

PRODUCT LINEUP VALVE ACTUATORS

Electric Valve Actuators
EXH SERIES

Electric Valve Actuators
EXS SERIES

Electric Valve Actuators
EXC SERIES

Electric Valve Actuators
EA SERIES

Pneumatic Valve Actuators
F SERIES

Pneumatic Valve Actuators
B SERIES

Pneumatic Valve Actuators
C SERIES

KITZ Electric Actuators

EXH SERIES



Features

Electric motor operated quarter turn actuator for ball valves.
 Quick operating time suitable for On-Off usage.
 High durability planetary reduction gear.
 High visibility position indicator.
 Manual override with interlocking switch for safe operation.
 No voltage position feed back switches.
 ISO 5211 bottom mount.
 Best fit Kitz process ball valve SCTBZ/UTBZ series.

Available options

Additional auxiliary switches.
 Feed back potentiometer (135 Ohm or 500 Ohm).

Type EXH actuator design specifications

Actuator size		Size 1	Size 2	Size 3	Size 4	
Actuator type		EXH***-1	EXH***-2	EXH***-3	EXH***-4	
Power supply	50Hz	AC 115V(+5% to -10%) • AC230V(±10%) • AC240V(+5% to -10%)				
	60Hz	AC 115V(+5% to -10%) • AC120V(+5% to -10%) • AC230V(+5% to -10%) • AC240V(+5% to -10%)				
Rated current(A)*1	50Hz	AC115V	0.6	0.6	0.95	2.4
		AC230/240V	0.3	0.3	0.55	1.2
	60Hz	AC115/120V	0.6	0.6	0.95	2.2
		AC230/240V	0.3	0.3	0.5	1.2/1.1
90°operation time(second)*2	50Hz	9	14	21	28	
	60Hz	8	12	17	23	
Rated output torque [In-lbs]		86	434	1736	5208	
Motor output [W]	50Hz	13	13	26	72	
	60Hz	16	16	31	85	
Power consumption [W]	50Hz	AC115V	60	60	100	240
		AC230/240V	70	70	115	260
	60Hz	AC115/120V	70	70	110	250
		AC230V	60	60	100	260
		AC240V	65	65	105	260
Overload protection		Built-in thermal protector (Activated at 248°F)				
Rotating direction		Counterclockwise to open/Clockwise to close (Viewed from top)				
Duty factor		Maximum 30%ED at 20°C				
Limit switch*3		2 each for opening / closing (2 position limit switches and 2 signal limit switches)				
Switch contact capacity		250V AC 11A least resistance load				
Service environment		Indoor / Outdoor (No water immersion/No exposure to sunlight)				
Water-proof/dust-proof		NEMA 4 Enclosure				
Heater capacity [W]	AC115/120V	10	10	10	20	
	AC230/240V	15	15	15	20	
Heater power consumption [W]	AC115V	3.3	3.3	3.3	5.3	
	AC120V	3.6	3.6	3.6	5.8	
	AC230V	3.8	3.8	3.8	5.3	
	AC240V	4.1	4.1	4.1	5.8	
Ambient temperature [°F]		15 to 120				
Insulation class		JIS C4003 Class E (Equivalent to UL Class A)				
Insulation strength		AC 1500V or 1 sec./AC 1800V				
Insulation resistance		100MΩ minimum / 500V DC				
Mounting orientation		Vertical to horizontal (No downward orientation)				
Lubrication		Grease				
Conduit port		1/2" NPT				
Electric wiring		M3 terminal board				
Mechanical stopper		Built-in stoppers for opening/closing(+/-7°each adjustment)				
Manual operation		Pulling up and turning a handle, while the motor is switched off with a built-in interlocking switch.				
Automated operation		Pushing down a handle to restore electric operation				
Valve mounting flange		ISO 5211				
Painting color		Metallic silver cover / Metallic dark grey case / Frosted black handle				
Actuator weight (Approx) [lbs]*4		9.7	9.7	16.1	27.1	

