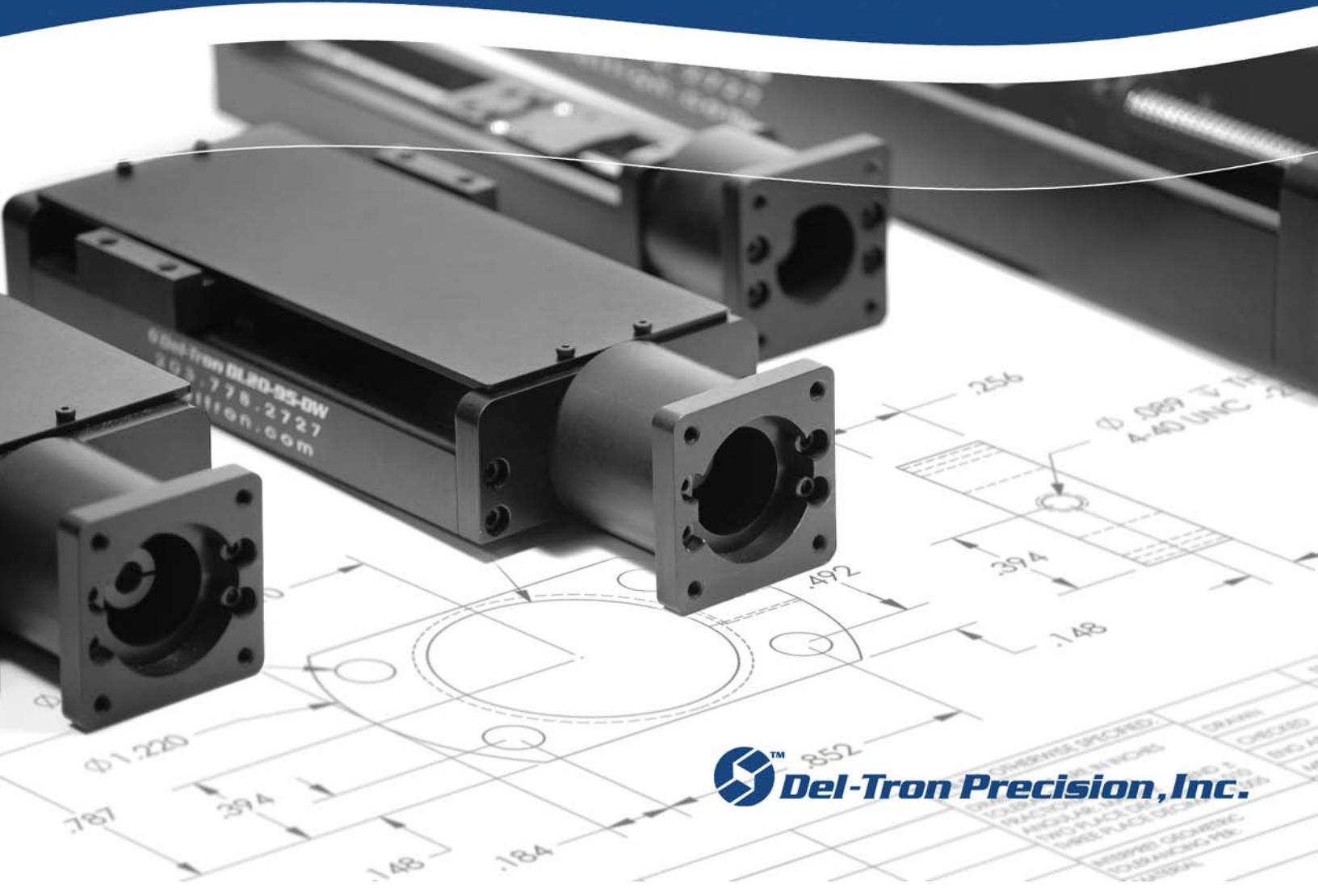




DL SERIES

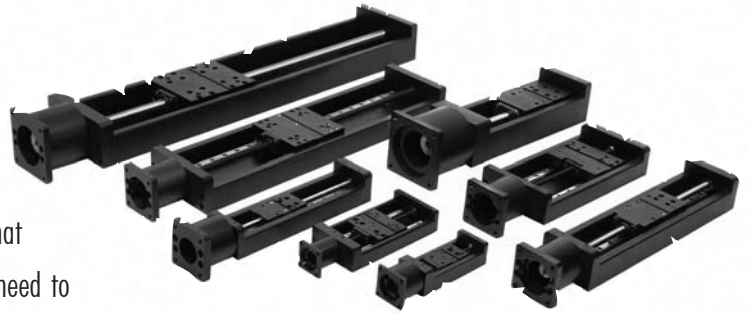
# Linear Actuators

Ball and Lead Screw Actuated Stages



# DL / DL DW SERIES

Del-Tron DL series linear actuators offer the benefits of a space-saving design, fast and simple assembly, long life, and a competitive price. The rigid enclosed aluminum box structure provides a compact envelope that incorporates the linear bearing and drive mechanism. Integrating all components into a single unit that includes the motor mount, saves assembly time and eliminates the need to source additional parts. Del-Tron's DL linear actuators are competitively priced and will outlast unsupported and unenclosed bearing drive assemblies.



Del-Tron's integrated design offers low friction and high accuracy in a compact, lightweight package. DL series linear actuators are available in travel lengths up to 410 millimeters. They feature an integrated anti-friction slide or slides and are actuated with a ball screw or Teflon coated lead screw drive mechanism. These integrated recirculating slide guides provide friction-free movement and have a coefficient of friction of only 0.01. Our DW series (double wide) is engineered to create a wider mounting platform while still maintaining the same low profile height as our standard width DL actuators. This double wide design is ideal for applications that need a greater carriage mounting area or where axial play must be minimized.

The anti-backlash lead screw nut is spring-loaded to ensure positive movement when changing direction. The units offer straight-line accuracy of less than 2 microns and repeatability of less than 1 micron. They deliver 254 million mm of travel at their full load rating.

Options for Del-Tron DL series linear actuators include an Oriental PK223, PK243 or PK264 stepper motor, or a Yaskawa SGMM, SGMAH or SGMPH servomotor. Mounts are available for other styles of motors. Photoelectric or proximity position sensors are available. An anti-dust containment cover protects moving components while also preventing particulate emissions. Load capacities range from 150 newtons to 900 newtons.

Del-Tron can provide special leads, diameters, couplings, motor mounts, and vary the size, type and travel of slides on request. Del-Tron's website offers access to 3D CAD drawings which may be downloaded into the user's CAD system in a number of native CAD formats. Life and moment load calculators are also available to determine the suitability of a particular linear bearing for the intended application





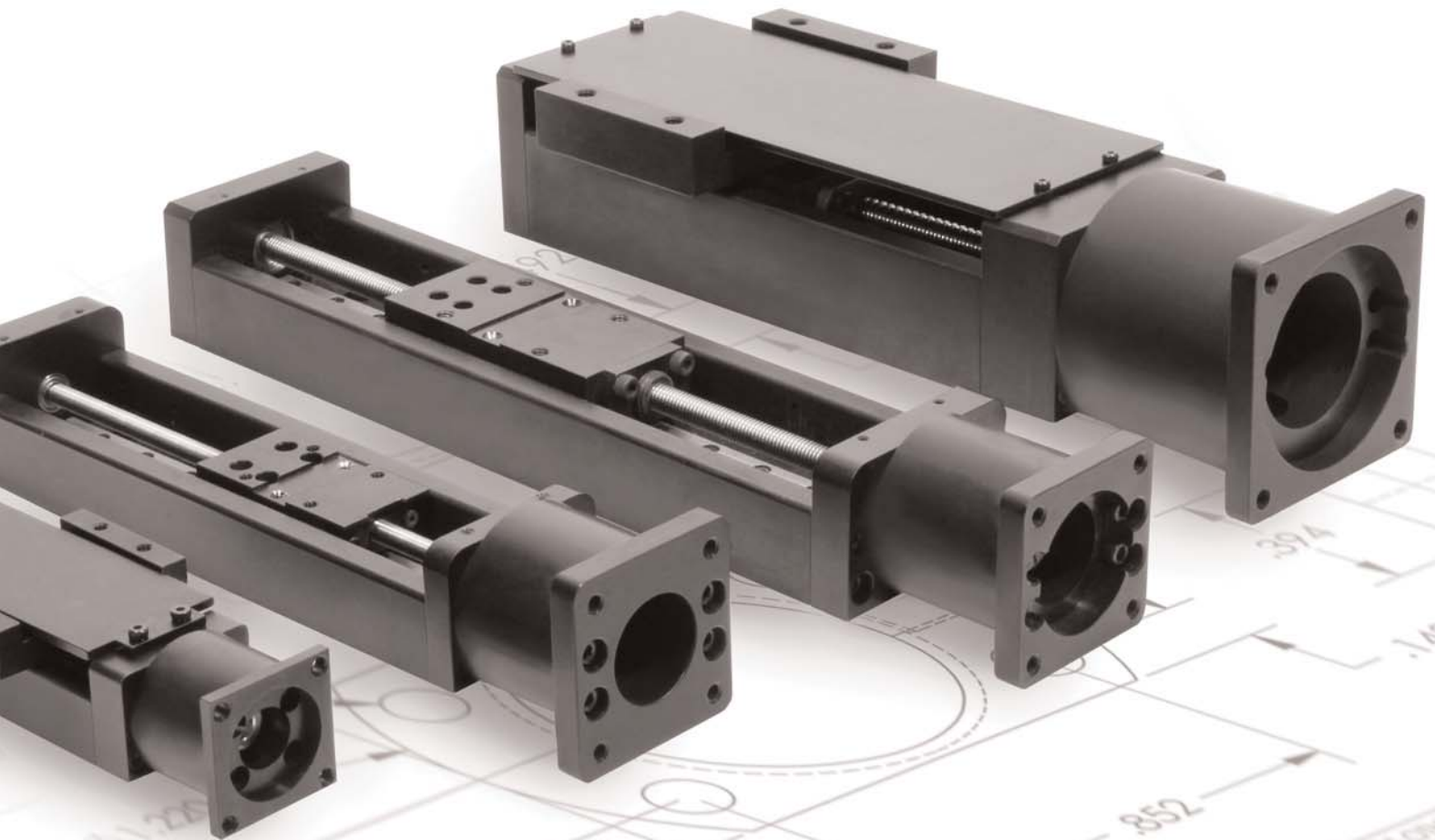


# DL Linear Actuators

Ball and Lead Screw Actuated Stages

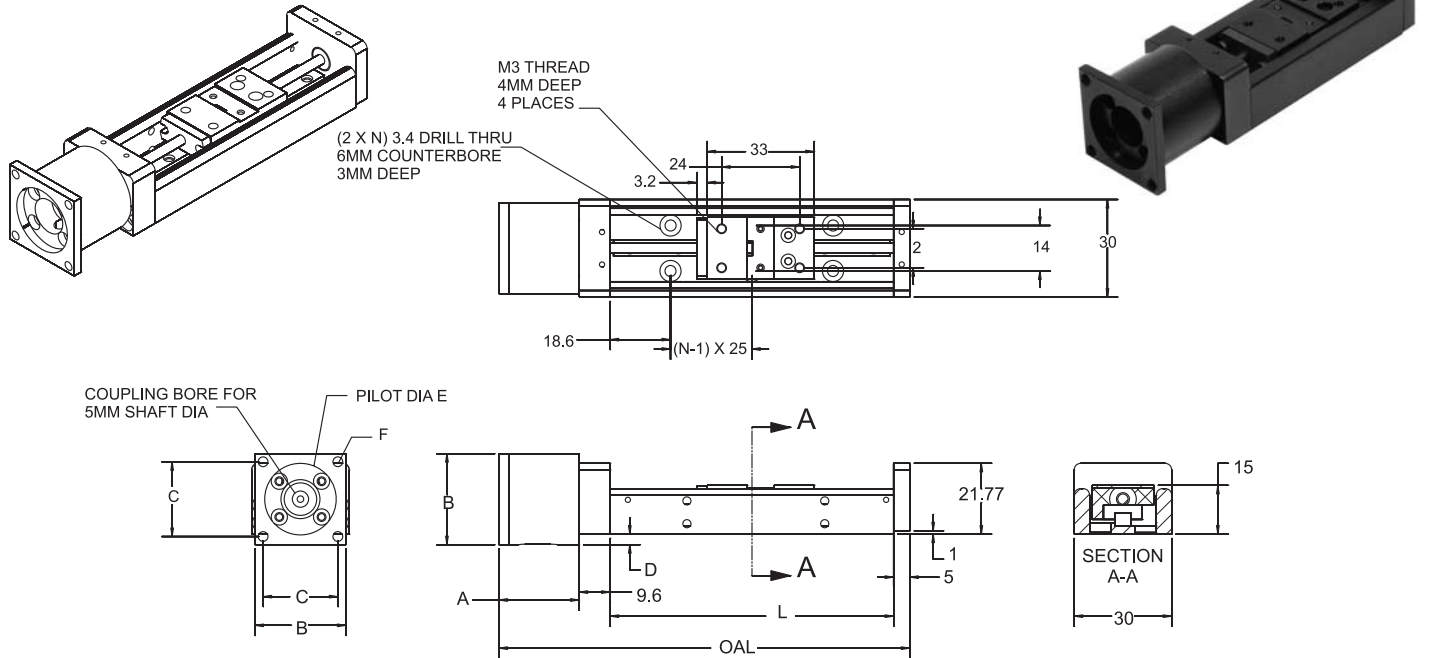
## DL Series

<b>Compact:</b>	Space saving design
<b>Simple assembly:</b>	Standard mounting holes
<b>Low cost:</b>	To purchase and operate
<b>Contaminant resistant:</b>	Enclosed, covered rigid box structure
<b>Non corrosive:</b>	Aluminum and Stainless steel materials

