

LINEAR ROTARY ACTUATORS | CBR/LBR/LCR SERIES

The CBR offers independent linear and rotary motion within one conventional cylinder shape.

The LBR and LCR are slim, stackable Z-theta actuators.



- ✓ Independent linear and rotary motions in one unit
- ✓ Absolute control over force/torque, position, acceleration and velocity
- ✓ Direct drive brushless servo motor
- ✓ Vacuum through shaft prevents dust accumulation

Part Number	Voltage [DC]	Size: LxWxH [mm]	Stroke [mm]	Peak Force [N]	Continuous Force [N]	Force Constant [N/A]	Maximum Current [Amp]	Moving Mass [kg]	Weight [kg]	Peak Torque* [Nm]	Rotary type	Rotary Encoder Resolution	Velocity* [rpm]
CBR100-050-35-15	48	101.5x360	50	85	34	22	4	1.6	7.2	3.9	7.67:1	2K	300
CBR100-100-35-12	48	101.5x400	100	85	34	22	4	1.7	8.5	3.9	7.67:1	2K	300
CBR100-150-35-12	48	101.5x450	150	85	34	22	4	1.8	9	3.9	7.67:1	2K	300
LBR40-050-35-3	48	335x160x40	50	100	40	40	2.5	0.9	7.2	0.45	direct	2K	2100
LCR13-025-55-2	24	155x75x13	25	7	2.8	2.5	3	0.11	0.43	0.047	direct	24K	1K
LCR13-035-15-6	24	180x75x13	35	14	5.6	9.4	1.5	0.15	0.55	0.047	direct	24K	1K
LCR13-050-15-6	24	210x75x13	50	14	5.6	9.4	1.5	0.155	0.62	0.047	direct	24K	1K
LCR16-025-55-2	24	155x75x16	25	7	2.5	2.5	3	0.11	0.5	0.047	direct	24K	1K
LCR16-035-15-6	24	180x75x16	35	14	5.6	9.4	1.5	0.15	0.65	0.047	direct	24K	1K
LCR16-050-15-6	24	210x75x16	50	14	5.6	9.4	1.5	0.155	0.75	0.047	direct	24K	1K
LCR20-025-75-2	48	155x75x20	25	25	10	7	3.6	0.095	0.65	0.047	direct	24K	1K

NOTE: For any SMAC Moving Coil Actuators, the maximum recommended continuous duty current is 600mA supplied to the actuator over a 1 second period. For anything beyond this in terms of current draw or time please consult the factory. We manufacture actuators to suit our customers' requirements. Please call us if you do not find the right actuator in this list.



Options & Modifications (Consult factory for availability)

- Linear encoder resolutions ----- 5µm standard. 1µm optional.
- Shaft ends ----- Male, Female, Blank and Custom (check availability of custom option).
- Return spring ----- Prevents the shaft from dropping during vertical operation when power is cut.
- Vacuum ----- For pick and place applications.
- Extended nose bushing ----- For tighter shaft run-out and higher side load onto the shaft.
- Increase of force & acceleration ----- 48 volt coil and double coil options are available for some units with 24 volt single coil.
- Increase of torque/gear ratio ----- Alternative geared motors are available for some units.
- Rotary encoder resolution ----- Consult factory for higher resolution.
- Increase of force accuracy/lifetime ----- Low-friction linear guide/extra-long preload linear guide.
- M12 connector ----- Option available with CBR series

LINEAR ROTARY ACTUATORS | LAR SERIES

The precision Z-theta motion within one small actuator, providing a convenient pick, orient and place.



- ✓ Soft-Land™ function and precise force/torque control
- ✓ Precision positioning
- ✓ Vacuum built-in through the shaft

Part Number	Voltage [DC]	Size: LxWxH [mm]	Stroke [mm]	Peak Force [N]	Continuous Force [N]	Force Constant [N/A]	Maximum Current [Amp]	Moving Mass [kg]	Weight [kg]	Peak Torque* [Nm]	Rotary Type	Rotary Encoder Resolution	Velocity* [rpm]
LAR31-030-55-1	24	140x80x34,7	30	11	4,4	7	1,5	0,19	0,84	0,06		40960	2000
LAR31-050-15-6	24	78,8x175x36,4	50	20	8	8,5	3,5	0,25	1	0,06		40960	2000
LAR35-025-55-1	24	190x90x35	25	12	4,8	7,5	1,6	0,32	1,55	0,085	direct	20K	75 - 5000
LAR35-050-55-1	24	190x90x35	50	10	4	7	1,6	0,29	1,4	0,085		20K	500 - 5000
LAR51-058-35-6	48	180x95,6x54	58	41	16,4	11,5	6	0,35	2,1	0,14		40960	2000
LAR55-050-55-1	24	250x110x55	50	25	10	19	1,6	0,5	3,1	0,2 - 2,5		2K - 28K	500 - 5000
LAR55-050-75-1	48	250x110x55	50	40	16	27	1,8	0,31	2,8	0,2 - 2,5		2K - 28K	500 - 5000
LAR55-100-55-1	24	250x110x55	100	16	6,4	13	1,6	0,5	3,85	0,2 - 2,5		2K - 28K	500 - 5000
LAR55-100-75-1	48	250x110x55	100	25	10	13	2	0,5	3,85	0,2 - 2,5	direct or gear box	2K - 28K	500 - 5000
LAR95-015-75-1	48	304x115x90	15	84	33	53	1,7	0,9	3,5	0,2 - 4,5		2K - 132K	75 - 5000
LAR95-050-75-1	48	304x115x90	50	65	26	41	1,7	0,93	4,2	0,2 - 4,5		2K	75 - 5000
LAR300-050-75-2	48	284x160x85	50	202	80	86	3	1	9,5	0,2 - 4,5		2K - 132K	75 - 5000
LAR300-100-75-1	48	291x160x85	100	80	32	43	4	1,69	10,7	0,2 - 4,5		2K - 132K	75 - 5000

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Options & Modifications (Consult factory for availability)

- Linear encoder resolutions ----- 5µm standard. 1µm and 0.1µm optional for most units. Consult factory for availability.
- Shaft ends ----- Male, Female, Blank and Custom (check availability of custom option).
- Return spring ----- Prevents the shaft from dropping during vertical operation when power is cut.
- Vacuum ----- For pick and place applications.
- Extended nose bushing ----- For tighter shaft run-out and higher side load onto the shaft.
- Increase of force & acceleration ----- 48 volt coil and double coil options are available for some units with 24 volt single coil.
- Increase of torque/gear ratio ----- Alternative geared motors are available for some units.
- Rotary encoder resolution ----- Consult factory for higher resolution.
- Increase of force accuracy/lifetime ----- Low-friction linear guide/extra-long preload linear guide.

*Peak Torque and Velocity can vary based on your specific application.