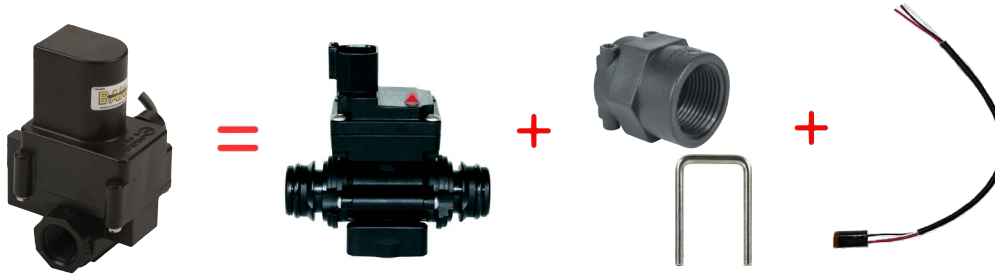


LEV TRANSITION TO ZIPVALVE

ZIPVALVE

LEV PART NO	=	ZIPVALVE	+	FITTING KIT (x2)	+	WIRE HARNESS
LEV038		KZ-NAZC28-1CEBS-D01		KZ-511-0019 + RB050-038		KZ-398-0276
LEV050		KZ-NAZC28-1CEBS-D01		KZ-511-0019		KZ-398-0276
MLEV100		KZ-NAZC28-1CEBS-D01		KZ-511-0028		KZ-398-0276
LEV038PL		KZ-NPZC28-1CEBS-D01		NONE		KZ-398-0276

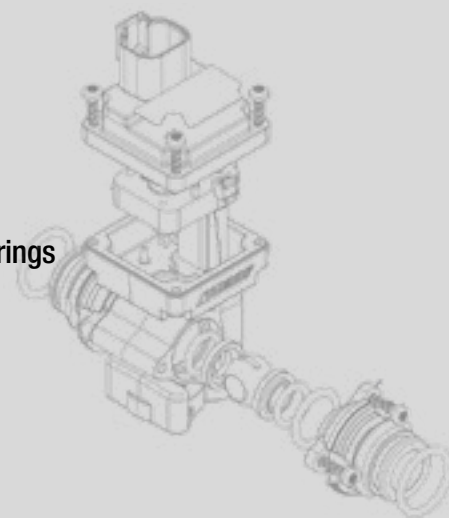
- Banjo's LEV series has been replaced by the ZIPValves
- When replacing an LEV valve, choose the following components:
 - ZIPValve
 - Fitting Kits
 - Wire Harness



ZIPValve

2-Way Ball Valve

Operating Torque:	1 – 2 in. lbs.
Ball Material:	316 Stainless Steel
Seat Material:	Carbon Graphite filled PTFE with FKM back-up O-rings
O-Ring Material:	FKM
Stem Material:	416 Stainless Steel
Operating Temperature:	-40°F to 185°F (-40°C to 85°C)
Storage Temperature:	-67°F to 221°F (-55°C to 105°C)
Body Pressure:	150 psi at 70°F (QD and Push-to-Connect) 300 psi at 70°F (MNPT Fittings)
Pressure Differential:	150 psi at 70°F



Available 2-Way Zip Valves

Part Number	Valve Size	Connection Type	Electrical Connector Type	CV Value*
NAZC28-1CEBS-D01	3/8" - SP	QD Fork Connection	Deutsch	6.4 GPM [29.4 LPM]
NPZC28-1CEBS-D01	3/8" - SP	3/8" Push-to-Connect	Deutsch	1.1 GPM [5.0 LPM]
NQZC28-1CEBS-D01	3/8" - SP	1/2" Push-to-Connect	Deutsch	3.8 GPM [17.7 LPM]
NAZC28-1CEBS-R01	3/8" - SP	QD Fork Connection	M12 Single	6.5 GPM [29.4 LPM]
NPZC28-1CEBS-R01	3/8" - SP	3/8" Push-to-Connect	M12 Single	1.1 GPM [5.0 LPM]
NQZC28-1CEBS-R01	3/8" - SP	1/2" Push-to-Connect	M12 Single	3.8 GPM [17.7 LPM]

FP = Full Port

SP = Standard Port

* Cv value at 1 psi drop, water

Reference page 15 for EH8 Actuator series options.

OPTIONAL MOUNTING BRACKETS FOR ZIPVALVE



BASE BRACKET

(OPTIONS AVAILABLE FOR 1/4" AND 3/8")
KIT PART # 511-0154
INCLUDES BRACKETS AND HARDWARE

- 16-gauge stainless steel
- Accepts size 1/4" – #20 bolt
- Recommend #6 hi-low fastener for plastics to attach bracket to the valve
- Valve body mounting hole is 3/8" deep
- Do not use a fastener that is longer than the mounting surface thickness plus 3/8"



NYLON BRACKET

(FITS 3/8" ONLY)
Kit Part # 511-0156
INCLUDES BRACKETS AND HARDWARE

- Nylon bracket with M6 stainless steel threaded inserts
- Connects to the 3/8" 2-way ball valve with three stainless steel screws
- Threaded inserts accept M6 x 1.0 bolt
- M6 stainless steel insert has 3/8" (10 mm) usable threads

Valves are made for actuation with the KZValve waterproof EH8 actuator series. Reference page 15 for additional actuator details.



2-Way Motorized Ball Valves

3/8" valve standard port, stainless steel ball, nylon valve body, stainless steel valve stem

Part Number	Control	Cycle Time at 90°	Voltage	Current Draw
NAZC28-1CEBS-D01	On/Off	0.2 sec.	12/24VDC	0.4 Amps
NPZC28-1CEBS-D01	On/Off	0.2 sec.	12/24VDC	0.4 Amps
NQZC28-1CEBS-D01	On/Off	0.2 sec.	12/24VDC	0.4 Amps
NAZC28-1CEBS-R01	On/Off	0.2 sec.	12/24VDC	0.4 Amps
NPZC28-1CEBS-R01	On/Off	0.2 sec.	12/24VDC	0.4 Amps

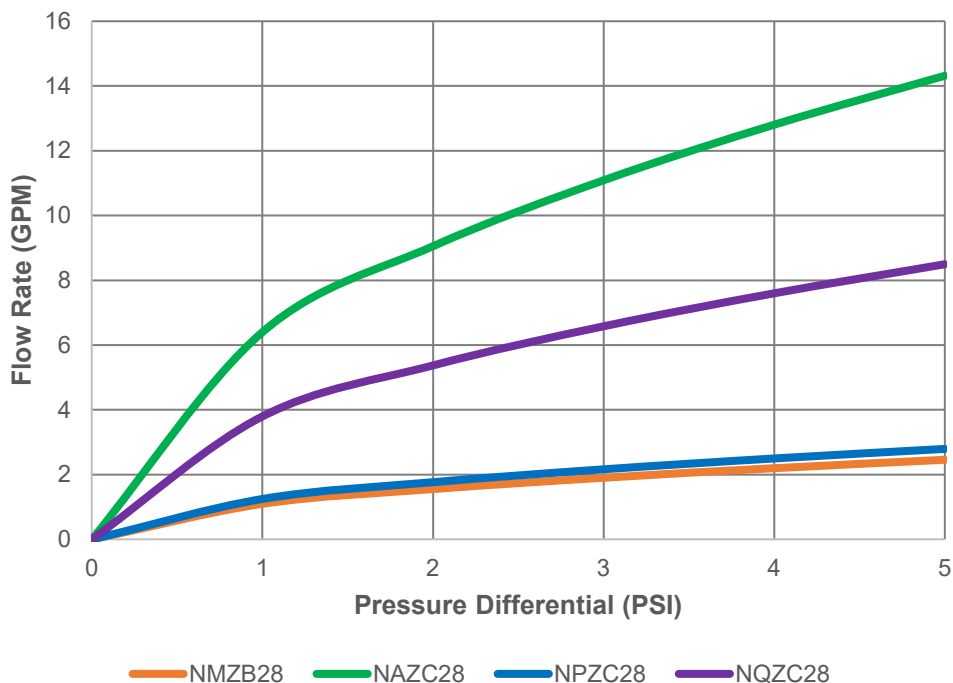
1/4" MAXIMUM DIMENSIONS



3/8" MAXIMUM DIMENSIONS



Flow Rate vs. Pressure Differential



DESIGN NOTES:

1. PART NUMBER: NAZC28-1CEBS-D01
2. KZVALVE ACTUATOR SERIES: EH8
3. ACTUATION TIME: 0.2S @ 12 VDC
4. AMBIENT OPERATING TEMP: -40°F TO 185°F (-40°C TO 85°C)
5. AMBIENT STORAGE TEMP: -67°F TO 221 °F (-55°C TO 105°C)
6. ENCLOSURE RATING: IP68 PER ISO 20653, NEMA 6P/7D PER NEMA 250
7. UP TO 90 DEG OF TOTAL TRAVEL - ROTATION TO OPEN STATE IS CLOCKWISE WHEN VIEWED FROM THE BOTTOM SIDE
8. ELECTRICAL

1. OPERATING INPUT VOLTAGE: 9-32 VDC

2. CURRENT DRAW

1. NORMAL OPERATION: 0.4 AMPS @ 12 VDC

2. CONTINUOUS (RUNNING STATE): 0.04 AMPS

3. STALL (LOCKED ROTOR): 1.8 AMPS @ 12 VDC
3. CONNECTION: 4-PIN DEUTSCH RECEPTACLE

1. PIN MATERIAL: GOLD-PLATED BRASS
4. PINOUT

1. PIN 1 - POWER IN (-)

2. PIN 2 - FEEDBACK (+) AT OPEN

3. PIN 3- SIG 1 (+) @ OPEN

4. PIN 4- POWER IN (+)

9. VALVE

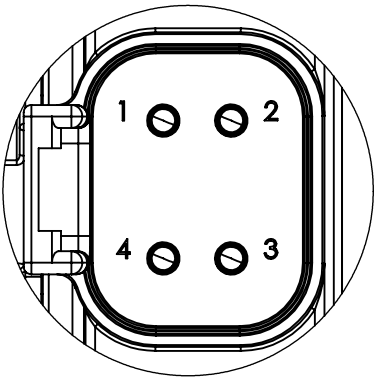
5. WETTED MATERIALS: FKM, CG REINFORCED PTFE, NYLON, 316SS

6. MAX PRESSURE DIFFERENTIAL: 150 PSI @ 70°F

7. MAX BODY PRESSURE: 300 PSI @ 70°F

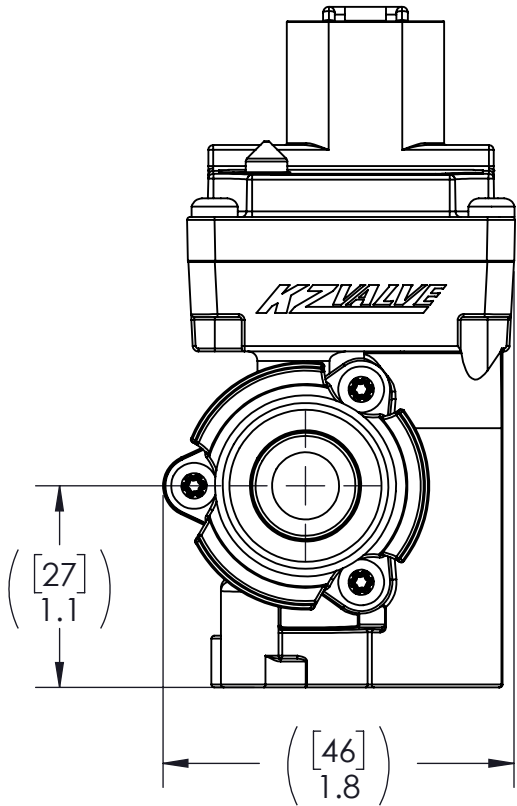
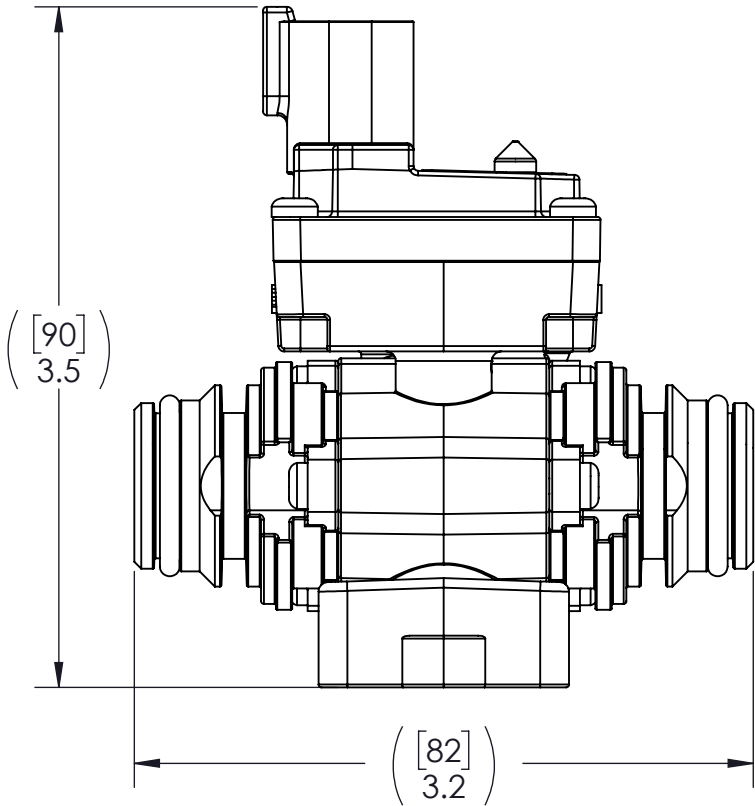
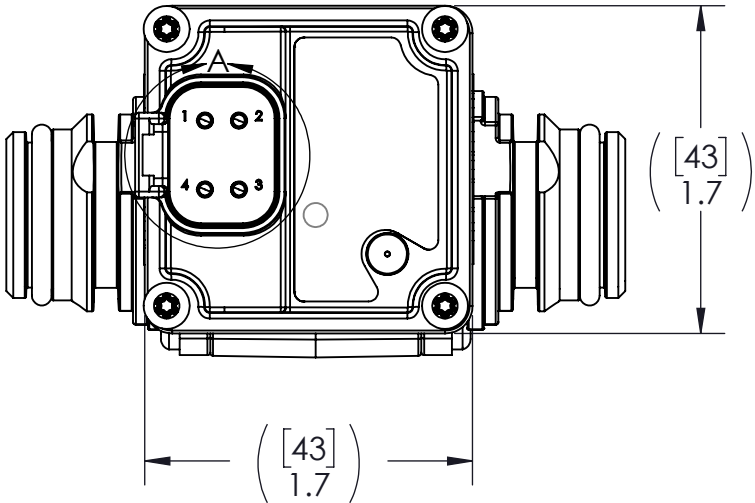
8. FLOW RATE: 5.2 GPM @ 1 PSI PRESSURE DIFFERENTIAL

