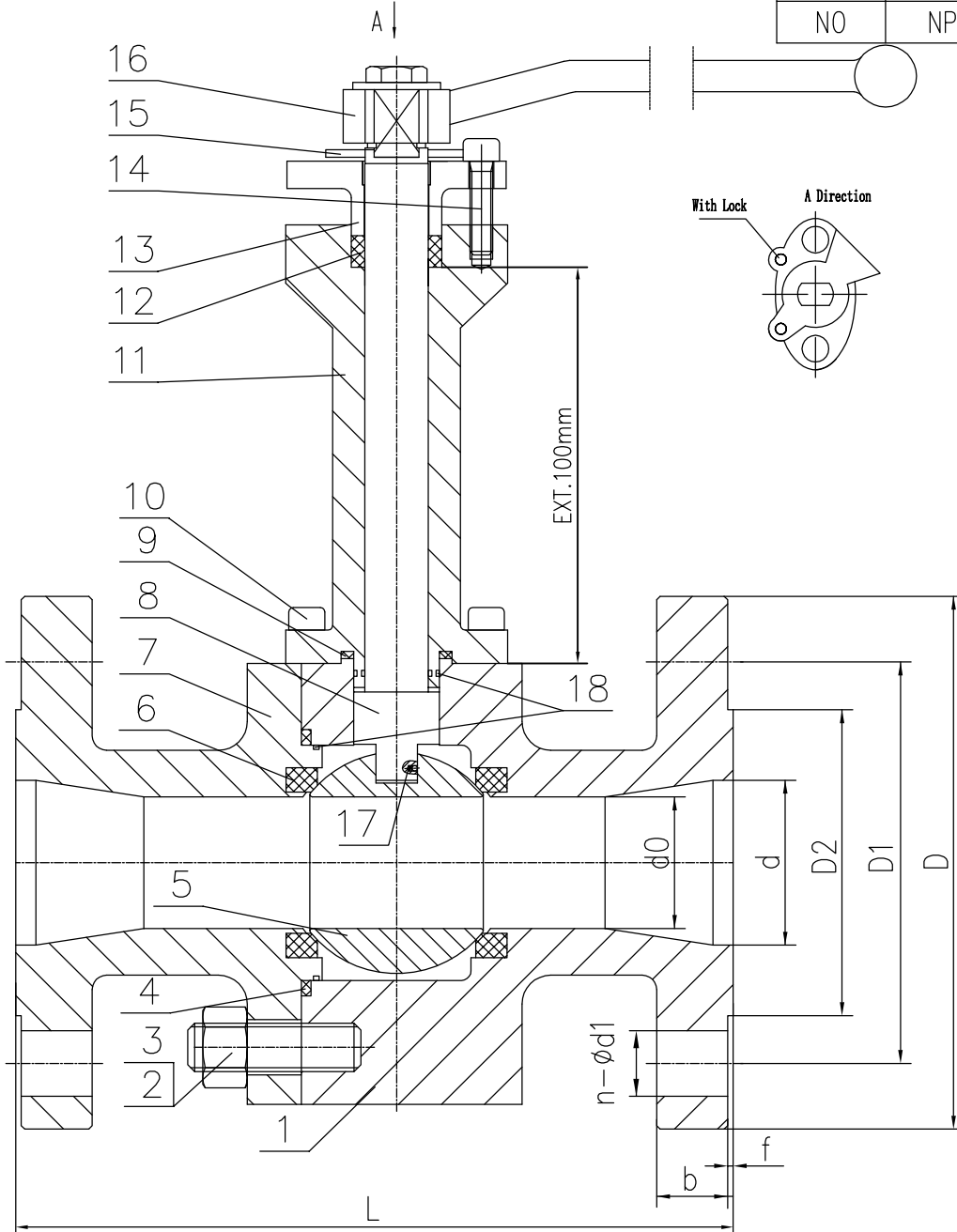


Please remove these ball valves from drawing

20~25	2"x1 1/2"	216	49	38	92.1	127	165	20.7	2	8-ø19
17	1 1/2"x1"	190	38	25	73	114.3	155	19.1	2	4-ø22
1&18&26	3/4"x1/2"	152	19	13	42.9	82.6	115	14.3	2	4-ø19
NO	NPS	L	d	d0	D2	D1	D	b	f	n-d1



Performance Specification		
Nominal Pressure		300LB
Test Pressure	Shell test	7.5
	Back seal test	--
	Seat test	5.5
	Gas test	0.6
Working Temperature		-29~120 ℃
Medium: water oil & gas		

- Technical Specification
1. Design and manufacture: API 6D
  2. Face-to-face: ASME B16.10
  3. Flanged ends: ASME B16.5
  4. Inspection and test: API 598

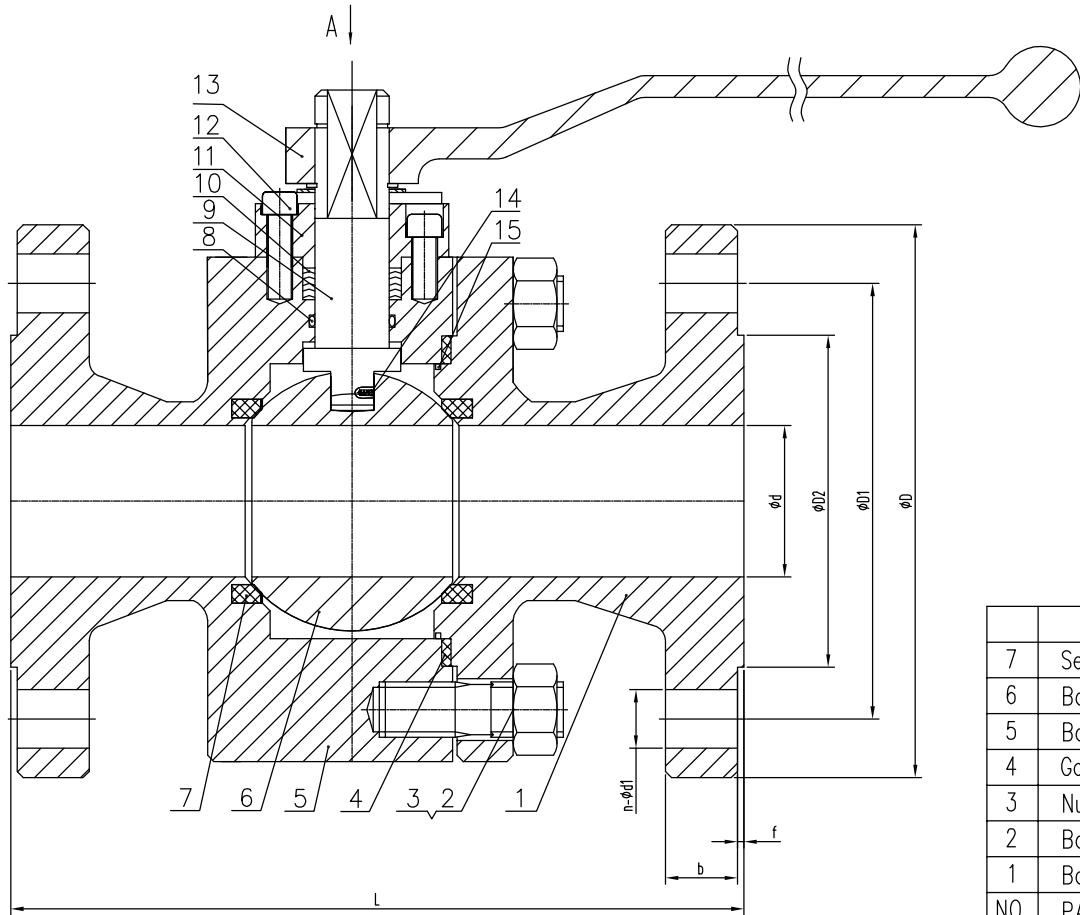
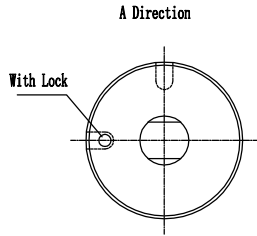
9	Gasket	Graphite+SS	18	O-Ring	Viton
8	Stem	ASTM A182 F304	17	Anti Static device	SS304
7	Bonnet	ASTM A350 LF2	16	Lever	Carbon steel
6	Seal Ring	RPTFE	15	Stopper	S.S
5	Ball	ASTM A182 F304	14	Screw nail	ASTM A320 L7
4	Gasket	Graphite+SS	13	Gland flange	ASTM A350 LF2
3	Nut	ASTM A194 7	12	Packing	Graphite
2	Bolt	ASTM A320 L7	11	EXT. YOKE	ASTM A350 LF2
1	Body	ASTM A350 LF2	10	Bolt	ASTM A320 L7
NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL

CHECKED BY  
PRINTED BY  
OLD DRAWING NO.  
BASED DRAWING NO.  
SIGNATURE  
DATE

MARK					QTY		FILE NO.		SIGN		DATE	
DESIGN		JASON		STANDARD								
CHECK				APPROVE		S.Parker						
TECHNOLOGY												
Class 300 NPS 2" BALL VALVE								DRAW REV.				
ASSEMBLY DRAWING												

Please remove these ball valves from drawing

3&10	2"	216	49	92.1	127	165	20.7	2	8- $\phi$ 19
2&9	1 1/2"	190	38	73	114.3	155	19.1	2	4- $\phi$ 22
NO	NPS	L	d	D2	D1	D	b	f	n-d1



Performance Specification		
Nominal Pressure		300LB
Test Pressure	Shell test	7.5
	Back seal test	--
	Seat test	5.5
	Gas test	0.6
Working Temperature		-29~120 °C
Medium: water oil & gas		

- Technical Specification
- Design and manufacture: API 6D
  - Face-to-face: ASME B16.10
  - Flanged ends: ASME B16.5
  - Inspection and test: API 598

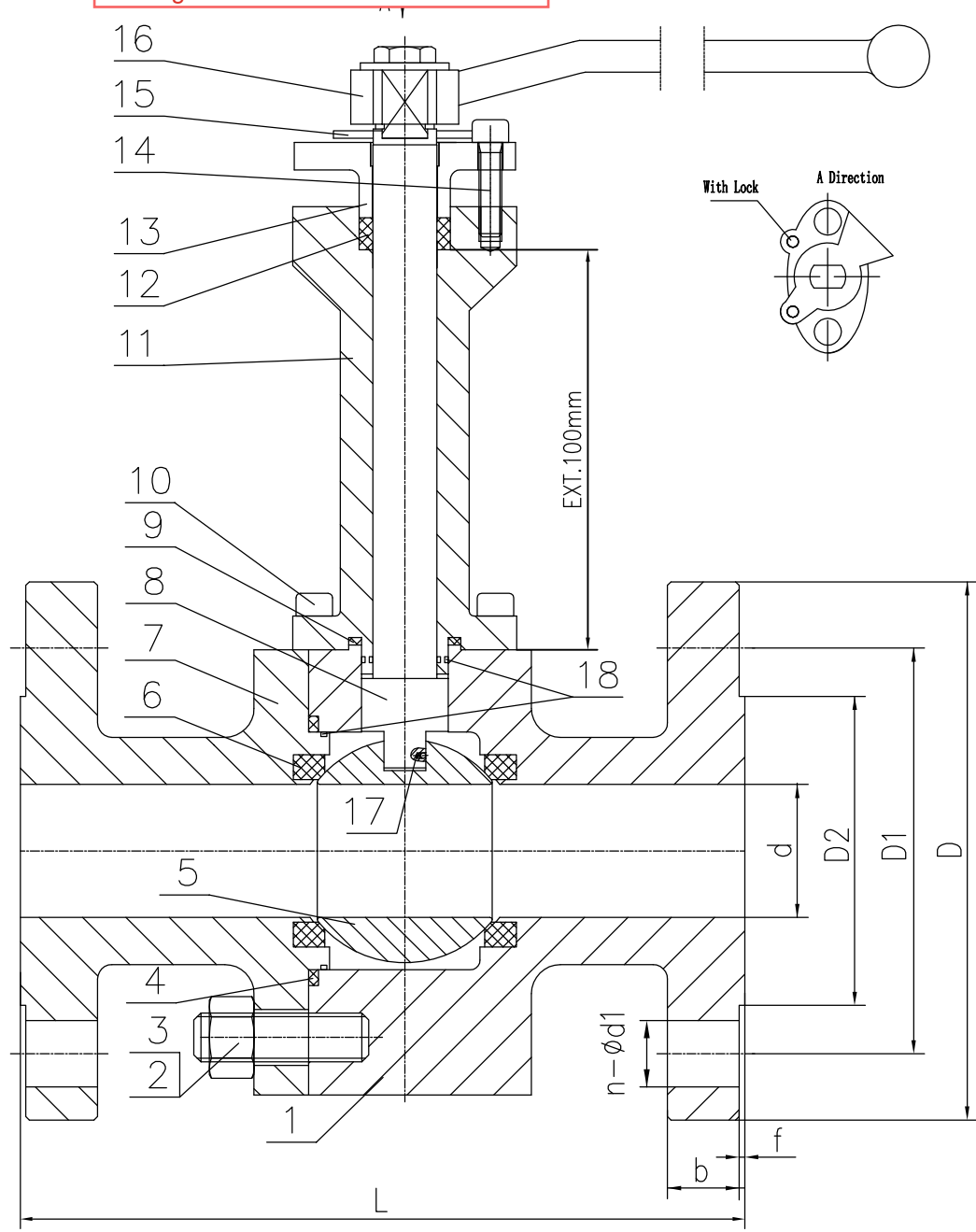
			15	O-Ring	Viton
7	Seal Ring	RPTFE	14	Anti Static device	SS304
6	Ball	ASTM A182 F304	13	Lever	Carbon steel
5	Body	ASTM A350 LF2	12	Screw nail	ASTM A320 L7
4	Gasket	Graphite+SS	11	Gland flange	ASTM A350 LF2
3	Nut	ASTM A194 7	10	Packing	Graphite
2	Bolt	ASTM A320 L7	9	Stem	ASTM A182 F304
1	Bonnet	ASTM A350 LF2	8	O-Ring	Viton
NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL

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 BASED DRAWING NO.  
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 DATE

				Class 300 NPS 1 1/2"~2" BALL VALVE		DRAW REV.	
MARK	QTY	FILE NO.	SIGN	DATE	ASSEMBLY DRAWING		
DESIGN	JASON	STANDARD					
CHECK		APPROVE	S.Parker				
TECHNOLOGY							

Please remove these ball valves from drawing

4	2"	216	49	92.1	127	165	20.7	2	8- $\phi$ 19
NO	NPS	L	d	D2	D1	D	b	f	n-d1



Performance Specification		
Nominal Pressure		300LB
Test Pressure	Shell test	7.5
	Back seal test	--
	Seat test	5.5
	Gas test	0.6
Working Temperature		-29~120 °C
Medium: water oil & gas		

- Technical Specification
1. Design and manufacture: API 6D
  2. Face-to-face: ASME B16.10
  3. Flanged ends: ASME B16.5
  4. Inspection and test: API 598

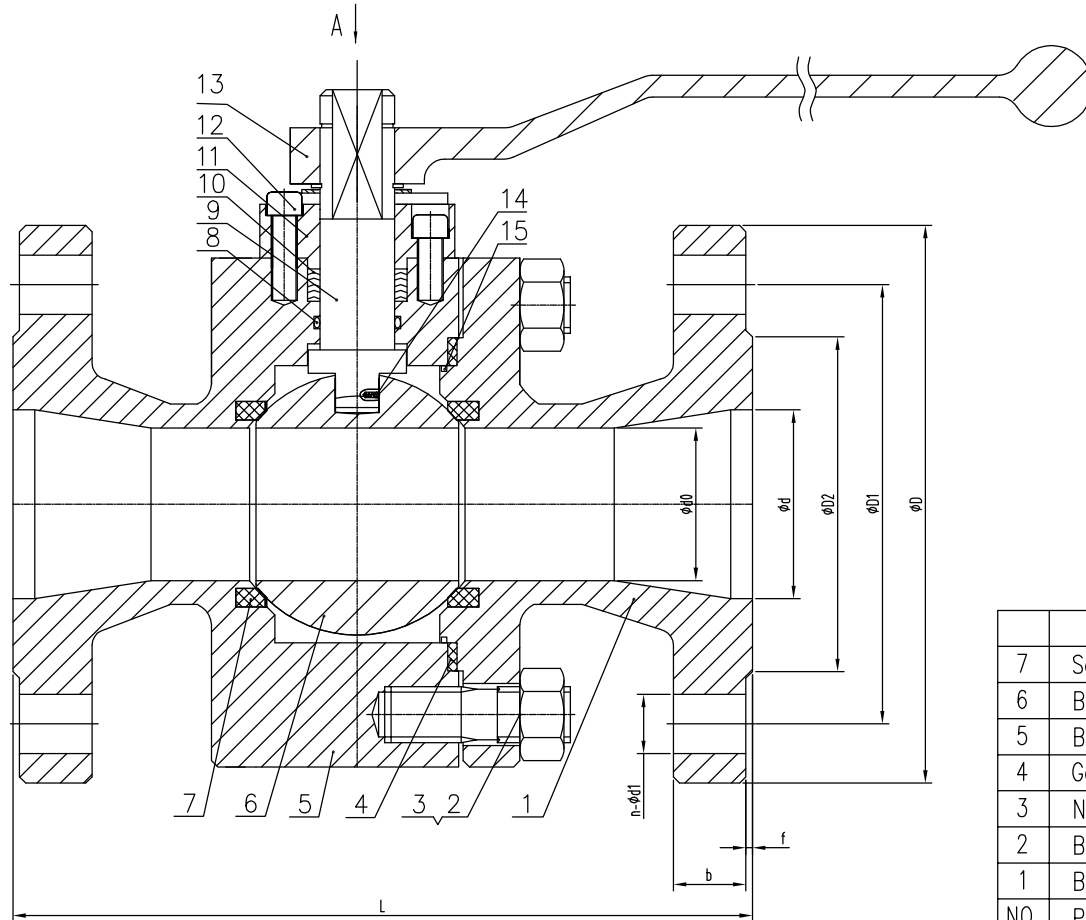
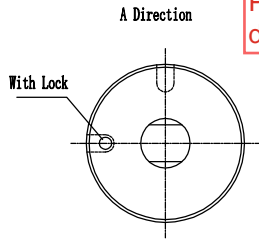
9	Gasket	Graphite+SS	18	O-Ring	Viton
8	Stem	ASTM A182 F304	17	Anti Static device	SS304
7	Bonnet	ASTM A350 LF2	16	Lever	Carbon steel
6	Seal Ring	RPTFE	15	Stopper	S.S
5	Ball	ASTM A182 F304	14	Screw nail	ASTM A320 L7
4	Gasket	Graphite+SS	13	Gland flange	ASTM A350 LF2
3	Nut	ASTM A194 7	12	Packing	Graphite
2	Bolt	ASTM A320 L7	11	EXT. YOKE	ASTM A350 LF2
1	Body	ASTM A350 LF2	10	Bolt	ASTM A320 L7
NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL

