

1/2" Quick Dump Valve Product Line

REV	DATE	DESCRIPTION	ORIGIN (issued by)	APPROVED
Rev 002	02-03-2017	Document No: 115-020317-002	AP	SS
Rev 001	02-03-2017	Document No: 115-020317-001	AP	SS

COMPANY PROPRIETARY INFORMATION

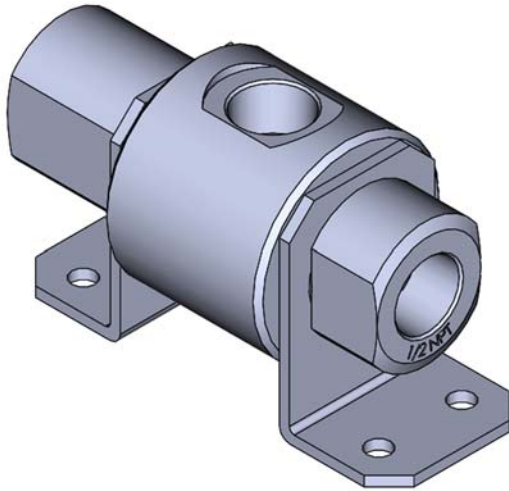
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 Gilmore Valve Facility
 1231 Lumpkin Road
 Houston, TX 77043

1/2" Quick Dump Valve Product Line



Proserv announces a new Gilmore 1/2" Quick Dump Valve Product Line

Proserv's line of Gilmore 1/2" Quick Dump Valves are used to enable quick dumping of a cylinder, pilot or circuit function volume (e.g. subsea riser connector). The 1/2" Quick Dump Valve vent port will bypass a restrictive upstream control system vent circuit.

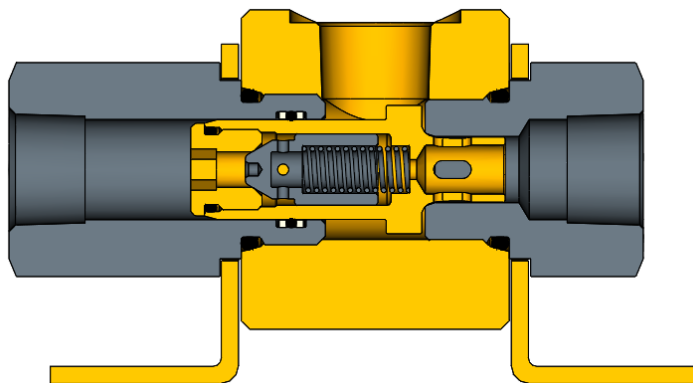
Features and Benefits:

- Nitronic 60 Spool with self-centering metal seat geometry
- Nitronic 60 Poppet
- Nitronic 60 Seat with O-Ring seal

The new Gilmore 1/2" Quick Dump Valve product line offers the following enhancements over the legacy product line:

- Field repairable
- Elimination of the need to coin each valve
- Meets the latest Proserv Gilmore material specifications
- Fits the same footprint as the legacy Gilmore 1/2" Quick Dump Valve

Figure 1. PN 29010: 1/2" NPT Quick Dump Valve



Proserv has exceeded API 16D requirements by qualifying two each of the new 1/2" Quick Dump Valve design to 2500 cycles.

The improved 1/2" Quick Dump Valve and its applicable repair kits and seal kits are available for sale immediately by utilizing the applicable part number from Table 1 below and by contacting your Proserv Customer Service Representative.

Proserv will continue selling the legacy 1/2" Quick Dump Valve part numbers listed in Table 1 below until February 3, 2018, at which time the legacy valves will be discontinued, no longer available for sale.

Proserv will continue to support discontinued legacy 1/2" Quick Dump Valves as follows:

- Proserv will continue providing repair kits and seal kits in support of discontinued 1/2" Quick Dump Valves for a minimum of 3 years from the date of legacy valve obsolescence.
- Proserv Aftermarket will continue to support discontinued legacy products with factory failure analysis and repair services for a minimum of 3 years from the date of legacy valve obsolescence.

Table 1. New and Legacy 1/2" Quick Dump 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, Quick Dump, 1/2 NPT	27627	27627 RK	Valve, Quick Dump, 1/2 NPT, Seat O-Ring	29010	29010 RK
2	Valve, Quick Dump, 1/2 SAE	28291	28291 RK	Valve, Quick Dump, 1/2 SAE, Seat O-Ring	29011	29011 RK

NOTES:

- 1 MARKING: MARK AS SHOWN USING LASER ETCH OR COMPUTER CONTROLLED DOT PEEN MARKING MACHINE, .13 HIGH MIN CHARACTERS.
- 2 TORQUE INLET ADAPTERS AT ASSEMBLY TO 50 FT-LBS.
- 3 DO NOT SCRATCH/DAMAGE METAL SEALING SURFACES ON SHUTTLE AND ADAPTERS.
- 4 MOUNTING PLATE REQUIRES QTY 2 Ø1/4" BOLTS PER PLATE.
- 5 MOUNTING PLATE IS FREE TO ROTATE 360° AROUND ADAPTER FOR MOUNTING
- 6 X IN BOM DEPICTS PARTS IN REPAIR KIT 29010 RK AND SEAL KIT 29010 SK.
- 7 ALL METAL ITEMS PASSIVATED
- 8 FOR ASSEMBLY PROCEDURE SEE 50194 FOR MAINTENANCE PROCEDURE SEE 51015 FOR STANDARD TEST PROCEDURE SEE 50195 FOR EXTENDED TEST PROCEDURE SEE 50196

REVISIONS				
REV	ERN /ECO NUMBER	DRAWN	CHECKED	APPROVED
A	ERN 02113	JSB 1/13/17	Am 1/13/17	APP 1/13/17

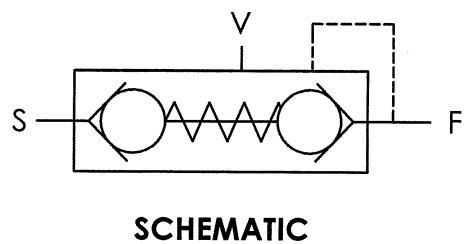
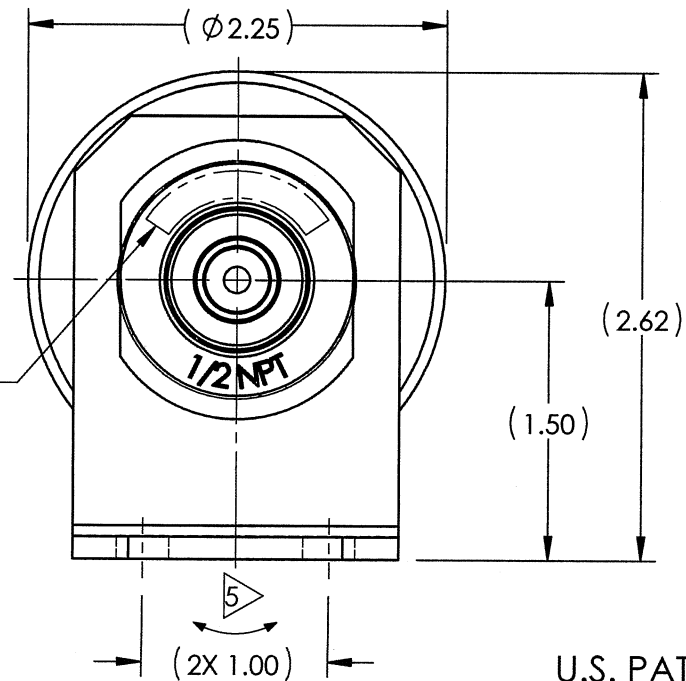
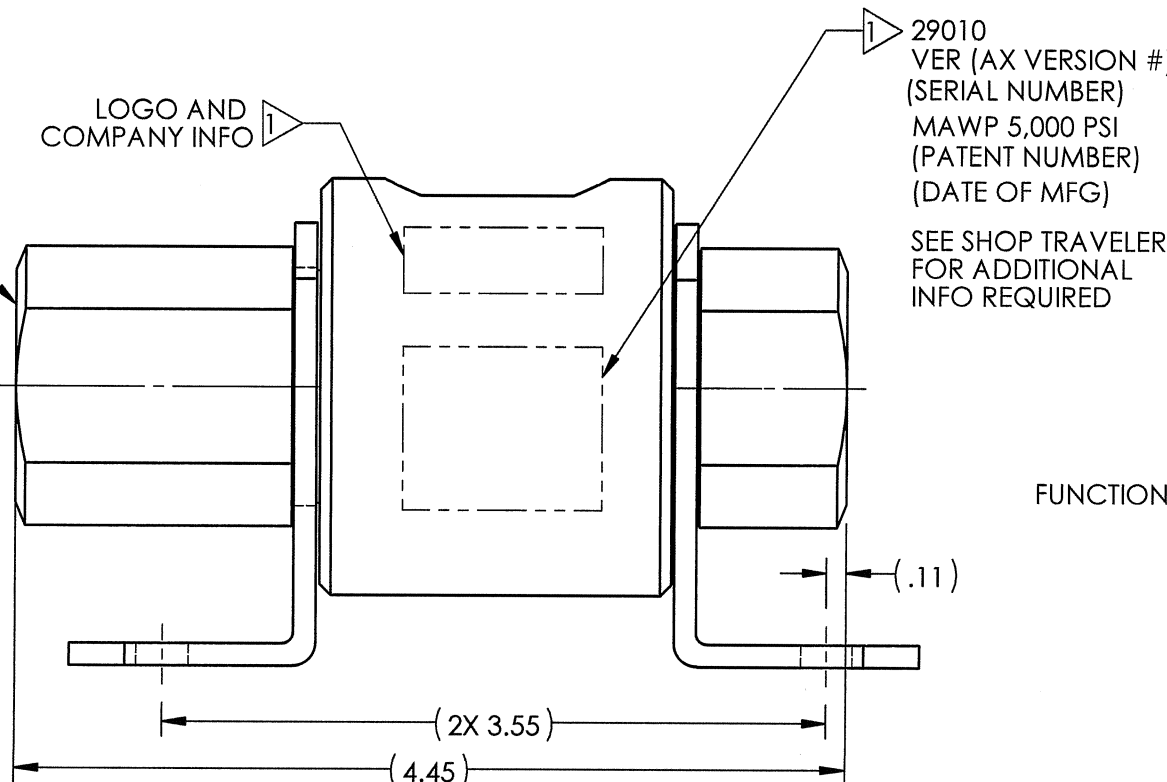
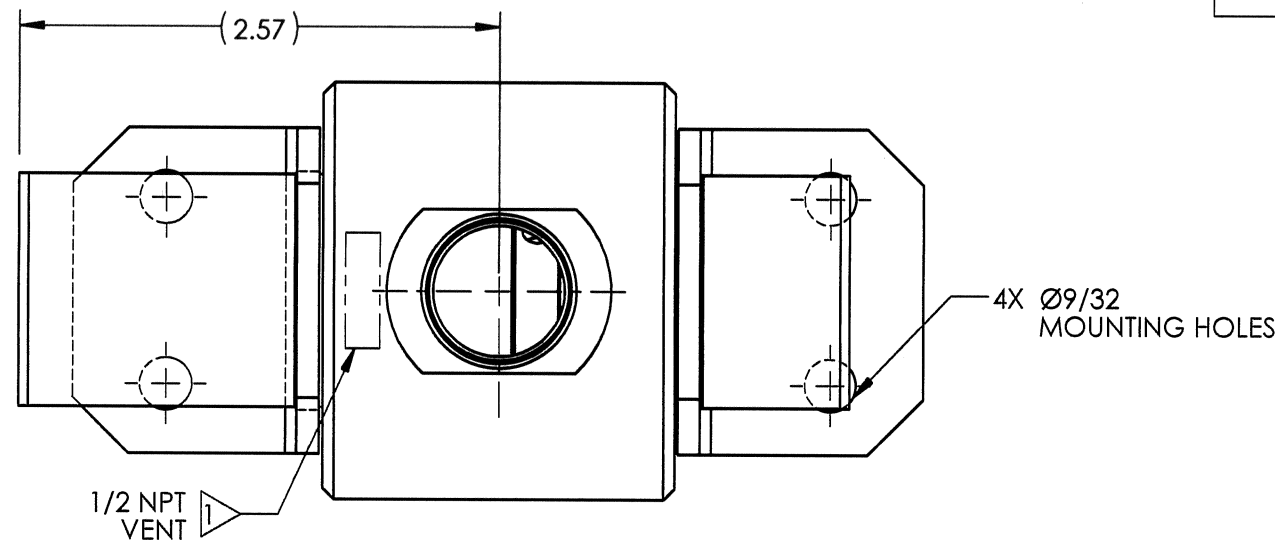
PRESSURE DATA
 MAX. PRESSURE RATING: 5,000 PSI
 FUNCTION VENTS WHEN SUPPLY: FUNCTION RATIO <1:2

