

PRESSURE CONTROL PRODUCTS

On / Off Control for Artificial Lift Pumps



ARGUS

Manufacturing Intelligent Solutions



SPECIFICATIONS



**We are committed to product safety and quality.
Argus Pressure Switches and Isolation Valves conform to the following standards:**

API

SPEC. Q1

AMERICAN PETROLEUM INSTITUTE

Specification for Quality Programs for the Petroleum and Natural Gas Industry

ASME

B16.34¹

B31.3²

AMERICAN SOCIETY OF MECHANICAL ENGINEERS

Valves - Flanged, Threaded, and Welding End
Process Piping

ANSI / ISA

12.27.01

**AMERICAN NATIONAL STANDARD INSTITUTE /
INTERNATIONAL SOCIETY OF AUTOMATION**

Requirements for Process Sealing (Dual Seal)

ISO

ISO 9001

ISO 15156

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

Quality Management System

Materials for Use in H₂S Containing Environments in Oil and Gas Production

NACE

MR0175

NATIONAL ASSOCIATION OF CORROSION ENGINEERS

Materials for Use in H₂S Containing Environments in Oil and Gas Production

CSA

C22.2 No. 14³

C22.2 No. 30³

CANADIAN STANDARDS ASSOCIATION

Industrial Control Equipment

Explosion-proof Enclosures for Use in Class I Hazardous Locations

CRN

OC08439.2 / OC11820.2

OF2161.2134

CANADIAN REGISTRATION NUMBERS

Isolation Valve

Pressure Switch

¹ Isolation valves only.

² For materials, pressure and temperature ratings.

³ Pressure switches only.

PRESSURE SWITCH

Rugged and reliable, the Argus Pressure Switch provides effective on / off pump control for dependable well site protection.

CONSIDER THESE BENEFITS

- Simple yet versatile, as each spring encompasses a broad spectrum of pressure settings.
- Utilizes an Inconel® diaphragm to withstand sour and corrosive media in oil, gas and steam applications.
- Dual Seal Certification (CSA and ANSI / ISA 12.27.01).
- Convenient, field replaceable micro-switch.
- High temperature models available.
- Externally adjustable set point.
- Automatic or manual reset.

Temperature Range

Standard: -50°F to +400°F
(-46°C to +204°C)

High Temperature: -50°F to +675°F
(-46°C to +357°C)

Pressure Range

Working: 20 PSI (138 kPa) to 5000 PSI
(34,470 kPa) ¹

Proof: 7500 PSI (51,710 kPa)

Process Connections

2" NPT Male Thread

Grayloc (2GR20)

Securamax (2SJ20)

Bluesky (2CJ20)

Available Options

Security Seal Assembly

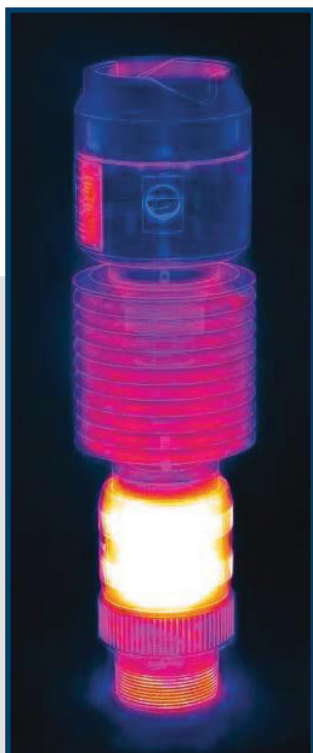
Factory installed Cable Assembly

¹ Upper pressure limit for 2" NPT process connection



PRESSURE SWITCH SPECIFICATIONS

CLASSIFICATION:	CSA Class I, Div. 1 & 2, Group D Hazardous Locations
DEAD BAND:	Fixed
ELECTRICAL CONNECTION:	1/2" NPT Female Thread
ELECTRICAL RATING:	1/2 Amp @ 125 VDC 1/4 Amp @ 250 VDC 15 Amps @ 125, 250 or 480 VAC (50/60Hz)
ENCLOSURE:	Type 4
PRESSURE SENSING ELEMENT:	Inconel®, Grade 718 Diaphragm
SETTING:	External
SET POINT REPEATABILITY:	± 1% of Adjustable Range
STD. PROCESS CONNECTION:	2" NPT Male Thread



**High Temperature Switch
(Thermal Image)**

Heat is effectively dispersed, thus maintaining the integrity of the microswitch under continuous high process temperatures.

