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E-V-2018 Cat no.





MINEWAY APIGA VALVES

NEWAY OIL EQUIPMENT (SUZHOU) CO., LTD Cat No. E-V-2018 How to Order

Figure Number Example:

GEN	2-1/16"	5M	FLG	DD-NL	PU	PSL2	PR1
1	2	3	4	5	6	\bigcirc	8

Following descriptions provide a basic guideline in valve specification:

① Valve	type											
	Valve typ	e		Symbol			Valve	e type		Sym	bol	
Ex	panding Gate	Valve		GEN			Multiple Or	ifice Cho	ke	C	M	
Expanding G	Gate Valve(hig	gh temperature)		GEH		Т	Trunnion Mounted Ball Valve			BS		
	Slab Gate Va	lve		GBC		Т	runnion Mour	nted Ball	Valve	BT		
Slab	Gate Valve(I	ip seal)		GBS			Metallic Seali	ing Ball V	alve	B	ГМ	
Ba	II Screw Gate	Valve		GBSR			Regular Cl	neck Valv	/e	L	C	
Fra	c Service Gat	e Valve		GBW			Regular Cl	neck Valv	/e	S	C	
Plug	& Cage Contr	ol Choke		CAP			Full-opening	Check V	alve	S	F	
Externa	al Sleeve Con	trol Choke		CAE			Mud	Valve		G	A	
Adju	stable Needle	e Choke		CAN			Mud Valve			GA75		
	Positive Cho	ke		CP			Globe	Valve		G	SL	
O O !												
② SIZE												
in	1-13/16	2-1/16	2-9/16	3-1/16	3-1/8	4-1/16	5-1/8	6-3/8	6-5/8	7-1/16	9	
mm	46	52	65	78	79	103	103 130		168	178	228	
③ Work	ing Press	sure										
Symb	ol	2M		3M	5	5M	10M		15M		20M	
MPa	а	13.8		20.7	3	4.5	69.0		103.5	1	38.0	
psi		2,000		3,000	5,	000	10,000		15,000	20	0,000	
④ End (Connectio	on										
Symb	ol	FLG		LP	Ν	1U	EU		н		W	
Enc	ł	Flange End	Pipe	line Thread	Tubing	Thread	EU Threa	ad	Hub Connect	ion Weld	Connection	
		-										

5 Material Selection

Please find the detailed sheet on the next page.

6 Temperature Rating

•							
Symbol	Rang	ge(°F	Range(°C				
K	-75	180	-60	82			
L	-50	180	-46	82			
Ν	-50	140	-46	60			
Р	-20	180	-29	82			
S	0	140	-18	60			
Т	0	180	-18	82			
U	0	250	-18	121			
V	35	250	2	121			
Х	0	350	0	180			
Y	0	650	0	345			

⑦ Product Speci	fication Level				
Symbol	PSI 1	PSI 2	PSI 3	PSI 3G	PSI /
Testing Type	Hydrostatic Test	Hydrostatic Test	Hydrostatic Test	Hydrostatic & Gas Test	Hydrostatic & Gas Tes
Traceability	No	No	Yes	Yes	Yes
8 Product Perfo	rmance Requireme	nt			

Symbol	PR1	PR2

© Material Selection												
						Size						
Parts	Material Type	Surface Treatment	DD-NL	EE-0.5	EE-1.5	EE-NL	FF-0.5	FF-1.5	FF-NL	HH-NL		
	ZG30CrMo	-										
	AISI 4130	-										
Valve	ASTM A217-CA15	-										
	AISI 410	-										
	AISI 4130	CLAD										
	AISI 4130	-										
Bonnet	AISI 410	-										
	AISI 4130	CLAD										
	AISI 4130	QPQ										
Stom	17-4PH	QPQ										
Stem	AISI 410	QPQ										
	INCONEL 718	-										
	41014400											
	AISI 4130	QPQ TO										
	AISI 4130	TC IC										
	AISI 410	QPQ										
Gate	AISI 410											
	17-4PH	SIL										
	INCONEL 718	QPQ -										
				1	1	1	1	1	1			
	AISI 4130	QPQ										
	AISI 4130	тс										
	AISI 410	QPQ										
Seat	AISI 410	тс										
	AISI 410	STL										
	17-4PH	QPQ										
	INCONEL 725/718	-										
	Carbon Steel	ZINC										
Bonnet Ring	SS316	-										
	INCONEL 625	-										

Notes:

Symbol	Meaning
CLAD	Surface Overlay
QPQ	Nitriding
TC	Tungsten Carbide
STL	Stellite Inlay

Material Selection

Product Range

			Size									
Valve Type		Working Pressure	1-13/16"	2-1/16"	2-9/16"	3-1/8"	3-1/16"	4-1/16"	5-1/8"	7-1/16"	9"	11"
	GEN	2,000 3,000 5,000										
	GEH	2,000 3,000 5,000										
	GBC	2,000 3,000 5,000 10,000 15,000 20,000										
	GBS	2,000 3,000 5,000 10,000 15,000 20,000										
	GBSR	5,000 10,000 15,000 20,000										
Gate Val	GBW	3,000 5,000 10,000 15,000 20,000										
Ve	GBFL	10,000 20,000										
	GA	2,000 3,000 5,000 7,500 10,000										
	АН	3,000 5,000 10,000 15,000 20,000										
	AC											
	DH	3,000 5,000 10,000 15,000 20,000										
	AP	3,000 5,000 10,000 15,000 20,000										
	AD	3,000 5,000 10,000 15.000										

			Size									
Valve	Valve Type		1-13/16"	2-1/16"	2-9/16"	3-1/8"	3-1/16"	4-1/16"	5-1/8"	7-1/16"	9"	11"
	САР	2,000 3,000 5,000 10,000 15,000 20,000										
Q	CAE	2,000 3,000 5,000 10,000 15,000 20,000										
noke Valve	CAN	2,000 3,000 5,000 10,000 15,000										
	СР	2,000 3,000 5,000 10,000 15,000										
	СМ	2,000 3,000 5,000 10,000 15,000 20,000										
	BS	3,000 5,000										
all Valve	BT	2,000 3,000 5,000										
	BTM	5,000 10,000										
	BEM	10,000										
Check Va	LC	2,000 3,000 5,000 10,000 15,000 20,000										
alve	SC	3,000 5,000 10,000										
	51	10,000								l		
Globe Valve	GL	3,000 5,000										
Plug Valve	PL	15,000										

Expanding Gate Valve GEN

GEN

Description

The GE Gate Valve, with expanding split gate design, non-rising stem and all kinds of sealing provide safe, dependable service in applications of 2000 to 5000 psi WP. It is available in sizes from 2-1/16" through 4-1/16" with threaded and 2-1/16 " through 7-1/16" with flanged ends. It is available in trims for all types of oilfield service.



Features

- It is available in two sealing types, double sealing and metal to metal sealing.
- Expanding gate design creates a positive mechanical seal across seat, with or without line pressure;
- The valve has a preferred direction of installation (marked with an arrow on the valve body) .
- · Gate skirts reduce loss of body lubricants.
- Upper/lower thrust bearings are isolated from well fluid, minimizing torque.
- Stem packing can be re-energized with the valve under pressure.
- Non-rising stem permits valve installation in closer quarters.

Approved Certification

PR2 Product Test, Issued by LR

CE/PED For API 6A Product, Issued by DNV



2,000 psi Working Pressure													
Size	Bo	Bore A		В		C	С		D		ight	Full open /close	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	11.62	295	4.92	125	18.50	470	11.02	280	99	45	13
2-9/16"	2.56	65.1	13.12	333	5.91	150	19.29	490	12.99	330	143	65	15
3-1/8"	3.13	79.4	14.12	359	7.28	185	21.65	550	12.99	330	220	100	20
4-1/16"	4.06	103.2	17.12	435	8.86	225	25.00	635	15.75	400	353	205	24
7-1/16''	7.06	179.4	26.12	664	14.17	360	32.48	825	25.59	650	1146	520	39

3,000 psi Working Pressure

Size	Bore		А		В		С		۵)	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	14.62	371	5.31	135	18.31	465	12.99	330	165	75	13
2-9/16"	2.56	65.1	16.62	422	5.91	150	19.49	495	15.75	400	220	100	15
3-1/8"	3.13	79.4	17.12	435	7.28	185	21.85	555	15.75	400	276	125	20
4-1/16"	4.06	103.2	20.12	511	8.86	225	25.59	650	18.90	480	573	260	24
7-1/16"	7.06	179.4	28.12	714	14.17	360	32.48	825	29.92	760	1235	560	39

5.000 psi Working Pressure

,			0										
Size	Bore A		В			C D			We	ight	Full open /close		
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	14.62	371	5.31	135	18.50	470	12.99	330	154	70	13
2-9/16"	2.56	65.1	16.62	422	5.91	150	19.49	495	15.75	400	220	100	15
3-1/8"	3.13	79.4	18.62	473	7.28	185	21.85	555	15.75	400	320	145	20
4-1/16"	4.06	103.2	21.62	549	9.06	230	25.39	645	18.90	480	573	260	24
7-1/16"	7.06	179.4	32.00	813	13.98	355	32.68	830	29.92	760	1433	650	39



Dimensions for flanged end GE

A:Flange face to face

B:Bore centerline to bottom of valve C:Bore centerline to handwheel top

D:Handwheel diameter

Expanding Gate Valve GEN



Dimensions for threaded end GE

A: Thread face to face

B: Bore centerline to bottom of valve C: Bore centerline to handwheel top D: Handwheel diameter

2,000 psi Working Pressure

Size	Bo	ore	1	Ą	E	}	C	;	C)	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	9.65	245	4.92	125	18.50	470	11.02	280	99	45	13
2-9/16"	2.56	65.1	10.24	260	5.91	150	19.29	490	12.99	330	132	60	15
3-1/8"	3.13	79.4	11.42	290	7.28	185	21.65	550	12.99	330	198	85	20
4-1/16"	4.06	103.2	12.99	330	8.86	225	25.00	635	12.99	330	276	150	24

3,000 psi Working Pressure

Size	Bo	ore		Ą	E	3	C	;	C)	We	ight	Full open /clos
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	8.86	225	4.92	125	18.70	475	12.99	330	110	50	13
2-9/16"	2.56	65.1	10.24	260	5.91	150	19.49	495	15.75	400	143	65	15
3-1/8''	3.13	79.4	11.42	290	7.28	185	21.85	555	15.75	400	198	90	20
4-1/16''	4.06	103.2	12.99	330	9.06	230	26.38	670	20.00	508	276	190	24

5,000 psi Working Pressure

Size	Bo	ore		Ą	E	3	С	;	0)	We	ight	Full open /clos
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	8.86	225	4.92	125	18.70	475	12.99	330	110	50	13
2-9/16"	2.56	65.1	10.24	260	5.91	150	19.49	495	15.75	400	143	65	15
3-1/8"	3.13	79.4	11.42	290	7.28	185	21.85	555	15.75	400	198	90	20
4-1/16'''	4.06	103.2	12.99	330	9.06	230	25.39	645	18.90	480	419	190	24

Description

The GE Gate Valve, with expanding split gate design, non-rising stem and all kinds of sealing provide safe, dependable service in applications of 2000 to 5000 psi WP. It is available in sizes from 2-1/16" through 4-1/16" with threaded and 2-1/16 " through 7-1/16" with flanged ends. The valve is suitable for thermal recovery wellhead.



