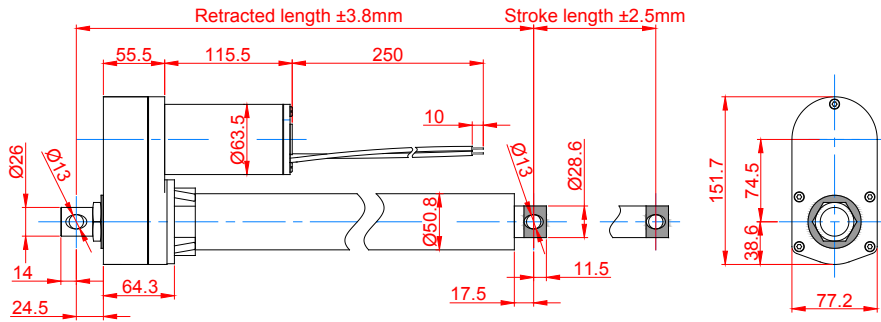


## DMA SERIES

102 mm to 610 mm stroke  
7000 N



# DMA series 102-610 mm 3500 N



## MODEL NO. DESIGNATIONS

DMA - VOLTAGE - RATIO - A - STROKE - IP65

Example: DMA-12-20-A-305-IP65

## ACTUATOR DATA

Reduction	10	20	40
Voltage (VDC)	12/24	12/24	12/24
Current at max. thrust (A)	18/9	13/6.5	11/5.5
Max. thrust (N)	1500	2500	3500
Static force (N)	4500	4500	4500
Speed at max. thrust (mm/s)	28	12	5
Max. speed	34	17	8

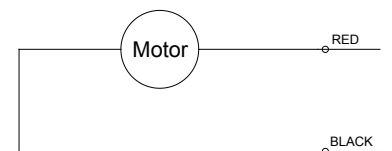
## ACTUATOR STROKE DATA

Stroke length and version (mm)	102	153	203	305	457	610
Retracted length (mm)	262	313	364	465	668	821
Life time number single strokes	39.000	26.000	20.000	12.000	8.700	6.500
Weight (Kg)	4.3	4.6	4.9	5.4	6.2	7.8

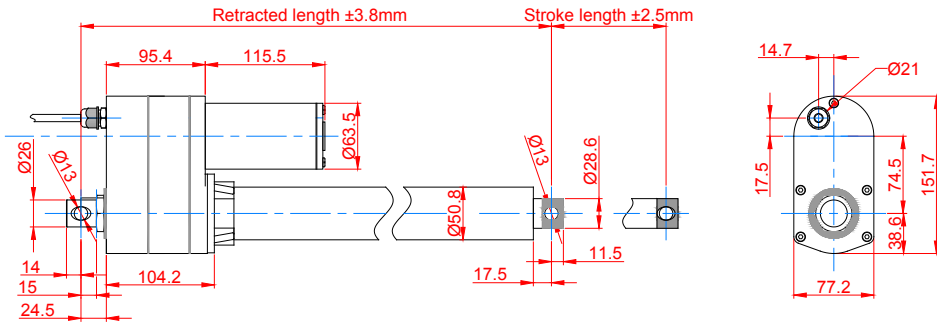
## ACTUATOR FEATURES AND STANDARD DATA

	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM dc motor	
Cable	Flying wire 250 mm	Yes
Voltage	12 or 24 volt dc	36 or 48 volt dc
Screw type	ACME	
Noise level	< 60 db (A)	Yes
Life time	4 million mm total stroke	
Limit switches option	Yes	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
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	
Gear box material	Aluminum alloy	
Rod and house material	Steel 12L14 STKM11A	
Feedback options	Potentiometer	
Operating and storage temperature	-26°C~+65°C	
Manufacturing quality standards	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	
UL approval	No	Yes

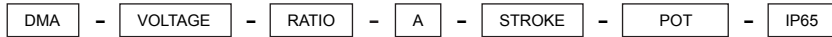
Standard wiring



# DMA series 102-610 mm 3500 N potentiometer



## MODEL NO. DESIGNATIONS



Example: DMA-12-20-A-305-POT-IP65

## ACTUATOR DATA

Reduction	10	20	40
Voltage (VDC)	12/24	12/24	12/24
Current at max. thrust (A)	18/9	13/6.5	11/5.5
Max. thrust	1500	2500	3500
Static force (N)	4500	4500	4500
Speed at max. thrust (mm/s)	26	12	5
Max. speed	34	17	8

