



## Banjo Electric Ball Valves

### Electric On/Off Motors



PART#	DESCRIPTION	Size Valve
EV3305	3/4 Second, 3 Wire, 4 pin Weather Pack	3/4" - 1 1/4"
EV4305	1 1/4 Second, 3 Wire, 4 pin Weather Pack	1 1/2" - 2"

### 2-Way Valve Bodies



EV100XR1



MEV100XR1

PART#	DESCRIPTION
EV100XR1	1" Threaded EV Sub-Assembly
MEV100XR1	M100 Flanged EV Sub-Assembly

### Electric On/Off Assemblies



PART#	DESCRIPTION
EV100FP	3/4 Second, 3 Wire, 1" Full Port Threaded Valve
MEV100FP	1 1/4 Second, 3 Wire, 1" Full Port Flange Valve
EV204FP	1 1/4 Second, 3 Wire, 2" Full Port Threaded Valve

## WeatherPack Connectors

### Tower Connector Housings



PART#	Outlets
75010	1
75014	2
75018	3
75022	4
75044	4 square
75026	6

### Shroud Connector Housings



PART#	Outlets
75012	1
75016	2
75020	3
75024	4
75046	4 square
75028	6

### Cable Seals



PART#	Gauge	Color
75000	22-20	Purple
75002	20-18	Green
75004	16-14	Gray
75006	12	Blue
75042	Cavity Seal	Green

### WeatherPack Terminals



PART#	Gauge	Terminal
75030	20-18	Male
75032	20-18	Female
75034	16-14	Male
75036	16-14	Female
75038	12	Male
75040	12	Female





# OVA Carries EXCLUSIVE 2 Year Warranty on KZ Valves

## Electric Valve Actuators

### EH2 Actuator

- Mid-size Motorized Valve Actuator
- Valve Sizes: 3/4" to 3"
- 12/24 VDC and 24 VAC Available
- 5 Cycle Time Options
- Max Break Away Torque: 300 in/lb.
- Max Operating Torque: 205 in/lb.
- NEMA 6P Actuator Housing

MOTOR	12 VDC	24 VDC	24 VAC
U	7 Sec.	4 Sec.	4 Sec.
V	NA	.75 Sec.	.75 Sec.
W	3 Sec.	1.5 Sec.	1.5 Sec.
Y	1.5 Sec.	NA	NA
Z	.5 Sec.	NA	NA



VALVE TYPE	WIRING OPTIONS		MOTOR	CONNECTOR [*]
20D Control (Actuator Only)	20DU0-*F1	Standard, Control Only	U - 7 Sec.	C - Raven Conxall
	20DW0-*F1	Fast/Fast Close, Control & On/Off	W - 3 Sec.	P - Weather Pak
	20DY0-*F1	Fast/Fast Close, Control & On/Off	Y - 1.5 Sec.	
10D On/Off (Actuator Only)	10DY0-*F1	On/Off Only	Y - 1.5 Sec.	

### EH3 Actuator

- Compact Motorized Valve Actuator
- Valve Sizes: 1/4" to 1"
- 12/24 VDC and 24 VAC Available
- 5 Cycle Time Options
- 3 Position Capability Optional
- Max Break Away Torque: 110 in/lb.
- Max Operating Torque: 80 in/lb.
- NEMA 6P Actuator Housing

VALVE TYPE	WIRING OPTIONS		MOTOR	CONNECTOR [*]
10D On/Off (Actuator Only)	10D20-*01	On/Off Only	2 - .8 Sec.	C - Raven Conxall
				P - Weather Pak



MOTOR	12 VDC
2	.8 Sec.
N	1.5 Sec.
P	2.5 Sec.
Q	7 Sec.
O	12 Sec.

### EH7 Actuator

- Sub-Compact Motorized Valve Actuator
- Valve Sizes: 1/2"
- 12 VDC
- 2 Cycle Time Options
- 3 Position Capability Optional
- NEMA 6P Actuator Housing

VALVE TYPE	WIRING OPTIONS		MOTOR	CONNECTOR [*]
20D Control (Actuator Only)	20DJ0-*	Standard, Control Only	J - 7 Sec.	131 - Weather Pak
10D On/Off (Actuator Only)	10DK0-*	On/Off Only	K - .8 Sec.	C01 - Raven Conxall



MOTOR	12 VDC
K	.5 Sec.
J	7 Sec.

