

Product Information Bulletin

3/4" GEN 2 V-Seal Shuttle Valve

REV	DATE	DESCRIPTION	ORIGIN (issued by)	APPROVED
001	06-10-2020	Document No: 120-061020-001	AP	SS
002	12-18-2020	Document No: 120-061020-002	SD	BR

COMPANY PROPRIETARY INFORMATION

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For more information:

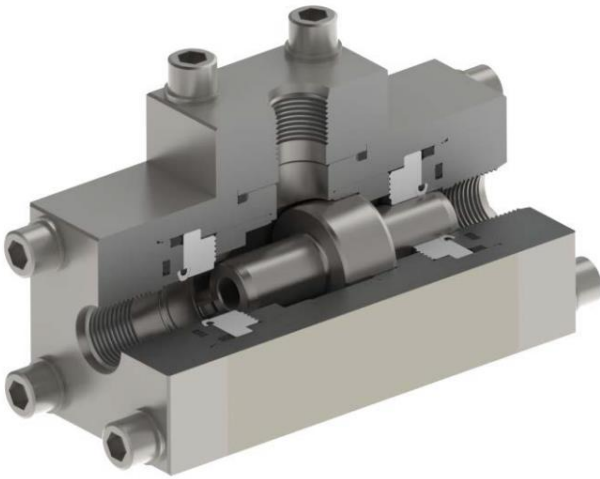
Call (800) 469-8786

Gilmore@proserv.com

Gilmore, A Proserv Company
1231 Lumpkin Road
Houston, TX 77043

Product Information Bulletin

3/4" GEN 2 V-Seal Shuttle Valve

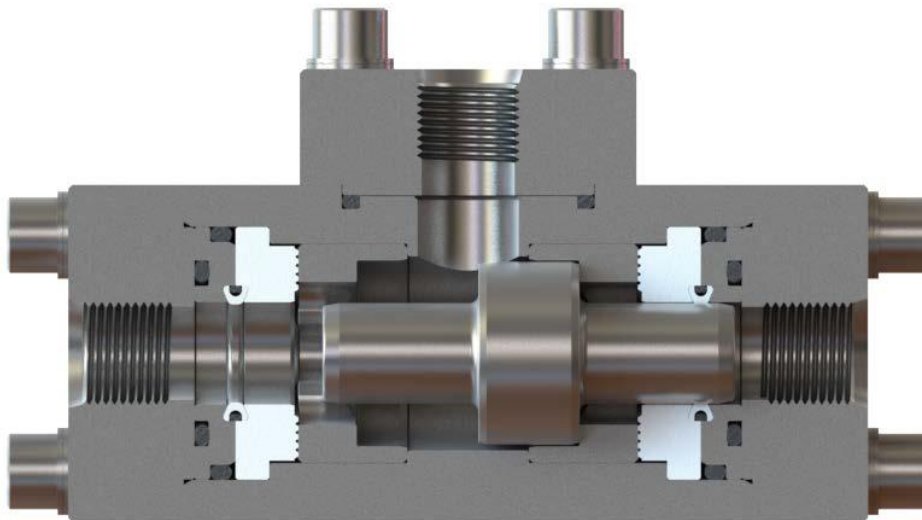


Gilmore announces the new 3/4" GEN 2 V-Seal Shuttle Valve product line for critical offshore and subsea applications. The 3/4" GEN 2 V-Seal Shuttle Valve has been designed with the same footprint as the legacy Traditional Shuttle Valve for easy drop-in replacement. Gilmore's proprietary dynamic V-Seal technology provides an order of magnitude improvement in valve cycle life.

Features and Benefits:

- Qualification exceeds API 16D requirements
 - Two separate full flow tests at 2500 cycles each
- Proprietary V-Seal and hydraulic dampening technology
- Improved Valve Materials:
 - 316 SS Body and Flanges
 - Nitronic 60 Shuttle, Sleeve and Cap
 - PEEK Spacer
 - PTFE/Nitrile 90 Duro V-Seal
 - Duplex Cap Screws with T316 Nordlock Washers

Figure 1. PN 29058: 1/2" SAE Traditional Gen 2 Shuttle Valve, 3000 psi, Low Interflow



Gilmore has exceeded API 16D requirements by qualifying the new 3/4" GEN 2 V-Seal Shuttle Valve designs to multiple endurance qualification tests to 2500 cycles, at a starting flow rate of 70 gpm at 5000 psi, with 1% - 4% water glycol test fluid.

The new Gilmore 3/4" GEN 2 V-Seal Shuttle Valves have an identical footprint to the legacy valves for simple retrofitting.

As a result of the new Gilmore 3/4" GEN 2 V-Seal Shuttle Valve product line, please note that sales of the legacy 3/4" Traditional Shuttle Valve part numbers listed below in Table 1 will be discontinued as of June 9th, 2021.

The new Gilmore 3/4" GEN 2 V-Seal Shuttle Valve is now available as a replacement for the legacy 3/4" Traditional Shuttle Valves.

Gilmore will continue to sell and support the legacy 3/4" shuttle valve repair kits, seal kits and Aftermarket support after new valve sales of the legacy design are discontinued.

Table 1. New and Legacy 3/4" Shuttle Valve Part Numbers:

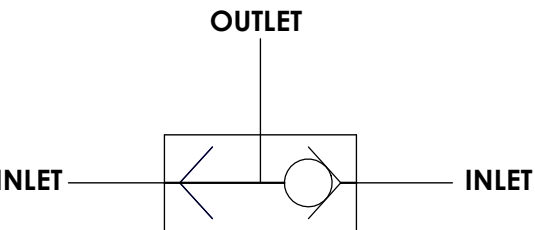
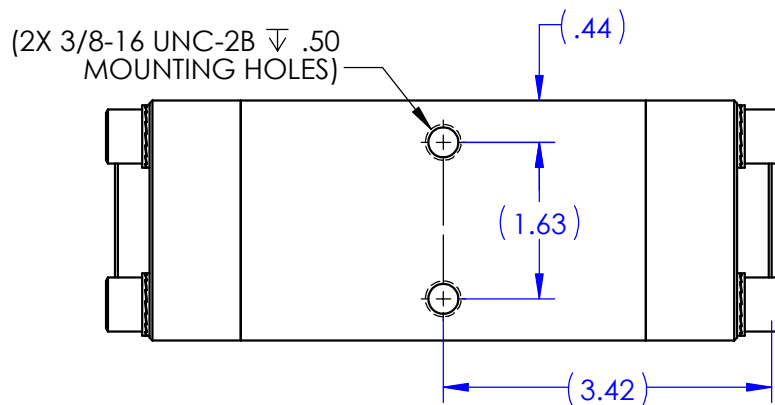
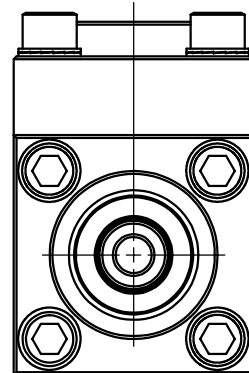
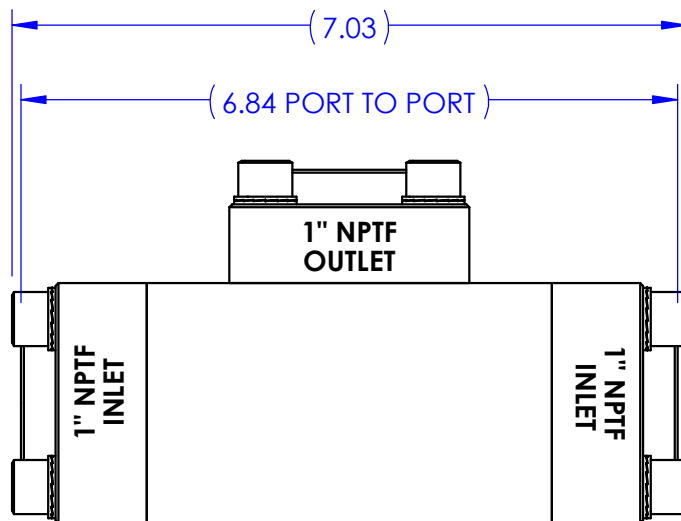
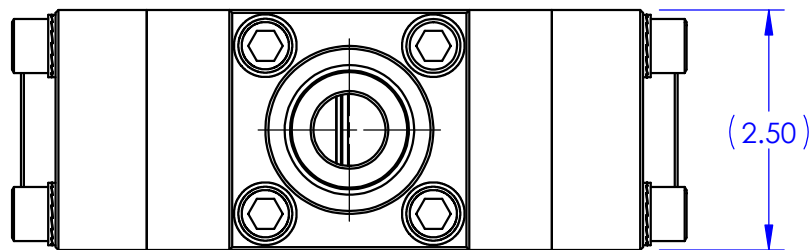
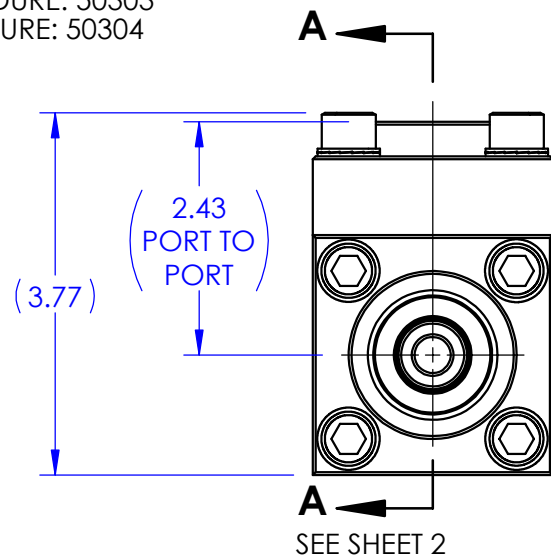
Item	Legacy Description	Legacy Valve PN	Legacy Repair Kit PN	New Valve Description	New Valve PN	New Repair Kit PN
1	Valve, 3/4", Shuttle, Traditional, 1" NPT, Low Interflow, 3000 psi	25412	25412 RK	Valve, 3/4", Shuttle, GEN 2, 1" NPT, Low Interflow, 3000 psi	29057	29057 RK
2	Valve, 3/4", Shuttle, Traditional, 1/2" NPT, Low Interflow, 3000 psi	25412-2	25412-2 RK	Valve, 3/4", Shuttle, GEN 2, 1/2" NPT, Low Interflow, 3000 psi	29112	29112 RK
3	Valve, 3/4", Shuttle, Traditional, 1" NPT, Low Interflow, 3000 p	25415	25415 RK	Valve, 3/4", Shuttle, GEN 2, 1" NPT, High Interflow, 3000 psi	29113	29113 RK
4	Valve, 3/4", Shuttle, Traditional, 1/2" SAE, Low Interflow, 3000 psi	25426	25426 RK	Valve, 3/4", Shuttle, GEN 2, 1/2" SAE, Low Interflow, 3000 psi	29058	29058 RK
5	Valve, 3/4", Shuttle, Traditional, 1" NPT, Low Interflow, 3000 psi, N60 trim	181664	181666	Valve, 3/4", Shuttle, GEN 2, 1" NPT, Low Interflow, 3000 psi	29057	29057 RK
6	Valve, 3/4", Shuttle, Traditional, 1" NPT, High Interflow, 3000 psi, N60 trim	181667	181671	Valve, 3/4", Shuttle, GEN 2, 1" NPT, Low Interflow, 3000 psi	29113	29113 RK
7	Valve, 3/4", Shuttle, Traditional, 1/2" SAE, Low Interflow, 3000 psi, N60 trim	181672	181674	Valve, 3/4", Shuttle, GEN 2, 1/2" SAE, Low Interflow, 3000 psi	29058	29058 RK
8	Valve, 3/4", Shuttle, Traditional, 1/2" BSPP, Low Interflow, 3000 psi	25412-1	25412-1 RK	Valve, 3/4", Shuttle, Traditional, 1/2" BSPP, Low Interflow, 3000 psi	29098	29098 RK
9	Valve, 3/4", Shuttle, Traditional, Seal Sub Mount, Low Interflow, 3000 psi	28337	28337 RK	Valve, 3/4", Shuttle, Traditional, Seal Sub Mount, Low Interflow, 3000 psi	29097	29097 RK

Please note that GEN 2 repair kits are not interchangeable with legacy repair kits and cannot be used in the legacy Traditional Shuttle Valves. Please contact Gilmore Customer Service to assist you with selecting GEN 2 replacement valve part numbers.

Please contact Gilmore Customer Service to request drawings and quotations for these 3/4" GEN 2 V-Seal Shuttle Valves at Gilmore@proserv.com.

- NOTES:
- 1 MARKING: MARK COMPONENT WITH ASSEMBLY W.O. AS SHOWN ON THE COMPONET DRAWING.
 - 2 MARKING: MARK AS SHOWN USING LASER ETCH OR COMPUTER CONTROLLED DOT PEEN MARKING MACHINE, .06 HIGH MIN CHARACTERS.
 - 3 "X" IN COLUMN RK DENOTES PARTS CONTAINED IN REPAIR KIT 29057 RK.
 - 4 "X" IN COLUMN RK DENOTES PARTS CONTAINED IN SEAL KIT 29057 SK.
 - 5 ALL METAL ITEMS PASSIVATED
 - 6 TORQUE ITEM 8 AT ASSEMBLY TO 20 FT-LBS. (12X)
 - 7 ASSEMBLY PROCEDURE: 50302
MAINTENANCE MANUAL: 51029
STANDARD FAT PROCEDURE: 50303
EXTENDED FAT PROCEDURE: 50304