## ACTUATOR STROKE DATA

Stroke length and version (mm)	102	153	203	305	457	610
Retracted length (mm)	302	353	404	505	708	861
Feedback (ohm/mm)	100	67	50	33	22	17
Life time number single strokes	39.000	26.000	20.000	13.000	8.700	6.500
Weight (Kg)	4.3	4.6	4.9	5.4	6.2	7.8

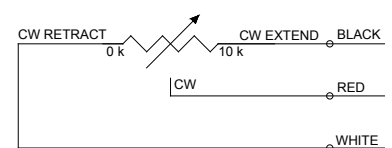
## ACTUATOR FEATURES AND STANDARD DATA

	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM dc motor	
Cable	Flying wire 250 mm	Yes
Voltage	12 or 24 volt dc	36 or 48 volt dc
Screw type	ACME	
Noise level	< 60 db (A)	Yes
Life time	4 million mm total stroke	
Limit switches	N/A	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
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	
Gear box material	Aluminum alloy	
Rod and house material	Steel 12L14 STKM11A	
Feedback	Potentiometer	
Operating and storage temperature	-26°C~+65°C	
Manufacturing quality standards	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	
UL approval	No	Yes

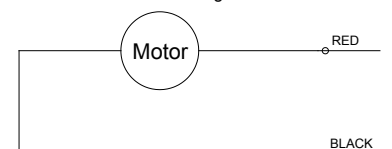
## POTENTIOMETER DATA

Type	Wire wound
Resistance	0.3 - 9.7 Kohm
Resolution	0.025%
Resistance tolerance	±5%
Linearity	±0.25%
Cable	3+2 leads 250 mm

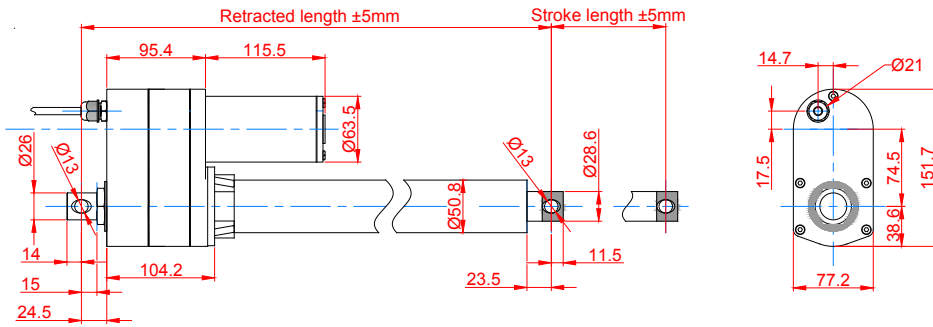
Potentiometer wiring



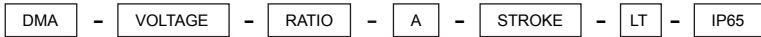
Standard wiring



# DMA series 102-610 mm 3500 N limit switch



## MODEL NO. DESIGNATIONS



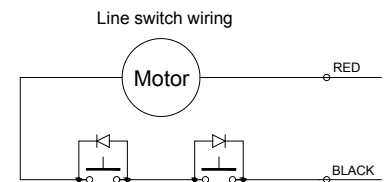
Example: DMA-12-20-A-305-LT-IP65

ACTUATOR DATA			
Reduction	10	20	40
Voltage (VDC)	12/24	12/24	12/24
Current at max. thrust (A)	18/9	13/6.5	11/5.5
Max. thrust (N)	1500	2500	3500
Max Static force (N)	4500	4500	4500
Speed at max. thrust (mm/s)	26	12	5
Max. speed	34	17	8