**OVA carries direct replacement regulating and shut off valves for:**

- ◆ John Deere
- ◆ Spra-Coupe
- ◆ RoGator
- ◆ Willmar
- ◆ Hagie

**& other manufacturers. Please contact OVA for details.**



**KZGO**<sup>TM</sup>  
 inc.

**OVA Carries EXCLUSIVE 2 Year Warranty on KZ Valves**

## 5 Series 1" Stainless Steel Ammonia Valves

### Design Features:

- Vented, 2-Way SS Ammonia Ball Valves
- Valve Body: CF8M SS
- Ball: 316 SS (Vented)
- Stem: 316 SS with EPDM O-Ring
- Seat: ME-PTFE
- Stem Packing: Adjustable ME-PTFE



VALVE	SIZE	PORT TYPE	CV	ACTUATOR
F	1"	Full	24	EH2, EH3

MOTOR & VALVE ASSEMBLY	VALVE SIZE	MOTOR TYPE	SPEED	NOTES
S8F33-10D20-C01	1"	On/Off	0.8 Sec	Raven Conxall
S8F33-10D20-P01	1"	On/Off	0.8 Sec	Weather Pack

## 67 Series Stainless Steel Ammonia Valves

### Design Features:

- Vented, 2-Way SS Ammonia Ball Valves
- Max PSI 2000
- Valve Body: CF8M SS
- Ball: 316 SS (Vented)
- Stem: 316 SS with EPDM O-Ring
- Seat: ME-PTFE
- Stem Packing: Adjustable ME-PTFE
- Direct replacement for Raven actuators



VALVE	SIZE	PORT TYPE	CV	ACTUATOR
B	1/4"	Full	8.4	EH3
D	1/2"	Full	15	EH3
E	3/4"	Standard	30	EH2, EH3
G	1 1/4"	Standard	48	EH2
H	1 1/2"	Standard	84	EH2
I	2"	Standard	108	EH2

### Raven Conxall Plug

MOTOR & VALVE ASSEMBLY	VALVE SIZE	MOTOR TYPE	SPEED	EH2 ACTUATOR
67GKR-ONOFF	1 1/4"	On/Off	1.5 Sec	10DY0-CF1
67GKR-FC	1 1/4"	Regulating "Fast"	1.5 Sec	20DY0-CF1
67GKR-FC8	1 1/4"	Regulating "Std"	8 Sec	20DU0-CF1

### Weather Pack Plug

MOTOR & VALVE ASSEMBLY	VALVE SIZE	MOTOR TYPE	SPEED	NOTES
67G22-10DY0-PF1	1 1/4"	On/Off	1.5 Sec	-
67G22-20DW0-PF1	1 1/4"	Regulating "Fast"	3.5 Sec	-
67G22-2MDW0-PF1	1 1/4"	Regulating "Fast"	3.5 Sec	CCS100
67HQ2-20DW0-P01	1 1/2"	Regulating "Fast"	3.5 Sec	V-Cut Ball

\*3 Pin Male Weather Pack for On/Off Motors

\*6 Pin Male Weather Pack for Regulating motors

## Actuator Retrofit Kits for Raven NH3 Valves

### Design Features:

- NEMA 6P rated waterproof
- Solid-state components
- Conxall plug
- Direct replacement for Raven actuators
- Retrofit kits allow KZValve actuators to be used with common RAVEN systems valves

\*Valves shown for illustrative purposes  
valves not included



Eliminator Valve



Raven Clincher Valve



Jamesbury Clincher Valve

(KR-KIT shown on 3 generations of NH3 valves)



ON/OFF  
Valve Connector



Control  
Valve Connector

### Actuator Retrofit Kits for Raven 1" & 1 1/4" NH3 Valves

PART#	MOTOR TYPE	SPEED	EH2 ACTUATOR
KR-ONOFF	On/Off	1.5 Sec	10DY0-CF1
KR-FC	Regulating "Fast"	1.5 Sec	20DY0-CF1
KR-FC8	Regulating "Std"	8.0 Sec	20DU0-CF1

Includes part# KR-KIT, mounting kit to attach KZ motors to Raven valves

### Actuator Retrofit Kits for Raven 1 1/2" NH3 Valves

PART#	MOTOR TYPE	SPEED	EH2 ACTUATOR
KR-15ONOFF	On/Off	1.5 Sec	10DY0-CF1
KR-15FC8	Regulating "Std"	8.0 Sec	20DU0-CF1