B



SCHEMATIC

U.S. PATENT 9,719,600



VALVE, SHUTTLE, 3/4", GEN 2,
1" NPTF IN, 1" NPTF OUT,
3000PSI, LOW INTERFLOW

SIZE	DWG NO	REV
B	29057	D
SCALE	1:2	SHEET 1 OF 2

SolidWorks

MATERIAL: SEE PARTS IN BOM	DIMENSIONS AND TOLERANCES ARE IN INCHES PER ASME Y14.5M-1994. UNLESS OTHERWISE SPECIFIED: 1) TOLERANCES: .X: ±.1 .XX: ±.01 .XXX: ±.005 ANGLES: ±.5° 2) SURFACE TEXTURE: 63/ 3) CORADIAL FEATURES SHALL BE © WITHIN .010 4) BREAK SHARP EDGES .010 5) INTERNAL RADII SHALL BE .016 MAX 6) DRILL POINTS OPTIONAL WHEN SHOWN UNSPECIFIED, ALL DRILL POINT ANGLES SHALL BE BETWEEN 90°-140°	APPROVAL	
CONDITION:		DRAWN BY	DATE
TREATMENT:		CHECKED BY	DATE
PROCEDURE NUMBER:		ENGINEER	DATE
		ERN NUMBER	DATE
		02186	5-7-18
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF GILMORE VALVE CO UNLESS OTHERWISE STATED. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF GILMORE VALVE CO IS PROHIBITED.			

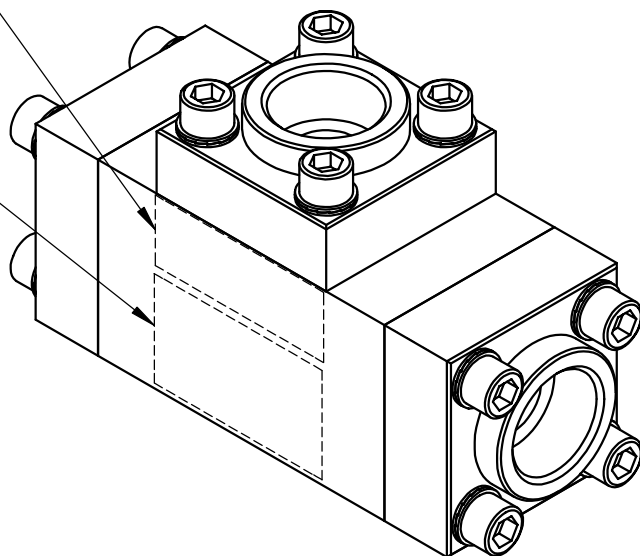
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7



29057
VER(AX VERSION #)
(SERIAL NUMBER)
US PATENT 9,719,600
3,000 PSI
(DATE OF MFG)
SEE SHOP TRAVELER
FOR ADDITIONAL
INFO REQUIRED

A



1



SECTION A-A



REV

D

SHEET 2 OF 2

4

3

2

1

NOTES:

- 1 MARKING: MARK COMPONENT WITH ASSEMBLY W.O. AS SHOWN ON THE COMPONET DRAWING.
- 2 MARKING: MARK AS SHOWN USING LASER ETCH OR COMPUTER CONTROLLED DOT PEEN MARKING MACHINE, .06 HIGH MIN CHARACTERS.
- 3 "X" IN COLUMN RK DENOTES PARTS CONTAINED IN REPAIR KIT 29058 RK.
- 4 "X" IN COLUMN RK DENOTES PARTS CONTAINED IN SEAL KIT 29058 SK.
- 5 ALL METAL ITEMS PASSIVATED
- 6 TORQUE ITEM 8 AT ASSEMBLY TO 20 FT-LBS. (12X)
- 7 ASSEMBLY PROCEDURE: 50302
MAINTENANCE MANUAL: 51029
STANDARD FAT PROCEDURE: 50303
EXTENDED FAT PROCEDURE: 50304

REVISIONS

REV	ERN /ECO NUMBER	DRAWN	CHECKED	APPROVED
D	ECO 019456	CMCJ 9-15-20	JZ 9/15/20	AJP 9/16/20

PRESSURE DATA

MAX WORKING PRESSURE: 3,000 PSI

PORTS

INLETS: 1/2" SAE

OUTLET: 1/2" SAE

FLOW DATA

C_v: 3 (CALCULATED)

MAX FLOW CAPACITY: 70 GPM

MINIMUM SHIFT FLOW: 0.5 GPM

GENERAL DATA

APPROX WEIGHT: 10.6 LBS

TEMPERATURE: 32 °F TO 150 °F

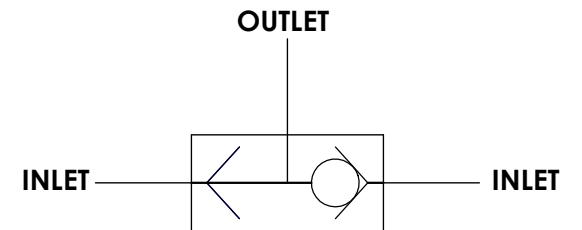
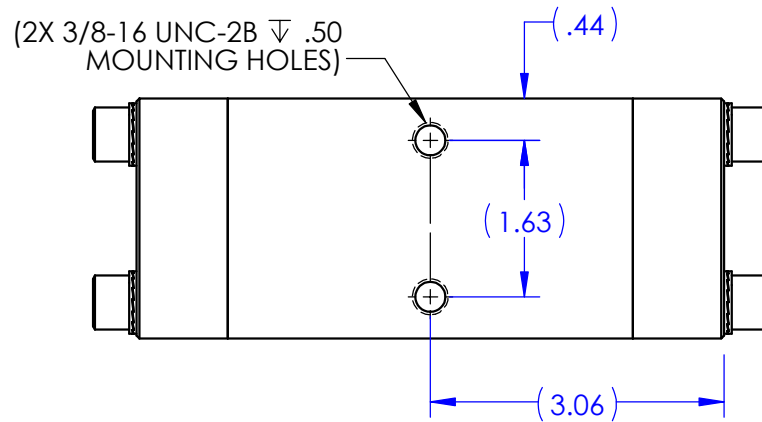
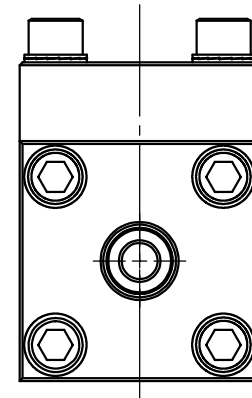
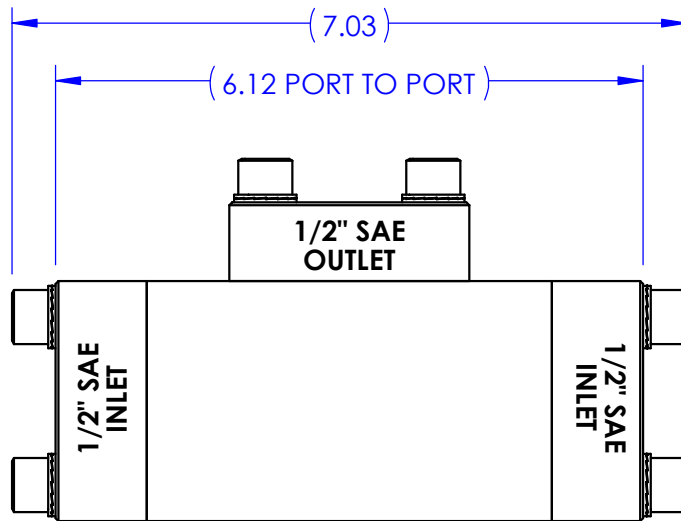
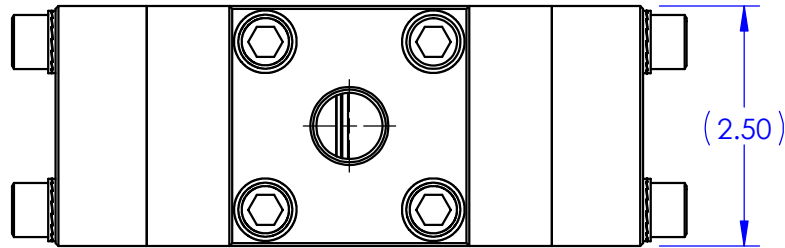
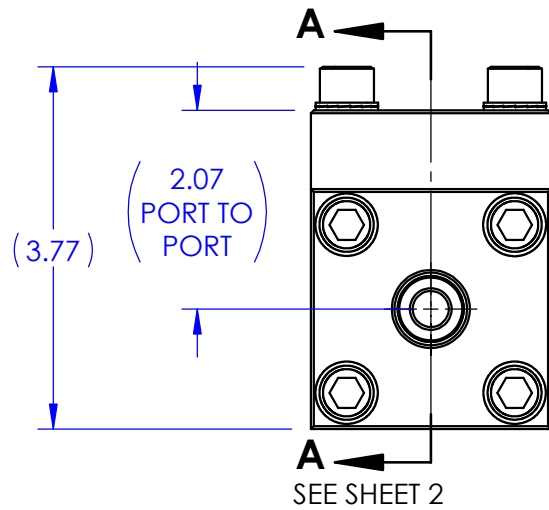
FLUIDS: - WATER BASED DRILLING