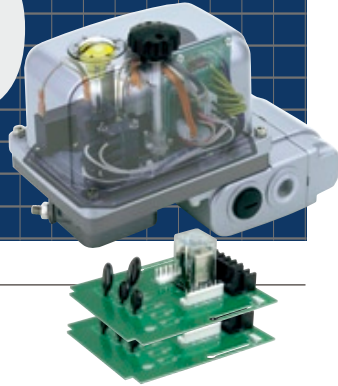
*1 At the moment of start-up operation, actuator motors are loaded with a surge of approximately ten times rated current. Switch contact capacities of all electric devices connected to actuators must be provided with a sufficient margin to absorb such a high current.

*2 Valve closing times are calculated for actuators only. Add 3% to 10% to the listed closing time for the actuators assembled with valves.

*3 If the load current is 50mA or smaller, contact Kitz Corporation for supply of optional auxiliary limit switches provided with gold contacts.

*4 Net weight of the actuator with excluding the weight of the valve.

KITZ Electric Actuators EXS SERIES



Type EXS actuator design specifications

Actuator size	Size 2		Size 3		Size 4	
Actuator type	EXS***-2		EXS***-3		EXS***-4	
Power supply	50Hz	AC 115V(+5% to -10%) • AC230V(±10%) • AC240V(+5% to -10%)				
	60Hz	AC 115V(+5% to -10%) • AC120V(+5% to -10%) • AC230V(+5% to -10%) • AC240V(+5% to -10%)				
Rated current(A)*1	50Hz	AC115V	0.6	0.95	2.4	
		AC230/240V	0.3	0.55	1.2	
	60Hz	AC115/120V	0.6	0.95	2.2	
		AC230/240V	0.3	0.5	1.2/1.1	
90°operation time(second)*2	50Hz	25	35	49		
	60Hz	21	30	41		
Rated output torque [In-lbs]		434	1736	5208		
Motor output [W]	50Hz	13	26	72		
	60Hz	16	31	85		
Power consumption [W]	50Hz	AC115V	60	100	240	
		AC230/240V	70	115	260	
	60Hz	AC115/120V	70	110	250	
		AC230V	60	100	260	
		AC240V	65	105	260	
Overload protection	Built-in thermal protector (Activated at 248°F)					
Rotating direction	Counterclockwise to open/Clockwise to close (Viewed from top)					
Duty factor	Maximum 30%ED at 20°C					
Limit switch*3	2 each for opening / closing (2 position limit switches and 2 signal limit switches)					
Switch contact capacity	250V AC 11A least resistance load					
Service environment	Indoor / Outdoor (No water immersion/No exposure to sunlight)					
Water-proof/dust-proof	NEMA 4 Enclosure					
Heater capacity [W]	AC115/120V	10	10	20		
	AC230/240V	15	15	20		
Heater power consumption [W]	AC115V	3.3	3.3	5.3		
	AC120V	3.6	3.6	5.8		
	AC230V	3.8	3.8	5.3		
	AC240V	4.1	4.1	5.8		
Ambient temperature [°F]	15 to 120					
Insulation class	JIS C4003 Class E (Equivalent to UL Class A)					
Insulation strength	Max.10mA leakage current with 1 min./AC 1500V or 1 sec./AC 1800V					
Insulation resistance	100MΩ minimum / 500V DC					
Mounting orientation	Vertical to horizontal (No downward orientation)					
Lubrication	Grease					
Conduit port	Two ½" NPT on the left side of control box (standard)					
Electric wiring	M3 terminal board					
Mechanical stopper	Built-in stopper for opening and an adjustable stopper bolt for closing					
Manual operation	Pulling up and turning a handle, while the motor is switched off with a built-in interlocking switch.					
Automated operation	Pushing down a handle to restore electric operation					
Valve mounting flange	ISO 5211					
Painting color	Metallic silver cover / Metallic dark grey case / Frosted black handle					
Actuator weight (Approx) [lbs]*4		11.3	17.6	28.7		

*1 At the moment of start-up operation, actuator motors are loaded with a surge of approximately ten times rated current. Switch contact capacities of all electric devices connected to actuators must be provided with a sufficient margin to absorb such a high current.