CHECKED BY  
PRINTED BY  
OLD DRAWING NO.  
BASED DRAWING NO.  
SIGNATURE  
DATE

MARK				QTY		FILE NO.		SIGN		DATE	
DESIGN		JASON		STANDARD							
CHECK				APPROVE		S.Parker					
TECHNOLOGY											
Class 300 NPS 2" BALL VALVE										DRAW REV.	
ASSEMBLY DRAWING											

NO	NPS	L	D	D1	D2	d	d0	b	f	n- $\phi$ d1
5	1/2"x3/8"	140	95	66.7	34.9	13	9	12.7	2	4- $\phi$ 16

Please remove these ball valves from drawing



Performance Specification		
Nominal Pressure	300LB	
Test Pressure	Shell test	7.5
	Back seal test	--
	Seat test	5.5
	Gas test	0.6
Working Temperature	-29~120	°C
Medium: water oil & gas		

Technical Specification

1. Design and manufacture: API 6D
2. Face-to-face: ASME B16.10
3. Flanged ends: ASME B16.5
4. Inspection and test: API 598

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SIGNATURE
DATE

			15	O-Ring	Viton
7	Seal Ring	RPTFE	14	Anti Static device	SS304
6	Ball	ASTM A182 F304	13	Lever	Carbon steel
5	Body	ASTM A350 LF2	12	Screw nail	ASTM A320 L7
4	Gasket	Graphite+SS	11	Gland flange	ASTM A350 LF2
3	Nut	ASTM A194 7	10	Packing	Graphite
2	Bolt	ASTM A320 L7	9	Stem	ASTM A182 F304
1	Bonnet	ASTM A350 LF2	8	O-Ring	Viton
NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL

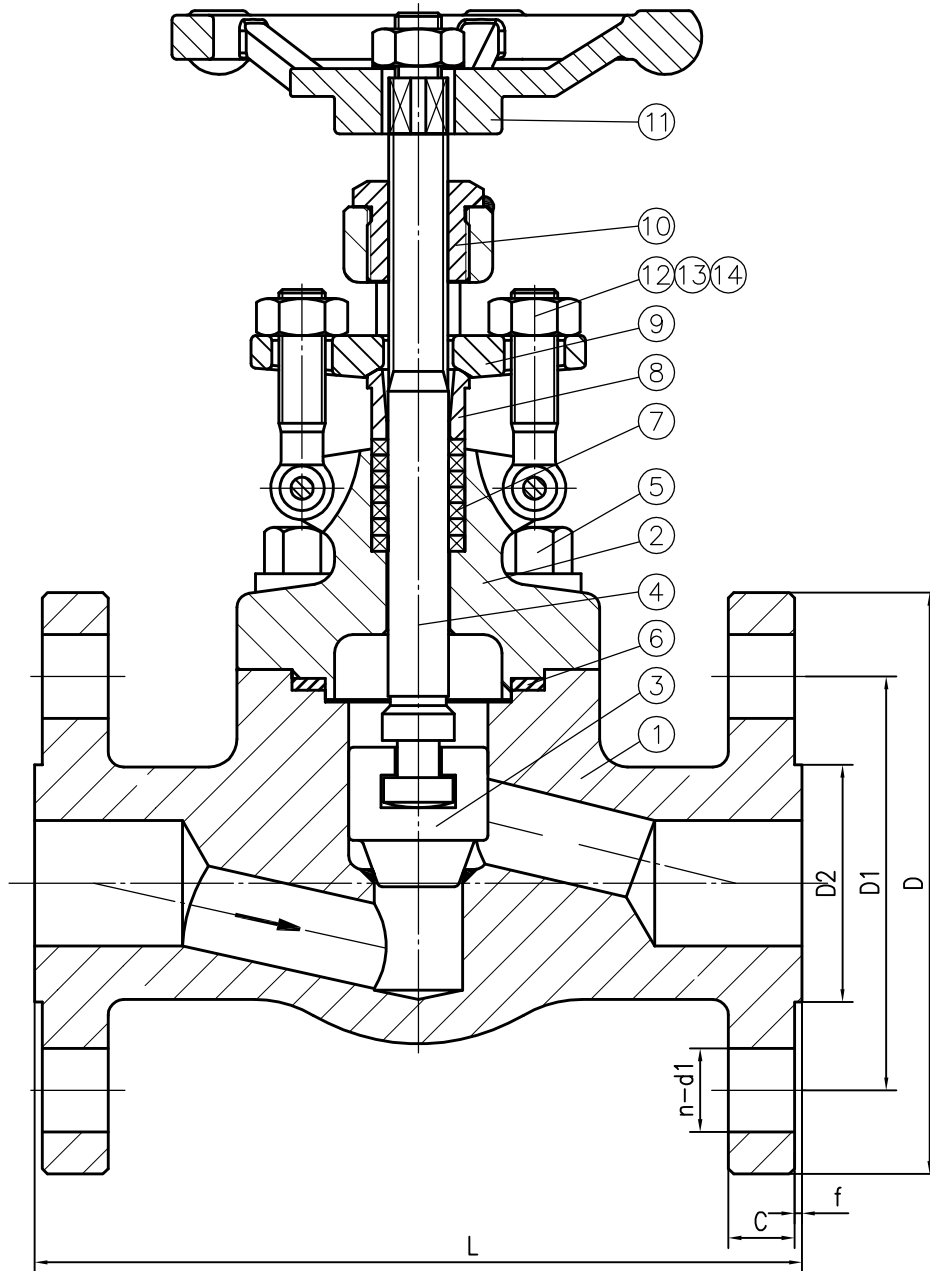
					Class 300 NPS 1/2"x3/8" BALL VALVE	DRAW REV.
MARK	QTY	FILE NO.	SIGN	DATE		
DESIGN	JASON		STANDARD			ASSEMBLY DRAWING
CHECK			APPROVE	S.Parker		
TECHNOLOGY						



6	1	203	50.8	88.9	125	15.9	2	4- $\phi$ 19
NO	NPS	L	D2	D1	D	C	f	n-d1

Please add tag number:  
GLO-RU0001A02  
GLO-RU0001B02

Please add weight  
to drawing



Performance Specification		
Nominal Pressure		300LB
Test Pressure	Shell test	7.8 MPa
	Back seal test	5.7
	Seat test	5.7
	Gas test	0.4~0.7
Working Temperature		-29~425 °C
Medium: water oil & gas		

Technical Specification	
Design and manufacture	API 602
Face-to-face	ASME B16.10
Flanged ends	ASME B16.5(RF)
Pressure-Temperature class	ASME B16.34
Inspection and test	API 598

