

ACTUATORS & DAMPERS

KELE REVOLUTION™ DIRECT COUPLED ACTUATORS NON-SPRING RETURN KA-44, KA-88, KA-175, KA-301 SERIES

DESCRIPTION

The Kele Revolution™ KA-44, KA-88, KA-175, and KA-301 Series actuators are designed and tested to provide reliable non-spring return control for dampers and valves. They are powered by 24 VAC/VDC and accept tri-state/two-position and proportional control signals.

FEATURES

- Switchable drive direction
- Service/Off switch (tri-state/two-position models)
- Auto-adapt switch (proportional models)
- Manual override
- Self-centering, reversible hub
- Adjustable mechanical rotation stops
- Dual SPDT auxiliary switches available
- 60,000 cycles nominal



KA-175-P
(KA-301 Higher torque)



KA-44-M
(KA-88 Higher torque)



COMMON SPECIFICATIONS

Supply Voltage	21-27 VAC, 50/60 Hz, 24 VDC (VAC only for KA-175-2T, KA-301-2T)	Noise	
Motor	Synchronous with magnetic clutch (2-pos, floating), Brushless DC (proportional)	-44, -88	<35 db @ 3' (1m)
Wiring Action	Enclosed terminals Switch selectable direct/reverse acting	-175, -301	<40 db @ 3' (1m)
Rotation	95° ± 3°	Resolution	
Drive Time	95 seconds @ 60Hz	2-10Vdc	150 steps
Manual Override	Disengage button	0-10Vdc	190 steps
		Life Expectancy	60,000 cycles, 1.5 million repositions
		Operating Temperature	-5° to 140°F (-20° to 60°C)
		Operating Humidity	5 to 95% RH
		Approvals	CE, CSA, plenum rated, UL File #E4436/E179109
		Warranty	5 years

INDIVIDUAL SPECIFICATIONS

Model	Torque	Supply VA	Control Signal	Input Impedance	Feedback	Auxiliary Switch
KA-44-2T	44 in-lb (5 Nm)	5.0 VA	Two-position, floating		None	None
KA-44-M	44 in-lb (5 Nm)	5.0 VA	Prop. 0/2-10 VDC, 0/4-20 mA, two-pos., floating	100 kΩ @ 0/2-10 VDC; 500Ω @ 4-20 mA	0/2-10 VDC	None
KA-88-2T	88 in-lb (10 Nm)	5.0 VA	Two-position, floating		None	None
KA-88-M	88 in-lb (10 Nm)	5.0 VA	Prop. 0/2-10 VDC, 0/4-20 mA, two-pos., floating	100 kΩ @ 0/2-10 VDC; 500Ω @ 4-20 mA	0/2-10 VDC	None
KA-175-2T	175 in-lb (20 Nm)	6.0 VA	Two-position, floating		None	SW2 accessory
KA-175-P	175 in-lb (20 Nm)	6.0 VA	Prop. 0/2-10 VDC, 0/4-20 mA	100 kΩ @ 0/2-10 VDC; 500Ω @ 4-20 mA	0/2-10 VDC	SW2 accessory
KA-301-2T	301 in-lb (34 Nm)	9.0 VA	Two-position, floating		None	SW2 accessory
KA-301-P	301 in-lb (34 Nm)	8.0 VA	Prop. 0/2-10 VDC, 0/4-20 mA	100 kΩ @ 0/2-10 VDC; 500Ω @ 4-20 mA	0/2-10 VDC	SW2 accessory