*2 Valve closing times are calculated for actuators only. Add 3% to 10% to the listed closing time for the actuators assembled with valves.

*3 If the load current is 50mA or smaller, contact Kitz Corporation for supply of optional auxiliary limit switches provided with gold contacts.

*4 Net weight of the actuator with excluding the weight of the valve.

Features

Electric motor operated quarter turn actuator for ball and butterfly valves.

High durability planetary gear with self locking function.

High visibility position indicator.

Manual override with interlocking switch for safety operation.

No voltage position feed back switches.

Terminal box.

ISO 5211 bottom mount.

Available options

Additional auxiliary switches.

Feed back potentiometer (135 Ohm or 500 Ohm).

Integral electric relay for 2-wire control.

Adjustable operating speed controller.

Position feed back transmitter (Out put signal 4 to 20mA DC)

KITZ Electric Actuators EXC SERIES



Features

Electric motor operated modulating quarter turn actuator for 1/4 turn valves.
 High durability planetary gear with self locking function.
 High resolution control (1/200 electric range ability).
 Linearity +/- 1.0% F.S.(without load condition).
 Hysteresis Min +/- 0.5% F.S.(Adjustable).
 Input signal:
 4 to 20 mA DC (Standard)
 0 to 5V /1 to 5V /0 to 10V /2 to 10V DC (Option)
 0 to 135 Ohm (Option)
 Precise potentiometer with non back lash gear.
 (1K Ohm)
 Action on process signal failure (selectable).
 Fully Open /Hold current position /Fully Close.
 Manual override with interlocking switch for safe operation.
 No voltage position feed back switches.
 Terminal box.
 ISO 5211 bottom mount.



Type EXC actuator design specifications

Actuator size	Size 2		Size 3		Size 4	
Actuator type	EXC***-2		EXC***-3		EXC***-4	
Power supply	50Hz	AC 115V(+5% to -10%) · AC230V(±10%) · AC240V(+5% to -10%)				
	60Hz	AC 115V(+5% to -10%) · AC120V(+5% to -10%) · AC230V(+5% to -10%) · AC240V(±10%)				
Rated current(A)*1	50Hz	AC115V	0.6	0.95	2.4	
		AC230/240V	0.3	0.55	1.2	
	60Hz	AC115/120V	0.6	0.95	2.2	
		AC230/240V	0.3	0.5	1.2/1.1	
90°operation time(second)*2	50Hz	25	35	49		
	60Hz	21	30	41		
Rated output torque [In-lbs]		434	1736	5208		
Motor output [W]	50Hz	13	26	72		
	60Hz	16	31	85		
Power consumption [W]	50Hz	AC115V	60	100	240	
		AC230/240V	70	115	260	
	60Hz	AC115/120V	70	110	250	
		AC230V	60	100	260	
	AC240V	65	105			
Overload protection	Built-in thermal protector (Activated at 248°F)					
Rotating direction	Counterclockwise to open/Clockwise to close					
Duty factor	Maximum 30%ED at 20°C					
Limit switch*3	2 each for opening / closing (2 position limit switches and 2 signal limit switches)					
Switch contact capacity	250V AC 11A least resistance load					
Service environment	Indoor / Outdoor (No water immersion/No exposure to sunlight)					
Water-proof/dust-proof	NEMA 4 Enclosure					
Heater capacity [W]	AC115/120V	10	10	20		
	AC230/240V	15	15	20		
Control of motor drive mode	Direct or Reverse. (Switchable: Shipment preset for reverse mode.)					
Input signal	DC4 to 20mA (Standard) , DC0 to 5 /1 to 5 /0 to 10 /2 to 10V , 0 to 135 Ω					
Input impedance	DC4 to 20mA : 240 Ω , DC0 to 5V /1 to 5V /0 to 135 Ω : 10k Ω , DC0 to 10V /2 to 10V : 20k Ω					
Valve opening angle signal	DC 4 to 20mA (Maximum load: 300 Ω)					
For input signal cutoff	Actuation	Full closing · Stopping · Full opening (Switchable: Preset for stopping mode for shipment)				
	Output	Warning signal by relay contact (Contact capacity: 3A DC 30V resistance load)				
Motor linearity	±1.0%F.S.(Unloaded actuator output shaft)					
Dead band	±0.5% to ±4.0% F.S. (Adjustable)					
Adjusting function	[Zero] point adjustment: 0% to +50% F.S. on reverse mode					
	Spanned adjustment: +50% to +200% F.S.					
Ambient temperature [°F]	15 to 120					
Insulation class	JIS C4003 Class E (Equivalent to UL Class A)					
Insulation strength	Max.10mA leakage current with 1 min./AC 1500V or 1 sec./AC 1800V					
Insulation resistance	100MΩ minimum / 500V DC					
Mounting orientation	Vertical to horizontal (No downward orientation)					
Lubrication	Grease					
Conduit port	Two NPT½ on the left side of control box (standard)					
Mechanical stopper	Fixed opening stopper · Adjustable closing stopper					
Manual operation	Pulling up and turning a handle, while the motor is switched off with a built-in interlocking switch.					
Automated operation	Pushing down a handle to restore electric operation					
Valve mounting flange	ISO 5211					
Painting color	Metallic silver cover / Metallic dark grey case / Frosted black handle					
Actuator weight (Approx) [lbs]*4		13.2	19.4	32.3		

