

# API603 Cast Stainless Valves

Complete Solutions for Engineered Valves





**NEWAY VALVE** 

Cat.no.:E-API603-2012

## Table of Contents

#### Introduction

- Quality Commitment
- 2 How to Order
- 3 Product Introduction

#### **API603 Gate Valve**

4 1/2"~1-1/2" (15-40mm) Flanged, Threaded or Socket Weld

#### API603 Globe Valve

5 1/2"~1-1/2" (15-40mm) Flanged, Threaded or Socket Weld

#### API603 Check Valve

6 1/2"~1-1/2"(15-40mm) Flanged, Threaded or Socket Weld

#### **API603 Gate Valve**

- 7 2"~24" (50-600mm, 150LB) Flanged
- 8 2"~16" (50-400mm, 300LB) Flanged

#### API603 Globe Valve

9 2"~12" (50-300mm) Flanged

#### **API603 Check Valve**

- 2"~16" (50-400mm) Flanged
- 11 Low Fugitive Emission Control



#### **Complete Solutions for Industrial Valves**

Being one of the leading valve manufacturer in the world, Neway specializes exclusively in the development of innovative designs, through intensive R&D programs and engineering excellence. We engineer and manufacture valve solutions for all industries.

Neway's main product lines include Gate, Globe, Check, Butterfly, Ball valves, Nuclear valves and Pressure Relieving valves. Our production facilities and quality system have been inspected and approved by many global end users and EPC firms. Our products have been installed around the world, handling a wide variety of applications in the Gas, Oli, Refining, Chemical, Marine, Power Generation and Pipeline Transmission Industries.

Neway stress on internationalization and the establishment of global market. Neway had set up a basically integrated organization of global market: 3 JV ventures were set up in South America and Middle East. Sales offices were working in the United States, the Netherland and Brazil. Representative office were developing business in Japan and Korea. Sale agency or Exclusive agency were found in nearby 80 countries in the world.

#### **Neway Facilities**

Neway's management groups are structured based on operating several plants. Neway valves are manufactured in 5 specialized manufacturing facilities, 3 plants in China, one in Mexico and the other in Saudi Arabia. They are all supported by 4 Neway owned specialized foundries.

Our intranet includes over 400 computers using the most advanced R&D software Including CAD, I-Deas, Pro-E, a number of CNC & machine centers, in addition we utilize a bar code inventory management systems. We are one of the few valve manufacturers performing Enterprise Resource Planning (ERP), In-house fire safe and cryogenic testing, high pressure gas and low fugitive emission testing.

### Quality Assurance

Neway's quality assurance is dedicated to the pursuit of zero defect valve supply to our customers. We have implemented a six sigma management process in order to continually improve our processes and management controls through the use of advanced statistical data analysis. Neway holds most of the industrial valve manufacturing certificates, such as ISO 9001, CE/PED, TA-Luft, API 6A, API 6D, ABS, and API 607 Fire Safe certificate.

# **Quality Commitment**

#### ISO 9001



eway recognizes the importance of valve quality for the safety and protection of personnel health and property. It is our quality commitment to focus our resources to provide our customers with first class products at a competitive price, designed, manufactured, inspected and tested in accordance with our customers specifications and complying with all international standards.

Current Industrial standards do not always take into consideration the likelihood and consequences of possible deterioration in service, related to specific service fluids or the external environments in which they operate. Therefore we request that our customers communicate with our engineering department. Our valve optimization program continuously strives to provide valves that withstand deterioration in service, and ensure safety over the valves expected lifetime.

ABS

CE/PED

Fire Safe Test

# **How to Order**

## Figure Number Example:



Neway valve figure numbers are designed to cover essential features. When ordering, please show figure numbers to avoid misunderstanding of your requirements. However a detailed description must accompany any special orders.

Following descriptions provide a basic guideline in valve specification.



③ Valve Class			
ANSI Class	150	300	600
Symbol	1	3	6

End Connection	ction					
End Connection	Socket Weld End	NPT Threaded End	Butt Weld End	Threaded × Socket	Ralsed Flange	RTJ Flange
Symbol	8	N	В	SN	R	J

⑤ Actuator or Special Code										
Description	Gear Operator	Electric Actuator	Pneumatic Actuator	Extended Bonnet	Lock					
Symbol	G	M	P	EB	L					

6 Body Mat	erials						
Body Materials	CF8M	CF8	CF3M	CF3	CF8C	CG8M	Alloy 20
ASTM Ref.	A351 Gr. CF8M	A351 Gr. CF8	A351 Gr. CF3M	A351 Gr. CF3	A351 Gr. CF8C	A351 Gr. CG8M	Alloy 20

Trim Materials			
Symiloi	Wedge or Disc Surface	Seat Surface	Stem Materials
No.2	Same as body	Integral	ASTM A182 Grade F304
No.10	Same as body	Integral	ASTM A182 Grade F316
No.12	Same as body	Stellite	ASTM A182 Grade F316
No.15	Stellite	Stellite	ASTM A182 Grade F304
No.16	Stellite	Stellite	ASTM A182 Grade F316

Note: Other meterfale upon request.

