



DLA SERIES + ACCESORIES

Stroke: 25 - 300mm
150 - 1000N

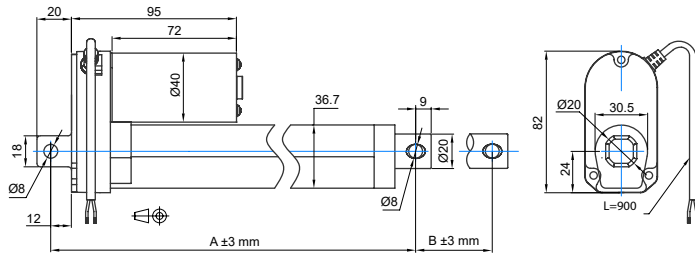
Transmotec sell a broad range of linear actuators in standard and customized configurations. Transmotec is the ideal supplier source especially to instrument and apparatus builders. We keep a high number of actuators in stock for immediate delivery.

Customizations include:

- ✓ Customized stroke length
- ✓ Customized clevis
- ✓ Customized cabling
- ✓ And more...

DLA Series / 25 - 300mm / 150 - 1000N

DRAWING
(mm)



PHOTO



MODEL NO. DESIGNATION



Example: DLA-12-5-A-50-IP65

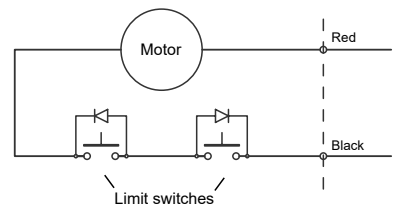
ACTUATOR DATA						
Reduction	5	10	20	30	40	
Voltage (VDC)	12/24	12/24	12/24	12/24	12/24	
Current at nominal dynamic load (A)	2.0/1.0	2.4/1.2	2.6/1.3	2.9/1.5	2.8/1.4	
Nominal dynamic load (N)	150	250	500	800	1000	
Max. static load (N)	500	2500	2500	2500	2500	
Speed at nominal dynamic load (mm/s)	36.5	23.5	12.3	7.5	5.5	

ACTUATOR STROKE DATA							
Stroke length B (mm)	25.4	50.0	100.0	150.0	200.0	250.0	300.0
Retracted length A (mm)	132.6	158.0	209.0	260.0	311.0	362.0	413.0
Life time number single strokes	157.000	80.000	40.000	26.666	20.000	16.000	13.333
Weight (kg)	0.800	0.850	0.925	0.990	1.060	1.130	1.200

ACTUATOR FEATURES AND STANDARD DATA

	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM DC motor	
Cable	Flying wire 900 mm	Length, type and connector
Voltage	12 or 24 VDC	36 or 48 VDC
Screw type	ACME pitch 3 mm	
Noise level	< 70 dB (A)	Yes
Life time	4 million mm total stroke	
Limit switches	Integrated non adjustable	Stroke length
Direction movement	By reversing voltage polarity	Yes
Stroke tolerance	±3 mm	±2 mm
Duty cycle	25%	
Max. duty operational time	1 min. nominal dynamic load	
Protection class	IP65	
Insulation class	F	
Max. motor winding temp.	155 °C	
EMC	EN55014 IEC61000	
Gear material	Metal spur gears	
Motor pinion gear	Plastic	Metal
Gear house material	STKM11A & zinc alloy	
Rod and house material	Aluminum	
Feedback options	Potentiometer or hall sensor	
Operating and storage temperature	-26°C~+65°C	
Manufacturing quality standards	ISO 9001:2008	
RoHS compliance	Yes	
CE label	Yes	

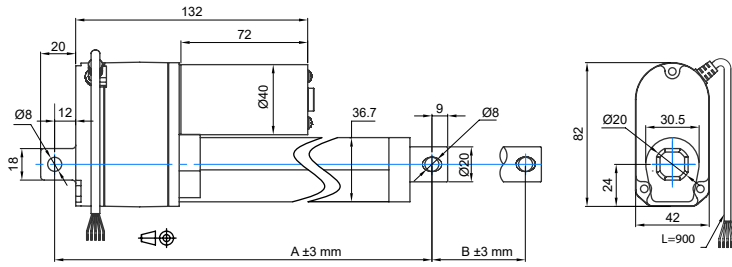
Motor wiring



	Red	Black
Extend	+	-
Retract	-	+

DLA Series / 25 - 300mm / 150 - 1000N / potentiometer (POT)