*1 At the moment of start-up operation, actuator motors are loaded with a surge of approximately ten times rated current. Switch contact capacities of all electric devices connected to actuators must be provided with a sufficient margin to absorb such a high current.

*2 Valve closing times are calculated for actuators only. Add 3% to 10% to the listed closing time for the actuators assembled with valves.

*3 If the load current is 50mA or smaller, contact KITZ Corporation for supply of optional auxiliary limit switches provided with gold contacts.

*4 Net weight of the actuator with excluding the weight of the valve.

KITZ Electric Actuators EA SERIES

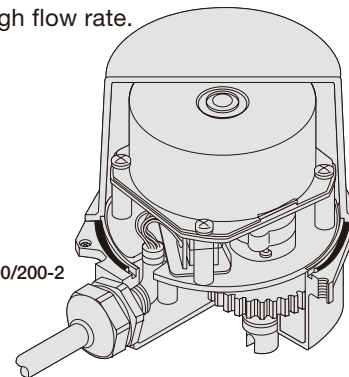


Features

Compact and light weight actuated valve.
Completely integrated assembly of valve and actuator.
Well balanced operating time to prevent water or steam hammer.
Low pressure loss and high flow rate.
Wide products range.

Available options

Integral electric relay.
Terminal Box.



Type EA100/200-2

Type EA actuator design specifications

Actuator type	EA100/120-1	EA220/240-1	EA110/120-1.5	EA220/240-1.5	EA110-2	EA120-2	EA240-2
Power supply	50Hz 110VAC 60Hz 120VAC	220VAC 240VAC	110VAC 120VAC	220VAC 240VAC	110VAC	120VAC	240VAC
Rated current (mA)	Max100	Max50	Max100	Max50	Max100	Max100	Max50
Power consumption [W]	12	12	12	12	11	12	12
90°operation time (second)	50Hz 6 60Hz 5	6 5	45 10	45 10	15 13	15 13	15 13
Rated output torque [In-lbs]	17.4	17.4	34.7	34.7	86.8	86.8	86.8
Rated time	Continuous						
Insulation class	JIS C4003 Class E (Equivalent to UL Class A)						
Switch contact capacity	250V AC 0.6A (least resistance load)				250V AC 3A (least resistance load)		
Limit switch	1 each for opening / closing						
Insulation strength	1 min./AC 1500VAC or 1 sec./AC 1800VAC						
Insulation resistance	10MΩ minimum / 500V DC						
Water-proof/dust-proof	Equivalent to IP56						
Ambient temperature [°F]	15 to 120						
Mounting orientation	Vertical to horizontal (No downward orientation)						
Wiring	Vinyl cabtyre cord with 5 cores (27.6 in long) 0.3mm ² (Equivalent to AWG22)				0.5mm ² (Equivalent to AWG20)		
Lubrication	Grease						
Overload protection	Impedance protect						
Painting color	Housing : Black Cover : Light Blue						