CONTROL FLUID.

- MINERAL OIL BASED DRILLING
CONTROL FLUID.

FIELD SERVICEABLE, REPAIR KITS AVAILABLE

RECOMMENDED INSTALLED POSTION IS
HORIZONTAL CENTERLINE, A VERTICAL
CENTERLINE WILL INCREASE MINIMUM
SHIFT FLOW REQUIRED AND GRAVITY MAY
CAUSE SHUTTLE TO MOVE TO LOWEST
POSITION

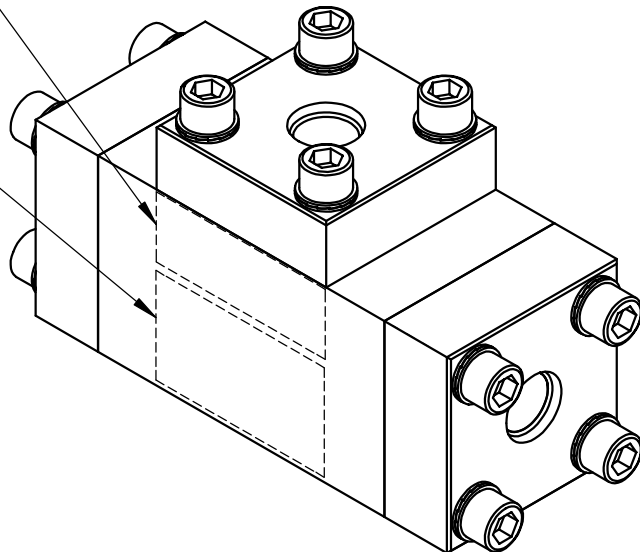



SCHEMATIC

U.S. PATENT 9,719,600

Gilmore
GEN2
LOGO AND
COMPANY INFO

29058
VER(AX VERSION #)
(SERIAL NUMBER)
US PATENT 9,719,600
3,000 PSI
(DATE OF MFG)
SEE SHOP TRAVELER
FOR ADDITIONAL
INFO REQUIRED



MATERIAL: SEE PARTS IN BOM		<div>DIMENSIONS AND TOLERANCES ARE IN INCHES PER ASME Y14.5M-1994. UNLESS OTHERWISE SPECIFIED: 1) TOLERANCES: .X: ±.1 .XX: ±.01 .XXX: ±.005 ANGLES: ±.5° 2) SURFACE TEXTURE: 63 ✓ 3) CORADIAL FEATURES SHALL BE ☉ WITHIN .010 4) BREAK SHARP EDGES .010 5) INTERNAL RADII SHALL BE .016 MAX 6) DRILL POINTS OPTIONAL WHEN SHOWN UNSPECIFIED, ALL DRILL POINT ANGLES SHALL BE BETWEEN 90°-140°</div>	APPROVAL		<div>ENGINEERING</div>		
CONDITION:			DRAWN BY CY	DATE 5-8-18	<div>VALVE, SHUTTLE, 3/4", GEN 2, 1/2" SAE IN, 1/2" SAE OUT, 3000 PSI, LOW INTERFLOW</div>		
			CHECKED BY JP	DATE 5-8-18			
			ENGINEER AP	DATE 5-10-18			
TREATMENT:	<div>5</div>		ERN NUMBER 02186	DATE 5-7-18			
PROCEDURE NUMBER:	<div>7</div>	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF GILMORE VALVE CO UNLESS OTHERWISE STATED. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF GILMORE VALVE CO IS PROHIBITED.			SIZE B	DWG NO 29058	REV D
					SCALE 1:2	SolidWorks	SHEET 1 OF 2