DRAWING
(mm)



PHOTO



MODEL NO. DESIGNATION



Example: DLA-12-5-A-50-POT-IP65

ACTUATOR DATA

	5	10	20	30	40
Reduction	5	10	20	30	40
Voltage (VDC)	12/24	12/24	12/24	12/24	12/24
Current at nominal dynamic load (A)	2.0/1.0	2.4/1.2	2.6/1.3	2.9/1.5	2.8/1.4
Nominal dynamic load (N)	150	250	500	800	1000
Max. static load (N)	500	2500	2500	2500	2500
Speed at nominal dynamic load (mm/s)	36.5	23.5	12.3	7.5	5.5

ACTUATOR STROKE DATA

	25.4	50.0	100.0	150.0	200.0	250.0	300.0
Stroke length B (mm)	25.4	50.0	100.0	150.0	200.0	250.0	300.0
Retracted length A (mm)	169.6	195.0	246.0	297.0	348.0	399.0	450.0
Resistance (kΩ)	0.3-4.62	0.3-9.3	0.3-9.7	0.3-8.6	0.3-9.6	0.3-9.3	0.3-9.3
Feedback (Ω/mm)	180	180	95	55	46	36	30
Life time number single strokes	157.000	80.000	40.000	26.666	20.000	16.000	13.333
Weight (kg)		1.110	1.175	1.250	1.315	1.385	1.455

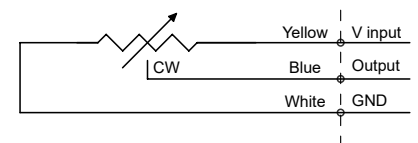
ACTUATOR FEATURES AND STANDARD DATA

	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM DC motor	
Cable	Flying wire 900 mm	Length, type and connector
Voltage	12 or 24 VDC	36 or 48 VDC
Screw type	ACME pitch 3 mm	
Noise level	< 70 dB (A)	Yes
Life time	4 million mm total stroke	
Limit switches	Integrated non adjustable	Stroke length
Direction movement	By reversing voltage polarity	Yes
Stroke tolerance	±3 mm	±2 mm
Duty cycle	25%	
Max. duty operational time	1 min. nominal dynamic load	
Protection class	IP65	
Insulation class	F	
Max. motor winding temp.	155 °C	
EMC	EN55014 IEC61000	
Gear material	Metal spur gears	
Motor pinion gear	Plastic	Metal
Gear house material	STKM11A & zinc alloy	
Rod and house material	Aluminum	
Feedback	Potentiometer	
Operating and storage temperature	-26°C~+65°C	
Manufacturing quality standards	ISO 9001:2008	
RoHS compliance	Yes	
CE label	Yes	

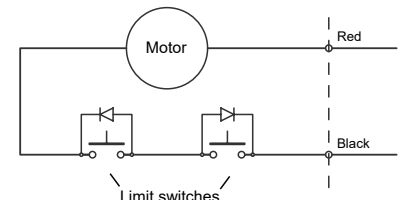
POTENTIOMETER FEATURES AND DATA

Type	Wire wound
Resistance	0.3 - 9.7 kΩ
Resolution	0.025%
Resistance tolerance	±5%
Linearity	±0.25%
Cable	3+2 wires flying wire

Potentiometer wiring



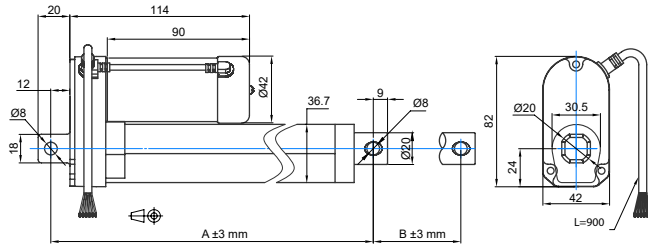
Motor wiring



	Red	Black
Extend	+	-
Retract	-	+

DLA Series / 25 - 300mm / 150 - 1000N / hall sensor (HS2)

DRAWING
(mm)



