

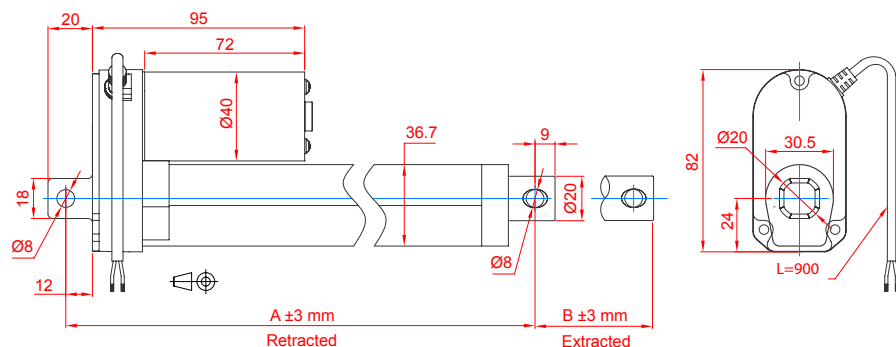
## DLA SERIES + ACCESSORIES

50 mm to 300 mm stroke  
1200 N

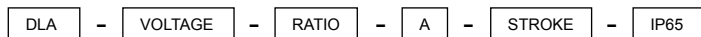


LINEAR ACTUATORS

# DLA series 50-300 mm 200-1200 N



## MODEL NO. DESIGNATIONS



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

## ACTUATOR DATA

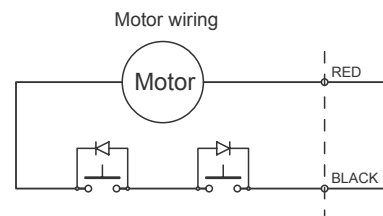
Reduction	5	10	20	30	40
Voltage (VDC)	12/24	12/24	12/24	12/24	12/24
Current at max. thrust (A)	3.0/1.5	3.0/1.5	3.0/1.5	3.0/1.5	3.0/1.5
Max. thrust (N)	200	300	500	800	1200
Static force (N)	1500	1500	1500	1500	1500
Speed at max. thrust (mm/s)	35	25	15	10	5

## ACTUATOR STROKE DATA

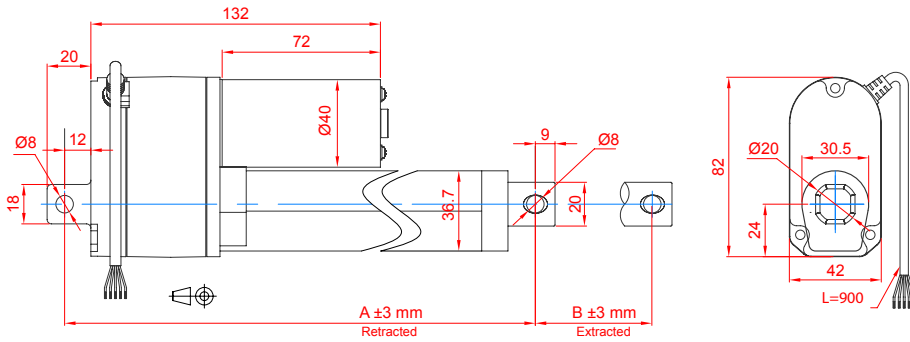
Stroke version B (mm)	50	100	150	200	250	300
Retracted length A (mm)	158	209	260	311	362	413
Life time number single strokes	80.000	40.000	26.666	20.000	16.000	13.333
Weight (g)	850	925	990	1060	1130	1200

## ACTUATOR FEATURES AND STANDARD DATA

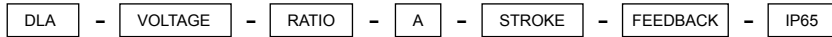
	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM dc motor	
Cable	Flying wire 900 mm	Yes
Voltage	12 or 24 volt dc	36 or 48 volt dc
Screw type	ACME pitch 3 mm	
Noise level	< 60 db (A)	Yes
Life time	4 million mm total stroke	
Limit switches	Integrated non adjustable	Stroke length
Direction movement	By reversing voltage polarity	Yes
Stroke tolerance	±3 mm	±2 mm
Duty cycle	25%	
Max. duty operational time	1 min. max. thrust	
Protection class	IP65	
Insulation class	F	
Max. motor winding temp.	155 °C	
EMC	EN55014 IEC61000	
Gear box	Metal spur gears	
Motor pinion gear	Plastic	Metal
Gear box material	Zinc alloy	
Rod and house material	Aluminum STKM11A	Stroke length
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	
UL approval	No	Yes