4

3

2

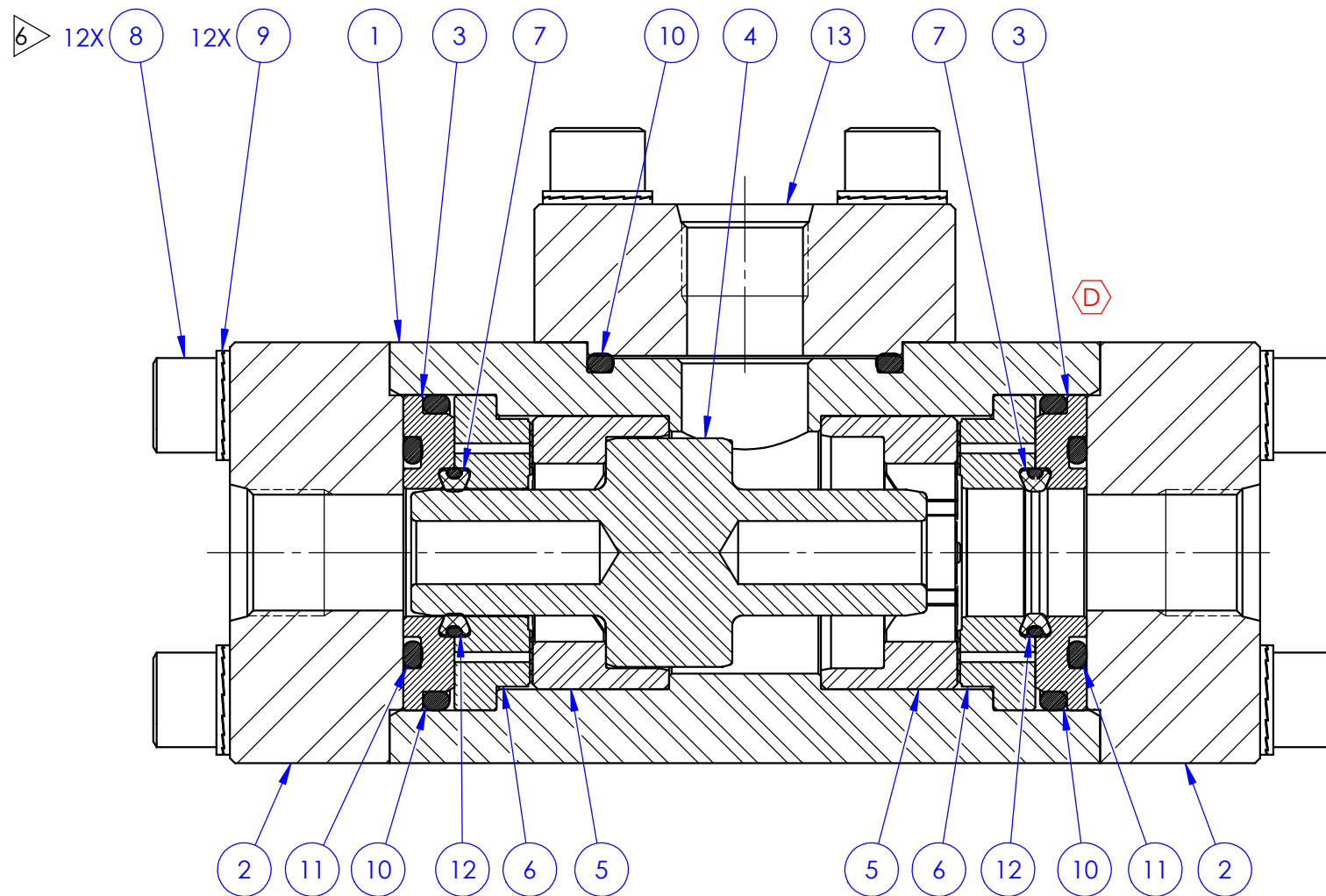
1

B

B

A

A



SECTION A-A

4

3

2

1

5

1

1

6

BILL OF MATERIALS

ITEM NO	PART NUMBER	DESCRIPTION	MATERIAL	QTY	RK	SK
1	176324	BODY	A276 TP 316 (316 SS)	1		
2	176322	FLANGE INLET, 1/2" SAE	A276 TP 316 (316 SS)	2		
3	176326	CAP	A276 UNS S21800 (NITRONIC 60)	2	X	
4	176332	SHUTTLE	A276 UNS S21800 (NITRONIC 60)	1	X	
5	176331	SLEEVE, LOW INTERFLOW	A276 UNS S21800 (NITRONIC 60)	2	X	
6	176325	SPACER, LOW INTERFLOW	PEEK	2	X	
7	176327	V SEAL	PTFE MOLDED BAR	2	X	X
8	18224-003	SHCS, 3/8-16 UNC X 1-1/2 LG	A286 GR 660	12		
9	18740-015	WASHER, NORD-LOCK	254 SMO	12		
10	18100-106C	O-RING	BUNA-N	3	X	X
11	18100-110C	O-RING	BUNA-N	2	X	X
12	18100-003C	O-RING	BUNA-N	2	X	X
13	207753	FLANGE OUTLET, 1/2" SAE	A276 TP 316 (316 SS)	1		



ENGINEERING

SIZE B	DWG NO 29058	REV D
SCALE 1:2	SolidWorks	SHEET 2 OF 2

- NOTES:
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 - 3 "X" IN COLUMN RK DENOTES PARTS CONTAINED IN REPAIR KIT 29112 RK.
 - 4 "X" IN COLUMN RK DENOTES PARTS CONTAINED IN SEAL KIT 29112 SK.
 - 5 ALL METAL ITEMS PASSIVATED
 - 6 TORQUE ITEM 8 AT ASSEMBLY TO 20 FT-LBS. (12X)
 - 7 ASSEMBLY PROCEDURE: 50302
MAINTENANCE MANUAL: 51029
STANDARD FAT PROCEDURE: 50303
EXTENDED FAT PROCEDURE: 50304

REVISIONS				
REV	ERN /ECO NUMBER	DRAWN	CHECKED	APPROVED
B	ECO 019456	CMJ 9-16-20	JZ 9/16/20	AJP 9/16/20

PRESSURE DATA
MAX WORKING PRESSURE: 3,000 PSI

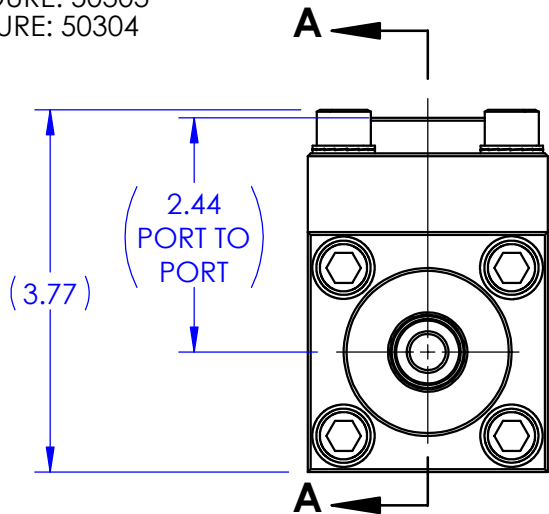
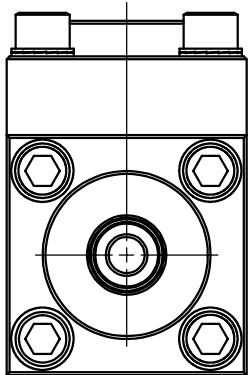
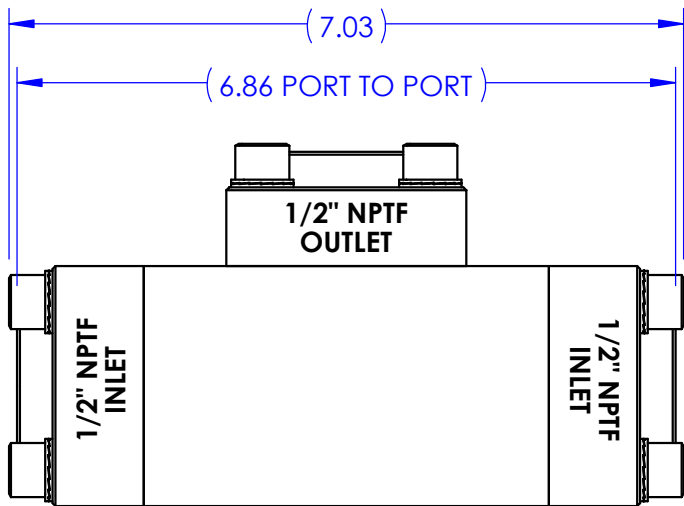
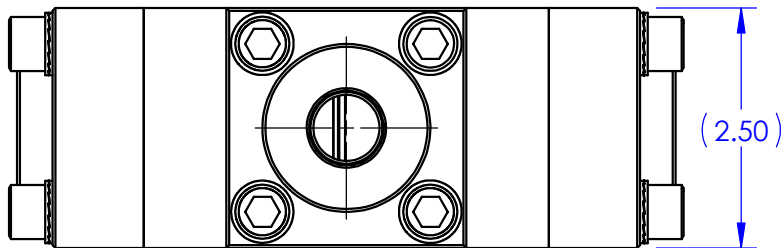
PORTS
INLETS: 1/2" NPTF
OUTLET: 1/2" NPTF

