

## FEATURES



### Gland Flange

A fully adjustable two-piece gland flange to make sure an even packing load over 360 °

### Anti-Blow-Out Stem

Protecting stem blow-out caused by pressure.

### Gland Bush

Standing alone with Gland Flange, preventing uneven down-pressure on gland packing.

### Gland Packing

Use PTFE or same as Valve Seat. Performance is compliance with API 598's testing pressure.

### Valve Seat

Bi-direction zero leakage design. Use Higa-PTFE, RTFE, or UHMWPE.

### Taper Pin

Tangentially positioned half in disc and half in stem to eliminate potential of failure.

### Patented Retainer Ring

A no-screw-floating design to eliminate cold flow. This design provides positive tight shut-off of seat. Surface roughness is 125-200AARH.

### Thrust Ring

Use 316 as material. Position in bottom of stem for preventing incorrect stem shift.

### Bottom Cover

Use rigid 316 as material to prevent abnormal leakage.

### Bottom Gasket

Use RTFE or GRAPHITE as material.

### Valve Stem

Use stainless-steel with hard chrome plated. A strong and rigid one-piece-stem design which largely increase overall strength. Stem and corresponding components size are all compliance with ISO 5211. Stem material and disc position is marked on the top of stem.

### Self-Lubricant Bush

Use PTFE+316 as material to lower down stem's friction factor.

### Valve Disc

Use stainless-steel with hard chrome plated. A streamlined design with great enhancement on lowering noise and turbulence.

### Valve Body

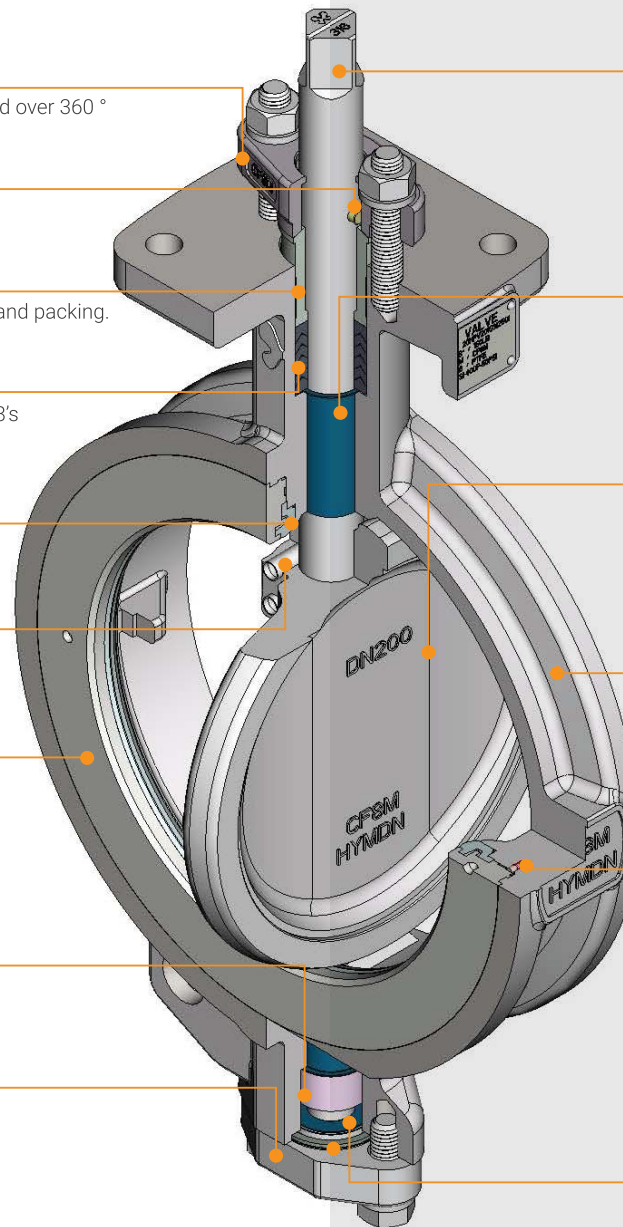
Compliance with API 609 & ASME B16.34. In order to make valve context intuitive and straightforward, an additional name plate is designed to mark detail information.

### Lock Pin and Spring

Use PTFE. While Retainer Ring moves to locking position, spring will pop-up and push pin locked in Retainer Ring.

### Thrust Plate

Use stainless-steel 316+PTFE to reduce operating friction between stem and bottom cover.



