

# BUTTERFLY VALVE Type 57

## Materials

Body PVC - PP - PVDF  
Lens PVC - PP - PVDF  
Gaskets Sleeve type in EPDM - FKM

**Diameters** From DN 40 to DN 350

**Connections** Flanged DIN PN10 or ANSI 150 lb

**Operation** Manual with lever up to DN 200  
Manual with gear-box up to DN 350  
(gear-box on request from DN 40 up to DN 200)  
Automatic with pneumatic or electric actuator



The new Type 57 Butterfly Valve still extends the innovation of the already excellent Type 56 (today still produced only as DN 400).

The modular design of the top flange is still the same: the Type 57 valve can be changed from manual with lever to manual with gear-box or automatic without any modification.

The drilling of the top flange is made, as Type 56, according to ISO 5211 standard. This aspect allows the easy mounting of pneumatic or electric actuators with standard bracket.

Also the overall dimensions have been kept the same of previous Type 56.



# INNOVATIVE FEATURES

## 1. EXCELLENT SEALING PERFORMANCE

Sealing performance has been improved due its special designed PAT pending seat (see figure below).

## 2. LOWERED OPERATING TORQUE

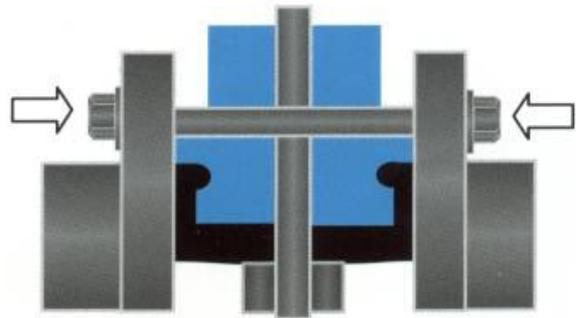
The required operating torque has been reduced by applying specially designed seat.

Operating torque (N m)

DN	40	50	65	80	100	125	150	200	250	300	350
<b>TORQUE</b>	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>30</b>	<b>65</b>	<b>85</b>	<b>190</b>	<b>300</b>	<b>370</b>	<b>420</b>

## 3. HIGH PERFORMANCES

The valve body acts as a protector against over-tightening of the bolts to avoid breakage or deformation of the seat. Consequently, in case of over-tightening there won't be any increment of the operating torque.



## 4. SPHERICAL DESIGN DISC

A new spherical design of the disc provides superior durability and improved Cv value (low pressure loss, being the rate of flow proportional to Cv).

Cv value

DN	40	50	65	80	100	125	150	200	250	300	350
<b>Cv</b>	<b>71</b>	<b>120</b>	<b>250</b>	<b>300</b>	<b>470</b>	<b>830</b>	<b>1100</b>	<b>2500</b>	<b>3860</b>	<b>5700</b>	<b>6440</b>

## 5. STEM RETAINER

A stainless steel retaining ring prevents the stem from being removed in case of mounting of automatic actuators and accessories.



## 6. NEW PLASTIC GEAR-BOX

A corrosion resistant plastic gear-box allows applications such as severe chemicals and sea waters.

- Plastic hand wheel (PPG)
- Stainless steel trim and hardware
- Yellow highly visible position indicator



## 7. OPTIMIZED DESIGN BY FEM ANALYSIS

The body of the type 57 valve has been designed by adopting 3D modelling and FEM analysis so to improve the load safety factor.

Example of FEM analysis (65 mm)

Working conditions:

Load: 1.0 MPa (hydrostatic pressure)

Tightening torque on the flanges' bolts: 22.5 N m