FLOW DATA
C_v: 3 (CALCULATED)
MAX FLOW CAPACITY: 70 GPM
MINIMUM SHIFT FLOW: 0.5 GPM

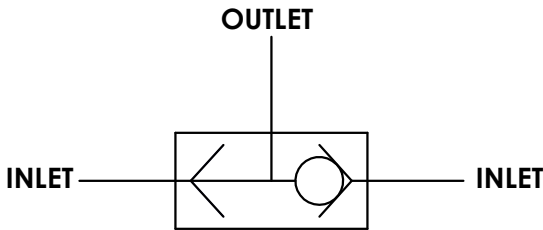
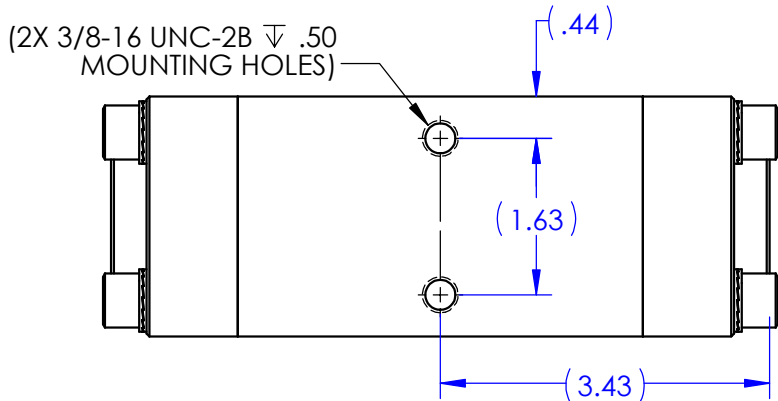
GENERAL DATA
APPROX WEIGHT: 10.7 LBS
TEMPERATURE: 32 °F TO 150 °F
FLUIDS: - WATER BASED DRILLING CONTROL FLUID.
- MINERAL OIL BASED DRILLING CONTROL FLUID.

FIELD SERVICEABLE, REPAIR KITS AVAILABLE

RECOMMENDED INSTALLED POSTION IS HORIZONTAL CENTERLINE, A VERTICAL CENTERLINE WILL INCREASE MINIMUM SHIFT FLOW REQUIRED AND GRAVITY MAY CAUSE SHUTTLE TO MOVE TO LOWEST POSITION