Features

- · Seat is welded to the valve body which decrease the sealing face.
- Metal to metal sealing between seat & gate to ensure the sealing performance of Y level temperature.
- Gate: parallel expanding ,with spring which can appropriately increase the pressure between the seat at any time to ensure the sealing
- sealing and prolong the service life.
- Stem with double packing design, improved the seal performance of the valve stem.
- The bonnet is equipped with cooling structure, which can effectively inhibit heat conduction upwards and protect the seals.
- operating torque.
- Valve is equipped with heavy-duty thrust bearing, reduce the operating torque.

Expanding Gate Valve

• Disc and seat sealing surface through nitriding, spray welding and HVOF to improve the quality, ensure the

• Bearing space sleeve is equipped with grease fitting which can prolong the service life of bearing and lower

Expanding Gate Valve GEH



Dimensions for flanged end GEH

A: Flange face to face

B: Bore centerline to bottom of valve C: Bore centerline to handwheel top D: Handwheel diameter

2,000 psi Working Pressure

Size	Bo	re	ŀ	4	E	3	C	;	C)	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	11.62	295	4.92	125	24.80	630	11.02	280	99	45	13
4-1/16"	4.06	103.2	17.12	435	9.06	230	44.09	1120	15.75	400	276	150	24

3,000 psi Working Pressure

Size	Bo	ore	1	4	E	3	C	;	0)	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	14.62	371	4.92	125	24.80	630	12.99	330	165	75	13
3-1/8"	3.13	79.4	17.12	435	7.68	195	25.79	655	15.75	400	276	125	20
4-1/16"	4.06	103.2	20.12	511	9.45	240	44.09	1120	18.90	480	573	260	24

5,000 psi Working Pressure

Size	Bo	re	A	4	E	3	C	;	0)	Weight		Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb kg		Turn Count
2-1/16"	2 06	52.4	14 62	371	4 92	125	24 80	630	12 99	330	154	70	13

Description

The GBC Gate Valve is a field-proven valve that provides reliability and interchangeability. The valve is available in a wide variety of trim configurations to suit all service conditions. Valves are also available prepared for an actuator of the customer's choice or equipped with a Neway Pneumatic Diaphragm, Pneumatic Piston or Hydraulic Actuator. It is available in pressure ratings from 2000 to 20,000 psi and bore sizes of 1-13/16" to 7-1/16".



Features

- GBC slab gate valves are full bore, through conduit design, non-rising stem, symmetrical, bi-directional design without a preferred direction of operation.
- Bearing cap grease fitting allows positive bearing lubrication.
- it's suggested to replace packing after releasing pressure).
- the back seat integrity.
- Positive metal-to-metal sealing (gate-to-seat and seat-to-body).
- creating effect a positive downstream seal.
- Handwheel can be easily removed/reassembled by means of a screw and nut.

Approved Certification

PR2	Product Test,
CE/PED	For API 6A Pr
API607/6FA	Fire Safe Tes

• Stem can be back seated to allow stem seal replacement with the valve under pressure(For safety purposes,

• Grease injection fitting is located on the bonnets, for lubricating stem, and gate. It can also be used to test

Special modified ACME threads at the gate-to-stem connection provide sufficient freedom of movement to

Issued by DNV & LR

roduct, Issued by DNV

st, Issued by LR

Slab Gate Valve GBC

Dimensions for flanged end GBC

A:Flange face to face

B:Bore centerline to bottom of valve C:Bore centerline to handwheel top D:Handwheel diameter

2,000 psi Working Pressure

Size	Bo	ore	1	4	E	3	C	;	0)	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	11.61	295	5.00	127	18.90	480	14.02	356	112	51	12
2-9/16"	2.56	65.1	16.61	422	6.34	161	22.36	568	14.00	356	208	95	15
3-1/8"	3.13	79.4	18.62	473	7.48	190	22.83	580	17.01	432	320	145	18
4-1/16"	4.06	103.2	17.13	435	8.98	228	22.64	575	15.16	385	397	180	23

3,000 psi Working Pressure

	_				_		-						
Size	Bo	ore	1	A	E	3	C	;)	Wei	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	14.61	371	5.28	134	20.67	525	14.00	356	165	75	12
2-9/16"	2.56	65.1	16.61	422	6.34	161	22.36	568	14.00	356	208	95	15
3-1/8"	3.13	79.4	17.13	435	7.01	178	22.74	578	17.00	432	262	119	18
4-1/16"	4.06	103.2	20.12	511	9.37	238	25.12	638	18.50	470	496	225	23
5-1/8"	5.13	130.2	24.13	613	11.38	289	26.38	670	24.02	610	926	420	29
7-1/16"	7.13	181.0	28.11	714	14.63	372	34.25	870	24.02	610	1620	735	48

5,000 psi Working Pressure

Size	Bo	ore	1	4	E	3	C	;	[C	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	14.61	371	5.32	135	21.65	550	14.00	356	165	75	12
2-9/16''	2.56	65.1	16.61	422	6.00	153	22.44	570	14.00	356	231	105	15
3-1/8"	3.13	79.4	18.62	473	7.56	192	22.64	575	17.00	432	320	145	18
4-1/16"	4.06	103.2	21.61	549	9.65	245	25.20	640	18.50	470	529	240	23
5-1/8"	5.13	130.2	28.62	727	11.22	285	28.15	715	24.00	610	959	435	29
7-1/16''	7.13	181.0	32.01	813	14.63	372	34.25	870	24.02	610	1984	900	48
9''	9.00	228.6	40.98	1041	18.50	470	45.28	1150	-	Gear Box	3748	1700	40

10,000 psi Working Pressure

Size	Bo	re	1	4	E	}	С	;	C)	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
1-13/16"	1.81	46.1	18.27	464	5.15	131	21.74	552	14.00	356	187	85	12
2-1/16"	2.06	52.4	20.51	521	5.75	146	21.54	547	18.50	470	265	120	12
2-9/16"	2.56	65.1	22.24	565	6.69	170	22.36	568	18.50	470	309	140	15
3-1/16"	3.06	77.8	24.37	619	8.19	208	23.23	590	24.02	610	452	205	18
4-1/16"	4.06	103.2	26.38	670	9.84	250	26.26	667	24.00	610	805	365	23
5-1/8"	5.13	130.2	29.02	737	13.11	333	28.94	735	24.02	610	1312	595	35

15,000 psi Working Pressure

10,00															
Size	B	ore	1	Ą	E	3	C	;	0)	We	ight	Full open /close		
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count		
1-13/16"	1.81	46.1	17.99	457	5.63	143	21.65	550	18.50	470	309	140	12		
2-1/16"	2.06	52.4	19.02	483	6.69	170	21.54	547	18.50	470	298	135	12		
2-9/16"	2.56	65.1	20.98	533	6.69	170	24.61	625	18.50	470	529	240	16		
3-1/16"	3.06	77.8	23.54	598	9.49	241	27.76	705	24.00	610	827	375	15		
4-1/16"	4.06	103.2	29.02	737	10.28	261	29.53	750	24.00	610	1091	495	29		

20,00)0 ps	si Wo	orkin	g Pr	essi	ure							
Size	Bo	ore		Ą	E	3	C	;	۵)	We	ight	Full open /close
	in	mm	in mm		in	mm	in	mm	in	mm	lb	kg	Turn Count
1-13/16"	1.66	42.1	20.98	533	5.82	148	21.58	548	18.50	470	474	215	12

Slab Gate Valve

Slab Gate Valve GBC



Dimensions for threaded end GBC

A:Thread face to face

B:Bore centerline to bottom of valve C:Bore centerline to handwheel top D:Handwheel diameter

2,000 psi Working Pressure

Size	Bo	re	A		E	3	C	;	C)	We	ight	Full open /clos
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	8.98	228	5.00	127	18.90	480	14.02	356	99	45	12
2-9/16"	2.56	65.1	12.20	310	6.34	161	22.36	568	14.00	356	208	95	15
3-1/8"	3.13	79.4	13.39	340	7.48	190	22.52	572	17.01	432	276	125	18
4-1/16"	4.06	103.2	15.43	392	8.98	228	22.52	572	18.50	470	331	150	23

3,000 psi Working Pressure

Size	Bo	ore	А		E	3	C	;	0	C	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	9.61	244	5.39	137	21.57	548	14.00	356	115	52	12
2-9/16"	2.56	65.1	12.20	310	6.34	161	22.36	568	14.00	356	208	95	15
3-1/8"	3.13	79.4	13.39	340	7.56	192	22.74	578	17.00	432	262	119	18
4-1/16"	4.06	103.2	15.43	392	9.37	238	25.12	638	18.50	470	496	225	23

5,000 psi Working Pressure

Size	Bo	ore	A		E	3	C))	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	9.61	244	5.39	137	21.46	545	14.02	356	132	60	12
2-9/16"	2.56	65.1	16.61	422	6.00	153	22.38	569	14.00	356	220	100	15
3-1/8"	3.13	79.4	18.62	473	7.56	192	22.64	575	17.00	432	322	146	18
4-1/16"	4.06	103.2	21.61	549	9.65	245	25.12	638	18.46	469	525	238	23

GBS

Description

The GBS Gate Valve is manufactured in accordance with API 6A and NACE MR 0175 and widely recognized as a high quality valve for all types of applications. The GBS is a full-bore, through-conduit valve available in standard double flange, threaded-end and special block body configurations. It is available in pressure ratings from 2000 to 20,000 psi and bore sizes of 1-13/16" to 7-1/16".

Features

- · Grease injection fitting is located on the bonnet, for lubricating stem, stem nut and gate.
- In addition to the metal-to-metal seal between the seats and gate, GBS gate valves incorporate two spring-loaded, pressure-energized structures.
- The structure can sense the spring supply load to seal when there is low pressures and lip seal to seal when there is high pressure. Nonelectrometric lip-seal between each seat and the body. This kind of structure protects the metal seal surface of the seat and gate from damage and improves valve performance at very low pressures.
- This double-seal design provides maximum protection against intrusion of particles into the valve cavity, prevents sand particles from affecting the metal-to-metal seal between the body and seats and gate and also prevents body erosion in drilling mud applications.
- Positive metal-to-metal sealing (gate-to-seat and seat-to-body).
- Simple, reliable gate and seat design promotes ease of field service.
- Bi-directional design provides flow direction versatility and increased service life.