Compact KELMO® actuator: power sources and functional features

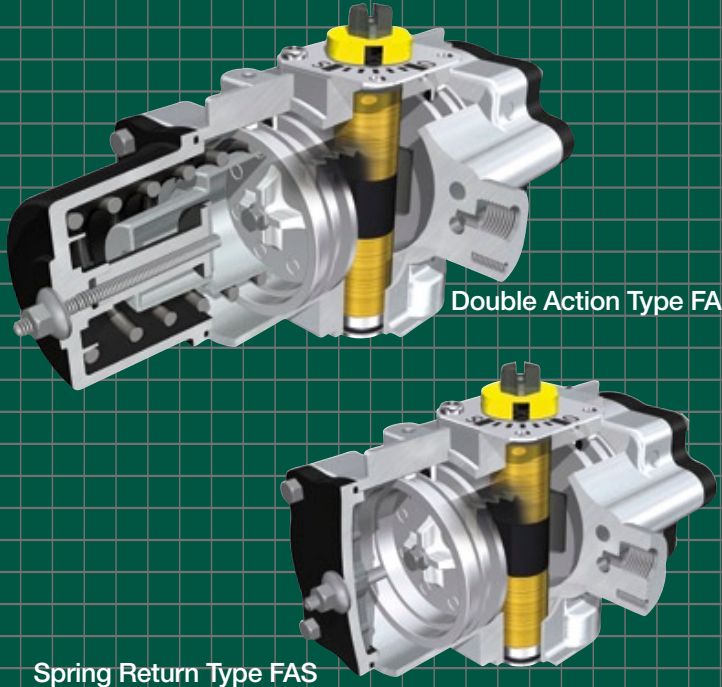
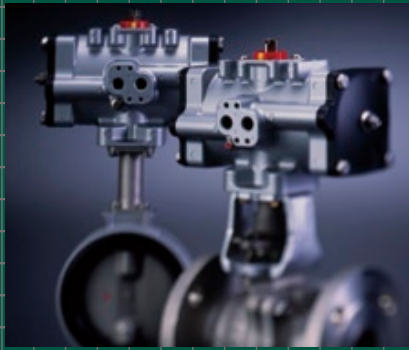
Actuator type	(H)ED12-2	(H)ED24-2	Actuator type	(H)ED12-2	(H)ED24-2
Power supply	12VDC	24VDC	Water-proof/dust-proof	NEMA 4/4X housing	
Rated current (mA)	520	260	Ambient temperature [°F]	-5 to 120	
Power consumption [W]	9	10	Mounting orientation	Vertical to horizontal (No downward orientation)	
90°operation time (second)	Approx. 5	Approx. 5	Wiring	Non-flammable cord with 4 cores (11.8 in long) AWG20 (UL AWM STYLE 2464)	
Rated output torque [In-lbs]	65.1	65.1	Lubrication	Grease	
Rated time (minute)	5	5	Overload protection	Thermistor	
Insulation class	JIS C4003 Class E (Equivalent to UL Class A)		Painting color	Housing : Black Cover : light blue	
Switch contact capacity	300V DC 5A (least resistance load)		Actuator weight (Approx) [lbs]	1.3	1.3
Limit switch	1 each for opening / closing				
Insulation strength	1 min./500VAC or 1 sec./600VAC				
Insulation resistance	10MΩ minimum / 500V DC				