# DLA series 50-300 mm 1200 N with potentiometer feedback



## MODEL NO. DESIGNATIONS



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

## ACTUATOR DATA

Reduction	5	10	20	30	40
Voltage (VDC)	12/24	12/24	12/24	12/24	12/24
Current at max. thrust (A)	3.0/1.5	3.0/1.5	3.0/1.5	3.0/1.5	3.0/1.5
Max. thrust (N)	200	300	500	800	1200
Static force (N)	1500	1500	1500	1500	1500
Speed at max. thrust (mm/s)	35	25	15	10	5

## ACTUATOR STROKE DATA

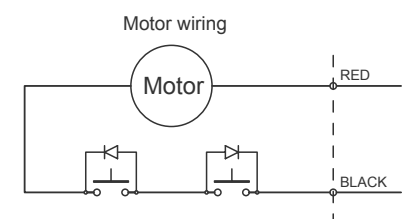
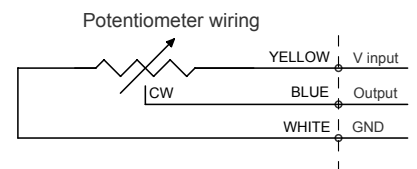
Stroke version B (mm)	50	100	150	200	250	300
Retracted length A (mm)	195	246	297	348	399	450
Resistance (Kohm)	0.3-9.3	0.3-9.7	0.3-8.6	0.3-9.6	0.3-9.3	0.3-9.3
Feedback (ohm/mm)	180	95	55	46	36	30
Life time number single strokes	80.000	40.000	26.666	20.000	16.000	13.333
Weight (g)	1110	1175	1250	1315	1385	1455

## ACTUATOR FEATURES AND STANDARD DATA

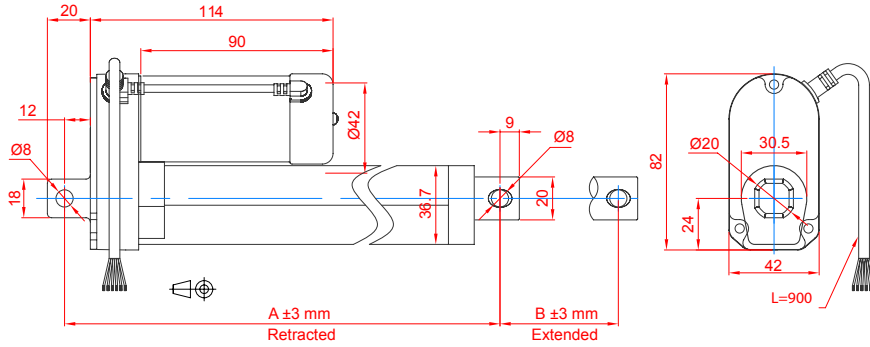
	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM dc motor	
Cable	Flying wire 900 mm	Yes
Voltage	12 or 24 volt dc	36 or 48 volt dc
Screw type	ACME pitch 3 mm	
Noise level	< 60 db (A)	Yes
Life time	4 million mm total stroke	
Limit switches	Integrated non adjustable	Stroke length
Direction movement	By reversing voltage polarity	Yes
Stroke tolerance	±3 mm	±2 mm
Duty cycle	25%	
Max. duty operational time	1 min. max. thrust	
Protection class	IP65	
Insulation class	F	
Max. motor winding temp.	155 °C	
EMC	EN55014 IEC61000	
Gear box	Metal spur gears	
Motor pinion gear	Plastic	Metal
Gear box material	Zinc alloy	
Rod and house material	Aluminum STKM11A	Stroke length
Feedback	Potentiometer	
Operating and storage temperature	-26°C~+65°C	
Manufacturing quality standards	ISO 9001:2008	
RoHS compliance	Yes	
CE label	Yes	
UL approval	No	Yes

## POTENTIOMETER FEATURES AND DATA

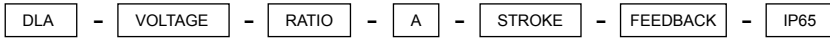
Type	Wire wound
Resistance	0.3 - 9.7 Kohm
Resolution	0.025%
Resistance tolerance	±5%
Linearity	±0.25%
Cable	3+2 leads flying wire 900 mm



# DLA series 50-300 mm 1200 N with hall sensor feedback



## MODEL NO. DESIGNATIONS



Example: DLA-12-5-A-50-HS2-IP65

## ACTUATOR STROKE DATA

Stroke version B (mm)	50	100	150	200	250	300
Retracted length A (mm)	158	209	260	311	362	413
Life time number single strokes	80.000	40.000	26.666	20.000	16.000	13.333
Weight (g)	850	925	990	1060	1130	1200