Approved Certification

PR2	Product Test
CE/PED	For API 6A Pi
ABS	For API 6A Pi

Slab Gate Valve



- Bearing cap grease fitting allows positive bearing lubrication.
 - Stem can be back seated to allow stem seal replacement with the valve under pressure(For safety purposes, it's suggested to replace packing after releasing pressure).
 - · Metal-to-metal bonnet seal, (pressure energized at 10,000 psi WP and above).
 - The stem packing is a pressure energized seal and can withstand severe temperatures and fluids. It is constructed of a non-elastomeric material that offers a low coefficient of friction.
 - · Compatible with a wide range of actuators.

Issued by DNV roduct, Issued by DNV roduct, Issued by ABS

Slab Gate Valve GBS

GBS



Dimensions for flanged end GBS

A:Flange face to face

B:Bore centerline to bottom of valve C:Bore centerline to handwheel top D:Handwheel diameter

5,000 psi Working Pressure

Size	Bo	ore	ŀ	4	E	3	C	;)	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	14.61	371	5.28	134	21.61	549	14.02	356	165	75	12
2-9/16"	2.56	65.1	16.61	422	6.34	161	22.36	568	14.00	356	209	95	15
3-1/8"	3.13	79.4	18.62	473	7.48	190	22.52	572	17.01	432	320	145	18
4-1/16"	4.06	103.2	21.61	549	9.65	245	24.99	635	17.72	450	507	230	24
5-1/8''	5.13	130.2	28.62	727	11.38	289	27.36	695	24.00	610	1102	500	28
7-1/16''	7.06	179.4	32.01	813	14.63	372	51.97	1320	42.91	1090	1984	900	48

10,000 psi Working Pressure

Size	Bo	ore	ļ	4	E	3	C	;	0)	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
1-13/16"	1.81	46.0	18.27	464	5.12	130	21.85	555	14.02	356	194	88	12
2-1/16"	2.06	52.4	20.51	521	5.71	145	21.65	550	18.50	470	243	110	12
2-9/16"	2.56	65.1	22.24	565	6.69	170	22.44	570	18.50	470	298	135	15
3-1/16"	3.06	77.8	24.37	619	8.19	208	24.41	620	24.02	610	474	215	18
4-1/16"	4.06	103.2	26.38	670	9.84	250	26.38	670	24.00	610	805	365	24
5-1/8''	5.13	130.2	29.02	737	13.19	335	29.13	740	24.02	610	1323	600	29
6-3/8"	6.37	161.9	35.00	889	14.76	375	45.87	1165	35.00	889	2502	1135	43

15,000 psi Working Pressure

Size	Bo	ore	А		E	3	C	;	۵)	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
1-13/16"	1.81	46.1	17.99	457	5.63	143	27.20	691	18.50	470	298	135	12
2-1/16"	2.06	52.4	19.02	483	6.69	170	21.54	547	18.50	470	287	130	12
2-9/16"	2.56	65.1	20.98	533	7.68	195	23.48	597	18.50	470	529	240	15
3-1/16"	3.06	77.8	23.54	598	9.45	240	24.61	625	23.03	585	871	395	19
4-1/16"	4.06	103.2	29.02	737	11.69	297	35.79	909	24.02	610	1554	705	29



3,000	3,000 psi Working Pressure														
Size	Bore A B C D Weight														
	in	mm	in	mm	in	mm	in	mm	in	mm	lb kg		Turn Count		
2-1/16"	2.06	52.4	10.63	270	5.28	134	21.61	549	14.02	356	132	60	12		
2-9/16"	2.56	65.1	12.36	314	6.34	161	22.36	568	14.00	356	172	78	15		
3-1/8"	3.13	79.4	13.62	346	7.48	190	22.52	572	17.01	432	320	145	18		

5,000 psi Working Pressure

Size	Bore			Ą	E	3	C	;	[C	We	ight	Full open /close
	in	mm	in mm		in	mm	in	mm	in	mm	lb	kg	Turn Count
5-1/8"	5.13	130.2	28.62	727	11.02	280	20.47	520	23.62	600	734	333	29

Dimensions for welded end GBS

- A:Weld face to face
- B:Bore centerline to bottom of valve C:Bore centerline to handwheel top D:Handwheel diameter

Fracturing Gate Valve GBFL

GBFL

Description

The GBFL Gate Valve was designed for use as a manual valve in high pressure, large bore applications. This valve incorporates a lower balancing stem and unique ball screw mechanism for ease of operation in the field. It is value-engineered for reliability, low torque, ease of operation and servic and has many of the same features as the GBS gate valve, including the gate and seat design.



Features

- Bi-directional and through conduit design provides low flow residence and increased service life.
- A ball screw mechanism and balance stem are incorporated into the GBFL gate valve to minimize the actuating torque.
- Sealing at the gate-to-seat and the seat-to-body is metal-to-metal.
- One-piece seats and a slab gate ensure dependable sealing and simplify field service. The gate and seat assembly seals in both directions, and the gate and seats can be reversed for increased life.
- In addition to the metal-to-metal seal between the seat and valve body, non-elastomeric seal rings provide protection against intrusion of particle contaminates into the valve cavity, improve gate and seat service life, prevent damage to the body-to-seat seal face, and improve valve performance at very low pressure.
- The stem packing can withstand severe temperatures and fluids of fracturing conditions. It's economical and convenient to maintain
- The balance stem may be used to indicate the gate position.
- The seal between the valve body and bonnet is a pressure-energized, BX-style metal bonnet gasket.



В	ore	A	Ą	E	3	C	;	[C	We	ight			
in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg			
5.13	130.2	29.02	737	26.97	685	42.72	1085	23.62	600	2006	910			
6.38	162	35	889	30	762	51.38	1305	34	863.6	2502	1135			
7.06	179.4	35	889	27.95	710	65.16	1655	34	863	3748	1700			
	b psi B in 5.13 6.38 7.06	Image: bold bold bold bold bold bold bold bold	Bore A in mm in 5.13 130.2 29.02 6.38 162 35 7.06 179.4 35	Bore A in mm in mm 5.13 130.2 29.02 737 6.38 162 35 889 7.06 179.4 35 889	Bore A E in mm in mm in 5.13 130.2 29.02 737 26.97 6.38 162 35 889 30 7.06 179.4 35 889 27.95	Bore A B in mm in mm 5.13 130.2 29.02 737 26.97 685 6.38 162 35 889 30 762 7.06 179.4 35 889 27.95 710	Bore A B C in mm in mm in in 5.13 130.2 29.02 737 26.97 685 42.72 6.38 162 35 889 30 762 51.38 7.06 179.4 35 889 27.95 710 65.16	Bore A B C in mm in mm in mm 5.13 130.2 29.02 737 26.97 685 42.72 1085 6.38 162 35 889 30 762 51.38 1305 7.06 179.4 35 889 27.95 710 65.16 1655	Bore A B C Image: Constraint of the state of	Bore A B C D in mm in in mm in in mm in in <td>Bore A B C D We in mm in mm in mm in mm in mm lb 5.13 130.2 29.02 737 26.97 685 42.72 1085 23.62 600 2006 6.38 162 35 889 30 762 51.38 1305 34 863.6 2502 7.06 179.4 35 889 27.95 710 65.16 1655 34 863 3748</td>	Bore A B C D We in mm in mm in mm in mm in mm lb 5.13 130.2 29.02 737 26.97 685 42.72 1085 23.62 600 2006 6.38 162 35 889 30 762 51.38 1305 34 863.6 2502 7.06 179.4 35 889 27.95 710 65.16 1655 34 863 3748			

15,000 psi Working Pressure

Size	Bo	ore	A	A Contraction	E	3	(C	D)	Wei	ght
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
4-1/16"	4.06	103.2	29.02	737	25.24	641	43.31	1100	23.62	600	1687	765
5-1/8"	5.13	130.2	35	889	27.99	711	45.08	1145	36	914.4	2601	1180
6-3/8"	6.38	162	41	1041	34.09	866	64.57	1640	40	1016	6779	3075
7-1/16"	7.06	179.4	40.98	1041	36.73	933	58.07	1475	34	863.6	5787	2625

Fracturing Gate Valve

Dimensions for flanged end GBFL

A:Flange face to face B:Bore centerline to bottom of valve C:Bore centerline to handwheel top D:Handwheel diameter

2	2
	,

Ball Screw Gate Valve **GBSR**

GBSR

Description

The GBS-R Gate Valve was designed as a manual valve for use in high pressure, large bore applications. This valve incorporates a lower balancing stem and unique ball screw mechanism for ease of operation in the field. It is value-engineered for reliability, low torque, ease of operation and service with many of the same features as the GBS Gate Valve, including the gate and seat design.

Features

- Bearing cap grease fitting allows positive bearing lubrication.
- · Positive metal-to-metal sealing (gate-to-seat and seat-to-body).
- The lower stem balances the pressure thrust on the upper stem to reduce operating torque, prevents body cavity pressure build-up during operation and provides position indication.
- The upper stem and lower stem can be back seated to allow either stem packing to be replaced, under pressure if necessary. (For safety purposes, it's suggested to replace packing after releasing pressure).
- · In addition to the metal-to-metal seal between the seats and valve body, two spring loaded, non-elastomeric lip-seals provide maximum protection against intrusion of particle contaminates into the valve cavity, improve gate and seat service life, prevent damage to the body-to-seat seal face, and improve valve performance at very low pressure.

Approved Certification

CE/PED

For API 6A Product, Issued by DNV



- · Pressure-energized metal-to-metal bonnet seal.
- The GBS-R Gate Valve has grease fittings located on the downstream side of the upper stem and lower stem back seat shoulders for lubricating stem and the valve cavity.
- · Bi-directional design provides flow direction versatility and increased service life.
- The stem packing is a pressure energized seal and can withstand severe temperatures and fluids. It is constructed of a non-elastomeric material that offers a low coefficient of friction.



