QUARTER-TURN ELECTRIC ACTUATORS

Unic & Nucom

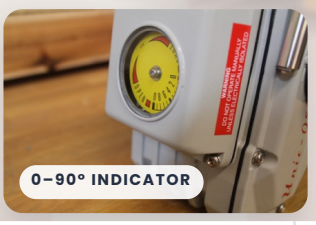
Open-close & modulating actuators

A versatile range of quarter-turn electric actuators for valves, dampers and similar applications. The final drive is by worm gear, preventing back drive and eliminating the need for a brake.

- Unic open-close types · 20 – 1470 Nm
- Nucom modulating types · 4–20 mA control
- Detachable manual handle supplied
- Male square output shaft, mostly ISO mounting



• UNIC-05 SHOWN


0–90° INDICATOR


VALVE MOUNTING

20–1470 Nm	IP65	24–230 V	-25 / +55 °C
OUTPUT TORQUE	PROTECTION	AC & DC SUPPLY	AMBIENT RANGE

The Koei range.

OPEN-CLOSE · MODULATING

Unic range

Open-close types

Torque	20 – 1470 Nm
Speed (50 Hz)	4 – 45 s / 90°
Models	Z · 05 · 10/15 · 10/30 · 20 · 40 · 60 · 100 · 150
Conduit entry	1 off G½ (½" BSP)

Four body sizes. Electric limit switches with mechanical stops for manual operation.

Nucom range

Modulating types

Torque	49 – 980 Nm
Speed (50 Hz)	15 – 30 s / 90°
Models	10NS · 10NM · 10NL (/15, /30)
Conduit entry	2 off G½ (½" BSP)

Integral encapsulated electronic positioner – resolution better than 0.4% FS with no hunting or overrun. 4–20 mA position output.

UNIC SUPPLY VOLTAGES · SINGLE PHASE

SUPPLY	UNIC Z	UNIC 05	UNIC 10	UNIC 20	UNIC 40 – 150
110 V AC 50/60 Hz	•	•	•	•	•
230 V AC 50/60 Hz	•	•	•	•	•
24 V AC 50/60 Hz	•	•	•	•	–
24 V DC	–	•	•	•	–

NUCOM SUPPLY
110 V or 230 V AC 50/60 Hz single phase

UNIC OPTIONS
Potentiometer (/POT) · Space heater (/SH) · Torque switches (/TL2)

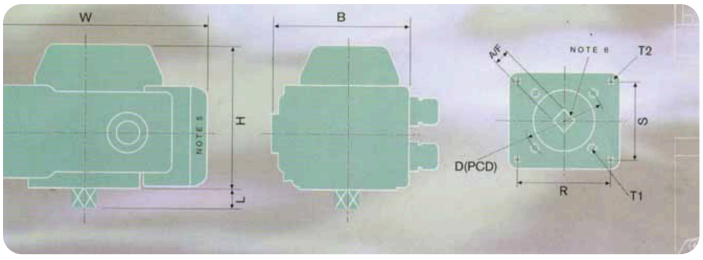
NUCOM OPTIONS
Torque switches (/TL2) – switch off the motor at preset torque

CE KOEI CE MARKED

Type specific data.

DIMENSIONS MM · SEE NOTES

Model	Torque	Speed	Power	Weight	Shaft size		Mounting					O/A dimensions		
	Nm	s/90° [1]	W	kg	A/F [2]	L	D (PCD) [3]	T1 [3]	R	S	T2	H [4]	B [4]	W [4]
UNIC RANGE · OPEN-CLOSE														
Unic Z	**20**	4	50	2	12	12	70	M8	68	60	M6	111	115	159
Unic 05	**40**	15	50	2	12	12	70	M8	68	60	M6	111	115	159
Unic 10/15	**49**	15	80	4	15	16.5	70	M8	82	70	M6	137	123	208
Unic 10/30	**98**	30	80	4	15	16.5	70	M8	82	70	M6	137	123	208
Unic 20	**196**	30	100	6.9	23	26.5	102	M10	118	84	M10	145	157	257
Unic 40	**392**	30	150	7.8	23	26.5	102	M10	118	84	M10	145	157	257
Unic 60	**588**	30	200	19.7	30	30	–	–	136	116	M12	171	242	381
Unic 100	**980**	30	250	20.5	30	30	–	–	136	116	M12	171	242	381
Unic 150	**1470**	45	250	21	30	30	–	–	136	116	M12	171	242	381
NUCOM RANGE · MODULATING														
Nucom 10NS/15	**49**	15	80	4.5	15	16.5	70	M8	82	70	M6	137	123	208
Nucom 10NS/30	**98**	30	80	4.5	15	16.5	70	M8	82	70	M6	137	123	208
Nucom 10NM/15	**196**	15	200	8.2	23	26.5	102	M10	118	84	M10	145	157	257
Nucom 10NM/30	**392**	30	200	8.2	23	26.5	102	M10	118	84	M10	145	157	257
Nucom 10NL/15	**490**	15	350	22	30	30	–	–	136	116	M12	171	242	381
Nucom 10NL/30	**980**	30	350	22	30	30	–	–	136	116	M12	171	242	381



1. Speed shown is at 50 Hz. For 60 Hz multiply by 0.83. For DC supply multiply by 0.4. Speed on DC is dependent on load and voltage.
2. Shaft tolerance: 12, 15 and 23 mm shafts +0 / -0.018 mm; 30 mm shaft +0 / -0.025 mm.
3. Four holes equi-spaced at 45° on the PCD shown. Tapped holes are 1.5 × diameter deep.
4. Dimensions are approximate only and do not include the gland projection. A detailed drawing can be supplied on request.
5. Allow sufficient room for removal of the terminal cover and for access for wiring.
6. Shaft orientation shown (at 45°) is with the actuator closed or open.

Specification.

UNIC & NUCOM

GENERAL SPECIFICATION · UNIC RANGE

Ambient temperature	-25 to +55 °C
Overload protection	Self-resetting thermal cut-out
Manual operation	By detachable handle (supplied)
Protection	IP65
End of travel	Electric operation – limit switches; manual operation – mechanical stops
Body material	Diecast aluminium alloy – ADC 12
Finish	Grey stove enamel
Shaft & exterior screws	Stainless steel
Conduit entry / gland	1 off G½ (½" BSP) · 1 off gland for cables 6.5 to 10.5 dia.
Position indicator	0 – 90° visible from above
Optional extras	/POT potentiometer, 500 ohms standard (replaces extra limits) · /SH space heater, recommended for cold or damp conditions · /TL2 torque switches

GENERAL SPECIFICATION · NUCOM RANGE

Supply voltage	110 V or 230 V AC 50/60 Hz single phase
Input signal	4–20 mA into 250 Ω
Position output signal	4–20 mA into max. resistance of 450 Ω
Direct / reverse action	Switch selectable
Signal fail (<2 mA)	Selectable to open, close or freeze
Resolution	Better than 0.4% full scale
Adjustments provided	Trimpots for span, zero and deadband
Conduit entry / gland	2 off G½ (½" BSP) · 2 off glands for cables 6.5 to 10.5 dia.
Optional extras	/TL2 torque switches – switch off motor at preset torque
Other details	All other specification details as for Unic range

Data supplied by Koei and provided for reference only. Specifications may change without notice – please confirm details with Actuation Valve & Control before ordering.

AV®

Need help specifying a Koei actuator?

Talk to our UK team about sizing, valve mounting kits and complete actuated valve packages.

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