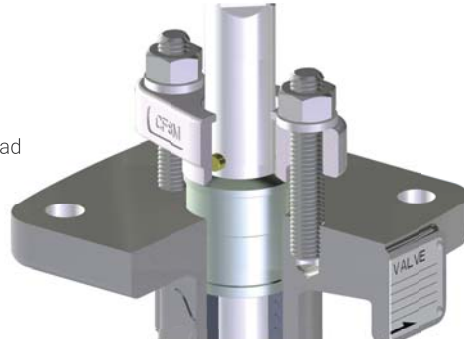
## Low Fugitive Emission Gland Packing System

Compliance with latest DIN3780 and MSS-SP143



### Gland Flange and Gland Bush

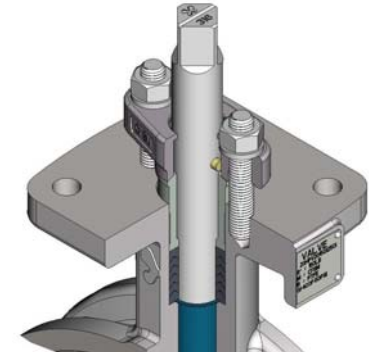
A fully adjustable two-piece gland with spherical mating surfaces to make sure an even packing load over 360 °



### Long Gland Bush for Positioning

Long gland bush ensures gland flange always keep in center while adjust packing gland.

Preventing gland bush away from rubbing and jamming condition with stem.

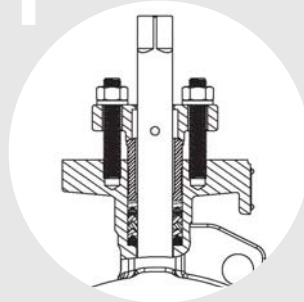


### Gland Packing System

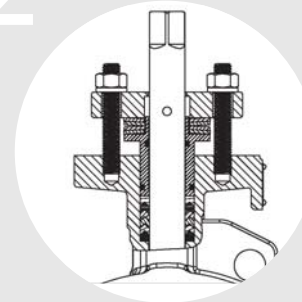
Five types:

1. Standard V-Type PTFE or RTFE
2. Live Loading Low Fugitive Emission V-Type PTFE or RTFE
3. Standard GRAPHITE
4. Live Loading Low Fugitive Emission GRAPHITE Having EVSP 9000 or 3300W in option.
5. Live Loading with Lantern Ring

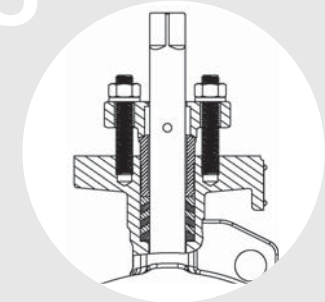
1 Standard V Type PTFE or RTFE Gland Packing System



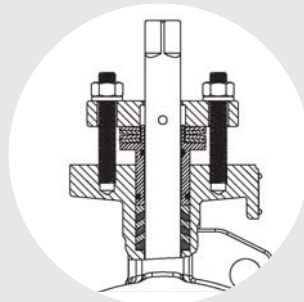
2 Live Loading Low Fugitive Emission V-Type PTFE or RTFE Packing System



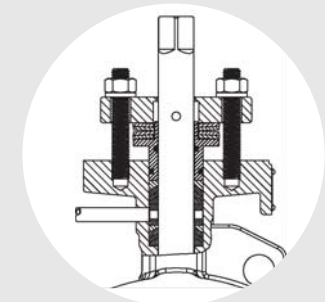
3 Standard GRAPHITE Packing System (Fire Safe Only)