9. CONNECTIONS: 2X 1/2" QD CONNECTIONS

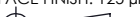


DETAIL A
SCALE 2 : 1

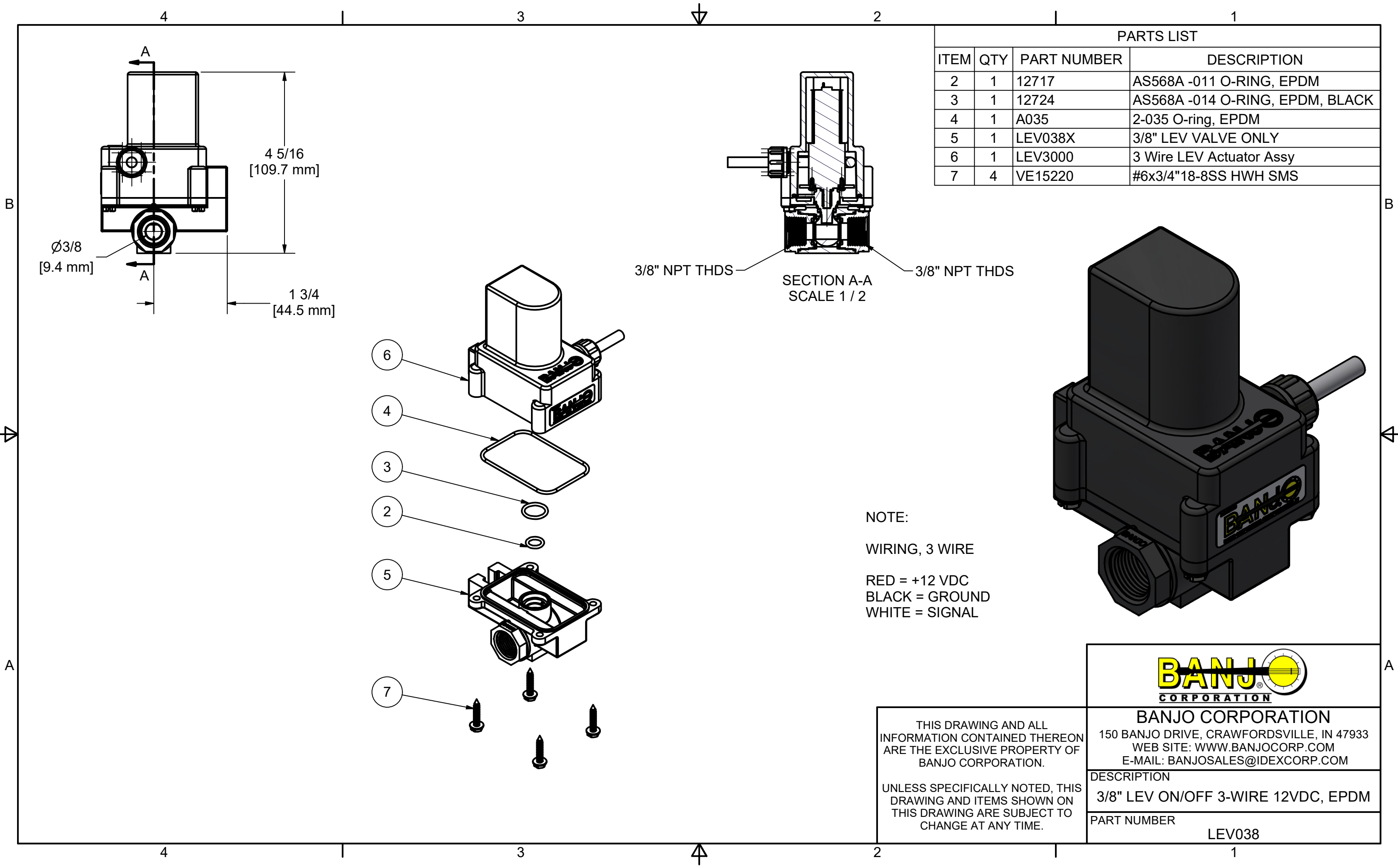
LED INDICATOR TABLE			
INDICATOR	RATE	COLOR	STATUS
SOLID	-	GREEN	CURRENTLY AT ON POSITION
SOLID	-	RED	CURRENTLY AT OFF POSITION
BLINKING	2.8 Hz	RED	FAULT/TIMEOUT



CUSTOMER REVISIONS			
REV	ECN	CHANGE	MODIFIED BY
1	24-0723	CREATED CUSTOMER SHEET	Austin Gemar
2	24-0723	ADDED LED TABLE	Austin Gemar

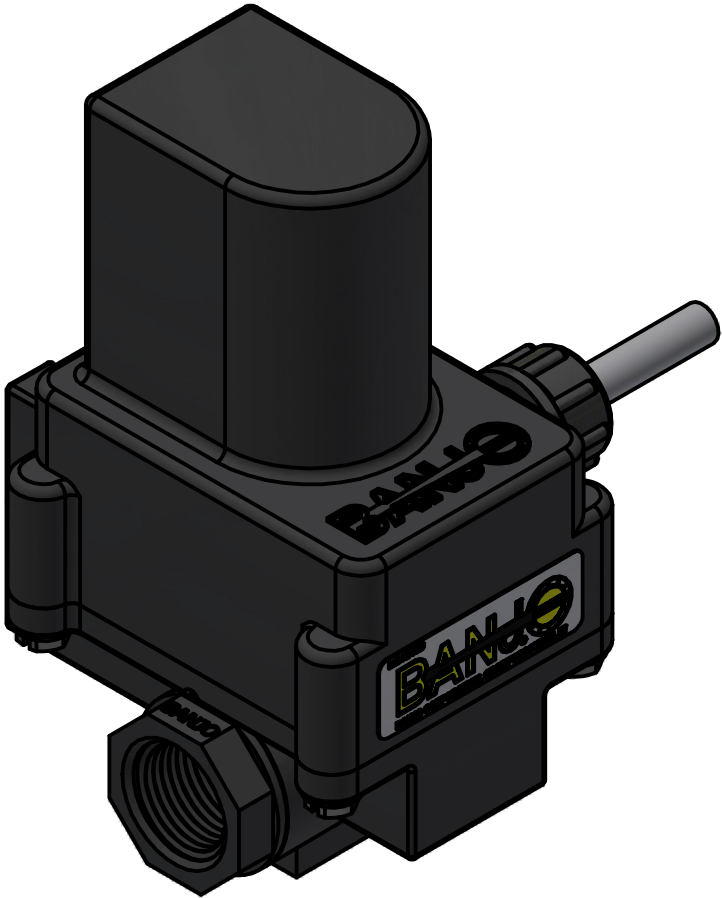
-STANDARD TOLERANCES- -ALL DIMENSIONS IN INCHES [mm]-		DESIGNED BY: Evan Schwahn		 23860 KZ PARKWAY GREENWOOD, NE 68366 USA PHONE: +1.402.944.2767 FAX: +1.402.944.2402	
.X±.1 .XX±.01 .XXX±.005 .XX°±1°	TOTAL RUNOUT: .005 FIM CORNER BREAK: .001/.010 SURFACE FINISH: 125 µIN 	DRAWN BY: Brian Pham			
		APPROVED:		TITLE: ACTUATED VALVE, EH8, 3/8" 2-WAY SS BALL, 1/2" QD, 0.2S@12/24VDC, DEUTSCH LED	
		SCALE: 1:1	SIZE: B		
DENSITY: 0.049 LBM/CU IN MASS: 0.234 LBM SURF AREA: 98.067 SQ IN VOLUME: 4.759 CU IN		MATERIAL:		PART NO: NAZC28-1CEBS-D01 REV: 6	
				DRAWING NO: NAZC28-1CEBS-D01 SHEET: 1 OF 1	

CONFORMS TO ASME
STANDARDS Y14.5-2009



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
2	1	12717	AS568A -011 O-RING, EPDM
3	1	12724	AS568A -014 O-RING, EPDM, BLACK
4	1	A035	2-035 O-ring, EPDM
5	1	LEV038X	3/8" LEV VALVE ONLY
6	1	LEV3000	3 Wire LEV Actuator Assy
7	4	VE15220	#6x3/4"18-8SS HWH SMS