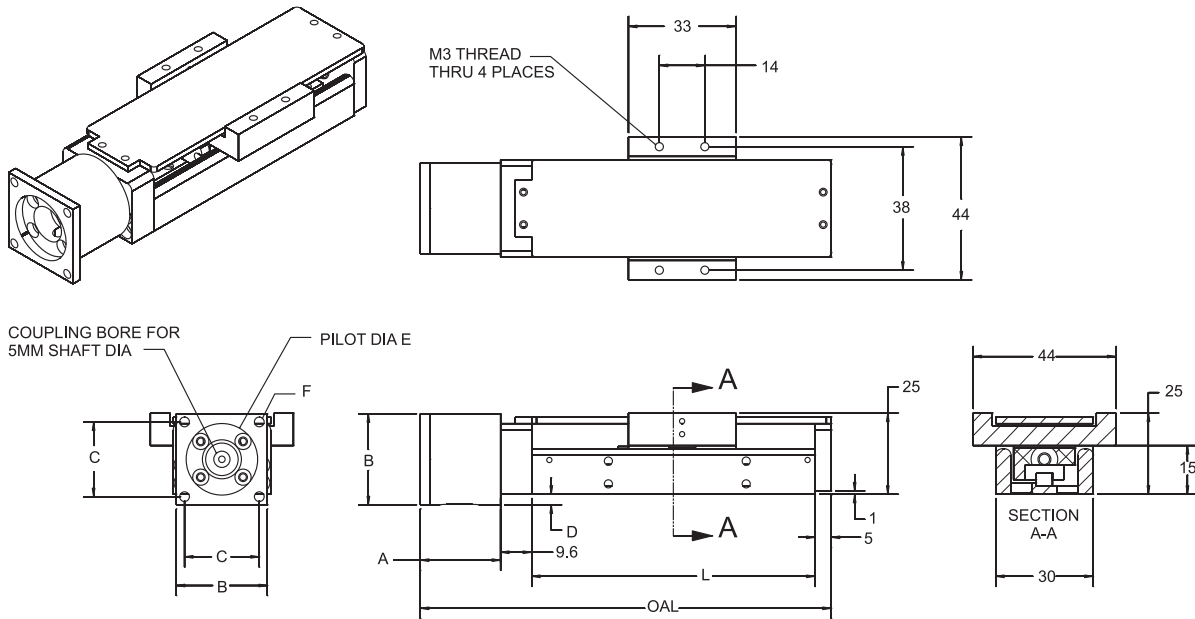


# DL 15

DL 15 All units are in mm



## DL 15 With Cover

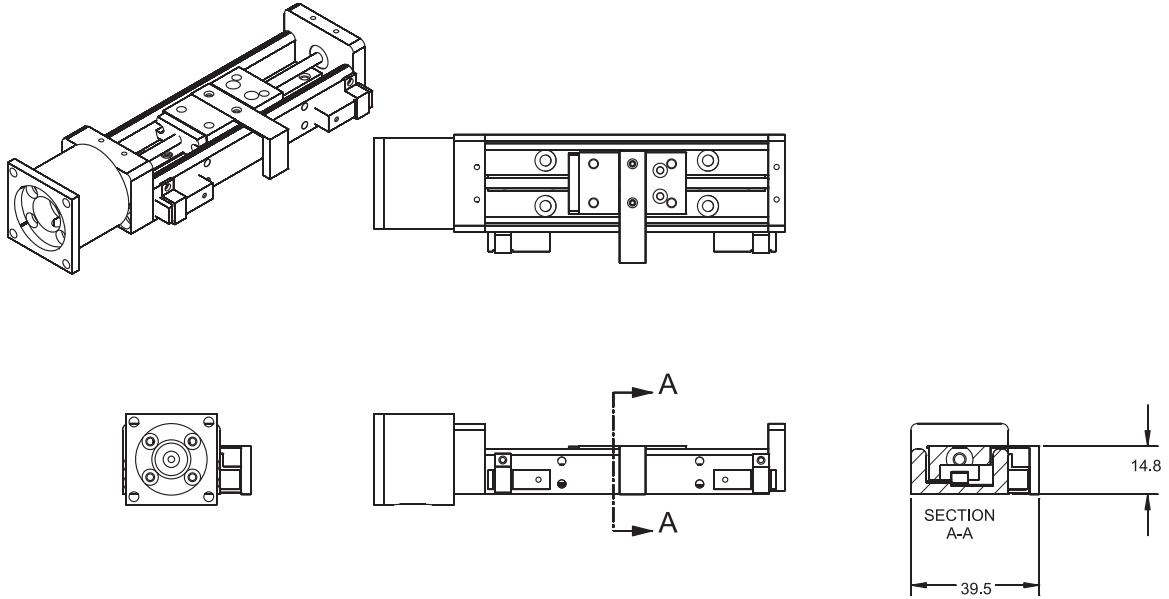


## Motor Options

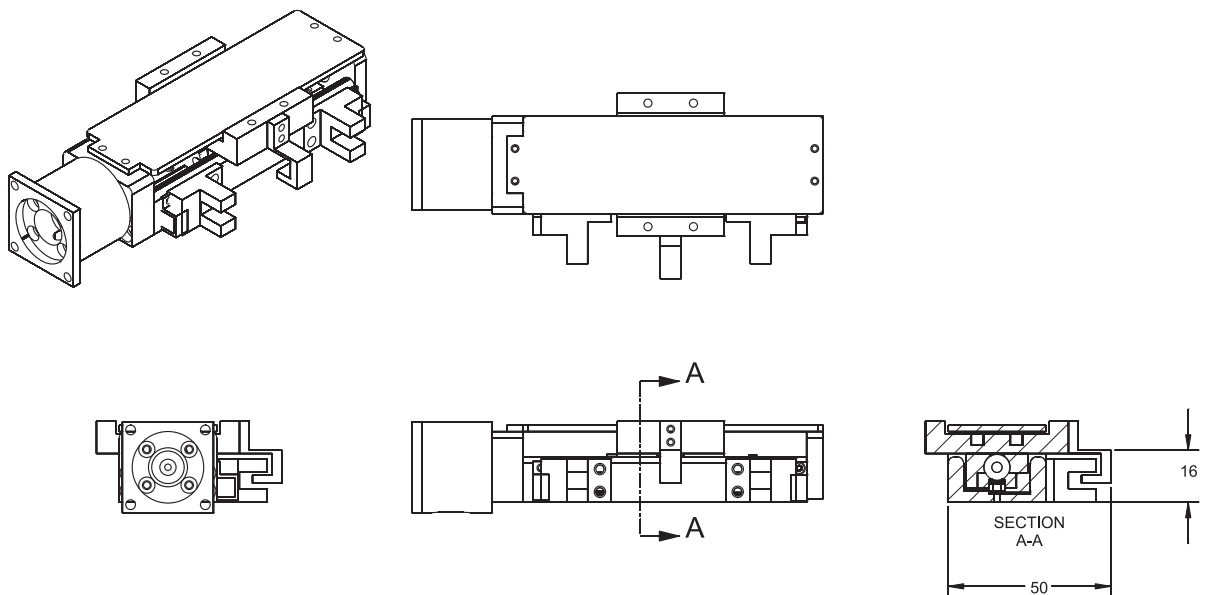
Travel	STEPPER MOTOR (ST)									SERVO MOTOR (SV)						
	OAL	L	N	A	B	C	D	E	F	OAL	A	B	C	D	E	F
25	101.2	62	2							102.2						
50	126.2	87	3	24.7	28	23	3.2	22	3 THRU	127.2	25.6	25	19.8	1.7	20	3.5 THRU
75	151.2	112	4							152.2						
100	176.2	137	5							177.2						

# DL 15 (continued)

## DL 15 With PX Proximity Sensors

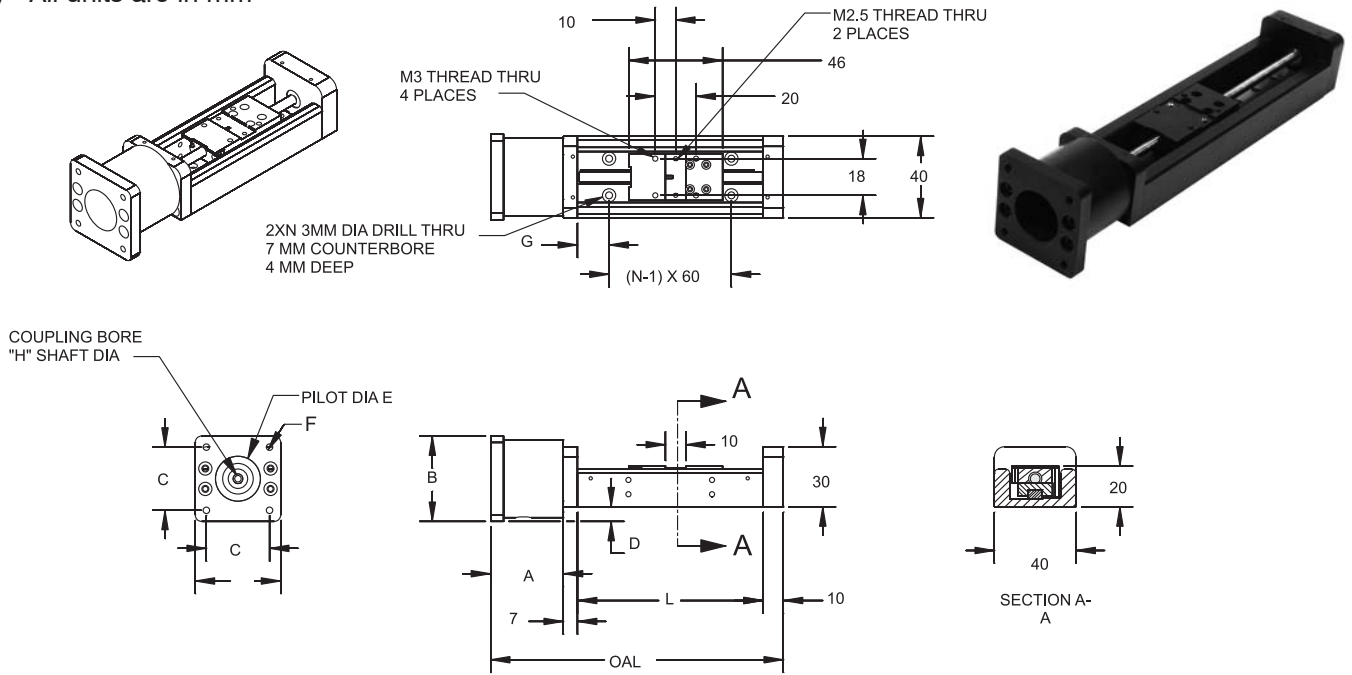


## DL 15 With PH Photo Sensors

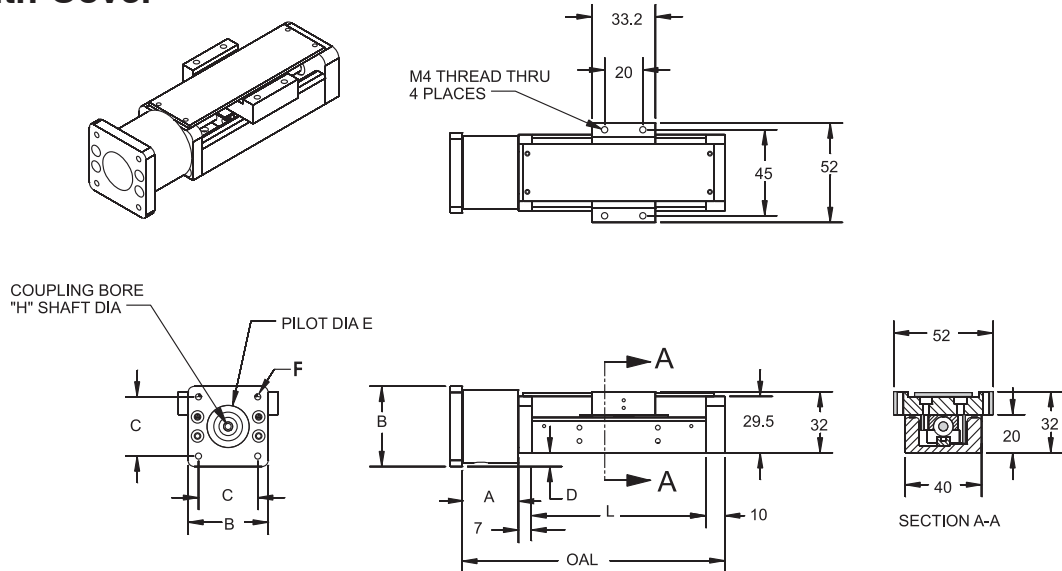


# DL 20

DL 20 All units are in mm



## DL 20 With Cover



## Motor Options

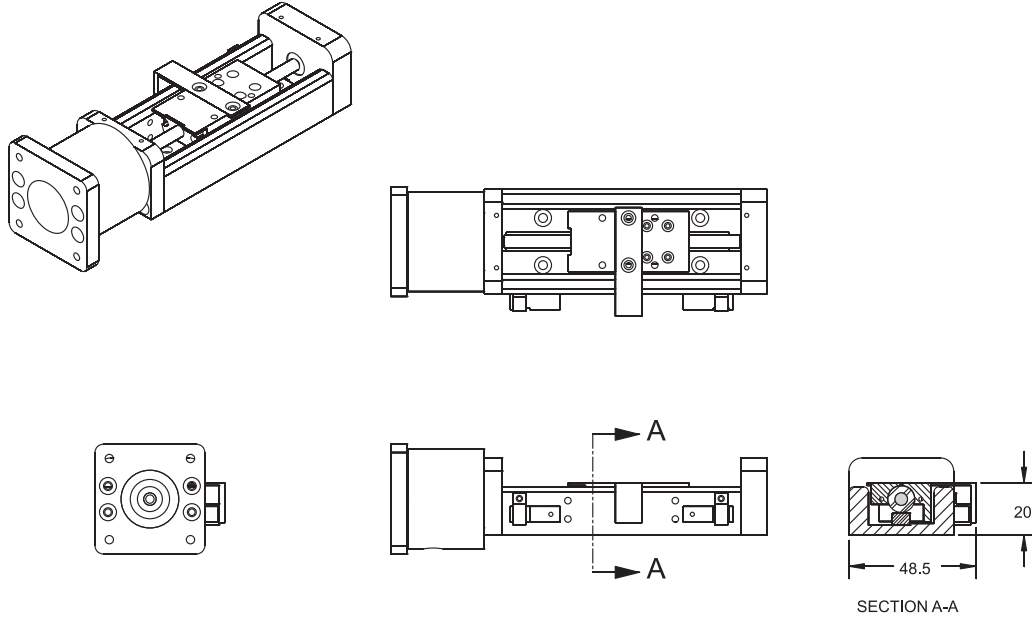
STEPPER MOTOR											
Travel	OAL	L	N	G	A	B	C	D	E	F	H
45	143.7	91	2	15.5							
95	193.7	141	3	10.5	35.7	42	31	7.1	22	3.2 THRU	5
145	243.7	191	3	35.5							