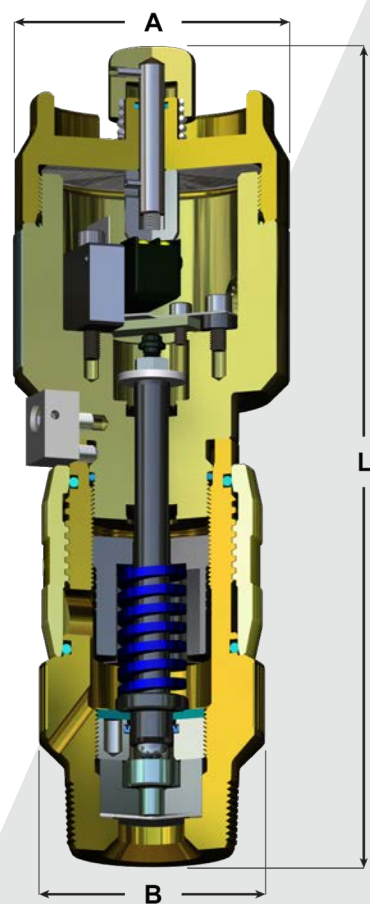
TEMPERATURE RANGE	STANDARD		HIGH TEMPERATURE	
	°F	°C	°F	°C
Continuous Process Operating	-50 to +400	-46 to +204	-50 to +675	-46 to +357
Switch Housing	-50 to +275	-46 to +135	-50 to +275	-46 to +135
Ambient	-50 to +104	-46 to +40	-50 to +104	-46 to +40

PRESSURE RANGE		MODEL			
		STANDARD		HIGH TEMPERATURE	
PSI	kPa	Automatic	Manual	Automatic	Manual
20 - 100	140 - 690	AEF-1.0	MBF-1.0	AEF-HT-1.0	MBF-HT-1.0
40 - 200	275 - 1380	AEF-2.0	MBF-2.0	AEF-HT-2.0	MBF-HT-2.0
80 - 800	550 - 5515	AEF-8.0	MBF-8.0	AEF-HT-8.0	MBF-HT-8.0
150 - 1400	1035 - 9650	AEF-14	MBF-14	AEF-HT-14	MBF-HT-14
250 - 2000	1720 - 13,790	AEF-20	MBF-20	AEF-HT-20	MBF-HT-20
1500 - 5000	10,340 - 34,470	AEF-50	MBF-50	AEF-HT-50	MBF-HT-50

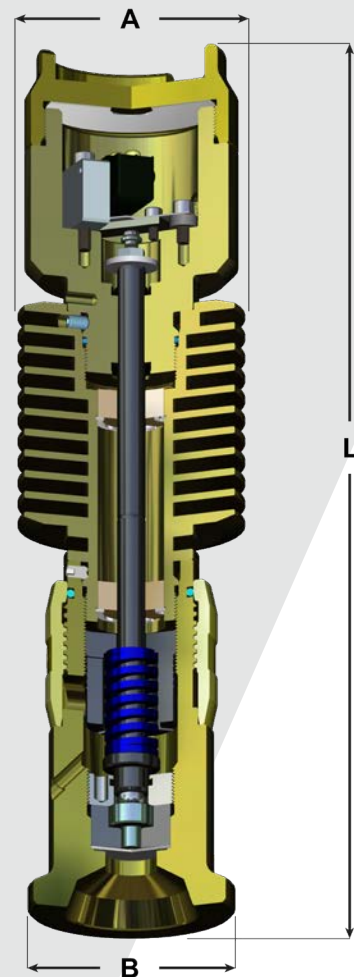
PRESSURE SWITCH STANDARD TRIM MATERIALS	
Electrical Housing	6061-T6 Aluminum, Coated
Microswitch (Precision Snap Acting -SPDT)	Beryllium Copper Spring
Pressure Diaphragm	Inconel®, Grade 718
Process Housing	ASTM A350-LF2 Class 1, Coated
Seals	Fluorosilicone

PRESSURE SWITCH

DIMENSIONS



Model MFB
(Manual)



Model AEF-HT
(Automatic)