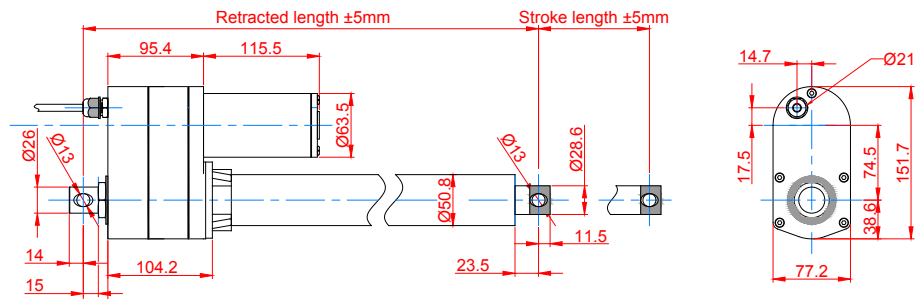
ACTUATOR STROKE DATA						
Stroke length and version (mm)	102	153	203	305	457	610
Retracted length (mm)	359	410	460	613	765	918
Life time number single strokes	39.000	26.000	20.000	13.000	8.700	6.500
Weight (Kg)	4.3	4.6	4.9	5.4	6.2	7.8

## ACTUATOR FEATURES AND STANDARD DATA

	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM dc motor	
Cable	Flying wire 250 mm	Yes
Voltage	12 or 24 volt dc	36 or 48 volt dc
Screw type	ACME	
Noise level	< 60 db (A)	Yes
Life time	4 million mm total stroke	
Limit switches	Yes	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
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	
Gear box material	Aluminum alloy	
Rod and house material	Steel 12L14 STKM11A	
Feedback options	Potentiometer	
Operating and storage temperature	-26°C~+65°C	
Manufacturing quality standards	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	
UL approval	No	Yes



# DMA series 102-610 mm 3500 N limit switch potentiometer



## MODEL NO. DESIGNATIONS

DMA - VOLTAGE - RATIO - A - STROKE - LT - POT - IP65

Example: DMA-12-20-A-305-LT-POT-IP65

## ACTUATOR DATA

	10	20	40
Reduction	10	20	40
Voltage (VDC)	12/24	12/24	12/24
Current at max. thrust (A)	18/9	13/6.5	11/5.5
Max. thrust (N)	1500	2500	3500
Max Static force (N)	4500	4500	4500
Speed at max. thrust (mm/s)	26	12	5
Max. speed	34	17	8

## ACTUATOR STROKE DATA

	102	153	203	305	457	610
Stroke length and version (mm)	102	153	203	305	457	610
Retracted length (mm)	359	410	460	613	765	918
Feedback (ohm/mm)	100	67	50	33	22	17
Life time number single strokes	39.000	26.000	20.000	13.000	8.700	6.500
Weight (Kg)	4.3	4.6	4.9	5.4	6.2	7.8

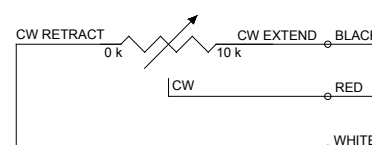
## ACTUATOR FEATURES AND STANDARD DATA

	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM dc motor	
Cable	Flying wire 250 mm	Yes
Voltage	12 or 24 volt dc	36 or 48 volt dc
Screw type	ACME	
Noise level	< 60 db (A)	Yes
Life time	4 million mm total stroke	
Limit switches	Yes	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
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	
Gear box material	Aluminum alloy	
Rod and house material	Steel 12L14 STKM11A	
Feedback	Potentiometer	
Operating and storage temperature	-26°C~+65°C	
Manufacturing quality standards	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	
UL approval	No	Yes

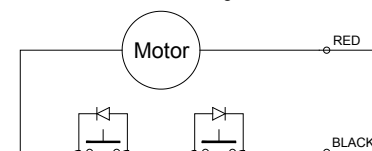
## POTENTIOMETER DATA

	WIRE WOUND
Type	Wire wound
Resistance	0.3 - 9.7 Kohm
Resolution	0.025%
Resistance tolerance	±5%
Linearity	±0.25%
Cable	3+2 leads 250 mm