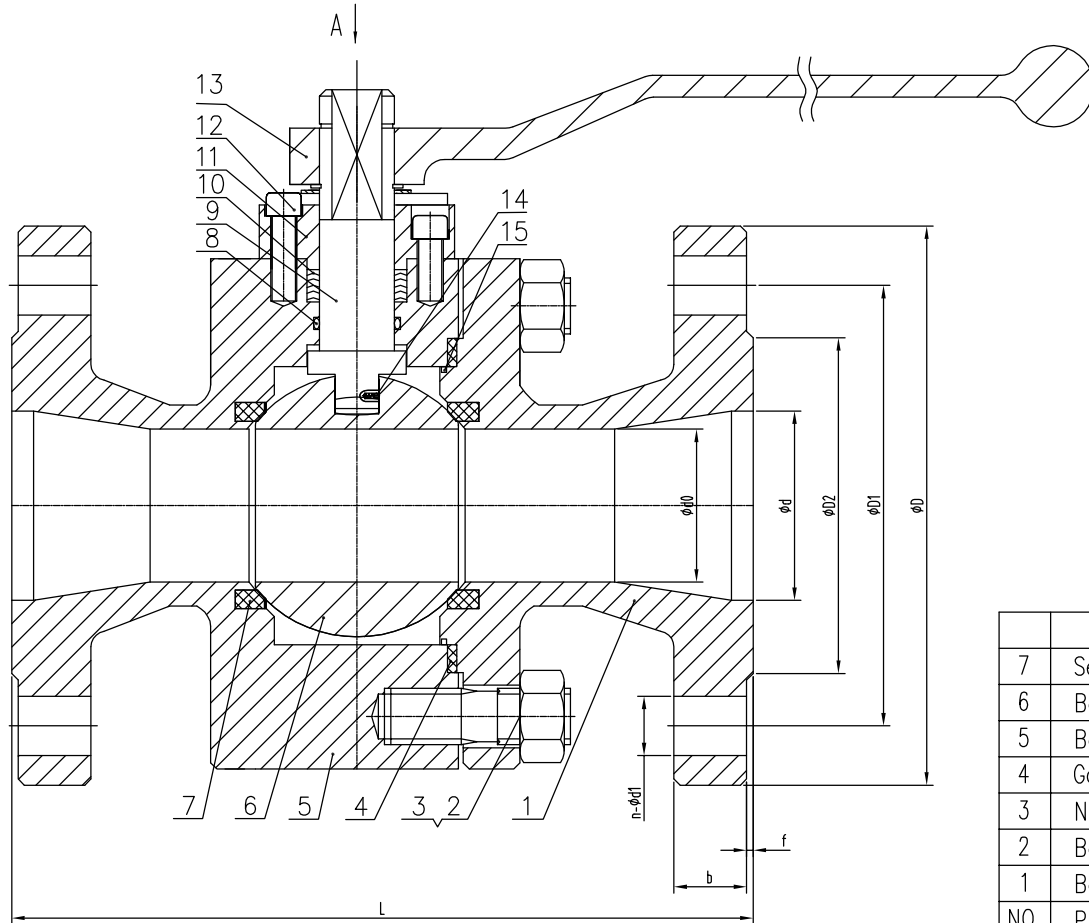
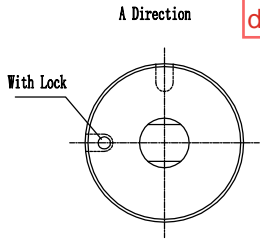
Please recheck and  
change to LTCS

7	Packing	Graphite	14	Nut	ASTM A194 7M
6	Gasket	S.S+Graphite	13	Eyebolt	ASTM A320 L7M
5	Bolt	ASTM A320 L7M	12	Pin	C.S
4	Stem	ASTM A182 F316	11	Hand Wheel	Malleable iron
3	Disc	ASTM A182 F316+STL	10	Stem Nut	AISI 1045
2	Bonnet	ASTM A350 LF2	9	Gland Flange	ASTM A105
1	Body	ASTM A350 LF2	8	Gland	ASTM A276 410
NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL
			Class 300 NPS 1 GLOBE VALVE		
MARK	QTY	FILE NO.	SIGN	DATE	DRAW REV.
DESIGN	JASON	STANDARD			
CHECK		APPROVE	S.Parker		
TECHNOLOGY					
ASSEMBLY DRAWING					

CHECKED BY
PRINTED BY
OLD DRAWING NO.
BASED DRAWING NO.
SIGNATURE
DATE

Please remove these ball valves from drawing

11~12	2"x1 1/2"	216	49	38	92.1	127	165	20.7	2	8-ø19
7~8&14~15	1"x3/4"	165	25	19	50.8	88.9	125	15.9	2	4-ø19
13	3/4"x1/2"	152	19	13	42.9	82.6	115	14.3	2	4-ø19
NO	NPS	L	d	d0	D2	D1	D	b	f	n-d1



Performance Specification		
Nominal Pressure		300LB
Test Pressure	Shell test	7.5
	Back seal test	--
	Seat test	5.5
	Gas test	0.6
Working Temperature		-29~120 °C
Medium: water oil & gas		

- Technical Specification
- Design and manufacture: API 6D
  - Face-to-face: ASME B16.10
  - Flanged ends: ASME B16.5
  - Inspection and test: API 598

			15	O-Ring	Viton
7	Seal Ring	RPTFE	14	Anti Static device	SS304
6	Ball	ASTM A105N+ENP	13	Lever	Carbon steel
5	Body	ASTM A105N	12	Screw nail	ASTM A193 B7
4	Gasket	Graphite+SS	11	Gland flange	ASTM A105N
3	Nut	ASTM A194 2H	10	Packing	Graphite
2	Bolt	ASTM A193 B7	9	Stem	ASTM A182 F6a
1	Bonnet	ASTM A105N	8	O-Ring	Viton
NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL
			Class 300		
			NPS 3/4"x1/2"~2"x1 1/2"		
			BALL VALVE		
			DRAW REV.		
MARK	QTY	FILE NO.	SIGN	DATE	ASSEMBLY DRAWING
DESIGN	JASON	STANDARD			
CHECK		APPROVE	S.Parker		
TECHNOLOGY					

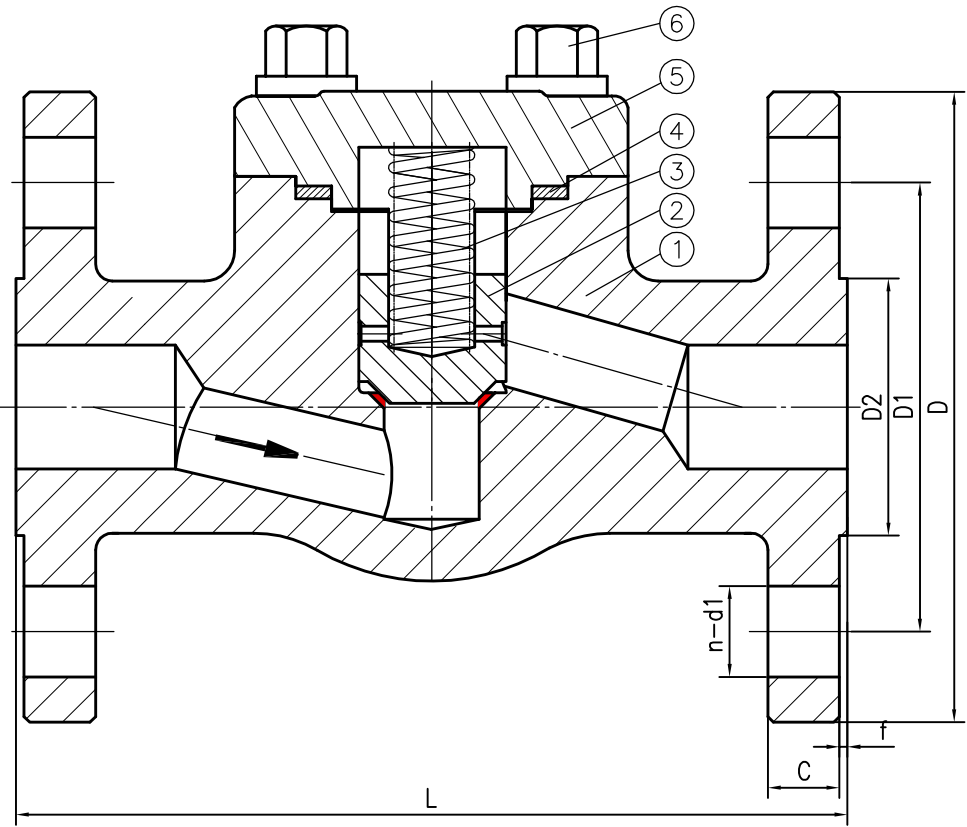


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 BASED DRAWING NO.  
 SIGNATURE  
 DATE

Please add tag number:  
 CHV-RU0001A04  
 CHV-RU0001B04

16	1	203	50.8	88.9	125	15.9	2	4-ø19
NO	NPS	L	D2	D1	D	C	f	n-d1

Please add weight  
 to drawing



Performance Specification		
Nominal Pressure 300LB		
Test Pressure	Shell test	7.8
	Back seal test	--
	Seat test	5.7
	Gas test	--
Working Temperature		-46~300 °C
Medium: water oil & gas		