# **Product Introduction**

To comply with Industry standards and the given advantages of light weight, compact design & cost effectiveness, Neway valve has incorporated the development of API 603 valves into our GDC Series Gate, GLD Series Globe and SDC Series Check valves. Neway specially adapted extended bonnet API603 valves offer cryogenic service (to -320°F).





#### **Product Introduction**

1/2"~24" (15~600 mm)					
Gate Valve, Globe Valve, Check Valve					
ANSI 150~600LB (PN20~100)					
Stainless Steel					
Flanged; Threaded; Socket Weld					
Petrochemical, Pulp and paper, Chemical; Medicine, Food Industrial etc					

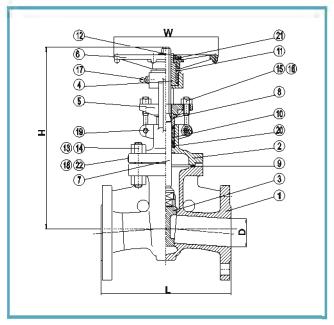
#### **Product Range**

Valva	Type &	AP1803	PI603 CLASS 150~300 CAST STAINLESS STEEL GATE, GLOBE & CHECK VALVE												FLANGE	D		
CI	265	1/2 15	3/4 20	1 25	1-1/2 40	2 50	2-1/2 65	3 80	4	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600
Gate	150	x	x	x	х	x	х	x	х	х	х	x	х	x	X	x	х	x
9	300	x	х	x	х	x	х	x	х	х	х	x	х	x	х			
2	150	x	×	x	ж	x	x	x	x	х	x	x	x					
Globe	300	x	x	x	x	x	x	×	x	x	x							
ğ	150	x	x	х	x	x	x	x	x	x	x	x	x	x	x			
Check	300	x	х	х	х	x	х	x	х	х	х	x						

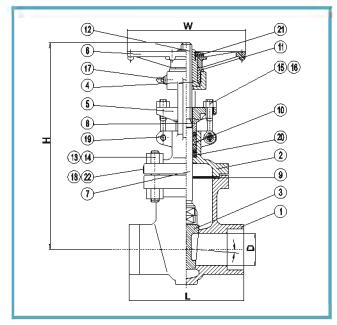
	AP1603	API603 CLASG 600 CAST STAINLESS STEEL GATE, GLOBE & CHECK VALVE										THREADED & SOCKET WELD					
Valve Type & Class	1/2	3/4 20	1 25	1-1/2													
Gate	x	х	x	x													
Globe	x	x	x	x													
Check	x	x	х	x													

# API603 Gate Valve 1/2"~1-1/2" (15-40mm)

## Flanged, Threaded or Socket Weld



Flanged, ASME 150~300LB (PN 20~50)
Integral Seat; Precision High Quality Castings



Threaded or Socket Weld, ASME 600LB (PN 100) Integral Seat; Precision High Quality Castings

## **Material List**

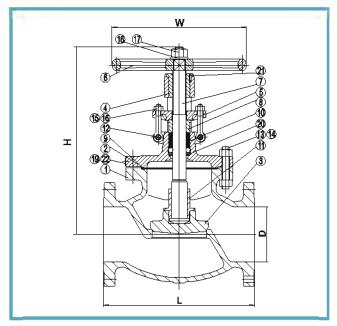
No	Part Name	Material
1	BODY	ASTM A351 CF8M
2	BONNET	ASTM A351 CF8M
3	WEDGE	ASTM A351 CF6M
4	STEM NUT	ASTM A439 D-2C
5	GLAND FLANGE	ASTM A351 CF8
6	HANDWHEEL	ASTM A538 60-40-18
7	STEM	ASTM A182 F316
8	GLAND	ASTM A276 F316L
9	GASKET	PTFE OR 316+GRAPHITE
10	PACKING	PTFE OR GRAPHITE
11	RETAINING NUT	ASTM A276 304