FLOW DATA
 MAX. FLOW CAPACITY: 10 GPM FORWARD / 15 GPM REVERSE
 Cv (S-F): 2.0 (CALC.)
 Cv (F-V): 2.8 (CALC.)
 FLUIDS: WATER BASED DRILLING CONTROL FLUID
 MINERAL OIL BASED DRILLING CONTROL FLUID

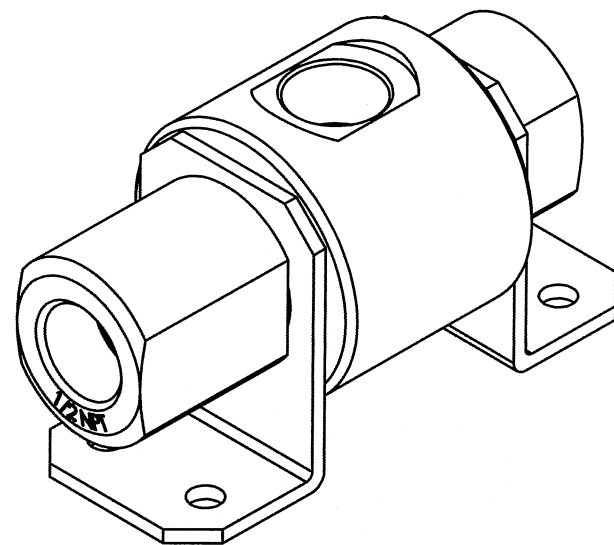
PORTS
 SUPPLY: 1/2 NPT
 FUNCTION: 1/2 NPT
 VENT: 1/2 NPT

GENERAL DATA
 TEMP RANGE: 32°F TO 150°F
 APPROX WEIGHT: 3.0 LBS
 FIELD SERVICEABLE

NOTE: DO NOT USE THE 1/2" QUICK DUMP VALVE AS A DCV. IT IS DESIGNED TO EXHAUST RELATIVELY SMALL VOLUMES (I.E. LESS THAN 10 GALLONS) QUICKLY.

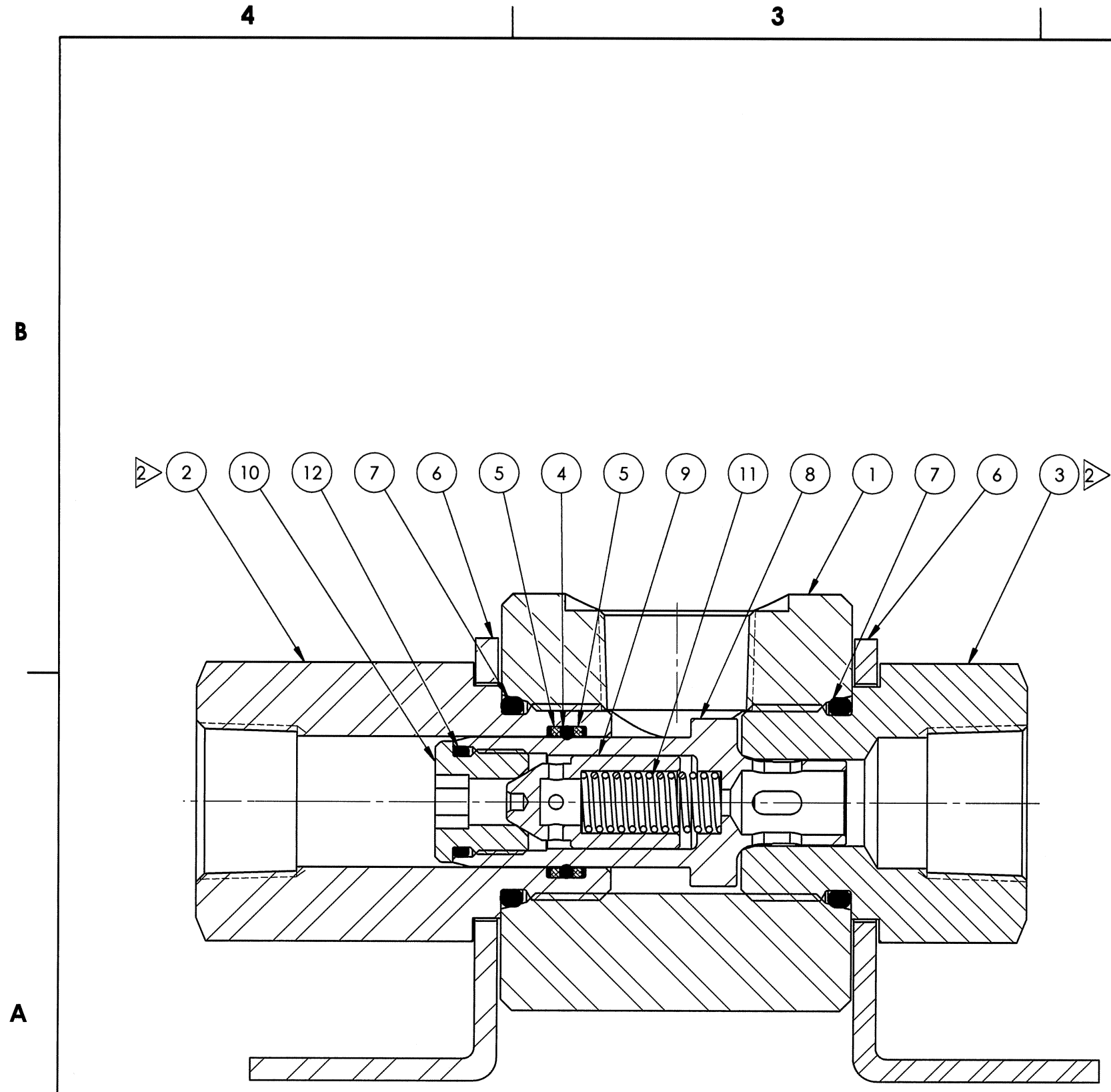


SCHMATIC



MATERIAL: SEE 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		proserv Gilmore VALVE, QUICK DUMP, 1/2" NPT SEAT O-RING	
CONDITION:		DRAWN BY JSB	DATE 1/13/17		SIZE B
TREATMENT:		CHECKED BY Am	DATE 1/13/17		DWG NO 29010
PROCEDURE NUMBER: 8		ENGINEER APP	DATE 1/13/17		REV A
		ERN NUMBER 02113	DATE 1/12/17	SCALE 1:1	
		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.		SolidWorks SHEET 1 OF 2	