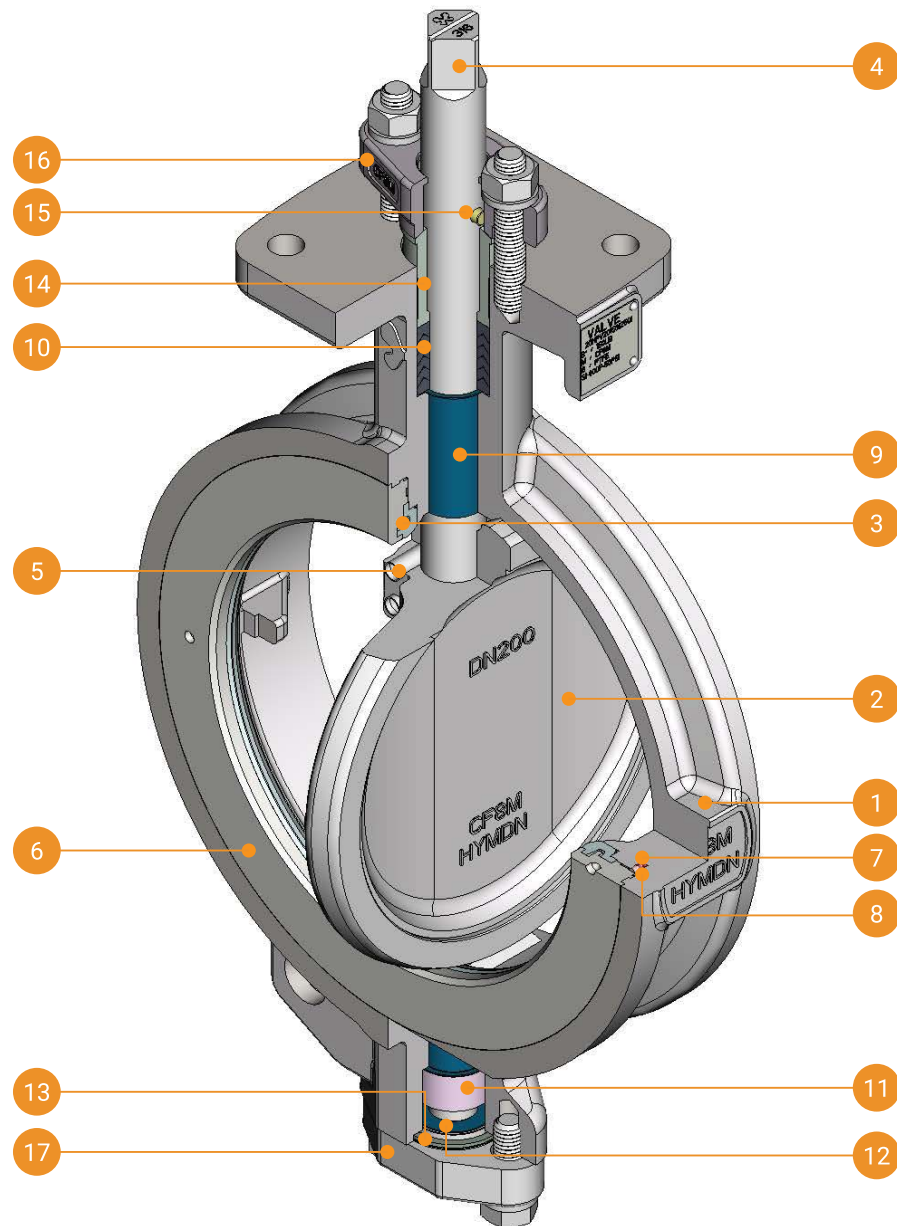
4 Live-Loading Low Fugitive Emission GRAPHITE Gland Packing System Having EVSP 9000 or 3000W in option.



5 Live Loading with Lantern Ring Gland Packing System  
A lantern ring with double packing leak-off-monitoring, provides functionality of purge and monitor leakage from bottom packing.



## VALVE COMPONENTS



ITEM	NAME	QTY	MATERIAL			REMARK
1	Body	1	A216 Gr. WCB	A351 Gr. CF8	A351 Gr. CF8M	
2	Disc	1	A351 Gr. CF8		A351 Gr. CF8 M	●
3	Seat	1	Higa-PTFE / RTFE / FIRE SAFE			★
4	Stem	1	A182 Gr. F6A	A182 Gr. F304	A182 Gr. F316	●
5	Taper Pin	2	A182 Gr. F316L			
6	Retainer Ring	1	A351 Gr. CF8		A351 Gr. CF8M	
7	Spring	1	A182 Gr. F316			
8	Lock Pin	1	PTFE			
9	Stem Bush	2	PTFE+SS316L			
10	Gland Packing	1	PTFE / RTFE / GRAPHITE(FIRE SAFE ONLY)			▲
11	Thrust Ring	1	A351 Gr. CF8M			
12	Thrust Plate	1	PTFE+SS316L			
13	Gasket	1	RTFE/GRAPHITE			▲
14	Gland Bush	1	A351 Gr. CF8M			
15	Anti-Blow-Out Pin	1	A182 Gr. F316			
16	Gland Flange	1	A351 Gr.CF8			
17	Bottom Cover	1	A351 Gr. CF8M			

### Remark

- Surface is Hard Chrome Plated
- ▲ Same as ITEM 3 SEAT's material. If valve is Fire-Safe design, use GRAPHITE as material.
- ★ Working temperature: PTFE -29~180 °C , RTFE -29-230°C
- When VOC Emission is requested, ITEM10 has 2 more materials, EVSP 9000 and 3300W, in option.
- The listed materials are assorted with standard package. We have ALLOY 20, HASTELLOY C276, Duplex A890 6A , MONEL in option. Please contact us for more details.
- Item 4 uses 17-4PH or UNS S31803 for Class 300LB.