SERVO MOTOR											
Travel	OAL	L	N	G	A	B	C	D	E	F	H
45	148.8	91	2	15.5							
95	198.8	141	3	10.5	40.8	42	32.5	7.1	30	M4 THREAD	6
145	248.8	191	3	35.5							

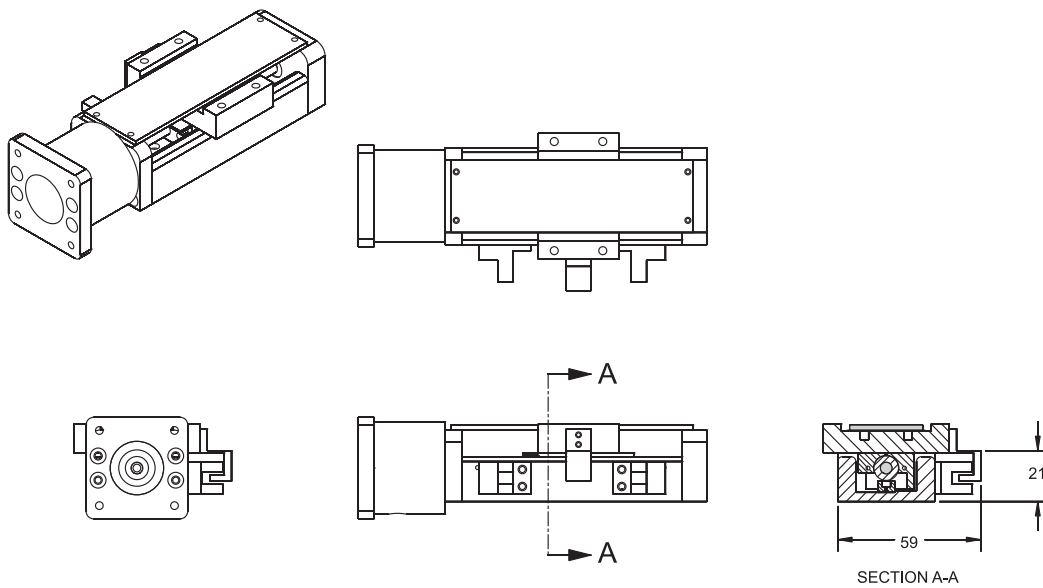


# DL 20 (continued)

## DL 20 With PX Proximity Sensors

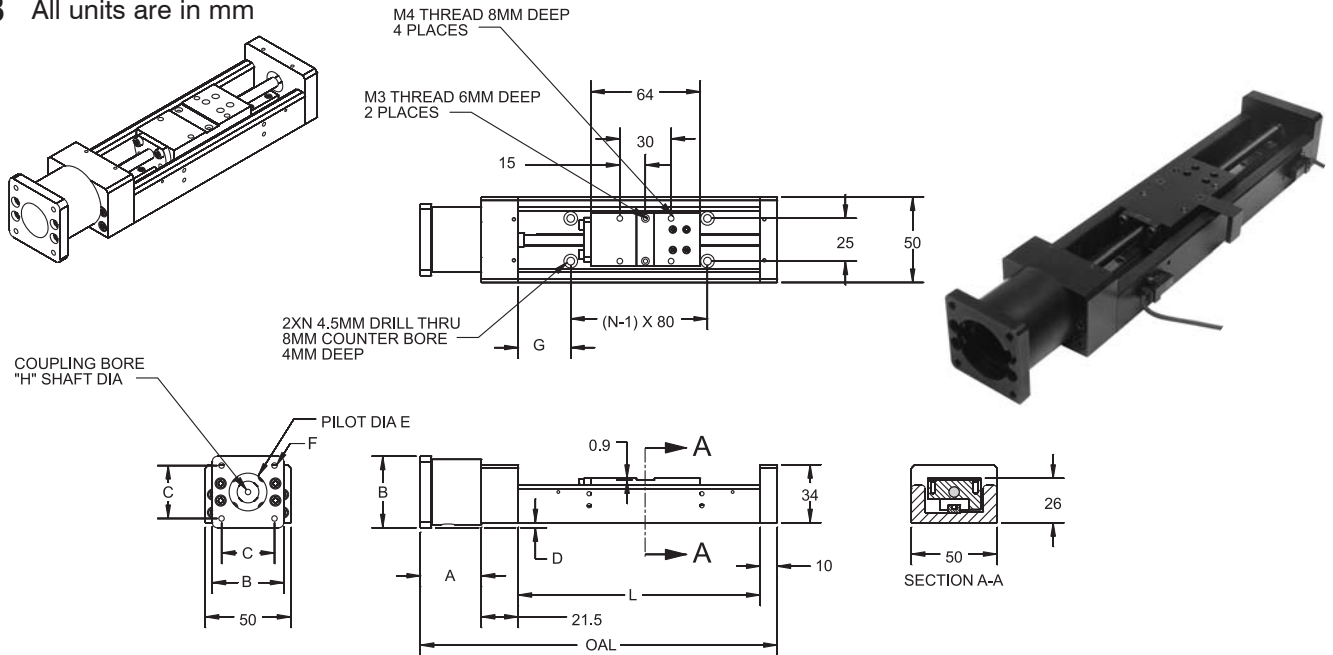


## DL 20 With PH Photo Sensors

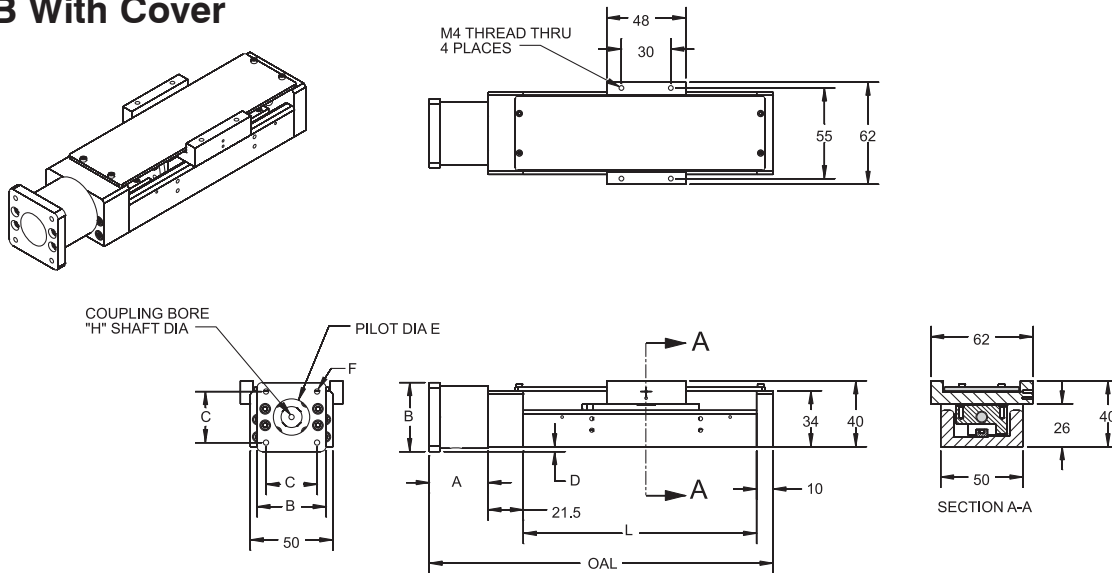


# DL 26B

**DL 26B** All units are in mm



## DL 26B With Cover



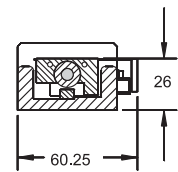
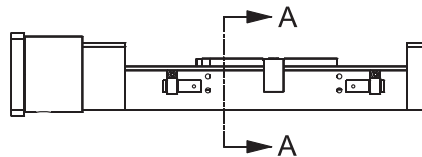
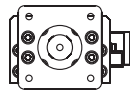
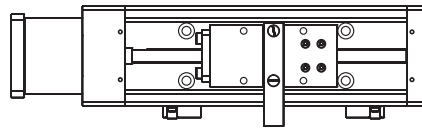
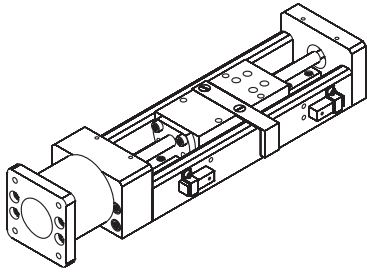
## Motor Options

STEPPER MOTOR											
Travel	OAL	L	N	G	A	B	C	D	E	F	H
70	208.7	141.5	2	30.75							
120	258.7	191.5	3	15.75	35.7	42	31	3	22	3.2 THRU	5
170	308.7	241.5	3	40.75							
220	358.7	291.5	4	25.75							

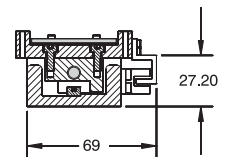
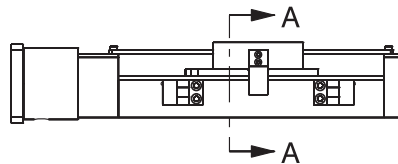
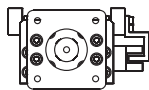
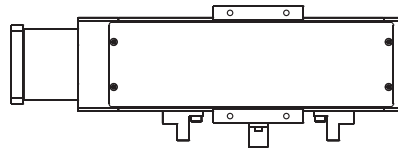
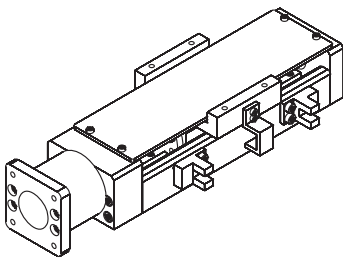
SERVO MOTOR											
Travel	OAL	L	N	G	A	B	C	D	E	F	H
70	213.8	141.5	2	30.75							
120	263.8	191.5	3	15.75	40.8	42	32.5	3	30	M4 THREAD	6
170	313.8	241.5	3	40.75							
220	363.8	291.5	4	25.75							