No	Part Name	Material
12	HANDWHEEL NUT	ASTM A276 304
13	STUD	ASTM A193-B8
14	NUT	ASTM A194-8
15	EYE BOLT	ASTM A193-B8
16	NUT	ASTM A194-8
17	GREASE FITTING	ASTM A276 304
18	RIVET	ASTM A276 304
19	PIN	ASTM A276 304
20	SPACER RING	ASTM A276 F316L
21	SCREW	ASTM A276 304
22	NAME PLATE	ASTM A240 304

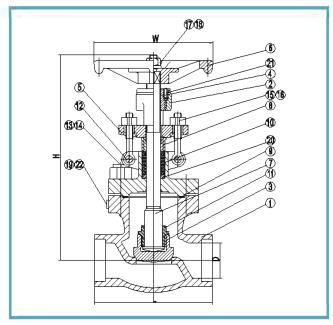
Size		Flanged,	ASME 150	LB (PN 2	(0)		Flanged, /	<b>ASME 300</b>	LB (PN 5	0)	Threade	d-Socket	Weld, A8I	WE 600LB	(PN 100)
in mm	D	L	W	H	Weight lb(kg)	D	L	W	Н	Weight lb(kg)	D	L	W	н	Weight lb(kg)
1/2	0.59	4.25	3.94	8.15	7.4	0.59	5.51	3.94	8.15	13.0	0.50	3.43	3.94	8.29	6.8
15	15	108	100	207	3.4	15	140	100	207	5.9	15	87	100	210.5	3.1
3/4	0.75	4.61	3.94	8.15	8.3	0.75	5.98	3.94	8.15	16.0	0.75	3.43	3.94	8.29	7.0
20	19	117	100	207	3.8	19	152	100	207	7.3	19	87	100	210.5	3.2
1	0.98	5.00	4.72	8.66	10.0	0.98	6.50	5.51	9.69	24.0	1.00	4.13	5.51	10.02	10.7
25	25	127	120	220	4.5	25	165	140	246	10.9	25	105	140	254.5	4.9
1-1/2	1.50	6.50	5.51	9.76	18.0	1.50	7.52	7.87	11.69	39.0	1.50	4.92	7.87	12.28	19.5
40	38	165	140	248	8.2	38	191	200	297	17.7	38	125	200	312	8.8

# API603 Globe Valve 1/2"~1-1/2" (15-40mm)

## Flanged, Threaded or Socket Weld



Flanged, ASME 150~300LB (PN 20~50)
Integral Seat; Precision High Quality Castings



Threaded or Socket Weld, ASME 600LB (PN 100) Integral Seat; Precision High Quality Castings

## **Material List**

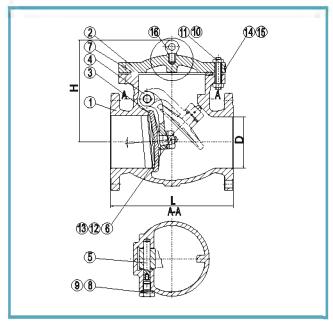
Ho	Part Name	Meterial
MO		The state of the s
1	BODY	ASTM A351 CF8M
2	BONNET	ASTM A351 CF8M
3	DISC	ASTM A182 F316
4	STEM NUT	ASTM A439 D-2C
5	GLAND FLANGE	ASTM A351 CF8
6	HANDWHEEL	ASTM A538 60-40-18
7	STEM	ASTM A182 F316
8	GLAND	ASTM A276 F316L
9	GASKET	PTFE OR 316+GRAPHITE
10	PACKING	PTFE OR GRAPHITE
11	DISC NUT	ASTM A276 F316

No	Part Name	Material
12	PIN	ASTM A276 304
13	STUD	ASTM A193-B6
14	NUT	ASTM A194-8
15	EYE BOLT	ASTM A193-B8
16	NUT	ASTM A194-8
17	HANDWHEEL NUT	ASTM A276 304
18	WASHER	ASTM A276 304
19	RIVET	ASTM A276 304
20	SPACER RING	ASTM A276 F316L
21	SCREW	ASTM A276 304
22	NAME PLATE	ASTM A240 304