U.S. PATENT 6,779,543



SECTION A-A

BILL OF MATERIALS						
ITEM NO	PART NUMBER	DESCRIPTION	MATERIAL	QTY	RK	SK
1	13001	BODY, 1/2 NPT	A276 TP 316	1		
2	27626	ADAPTER 1/2" NPT QUICKDUMP VALVE	A276 TP S21800 (NITRONIC 60)	1		
3	13000	ADAPTER, SHUTTLE, 1/2" NPT	A276 TP S21800 (NITRONIC 60)	1	X	
4	18100-009C	O-RING	BUNA N 90 DURO	1	X	X
5	18110-005T	BACKUP RING	TEFLON	2	X	X
6	12993	MOUNTING PLATE	A240 TP 304	2		
7	18100-063C	O-RING	BUNA N 90 DURO	2	X	X
8	133961	SPOOL, RADIUS SEAT	A276 TP S21800 (NITRONIC 60)	1	X	
9	133962	POPPET, 1/2" QUICK DUMP, 30° SEAT	A276 TP S21800 (NITRONIC 60)	1	X	
10	133963	SEAT, O-RING	A276 TP S21800 (NITRONIC 60)	1	X	
11	27458	SPRING COMPRESSION	ELGILOY	1	X	
12	18100-006C	O-RING	BUNA N 90 DURO	1	X	X

SIZE B	DWG NO 29010	REV A
SCALE 3:2	SolidWorks	SHEET 2 OF 2

4

3

2

1

NOTES:

- 1 MARKING: MARK AS SHOWN USING LASER ETCH OR COMPUTER CONTROLLED DOT PEEN MARKING MACHINE, .13 HIGH MIN CHARACTERS.
- 2 TORQUE INLET ADAPTERS AT ASSEMBLY TO 50 FT-LBS.
- 3 DO NOT SCRATCH/DAMAGE METAL SEALING SURFACES ON SHUTTLE AND ADAPTERS.
- 4 MOUNTING PLATE REQUIRES QTY 2 Ø1/4" BOLTS PER PLATE.
- 5 MOUNTING PLATE IS FREE TO ROTATE 360° AROUND ADAPTER FOR MOUNTING
- 6 X IN BOM DEPICTS PARTS IN REPAIR KIT 29011 RK AND SEAL KIT 29011 SK.
- 7 ALL METAL ITEMS PASSIVATED
- 8 FOR ASSEMBLY PROCEDURE SEE 50194 FOR MAINTENANCE PROCEDURE SEE 51015 FOR STANDARD TEST PROCEDURE SEE 50195 FOR EXTENDED TEST PROCEDURE SEE 50196

REVISIONS				
REV	ERN /ECO NUMBER	DRAWN	CHECKED	APPROVED
A	ERN 02113	JSB 1/13/17	CM 1/13/17	APP 1/13/17

PRESSURE DATA

MAX. PRESSURE RATING: 5,000 PSI
 FUNCTION VENTS WHEN SUPPLY: FUNCTION RATIO <1:2

FLOW DATA

MAX. FLOW CAPACITY: 10 GPM FORWARD / 15 GPM REVERSE
 Cv (S-F): 2.0 (CALC.)
 Cv (F-V): 2.8 (CALC)
 FLUIDS: WATER BASED DRILLING CONTROL FLUID
 MINERAL OIL BASED DRILLING CONTROL FLUID