Technical Specification	
Design and manufacture	API 602
Face-to-face	ASME B16.10
Flanged ends	ASME B16.5(RF)
Pressure-Temperature class	ASME B16.34
Inspection and test	API 598

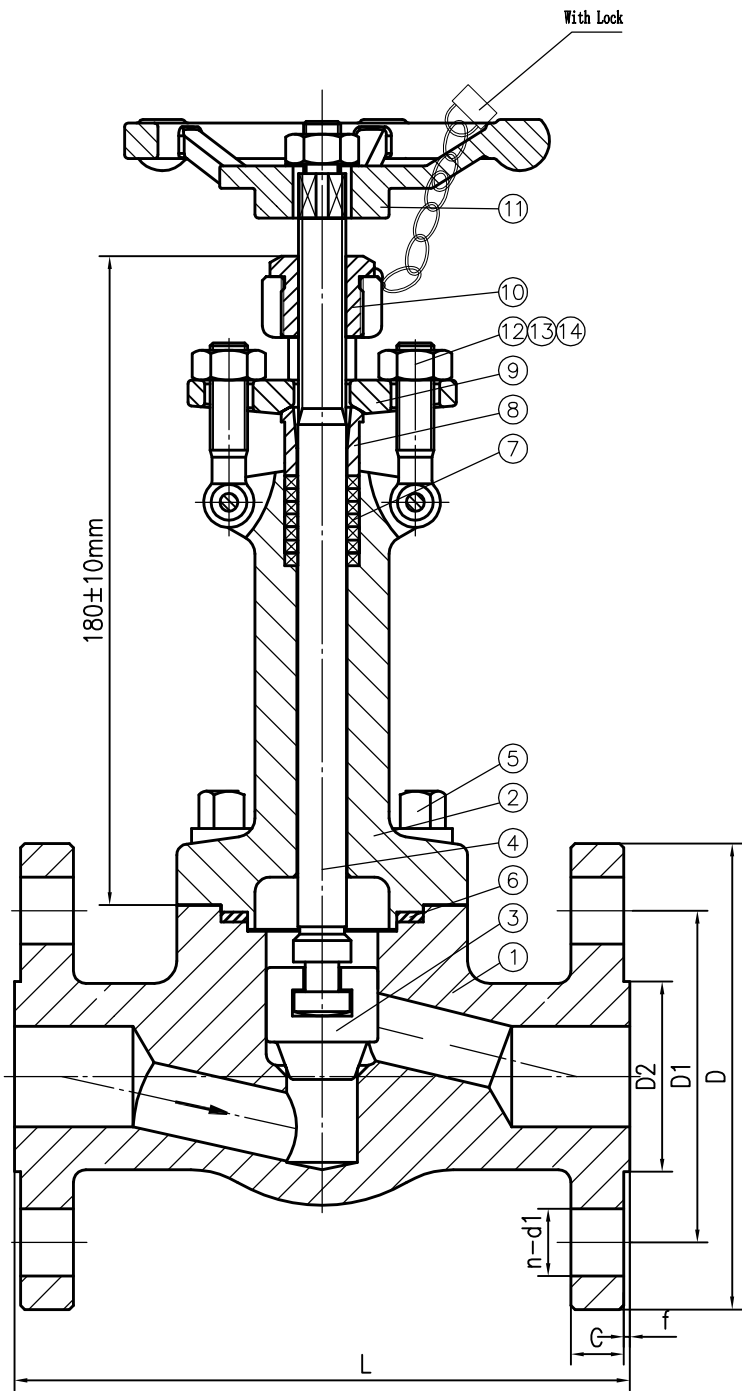
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 PRINTED BY  
 OLD DRAWING NO.  
 BASED DRAWING NO.  
 SIGNATURE  
 DATE

3	Spring	304SS	6	Bolt	ASTM A320 L7M
2	Disc	ASTM A182 F316+STL	5	Bonnet	ASTM A350 LF2
1	Body	ASTM A350 LF2	4	Gasket	S.S+Graphite
NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL
Class 300 NPS 1 Piston Check Valve					DRAW REV.
MARK	QTY	FILE NO.	SIGN	DATE	
DESIGN	JASON	STANDARD			<b>METALLUM</b>
CHECK		APPROVE	S.Parker		
TECHNOLOGY					

19	1	203	50.8	88.9	125	15.9	2	4-ø19
NO	NPS	L	D2	D1	D	C	f	n-d1

Please add tag number:  
GLO-RU0001A03  
GLO-RU0001B03

Please add weight  
to drawing




Performance Specification		
Nominal Pressure		300LB
Test Pressure	Shell test	7.8
	Back seal test	5.7
	Seat test	5.7
	Gas test	0.4~0.7
Working Temperature		-46~300 °C
Medium: water oil & gas		

Technical Specification	
Design and manufacture	API 602
Face-to-face	ASME B16.10
Flanged ends	ASME B16.5(RF)
Pressure-Temperature class	ASME B16.34
Inspection and test	API 598

Please recheck and  
change to LTCS

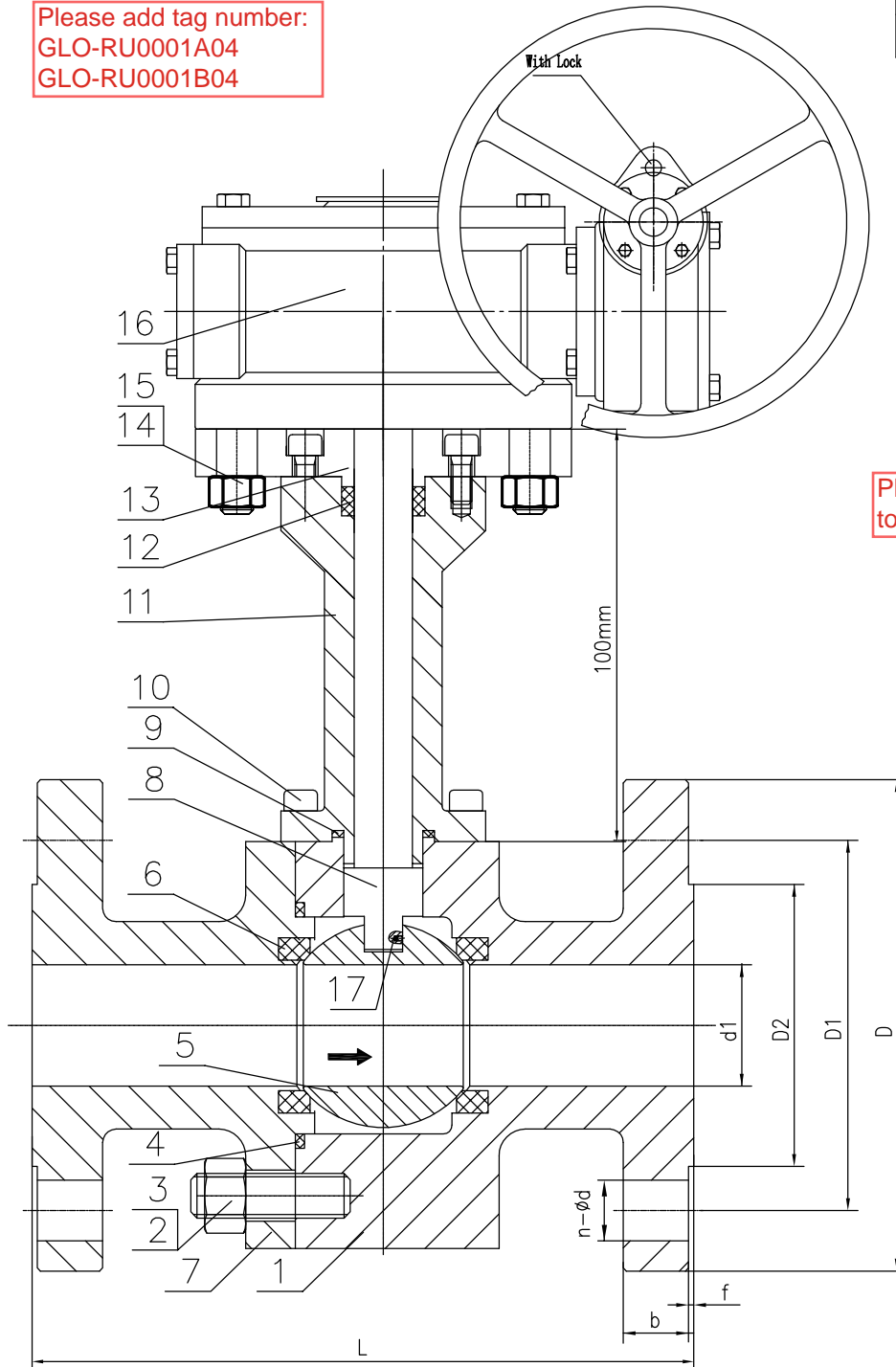
7	Packing	Graphite	14	Nut	ASTM A194 7M
6	Gasket	S.S+Graphite	13	Eyebolt	ASTM A320 L7M
5	Bolt	ASTM A320 L7M	12	Pin	C.S
4	Stem	ASTM A182 F316	11	Hand Wheel	Malleable iron
3	Disc	ASTM A182 F316+STL	10	Stem Nut	AISI 1045
2	Bonnet	ASTM A350 LF2	9	Gland Flange	ASTM A105
1	Body	ASTM A350 LF2	8	Gland	ASTM A276 410
NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL

CHECKED BY
PRINTED BY
OLD DRAWING NO.
BASED DRAWING NO.
SIGNATURE
DATE

MARK	QTY	FILE NO.	SIGN	DATE	Class 300 NPS 1 GLOBE VALVE	DRAW REV.
DESIGN	JASON	STANDARD				
CHECK		APPROVE	S.Parker		ASSEMBLY DRAWING	
TECHNOLOGY						

Please add tag number:  
GLO-RU0001A04  
GLO-RU0001B04

27	6"	403	150	215.9	269.9	320	35.0	2	12- $\phi$ 22
NO	NPS	L	d	D2	D1	D	b	f	n-d1



Performance Specification		
Nominal Pressure 300LB		
Test Pressure	Shell test	7.5
	Back seal test	--
	Seal test	5.5
	Gas test	0.6
Working Temperature		-20~120 c°
Medium: water oil & gas		

Technical Specification

1. Design and manufacture: API 6D
2. Face-to-face: ASME B16.10
3. Flanged ends: ASME B16.5
4. Inspection and test: API 598

Please add weight to drawing

17	Anti Static device	SS304
16	Gear	Assembly
15	Nut	ASTM A194 L7
14	Bolt	ASTM A320 L7
13	Top flange	ASTM A350 LF2
12	Packing	Graphite
11	Extend bonnet	ASTM A182 F304
10	Bolt	ASTM A320 L7
9	Gasket	Graphite+SS
8	Stem	ASTM A182 F304
7	Bonnet	ASTM A350 LF2
6	Seat	RPTFE
5	Ball	<b>ASTM A182 F304</b>
4	Gasket	Graphite+SS
3	Nut	ASTM A194 7
2	Bolt	ASTM A320 L7
1	Body	ASTM A350 LF2
No.	Name	Material

Please change to Globe valve

CHECKED BY

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OLD DRAWING NO.

BASED DRAWING NO.

SIGNATURE

DATE

MARK	QTY	FILE NO.	SIGN	DATE
DESIGN		JASON	STANDARD	
CHECK			APPROVE	S.Parker
TECHNOLOGY				

Class 300  
NPS 6"  
BALL VALVE

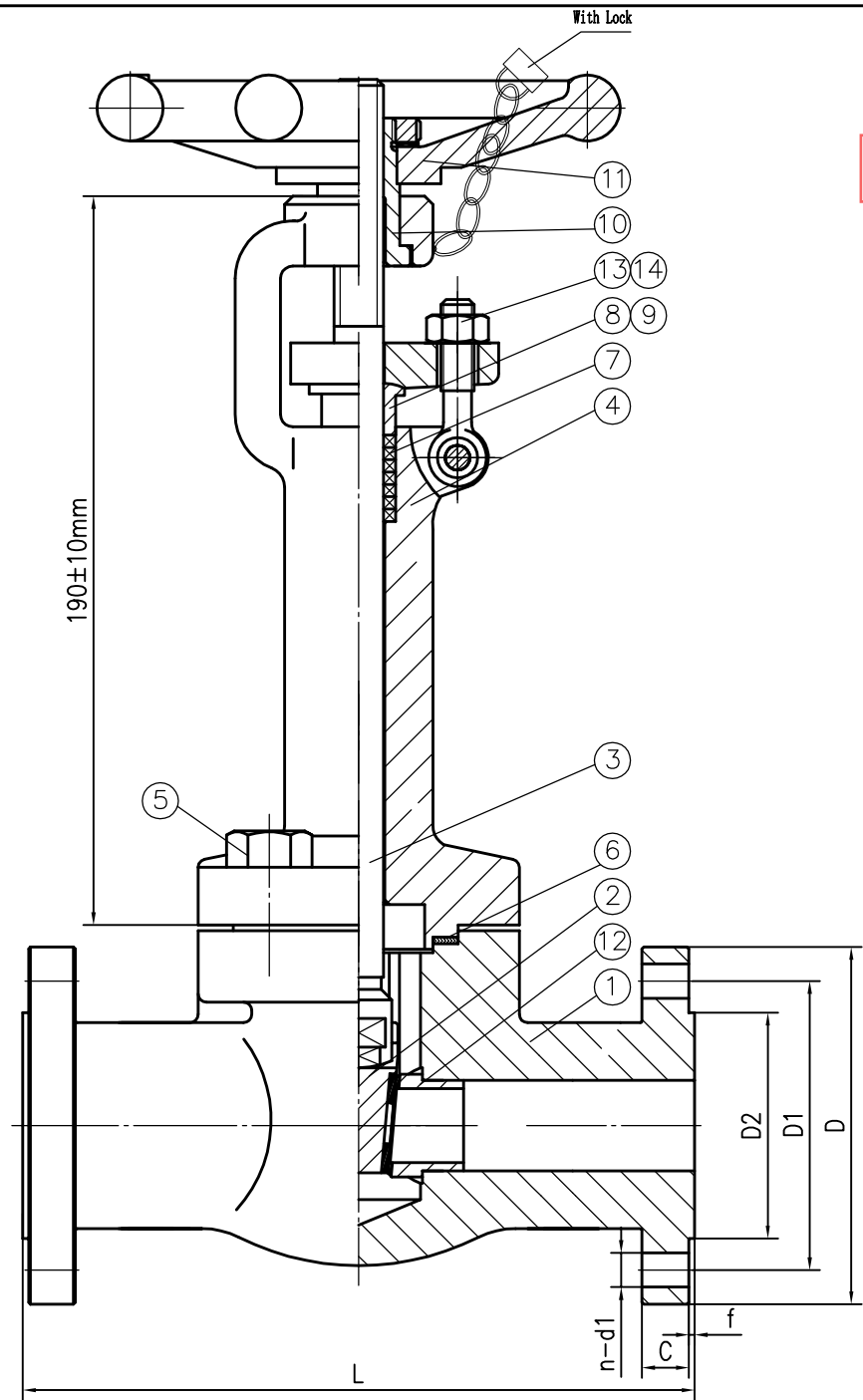
ASSEMBLY DRAWING

DRAW REV.



28	1/2	140	34.9	66.7	95	12.7	2	4-φ16
NO	NPS	L	D2	D1	D	C	f	n-d1

Please remove this gate valve from drawing




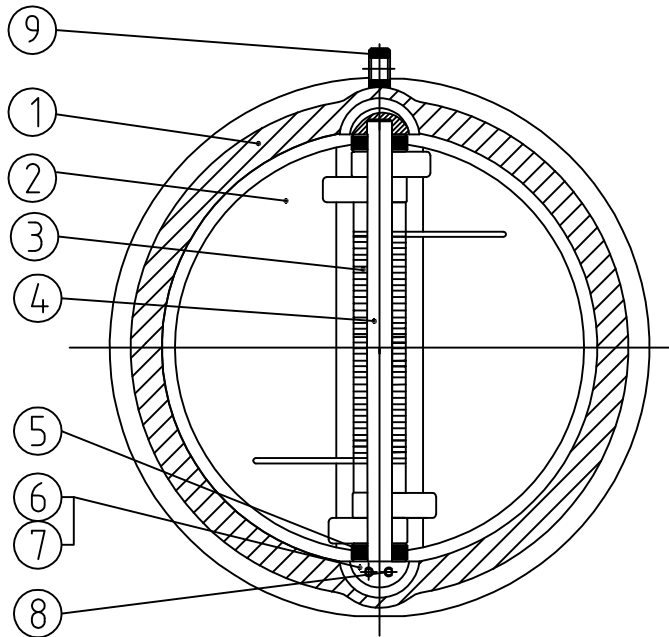
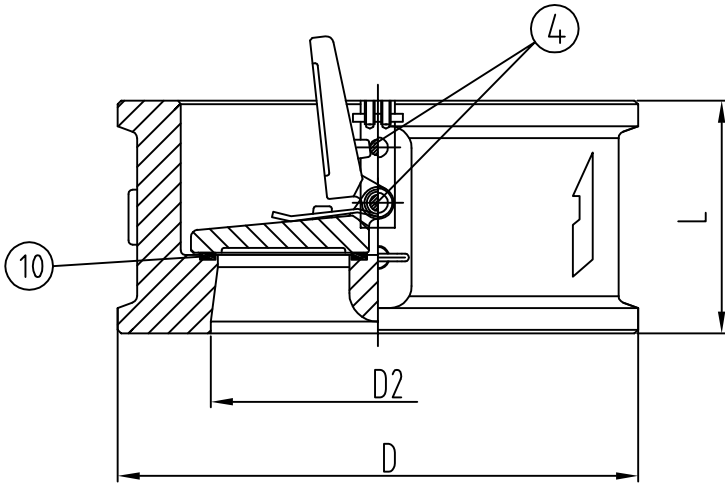
Performance Specification		
Nominal Pressure		300LB
Test Pressure	Shell test	7.8
	Back seal test	5.7
	Seat test	5.7
	Gas test	0.4~0.7
Working Temperature		-29~425 °C
Medium: water oil & gas		