# DL 26B (continued)

## DL 26B With PX Proximity Sensors



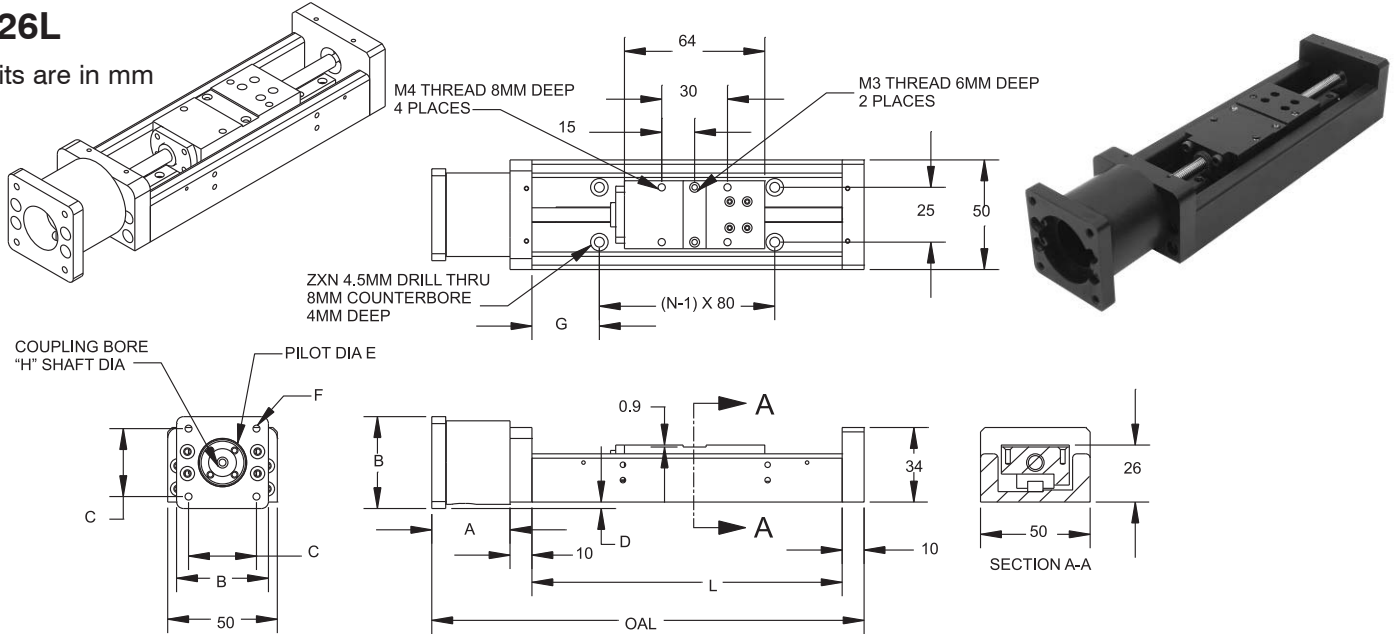
## DL 26B With PH Photo Sensors



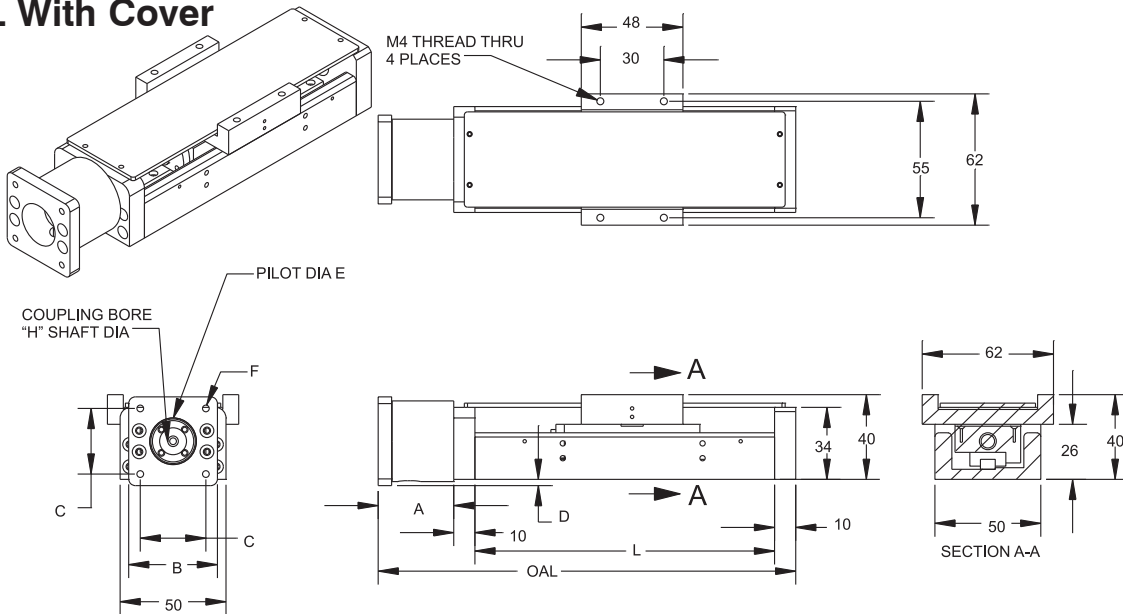
# DL 26L

## DL 26L

All units are in mm



## DL 26L With Cover



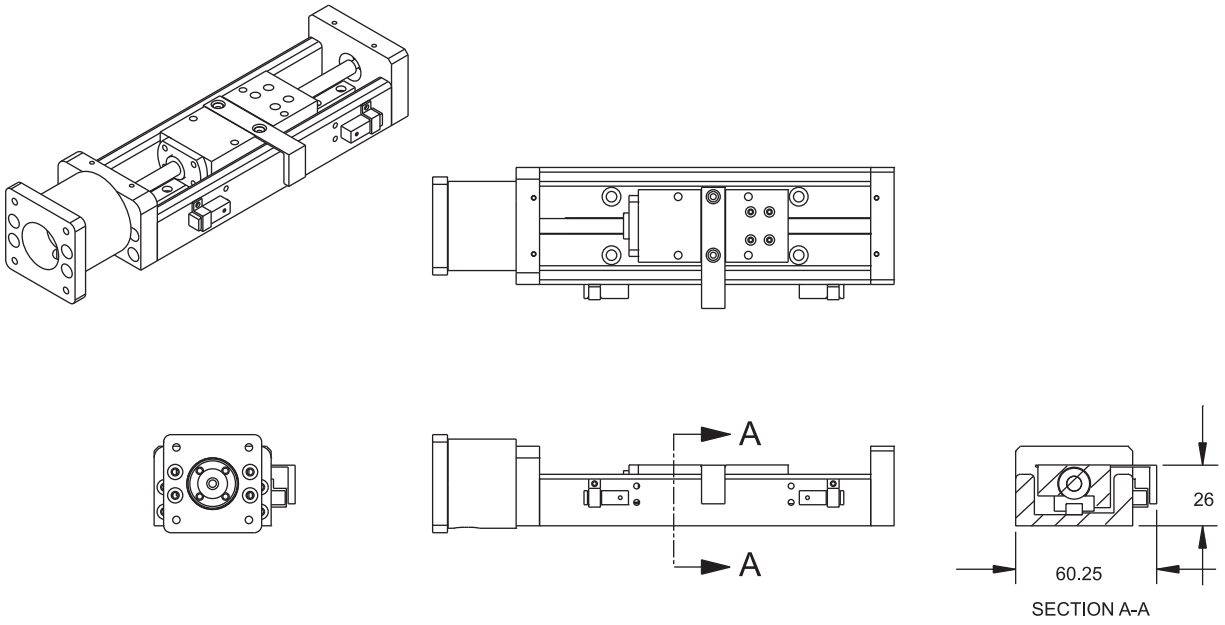
## Motor Options

STEPPER MOTOR											
Travel	OAL	L	N	G	A	B	C	D	E	F	H
70	197.2	141.5	2	30.75							
120	247.2	191.5	3	15.75	35.7	42	31	3	22	3.2 THRU	5
170	297.2	241.5	3	40.75							
220	347.2	291.5	4	25.75							

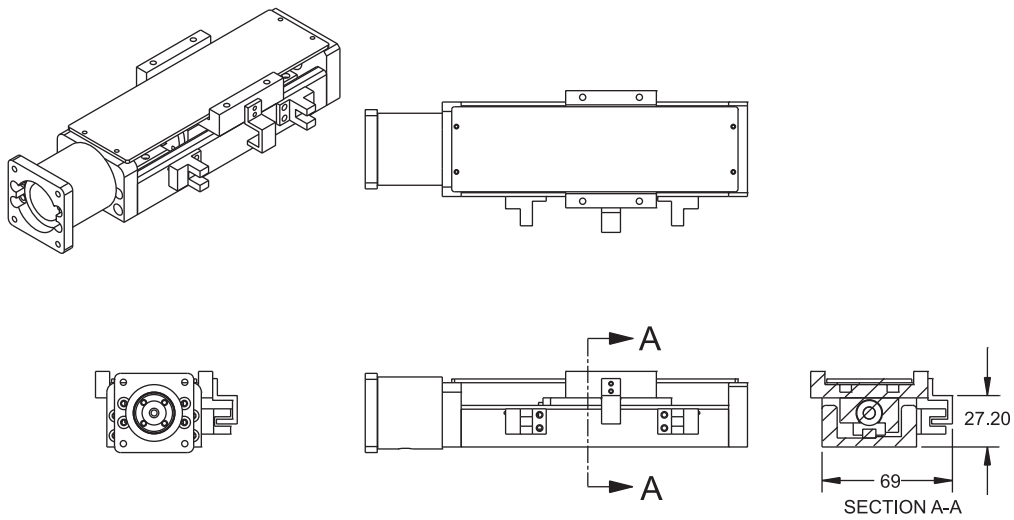
SERVO MOTOR											
Travel	OAL	L	N	G	A	B	C	D	E	F	H
70	202.3	141.5	2	30.75							
120	252.3	191.5	3	15.75	40.8	42	32.5	3	22	M4 THREAD	6
170	302.3	241.5	3	40.75							
220	352.3	291.5	4	25.75							

# DL 26L (continued)

## DL 26L With PX Proximity Sensors



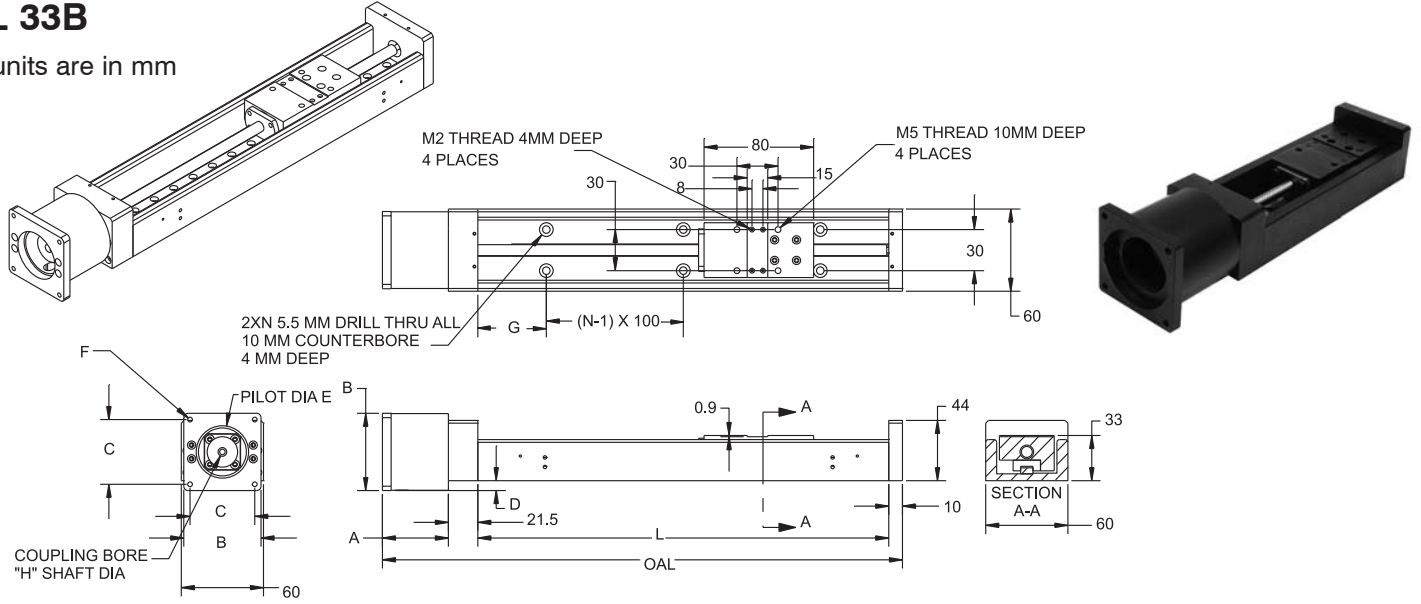
## DL 26L With PH Photo Sensors



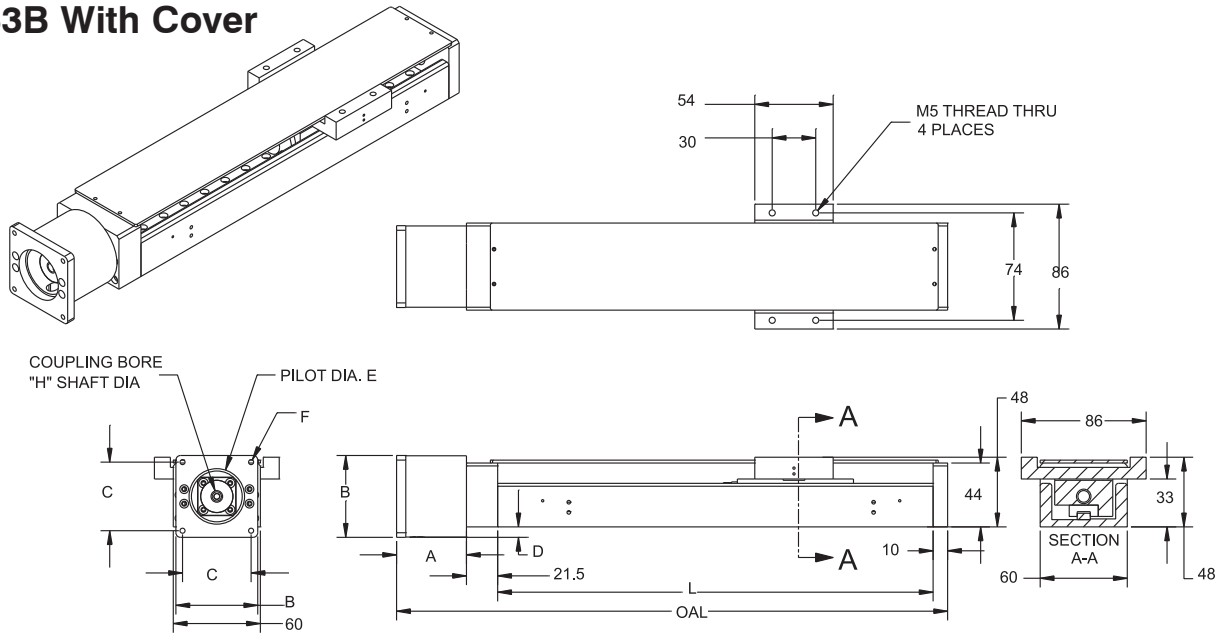
# DL 33B

## DL 33B

All units are in mm



## DL 33B With Cover



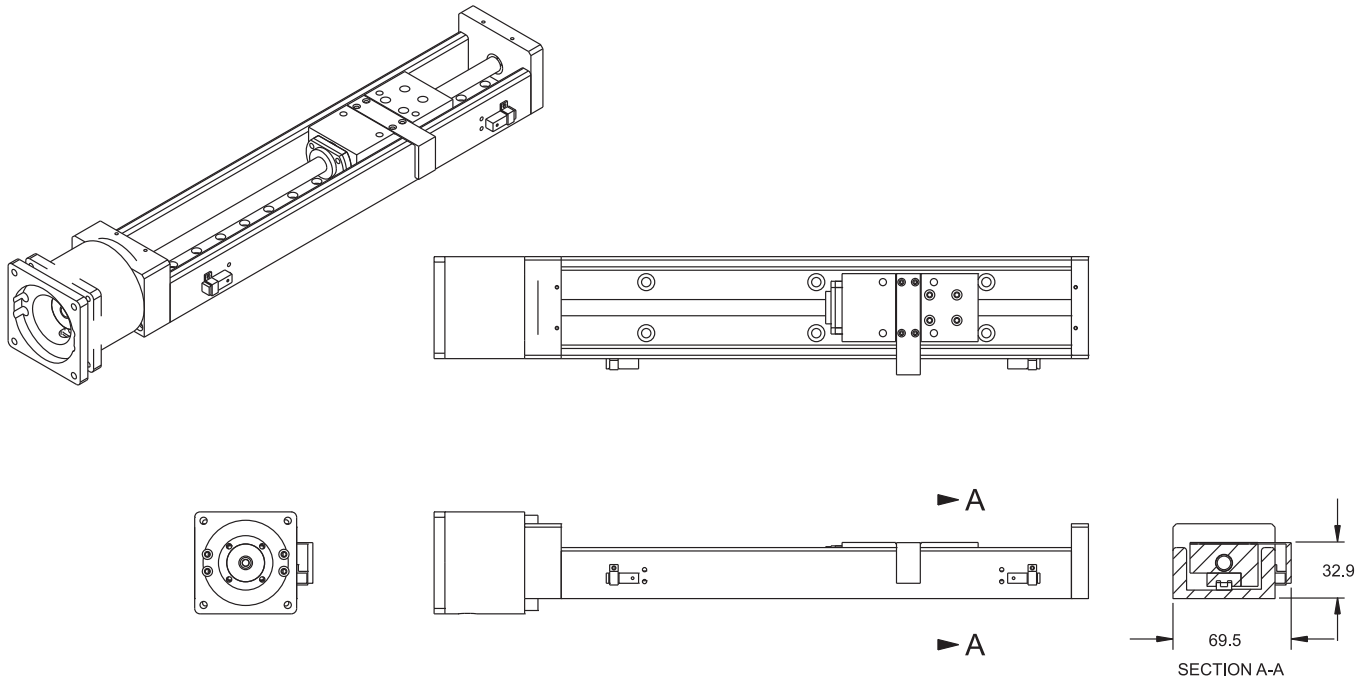
## Motor Options

Travel	OAL	L	N	G	STEPPER MOTOR							
					A	B	C	D	E	F	H	
60	229.6	150	2	25								
110	279.6	200	2	50	48.1	56.4	47.2	7.2	38.2	8-32 THREAD	6.35(.250")	
210	379.6	300	3	50								
310	479.6	400	4	50								
410	579.6	500	5	50								