SEE SHEET 2

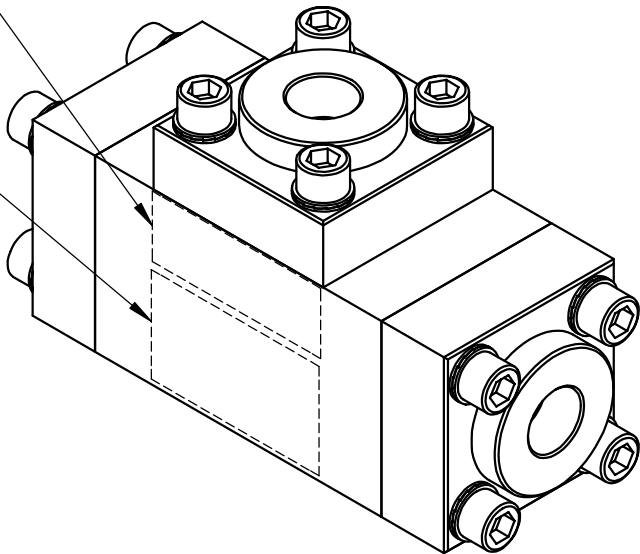



SCHEMATIC

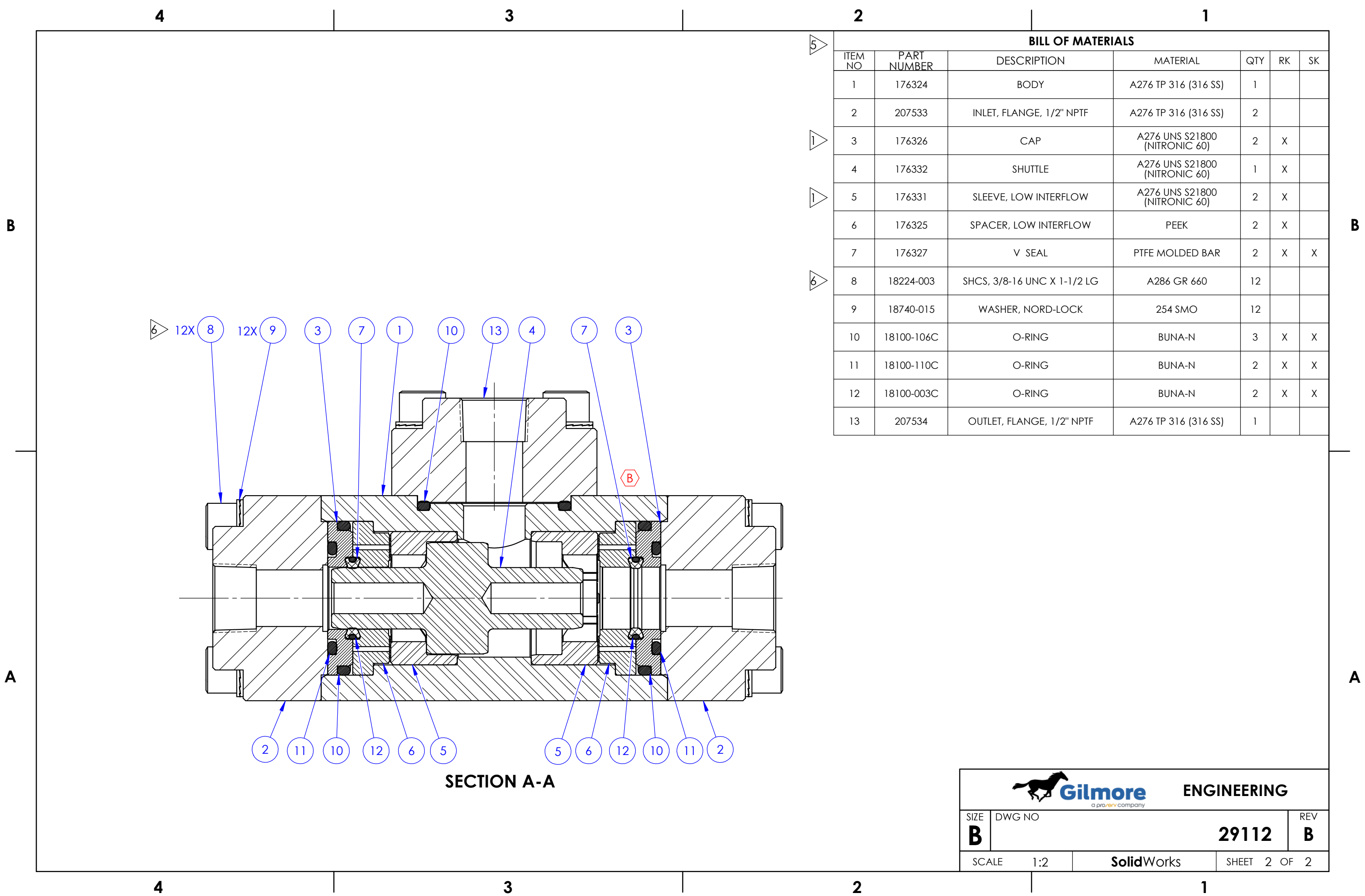
U.S. PATENT 9,719,600

Gilmore
GEN2
LOGO AND
COMPANY INFO

29112
VER(AX VERSION #)
(SERIAL NUMBER)
US PATENT 9,719,600
3,000 PSI
(DATE OF MFG)
SEE SHOP TRAVELER
FOR ADDITIONAL
INFO REQUIRED



MATERIAL: SEE PARTS IN BOM		<div>DIMENSIONS AND TOLERANCES ARE IN INCHES PER ASME Y14.5M-1994. UNLESS OTHERWISE SPECIFIED: 1) TOLERANCES: .X: ±.1 .XX: ±.01 .XXX: ±.005 ANGLES: ±.5° 2) SURFACE TEXTURE: 63/√ 3) CORADIAL FEATURES SHALL BE ☉ WITHIN .010 4) BREAK SHARP EDGES .010 5) INTERNAL RADII SHALL BE .016 MAX 6) DRILL POINTS OPTIONAL WHEN SHOWN UNSPECIFIED, ALL DRILL POINT ANGLES SHALL BE BETWEEN 90°-140°</div>		APPROVAL		<div>ENGINEERING <small>a proserv company</small></div>		
CONDITION:				DRAWN BY JZ	DATE 4-21-20	<div>VALVE, SHUTTLE, 3/4", GEN 2, 1/2" NPTF IN , 1/2" NPTF OUT, 3000 PSI, LOW INTERFLOW</div>		
TREATMENT:				CHECKED BY JOP	DATE 4-21-20			
<div>5</div>				ENGINEER AP	DATE 4-21-20			
				ERN NUMBER 02385	DATE 2/5/2020			
PROCEDURE NUMBER:		THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF GILMORE VALVE CO UNLESS OTHERWISE STATED. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF GILMORE VALVE CO IS PROHIBITED.			SIZE B	DWG NO 29112	REV B	
					SCALE 1:2	SolidWorks	SHEET 1 OF 2	



4

3

2

1

NOTES:

- 1
- MARKING: MARK COMPONENT WITH ASSEMBLY W.O. AS SHOWN ON THE COMPONET DRAWING.
- 2
- MARKING: MARK AS SHOWN USING LASER ETCH OR COMPUTER CONTROLLED DOT PEEN MARKING MACHINE, .06 HIGH MIN CHARACTERS.
3.
- "X" IN COLUMN RK DENOTES PARTS CONTAINED IN REPAIR KIT 29113 RK.
4.
- "X" IN COLUMN RK DENOTES PARTS CONTAINED IN SEAL KIT 29113 SK.
- 5
- ALL METAL ITEMS PASSIVATED
- 6
- TORQUE ITEM 8 AT ASSEMBLY TO 20 FT-LBS. (12X)
- 7
- ASSEMBLY PROCEDURE: 50302
MAINTENANCE MANUAL: 51029
STANDARD FAT PROCEDURE: 50303
EXTENDED FAT PROCEDURE: 50304