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1

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DIMENSIONS						
Model	Torque	Dimensions	Maximum Shaft Diameter	Minimum Shaft Length	Enclosure Rating	Weight
KA-44-2T	44 in-lb (5 Nm)	2.4"H x 2.6"W x 5.3"L (6.2 x 6.6 x 13.4 cm)	0.6" (1.6 cm)	1.6" (4.1 cm)	NEMA 2 (IP54)	1.0 lb (0.4 kg)
KA-44-M	44 in-lb (5 Nm)	2.4"H x 2.6"W x 5.3"L (6.2 x 6.6 x 13.4 cm)	0.6" (1.6 cm)	1.6" (4.1 cm)	NEMA 2 (IP54)	1.0 lb (0.4 kg)
KA-88-2T	88 in-lb (10 Nm)	2.4"H x 2.6"W x 5.3"L (6.2 x 6.6 x 13.4 cm)	0.6" (1.6 cm)	1.6" (4.1 cm)	NEMA 2 (IP54)	1.0 lb (0.4 kg)
KA-88-M	88 in-lb (10 Nm)	2.4"H x 2.6"W x 5.3"L (6.2 x 6.6 x 13.4 cm)	0.6" (1.6 cm)	1.6" (4.1 cm)	NEMA 2 (IP54)	1.0 lb (0.4 kg)
KA-175-2T	175 in-lb (20 Nm)	3.9"H x 3.6"W x 8.8"L (10.0 x 9.2 x 22.3 cm)	1.06 in (2.7 cm)	0.87 in (2.2 cm)	NEMA 2 (IP54)	3.2 lb (1.45 kg)
KA-175-P	175 in-lb (20 Nm)	3.9"H x 3.6"W x 8.8"L (10.0 x 9.2 x 22.3 cm)	1.06 in (2.7 cm)	0.87 in (2.2 cm)	NEMA 2 (IP54)	3.2 lb (1.45 kg)
KA-301-2T	301 in-lb (34 Nm)	3.9"H x 3.6"W x 8.8"L (10.0 x 9.2 x 22.3 cm)	1.06 in (2.7 cm)	0.87 in (2.2 cm)	NEMA 2 (IP54)	3.2 lb (1.45 kg)
KA-301-P	301 in-lb (34 Nm)	3.9"H x 3.6"W x 8.8"L (10.0 x 9.2 x 22.3 cm)	1.06 in (2.7 cm)	0.87 in (2.2 cm)	NEMA 2 (IP54)	3.2 lb (1.45 kg)

WIRING

Service used for manual adjust

KA-44-2T, KA-88-2T, KA-175-2T, KA-301-2T
Two-position Control

Service used for manual adjust

KA-44-2T, KA-88-2T, KA-44-M, KA-88-M, KA-175-2T, KA-301-2T
Floating Control

Service used for manual adjust

KA-44-M, KA-88-M, KA-175-P, KA-301-P
Proportional Control
0 or 2-10 VDC / 0 or 4-20 mA Signal
(500Ω resistor required)

SW2 Auxiliary Switch Kit

Switch ratings: Adjustable between 5 and 85 degrees, 24 VAC/VDC, 5A resistive, 3A inductive

ORDERING INFORMATION

MODEL	DESCRIPTION
KA-44-2T	Non-spring return, 44 in-lb (5 Nm), two-position or tri-state (floating) control
KA-44-M	Non-spring return, 44 in-lb (5 Nm), proportional, two-position or tri-state (floating) control
KA-88-2T	Non-spring return, 88 in-lb (10 Nm), two-position or tri-state (floating) control
KA-88-M	Non-spring return, 88 in-lb (10 Nm), proportional, two-position or tri-state (floating) control
KA-175-2T	Non-spring return, 175 in-lb (20 Nm), two-position or tri-state (floating) control
KA-175-P	Non-spring return, 175 in-lb (20 Nm), proportional
KA-301-2T	Non-spring return, 301 in-lb (34 Nm), two-position or tri-state (floating) control
KA-301-P	Non-spring return, 301 in-lb (34 Nm), proportional

	ACCESSORIES
32004254-003	Replacement shaft coupler for KA-301, MNxx34
50000407-001	Tandem mount bracket for KAS-175 actuators
50001194-001	Universal surface mount bracket with crank arm and 1/2" shaft
SW2	2X/SPDT/AUX SWITCH/KA/KAS/1000-X
ZG-R01	500Ω, 1/2W, 1% resistor