STANDARD	LENGTH 'L'				A		B		APPROX WT.	
	Automatic		Manual							
<i>Process Connection</i>	<i>in</i>	<i>mm</i>	<i>in</i>	<i>mm</i>	<i>in</i>	<i>mm</i>	<i>in</i>	<i>mm</i>	<i>lbs</i>	<i>kg</i>
2" NPT Male Thread	10.38	263.7	11.10	281.9	3.73	94.7	3.06	77.8	10.00	4.5
Clamp / Hub Style	11.00	279.4	11.72	297.6	3.73	94.7	3.63	92.1	10.00	4.5

HIGH TEMPERATURE	LENGTH 'L'				A		B		APPROX WT.	
	Automatic		Manual							
Process Connection	in	mm	in	mm	in	mm	in	mm	lbs	kg
2" NPT Male Thread	14.88	377.8	15.59	396.1	3.97	100.8	3.06	77.8	12.50	5.7
Clamp / Hub Style	15.50	393.7	16.22	412.0	3.97	100.8	3.63	92.1	12.50	5.7

PRESSURE ISOLATION VALVE

The Argus Pressure Isolation Valve provides safe and economical isolation from flow-lines, allowing for ease in calibration and maintenance of pressure safety equipment.

Features

- One piece body construction.
- Two position lockable handle.
- Two 1/2" FNPT accessory ports.
- Stem is back seated and blowout proof.
- Bidirectional shutoff of full operating pressure.

TRIM MATERIALS	
Ball	ASTM A351-CF8M, c/w ENC
Body	ASTM A350-LF2, Class 1
Bolting	ASTM A193-B8M
Seals	LTN and XNBR / Viton 'A'
Seat	Standard: Ertalyte® Medium Temp: Techtron® Severe Service: PEEK
Stem	A47-XM-19

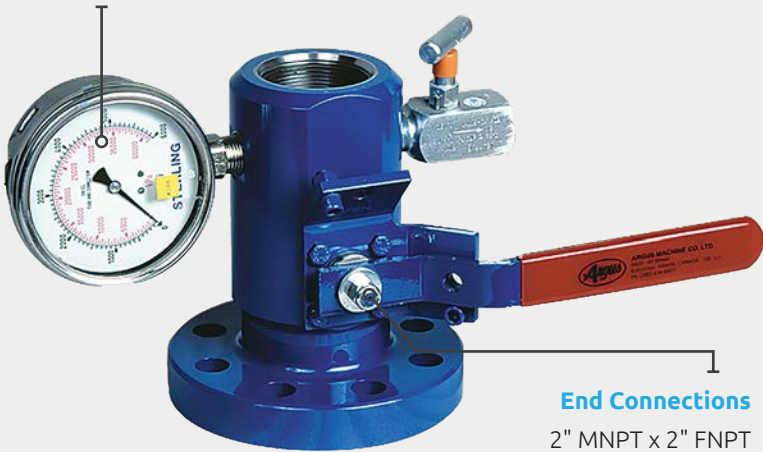
Maximum Operation Pressure

4000 PSI @ 100°F
(27,580 kPa @ 38°C)¹

Temperature Range

Standard: -50°F to +250°F
(-46°C to +121°C)

Medium: -20°F to +400°F
(-29°C to +204°C)



End Connections

2" MNPT x 2" FNPT
150 - 1500 ASME Class
Integral Flange x 2" FNPT

¹ Flange connection ratings governed by ASME class.
Note: Alternative trim materials available upon request.

CABLE ASSEMBLY

Features

- CSA Approved (C22.2 No. 0 & C22.2 No. 30).
- Explosion- proof for use in Class I Hazardous Locations.
- 90° Quick Connect Elbow.
- 3 wire (14 gauge).



LENGTH	
20 ft	WH93-20
30 ft	WH93-30
40 ft	WH93-40
50 ft	WH93-50
60 ft	WH93-60

DOUBLE BLOCK & BLEED PRESSURE ISOLATION VALVE

Features

- One piece body construction.
- Two position lockable handle for each ball.
- Two 1/2" FNPT accessory ports.
- One 1/2" FNPT drain port between independent valve balls.
- Independent bidirectional shutoff of full operating pressure.
- Stems are back seated and blowout proof.
- Dual stem seals for trouble free service.

TRIM MATERIALS

Ball	ASTM A351-CF8M, c/w ENC
Body	ASTM A350-LF2, Class 1
Bolting	316 Alloy Steel
Seals	LTN and XNBR / Viton 'A'
Seat	Standard: Ertalyte® Medium Temp: Techtron® Severe Service: PEEK
Stem	AISI 4130, c/w 0.001" ENP

¹ Flange connection ratings governed by ASME class.
Note: Alternative trim materials available upon request.

