



DMA SERIES + ACCESORIES

Stroke: 102 - 610mm
3500 - 7000N

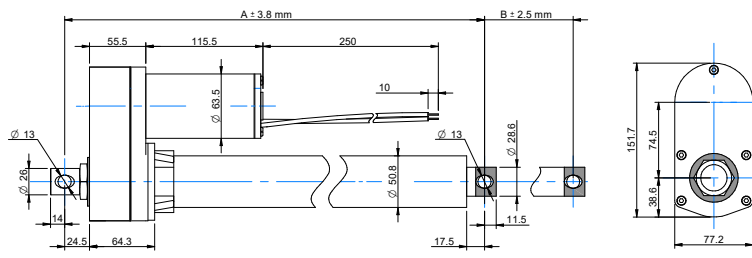
Transmotec sell a broad range of linear actuators in standard and customized configurations. Transmotec is the ideal supplier source especially to instrument and apparatus builders. We keep a high number of actuators in stock for immediate delivery.

Customizations include:

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

DMA Series / ACME / 102 - 610mm / 3500N

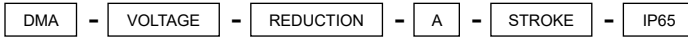
DRAWING (mm)



PHOTO



MODEL NO. DESIGNATION



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

ACTUATOR DATA

	10	20	40
Reduction	10	20	40
Voltage (VDC)	12/24	12/24	12/24
Current at max. dynamic load (A)	18/9	13/6.5	11/5.5
Max. dynamic load (N)	1500	2500	3500
Max. static load (N)	4500	4500	4500
Speed at max. dynamic load (mm/s)	26.7	14.3	7.4
Speed at no load (mm/s)	33.5	16.8	8.4

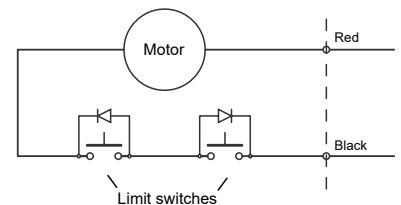
ACTUATOR STROKE DATA

	102	153	203	305	457	610
Stroke length B (mm)	102	153	203	305	457	610
Retracted length A (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	Length, type and connector
Voltage	12 or 24 VDC	36 or 48 VDC
Screw type	ACME	
Noise level	≤ 70 dB (A)	
Life time	4 million mm total stroke	
Limit switches	N/A	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
Stroke tolerance	±2.5 mm	
Duty cycle	25%	
Max. duty operational time	1 min. max. dynamic load	
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	-50°C~+65°C
Manufacturing quality standards	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	

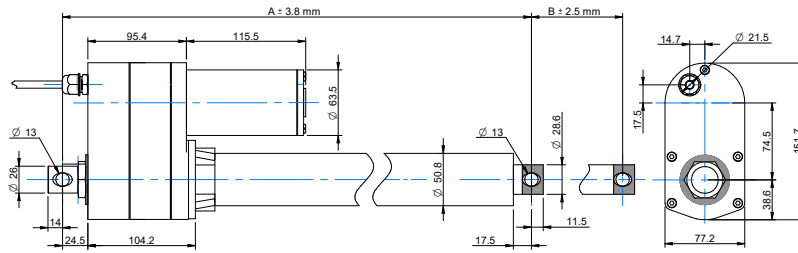
Motor wiring



	Red	Black
Extend	+	-
Retract	-	+

DMA Series / ACME / 102 - 610mm / 3500N / potentiometer (POT)

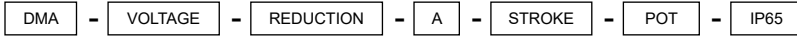
DRAWING
(mm)



PHOTO



MODEL NO. DESIGNATION



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. dynamic load (A)	18/9	13/6.5	11/5.5
Max. dynamic load (N)	1500	2500	3500
Max. static load (N)	4500	4500	4500
Speed at max. dynamic load (mm/s)	26.7	14.3	7.4
Speed at no load (mm/s)	33.5	16.8	8.4

ACTUATOR STROKE DATA

Stroke length B (mm)	102	153	203	305	457	610
Retracted length A (mm)	302	353	404	505	708	861
Feedback (Ω/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

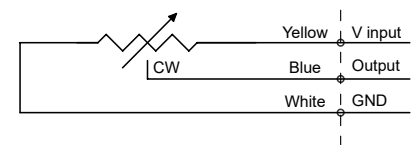
ACTUATOR FEATURES AND STANDARD DATA

	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM DC motor	
Cable	Flying wire 250 mm	Length, type and connector
Voltage	12 or 24 VDC	36 or 48 VDC
Screw type	ACME	
Noise level	≤ 70 dB (A)	
Life time	4 million mm total stroke	
Limit switches	N/A	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
Stroke tolerance	±2.5 mm	
Duty cycle	25%	
Max. duty operational time	1 min. max. dynamic load	
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	-50°C~+65°C
Manufacturing quality standards	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	