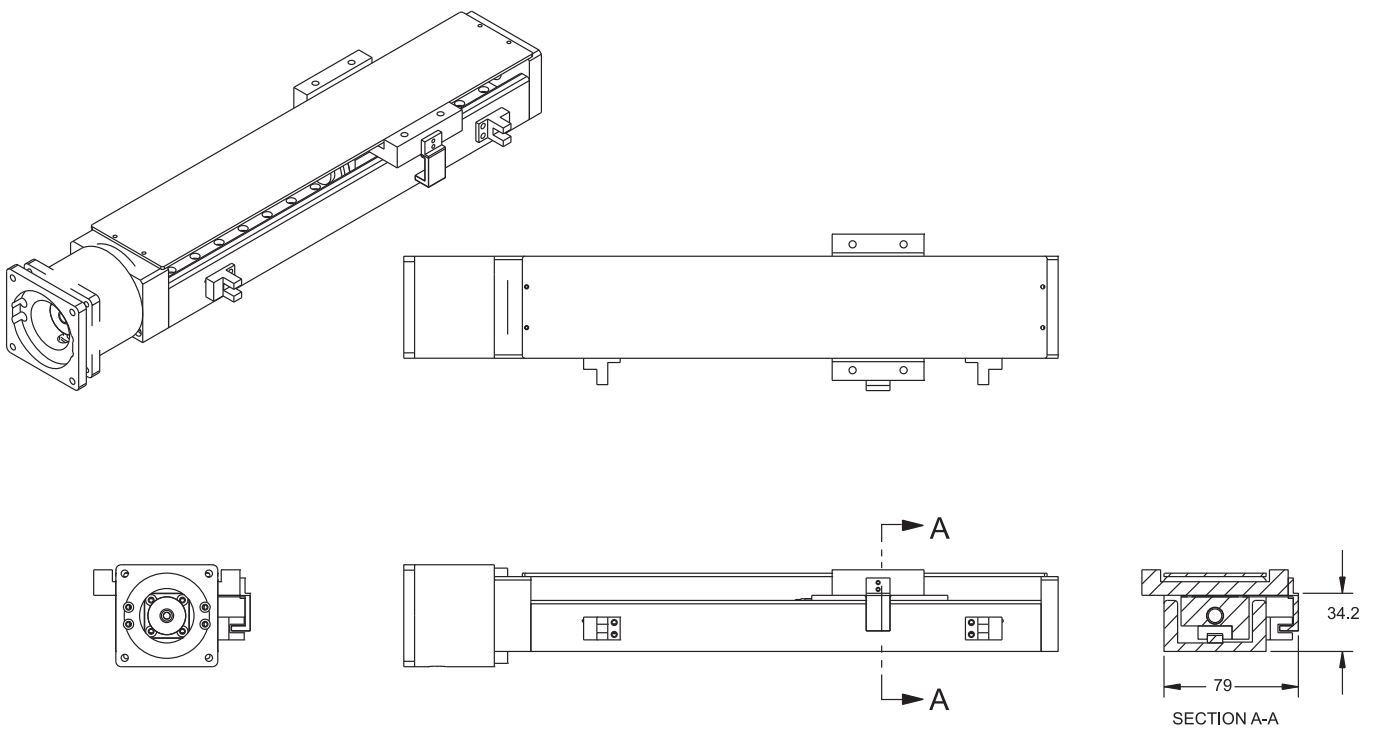
Travel	OAL	L	N	G	SERVO MOTOR						
					A	B	C	D	E	F	H
60	234.7	150	2	25							
110	284.7	200	2	50	53.2	60	49.5	8.9	50.1	M5 THREAD	8
210	384.7	300	3	50							
310	484.7	400	4	50							
410	584.7	500	5	50							