NOTE:
WIRING, 3 WIRE
RED = +12 VDC
BLACK = GROUND
WHITE = SIGNAL



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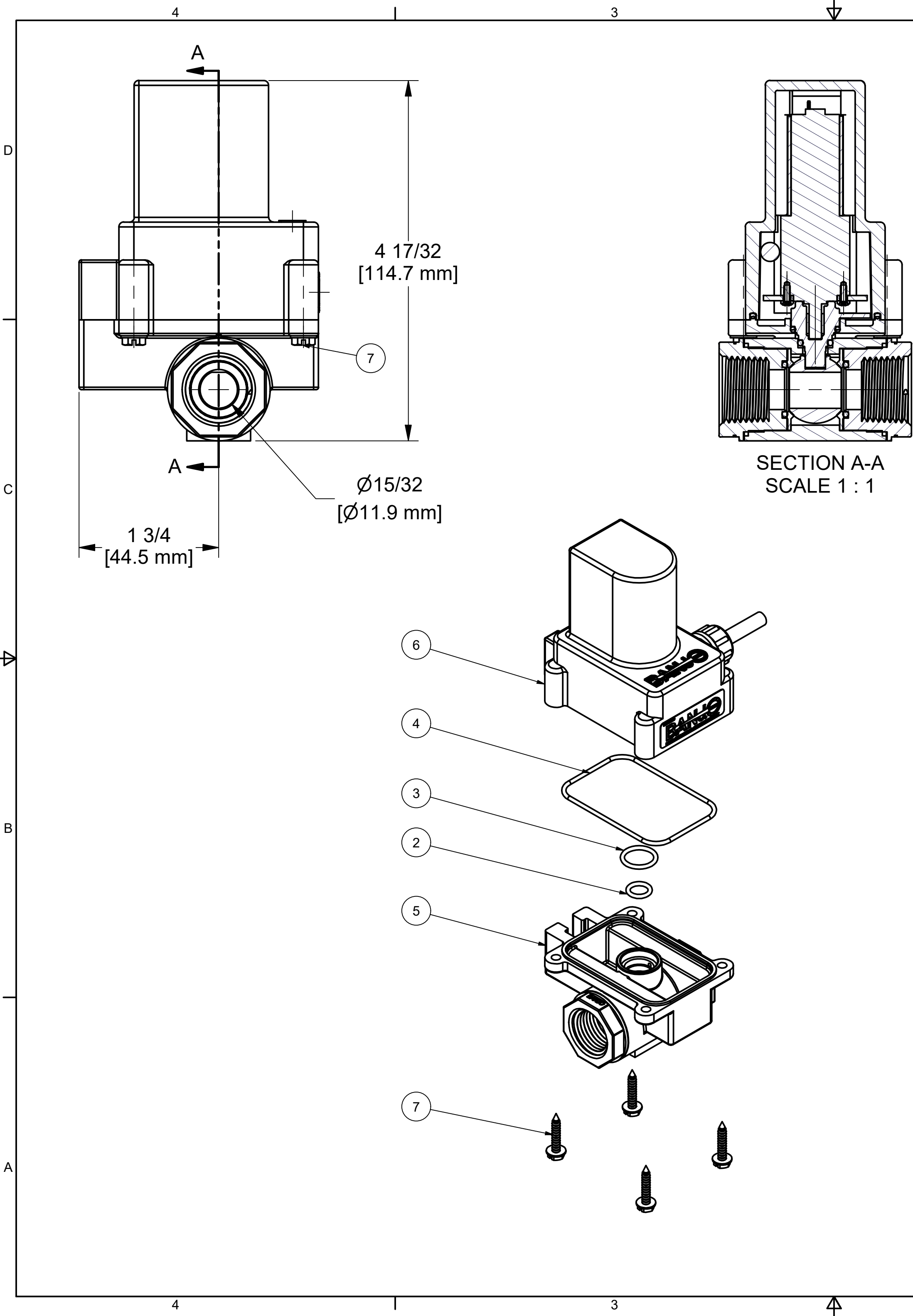
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150 BANJO DRIVE, CRAWFORDSVILLE, IN 47933
WEB SITE: WWW.BANJOCORP.COM
E-MAIL: BANJOSALES@IDEXCORP.COM

DESCRIPTION
3/8" LEV ON/OFF 3-WIRE 12VDC, EPDM

PART NUMBER
LEV038

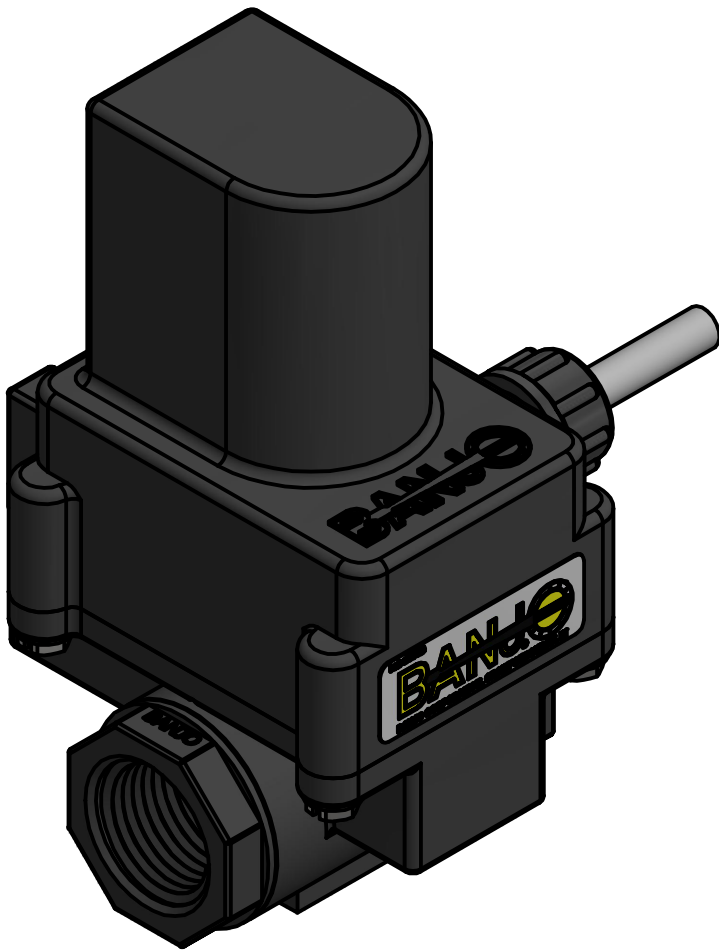


PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
2	1	12717	AS568A -011 O-RING, EPDM
3	1	12724	AS568A -014 O-RING, EPDM, BLACK
4	1	A035	2-035 O-ring, EPDM
5	1	LEV050X	1/2" LEV VALVE ONLY ASSEMBLY
6	1	LEV3000	3 Wire LEV Actuator Assy
7	4	VE15220	#6x3/4"18-8SS HWH SMS

NOTE:

WIRING, 3 WIRE

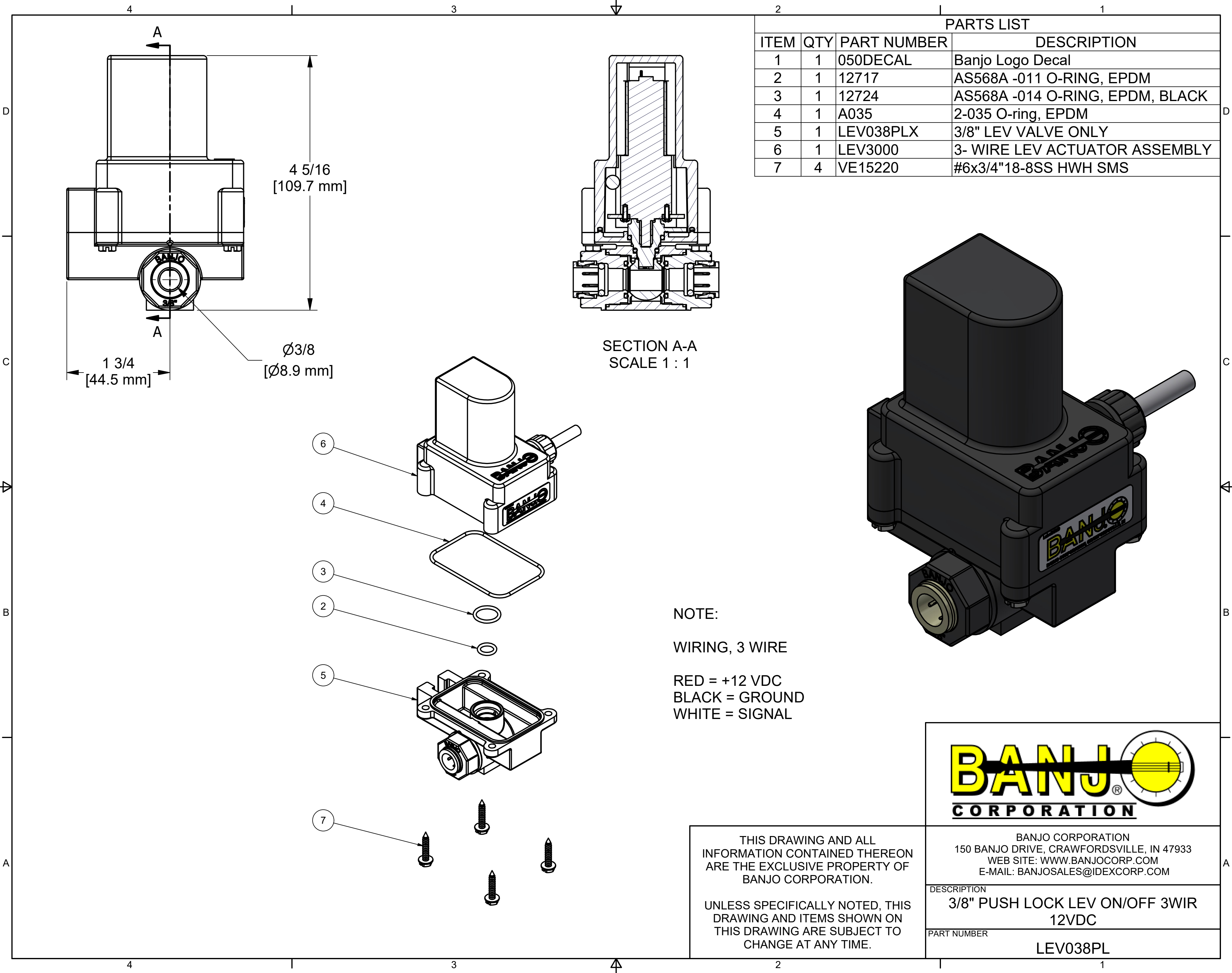
RED = +12 VDC
BLACK = GROUND
WHITE = SIGNAL



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DESCRIPTION	1/2" LEV ON/OFF 3 WIRE 12VDC EPDM
PART NUMBER	LEV050



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	050DECAL	Banjo Logo Decal
2	1	12717	AS568A -011 O-RING, EPDM
3	1	12724	AS568A -014 O-RING, EPDM, BLACK
4	1	A035	2-035 O-ring, EPDM
5	1	LEV038PLX	3/8" LEV VALVE ONLY
6	1	LEV3000	3- WIRE LEV ACTUATOR ASSEMBLY
7	4	VE15220	#6x3/4"18-8SS HWH SMS

NOTE:

WIRING, 3 WIRE

RED = +12 VDC
BLACK = GROUND
WHITE = SIGNAL



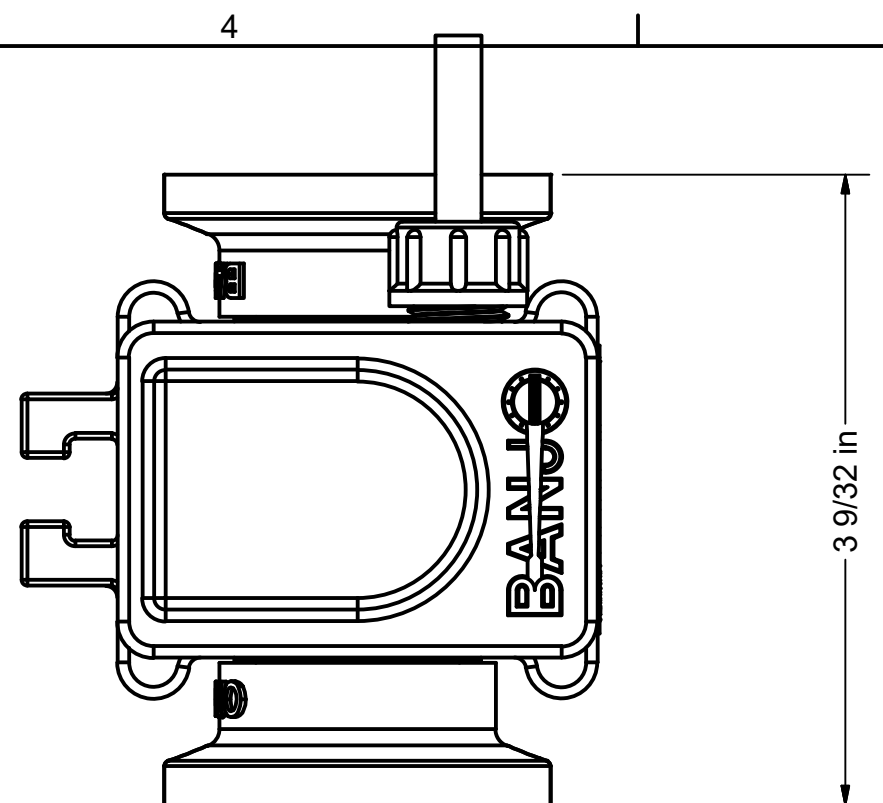
BANJO CORPORATION
150 BANJO DRIVE, CRAWFORDSVILLE, IN 47933
WEB SITE: WWW.BANJOCORP.COM
E-MAIL: BANJOSALES@IDEXCORP.COM