5,000	5,000 psi Working Pressure												
Size	Bo	ore		А		В		С		D		ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
9''	9.00	228.6	41.00	1041	33.70	856	59.06	1500	24.02	610	4552	2065	39

10,000 psi Working Pressure

Size	Bore		А		В		С		D		Weight		Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
4-1/16"	4.06	103.2	26.38	670	24.09	612	40.75	1035	23.62	600	1235	560	20
5-1/8"	5.13	130.2	29.02	737	26.97	685	42.72	1085	23.62	600	2006	910	23
6-3/8"	6.38	162.0	35.00	889	30.00	762	51.38	1305	34.00	864	2502	1135	30
7-1/16"	7.06	179.4	35.00	889	27.95	710	65.16	1655	34.00	864	3748	1700	32

15,000 psi Working Pressure

Size	Bo	ore	1	A		В		С		D		ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
4-1/16"	4.06	103.2	29.02	737	25.24	641	43.31	1100	23.62	600	1687	765	20
5-1/8"	5.13	130.2	35.00	889	27.99	711	45.08	1145	36.00	914	2601	1180	15
6-3/8"	6.38	162.0	41.00	1041	34.09	866	61.57	1640	40.00	1016	6779	3075	30
7-1/16"	7.06	179.4	40.98	1041	36.73	933	58.07	1475	34.00	864	5787	2625	34

20,00	20,000 psi Working Pressure												
Size	Bo	ore	1	4	E	3	C)	[C	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
3-1/16"	3.06	77.8	30.51	775	19.49	495	35.24	895	23.62	600	1885	855	15

Ball Screw Gate Valve

Dimensions for flanged end GBSR

A:Flange face to face

B:Bore centerline to bottom of valve C:Bore centerline to handwheel top D:Handwheel diameter

Frac Service Gate Valve GBW

Scope							
Working				Size			
Pressure	1-13/16"	2-1/16"	2-9/16"	3-1/16"	4-1/16''	5-1/8''	7-1/16"
3000 psi				*	*	*	*
5000 psi				*	*	*	*
10000 psi	*	*	*	*	*	*	
15000 psi	*	*	*	*	*		
20000 psi	*	*	*	*			



Features

- The outer seats and inner seats are both embedded into the body. Under the pressure, the inner seats and outer seats move freely, creating an effective upstream sealing.
- The inner seats have a sand control plate design on the bottom, and the set of shielded ring between outer seats and inner seats prevents the sand getting into the body cavity effectively.
- The surface of the sand control board and the inner seat sealing surface are aligned. When the gate move downward, the gate is always contact with the inner seat and sand control plate in order to prevent sand getting into body

Approved Certification

CE/PED

For API 6A Product, Issued by DNV

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Frac Service Gate Valve

Hydraulic Valve

AH

AH

Scope												
Working	Size											
Pressure	1-13/16"	2-1/16"	2-9/16"	3-1/16''	4-1/16"	5-1/8"	7-1/16"	9"				
3000 psi	*	*	*	*	*	*	*	*				
5000 psi	*	*	*	*	*	*	*	*				
10000 psi	*	*	*	*	*	*	*	*				
15000 psi	*	*	*	*	*	*	*					
20000 psi	*	*	*	*								

Actuator Accessories

- Mechanical Hold Open Device Assembly (Non Fusible)
- Mechanical Hold Open Device Assembly (Fusible)
- Fusible Lock Out Cap
- · Limit Switch & Position Indicator
- Transparent Stem Protector
- Hydraulic Override

Standard Hydraulic AH Actuator						
Model	АН					
Piston Size	AH 3.5 / AH 4.5 / AH 6.5 / AH 9.5					
API Material Class	AA					
Maximum Operating Pressure	3,000# PSI (207 Bars)					
Relief Device Setting	3,000# PSI (207 Bars) @ +72°F (+ 22°C)					
Housing Test Pressure	4,500# PSI (310 Bars)					
API 6A Monogramable	API 6A / ISO 10423					
Operating Temperature	- 20°F to +250°F (-28°C to +121°C)					
Product Specification Level	PSL 1, 2, 3, 3G, 4					
Performance Requirements	PR-1 & PR-2					

Pressure Ratings	API 6A 2,000# PSI thru 20,000# PSI								
Sizes	API6A 1	-13/16" thr	u 9"						
	Non Nace / Non Sour Service								
	A	A	BB		CC				
Material Class	Sour Service Nace MR0175 Trim								
	DD-0.5	DD-1.5	DD-NL	EE-0.5	EE-1.5	EE-NL			
	FF-0.5	FF-1.5	FF-NL	HH-0.5	HH-1.5	HH-NL			
Product Specification Level	PSL 1, 2,	3, 3G, 4							
Temperature Rating	-50°F to 250°F (-46°C to +121°C)								



- **Features**
- Valve body pressure assist in closing valve.
- Back seat port for testing of metal to metal seating.
- Quick disconnect.
- Vent weep port above bonnet packing to detect stem packing integrity.
- Top shaft seals easily repaired in-line by removing upper piston assembly.
- Manufactured to Nace MR-0175 for effective operation under harsh environments.
- Non traveling seal design increases piston seals longevity.
- · Piston cylinder and piston are electrolysis nickel plated for corrosion resistance.
- Hydraulic control port can be rotated 360 degrees for easy alignment.
- Metal-to-metal seal between bonnet and stem is designed to be secondary seal should high temperatures melt or distort bonnet stem packing.
- No small ports to plug up or freeze.
- Spring assist in closing with no valve body pressure.
- Actuator top shaft serves as a visual for position of gate.
- Can be installed as secondary master valve, wing valve, headers, gathering lines, pipelines or ESD valve.
- External Pressure Relief Device (PSE) to protect from over-pressure.

Approved Certification

PR2	Product Test , Issued by DNV
CE/PED	For API 6A Product, Issued by DN\

Hydraulic Valve

Hydraulic Valve AC

Scope										
Working	Size									
Pressure	3-1/16"	4-1/16"	5-1/8"							
3000 psi		*	*							
5000 psi	*	*	*							
10000 psi	*	*	*							
15000 psi	*									

St	Standard Hydraulic AC Actuator(IPS)							
Actuator Model	AC							
Piston Size	4.5" x 78 / 5.875" x 90 / 5.875" x 118 / 6.5" x 118 / 6.5" x 142							
Actuator Material Class	AA							
Maximum Operating Pressure	3,000# PSI (207 Bars)							
Relief Device Setting	3,000# PSI (207 Bars)							
Housing Test Pressure	4,500# PSI (310 Bars)							
API 6A Monogramable	API 6A / ISO 10423							
Operating Temperature	- 20°F to +250°F (-29°C to +121°C)							
Product Specification Level	PSL 1, 2							
Performance Requirements	PR-1 & PR-2							

Valve Model	GBS/GBC/GBW							
Valve Pressure Ratings	API 6A 2,	000# PSI th	nru 15,000#	≠PSI				
Valve Normal Sizes	API 6A 1-	13/16" thru	u 5-1/8"					
		Non Nace / Non Sour Service						
Valve Model Valve Pressure Ratings Valve Normal Sizes Valve Material Class Product Specification Level Temperature Rating	A	A	BB		CC			
		Sour S	Service Na	ce MR017	5 Trim			
	DD-0.5	DD-1.5	DD360	DD-NL	EE-0.5	EE-1.5		
	EE360	EE-NL	FF-0.5	FF-1.5	FF360	FF-NL		
	HH-NL							
Product Specification Level	PSL 1, 2,	3, 3G, 4						
Temperature Rating	-50°F to	250°F (-46	°C to +12	1°C)				



Features

- Liberal use of wear rings in actuator assuring long life.
- Actuator has single forged top cap and cylinder for simple in-line maintenance.
- Quick disconnect mechanism allows for fast removal without disturbing the body / bonnet connection and provides immediate access to stem packing.
- Provides immediate access to stem packing.
- Anti-explosive decompression seals and energized non-elastomeric lip seals are available.
- Adjustable internal down-stop for gate alignment.
- A metal to metal seal between the bonnet and stem acts as a secondary seal if the stem packing is damaged.

Approved Certification

PR2 Product Test , Issued by DNV

CE/PED

For API 6A Product, Issued by DNV

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Hydraulic Valve

Hydraulic Valve DH



Features

- Back seat test port and packing detection port.
- Rising stem provides indication of gate valve position.
- Cylinder and piston are electrolysis nickel plated for corrosion resistance.
- External Pressure Relief Device (PSE) to protect from over-pressure.

Approved Certification

CE/PED

For API 6A Product, Issued by DNV

Scope													
Working	Size												
Pressure	1-13/16"	2-1/16"	2-9/16"	3-1/16"	4-1/16"	5-1/8''	7-1/16"	9"					
3000 psi	*	*	*	*	*	*	*	*					
5000 psi	*	*	*	*	*	*	*	*					
10000 psi	*	*	*	*	*	*	*	*					
15000 psi	*	*	*	*	*	*	*						
20000 psi	*	*	*	*									

Actuator Accessories

- Mechanical Hand Open Device Assembly (Non Fusible)
- Fusible Lock Out Cap

Standard DH Actuator Specification								
Model	DH							
Piston Size	DH 4.5 / DH 6.5 / DH 9.5							
API Material Class	AA							
Maximum Operating Pressure	3,000# PSI (207 Bars)							
Relief Device Setting	3,000# PSI (207 Bars) @ +72°F (+ 22°C)							
Housing Test Pressure	6,000# PSI (414 Bars)							
API 6A Monogramable	API 6A / ISO 10423							
Operating Temperature	-20°F to +250°F (-29°C to +121°C)							
Product Specification Level	PSL 1, 2, 3, 3G, 4							
Performance Requirements	PR-1 & PR-2							

Pressure Ratings	API 6A 2,000# PSI thru 20,000# PSI							
Sizes	API 6A 1-13/16" thru 9"							
	Non Nace / Non Sour Service Trim							
	A	A	BB		CC			
Material Class	Sour Service Nace MR0175 Trim							
	DD-0.5	DD-1.5	DD-NL	EE-0.5	EE-1.5	EE-NL		
	FF-0.5	FF-1.5	FF-NL	HH-0.5	HH-1.5	HH-NL		
Product Specification Level	PSL 1, 2,	3, 3G, 4						
Temperature Rating	-50°F to 250°F (-46°C to +121°C)							

Hydraulic Valve

Pneumatic Valve

AP



Scope													
Working		Size											
11035010	1-13/16"	2-1/16"	2-9/16"	3-1/16"	4-1/16"	5-1/8"	7-1/16"						
3000 psi	*	\star	*	*	\star	*	*						
5000 psi	*	*	*	*	*	*	*						
10000 psi	*	*	*	*	*	*	*						
15000 psi	*	*	*	*	*	*							
20000 psi	*	*	*	*									

Actuator Accessories

- Mechanical Hold Open Device Assembly (Non Fusible)
- Mechanical Hold Open Device Assembly (Fusible)
- Fusible Lock Out Cap
- · Limit Switch & Position Indicator
- Transparent Stem Protector
- Hydraulic Override

