

# 42DBL Series Linear Actuators (non captive)

## Features:

- Linear force up to 103 N
- Radial Ball bearings
- Max pull in rate: 300 steps/sec
- Operating temperature -20° to 70°C

## Options:

- Custom operating force
- Custom travel
- Other supply voltages

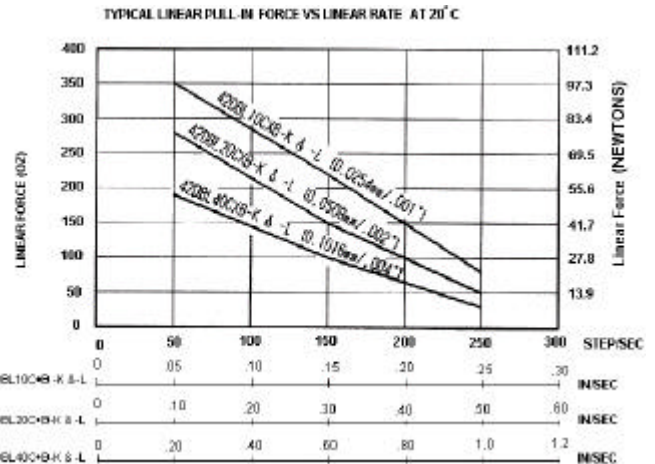
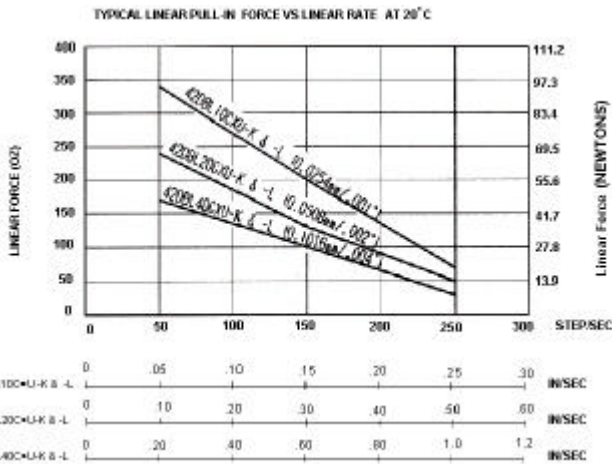


## Motor data

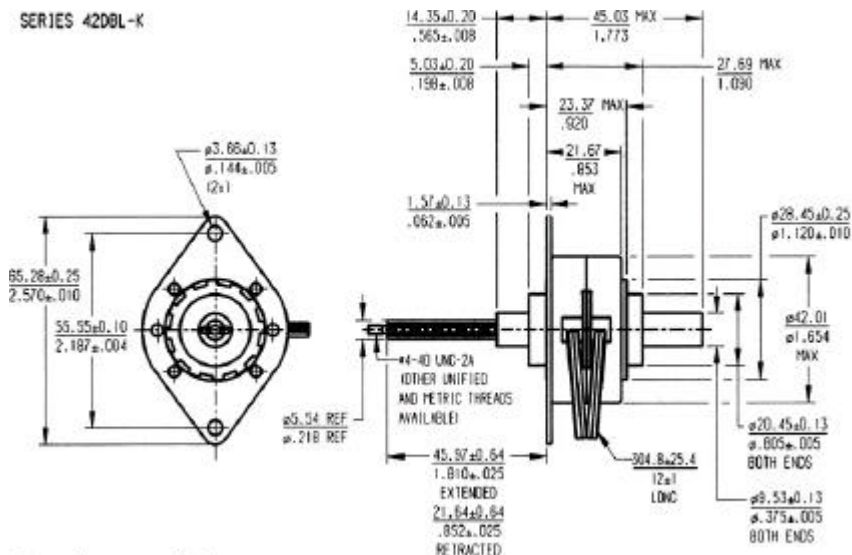
Motor order number	Operating voltage	Maximum travel	Linear travel per step	Maximum force*	Unenergized force	Coil resistance	Coil inductance	Drive electronics
1723-DBL10C1UK	5 V	24.1 mm	.001" (0.025 mm)	100.0 N	111.2 N	5 Ohm	3.7 mH	Unipolar
1723-DBL10C2UK	12 V	24.1 mm	.001" (0.025 mm)	100.0 N	111.2 N	28.8 Ohm	19.7 mH	Unipolar
1723-DBL20C1UK	5 V	24.1 mm	.002" (0.050 mm)	72.3 N	83.4 N	5 Ohm	3.7 mH	Unipolar
1723-DBL20C2UK	12 V	24.1 mm	.002" (0.050 mm)	72.3 N	83.4 N	28.8 Ohm	19.7 mH	Unipolar
1723-DBL40C1UK	5 V	24.1 mm	.004" (0.102 mm)	50.0 N	19.5 N	5 Ohm	3.7 mH	Unipolar
1723-DBL40C2UK	12 V	24.1 mm	.004" (0.102 mm)	50.0 N	19.5 N	28.8 Ohm	19.7 mH	Unipolar
1723-DBL10C1BK	5 V	24.1 mm	.001" (0.025 mm)	102.9 N	111.2 N	5 Ohm	5.5 mH	Bipolar
1723-DBL10C2BK	12 V	24.1 mm	.002" (0.025 mm)	102.9 N	111.2 N	28.8 Ohm	39.3 mH	Bipolar
1723-DBL20C1BK	5 V	24.1 mm	.004" (0.050 mm)	83.4 N	83.4 N	5 Ohm	5.5 mH	Bipolar
1723-DBL20C2BK	12 V	24.1 mm	.001" (0.050 mm)	83.4 N	83.4 N	28.8 Ohm	39.3 mH	Bipolar
1723-DBL40C1BK	5 V	24.1 mm	.002" (0.102 mm)	55.6 N	19.5 N	5 Ohm	5.5 mH	Bipolar
1723-DBL40C2BK	12 V	24.1 mm	.004" (0.102 mm)	55.6 N	19.5 N	28.8 Ohm	39.3 mH	Bipolar