DESCRIPTION
3/8" PUSH LOCK LEV ON/OFF 3WIR
12VDC

PART NUMBER
LEV038PL

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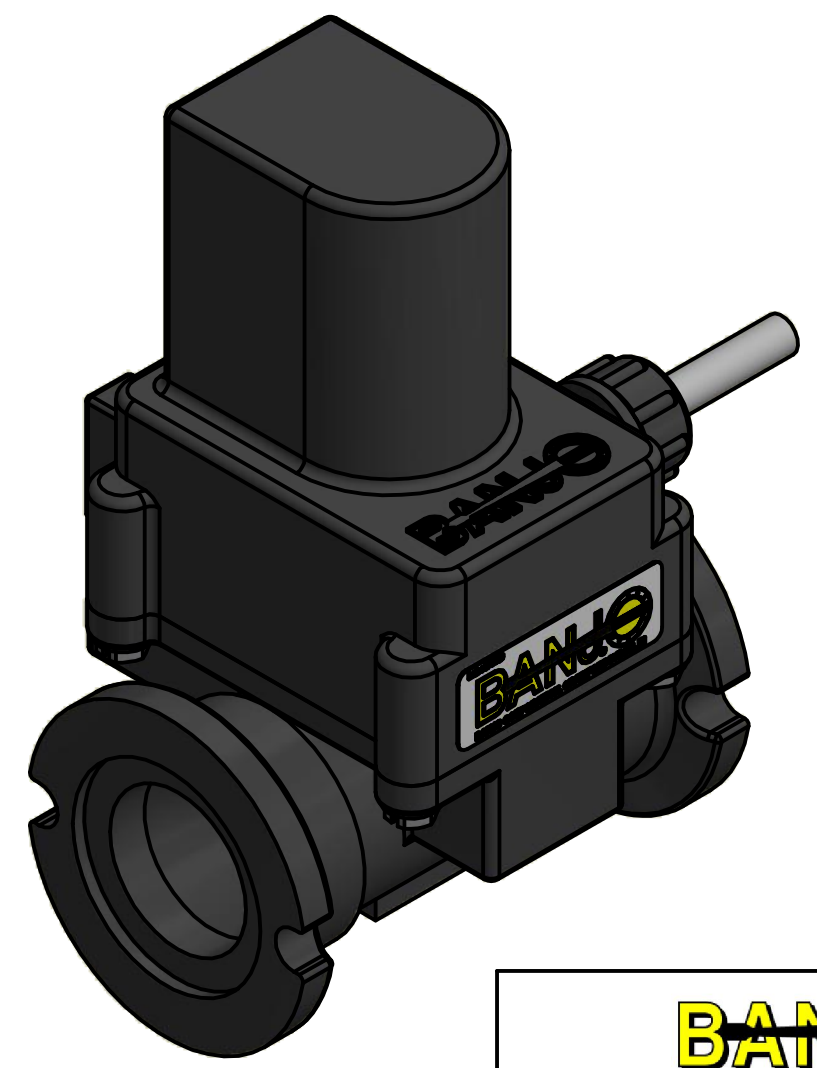
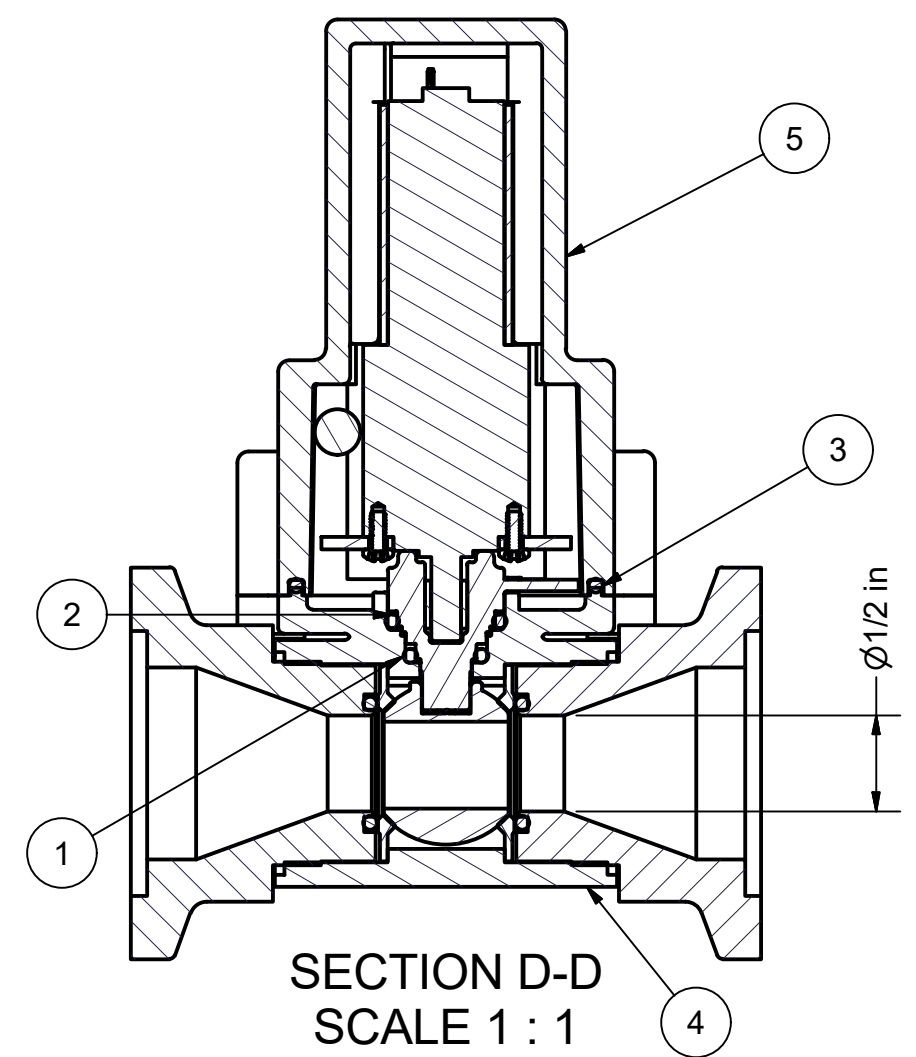
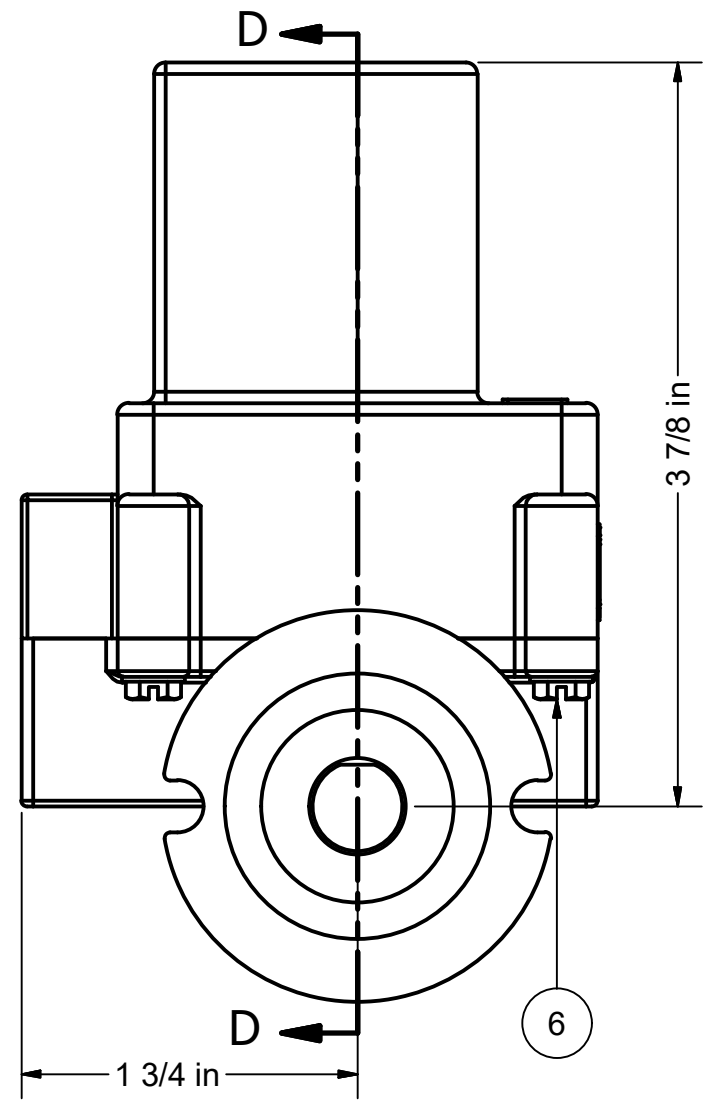


Note:

Wiring, 3 Wire

Red = +12 VDC
Black = Ground
White = Signal

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	12717	#11 O'RING, EPDM
2	1	12724	#14 O'RING
3	1	A035	2-035 O-ring, EPDM
4	1	MLEV100X	1/2" MLEV w/ M100 Valve Only Assy
5	1	LEV3000	3 Wire LEV Actuator Assy
6	4	VE15220	#6x3/4"18-8SS HWH SMS
7	1	050DECAL	Banjo Logo Decal