REVISIONS

REV	ERN /ECO NUMBER	DRAWN	CHECKED	APPROVED
B	ECO 019456	CMCJ 9-15-20	JZ 9/15/20	AJP 9/16/20

PRESSURE DATA
MAX WORKING PRESSURE: 3,000 PSI

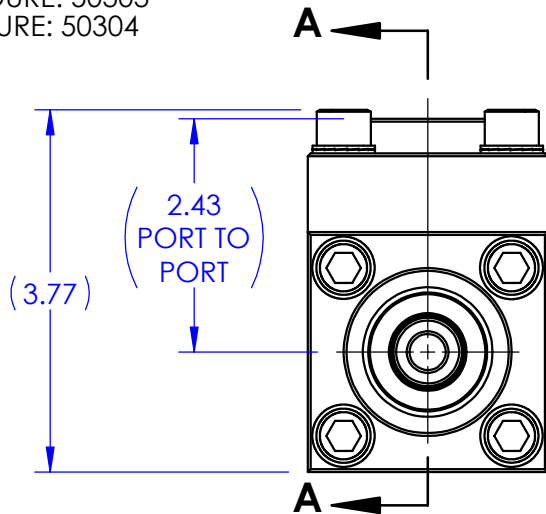
PORTS
INLETS: 1" NPTF
OUTLET: 1" NPTF

FLOW DATA
C_v: 3 (CALCULATED)
MAX FLOW CAPACITY: 70 GPM
MINIMUM SHIFT FLOW: 3 GPM

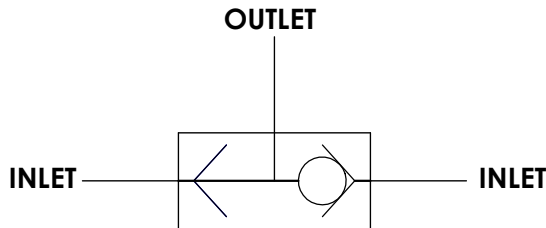
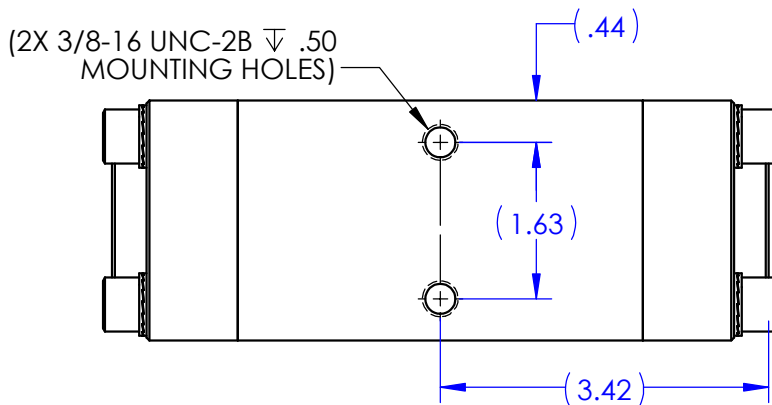
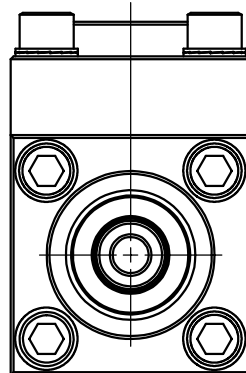
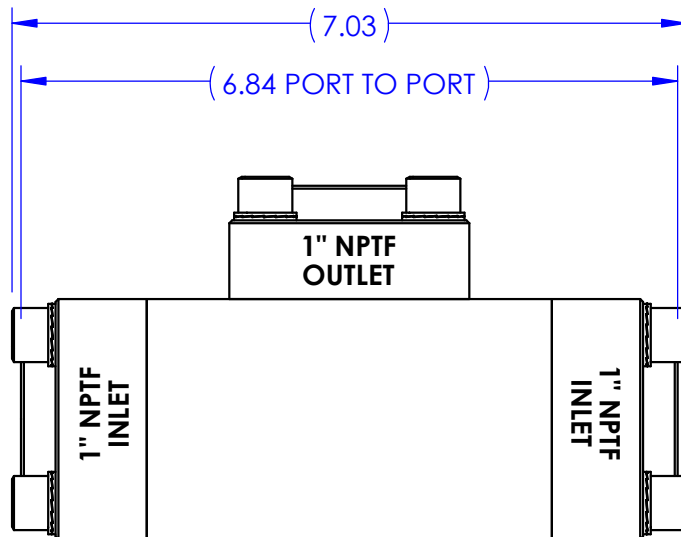
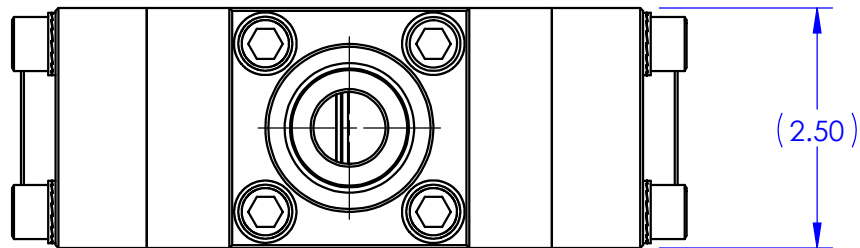
GENERAL DATA
APPROX WEIGHT: 10.7 LBS
TEMPERATURE: 32 °F TO 150 °F
FLUIDS: - WATER BASED DRILLING CONTROL FLUID.
- MINERAL OIL BASED DRILLING CONTROL FLUID.

FIELD SERVICEABLE, REPAIR KITS AVAILABLE

RECOMMENDED INSTALLED POSTION IS HORIZONTAL CENTERLINE, A VERTICAL CENTERLINE WILL INCREASE MINIMUM SHIFT FLOW REQUIRED AND GRAVITY MAY CAUSE SHUTTLE TO MOVE TO LOWEST POSITION

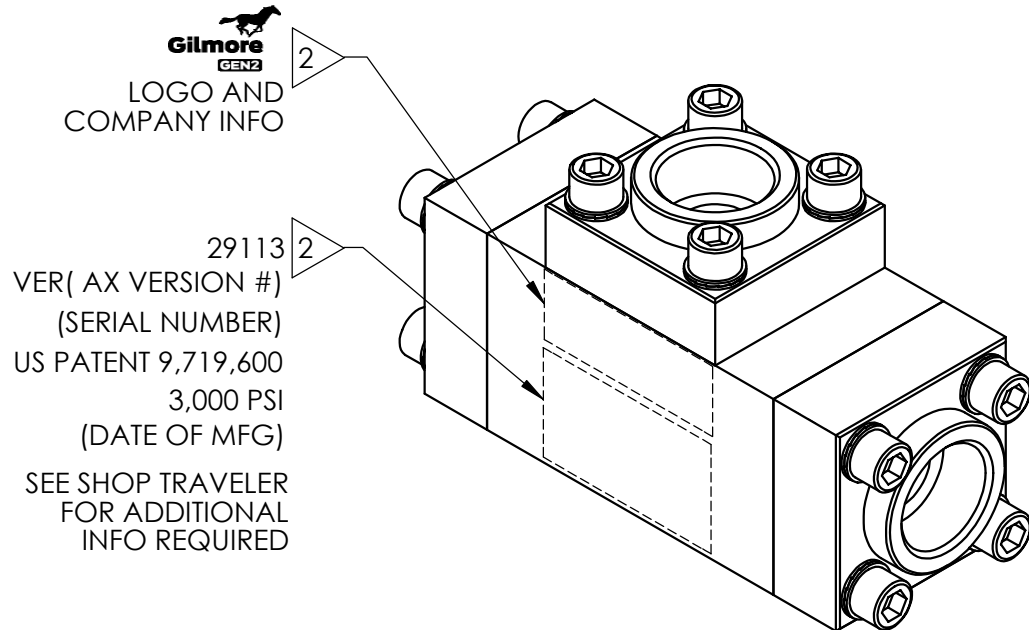


SEE SHEET 2



SCHEMATIC

U.S. PATENT 9,719,600



MATERIAL: SEE PARTS IN BOM		DIMENSIONS AND TOLERANCES ARE IN INCHES PER ASME Y14.5M-1994. UNLESS OTHERWISE SPECIFIED: 1) TOLERANCES: .X: ±.1 .XX: ±.01 .XXX: ±.005 ANGLES: ±.5° 2) SURFACE TEXTURE: 63/√		APPROVAL		ENGINEERING	
CONDITION:		3) CORADIAL FEATURES SHALL BE Ⓢ WITHIN .010		DRAWN BY	DATE		
TREATMENT:		4) BREAK SHARP EDGES .010		CHECKED BY	DATE		
PROCEDURE NUMBER:		5) INTERNAL RADII SHALL BE .016 MAX		ENGINEER	DATE		
		6) DRILL POINTS OPTIONAL WHEN SHOWN UNSPECIFIED, ALL DRILL POINT ANGLES SHALL BE BETWEEN 90°-140°		ERN NUMBER	DATE	VALVE, SHUTTLE, 3/4", GEN 2, 1" NPTF IN, 1" NPTF OUT, 3000 PSI, HIGH INTERFLOW	
				THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF GILMORE VALVE CO UNLESS OTHERWISE STATED. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF GILMORE VALVE CO IS PROHIBITED.		SIZE B	DWG NO 29113
						SCALE 1:2	SHEET 1 OF 2