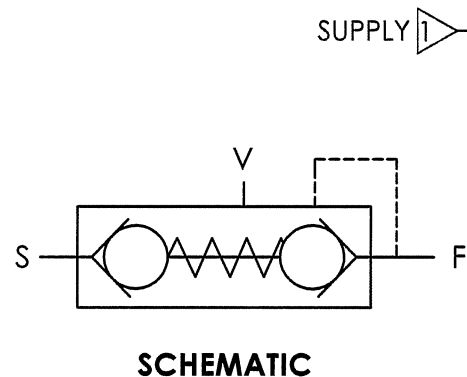
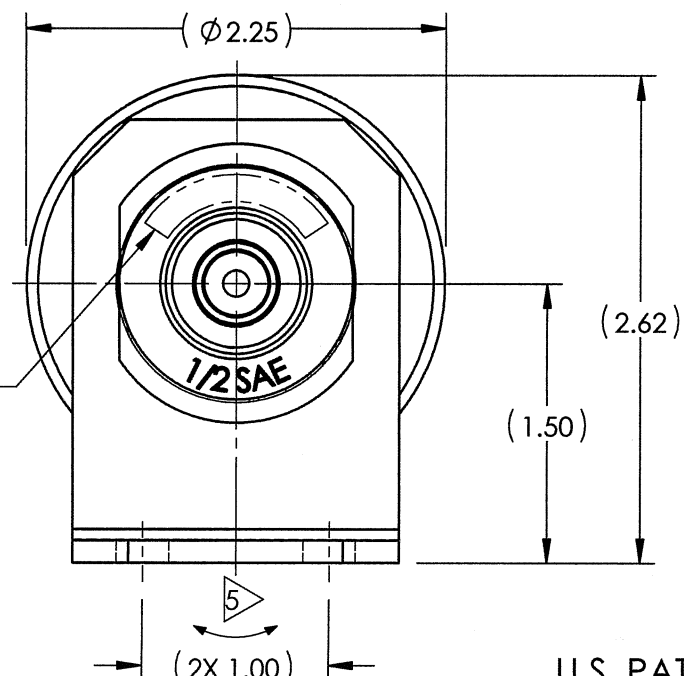
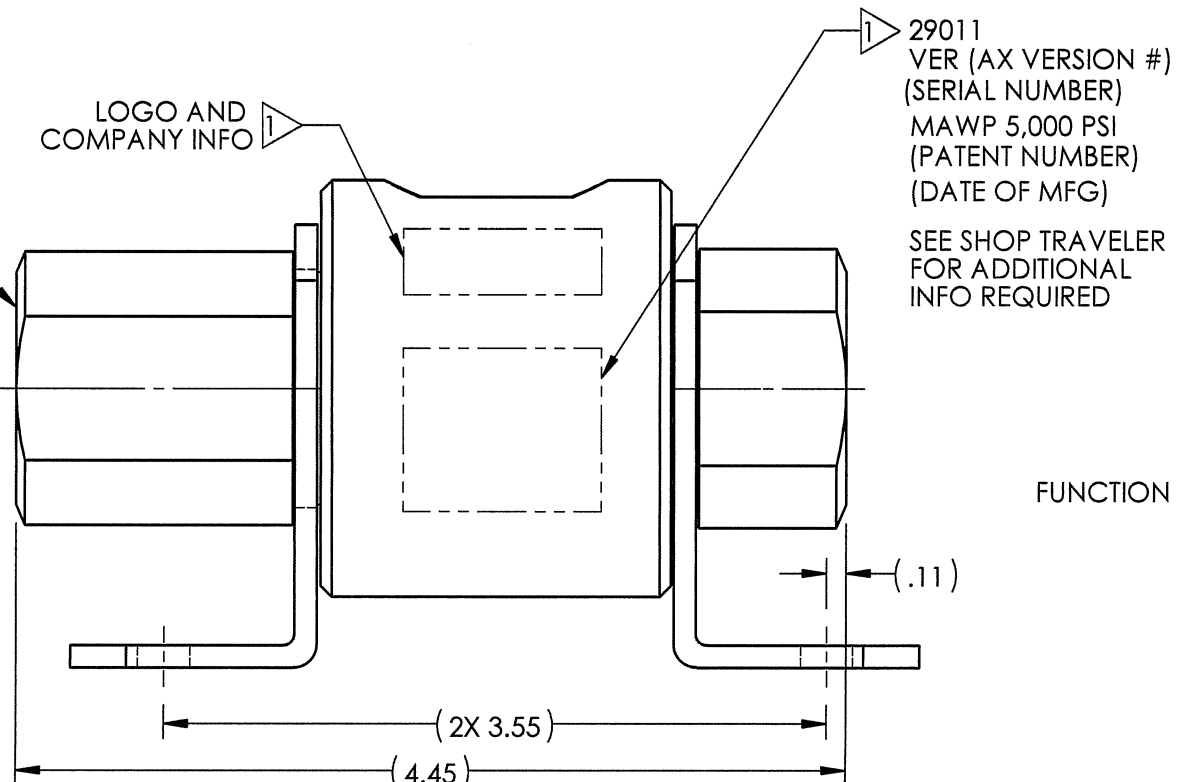
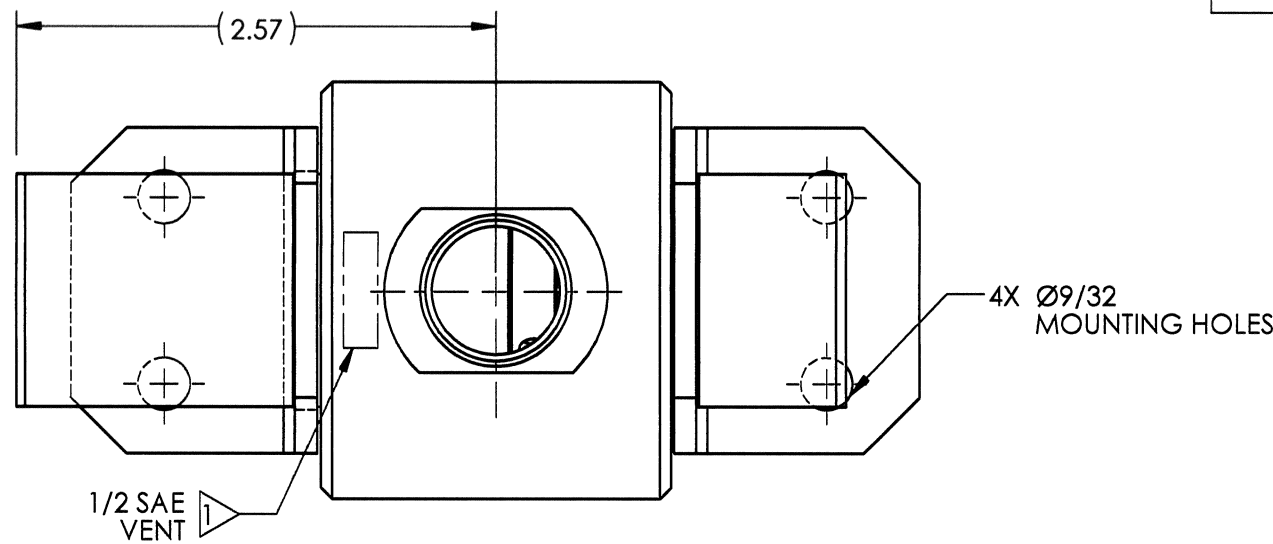
PORTS