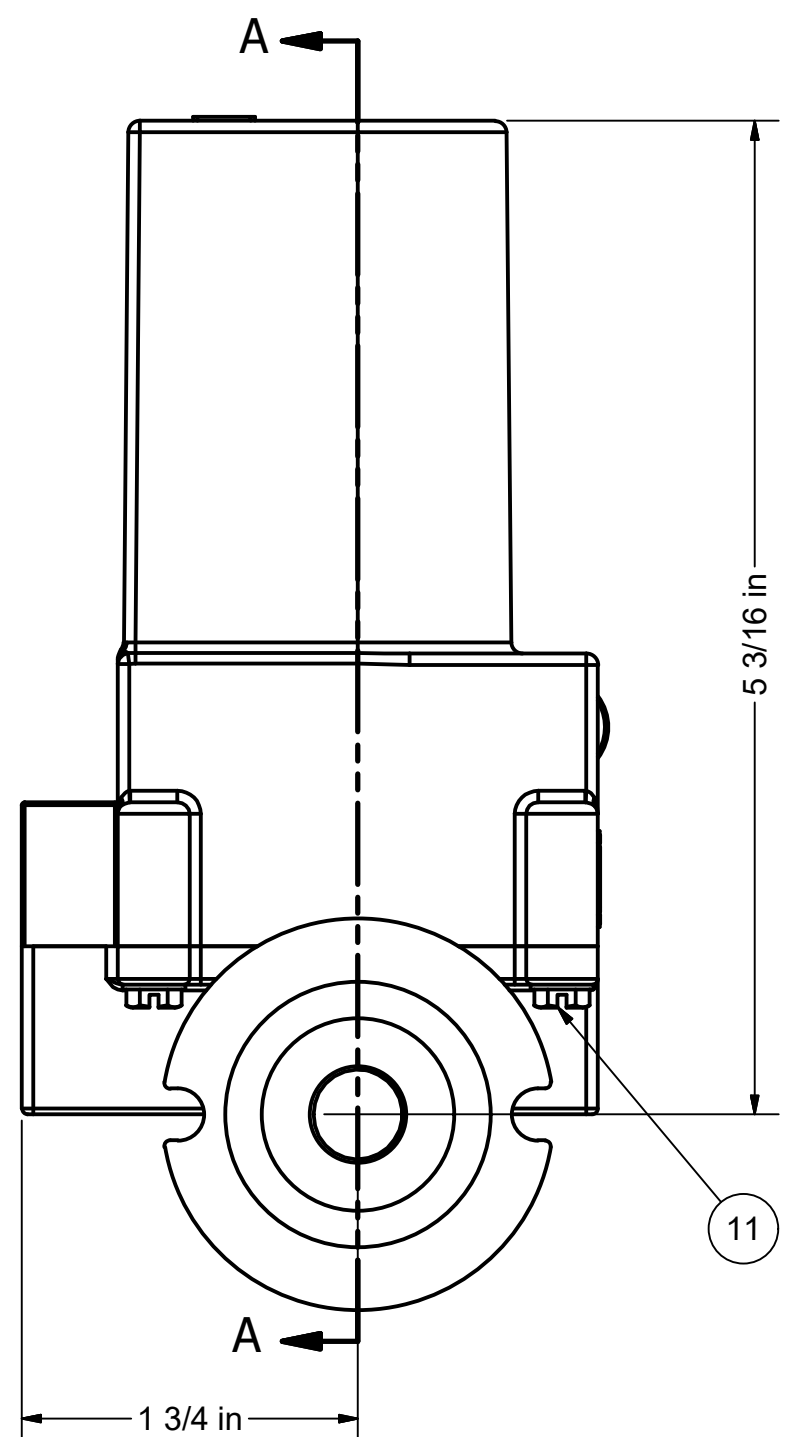
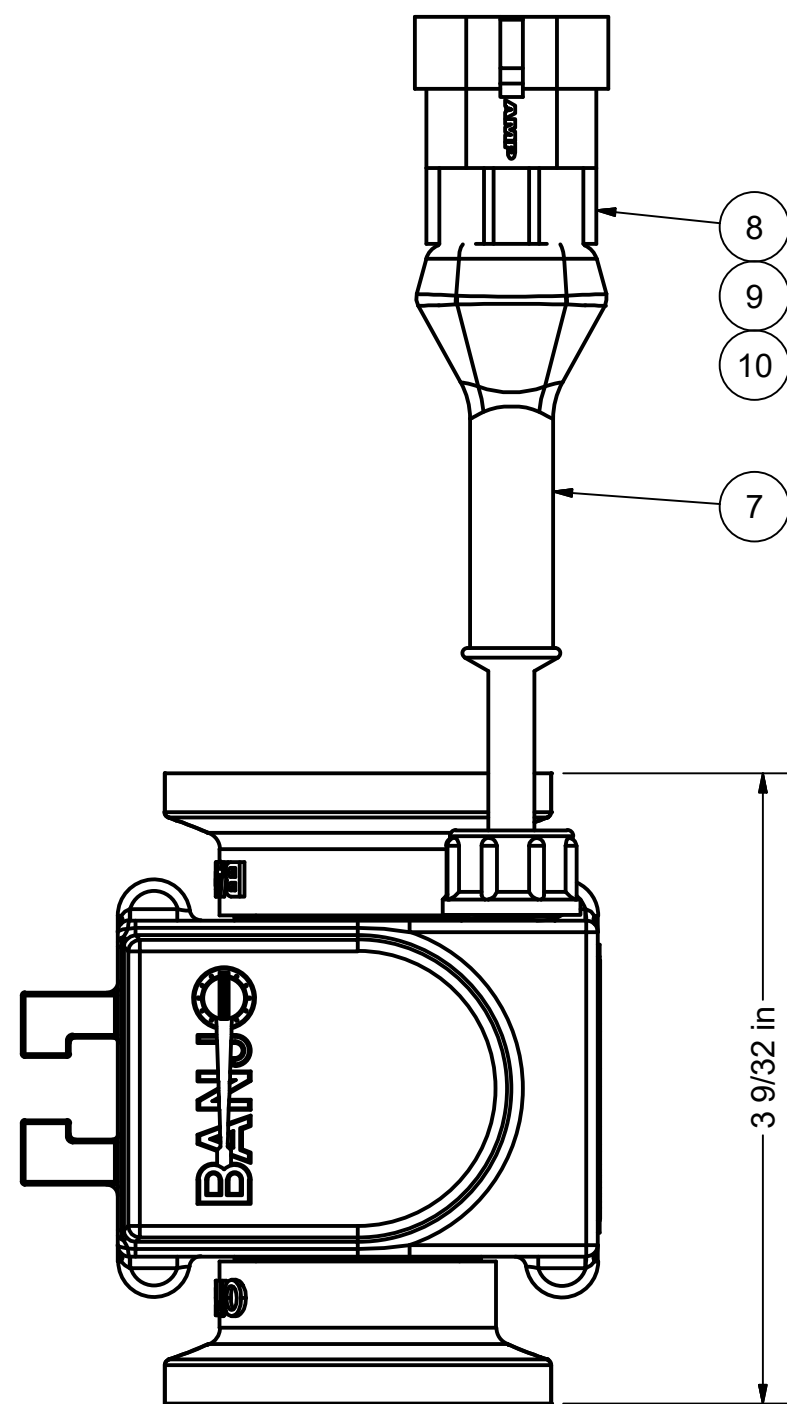
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WEB SITE: WWW.BANJOCORP.COM
E-MAIL: SALES1@BANJOCORP.COM

