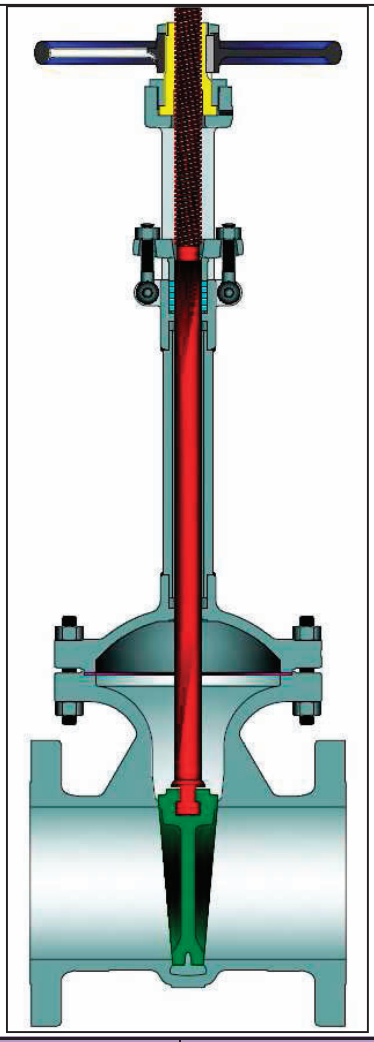
ASME B16.34 GATE VALVES
BOLTED BONNET, ASME CLASS 150-300
8" TO 12" (200 TO 300 mm), FLANGED OR BUTTWELD ENDS
CAST STAINLESS STEEL



Class	Figure Number
150	2456
300	2467

STANDARD MATERIALS (Other materials available)

PART	MATERIALS
Body	A351 Gr. CF8M (1)
Bonnet	A351 Gr. CF8M
Wedge	A351 Gr. CF8M
Stem	A276 316
Stem Bushing	A 439 Gr. D2
Gland Flange	A351 Gr. CF8
Eye Bolt	A193 Gr. B8
Eye Bolt Nut	A194 Gr.8
Groove Pin	Series 300
Gland	A276 316
Packing	PTFE
Gasket	Graphite
Hand Wheel	Malleable Iron or Steel
Hand Wheel Nut	Malleable Iron or Steel
Key	Steel
Lubricant Fitting	Steel
Body / Bonnet Stud	A193 Gr. B8
Body / Bonnet Nut	A194 Gr.8
Identification Plate	Series 300 SST

1) CF3M for weld end bodies.

Design Specifications

Item	Applicable Specification
Wall thickness	ASME B16.34
Pressure - temperature ratings	ASME B16.34
General valve design	ASME B16.34
Flanged ends	ASME B16.5
Buttweld ends	ASME B16.25
Materials	ASTM

DESIGN FEATURES:

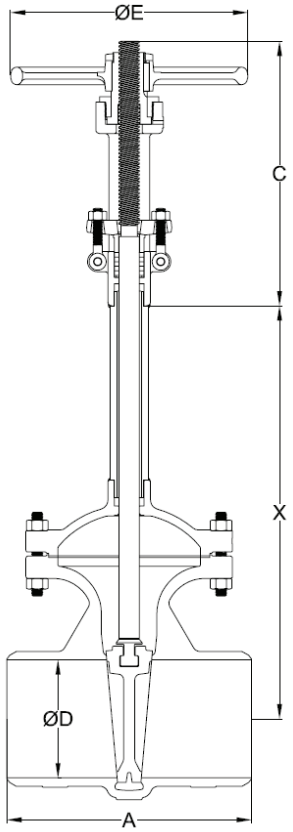
- **Seat face:** Ground and lapped to a smooth finish.
- **Flexible Wedge** with low center stem – wedge contact. Wedge is ground and lapped to a smooth finish and closely guided to prevent dragging and seat damage.
- **Non-rotating stem** with precision ACME threads and burnished finish. Double ACME threads for faster operation.
- **Body and bonnet joint** accurately machined.
- **Each** valve is shell, seat and backseat pressure tested.
- **Valves** are specially cleaned and processed for oxygen or cryogenic service and are then sealed to prevent contamination.
- **Bonnet** chamber ventilation, in order to prevent excess pressure build up caused by trapped cryogenic liquids, is available upon request.
- **Yoke** bushing can be lubricated to minimize friction and prolong life of the stem.
- **Body and bonnet** castings are precision machined.
- **Gland** has two-piece construction for easy alignment.
- **Each** valve has a unique certification number that is traceable to the valve certification sheet which includes MTR data, pressure test report, inspection report and certificate of conformance.
- **Other** available options as follows:
  -Alternate valve materials
  -Alternate trim materials
  -Non-extended design
  -Other options available as specified

NOTE: Powell reserves the right to convert threaded ends to socket weld. Remnant of threads will exist as pipe stop behind socket bore.

GATE VALVE DIMENSIONS (CLASSES 150-300)

SIZE	ASME 150											ASME 300									
in	A		C	D	E	X (1)	WT	lb	WT	lb	C_V	A	C	D	E	X (1)	WT	lb	WT	lb	C_V
mm	FE	WE					FE	kg	WE	kg							FE	kg	WE	kg	
8	11.50	16.50	25.1	8.00	14.0	28.0	266		225		4490	16.50	27.0	8.00	16.0	28.0	427		394		4490
200	292	419	638	203	356	711	121		102			419	686	203	406	711	194		179		
10	13.00	18.00	30.6	10.00	16.0	32.0	433		362		7000	18.00	31.9	10.00	20.0	32.0	687		631		7000
250	330	457	778	254	406	813	196		164			457	810	254	508	813	312		286		
12	14.00	19.75	37.3	12.00	18.0	36.0	575		560		10500	19.75	37.3	12.00	20.0	36.0	981		941		10500
300	356	502	946	305	457	914	261		254			502	946	305	508	914	445		427		

(1) Other extensions available.
Consult Powell Engineering.



Weld End Design

C = Bottom of yoke flange to top open
X = Center to bottom of yoke flange (Std)

FE = Flanged ends
WE = Buttweld ends
WT = Weight
C_V = Flow coefficient