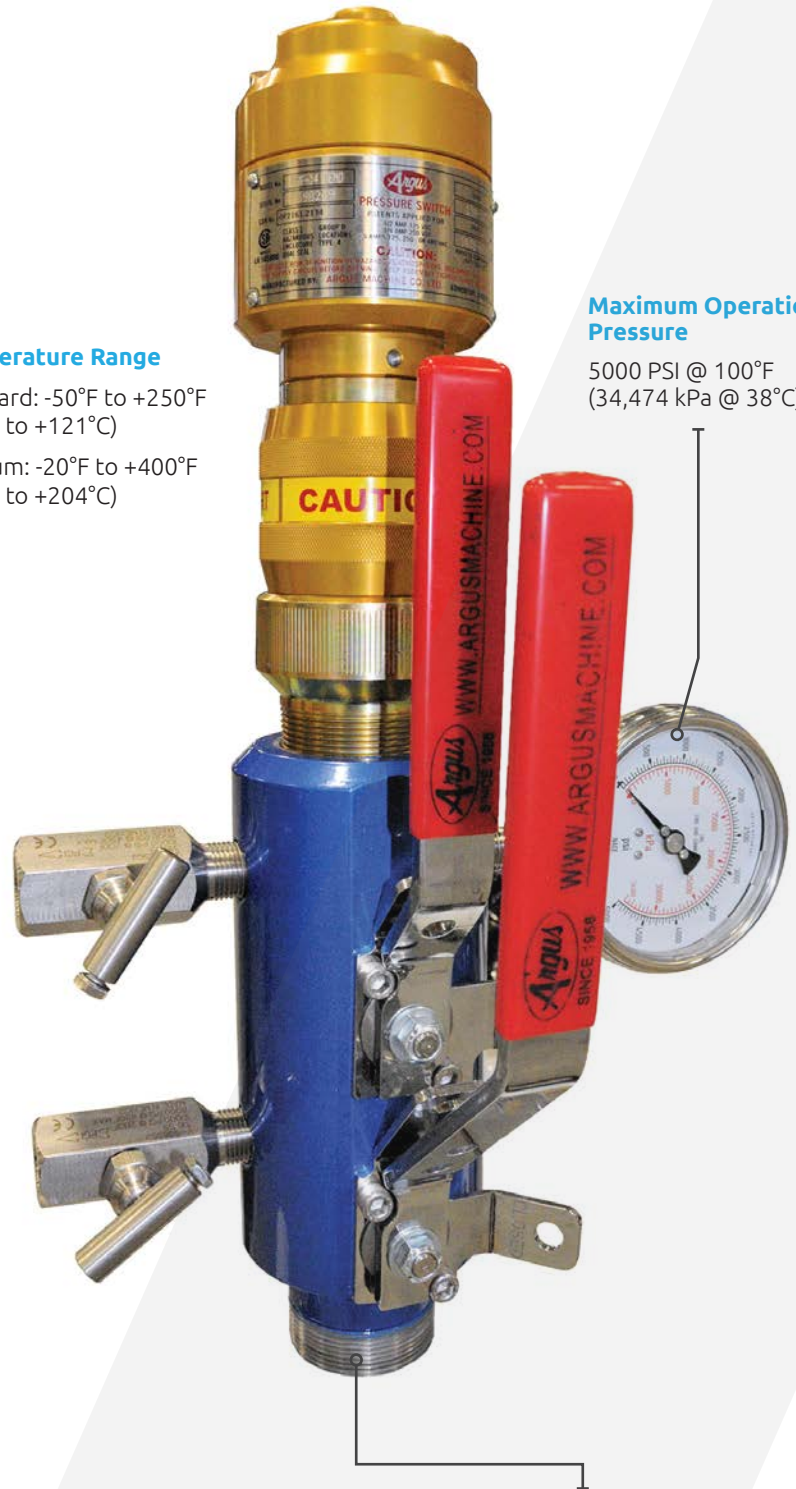
Temperature Range

Standard: -50°F to +250°F
(-46°C to +121°C)

Medium: -20°F to +400°F
(-29°C to +204°C)

