reliable opening and closing without pressure surges.

Characteristics:

- └ **Closing behaviour adapted to butterfly valve** – First 70% fast closing, last 30% slow closing to prevent water hammer.
- └ **High protection degree** means that the gearbox can be flooded or used in buried service without additional effort.
- └ **Versatile automation possibilities** – Optional ISO 5210 actuator connection flange allows use of all different kinds of actuators.



TORQUE CURVE OF SKG



OPTION : THE THREE-POINT LOCKING SYSTEM

Prevents unintended opening of the butterfly valves in case of revisions in the pipeline safely and reliably. This guarantees that the butterfly functions as a locked and drip-tight closed safety valve. Inspection of the pipeline can take place without danger, even in case of an operating error on the actuator.



FULL EPOXY



CHARACTERISTICS

High quality coating is selected and applied to the valve according to the application in order to provide the best possible corrosion protection.

MARKETS



Water treatment



Water transmission



Water distribution network



Industrial water applications



Dams and hydro power



Irrigation



Desalination

TECHNICAL DATA

Nominal Diameter (DN):

DN150 – DN1600

Nominal Pressure (PN):

PN10 to PN40

APPROVALS

DVGW, GO ST, AC S, WRAS

According to type of coatings

ENAMEL INSIDE / EPOXY OUTSIDE



CHARACTERISTICS

High quality enamel coating provides a very smooth surface in order to prevent limescale or deposit of other sediments.

MARKETS



Water treatment



Water transmission



Water distribution network



Irrigation

TECHNICAL DATA

Nominal Diameter (DN):

DN150 – DN1200

Nominal Pressure (PN):

PN10 to PN16

APPROVALS

DVGW, GO ST, AC S, WRAS

FULL ENAMEL



CHARACTERISTICS

High quality enamel coating provides a very smooth surface in order to prevent limescale or deposit of other sediments. At the same time, it provides optimal corrosion protection when the valve is buried in an aggressive environment.

MARKETS



Water treatment



Water transmission



Water distribution network



Irrigation

TECHNICAL DATA

Nominal Diameter (DN):

DN150 – DN600

Nominal Pressure (PN):

PN10 to PN16

APPROVALS

DVGW, GO ST, AC S, WRAS

RUBBER-LINING INSIDE / EPOXY OUTSIDE



CHARACTERISTICS

High quality hard, vulcanized rubber lining inside the valve body and disc in order to provide the strong protection against aggressive media.

MARKETS



Water
treatment



Desalination



Industrial
water
applications

TECHNICAL DATA

Nominal Diameter (DN):
DN150 – DN1600

Nominal Pressure (PN):
PN10 to PN40

EPC INSIDE / EPOXY OUTSIDE



CHARACTERISTICS

High quality EPC coating is an epoxy coating with ceramic reinforcement in order to provide the high quality corrosion protection for aggressive media.

MARKETS



Water
treatment



Desalination



Industrial
water
applications

TECHNICAL DATA

Nominal Diameter (DN):
DN150 – DN1600

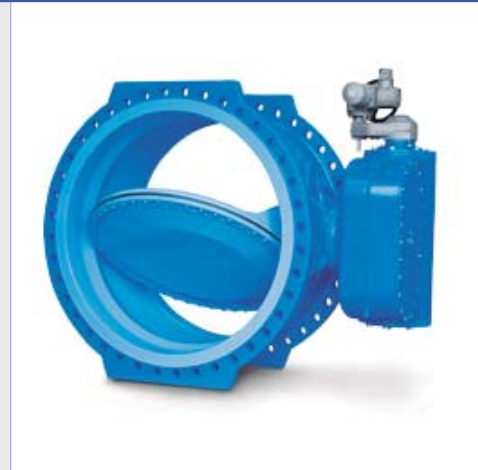
Nominal Pressure (PN):
PN10 to PN40

DOUBLE-ECCENTRIC BUTTERFLY VALVES

ERHARD RANGE

EAK

For more than 70 years, ERHARD EAK Butterfly Valves have provided proven technology of the highest quality. Tried and tested features ensure reliable quality and high economic efficiency. With nominal widths between DN1800 and DN3600 and pressure ratings from PN10 to PN40, they cover a wide field of application. Furthermore, customer-specific variants, e.g. higher pressure ratings, are also possible with the ERHARD EAK Butterfly Valve.



MARKETS



Water
treatment



Water
transmission



Water
distribution
network



Dams and
hydro power



Irrigation

TECHNICAL DATA

Double-flange design
acc. to EN593

Face-to-face dimension
acc. to EN558 series 14

Nominal Diameter (DN):
DN1800 – DN3600

Nominal Pressure (PN):
PN10 to PN40

Fully epoxy coated

Medium Temperature: Up to 60°C

APPROVALS

DVGW, GOST, ACS, WRAS

ADVANTAGES

SAFE

The valve can withstand the highest dynamic loads.

ROBUST

Proven and robust wedge connection between shaft and disc.

ENERGY EFFICIENT

Low head loss design for energy savings.

CHARACTERISTICS

└ **Double-eccentric design** acc. to EN593 ensures minimal stress on the sealing after unseating the valve. This results in a long service life of the valve.

└ **High quality coating** is selected and applied to the valve, according to the application, in order to provide the best possible corrosion protection.

└ **Proven design** – Valve has been installed and performed successfully in many extremely challenging applications for many years.



EAK DN3600 – LARGEST
VALVE EVER BUILT BY TALIS



HIGH PRESSURE EAK WITH
HARD RUBBER-LINING