Standard Piston Pneumatic AP Actuator									
Model	AP								
Piston Size	AP -13", AP - 15", AP - 18" ,AP - 20"								
API Material Class	AA								
Maximum Operating Pressure	170# PSI (12 Bars)								
Relief Device Setting	170# PSI (12 Bars) @ +72°F (+22°C)								
Housing Test Pressure	225# PSI (18 Bars)								
API 6A Monogramable	API 6A / ISO 10423								
Operating Temperature	-20°F to +250°F (-29°C to +121°C)								
Product Specification Level	PSL 1, 2, 3, 3G, 4								
Performance Requirements	PR-1 & PR-2								

Pressure Ratings	API 6A 2,000# PSI thru 20,000# PSI							
Sizes	API 6A 1-	13/16" thru	u 7-1/16"					
	Non Nace / Non Sour Service Trim							
Material Class	A	A	BB		CC			
	Sour Service Nace MR0175 Trim							
	DD-0.5	DD-1.5	DD-NL	EE-0.5	EE-1.5	EE-NL		
	FF-0.5	FF-1.5	FF-NL	HH-0.5	HH-1.5	HH-NL		
Product Specification Level	PSL 1, 2,	3, 3G, 4						
Temperature Rating	-50°F to	250°F (-46	°C to +12	1°C)				



Features

- Valve is designed to close upon loss of control pressure.
- A metal to metal seal between the bonnet and stem acts as a secondary seal if the stem packing is damaged.
- · Back seat port for gas testing of metal to metal seating.
- Vent weep port above the bonnet packing to detect stem packing integrity.
- An internal Pressure Relief Valve (PSE) helps provide tamper proof protection against overpressure. The internal PSE is set to relieve at a higher setting than the external PSE.
- Actuator top shaft serves as a visual for position of gate.
- Piston Housing is coated internally and externally with low friction coating, high corrosion resistance to oxidation and high temperatures. All other internal components are either stainless steel or coated to prevent corrosion from contamination.
- The AP Safety Valve is designed to be repaired and maintained in the field. Internal parts can be removed and changed without removing the valve assembly from the line.
- Top shaft seals easily repaired in line without removing piston housing.
- · Spring assist in closing with no valve body pressure.
- Internal adjustable down stop.
- Quick disconnect.
- Manufactured to Nace MR-0175 for effective operation under harsh environments.

Approved Certification

CE/PED

For API 6A Product, Issued by DNV

Pneumatic Valve

Pneumatic Valve

AD

Scope												
Working	Size											
Pressure	1-13/16"	2-1/16"	2-9/16"	3-1/16"	4-1/16''	5-1/8"	7-1/16"					
3000 psi	*	*	*	*	*	*	*					
5000 psi	*	*	*	*	*	*	*					
10000 psi	*	*	*	*	*	*	*					
15000 psi	*	*	*	*	*	*						

Actuator Accessories

- Mechanical Hold Open Device Assembly (Non Fusible)
- Mechanical Hold Open Device Assembly (Fusible)
- Fusible Lock Out Cap
- · Limit Switch & Position Indicator
- Transparent Stem Protector
- Hydraulic Override

Standard Diaphragm Pneumatic AD Actuator									
Model	AD								
Piston Size	AD - 10", AD - 12", AD - 15", AD - 18", AD - 20"								
API Material Class	AA								
Maximum Operating Pressure	170# PSI (12 Bars)								
Relief Device Setting	170# PSI (12 Bars) @ +72°F (+22°C)								
Housing Test Pressure	225# PSI (18 Bars)								
API 6A Monogramable	API 6A / ISO 10423								
Operating Temperature	-20°F to +250°F (-29°C to +121°C)								
Product Specification Level	PSL 1, 2, 3, 3G, 4								
Performance Requirements	PR-1 & PR-2								

Pressure Ratings	API 6A 2,000# PSI thru 20,000# PSI							
Sizes	API 6A 1	-13/16" thr	u 7-1/16"					
	Non Nace / Non Sour Service Trim							
Material Class	A	A	BB		CC			
	Sour Service Nace MR0175 Trim							
	DD-0.5	DD-1.5	DD-NL	EE-0.5	EE-1.5	EE-NL		
	FF-0.5	FF-1.5	FF-NL	HH-0.5	HH-1.5	HH-NL		
Product Specification Level	PSL 1, 2,	3, 3G, 4						
Temperature Rating	-50°F to	250°F (-46	°C to +12	1°C)				



Features

- Rolling diaphragm design leads to longer seal life and reduces problems associated with moving O-Ring seals.
- Non stainless steel components are Xylan coated for longer wear life and maximum corrosion resistance.
- Manufactured to Nace MR-0175 for effective operation under harsh environments.
- Internal adjustable down stop.
- Spring assist in closing with no valve body pressure.
- Top shaft seals easily repaired in line without removing upper diaphragm case.
- External Pressure Relief Valve (PSE) for over pressure protection.
- Actuator top shaft serves as a visual for position of gate.
- Vent weep port above the bonnet packing to detect stem packing integrity.
- The AD Safety Valve are designed to be repaired and maintained in the field.
- Back seat port for testing of metal to metal seating.
- Valve is designed to close upon loss of control pressure.
- Operates with low pressure air, gas, and nitrogen.
- Quick disconnect.
- A metal to metal seal between the bonnet and stem acts as a secondary seal if the stem packing is damaged.

Approved Certification

CE/PED

For API 6A Product, Issued by DNV

Pneumatic Valve

Plug & Cage Control Choke

Neway choke products include plug and cage choke, external sleeve choke, adjustable needle choke, positive choke and multiple orifice choke.

Description

The Plug and Cage Choke has a plug that throttles the flow on the inside diameter of the ported cage. This choke is used for high capacity/medium pressure drop applications. Because of its high capacity, the Plug and Cage Choke is useful for flow optimization near the end of well life.

CAP



Features

• Tungsten carbide flow plug assembly in conjunction with cage sleeve provides optimum wear resistance in

erosive conditions.

- Metal-to-metal bonnet closure seal.
- Fully guided plug minimizes side loading and vibration.
- · Self-flushing, pressure-balanced ports minimize stem loads and actuator requirements. Heavy duty thrust

bearings also reduce operating torque.

- Outer flow cage provides protection from impact damage.
- Stem lock maintains set position.
- Indicator calibrated in 1/64" or multiples of 1/64" increments to show effective orifice diameter.

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For API 6A Product, Issued by DNV



3,000	3,000 psi Working Pressure											
Size	Во	re	[D X			١	(H	ł	Weight	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
3-1/8"	3.13	79.4	15.75	400	10.39	264	11.22	285	34.84	885	386	175

5.000 psi Working Pressure

,			0									
Size	Bo	ore	l l	D	Х		Y		Н		Weight	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2-1/16"	2.06	52.4	15.75	400	8.74	222	10.87	276	27.95	710	309	140
2-9/16"	2.56	65.1	15.75	400	10.51	267	12.52	318	30.71	780	342	155
3-1/8"	3.13	79.4	15.75	400	10.39	264	11.61	295	35.43	900	392	178
4-1/16"	4.06	103.2	15.75	400	11.89	302	15.98	406	39.37	1000	476	216
5-1/8''	5.13	130.2	24.02	610	14.25	362	19.37	492	40.16	1020	849	385

10,000 psi Working Pressure

Size	Bore		D		Х		Y		н		Weight	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2-1/16"	2.06	52.4	15.75	400	8.74	222	10.87	276	27.95	710	320	145
2-9/16"	2.56	65.1	15.75	400	10.51	267	12.52	318	30.71	780	364	165
4-1/16"	4.06	103.2	15.75	400	10.00	254	11.54	293	33.98	863	560	254

15,000 psi Working Pressure

Size	Bo	Bore D		D	Х		Y		Н		Weight	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2-1/16"	2.06	52.4	15.75	400	8.74	222	10.87	276	27.95	710	331	150
3-1/16"	3.06	77.8	15.75	400	11.46	291	12.52	318	34.84	885	763	346

CAP

Plug & Cage Control Choke

Neway choke products include plug and cage choke, external sleeve choke, adjustable needle choke, positive choke and multiple orifice choke

Dimensions for CAP

- D:Handwheel diameter
- X:Bore centerline to inlet flange face Y:Bore centerline to outlet flange face

External Sleeve Control Choke CAE

Neway choke products include plug and cage choke, external sleeve choke, adjustable needle choke, positive choke and multiple orifice choke.

Description

The External Sleeve Control Choke has a sleeve that throttles the flow on the outside diameter of the ported cage. This choke is used for low capacity/high pressure drop applications. The external sleeve is specifically designed for severely erosive conditions where the combination of high pressure drops and high sand concentrations can reduce the life of a choke.



Features

- Tungsten carbide lined stem and seat provide optimum wear resistance in erosive conditions.
- Metal-to-metal bonnet closure seal.
- Reverse angle trim reduces annular flow-by extending the life of the trim.
- · Self-flushing, pressure-balanced ports minimize stem loads and actuator requirements. Heavy duty thrust bearings also reduce operating torque.
- Outer Flow Sleeve provides protection from impact damage.
- Stem lock maintains set position.
- Indicator calibrated in 1/64" or multiples of 1/64" increments to show effective orifice diameter.

Approved Certification

CE/PED

For API 6A Product, Issued by DNV



10,000 psi Working Pressure															
Size	Bore D X Y H Weight														
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg			
2-1/16"	2.06	52.4	15.75	5 400 11.81 300 12.13 308 33.86 860 304 138											

15,000 psi Working Pressure													
Size Bore D X Y H Weight													
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	
3-1/16"	3.06	77.8	15.75	400	13.46	342	17.76	451	39.25	997	1019	462	

20,00	20,000 psi Working Pressure													
Size Bore D X Y H Weight														
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg		
3-1/16"	3.06	77.8	15.75	400	14.96	380	15.51	394	38.43	976	970	440		



External Sleeve Control Choke

Neway choke products include plug and cage choke, external sleeve choke, adjustable needle choke, positive choke and multiple orifice choke.

Dimensions for CAE

- D:Handwheel diameter
- X:Bore centerline to inlet flange face
- Y:Bore centerline to outlet flange face

Adjustable Needle Choke CAN

Neway choke products include plug and cage choke, external sleeve choke, adjustable needle choke, positive choke and multiple orifice choke.

Description

The adjustable needle choke has a standard body with an adjustable bonnet assembly and seat installed. This assembly features a tungsten carbide-tipped needle, tungsten carbide-lined seat, and an indicator calibrated in 1/64" or multiple of 1/64" to show effective orifice diameter. A needle lock device retains needle position.