DESCRIPTION	1/2" MLEV w/ M100 Valve, 3 Wire
PART NUMBER	MLEV100

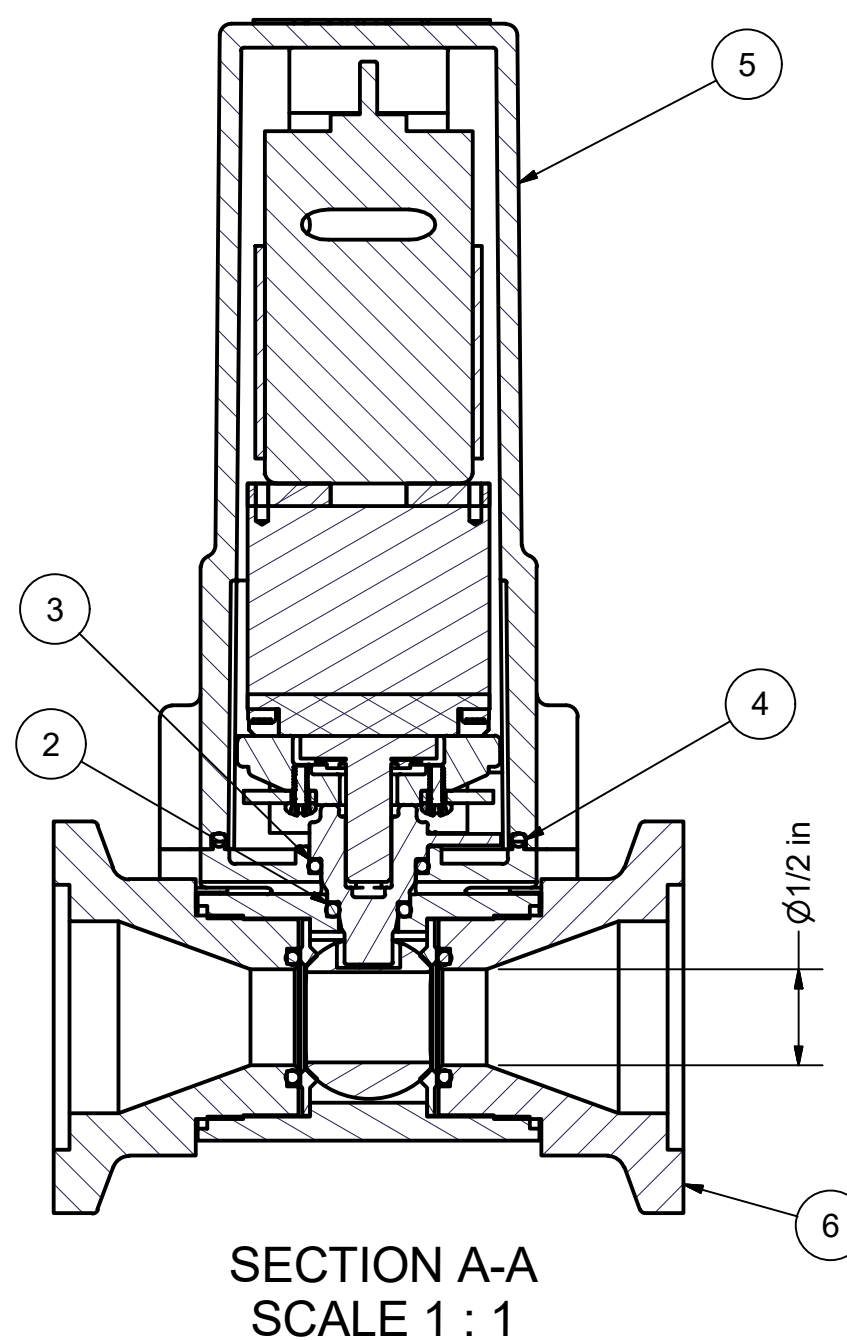


NOTE:

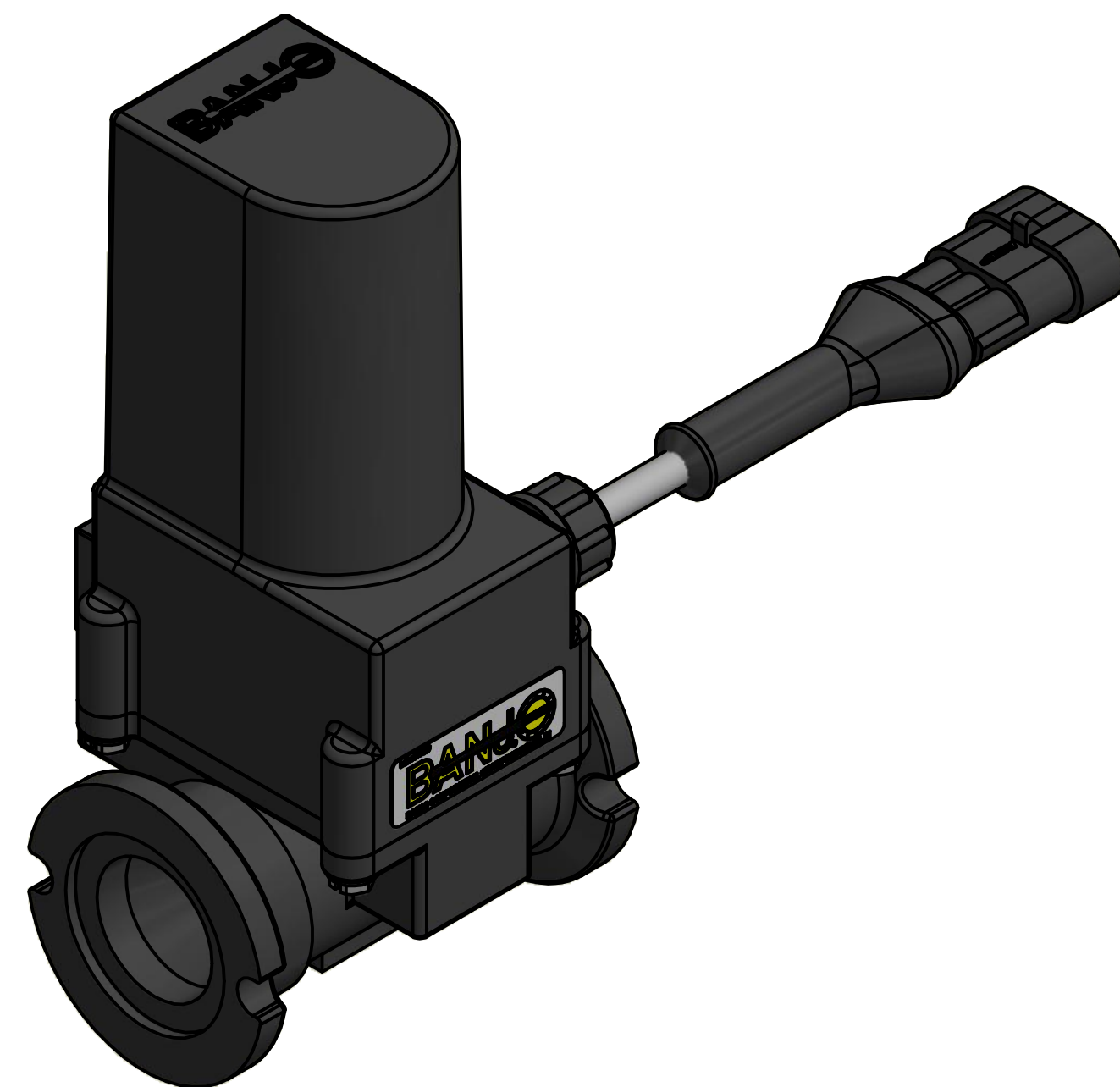
PIN OUT / WIRING, 3 WIRE

PIN 1 = BLACK = GROUND
 PIN 2 = RED = +12 VDC
 PIN 3 = WHITE = SIGNAL

WIRE LENGTH = 18" (450 mm)



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	050DECAL	Banjo Logo Decal
2	1	12717	#11 O'RING, EPDM
3	1	12724	#14 O'RING
4	1	A035	2-035 O-ring, EPDM
5	1	LEV4000	1/3 SEC 3 WIRE LEV ACTUATOR
6	1	MLEV100AX	1/2" MLEV w/ M100 Valve Only Assy, SS Ball
7	1	VE024	AMP RUBBER BOOT 880811-2
8	1	VE025	AMP 3 PIN TAB CONNECTOR 282105-1
9	3	VE026	AMP MINI MIC TAB 183024-1
10	3	VE027	AMP SINGLE WIRE SEAL 281934-2
11	4	VE15220	#6x3/4"18-8SS HWH SMS



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 WEB SITE: WWW.BANJOCORP.COM
 E-MAIL: SALES1@BANJOCORP.COM

DESCRIPTION
 1/2" MLEV w/ M100 Valve, 3 Wire, SS Ball

PART NUMBER
 MLEV100A

Banjo LEV Valve Wiring Diagram