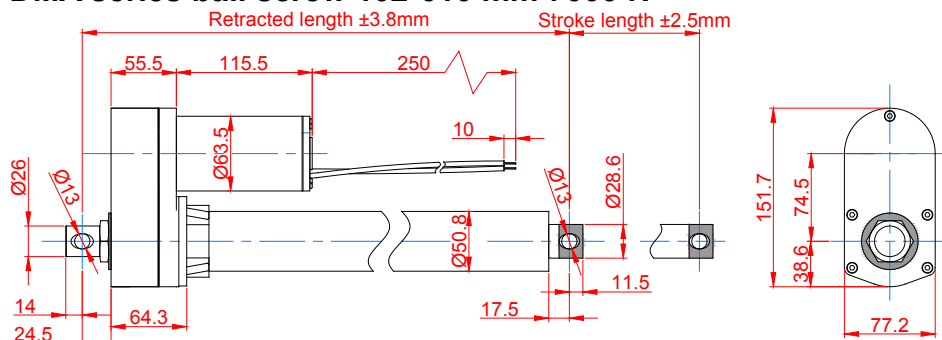
Potentiometer wiring



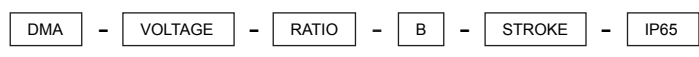
Line switch wiring



# DMA series ball screw 102-610 mm 7000 N



## MODEL NO. DESIGNATIONS



Example: DMA-12-20-B-305-IP65

## ACTUATOR DATA

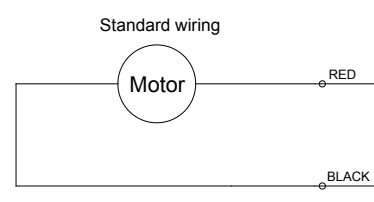
Reduction	5	10	20	30	40
Voltage (VDC)	12/24	12/24	12/24	12/24	12/24
Current at max. thrust (A)	28/14	18/9	13/7	13/7	11/5.5
Max. thrust (N)	2600	3500	4500	6000	7000
Max Static force (N)	13600	13600	13600	13600	13600
Speed at max. thrust (mm/s)	47	23	13	9	5
Max. speed	67	35	17	12	7

## ACTUATOR STROKE DATA

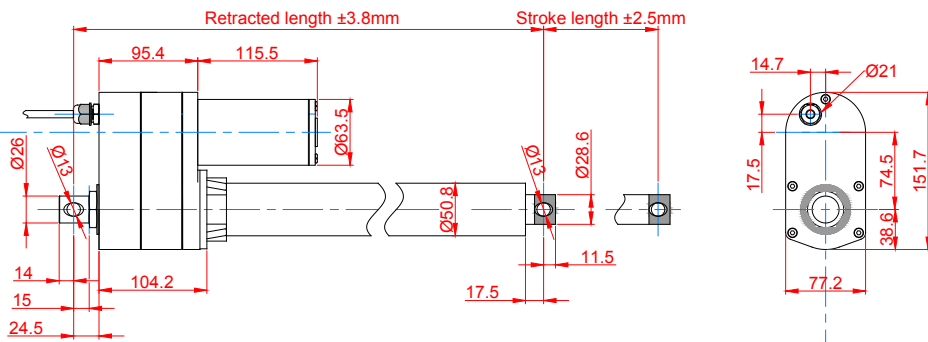
Stroke length and version (mm)	102	153	203	305	457	610
Retracted length (mm)	302	353	404	506	735	888
Life time number single strokes	39.000	26.000	20.000	13.000	8.700	6.500
Weight (Kg)	4.3	4.6	4.9	5.4	6.2	7.8

## ACTUATOR FEATURES AND STANDARD DATA

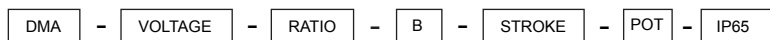
	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM dc motor	
Cable	Flying wire 250 mm	Yes
Voltage	12 or 24 volt dc	36 or 48 volt dc
Screw type	Ball screw	
Noise level	< 60 db (A)	Yes
Life time	4 million mm total stroke	
Limit switches	N/A	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
Stroke tolerance	$\pm 3\text{ mm}$	$\pm 2\text{ mm}$
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	
Gear box material	Aluminum alloy	
Rod and house material	Steel 12L14 STKM11A	
Feedback options	Potentiometer	
Operating and storage temperature	-26°C~+65°C	
Manufacturing quality standards	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	
UL approval	No	Yes