Features

- Bleed valve allows the operator to safety vent the body cavity pressure prior to removal of the bonnet assembly.
- Body pressure is automatically vented when the operator unscrews the bonnet nut one turn.
- ACME threads can be cleaned and inspected easily on both the bonnet assembly and body.
- CAN type choke prevents bonnet seal extrusion by means of body-to-bonnet contact behind the O-ring seal.
- The bean/seat has been recessed in the body below the inlet flow path for longer life.

Approved Certification

Product Test , Issued by DNV

CE/PED

For API 6A Product, Issued by DNV

Dimensions for CAN

CAN



3,000	3,000 psi Working Pressure														
Size	Bo	ore	I	D		X	١	(F	ł	We	ight			
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg			
2-1/16"	2.06	52.4	12.99	330	8.74	222	10.87	276	24.88	632	172	78			
2-9/16	2.56	65.1	12.99	330	10.5	267	12.5	317.5	27.83	707	220.5	100			
3-1/8"	3.13	79.4	12.99	330	10.39	264	11.61	295	27.56	700	249	113			
4-1/16"	4.06	103.2	15.75	400	11.89	302	15.98	406	33.98	863	401	182			
7-1/16"	7.13	181.0	7.09	180	14.25	362	19.37	492	38.27	972	791	359			

5 000 nsi Working Pressure

Size	Bo	ore		D	Х		Y		Н		Weight			
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg		
2-1/16"	2.06	52.4	12.99	330	8.74	222	10.87	276	25.43	646	187	85		
2-9/16"	2.56	65.1	12.99	330	10.51	267	12.01	305	28.74	730	220	100		
3-1/8"	3.13	79.4	15.75	400	10.39	264	11.61	295	31.65	804	287	130		
4-1/16"	4.06	103.2	15.75	400	11.89	302	15.98	406	34.72	882	452	205		
5-1/8"	5.13	130.2	18.90	480	14.25	362	19.37	492	38.27	972	833	378		
7-1/16"	7.06	179.4	18.90	480	14.25	362	19.37	492	38.27	972	833	378		

10 000 psi Working Pressure

,														
Size	Bo	ore	I	D		Х		Y		ł	Weight			
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg		
2-1/16"	2.06	52.4	12.99	330	7.68	195	8.74	222	23.62	600	163	74		
2-9/16"	2.56	65.1	15.75	400	10.51	267	12.52	318	25.59	650	243	110		
3-1/16"	3.06	77.8	8.66	220	10.39	264	11.61	295	28.46	723	370	168		
4-1/16"	4.06	103.2	19.69	500	11.89	302	15.98	406	29.53	750	430	195		

Adjustable Needle Choke

Neway choke products include plug and cage choke, external sleeve choke, adjustable needle choke, positive choke and multiple orifice choke.

- D:Handwheel diameter
- X:Bore centerline to inlet flange face Y:Bore centerline to outlet flange face

-	
-	
	=

Multiple Orifice Choke CM

Neway choke products include plug and cage choke, external sleeve choke, adjustable needle choke, positive choke and multiple orifice choke.

Description

The Multiple Orifice Chokes utilize a set of adjacent discs, each containing a pair of circular opening orifices. The two discs are diamond lapped on the mating surfaces to tolerances near two ligh bands of flatness. This allows for extremely precise shutoff and flow regulation.



Features

- Pressure holds discs together, avoid vibration, noise or fatigue failures.
- The circular shape of disc offers a smaller wearing surface, less wear on the throttling and greatly extended service life.
- Very little downtime for maintenance.
- Tungsten carbide discs are offered for extreme erosive conditions and very high pressure drops.
- The outlet end of a Multiple Orifice Choke has a replaceable adapter flange, the customer can changes it in

accordance with different pressure ratings and sizes.

Approved Certification

CE/PED

For API 6A Product, Issued by DNV

ØD

5,000	5,000 psi Working Pressure													
Size	Size Bore D X Y H Weight													
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg		
4-1/16"	4.06	103.2	23.62	600	11.93	303	16.89	429	44.49	1130	794	360		

15,000 psi Working Pressure

Size	Bo	ore		D		Х		Y		Н		Weight	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	
3-1/16"	3.06	77.8	12.80	325	12.80	325	37.20	945	37.20	945	1080	490	
4-1/16''	4.06	103.2	23.62	600	13.50	343	19.69	500	48.43	1230	794	360	



Multiple Orifice Choke

Neway choke products include plug and cage choke, external sleeve choke, adjustable needle choke, positive choke and multiple orifice choke.

Dimensions for CM

- D:Handwheel diameter
- X:Bore centerline to inlet flange face Y:Bore centerline to outlet flange face
- H:Overall size

Positive Choke CP

Neway choke products include plug and cage choke, external sleeve choke, adjustable needle choke, positive choke and multiple orifice choke.

Description

Positive Choke provides a fixed flow condition with a large selection of available bean sizes and types. All standard positive chokes under 15000psi wp are furnished with a blanking plug that has a 1/2" NPT port for attaching a needle valve and/or pressure gauge. Positive chokes 15000psi wp and over are supplied with a 9/16" autoclave port.



Features

- Positive choke bodies are interchangeable with adjustable needle choke.
- Bleed valve allows the operator to safely vent the body cavity pressure prior to removal of the bonnet assembly.
- Body pressure is automatically vented when the operator unscrews the bonnet nut one turn.
- ACME threads can be cleaned and inspected easily on both the bonnet assembly and body.
- CAN type choke prevents bonnet seal extrusion by means of body-to-bonnet contact behind the O-ring seal.
- The bean/seat has been recessed in the body below the inlet flow path for longer life.

Approved Certification

CE/PED

For API 6A Product, Issued by DNV



3,000 p	osi Wo	orking	Press	sure											
Size	Size Bore X Y H Weight														
	in	mm	in	mm	in	mm	in	mm	lb	kg					
7-1/16"	7.06	179.4	14.25	362	19.37	492	29.17	741	505	229					

5.000 psi Working Pressure

-,	,													
Size	Bo	ore	X	(,	Y	ł	Ч	Wei	ght				
	in	mm	in	mm	in	mm	in	mm	lb	kg				
2-9/16"	2.56	65.1	10.55	268	12.52	318	20.87	530	198	90				
3-1/8"	3.13	79.4	10.39	264	11.61	295	20.16	512	254	115				
7-1/16"	7.06	179.4	14.25	362	19.37	492	29.17	741	604	274				

10,000 psi Working Pressure

Size	Bo	ore	X	(·	Y	ł	H	Wei	ght
	in	mm	in	mm	in	mm	in	mm	lb	kg
2-9/16"	2.56	65.1	10.51	267	12.52	318	20.87	530	220	100
3-1/16"	3.13	77.8	9.06	230	11.02	280	22.05	560	282	128
4-1/16"	4.06	103.2	10.00	254	11.50	292	21.18	538	381	173

Neway choke products include plug and cage choke, external sleeve choke, adjustable needle choke, positive choke and multiple orifice choke.

Dimensions for CP

X:Bore centerline to inlet flange face Y:Bore centerline to outlet flange face

Description

NOE Trunnion Mounted soft sealing Ball Valve is supplied for two-piece or three-piece split body, all design is based on standard API 6A&ISO 10423. Flow shut off can be achieved by rotating the ball 90 degrees.







BS

Features

- Two O-ring seals prevents leakage from stem area.
- Emergency Sealant Injection Fitting: Allow external interventions to prevent stem leakage.
- Blow-out Proof Stem(internally inserted): Safety feature that functions to assure stem sealing at all pressures.
- Emergency Sealant Injection Fitting: Allows for external intervention to prevent seat leakage.
- Back-up Metal to Metal Sealing: When primary soft-seat material is deteriorated by fire, the metal-to-metal provides shutoff.
- O-ring & Gasket Combination: Prevents leakage from body joint area.
- Floating Spring-loaded Seats: Ensure sealing even at low pressures.
- Anti-Static Device: Anti-static device ensures electric continuity preventing damage from static build-up.

Approved Certification

CE/PED

For API 6A Product, Issued by DNV



3,000 psi Working Pressure														
Size	Bo	ore	I	L	[C	Н	1	ŀ	ł	V	V	Wei	ight
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2-1/16"	2.06	52.4	17.72	450	6.30	160	4.65	118	15.75	400	7.99	203	198	90
3-1/8"	3.13	79.4	18.70	475	10.63	270	5.71	145	22.83	580	15.75	400	364	165
4-1/16"	4.06	103.2	22.76	578	16.54	420	6.97	177	27.95	710	19.69	500	584	265
7-1/16"	7.06	179.4	32.68	830	22.05	560	16.97	431	45.87	1165	23.62	600	2205	1000

5,000 psi Working Pressure														
Size	Bo	ore	I	L	[C	H	1	ŀ	ł	V	V	We	ight
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2-1/16"	2.06	52.4	17.64	448	9.06	230	5.71	145	20.67	525	15.75	400	220	100
3-1/8"	3.13	79.4	23.86	606	16.54	420	7.28	185	28.35	720	19.69	500	628	285
4-1/16"	4.06	103.2	26.38	670	18.11	460	7.87	200	34.06	865	23.62	600	838	380
7-1/16"	7.06	179.4	37.40	950	22.05	560	16.97	431	49.80	1265	27.56	700	2756	1250
9"	9.00	228.6	47.64	1210	25.59	650	20.12	511	57.68	1465	29.92	760	5203	2360

Trunnion Mounted Ball Valve



Dimensions for BS ball valve

L:Flange face to face D:Bore centerline to handwheel H:Valve overall size H1:Bore centerline to bottom

Trunnion Mounted Ball Valve

Description

NOE Trunnion Mounted soft sealing Ball Valve is supplied for two-piece or three-piece split body, all design is based on standard API 6A&ISO 10423. Flow shut off can be achieved by rotating the ball 90 degrees.





BT

Features

- Two O-ring seals prevents leakage from stem area.
- Emergency Sealant Injection Fitting: Allow external interventions to prevent stem leakage.
- Blow-out Proof Stem(internally inserted): Safety feature that functions to assure stem sealing at all pressures.
- Emergency Sealant Injection Fitting: Allows for external intervention to prevent seat leakage.
- Back-up Metal to Metal Sealing: When primary soft-seat material is deteriorated by fire, the metal-to-metal provides shutoff.
- O-ring & Gasket Combination: Prevents leakage from body joint area.
- Floating Spring-loaded Seats: Ensure sealing even at low pressures.