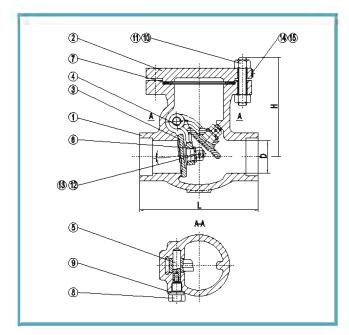
Sha		Flanged	ASME 15	QLB (PN 2	(0)		Flanged	ASME 30	OLB (PN	50)	Throade	d-Socket	Weld, ASI	AE GOOLB	(PN 100)
In mm	D	L	w	Н	Weight lb(kg)	D	L	W	Н	Weight lb(kg)	D	L.	w	н	Weight lb (kg)
1/2	0.59	4.25	3.94	8.03	7.6	0.59	5.98	3.94	7.28	13.0	0.50	3.74	3.94	7.82	12.0
15	15	108	100	203.9	3.4	15	152	100	185	5.9	15	95	100	198.7	5.4
3/4	0.75	4.61	3.94	8.22	8.9	0.75	7.01	3.94	7.43	17.0	0.75	4.25	3.94	7.82	12.0
20	19	117	100	208.7	4.0	19	178	100	188.7	7.7	19	108	100	198.7	5.4
1	0.98	5.00	3.94	8.28	11.6	0.98	7.99	5.91	8.64	25.0	1.00	5.00	5.91	9.39	17.0
25	25	127	100	210.4	5.3	25	203	150	219.5	11.3	25	127	150	238.4	7.7
1-1/2	1.50	6.50	7.87	8.83	16.4	1.50	9.02	7.87	10.41	36.0	1.50	5.98	7.87	11.02	32.0
40	38	165	200	224.4	7.4	38	229	200	264.4	16.3	38	152	200	280	14.5

# API603 Check Valve 1/2"~1-1/2" (15-40mm)

## Flanged, Threaded or Socket Weld



Flanged, ASME 150~300LB (PN 20~50)
Integral Seat; Precision High Quality Castings



Threaded or Socket Weld, ASME 600LB (PN 100) Integral Seat; Precision High Quality Castings

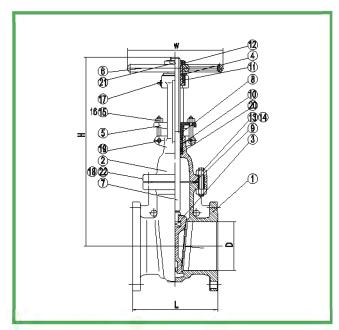
## **Material List**

No	Part Name	Metarial
1	BODY	ASTM A351 CF8M
2	COVER	ASTM A351 CF8M
3	DISC	ASTM A182 F316
4	HINGE	ASTM A351 CF8M
5	HINGE PIN	ASTM A276 316
6	WASHER	ASTM A276 316
7	GASKET	PTFE OR 316+GRAPHITE
8	PLUG	ASTM A276 316

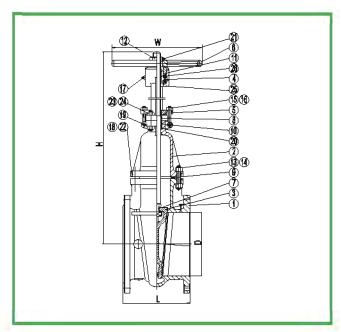
No	Part Name	Material
9	WASHER	ASTM A276 316
10	STUD	ASTM A193-B8
11	NUT	ASTM A194-8
12	DISC NUT	ASTM A276 316
13	PIN	ASTM A276 316
14	RIVET	ASTM A276 304
15	NAME PLATE	ASTM A240 304
16	HOOK SCREW	ASTM A276 304

Size	FI	nged, ASME	150LB (PN	20)	l l	Flanged, ASME 300LB (PN 50)			Threaded-Socket Weld, ASME 600LB (PN			
In mm	D	L	н	Weight lb(kg)	D	L	H	Weight lb(kg)	D	L	н	Weight ib (kg)
1/2	0.59	4.25	3.54	4.2	0.59	5.98	3.54	16.0	0.50	3.23	3.62	4.2
15	15	108	90	1.9	15	152	90	7.3	15	82	92	1.9
3/4	0.75	4.61	3.54	5.6	0.75	7.01	3.54	18.0	0.75	3.23	3.62	4.2
20	19	117	90	2.5	19	178	90	8.2	19	82	92	1.9
1	0.98	5.00	3.70	8.4	0.98	8.50	3.56	21.0	1.00	4.13	3.78	5.8
25	25	127	94	3.8	25	216	90.5	9.5	25	105	96	2.6
1-1/2	1.50	6.50	4.07	13.5	1.50	9.49	4.51	30.0	1.50	4.92	4.82	10.1
40	38	165	103.5	6.1	38	241	114.5	13.6	38	125	122.5	4.6