# DL 33B (continued)

## DL 33B With PX Proximity Sensors



## DL 33B With PH Photo Sensors

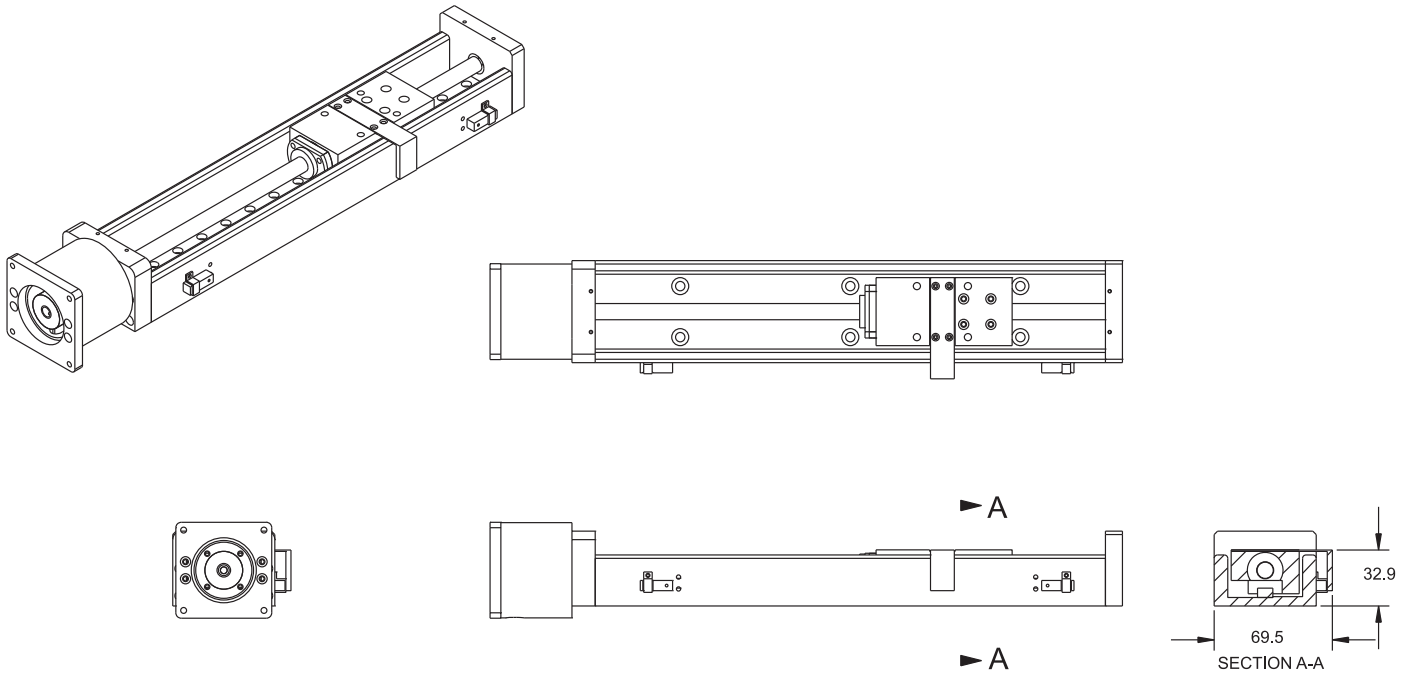




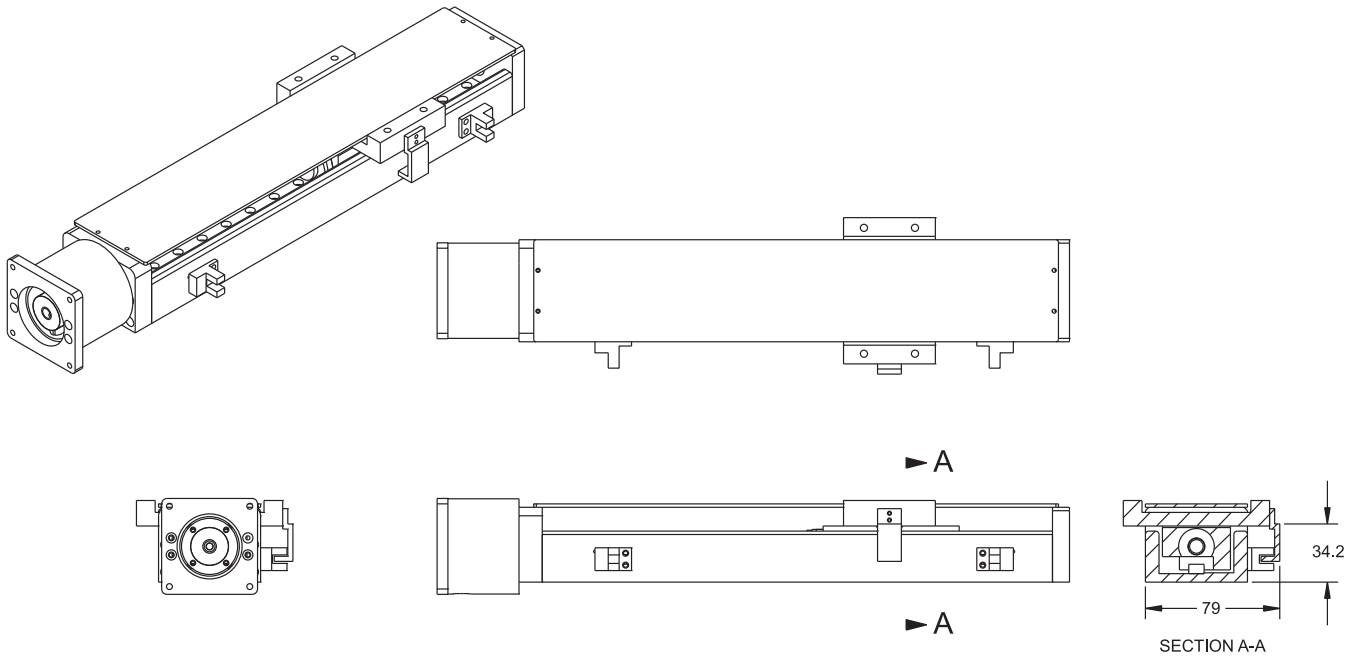


# DL 33L (continued)

## DL 33L With PX Proximity Sensors



## DL 33L With PH Photo Sensors





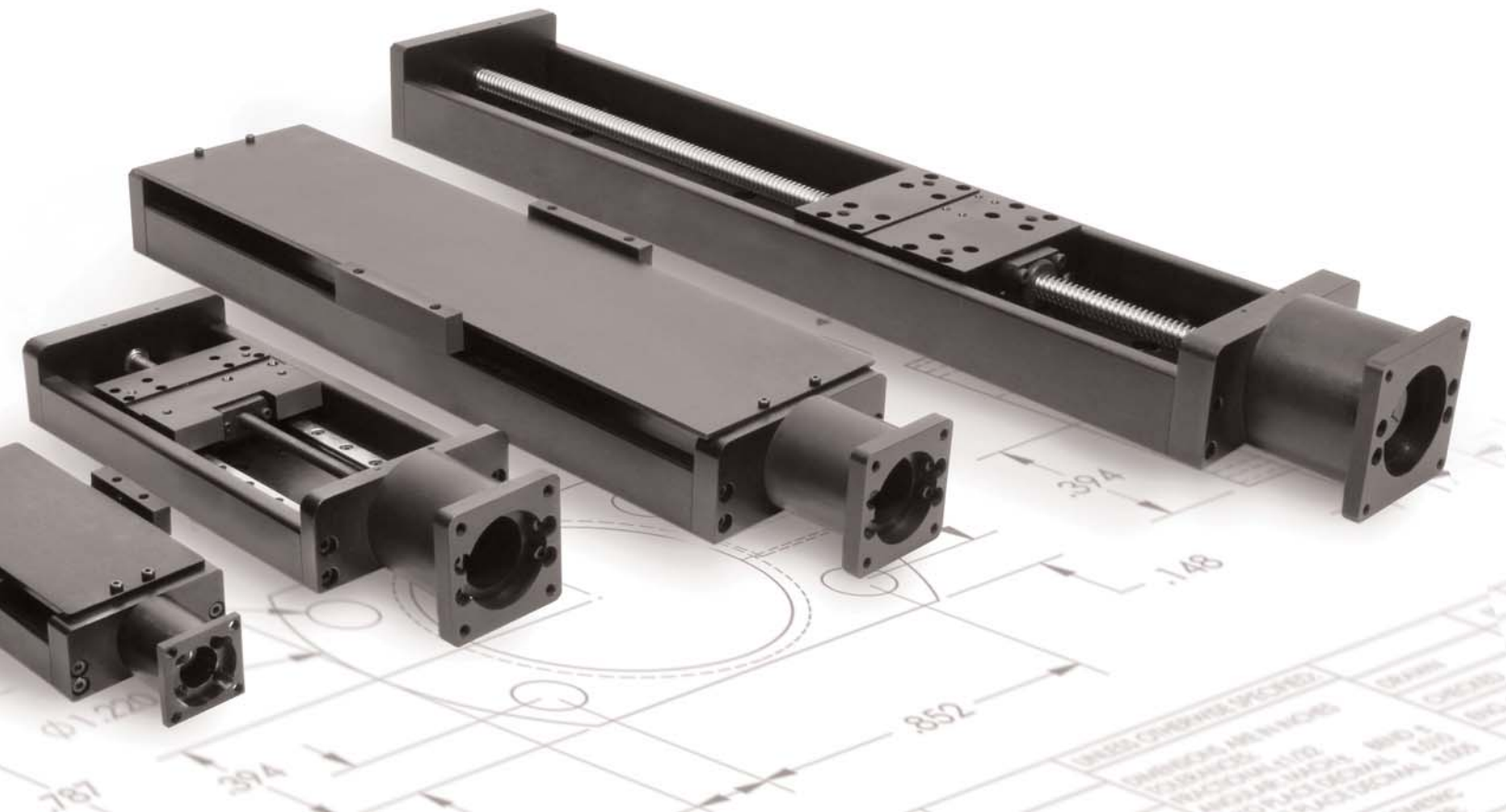


# DL DW Linear Actuators

Ball and Lead Screw Actuated Stages

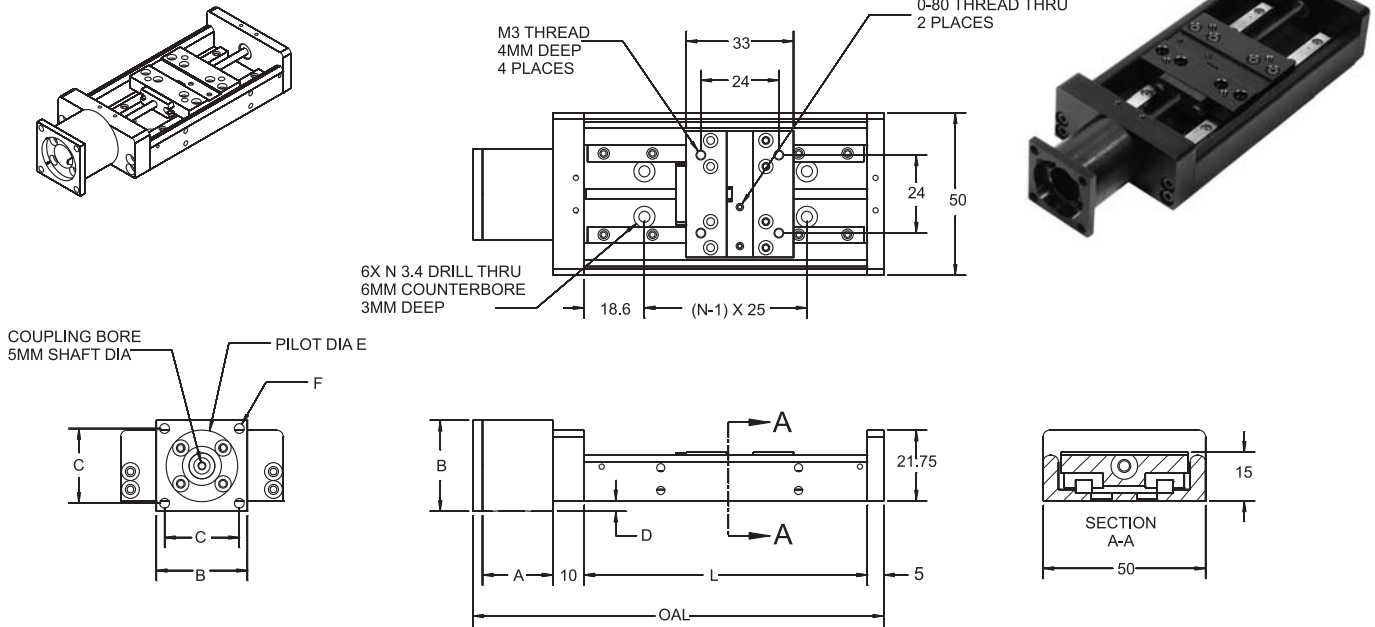
## DL DW Series

- |                               |  |
|-------------------------------|--|
| <b>Compact:</b>               | Low profile space saving design        |
| <b>Wide mountin platform:</b> | Reduces axial play                     |
| <b>Simple assembly:</b>       | Standard mounting holes                |
| <b>Low cost:</b>              | To purchase and operate                |
| <b>Contaminant resistant:</b> | Enclosed, covered rigid box structure  |
| <b>Non corrosive:</b>         | Aluminum and Stainless steel materials |

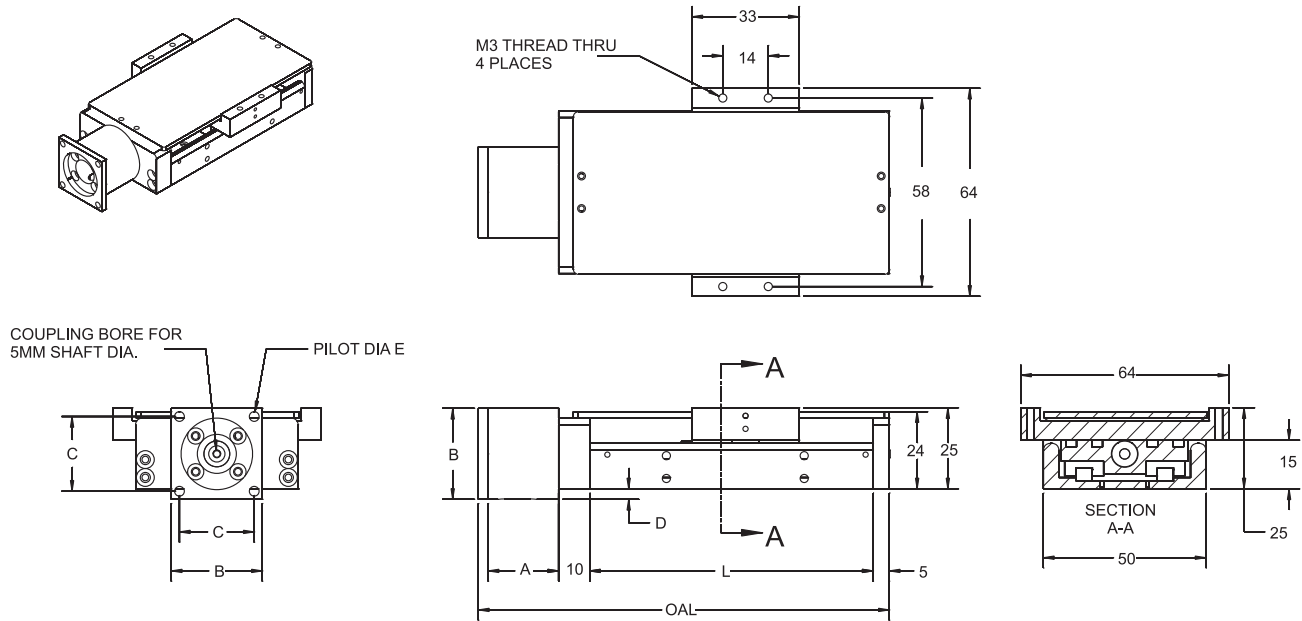


# DL 15 DW

**DL 15 DW** All units are in mm



## DL 15 DW With Cover

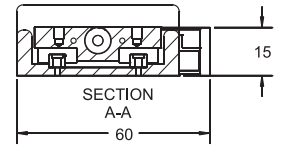
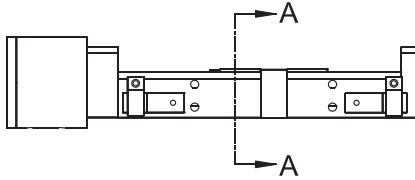
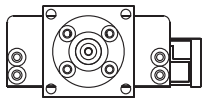
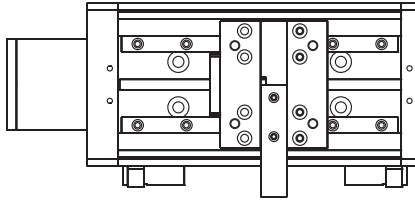
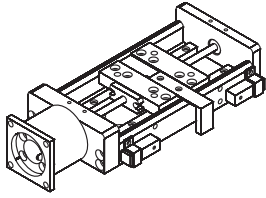


## Motor Options

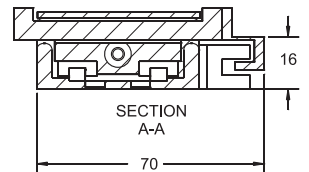
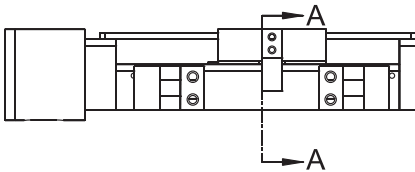
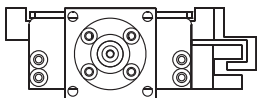
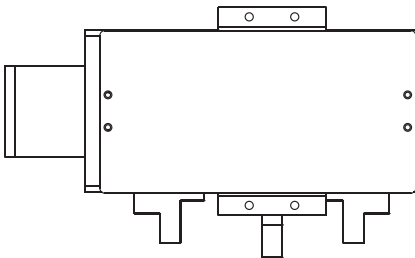
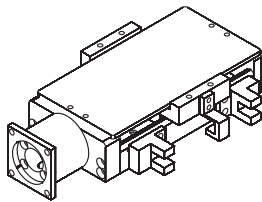
Travel	STEPPER MOTOR (ST)										SERVO MOTOR (SV)						
	OAL	L	N	A	B	C	D	E	F	OAL	A	B	C	D	E	F	
25	101.2	62	2								102.2						
50	126.2	87	3	24.7	28	23	3.2	22	3 THRU		127.2	25.6	25	19.8	1.7	20	3.5 THRU
75	151.2	112	4								152.2						
100	176.2	137	5								177.2						

# DL 15 DW (continued)

## DL 15 DW With PX Proximity Sensors

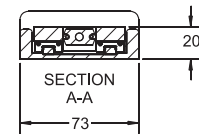
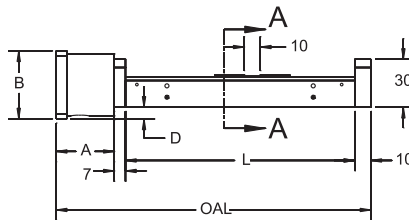
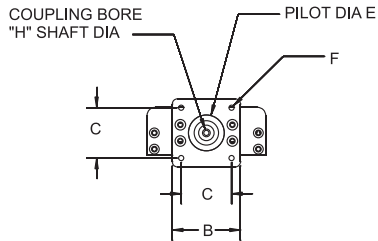
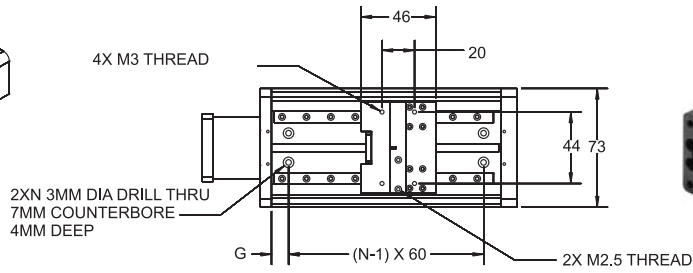
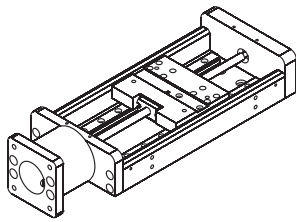


## DL 15 DW With PH Photo Sensors

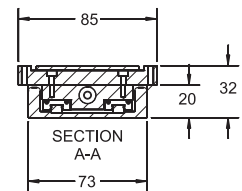
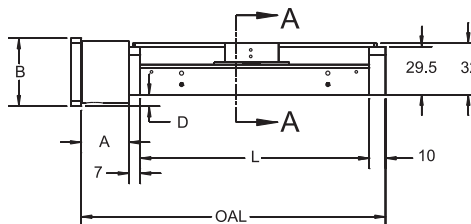
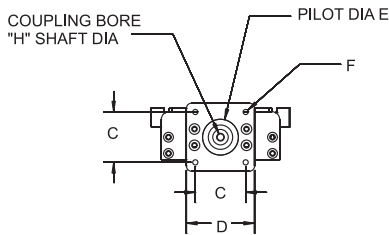
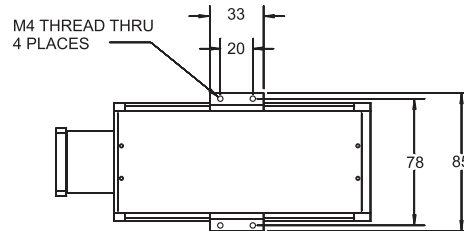
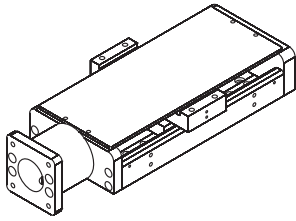


# DL 20 DW

DL 20 DW All units are in mm



## DL 20 DW With Cover



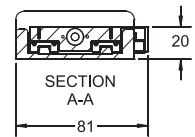
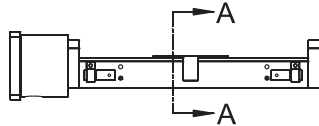
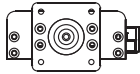
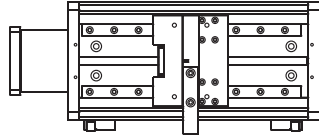
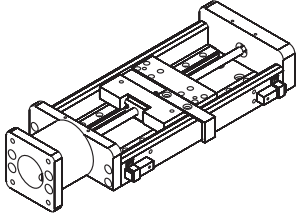
## Motor Options

STEPPER MOTOR											
Travel	OAL	L	N	G	A	B	C	D	E	F	H
45	143.7	91	2	15.5							
95	193.7	141	3	10.5	35.7	42	31	7.1	22	3.2 THRU	5
145	243.7	191	3	35.5							

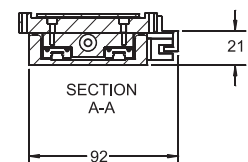
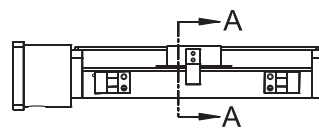
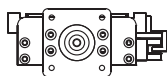
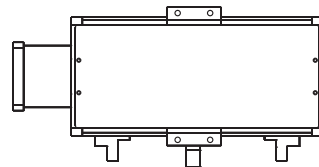
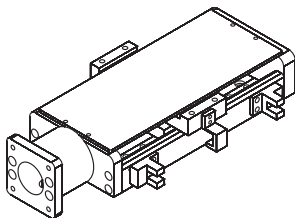
SERVO MOTOR											
Travel	OAL	L	N	G	A	B	C	D	E	F	H
45	148.8	91	2	15.5							
95	198.8	141	3	10.5	40.8	42	32.5	7.1	30	M4 THREAD	6
145	248.8	191	3	35.5							