## ACTUATOR DATA

Reduction	5	10	20	30	40
Voltage (VDC)	12/24	12/24	12/24	12/24	12/24
Current at max. thrust (A)	3.0/1.5	3.0/1.5	3.0/1.5	3.0/1.5	3.0/1.5
Max. thrust (N)	200	300	500	800	1200
Static force (N)	1500	1500	1500	1500	1500
Speed at max. thrust (mm/s)	35	25	15	10	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

## HALL SENSOR FEATURES AND DATA

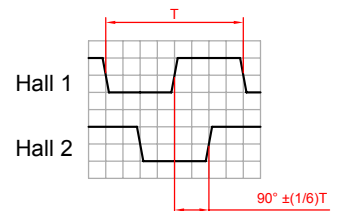
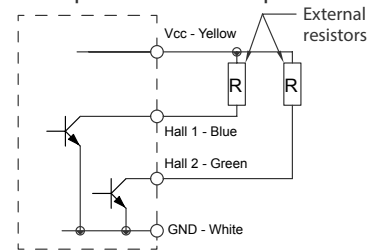
CHARACTERISTIC	CONDITION	VALUE
Supply voltage, Vcc		3,5V to 20V
Supply Current, Icc	Vcc = 20V Output open	≤10 mA
Output current, Ic		≤25 mA
Output saturation voltage, Vce(sat)	Vcc=14V ; Ic=20mA	≤ 700mV
Output leakage current, Iccx	Vcc= 14V; Vce=14V	≤10 µA
Output rise and fall time, tr/tf	RL=820Ω; CL=20pF	≤1,5 µS

## ACTUATOR FEATURES AND STANDARD DATA

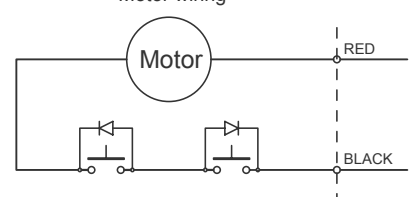
	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM dc motor	
Cable	Flying wire 900 mm	Yes
Voltage	12 or 24 volt dc	36 or 48 volt dc
Screw type	ACME pitch 3 mm	
Noise level	< 60 db (A)	Yes
Life time	4 million mm total stroke	
Limit switches	Integrated non adjustable	Stroke length
Direction movement	By reversing voltage polarity	Yes
Stroke tolerance	±3 mm	±2 mm
Duty cycle	25%	
Max. duty operational time	1 min. max. thrust	
Protection class	IP65	
Insulation class	F	
Max. motor winding temp.	155 °C	
EMC	EN55014 IEC61000	
Gear box	Metal spur gears	
Motor pinion gear	Plastic	Metal
Gear box material	Zinc alloy	
Rod and house material	Aluminum STKM11A	Stroke length
Feedback	Hall sensor	
Operating and storage temperature	-26°C~+65°C	
Manufacturing quality standards	ISO 9001:2008	
RoHS compliance	Yes	
CE label	Yes	
UL approval	No	Yes

## Hall sensor output circuit

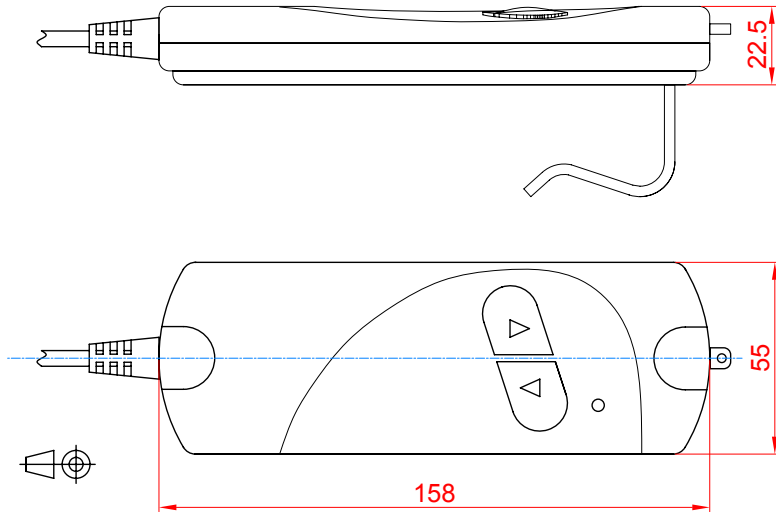
### Open collector output



### Motor wiring



## DLA series control system



CONTROL SYSTEM DATA				
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