## Flanged



Flanged, ASME 150LB (PN 20, DN50~300)
Integral Seat; Wall Thickness to B16.34 with flexible wedge; Optional Stellited Seat Face



Flanged, ASME 150LB (PN20, DN350~000) Integral Seet; Wall Thickness to B18.34 with flexible wedge; Optional Stollited Seet Face

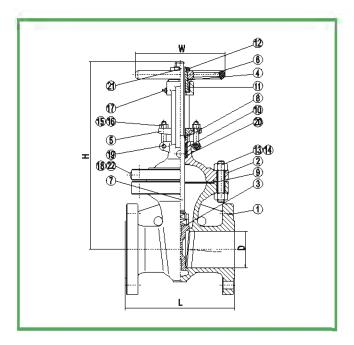
## **Material List**

No	Part Name	Meterial
1	BODY	ASTM A351 CF8M
2	BONNET	ASTM A351 CF8M
3	WEDGE	ASTM A351 CF8M
4	STEM NUT	ASTM A439 D-2C
5	GLAND FLANGE	ASTM A351 CF8
6	HANDWHEEL	ASTM A538 60-40-18
7	STEM	ASTM A182 F316
8	GLAND	ASTM A276 F316L
9	GASKET	PTFE OR 318+GRAPHITE
10	PACKING	PTFE OR GRAPHITE
11	RETAINING NUT	ASTM A276 304
12	HANDWHEEL NUT	ASTM A276 304
13	STUD	ASTM A193-B8

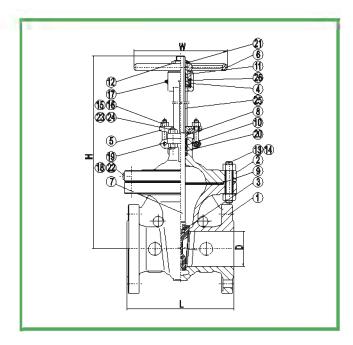
No	Part Name	Meterial
14	NUT	ASTM A194-8
15	EYE BOLT	ASTM A193-B8
16	NUT	ASTM A194-8
17	GREASE FITTING	ASTM A276 304
18	RIVET	ASTM A276 304
19	PIN	ASTM A276 304
20	SPACER RING	ASTM A276 F316L
21	SCREW	ASTM A276 304
22	NAME PLATE	A\$TM A240 904
23	STUD	ASTM A193-B8
24	NUT	ASTM A194-8
25	YOKE	ASTM A351 CF8M
26	THRUST BEARING	STAINLESS STEEL

Size	Flanged, ASME 150LB (PN 20)					
In mm	D	L	W	Н	Weigh lb(kg)	
2	2.01	7.01	5.51	11.42	27.0	
50	51	178	140	290	12.2	
2-1/2	2.52	7.48	5.51	13.19	37.5	
65	84	190	140	335	17.0	
3	2.99	7.99	7.87	15.20	46.3	
80	76	203	200	386	21.0	
4	4.02	9.02	9.84	17.52	75.0	
100	102	229	250	445	34.0	
6	5.98	10,51	11.81	23.27	128.0	
150	152	287	300	591	58.1	
8	7.99	11.50	13.78	28.74	216.1	
200	203	292	350	730	98.0	
10	10.00	12.99	15.75	34.76	291.1	
250	254	330	400	883	132.0	
12	12.01	14.02	17.72	39.98	436.6	
300	305	356	450	1015	198.0	
14	13.27	15.00	19.69	44.53	703.4	
350	337	381	500	1131	319.1	
16	15.24	15.98	21.65	50.59	1018.7	
400	387	406	550	1285	462.1	
18	17.24	17.01	23.62	74.49	1190.7	
450	438	432	600	1892	540.1	
20	19.25	17.99	26.77	83.23	1631.7	
500	489	457	680	2114	740.1	
24	23.27	20.00	29.92	98.43	2434.3	
600	591	508	760	2500	1104.2	

## Flanged



Flanged, ASME 300LB (PN50, DN50~200) Integral Seat; Wall Thickness to B16.34 with flexible wedge; Optional Stellited Seat Face



Flanged, ASME 300LB (PN50, DN250~400)
Integral Seat; Wall Thickness to B16.34 with flexible wedge; Optional Stellited Seat Face