# DL 20 DW (continued)

## DL 20 DW With PX Proximity Sensors

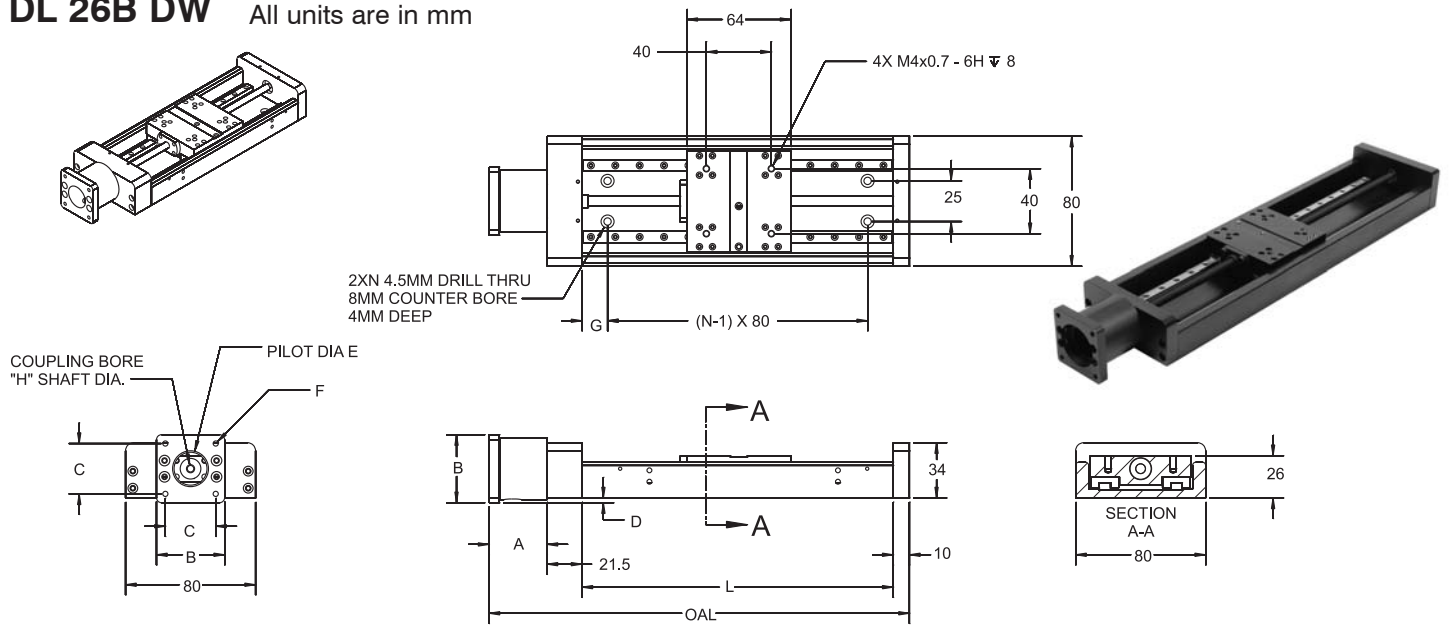


## DL 20 DW With PH Photo Sensors

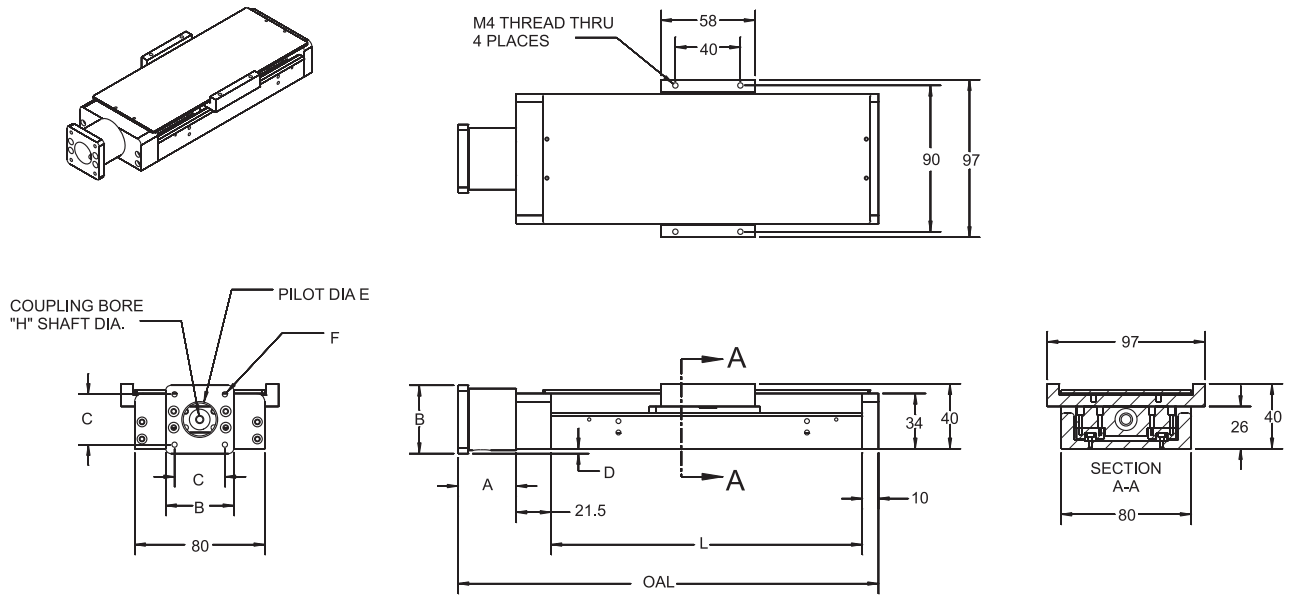


# DL 26B DW

**DL 26B DW** All units are in mm



## DL 26B DW With Cover



## Motor Options

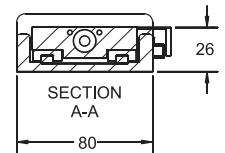
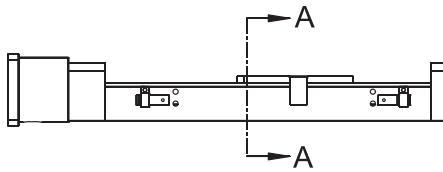
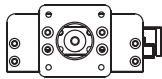
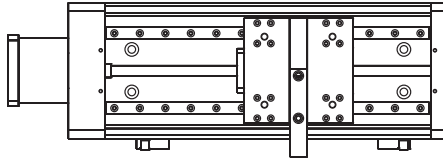
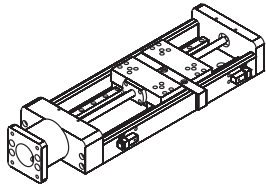
STEPPER MOTOR											
Travel	OAL	L	N	G	A	B	C	D	E	F	H
70	208.7	141.5	2	30.75							
120	258.7	191.5	3	15.75	35.7	42	31	3	22	3.2 THRU	5
170	308.7	241.5	3	40.75							
220	358.7	291.5	4	25.75							

SERVO MOTOR											
Travel	OAL	L	N	G	A	B	C	D	E	F	H
70	213.8	141.5	2	30.75							
120	263.8	191.5	3	15.75	40.8	42	32.5	3	30	M4 THREAD	6
170	313.8	241.5	3	40.75							
220	363.8	291.5	4	25.75							

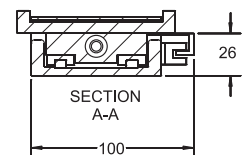
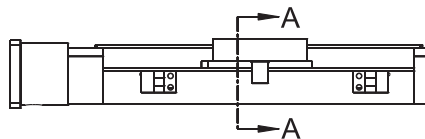
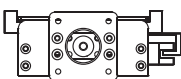
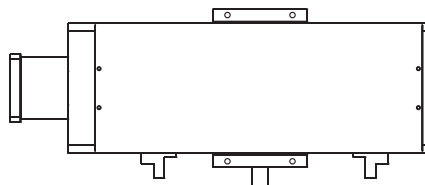
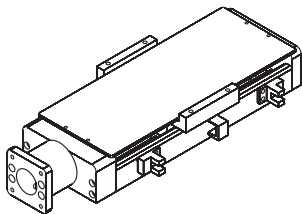


# DL 26B DW (continued)

## DL 26B DW With PX Proximity Sensors



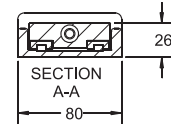
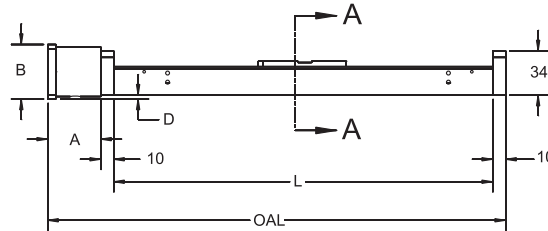
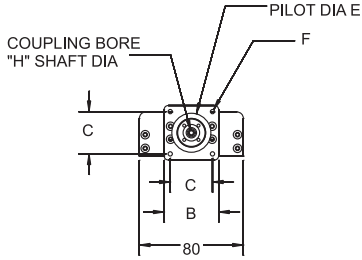
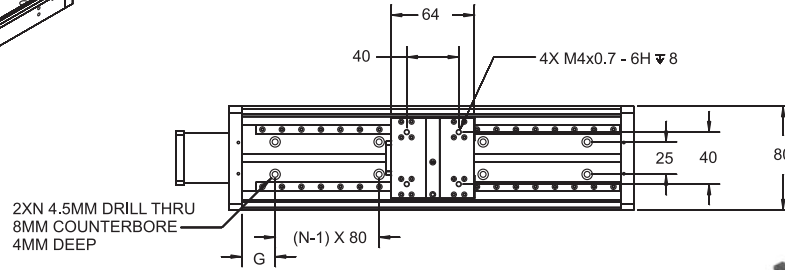
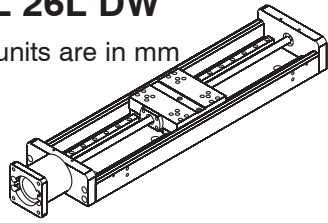
## DL 26B DW With PH Photo Sensors



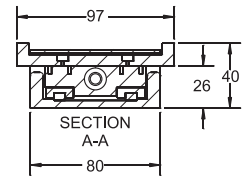
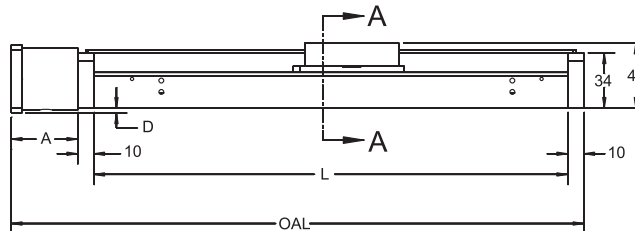
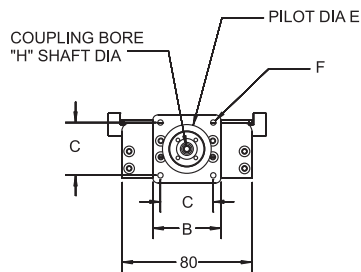
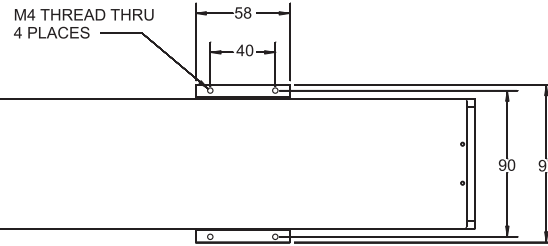
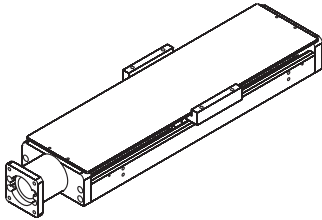
# DL 26L DW

## DL 26L DW

All units are in mm



## DL 26L DW With Cover



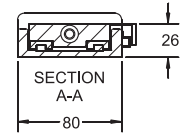
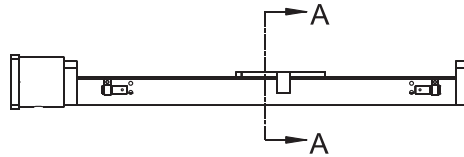
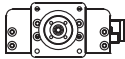
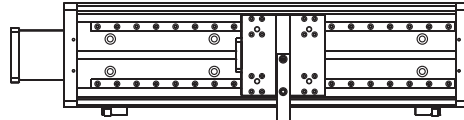
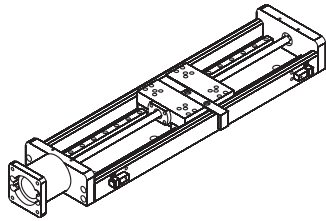
## Motor Options

STEPPER MOTOR											
Travel	OAL	L	N	G	A	B	C	D	E	F	H
70	197.2	141.5	2	30.75							
120	247.2	191.5	3	15.75	35.7	42	31	3	22	3.2 THRU	5
170	297.2	241.5	3	40.75							
220	347.2	291.5	4	25.75							

SERVO MOTOR											
Travel	OAL	L	N	G	A	B	C	D	E	F	H
70	202.3	141.5	2	30.75							
120	252.3	191.5	3	15.75	40.8	42	32.5	3	22	M4 THREAD	6
170	302.3	241.5	3	40.75							
220	352.3	291.5	4	25.75							

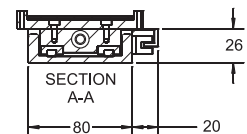
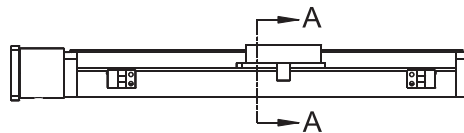
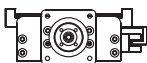
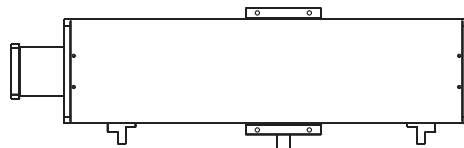
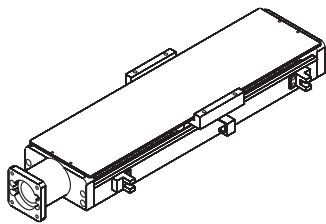
# DL 26L DW (continued)