Includes mounting kit to attach KZ motors to Raven valves



## TX2 1/2" Polypropylene Valve Manifold

### Design Features:

- 2-way, 3-way, or metered bypass
- Full port w/ SS Ball & Valve Stem
- 150 PSI at 70°F
- .5 sec cycle time
- On/Off



MOTOR & VALVE ASSEMBLY	VALVE SIZE	# OF VALVES
21CA7-10DK0-131	1/2"	1
22CA7-10DK0-131	1/2"	2
23CA7-10DK0-131	1/2"	3
24CA7-10DK0-131	1/2"	4

\*3 Pin Female Weather Pack for On/Off Motors

## QD Fittings For TX2 & Zip Valves



PART#	FEMALE HOSE BARBS
511-0012	3/4" Straight Hose Barb x Female QD
511-0013	1" Straight Hose Barb x Female QD



PART#	90° HOSE BARBS
511-0014	3/4" 90° Hose Barb x Female QD
511-0015	1" 90° Hose Barb x Female QD



PART#	FNPT
511-0016	3/4" FPT x Female QD



PART#	BLANK CAPS
511-0010	Female QD End Cap
511-0011	Male QD End Cap



PART#	ADDITIONAL ACCESSORIES
511-0023	1/2" ID Tee Fitting, Female QD x Female QD x Male QD (use to build manifolds)
211-0239	M100 Flange x Female QD
106-0018	Hairpin Retainer
511-0017	Metered Bypass Assembly



## Valves



### Plunger Style On/Off Valve

PART#	SPEED	INLET MANIFOLD	OUTLET	CV	PSI	PLUG
063-0171-926	0.75 sec	M200	M100 & 3/4" FPT	18	175	3 pin Weather Pack
063-0172-868	0.8 sec	M220	M200	40	175	3 pin Deutsch



### Fast Hydraulic Control Valve

- Available in 3, 8, 16, 25, and 40 GPM models

30 GPM (2 pin) 063-0173-164



### Butterfly Control Valves

RAVEN PART#	MICRO-TRAK PART#	SPEED	SIZE	CV	PSI	PLUG
063-0172-125	16129-MT	9 sec	M100 & 1" FPT	13	175	2 pin Trailer
063-0171-894	16130-MT	9 sec	M200 & 1 1/2" FPT	26	200	2 pin Trailer
063-0173-446	16149-MT	9 sec	M200 & 1 1/2" FPT	26	200	2 pin Deutsch



### PWM Hydraulic Control Valve

- 3000 PSI pressure rating
- 60-115 Hz recommended pulse frequency
- Available in 5, 10, 15 and 30 GPM models
- PWM Control

30 GPM (2pin) 063-0171-846



## TeeJet Electric Valves

### 1" 2-Way Shutoff Ball Valve 32 GPM

344BE-24-C (Reverse Polarity)  
344BEC-24-C (Positively Switched)



- 25 RPM, 0.6 second shutoff fully open to close
- Flexible inlet/outlets provide quick simple plumbing for a single valve
- 2-Way valves allow complete shutoff while 3-Way valves divert flow to a bypass line when boom controls are shut off



### 3/4" 3-Way Shutoff/Bypass Valve 24 GPM

344BE-33-C (Reverse Polarity)  
344BEC-33-C (Positively Switched)

- Stainless steel stem with optional polypropylene or stainless steel ball
- Maximum pressure rating is 300 psi.
- 5 PSI Pressure Drop

### Electronic Bypass Control Valves

- The three-way solenoid-operated DirectoValve control valve bypasses boom flow to maintain constant spraying pressure when one or more boom sections are shut off
- For pressures to 65 PSI; 8 GPM flow at only 5 PSI pressure drop
- 2.5 amp current draw
- Encapsulated 12 VDC coil can be changed without removing valve from line
- Chemical Resistant Body and Internal Components



AA144A-1-3

### 100 PSI Electric Solenoid Valve

- For Pressures up to 100 PSI
- 10 GPM flow with only 5 PSI pressure drop
- 2.5 amp current draw
- Polypropylene body for chemical resistance
- Fabric reinforced diaphragms
- Also available as 2- or 3-unit assembly



AA144A-1

### Electric Butterfly Valve

The AA244C remote control electric regulation valve has been specifically designed to provide remote pressure control in agricultural applications using DirectoValve solenoid shutoff valves.