Product Line Up

Type of actuator	Figure	CLASS125				
		Material	Port	Neck	End connection	Valve size range
Type C Double acting	AKTE	Bronze	2-way	Short	Threaded	3/8" to 2"
	AKTFE	Brass or Bronze	2-way	Short	Threaded	1/2" to 1 1/2"
	AKTLE	Bronze	2-way	Long	Threaded	1/2" to 2"
	AKTNE	Bronze	Horizontal 3-way	Short	Threaded	1/4" to 2"
	AKTGE	Bronze	2-way	Short	Threaded(with gland)	3/8" to 1"
	AKTUE	Bronze	2-way	Short	Male & Female threaded	1/2" & 3/4"
	AKTLUE	Bronze	2-way	Long	Male & Female threaded	1/2" & 3/4"
	AKUTE	Stainless Steel	2-way	Short	Threaded	1/4" to 2"
	AKUTFE	Stainless Steel	2-way	Short	Threaded	1/2" to 1 1/2"
	AKUTGE	Stainless Steel	2-way	Short	Threaded	1/4" to 1"
AKUTNE	Stainless Steel	Horizontal 3-way	Short	Threaded	1/4" to 2"	

KITZ Pneumatic Valve Actuators

F SERIES



Features

- High durability.
- Single rack configuration.
- Rack and Pinion mechanism are not pressurized by supply air to minimize corrosion and eliminate leakage from drive shaft.
- Unique piston and piston sealing design.
- Minimize air consumption.
- Shaft rotation 90 degree (+/- 7 degree.)
- Easy conversion between Double acting and Spring return.
- Easy conversion between Fail open and Fail close.
- Spring out proof cartridge.
- ISO 5211 bottom mount and Namur top side mount for accessories.
- All fasteners are Stainless Steel.
- Direct mount to KITZ DJ/XJ Butterfly valves.

Specifications

Operating medium	Compressed instrumentation air or nitrogen gas
Operating pressure	Standard operating pressure 60psi (0.39MPa)
Operating pressure range	45 to 100psi (0.29MPa to 0.69MPa)
Cylinder test pressure	140psi (0.97MPa)
Shaft rotation	90°±7° (Open / Closed)
Service temperature	-4°F to 176°F (Supply air should not be frozen)
Opening degree indication	Indicator has 15 degree graduation
Valve mounting flange	ISO5211
Accessory mounting	NAMUR / VDE3845

Actuator Output Torque

Double-Acting unit: In-lbs

Type	Operating pressure (air)		
	45psi	60psi	75psi
FA-1	125	166	208
FA-2	296	394	493
FA-3	597	795	991
FA-4	1186	1584	1974
FA-5	2160	2939	3602
FA-6	5204	6939	8674

Actuator weight

unit: lbs

Double-Acting	weight (approx.)	Spring return	weight (approx.)
FA-1	0.77	FAS-1	0.95
FA-2	1.3	FAS-2	1.7
FA-3	2.0	FAS-3	2.9
FA-4	3.6	FAS-4	5.8
FA-5	6.1	FAS-5	10.5
FA-6	12.7	FAS-6	22.5

Spring return unit: In-lbs

Type	Spring rating	Operating pressure (air)							
		45psi		60psi		75psi		Operating force(spring)	
		0° *1	90° *2	0° *1	90° *2	0° *1	90° *2	0° *3	90° *4
FAS-1	45psi	82	58	—	—	—	—	46	70
	60psi	—	—	103	68	—	—	67	103
	75psi	—	—	—	—	129	85	84	128
FAS-2	45psi	179	121	—	—	—	—	117	174
	60psi	—	—	237	159	—	—	157	235
	75psi	—	—	—	—	296	199	197	294
FAS-3	45psi	379	290	—	—	—	—	210	317
	60psi	—	—	474	315	—	—	311	470
	75psi	—	—	—	—	591	393	390	588
FAS-4	45psi	735	526	—	—	—	—	492	700
	60psi	—	—	974	660	—	—	658	974
	75psi	—	—	—	—	1221	825	824	1221
FAS-5	45psi	1372	965	—	—	—	—	894	1301
	60psi	—	—	1797	1221	—	—	1221	1797
	75psi	—	—	—	—	2257	1514	1514	2248
FAS-6	45psi	3133	2204	—	—	—	—	2098	3027
	60psi	—	—	4187	2885	—	—	2885	4204
	75psi	—	—	—	—	5231	3470	3487	5249