## DL 26L DW With PX Proximity Sensors



---

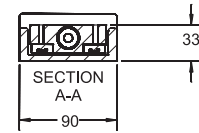
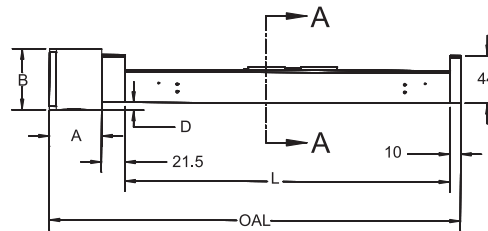
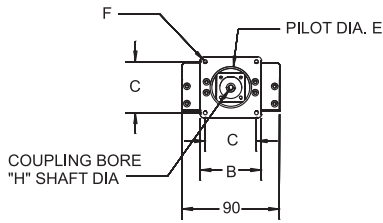
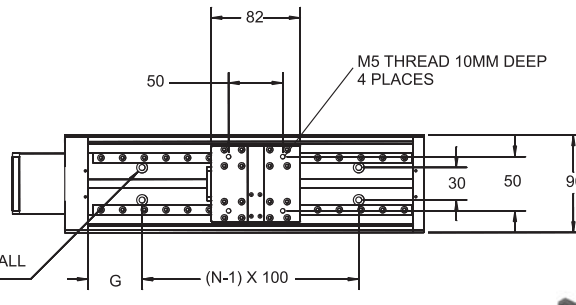
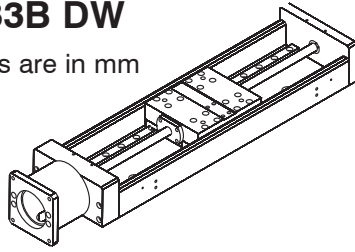
## DL 26L DW With PH Photo Sensors



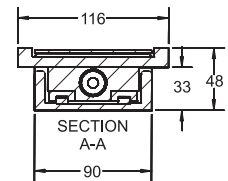
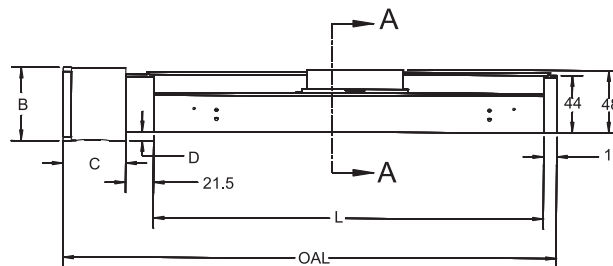
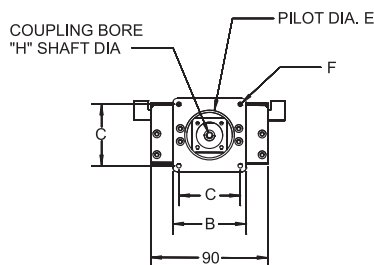
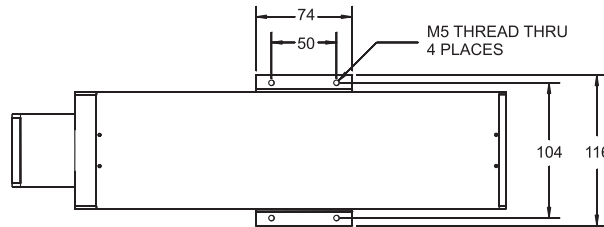
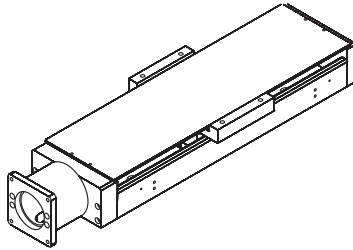
# DL 33B DW

## DL 33B DW

All units are in mm



## DL 33B DW With Cover



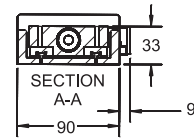
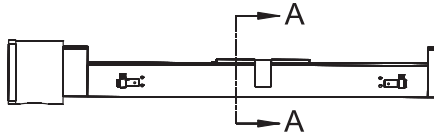
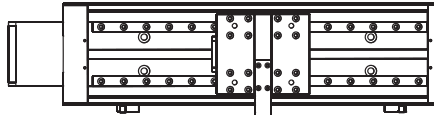
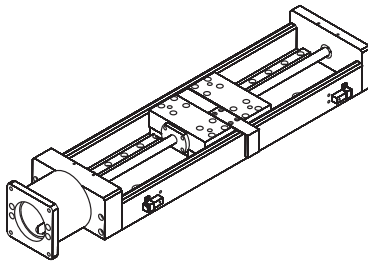
## Motor Options

Travel	OAL	L	N	G	STEPPER MOTOR							
					A	B	C	D	E	F	H	
60	229.6	150	2	25								
110	279.6	200	2	50	48.1	56.4	47.2	7.2	38.2	8-32 THREAD	6.35(.250")	
210	379.6	300	3	50								
310	479.6	400	4	50								
410	579.6	500	5	50								

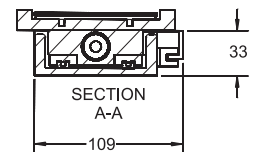
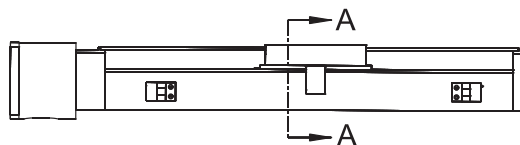
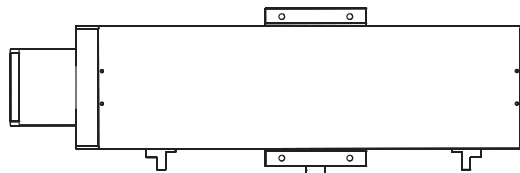
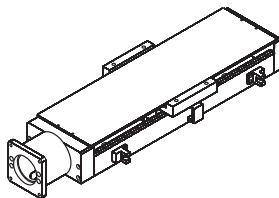
Travel	OAL	L	N	G	SERVO MOTOR						
					A	B	C	D	E	F	H
60	234.7	150	2	25							
110	284.7	200	2	50	53.2	60	49.5	8.9	50.1	M5 THREAD	8
210	384.7	300	3	50							
310	484.7	400	4	50							
410	584.7	500	5	50							

# DL 33B DW (continued)

## DL 33B DW With PX Proximity Sensors



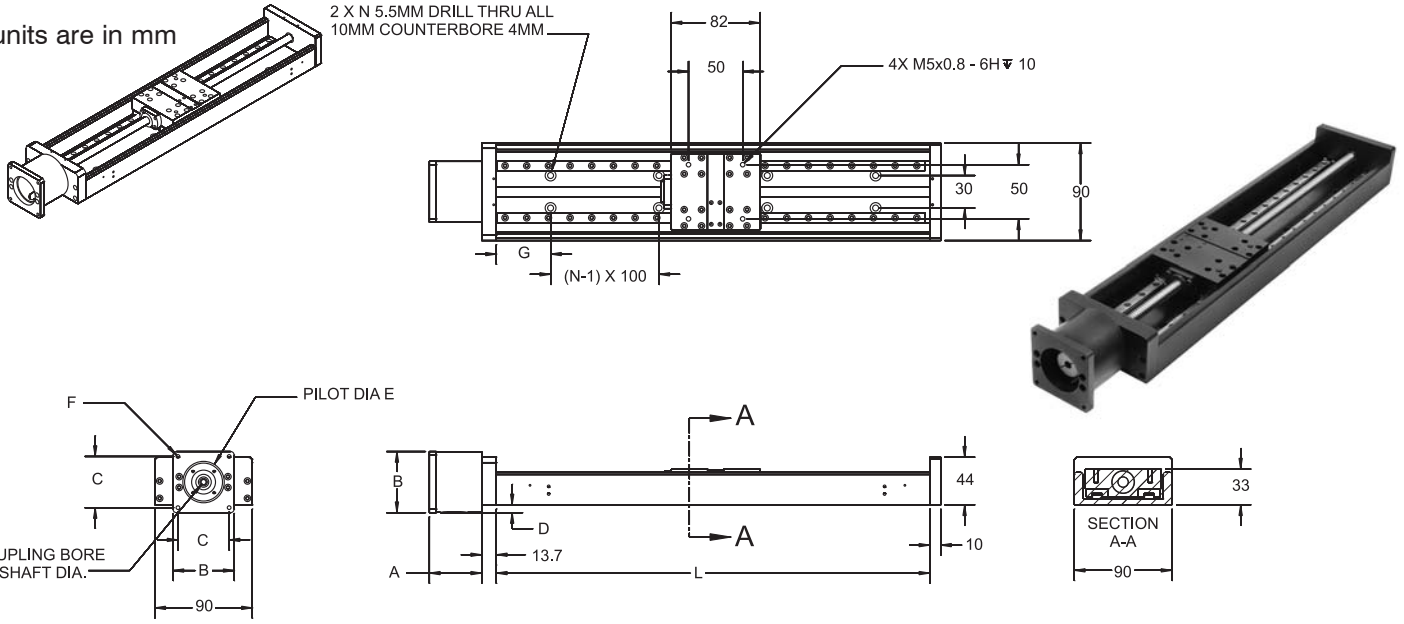
## DL 33B DW With PH Photo Sensors



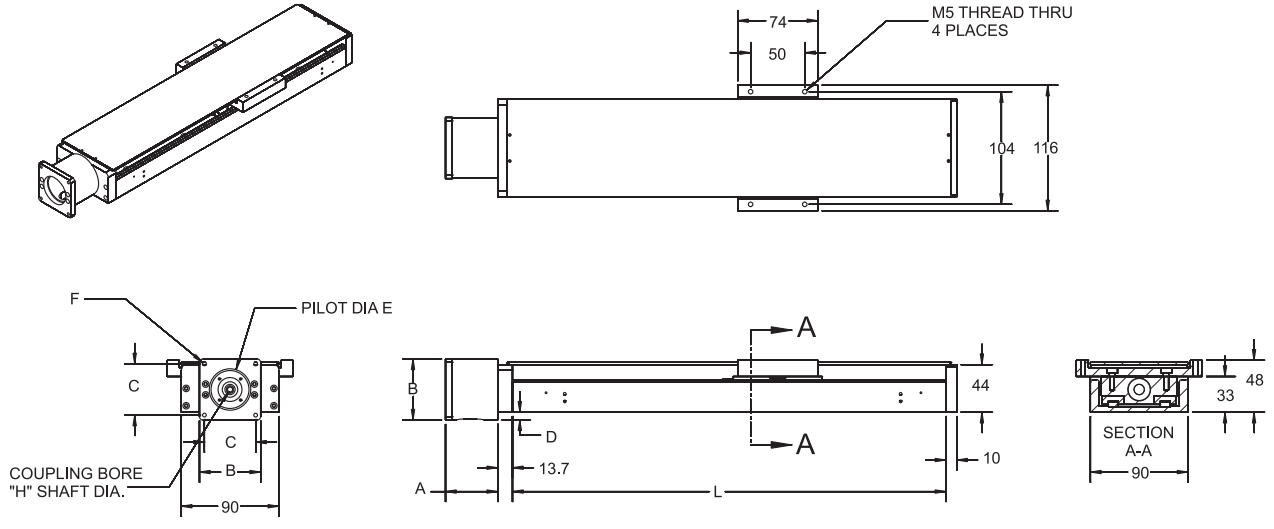
# DL 33L DW

## DL 33L DW

All units are in mm



## DL 33L DW With Cover



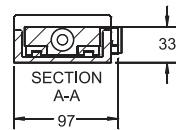
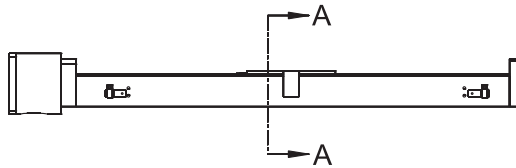
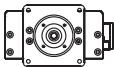
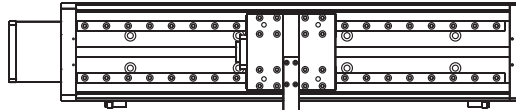
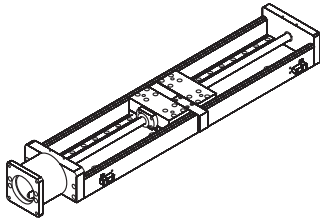
## Motor Options

Travel	OAL	L	N	G	STEPPER MOTOR							
					A	B	C	D	E	F	H	
60	221.8	150	2	25								
110	271.8	200	2	50	48.1	56.4	47.2	7.2	38.2	8-32 THREAD	6.35(.250")	
210	371.8	300	3	50								
310	471.8	400	4	50								
410	571.8	500	5	50								

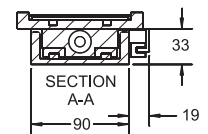
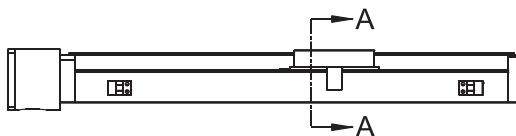
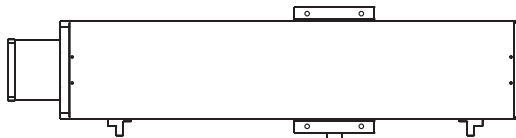
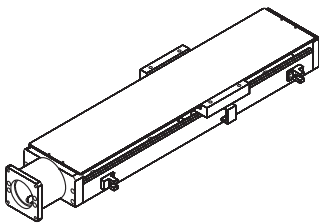
Travel	OAL	L	N	G	SERVO MOTOR						
					A	B	C	D	E	F	H
60	226.9	150	2	25							
110	276.9	200	2	50	53.2	60	49.5	8.9	50.1	M5 THREAD	8
210	376.9	300	3	50							
310	476.9	400	4	50							
410	576.9	500	5	50							

# DL 33L DW (continued)

## DL 33L DW With PX Proximity Sensors



## DL 33L DW With PH Photo Sensors





5 Trowbridge Drive, Bethel, CT 06801 · Phone: (203) 778-2727 · Fax: (203) 778-2721  
Web: [www.deltron.com](http://www.deltron.com) · E-Mail: [deltron@deltron.com](mailto:deltron@deltron.com)

6/11  
REV 6