SUPPLY: 1/2 SAE
 FUNCTION: 1/2 SAE
 VENT: 1/2 SAE

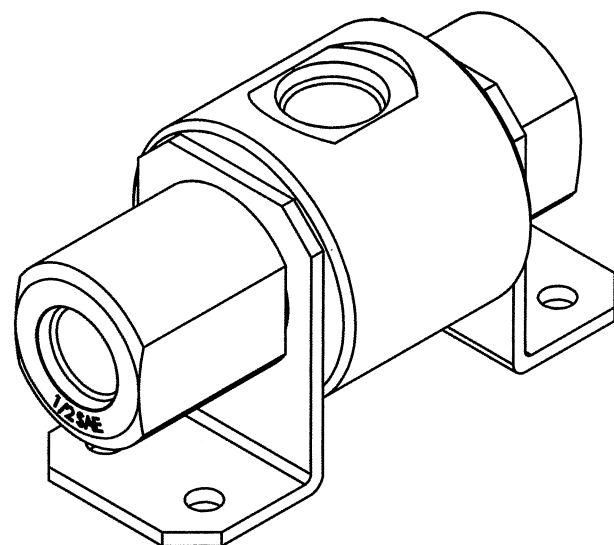
GENERAL DATA

TEMP RANGE: 32°F TO 150°F
 APPROX WEIGHT: 3.0 LBS
 FIELD SERVICEABLE

NOTE: DO NOT USE THE 1/2" QUICK DUMP VALVE AS A DCV. IT IS DESIGNED TO EXHAUST RELATIVELY SMALL VOLUMES (I.E. LESS THAN 10 GALLONS) QUICKLY.



SCHEMATIC



MATERIAL: SEE BOM

CONDITION:

TREATMENT:

PROCEDURE NUMBER: 8

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	
DRAWN BY	DATE
CHECKED BY	DATE
ENGINEER	DATE
ERN NUMBER	DATE
02113	1/12/17

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VALVE, QUICK DUMP, 1/2" SAE SEAT O-RING