# DMA series ball screw 102-610 mm 7000 N potentiometer



## MODEL NO. DESIGNATIONS



Example: DMA-12-20-B-305-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 max. thrust (A)	28/14	18/9	13/7	13/7	11/5.5
Max. thrust (N)	2600	3500	4500	6000	7000
Max Static force (N)	13600	13600	13600	13600	13600
Speed at max. thrust (mm/s)	47	23	13	9	5
Max. speed	67	35	17	12	7

## ACTUATOR STROKE DATA

	102	153	203	305	457	610
Stroke length and version (mm)	102	153	203	305	457	610
Retracted length (mm)	342	393	444	546	775	928
Feedback (ohm/mm)	100	67	50	33	22	17
Life time number single strokes	39.000	26.000	20.000	13.000	8.700	6.500
Weight (g)	4.3	4.6	4.9	5.4	6.2	7.8

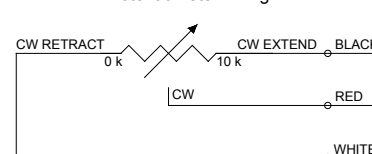
## ACTUATOR FEATURES AND STANDARD DATA

	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM dc motor	
Cable	Flying wire 250 mm	Yes
Voltage	12 or 24 volt dc	36 or 48 volt dc
Screw type	Ball screw	
Noise level	< 60 db (A)	Yes
Life time	4 million mm total stroke	
Limit switches	N/A	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
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	
Gear box material	Aluminum alloy	
Rod and house material	Steel 12L14 STKM11A	
Feedback	Potentiometer	
Operating and storage temperature	-26°C~+65°C	
Manufacturing quality standards	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	
UL approval	No	Yes

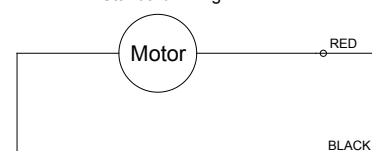
## POTENTIOMETER DATA

Type	Wire wound
Resistance	0.3 - 9.7 Kohm
Resolution	0.025%
Resistance tolerance	±5%
Linearity	±0.25%
Cable	3+2 leads 250 mm

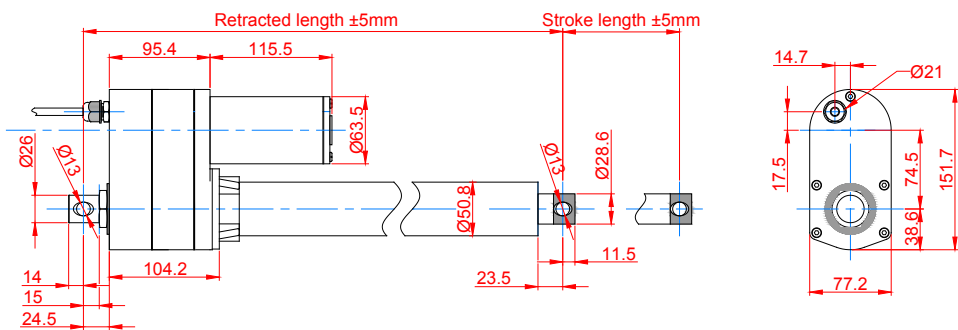
### Potentiometer wiring



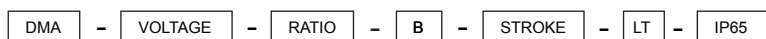
### Standard wiring



# DMA series ball screw 102-610 mm 7000 N limit switch



## MODEL NO. DESIGNATIONS



Example: DMA-12-20-B-305-LT-IP65

## ACTUATOR STROKE DATA

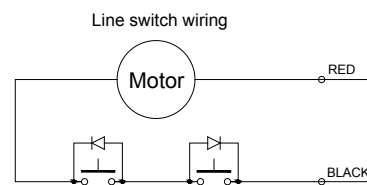
	5	10	20	30	40
Reduction	5	10	20	30	40
Voltage (VDC)	12/24	12/24	12/24	12/24	12/24
Current at max. thrust (A)	28/14	18/9	13/7	13/7	11/5.5
Max. thrust (N)	2600	3500	4500	6000	7000
Max Static force (N)	13600	13600	13600	13600	13600
Speed at max. thrust (mm/s)	47	23	13	9	5
Max. speed	67	35	17	12	7