PHOTO



MODEL NO. DESIGNATION

DLA - VOLTAGE - REDUCTION - A - STROKE - FEEDBACK - IP65 Example: DLA-12-5-A-50-HS2-IP65

ACTUATOR DATA						
Reduction	5	10	20	30	40	
Voltage (VDC)	12/24	12/24	12/24	12/24	12/24	
Current at nominal dynamic load (A)	2.0/1.0	2.4/1.2	2.6/1.3	2.9/1.5	2.8/1.4	
Nominal dynamic load (N)	150	250	500	800	1000	
Max. static load (N)	500	2500	2500	2500	2500	
Speed at nominal dynamic load (mm/s)	36.5	23.5	12.3	7.5	5.5	
Number of encoder channels	2	2	2	2	2	
Hall sensor channel counts per mm	4.6	7.2	13.8	21.2	28.6	

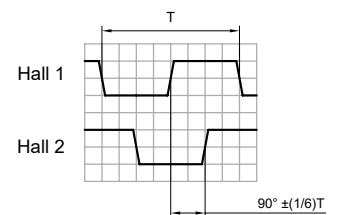
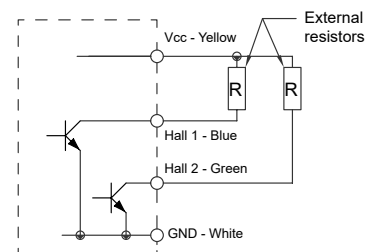
ACTUATOR STROKE DATA							
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Life time number single strokes	157.000	80.000	40.000	26.666	20.000	16.000	13.333
Weight (kg)	0.800	0.850	0.925	0.990	1.060	1.130	1.200

HALL SENSOR FEATURES AND DATA		
CHARACTERISTIC		VALUE
Supply voltage, Vcc		3.5V to 20V
Supply Current, Icc	Vcc	≤10 mA
Output current, Ic		≤25 mA
Output saturation voltage,	Vcc=14V	≤700mV
Output leakage current, Icox	Vcc=	≤10 µA
Output rise and fall time, tr/tf		≤1,5 µS

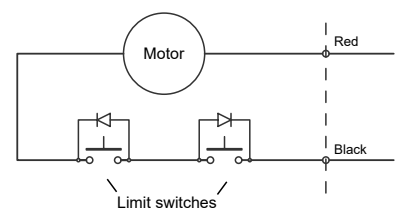
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Limit switches	Integrated non adjustable	Stroke length
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EMC	EN55014 IEC61000	
Gear material	Metal spur gears	
Motor pinion gear	Plastic	Metal
Gear house material	STKM11A & zinc alloy	
Rod and house material	Aluminum	
Feedback	Hall sensor	
Operating and storage temperature	-26°C~+65°C	
Manufacturing quality standards	ISO 9001:2008	
RoHS compliance	Yes	
CE label	Yes	

Hall sensor output circuit
Open collector output

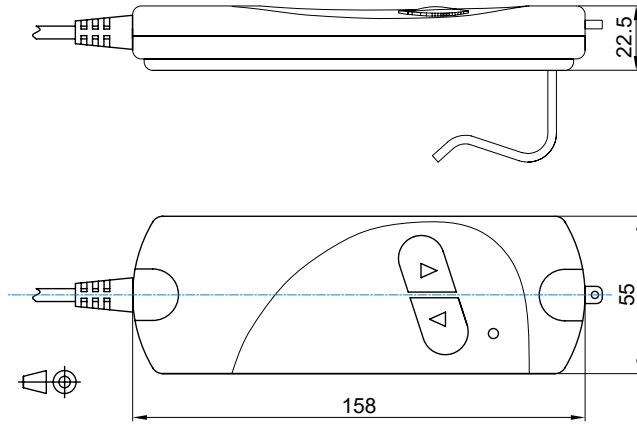


Motor wiring



DLA Series / control system

DRAWING
(mm)



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CONTROL SYSTEM DATA

	110/60Hz	110/60Hz	230/50Hz	230/50Hz
Input voltage (VAC)	110/60Hz	110/60Hz	230/50Hz	230/50Hz
Output voltage (VDC)	12	24	12	24
Output current limit (A)	6	3	6	3
Weight DDL transformer (g)	1290	1290	1290	1290
Weight HDL hand control (g)	180	180	180	180

CONTROL SYSTEM FEATURES AND DATA

	STANDARD	CUSTOMIZATION OPTIONS
Type	AC/DC transformer	
Cable HDL	3000 mm	Yes
Cable DDL	1000 mm	Yes
Battery backup	2 x 9 volt batteries	
Integrated voltage polarity switch	Yes	
Current limit	Yes	
Actuator connector	DIN 2 poles	
Hand control connector	DIN 4 poles	
CE label	Yes	
UL approval	Yes for 110 VAC / 24 VDC	Yes