## **Material List**

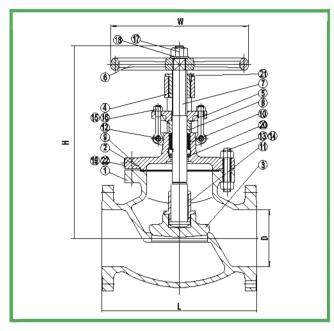
No	Part Name	Material
1	BODY	ASTM A351 CF8M
2	BONNET	ASTM A361 CF8M
3	WEDGE	ASTM A351 CF8M
4	STEM NUT	ASTM A439 D-2C
5	GLAND FLANGE	ASTM A351 CF8
8	HANDWHEEL	ASTM A538 60-40-18
7	STEM	ASTM A182 F316
8	GLAND	ASTM A276 F316L
9	GASKET	PTFE OR 316+GRAPHITE
10	PACKING	PTFE OR GRAPHITE
11	RETAINING NUT	ASTM A276 304
12	HANDWHEEL NUT	ASTM A276 304
13	STUD	ASTM A193-B8

No	Part Name	Meterial
14	NUT	ASTM A194-8
15	EYE BOLT	ASTM A193-B8
16	NUT	ASTM A194-8
17	GREASE FITTING	ASTM A278 304
18	RIVET	ASTM A276 304
19	PIN	ASTM A276 304
20	SPACER RING	ASTM A276 F816L
21	SCREW	ASTM A276 304
22	NAME PLATE	ASTM A240 304
23	STUD	ASTM A193-B8
24	NUT	ASTM A194-8
25	YOKE	ASTM A351 CF8M
26	THRUST BEARING	STAINLESS STEEL

Size	Flanged, ASME 300LB (PN 50)					
in mm	D	L	W	Н	Weight ib(kg)	
2	2.01	8.50	7.87	11.93	53.0	
50	51	216	200	303	24.0	
2-1/2	2.52	9.49	7.87	14.33	68.4	
65	64	241	200	364	31.0	
3	2.99	11.14	9.84	15.51	90.4	
80	76	283	250	394	41.0	
4	4.02	12.01	9.84	17.83	119.1	
100	102	305	250	453	54.0	
6	5.98	15.87	13.78	24.57	251.4	
150	152	403	350	624	114.0	
8	7.99	16.50	15.75	30.04	478.5	
200	203	419	400	763	217.0	
10	10.00	17.99	17.72	36.18	557.9	
250	254	457	450	919	253.1	
12	12.01	19.76	19.69	42.99	917.3	
300	305	502	500	1092	416.1	
14	13.27	30.00	21.65	48.19	957.0	
350	337	762	550	1224	434.1	
16	15.24	32.99	23.62	51.93	1206.1	
400	387	838	600	1319	547.1	

# API603 Globe Valve 2"~12" (50-300mm)

## Flanged



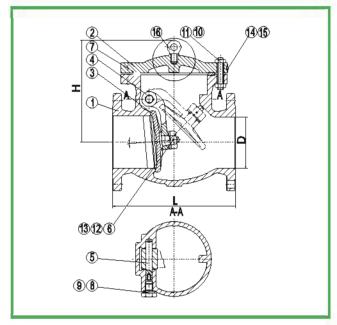
Flanged, ASME 150~300LB (PN 20~50)
Integral Seat; Wall Thickness to B16.34; Optional Stellited Seat Face

No	Part Name	Material
1	BODY	ASTM A351 CF8M
2	BONNET	ASTM A351 CF8M
3	DISC	ASTM A182 F316
4	STEM NUT	ASTM A439 D-2C
5	GLAND FLANGE	ASTM A351 CF8
6	HANDWHEEL	ASTM A538 60-40-18
7	STEM	ASTM A182 F316
8	GLAND	ASTM A276 F316L
9	GASKET	PTFE OR 316+GRAPHITE
10	PACKING	PTFE OR GRAPHITE
11	DISC NUT	ASTM A276 F316
12	PIN	ASTM A276 304
13	STUD	ASTM A193-B8
14	NUT	ASTM A194-8
15	EYE BOLT	ASTM A193-B8
16	NUT	ASTM A194-8
17	HANDWHEEL NUT	ASTM A276 304
18	WASHER	ASTM A276 304
19	RIVET	ASTM A240 304
20	SPACER RING	ASTM A276 F316L
21	SCREW	ASTM A276 304
22	NAME PLATE	ASTM A276 304