## ACTUATOR DATA

	102	153	203	305	457	610
Stroke length and version (mm)	102	153	203	305	457	610
Retracted length (mm)	399	450	460	680	832	985
Life time number single strokes	39.000	26.000	20.000	13.000	8.700	6.500
Weight (Kg)	4.3	4.6	4.9	5.4	6.2	7.8

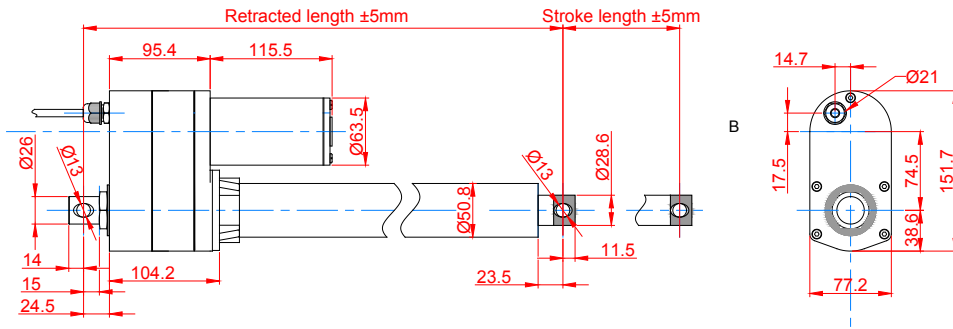
## ACTUATOR FEATURES AND STANDARD DATA

	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM dc motor	
Cable	Flying wire 250 mm	Yes
Voltage	12 or 24 volt dc	36 or 48 volt dc
Screw type	Ball screw	
Noise level	< 60 db (A)	Yes
Life time	4 million mm total stroke	
Limit switches	Yes	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
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	
Gear box material	Aluminum alloy	
Rod and house material	Steel 12L14 STKM11A	
Feedback options	Potentiometer	
Operating and storage temperature	-26°C~+65°C	
Manufacturing quality standards	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	
UL approval	No	Yes

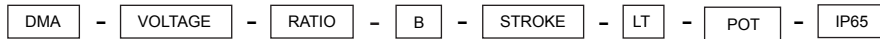




# DMA series ball screw 102-610 mm 3500 N limit switch potentiometer



## MODEL NO. DESIGNATIONS



Example: DMA-12-20-B-305-LT-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 max. thrust (A)	28/14	18/9	13/7	13/7	11/5.5
Max. thrust (N)	2600	3500	4500	6000	7000
Max Static force (N)	13600	13600	13600	13600	13600
Speed at max. thrust (mm/s)	47	23	13	9	5
Max. speed	67	35	17	12	7

## ACTUATOR STROKE DATA

	102	153	203	305	457	610
Stroke length and version (mm)	102	153	203	305	457	610
Retracted length (mm)	399	450	501	680	832	985
Feedback (ohm/mm)	100	67	50	33	22	17
Life time number single strokes	39.000	26.000	20.000	13.000	8.700	6.500
Weight (Kg)	4.3	4.6	4.9	5.4	6.2	7.8

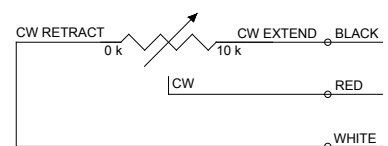
## ACTUATOR FEATURES AND STANDARD DATA

	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM dc motor	
Cable	Flying wire 250 mm	Yes
Voltage	12 or 24 volt dc	36 or 48 volt dc
Screw type	Ball screw	
Noise level	< 60 db (A)	Yes
Life time	4 million mm total stroke	
Limit switches	Yes	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
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	
Gear box material	Aluminum alloy	
Rod and house material	Steel 12L14 STKM11A	
Feedback	Potentiometer	
Operating and storage temperature	-26°C~+65°C	
Manufacturing quality standards	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	
UL approval	No	Yes

## POTENTIOMETER DATA

Type	Wire wound
Resistance	0.3 - 9.7 Kohm
Resolution	0.025%
Resistance tolerance	±5%
Linearity	±0.25%
Cable	3+2 leads 250 mm

### Potentiometer wiring



### Line switch wiring