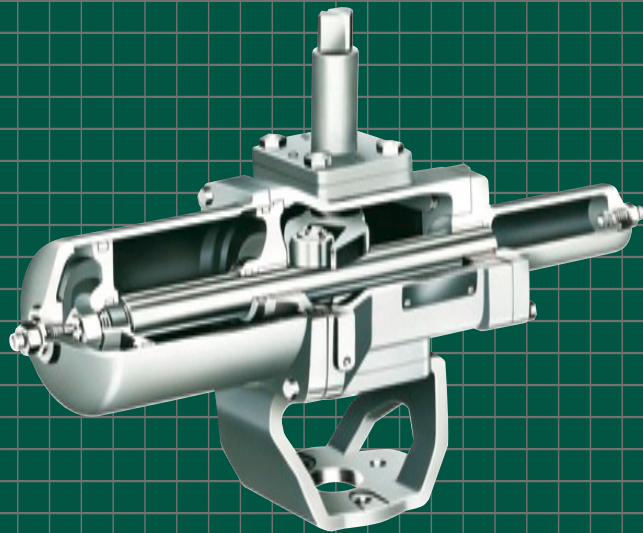
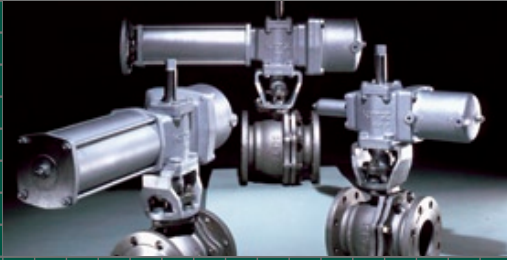
*1At starting point (close position) *2At ending point (open position)

*3At ending point (close position) *4At starting point (open position)

KITZ Pneumatic Valve Actuators

B

SERIES



Double Action Type B

Features

High durability and heavy duty design pneumatic actuator.
 Scotch & Yoke mechanism.
 Scotch & Yoke mechanism are not pressurized by supply air to minimize corrosion and eliminate leakage from drive shaft.
 Inside surface of cylinder are coated by PTFE for smooth and trouble free operation.
 Wide torque range 234 in-lbs to 81553 In-lbs.
 Namur design drive shaft top.

Specifications

Operating medium	Compressed instrumentation air
Operating pressure	Standard operating pressure 60psi (0.39MPa)
Operating pressure range	60 to 100psi (0.39MPa to 0.69MPa)
Housing test pressure	140psi (0.97MPa)
Shaft rotation	90°±5° (Open / Closed)
Rotation adjustment range	5°at each end
Service temperature range	Standard: -4°F to +140°F Option: -40°F to +140°F

Actuator Output Torque

Type	Operating pressure (air)			Type	Operating pressure (air)					
	60psi				Operating force(spring)					
Double-Acting	0°	45°	90°	Spring-Return	0°	45°	90°	0°	45°	90°
B-0	124	61	124	BS-0	146	59	93	95	60	148
B-1	322	161	322	BS-1	344	142	228	346	143	229
B-2	836	418	836	BS-2	894	371	591	885	369	587
B-3	2106	1053	2106	BS-3	2354	982	1575	2345	974	1566
B-4	5363	2682	5363	BS-4	6036	2505	4000	6062	2522	4027
B-5	13425	6708	13425	BS-5	15311	6372	10178	15311	6372	10186
B-6	32568	16284	32568	BS-6	36798	15337	25426	36736	15302	24497
B-7	81553	40772	81553	BS-7	94022	39029	62092	97120	40533	65109

Actuator weight

Double Acting weight (approx.)