\* measured with 2 phases energized

## Performance curves and dimensional drawing



### SERIES 42DBL-K



Dimensions : mm/inches

# 42DBL Series Linear Actuators (captive)

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## Options:

- Custom operating force
- Custom travel
- Other supply voltages



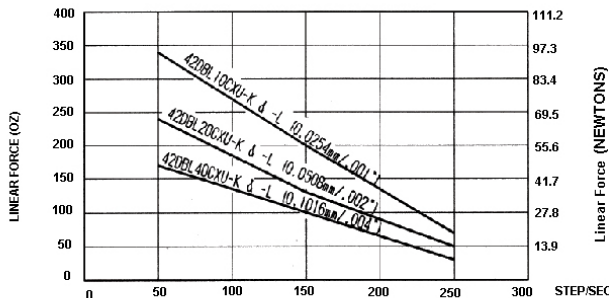
## Motor data

Motor order number	Operating voltage	Maximum travel	Linear travel per step	Maximum force*	Unenergized force	Coil resistance	Coil inductance	Drive electronics
1723-DBL10C1UL	5 V	61 mm	0.025 mm	100.0 N	111.2 N	5 Ohm	3.7 mH	Unipolar
1723-DBL10C2UL	12 V	61 mm	0.025 mm	100.0 N	111.2 N	28.8 Ohm	19.7 mH	Unipolar
1723-DBL20C1UL	5 V	61 mm	0.050 mm	72.3 N	83.4 N	5 Ohm	3.7 mH	Unipolar
1723-DBL20C2UL	12 V	61 mm	0.050 mm	72.3 N	83.4 N	28.8 Ohm	19.7 mH	Unipolar
1723-DBL40C1UL	5 V	61 mm	0.102 mm	50.0 N	19.5 N	5 Ohm	3.7 mH	Unipolar
1723-DBL40C2UL	12 V	61 mm	0.102 mm	50.0 N	19.5 N	28.8 Ohm	19.7 mH	Unipolar
1723-DBL10C1BL	5 V	61 mm	0.025 mm	102.9 N	111.2 N	5 Ohm	5.5 mH	Bipolar
1723-DBL10C2BL	12 V	61 mm	0.025 mm	102.9 N	111.2 N	28.8 Ohm	39.3 mH	Bipolar
1723-DBL20C1BL	5 V	61 mm	0.050 mm	83.4 N	83.4 N	5 Ohm	5.5 mH	Bipolar
1723-DBL20C2BL	12 V	61 mm	0.050 mm	83.4 N	83.4 N	28.8 Ohm	39.3 mH	Bipolar
1723-DBL40C1BL	5 V	61 mm	0.102 mm	55.6 N	19.5 N	5 Ohm	5.5 mH	Bipolar
1723-DBL40C2BL	12 V	61 mm	0.102 mm	55.6 N	19.5 N	28.8 Ohm	39.3 mH	Bipolar

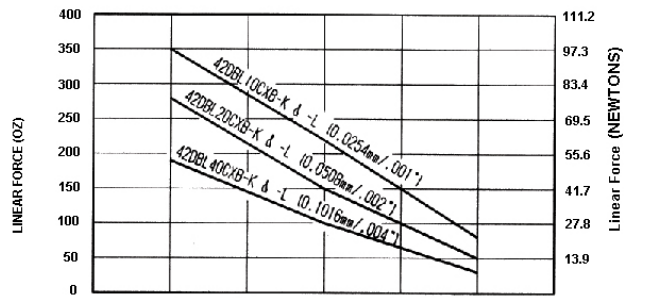
\* measured with 2 phases energized

## Performance curves and dimensional drawing

TYPICAL LINEAR PULL-IN FORCE VS LINEAR RATE AT 20° C



TYPICAL LINEAR PULL-IN FORCE VS LINEAR RATE AT 20° C



Model	0	.05	.10	.15	.20	.25	.30	IN/SEC
42DBL10C*U-K & -L	0	.05	.10	.15	.20	.25	.30	IN/SEC
42DBL20C*U-K & -L	0	.10	.20	.30	.40	.50	.60	IN/SEC
42DBL40C*U-K & -L	0	.20	.40	.60	.80	1.0	1.2	IN/SEC

Model	0	.10	.20	.30	.40	.50	.60	IN/SEC
42DBL10C*B-K & -L	0	.10	.20	.30	.40	.50	.60	IN/SEC
42DBL20C*B-K & -L	0	.20	.40	.60	.80	1.0	1.2	IN/SEC

## SERIES 42DBL-L