Size	Flanged, ASME 150LB (PN 20)					Flanged, ASME 300LB (PN 50)				
In mm	D	L	w	н	Weight lb(kg)	D	L	w	н	Weight lb(kg)
2	2.01	7.99	7.87	9.64	25.2	2.01	10.51	7.87	11.65	54.0
50	51	203	200	244.8	11.4	51	267	200	296	24.5
2-1/2	2.52	8.50	7.87	10.98	46.3	2.52	11.50	9.84	13.30	83.5
65	64	216	200	279	21.0	64	292	250	337.9	37.9
3	2.99	9.49	9.84	13.66	61.7	2.99	12.52	9.84	14.35	92.0
80	76	241	250	346.9	28.0	76	318	250	364.4	41.7
4	4.02	11.50	11.81	15.74	97.0	4.02	14.02	13.78	16.69	130.1
100	102	292	300	399.9	44.0	102	356	350	423.9	59.0
6	5.98	15.98	13.78	17.71	198.5	5.98	17.48	19.69	23.17	317.5
150	152	406	350	449.9	90.0	152	444	500	588.4	144.0
8	7.99	19.49	15.75	19.92	383.7	7.99	22.01	22.05	27.89	562.3
200	203	495	400	508	174.0	203	559	560	708.5	255.1
10	10.00	24.49	19.69	26.06	546.8					
250	254	622	500	662	248.0					
12	12.01	27.48	22.05	30.39	848.9					
300	305	698	560	772	385.1					

# API603 Check Valve 2"~16" (50-400mm)

## Flanged



No	Part Name	Material
1	BODY	ASTM A351 CF8M
2	COVER	ASTM A351 CF8M
3	DISC	ASTM A182 F318
4	HINGE	ASTM A351 CF8M
5	HINGE PIN	ASTM A276 316
6	WASHER	ASTM A276 316
7	GASKET	PTFE OR 316+GRAPHITE
8	PLUG	ASTM A276 316
9	WASHER	ASTM A276 316
10	STUD	ASTM A193-B8
11	NUT	ASTM A194-8
12	DISC NUT	ASTM A276 316
13	PIN	ASTM A276 316
14	RIVET	ASTM A240 304
15	NAME PLATE	ASTM A276 304

Flanged, ASME 150~300LB (PN20-50)
Integral Seat; Wall Thickness to B16.34; Optional Stallited Seat Face

Size	F	langed, ASME	150LB (PN 20)			Flanged, AS	ME 300LB (PN	50)
In mm	D	L	н	Weight Ib(kg)	D	L	н	Weight Ib(kg)
2	2.01	7.99	4.51	20.4	2.01	10.51	5.02	60.0
50	51	203	114.5	9.3	51	267	127.5	27.2
2-1/2	2.52	8.50	6.00	50.7	2.52	11.50	7.17	81.6
65	64	216	152.5	23.0	64	292	182	37.0
3	2.99	9.49	6.59	57.3	2.99	12.52	7.40	92.6
80	76	241	167.5	26.0	76	318	188	42.0
4	4.02	11.50	7.34	99.2	4.02	14.02	8.62	141.1
100	102	292	186.5	45.0	102	356	219	64.0
6	5.98	14.02	11.42	172	5.98	17.48	12.50	273.4
150	152	356	290	78.0	152	444	317.5	124.0
8	7.99	19.49	14.13	299.9	7.99	20.98	14.35	489.5
200	203	495	359	136.0	203	533	364.5	222.0
10	10.00	24.49	15.35	471.9	10.00	24.49	16.73	643.9
250	254	622	390	214.1	254	622	425	292.1
12	12.01	27.48	16.65	707.8				
300	305	698	423	321.1				
14	13.27	30.98	17.83	904.1				
350	337	787	453	410.1				
16	15.24	34.02	20.35	1133.4				
400	387	864	517	514.1				

With the enhancement of people's ecological awareness since the 1960's, especially under the background of current economic globalization, protecting environment is becoming common understanding in present global development, whether developed or developing countries, and has led to the establishment of associated law and regulation in different fields, including modern process industries.

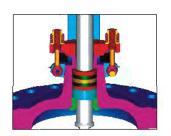
Industrial valves are one of the main pollution sources in modern process industries because of fugitive emission. To minimize this for human health, safety and environment, Neway has implemented low emission technology for all series of valves. This features the essential function of effectively controlling fugitive emission leakage from valves by utilizing defense material and special structure design as outlined below. These valves are measured and tested in accordance with ISO 15848 or Shell SPE 77/312.