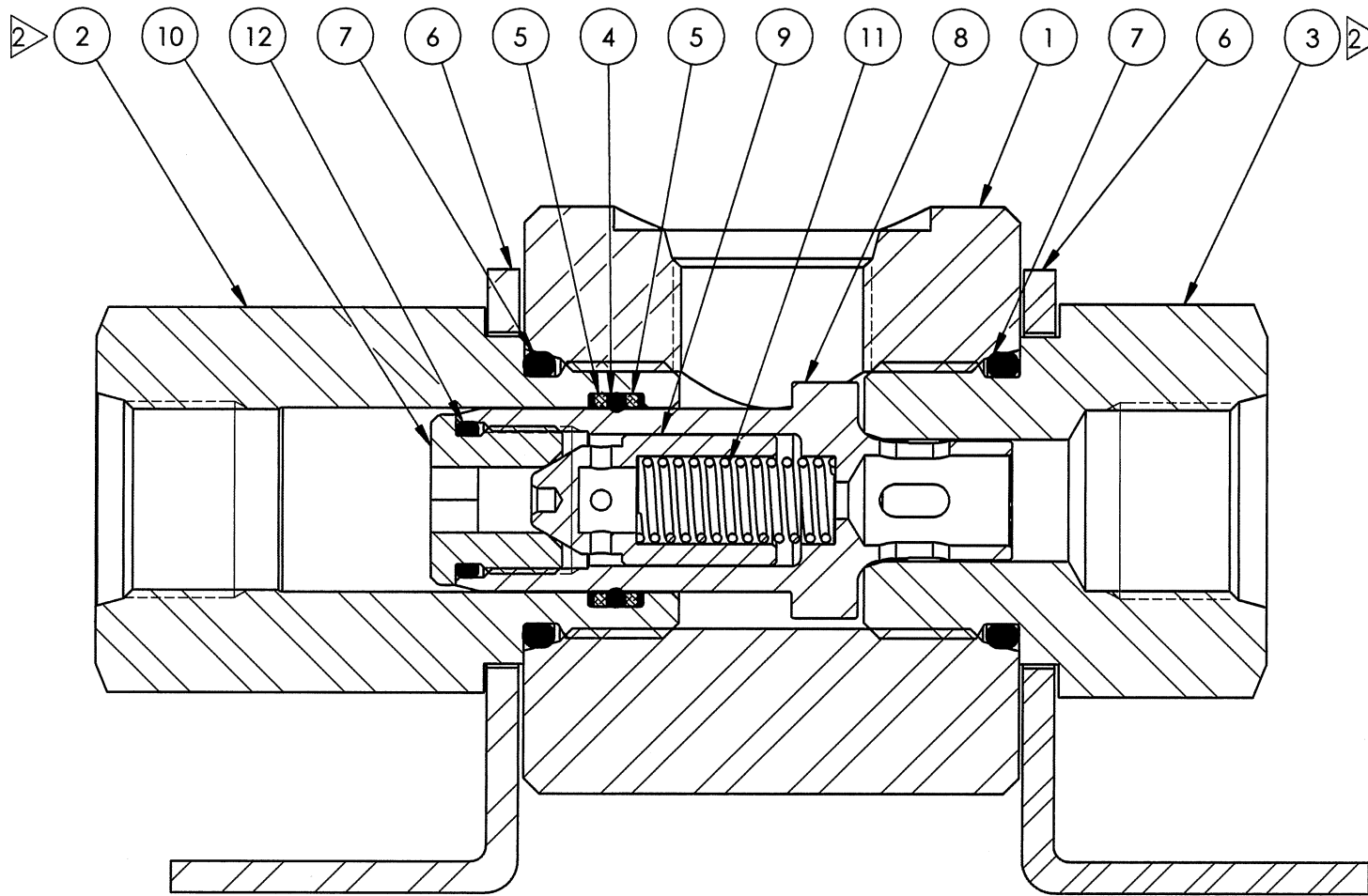
SIZE	DWG NO	REV
B	29011	A
SCALE 1:1	SolidWorks	SHEET 1 OF 2

4

3

2

1



SECTION A-A

BILL OF MATERIALS						
ITEM NO	PART NUMBER	DESCRIPTION	MATERIAL	QTY	RK	SK
1	12991	BODY, 1/2" SAE	A276 TP 316 (316 SS)	1		
2	28290	ADAPTER, 1/2" SAE	A276 TP S21800 (NITRONIC 60)	1		
3	12990	ADAPTER, 1/2" SAE	A276 TP S21800 (NITRONIC 60)	1	X	
4	18100-009C	O-RING	BUNA N 90 DURO	1	X	X
5	18110-005T	BACKUP RING	TEFLON	2	X	X
6	12993	MOUNTING PLATE	A240 TP 304	2		
7	18100-063C	O-RING	BUNA N 90 DURO	2	X	X
8	133961	SPOOL, RADIUS SEAT	A276 TP S21800 (NITRONIC 60)	1	X	
9	133962	POPPET, 1/2" QUICK DUMP, 30° SEAT	A276 TP S21800 (NITRONIC 60)	1	X	
10	133963	SEAT, O-RING	A276 TP S21800 (NITRONIC 60)	1	X	
11	27458	SPRING COMPRESSION	ELGILOY	1	X	
12	18100-006C	O-RING	BUNA N 90 DURO	1	X	X




SIZE	DWG NO	29011	REV
B			A
SCALE	3:2	SolidWorks	SHEET 2 OF 2