Technical Specification	
Design and manufacture	API 602
Face-to-face	ASME B16.10
Flanged ends	ASME B16.5
Pressure-Temperature class	ASME B16.34
Inspection and test	API 598

7	Packing	Graphite	14	Nut	ASTM A194 7M
6	Gasket	S.S+Graphite	13	Eye Bolt	ASTM A320 L7M
5	Bolt	ASTM A320 L7M	12	Seat	ASTM A182 F316
4	Bonnet	ASTM A350 LF2	11	Hand Wheel	Malleable iron
3	Stem	ASTM A182 F316	10	Stem Nut	AISI 1045
2	Wedge	ASTM A182 F316+STL	9	Gland Flange	ASTM A105
1	Body	ASTM A350 LF2	8	Gland	ASTM A276 410
NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL

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 BASED DRAWING NO.  
 SIGNATURE  
 DATE

MARK QTY FILE NO. SIGN DATE					Class 300 NPS 1/2 GATE VALVE	DRAW REV.
DESIGN	JASON	STANDARD				
CHECK		APPROVE	S.Parker		ASSEMBLY DRAWING	
TECHNOLOGY						



First Priority is swing type check valve.  
 If Metallum has not Swing type,  
 Second priority is dual plate check valve.

Please add weight to drawing

Item	NPS (in)	L	D	D2
Class 300#		SIZE (MM)		
29	2"	60	110	51

Technical Requirements

1. Design & manufacture to API 594
2. Pressure-temperature to ANSI B16.34
3. Flange ends to ASME B16.5
4. Face to face dimension to API 594
5. Inspection & test to API 598
6. End Connection WAFER

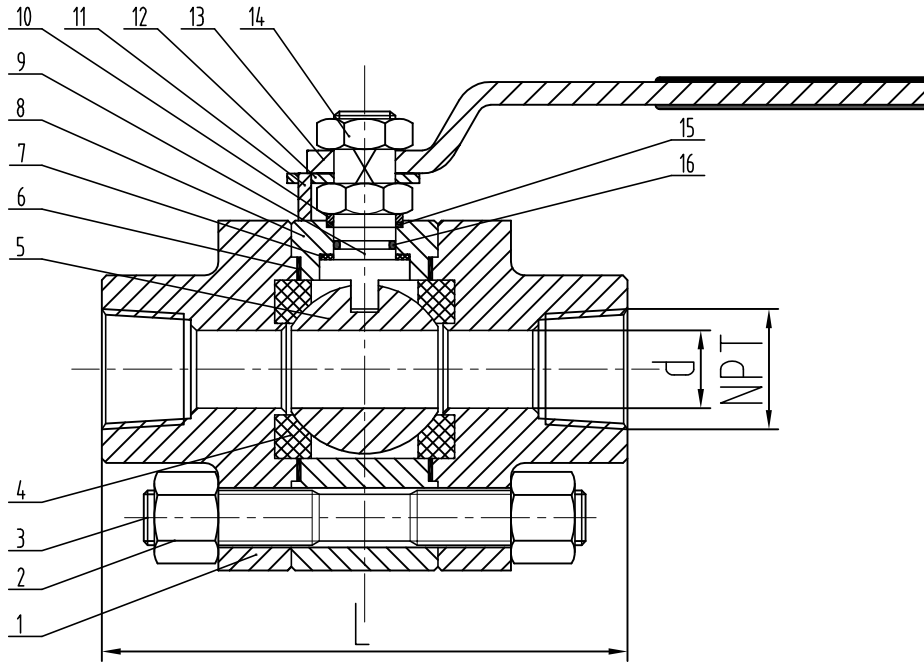
performance list			
Nominal Pressure		Class 300#	
Test item	Shell test(water)	7.5	(Mpa)
	SEAT SEAL(water)	5.5	
	AIR SEAL(air)	/	

10	Seat sealing face	316 OVERLAY	
9	Rings	CS	
8	BOLT	SS316	
7	LOCATION	A182 F316	
6	SHAFT SEAT	A182 F316	
5	WASHER	A182 F316	
4	SHAFT	A182 F316	
3	SPRING	INCONEL X750	
2	DISC	A351 CF8M	
1	BODY	A216 WCB	
ITEM	PARTNAME	MATERIAL	NOTE

MARK	QTY	FILE NO.	SIGN	DATE	Class 300 NPS 2 CHECK VALVE	DRAW REV.
DESIGN	JASON	STANDARD				
CHECK		APPROVE	S.Parker			
TECHNOLOGY						
					ASSEMBLY DRAWING	

Please remove these ball valves from drawing

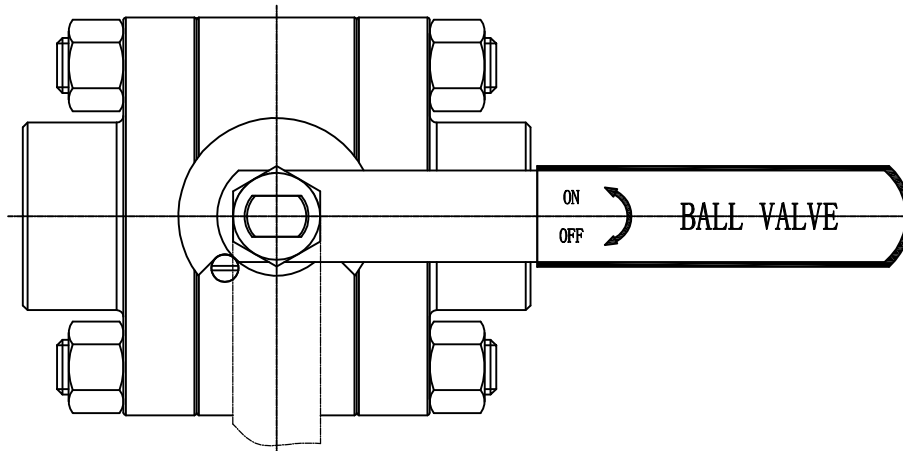
Main dimension (mm)				
NO	NPS	L	d	NPT
30	1/2	92	14	1/2



Performance Specification		
Nominal Pressure	800LB	
Test Pressure	Shell test	20.6
	Back seal test	--
	Seat test	15.2
	Gas test	0.6
Working Temperature	-46~150	°C
Medium:	water oil & gas	

Technical Specification

1. Design and manufacture: ASME B16.34
2. Face-to-face: MANUFACTURER STANDARD
3. NPT END: ANSI B1.20.1
4. Inspection and test: API 598

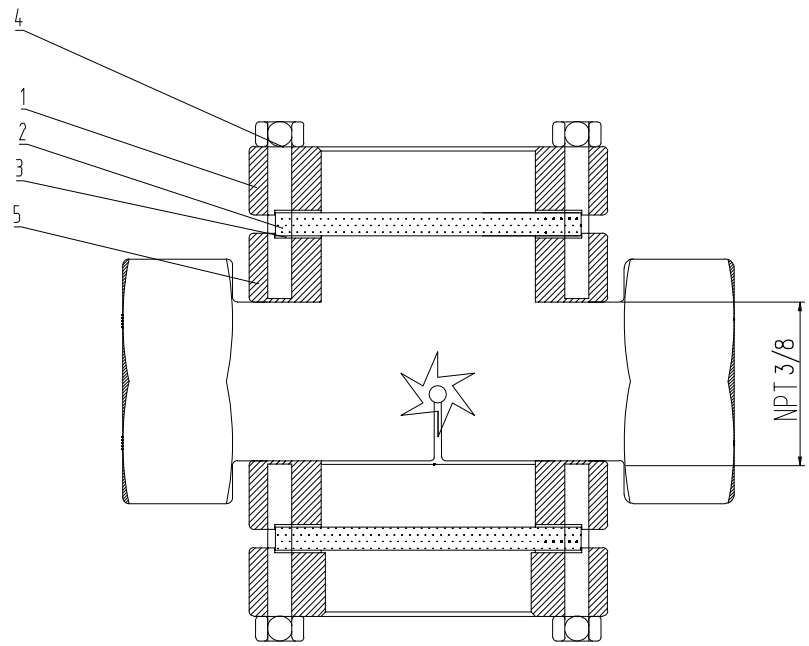


8	BODY	ASTM A182 F316	16	STEM "O" RING	VITON
7	THRUST WASHER	PTFE	15	PACKING	GRAPHITE
6	BODY GASKET	GRAPHITE+SS	14	STEM NUT	STAINLESS STEEL
5	BALL	ASTM A182 F316	13	LEVER	201+PLASTIC
4	SEAT RING	RPTFE	12	POSITIONING PLATE	STAINLESS STEEL
3	STUD BOLTS	ASTM A193 B8M	11	POSITIONING PIN	STAINLESS STEEL
2	NUT	ASTM A194 8M	10	GLAND	SS316
1	BONNET	ASTM A182 F316	9	STEM	ASTM A182 F316
NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL

				NPS 1/2"~2" CLASS800		DRAW REV.
				BALL VALVE		
MARK	QTY	FILE NO.	SIGN	DATE	ASSEMBLY DRAWING	
DESIGN	JASON	STANDARD				
CHECK		APPROVE	S.Parker			
TECHNOLOGY						

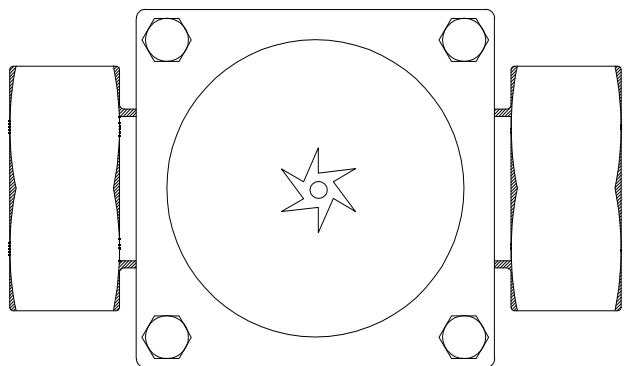


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 DATE




Please add weight to drawing

Performance Specification		
Nominal Pressure	2.0	MPa
Shell test	2.5	
Back seal test	--	
Seat test	--	
Gas test	--	
Working Temperature	-29~120	°C
Medium: water oil & gas		



6	Impeller	PTFE
5	Body	SS316
4	Bolt	SS304
3	Gasket	PTFE
2	Window	Glass
1	Bonnet	SS304
NO.	PART NAME	MATERIAL

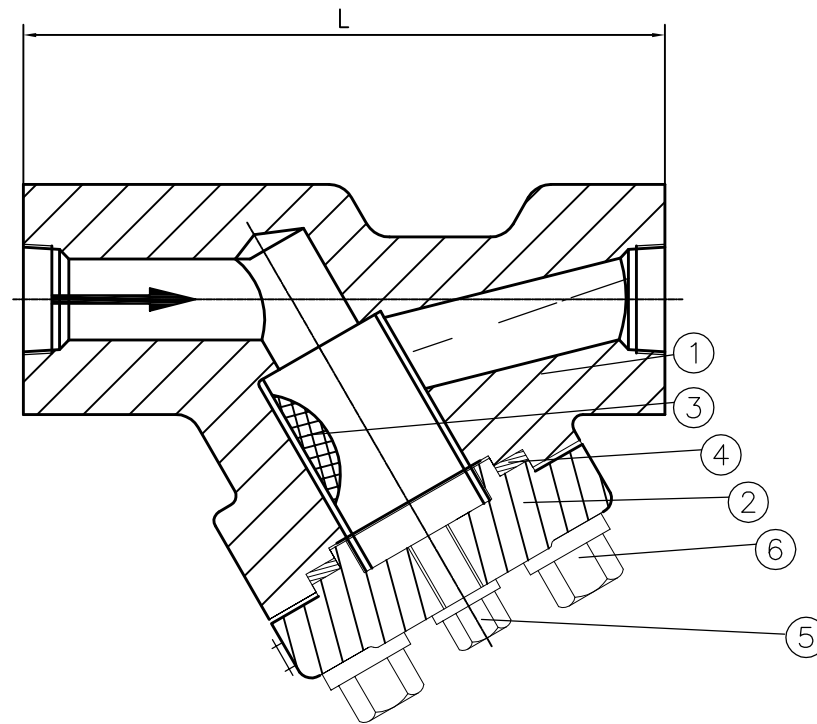
CHECKED BY
PRINTED BY
OLD DRAWING NO.
BASED DRAWING NO.
SIGNATURE
DATE

MARK	QTY	FILE NO.	SIGN	DATE	PN20 NPS 3/8 SIGHT GLASS	DRAW REV.
DESIGN	JASON	STANDARD				
CHECK		APPROVE	S.Parker		ASSEMBLY DRAWING	
TECHNOLOGY						

33	3/8	MFR	3/8
NO	NPS	L	NPT

Please add weight to drawing

Please mention mesh size:  
Mesh 90



Performance Specification			
Nominal Pressure		300LB	MPa
Test Pressure	Shell test	7.5	
	Back seal test	--	
	Seat test	--	
	Gas test	--	
Working Temperature		-29~120	°C
Medium: water oil & gas			

Technical Specification

1. Design and manufacture: API 602
2. Face-to-face: Manufacturer's standard
3. Thread ends: ASME B1.20.1
4. Inspection and test: API 598

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BASED DRAWING NO.
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DATE

3	Filter Screen	SS316	6	Bolt	ASTM A193 B7
2	Bonnet	ASTM A105N	5	Drain	C.S
1	Body	ASTM A105N	4	Gasket	S.S+Graphite
NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL
				Class 300	
				NPS 3/8	
				Y-Strainer	
				DRAW REV.	
MARK	QTY	FILE NO.	SIGN	DATE	ASSEMBLY DRAWING
DESIGN	JASON	STANDARD			
CHECK		APPROVE	S.Parker		
TECHNOLOGY					

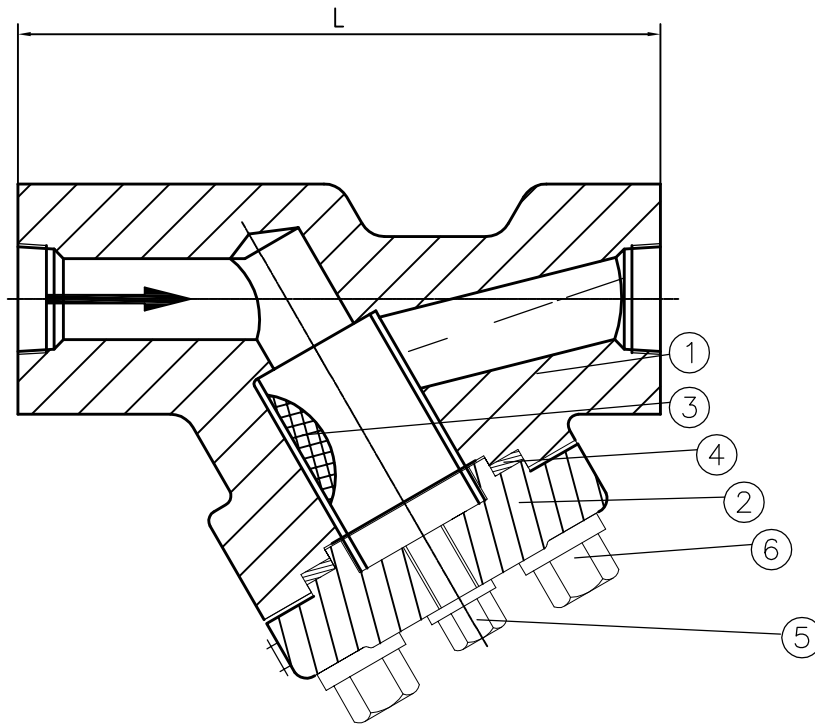


34	3/8	MFR	3/8
NO	NPS	L	NPT

1/2"

Please add weight to drawing

Please mention mesh size: Mesh 90



Performance Specification		
Nominal Pressure		300LB
Test Pressure	Shell test	7.5
	Back seal test	--
	Seat test	--
	Gas test	--
Working Temperature		-45~120 °C
Medium: water oil & gas		

Technical Specification

1. Design and manufacture: API 602
2. Face-to-face: Manufacturer's standard
3. Thread ends: ASME B1.20.1
4. Inspection and test: API 598

CHECKED BY
PRINTED BY
OLD DRAWING NO.
BASED DRAWING NO.
SIGNATURE
DATE

1/2"

3	Filter Screen	SS316	6	Bolt	ASTM A320 L7
2	Bonnet	ASTM A350 LF2	5	Drain	S.S
1	Body	ASTM A350 LF2	4	Gasket	S.S+Graphite
NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL
			Class 300		
			NPS 3/8		
			Y-Strainer		
MARK	QTY	FILE NO.	SIGN	DATE	DRAW REV.
DESIGN	JASON	STANDARD			
CHECK		APPROVE	S.Parker		
TECHNOLOGY					
ASSEMBLY DRAWING					