unit: lbs

B-0	B-1	B-2	B-3	B-4	B-5	B-6	B-7
5.3	9.1	17.7	43.0	106	177	375	714

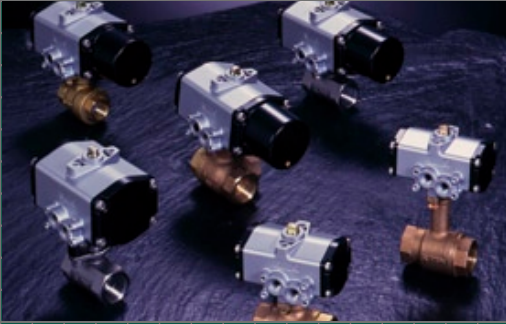
Spring return weight (approx.)

unit: lbs

BS-0	BS-1	BS-2	BS-3	BS-4	BS-5	BS-6	BS-7
9.1	16.6	38.6	97.1	183	439	809	1654

KITZ Pneumatic Valve Actuators

C SERIES



Features

Compact and light weight actuated valve.
Quick operating time suitable for On / Off usage.
Low pressure loss and high flow rate.
Rack and Pinion configuration.
Wide products range.

Available option

Direct mounting of KITZ OEM solenoid valve without any tubing work

Actuator design specifications

Type	C-1	C-2	CS-1	CS-2	FBS-1
Operating medium	Instrumentation air				
Standard operating pressure	60psi (0.39MPa)				
Operating pressure range	60psi~100psi (0.39MPa~0.69MPa)				
Output torque In-lbs	34.5	75.2	11.5	27.4	67
Cylinder pressure test	140psi (0.97MPa)				
Operating angle	90° (+5° to +1°)		90° (+5° to -5°)		
Cylinder volume(l)	0.073	0.16	0.033	0.071	0.18
Stroke time(close↔open)	Max. 1 second				
Service temperature	-4°F to +140°F				
Service condition	General purpose				

Materials : Type C & CS

Parts	ASTM
Housing	B85 -96 -383.0
Piston	B86 -96 -AG 40A
Shaft	A576 Gr.1045
Bearing	B505 C83600
Cap screw	A193 Gr.B8
Gasket	NBR
O-ring	NBR
Snap ring	A686 W1-8
Spring	A228
Spring retainer	B85 -96 -383.0
Plug	A576 Gr.1010

Product Line Up

Type of actuator	Figure	CLASS125	Material	Port	Neck	End connection	Valve size range
Type C Double acting	AKTE	Bronze	2-way	Short	Threaded	3/8" to 2"	
	AKTFE	Brass or Bronze	2-way	Short	Threaded	1/2" to 1 1/2"	
	AKTLE	Bronze	2-way	Long	Threaded	1/2" to 2"	
	AKTNE	Bronze	Horizontal 3-way	Short	Threaded	1/4" to 2"	
	AKTGE	Bronze	2-way	Short	Threaded(with gland)	3/8" to 1"	
	AKTUE	Bronze	2-way	Short	Male & Female threaded	1/2" & 3/4"	
	AKTLUE	Bronze	2-way	Long	Male & Female threaded	1/2" & 3/4"	
	AKUTE	Stainless Steel	2-way	Short	Threaded	1/4" to 2"	
	AKUTFE	Stainless Steel	2-way	Short	Threaded	1/2" to 1 1/2"	
	AKUTGE	Stainless Steel	2-way	Short	Threaded	1/4" to 1"	
	AKUTNE	Stainless Steel	Horizontal 3-way	Short	Threaded	1/4" to 2"	



CAUTION

While this catalog has been compiled with the utmost care, we assume no responsibility for errors, impropriety or inadequacy. Any information provided in this catalog is subject to from-time-to-time change without notice for error rectification, product discontinuation, design modification, new product introduction or any other cause that KITZ Corporation considers necessary. This edition cancels all previous issues.

ISO 9001 certified since 1989

KITZ

KITZ CORPORATION OF AMERICA

10750 Corporate Drive, Stafford, Texas 77477, U.S.A.
Phone: 281-491-7333 Fax: 281-491-9402

— Distributed by —

0705①PP