- Unrestricted flow when wide open
- 5 psi pressure loss for 28.4 gpm flow
- Bypass flow rate: 2 gpm at 10 psi
- Maximum operating pressure of 100 psi
- Two-wire lead for use in 12 VDC system
- 3/4" (F) NPT or BSPT connections
- Good corrosion resistance
- 20 second response time



21773-244C-3/4

### 2-Way Shutoff Manifold Valve

- 25 RPM, 0.6 second shutoff fully open to close
- Flexible inlet/outlet connections
- Stainless steel stem
- Maximum pressure rating of 200 psi
- Flow rate of 32 gpm with 5 psi pressure drop



56608-32-451-BEC-2NFS

3 wire w/4pin shroud (Apache)



# Flow Meters




## Raven Connectivity

Part #	Flow Meter	Flow Rate	Material	Fittings	Pinning
063-0172-058	RFM 15	0.3-15 GPM	Poly	M200 Flanged/ 1-1/2" NPT	3 Pin Conxall
01980-P	FM270 LF	.5-15 GPM	Poly	M200 Flanged	3 Pin Conxall
063-0171-985	RFM 60P	1-60 GPM	Poly	M200 Flanged/ 1-1/2" NPT	3 Pin Conxall
01577-P	FM270	3.5-70 GPM	Poly	M200 Flanged	3 Pin Conxall
063-0172-457	RFM 60P	1.5-60 GPM	Poly	M200 Flanged/ 1-1/2" NPT	3 pin Deutsch
063-0173-867	RFM 60S (NH3)	1-60 GPM	Stainless Steel	1-1/2" NPT	3 Pin Conxall
02029	FM1500 LF (NH3)	3.5-70 GPM	Stainless Steel	1-1/2" NPT	3 Pin Conxall
063-0173-578	RFM 100	5-100 GPM	Poly	M220 Flanged/ 2" NPT	3 Pin Conxall
01578-P	FM10/100	10-100 GPM	Poly	M200 Flanged	3 Pin Conxall
063-0173-579	RFM 200P	15-200 GPM	Poly	M300 Flanged/ 3" NPT	3 Pin Conxall



## Micro-Trak Connectivity (3 Pin Metro Pack)

Part #	Flow Meter	Flow Rate	Material	Fittings
01898-P	FM270 LF	.5-15 GPM	Poly	M200 Flanged
01501	FM750 GFN	2-40 GPM	Poly	3/4" FPT
01515-P	FM270	3.5-70 GPM	Poly	M200 Flanged



## Sensors



Raven Flow Meter  
Sensors

Part #	Description
063-0172-458	3-Pin Deutsch DTM HP (Inline)
063-0172-447	3-Pin Deutsch DT HP (Triangular)
063-0171-669	3-Pin Conxall
063-0172-004	3-Pin Conxall HP
063-0173-855	3-Pin Metri-Pack (JD Sprayers)



Micro-Trak Flow Meter  
Sensors

Part #	Description
13096	3-Pin Metro Pack (Micro-Trak)
17442	3-Pin Conxall (Raven)



Granular Encoders

Part #	Description
063-0171-071	180 CPR, 50 RPM Max
063-0171-114	36 CPR
063-0171-443	180 CPR, 25'
063-0171-786	360 CPR, 3 Pin WP
46436150051	180 CPR, 18"



Pressure Transducers

Part #	Description
422-0000-090	1/4" SS MPT 0-250 psi
TD6828	1/4" SS MPT 0-250 psi
AKSCP-030	1/4" SS MPT 0-100 psi

\*Same connections but wired differently



Spinner Encoders

Part #	Description
117-0159-575	Sensor w/ Mount, 3 pin WP
063-0171-277	Sensor, 3 pin WP
16-05000	Sensor Only, 3 pin MetroPak
45-05114	20' Cable, 3 pin MetroPak to 3 pin WP
16-05004	Sensor & Cable, 3 pin WP



Gear Sensors

Part #	Description
063-0172-443	Gear Tooth Speed Sensor
063-0159-881	DJ Shaft Sensor Adapter (Amp)
063-0159-997	DJ Shaft Sensor Adapter (WP)
063-0159-981	Rawson Gear Tooth Sensor (Conxall)