Maximum Operation Pressure

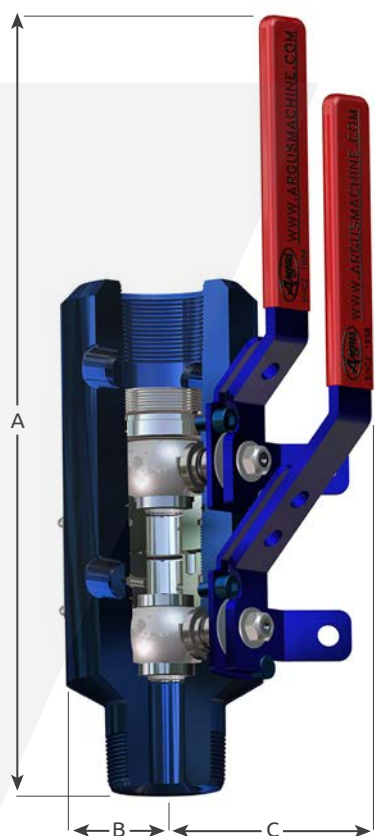
5000 PSI @ 100°F
(34,474 kPa @ 38°C)¹



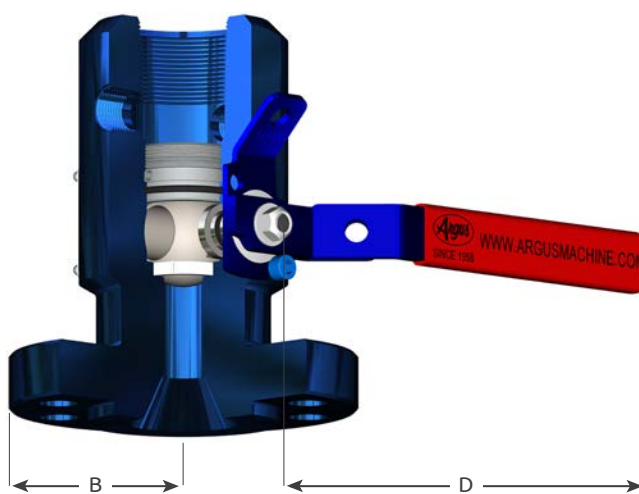
End Connections

2" MNPT x 2" FNPT
150 - 1500 ASME Class Integral Flange x 2" FNPT

ISOLATION VALVE DIMENSIONS



Threaded
(Open Position)



Flanged (RF/RTJ)
(Closed Position)

STANDARD	A						B		C		D (SWING)		APPROX WT	
	Threaded		RF		RTJ									
End Connection	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg
2" FNPT x 2" MNPT	11.74	298	-	-	-	-	1.85	47	3.76	95	8.74	222	15	7
2" FNPT x 150 Class	-	-	11.74	298	-	-	3.00	76	3.76	95	8.74	222	21	10
2" FNPT x 300 / 600 Class	-	-	12.20	310	12.30	312	3.25	83	3.76	95	8.74	222	25	11
2" FNPT x 900 / 1500 Class	-	-	13.18	335	13.24	336	4.25	108	3.76	95	8.74	222	40	18

DOUBLE BLOCK & BLEED	A						B		C		D (SWING)		APPROX WT	
	Threaded		RF		RTJ									
End Connection	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg
2" FNPT x 2" MNPT	15.1	382	-	-	-	-	1.95	49	5.09	129	10.34	263	26	12
2" FNPT x 150 Class	-	-	15.1	382	-	-	3.00	76	5.09	129	10.34	263	31	14
2" FNPT x 300 / 600 Class	-	-	15.6	395	15.6	397	3.25	83	5.09	129	10.34	263	35	16
2" FNPT x 900 / 1500 Class	-	-	16.5	419	16.6	420	4.25	108	5.09	129	10.34	263	51	23

APPLICATIONS



A green band jack pumpjack is shown in an oil field. The pumpjack has a long, articulated arm with a large, circular band at the end. It is mounted on a base and is surrounded by other equipment. The background shows a grassy field and distant mountains under a blue sky with clouds.

BAND JACKS



A black and orange pumpjack is shown in an oil field. The pumpjack has a long, articulated arm with a large, circular band at the end. It is mounted on a base and is surrounded by other equipment. The background shows a grassy field and distant mountains under a blue sky with clouds.

PUMP JACKS



A red PCP pump is shown in an oil field. The pump has a red body with the word "OIL" in yellow. It is connected to a black hose and has various valves and gauges. The background shows a grassy field and distant mountains under a blue sky with clouds.

PCP PUMPS





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