## **Design Features**

#### **Emission Defense Packing**

The Neway designed packing set consist of 3 die formed flexible graphite rings and 2 braided flexible graphite rings with cone surface. The graphite packing sets feature pliability, excellent compression recovery, heat resistance, less stress relaxation and low creep. The structure allows a low friction on rotary & rising stem valves so as to provide the stabilized seal performance for long cycle life.





#### Stuffing box and stem finish

All of the valves have been designed to have maximum Ra1.6 inside surface of stuffing box, a smoother surface finish will allow better holding of the packing ring and result in a better sealing performance.

The stem surface finish is controlled to a maximum Ra0.4, and straightness and roundness are precision controlled in accordance with Neway design and manufacturing standard. The structure will ensure the graphite to fill and migrate into the stem micro scratches, and function as a lubricant to reduce leakage through stem.

## **Fugitive Emission Valve Test**

Neway full series low emission gate, globe and check valves had been Certified as per TA-Luft, the proto type test and the product test were carried out and inspected by a third party at Neway China plant in year 2003. Below table shows the typical test parameter:

#### Optional Live-loaded Gland Bolts

Live-loaded gland bolts are optional upon customer request. The special structure can maintain a permanent packing stress in virtue of two sets of Belleville spring, and extend the low emission service life. Neway standard Belleville springs are protected by a weatherproof cap to keep them from environmental contamination so as to ensure a long and continual stable work life.

Test Standard	ISO 15848	Neway Accep	Neway Acceptable Level		
Test Medium	97% Hellium	Stem Seal Leakage Rate	ISO 15848 class B 1.78x10 <sup>-7</sup> Pa.m³/s (Per mm Stem diameter)		
Test Pressure	Valve body pressure At the selected test Temperature es ASME B16.34	Mechanical Cycles	100		
Test Equipment	Hellum Spectrometer	Temperature	-196 ∼ 450°C		

# **NEWAY Factory**

#### **NEWAY Huashan Plant**

Main Products: Ball Valve Covers area: 33,000sqm Work shop: 21,000sqm

Founded in 2003



#### **NEWAY Taishan Plant**

Main Producta: Gate Valve, Globe Valve, Check Valve, Forged Steel Valve, Butterfly Valve Covers Area: 160,000eqm

Work shop: 92,000sqm

Founded in 2006



### **NEWAY Foundry (Suzhou)**

Main products: Sand Casting Covers area: 112,500sqm Work shop: 98,000sqm

Founded in 2008



#### **NEWAY Foundry (Suzhou)**

Main products: Sand Casting Covers area: 45,000sqm Work shop: 25,000sqm

Founded in 2003



### **NEWAY Foundry (Dafeng)**

Main Products: Lost wax investment casting Covers area: 46,000sqm Work shop: 12,000sqm

Founded in 2004



### **NEWAY Foundry (Dafeng)**

Main Products: Lost wax investment casting Covers area: 40,000sqm Work shop: 20,000sqm

Founded in 2008



Seller will replace without charge or refund the purchase price of products provided by Seller which prove to be defective in material or workmanship, provided in each case that the product is properly installed and is used in the service for which Seller recommends it and that written claim, specifying the alleged defect, is presented to the Seller within 18 months from the date of shipment or 12 months after installation, whichever occurs first. Seller shall in no event bear any labor, equipment, engineering or other costs incurred in connection with repair of replacement. The warranty stated in this paragraph is in lieu of all other warranties, either expressed or implied. With respect to warranties, this paragraph states Buyer's exclusive remedy and seller's exclusive liability.



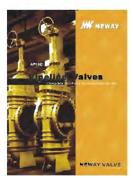
Cat.no.:E-PS



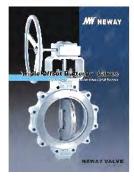
Cat.no.:E-FBV



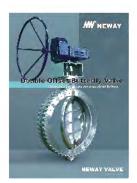
Cat.no.:E-TMBV



Cat.no.:E-PLV



Cat.no.:E-TOV



Cat.no.:E-DOV



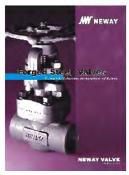
Cat.no.:E-GGC



Cat.no.:E-AV



Cat.no.:E-HPCV



Cat.no.:E-FSV



Cat.no.:E-CSS



Cat.no.:E-CSC



No.999 Xiangjiang Road, Suzhou New District,P.R. China Post Code:215129 Tel: 86-512-666-51365

Fax: 86-512-666-51365
Fax: 86-512-666-51360
E-Mail: neway@neway.com.cn
http://www.newayvalve.com

Distributed by:
-----------------

1		
1		