Approved Certification

CE/PED

For API 6A Product, Issued by DNV



2,000 p	2,000 psi Working Pressure														
Size	Size Bore L D H1 H W Weight														
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	
2-1/16"	2.06	52.4	11.61	295	6.30	160	4.72	120	15.75	400	7.99	203	132	60	
3-1/8"	3.13	79.4	14.13	359	10.63	270	5.71	145	22.64	575	15.75	400	254	115	
4-1/16"	4.06	103.2	17.13	435	16.54	420	6.97	177	27.95	710	19.69	500	507	230	
7-1/16"	7.06	179.4	27.95	710	22.05	560	13.19	335	42.13	1070	23.62	600	2006	910	

3,000 psi Working Pressure														
Size	Bo	ore	l	-	[C	H	1	ŀ	ł	V	V	Wei	ight
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2-1/16"	2.06	52.4	14.61	371	6.30	160	4.72	120	15.75	400	7.99	203	176	80
3-1/8"	3.13	79.4	15.12	384	10.63	270	5.71	145	22.64	575	15.75	400	287	130
4-1/16"	4.06	103.2	18.11	460	16.54	420	6.97	177	27.95	710	19.69	500	551	250
7-1/16"	7.06	179.4	30.39	772	22.05	560	13.19	335	42.13	1070	23.62	600	2116	960

5,000 p	5,000 psi Working Pressure													
Size	Bo	ore	l	-	[C	H	1	H	ł	V	V	Wei	ight
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2-1/16"	2.06	52.4	14.61	371	9.06	230	5.31	135	18.90	480	11.81	300	209	95
3-1/8"	3.13	79.4	18.62	473	16.54	420	7.28	185	28.35	720	19.69	500	595	270
4-1/16"	4.06	103.2	21.61	549	18.11	460	7.87	200	34.06	865	23.62	600	661	300
7-1/16"	7.06	179.4	34.25	870	22.05	560	14.17	360	47.24	1200	27.56	700	2557	1160

Trunnion Mounted Ball Valve



Dimensions for BT ball valve

L:Flange face to face D:Bore centerline to handwheel H:Valve overall size H1:Bore centerline to bottom

BTM

BTM

Description

Metallic sealing ball valve is designed to suit severe conditions, such as high temperature, high pressure, strong corrosive fluid and the medium with solid phase particles. It is value-engineered for reliability, low pressure loss, ease of operation and has long service time.



Features

- Low leakage graphite packing.
- Surface harding treatment between ball and seat, it meets the requirement of high temperature abrasive wear and high impact resistance.
- Floating Spring-loaded Seats: Ensure sealing even at low pressures.
- Blow-out Proof Stem(internally inserted): Safety feature that functions to ensure stem sealing at all pressures.
- The top flange is designed according to ISO 5211, it is available for installation with either gear box or power

drive mechanism.

Approved Certification

For API 6A Product, Issued by DNV

API 607/6FA

Fire Safe Test, Issued by LR



5,000 p	osi V	/orki	ng l	Pres	sure	;									
Size	Size Bore L L1 H H1 H2 Weight														
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	
3-1/8"	3.13	79.4	18.62	473	8.03	204	29.02	737	7.99	203	8.35	212	613	278	

10,000	psi	Wor	king	Pre	ssui	re									
Size	ize Bore L L1 H H1 H2 Weight														
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	
1-13/16"	1.81	46.0	21.46	545	8.39	213	37.40	950	8.46	215	10.16	258	661	300	
2-1/16"	2.06	52.4	20.51	521	9.17	233	26.69	678	7.48	190	9.37	238	529	240	
3-1/16''	3.13	79.4	18.62	473	8.03	204	29.02	737	7.99	203	8.35	212	613	278	

Metallic Sealing Ball Valve



Dimensions for BM ball valve

L1:Bore centerline to bonnet L:Face to face H1:Bore centerline to bottom H2:Bore centerline to body top H:Valve overall size

BEM

BEM

Description

The BEM ball valve can be removed easily and quickly on the pipe line. There is no need to remove the valve from the line when the valve has a failure on the line, and only remove the flange bolts and nuts, remove the bonnet and stem assembly from the valve body and then remove the ball and seat assembly, you can repair the valve on the line. So that we can saves time and reduces losses.



Features

- The ball valve consists of body, ball, seat, stem, bonnet, gearbox and so on.
- Adopt up install structure, more less leakage, little pipeline stress, easy to manufacture, it can achieve online maintenance.
- This valve body is forging, which is convenient to process support in the body bottom, simple structure, small processing difficulty, accurate positioning, no leakage point, and cost saving.
- Use o-rings or fire prevention sealing materials between seat and body, that can ensure the sealing effect.
- Seat and ball low pressure seal adopt two opposite disc springs , that can reduce processing cost and difficulty, easy to install.
- Between the valve body and the bonnet, BX ring was used, that can ensure the seal performance. Two seals are designed for stem packing: Lipseal and Graphite packing.
- · Add a relief valve to the valve body. When replacing the stem packing, the pressure of the middle cavity is all released to ensure the safety of the operator.
- Simple installation and disassembly tools can be used for online maintenance.



	10,000 p	osi W	orkir	ig Pr	essu	ire							
	Size	Bore L H1 H2 H											ght
		in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
	1-13/16"	1.81	46	18.27	464	22.20	564	4.72	120	16.34	415	572	260
2-1/16" 2.06 52.4 20.51 521 23.43 595 4.72 120 17.13 435												605	275

Top Entry Ball Valve



Dimensions for BEM ball valve

L:Face to face size H1:Bore centerline to bottom size H2:Body top to bottom size H: Gear Box top to bottom size



Mud Valve **GA75**

GA75

Description

The GA75 Series Mud Valve is designed to meet the 7,500 psi working pressure demands of deep well drilling. It is chosen for the following drilling applications: standpipe manifolds, pump manifolds, pump manifold block valves, high pressure drilling system block valves and high pressure frac service. This Valve is available in sizes 2-1/16" to 5-1/8" with butt weld end or flanged end connections.



Features

• Unique abrasion-resistant one piece seat and metal wear rings ensure positive seal performance for

extended service.

- Replaceable one piece seat and metal wear rings eliminate costly valve removal.
- In Line Field Repairability, bonnet is easily removed for internal parts inspection and/or replacement without removing the valve from the line.
- Include a sight lens to view the stem for determining gate position.
- Locking seat design ensures alignment and minimum resistance to flow.
- Flow-cleansed body cavity eliminates sanding problems.
- Floating slab gate design.

Approved Certification

CE/PED	For API 6A Product, Issued by DNV
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ABS

For API 6A Product, Issued by ABS



7,500 psi Working Pressure

Size	Bo	ore	A	A	E	3	C	;	0)	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	20.51	521	4.02	102	17.36	441	9.96	253	265	120	13
2-9/16"	2.56	65.1	22.24	565	4.72	120	20.08	510	11.02	280	417	189	14
3-1/16"	3.06	77.8	24.38	619	5.39	137	22.36	568	11.02	280	562	255	16
4-1/16"	4.06	103.2	26.38	670	6.22	158	24.80	630	9.53	242	739	335	22
5-1/8"	5.13	130.2	29.00	737	7.17	182	33.94	862	10.00	254	1404	637	31

Dimensions for flanged end GA75

A:Flange face to face

- B:Bore centerline to bottom of valve
- C:Bore centerline to handwheel top
- D:Bore centerline to handwheel

Mud Valve **GA75**

Dimensions for welded end GA75

A:Weld face to face B:Bore centerline to bottom of valve C:Bore centerline to handwheel top D:Bore centerline to handwheel

7,500 psi Working Pressure

Size	Bo	ore	1	4	E	3	C	;	C)	Weight		Full open /clos
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.00	50.8	9.00	229	4.02	102	13.03	331	9.96	253	260	118	13
3-1/16"	3.00	76.2	13.00	330	5.39	137	22.36	568	11.02	280	430	195	16
4-1/16"	4.00	101.6	16.00	406	6.22	158	24.80	630	9.53	242	529	240	22
5-1/8''	5.00	127.0	17.88	454	7.17	182	33.94	862	10.00	254	1102	500	31

10,000 psi Working Pressure

Size	Bo	ore	1	A	E	3	С		0)	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
3-1/16"	3.06	77.8	13.00	330	4.29	109	23.07	586	11.02	280	419	190	16
4-1/16"	4.06	103.2	16.00	406	4.88	124	26.22	666	10.00	254	529	240	22
5-1/8"	5.13	130.2	18.66	474	6.69	170	34.65	880	13.39	340	1146	520	31

Description

The GA series mud valve specifically engineered for the rigorous requirements of oilfield applications. It is designed for dependable, heavy duty performance in abrasive service conditions. It is available in pressure ratings from 2000 to 5000psi and bore sizes from 2-1/16" to 4-1/16".



Features

- erode the gate and seat.
- removing the valve from the line.
- trim valves for a wide range of service conditions.
- The rising stem design protects the stem threads from lading.
- Include a sight lens to view the stem for determining gate position.
- proven to be effective even if the gate and seat ring become scored or abraded during service.

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ABS	For API 6A Pro



• The valve should be either fully open or fully closed while in service. Flow through a partially open valve may

• In Line Field Repairability, the bonnet is easily removed for internal parts inspection and/or replacement without

• Flexible trim offerings: Optional materials for stems, gates, seat inserts and seat elastomers make it easier to

• The seat uses a unique design to ensures a tight seat seal against the body and around each valve port and has

oduct, Issued by DNV

oduct, Issued by ABS

Mud Valve GA



Dimensions for flanged end GA

A:Flange face to face B:Bore centerline to bottom of valve C:Bore centerline to handwheel top D:Bore centerline to handwheel

2,000 psi Working Pressure

Size	Bo	ore	1	4	E	3	C)	[)	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
7-1/16"	7.06	179.4	26.14	664	7.28	185	41.34	1050	12.80	325			

3,000 psi Working Pressure

Size	Bo	ore	A		E	3	C	;	C)	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
3-1/8"	3.13	79.4	17.13	435	4.92	125	17.72	450	19.02	483	298	135	20
4-1/16"	4.06	103.2	14.13	359	4.72	120	16.93	430	19.02	483	179	81	25

5,000 psi Working Pressure

Size	Bo	ore	1	Ą	E	3	C)	6)	We	ight	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
4-1/16"	4.06	103.2	17.99	457	6.10	155	24.65	626	22.99	584	374	170	24
7-1/16"	7.06	179.4	32.01	813	8.07	2.05	41.34	1050	15.75	400			



2,000	psi	Wor	king	Pre	essu	re							
Size	В	ore	/	Ą	E	B C D Weigh					ght	Full open /close	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
5-1/8"	5.13	130.2	16.00	406	5.55	141	31.61	803	24.02	610	402	183	31

3,000	3,000 psi Working Pressure													
Size	В	ore	1	4	E	3	C	;	C)	Wei	ight	Full open /close	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count	
4-1/16"	4.06	103.1	13.03	331	4.69	119	19.02	483	22.91	582	207	94	25	
5-1/8"	5.13	130.2	15.98	406	5.55	141	31.61	803	24.02	610	403	183	31	

5 000 psi Working Pressure

3,000														
Size	В	ore	1	Ą	E	3	C	С		D		ight	Full open /close	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count	
2-1/16"	2.09	53.1	8.98	228	2.56	65	13.58	345	12.52	155	74	35	16	
4-1/16"	4.06	104.0	13.00	330	4.59	116	24.61	625	11.50	292	254	115	24	



Dimensions for threaded end GA

- A:Thread face to face
- B:Bore centerline to bottom of valve C:Bore centerline to handwheel top
- D:Bore centerline to handwheel

Mud Valve

Dimensions for welded end GA

GA

A:Weld face to face B:Bore centerline to bottom of valve C:Bore centerline to handwheel top D:Bore centerline to handwheel

3,000 psi Working Pressure

Size	Во	ore		A	E	3	C	;	D)	Weig	ht	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
4-1/16"	4.09	104.0	13.03	331	4.7	119	19.01	483	22.91	582	207	94	25

5,000 psi Working Pressure

Size	Bo	ore	А		В		С		D		Weig	ht	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.0	8.98	228	2.56	65	13.59	345	12.21	310	73	33	16
3-1/8"	3.11	79.0	10.98	279	3.94	100	17.72	450	9.45	240	132	60	20
4-1/16"	4.06	104.0	13.00	330	4.59	117	24.61	625	11.50	292	254	115	24

Description

LC Series Check Valve is a unidirectional check valve which utilizes a spring loaded Poppet. The Poppet is guided for consistent, reliable operation and seating. This Valve is designed for installation and use in high-pressure Mud Choke Manifolds, and high pressure Christmas Tree Injection and Kill Lines. It is available in pressure ratings from 2000 to 20,000 psi and Bore sizes of 1-13/16" to 7-1/16".

LC



Features

- horizontal orientation with its spring loaded Poppet.
- The Check Valves are available with a variety of end connections. Flanged, Clamp Hub and Butt Weld connections or any combination of these are available.
- Metal sealing between disc and seat offers advantages over elastomeric seals in applications where chemical and well fluid attack and extreme temperatures are factors.
- Streamlined valve seat area results in less flow turbulence and improves body longevity.
- Low Maintenance Operation: The Check Valve is non-lubricated and requires no routine maintenance.

Approved Certification

CE/PED

For API 6A Product, Issued by DNV

• Although the preferred orientation of installation is vertical, the check valve can operate equally well in the

Regular Check Valve



Dimensions for LC

LC

A:Flange face to face B:Bore centerline to bottom of valve C:Bore centerline to handwheel top

3,000 psi Working Pressure

Size	Во	re	A	A	E	3	C)	Wei	ght
	in	mm	in	mm	in	mm	in	mm	lb	kg
2-1/16"	2.06	52.4	14.61	371	4.61	117	8.58	218	179	81
3-1/8"	3.13	79.4	15.12	384	4.72	120	9.76	248	216	98
4-1/16"	4.06	103.2	18.11	460	5.91	150	8.27	210	298	135
7-1/16"	7.05	179.0	29.02	737	9.06	230	14.69	373	992	450

5,000 psi Working Pressure

Size	Во	re	A B C)	Weight			
	in	mm	in	mm	in	mm	in	mm	lb	kg
2-1/16''	2.06	52.4	14.61	371	4.61	117	7.28	185	183	83
2-9/16"	2.56	65.1	16.61	422	6.00	153	8.27	210	220	100
3-1/8''	3.13	79.4	18.62	473	5.51	140	8.66	220	265	120
4-1/16"	4.06	103.2	21.61	549	7.09	180	9.96	253	547	248
7-1/16"	7.05	179.0	29.02	737	9.06	230	16.77	426	1190	540

10,000 psi Working Pressure

Size	Во	re	A	A	E	3	C)	Wei	ght
	in	mm	in	mm	in	mm	in	mm	lb	kg
1-13/16''	1.81	46.1	18.27	464	4.33	110	7.60	193	225	102
2-1/16"	2.06	52.4	20.51	521	4.33	110	7.60	193	313	142
2-9/16''	2.56	65.1	22.24	565	4.96	126	8.78	223	295	134
3-1/16''	3.06	77.8	24.37	619	5.71	145	8.98	228	353	160

15,000 psi Working Pressure

Size	Во	re	А		E	3	(2	Wei	ght
	in	mm	in	mm	in	mm	in	mm	lb	kg
3-1/16"	3.06	77.8	23.54	598	6.69	170	12.05	306	705	320
4-1/16"	4.06	103.2	29.02	737	10.28	261	13.90	353	1091	495

Descrption

The regular check valve is a unidirectional valve and always installed in the horizontal orientation. The valve opened or closed by virtue of flow force and chosen for clean liquid. It is available in pressure ratings from 2000-5000psi and bore sizes of 2-1/16" to 7-1/16".

SC



Features

- A hinge and hinge pin provided and mounted so as to permit full movement of the disc.
- Standard renewable seal welded seat with stellite 6.
- Standard swing disc type used in horizontal position for liquid service applications.
- There is a reserved standard boss at the bottom of body center line.

Approved Certification

CE/PED

For API 6A Product, Issued by DNV



Dimensions for SC

SC

A:Flange face to face B:Bore centerline to bottom of valve C:Bore centerline to handwheel top

3,000 psi Working Pressure

Size	Во	re	A	A Contraction of the second se	E	3	C	;	Wei	ght
	in	mm	in	mm	in	mm	in	mm	lb	kg
2-1/16"	2.06	52.4	14.61	371	4.25	108	8.54	217	106	48
3-1/8"	2.90	73.7	17.13	435	4.72	120	13.19	335	265	120
4-1/16''	4.06	103.2	20.12	511	5.71	145	13.07	332	434	197
7-1/16"	7.05	179.0	24.13	613	7.48	190	15.75	400	681	309
9"	7.44	189.0	31.50	800	9.25	235	18.50	470	1272	577

5,000 psi Working Pressure

Size	Во	re	1	4	E	3	C	;	Wei	ght
	in	mm	in	mm	in	mm	in	mm	lb	kg
2-1/16"	2.06	52.4	14.61	371	4.23	108	9.17	233	121	55
3-1/8"	2.90	73.7	18.62	473	5.22	133	19.69	500	331	150

man

10,000	psi W	orking	g Pres	sure						
Size	Во	re	ŀ	A	E	3	C	>	Wei	ight
	in	mm	in	mm	in	mm	in	mm	lb	kg
1-13/16"	1.81	46 18.27 464			3.82	97	7.87	200	209	95
2-1/16"	2.06	52.4	20.51	521	4.13	105	7.87	200	225	150

Regular Check Valve

Dimensions for SC

- A:Flange face to face
- B:Bore centerline to bottom of valve
- C:Bore centerline to handwheel top

Full-opening Check Valve SF

Descrption

The full-opening check value is a unidirectional value and always installed in the horizontal orientation. The valve opened or closed by virtue of flow force and chosen for clean liquid. It is available in pressure ratings from 2000-5000psi and bore sizes of 2-1/16" to 7-1/16".



Features

- Full bore, strong flow capacity.
- Disc of convex design with better performance, and the arc design can reduce

the pressure loss and turbulent medium.

• Optional soft seal and metal seal.

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5,000 p	5,000 psi working Pressure														
Size	Size Bore A B C Weight														
	in	mm	in	mm	in	mm	in	mm	lb	kg					
2-1/16"	1.69	42.9	14.61	371	4.23	108	9.54	240	110	50					
3-1/8"	2.90	66.6	18.62	473	5.22	133	11.22	285	243	110					
4-1/16"	3.44	87.3	21.61	549	6.10	155	14.17	360	463	210					

Dimensions for SF

A:Flange face to face B:Bore centerline to bottom of valve C:Bore centerline to handwheel top

Globe Valve

Description

The globe valve is a unidirectional valve, with simple structure and ease of maintenance. The valve has a very short stroke and reliable cutting function and it is also well controlled for flow regulation.

GL



Features

- Impact handwheel supplied at manufacture's option or on customer request.
- Anti blow-out stem design with conical backseat surface to permit repacking of valve in the fully open position.
- Plug seat surface is standard disc design as well as spherical and flat seating surface is optional on customer

request.

• Seat face with stellite 6 is standard design.

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3,000	3,000 psi working Pressure														
Size Bore A B C D Weight															
	in	mm	in		in	mm	in	mm	in	mm	lb	kg	Turn Count		
2-1/16"	2.06	52.4	14.61	371	5.28	134	18.70	475	14.00	350	198	90	5		
4-1/16"	4.06	103.2	20.12	511	9.37	238	20.47	520	18.00	450	595	270	6		
7-1/16"	7.05	179.0	28.11	714	7.87	200	32.09	815	-	Gear Box	1179	535	5		

5,000 psi Working Pressure

Size	Bo	ore	А		В		С			D	Wei	ght	Full open /close
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	Turn Count
2-1/16"	2.06	52.4	14.61	371	4.25	108	18.70	475	14.00	350	198	90	5
3-1/8"	3.13	79.4	18.62	473	7.44	189	16.93	430	18.00	450	386	175	6
7-1/16"	7.05	179.0	41.93	1065	7.87	200	57.28	1455	-	Gear Box	2646	1200	4

Globe Valve

Dimensions for Globe valve

A:Flange face to face B:Bore centerline to bottom of valve C:Bore centerline to handwheel top D:Bore centerline to handwheel

Description

The valves are intended for both onshore and offshore use. Onshore, the plug valves are used in connection with mobile pumping service units used to kill wells, cement wells, acidize and fracture wells. They are also used in hydraulic lines to control wellhead protector tools. Offshore, the valves are used in a number of applications. They are used in essentially permanent installations in pump rooms to isolate the discharges of the triplex pumps used in fracturing wells. They have also been used in choke and kill manifold systems.

PL



Features

- Excellent sealing provided by precision ground metal-to-metal seal between Seats and plug.
- No need to remove valve from line for maintenance.
- No special tools needed for operation or maintenance.
- Plug bar cap has visible indication of open or closed position.
- Flanged body for easier maintenance.
- The stem packing can withstand severe temperatures and fluids of fracturing conditions. It's economical

and convenient to maintain.

• The balance stem packings effectively reduce the operation torque.



2 000 noi Working Drosouro

3,000 psi working Pressure										
Size	Bore		А		В		С		Weight	
	in	mm	in	mm	in	mm	in	mm	lb	kg
1-13/16"	1.81	46	17.99	457	5	127	11.3	287	154.3	70

Plug Valve

Dimensions for flanged end PPV plug valve

A:Flange face to face B:Bore centerline to bottom of valve C:Bottom to handwheel top