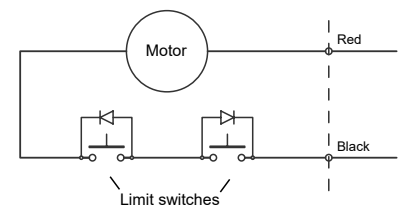
POTENTIOMETER FEATURES AND DATA

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



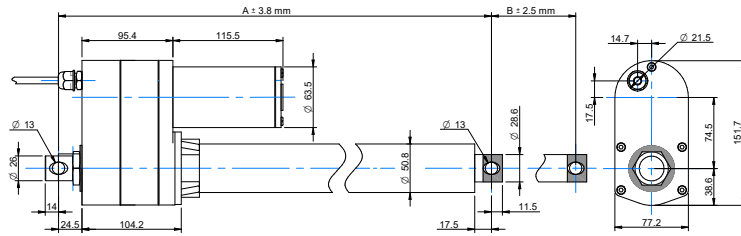
Motor wiring



	Red	Black
Extend	+	-
Retract	-	+

DMA Series / ACME / 102 - 610mm / 3500N / adjustable limit switch (LT)

DRAWING
(mm)



PHOTO



MODEL NO. DESIGNATION

DMA	-	VOLTAGE	-	REDUCTION	-	A	-	STROKE	-	LT	-	IP65
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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. dynamic load (A)	18/9	13/6.5	11/5.5
Max. dynamic load (N)	1500	2500	3500
Max. static load (N)	4500	4500	4500
Speed at max. dynamic load (mm/s)	26.7	14.3	7.4
Speed at no load (mm/s)	33.5	16.8	8.4

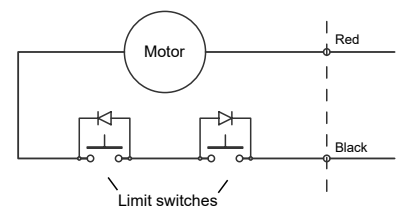
ACTUATOR STROKE DATA

Stroke length B (mm)	102	153	203	305	457	610
Retracted length A (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	Length, type and connector
Voltage	12 or 24 VDC	36 or 48 VDC
Screw type	ACME	
Noise level	≤ 70 dB (A)	
Life time	4 million mm total stroke	
Limit switches	Yes	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
Stroke tolerance	± 2.5 mm	
Duty cycle	25%	
Max. duty operational time	1 min. max. dynamic load	
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	-50°C~+65°C
Manufacturing quality standards	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	

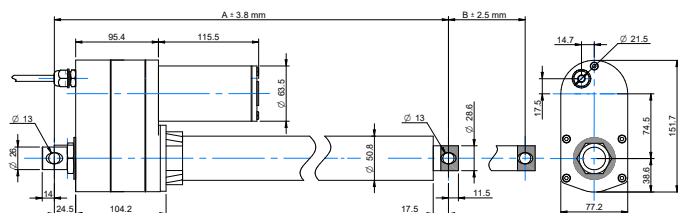
Motor wiring



	Red	Black
Extend	+	-
Retract	-	+

DMA Series / ACME / 102 - 610mm / 3500N / adjustable limit switch (LT) & potentiometer (POT)

DRAWING
(mm)



PHOTO



MODEL NO. DESIGNATION

DMA	-	VOLTAGE	-	REDUCTION	-	A	-	STROKE	-	LT	-	POT	-	IP65
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Example: DMA-12-20-A-305-LT-POT-IP65

ACTUATOR DATA

Reduction	10	20	40
Voltage (VDC)	12/24	12/24	12/24
Current at max. dynamic load (A)	18/9	13/6.5	11/5.5
Max. dynamic load (N)	1500	2500	3500
Max. static load (N)	4500	4500	4500
Speed at max. dynamic load (mm/s)	26.7	14.3	7.4
Speed at no load (mm/s)	33.5	16.8	8.4

ACTUATOR STROKE DATA

Stroke length B (mm)	102	153	203	305	457	610
Retracted length A (mm)	359	410	460	613	765	918
Feedback (Ω/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

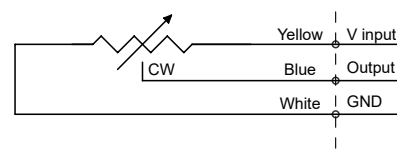
ACTUATOR FEATURES AND STANDARD DATA

	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM DC motor	
Cable	Flying wire 250 mm	Length, type and connector
Voltage	12 or 24 VDC	36 or 48 VDC
Screw type	ACME	
Noise level	≤ 70 dB (A)	
Life time	4 million mm total stroke	
Limit switches	Yes	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
Stroke tolerance	± 2.5 mm	
Duty cycle	25%	
Max. duty operational time	1 min. max. dynamic load	
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	-50°C~+65°C
Manufacturing quality standards	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	

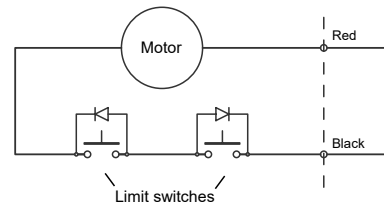
POTENTIOMETER FEATURES AND DATA

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

Potentiometer wiring



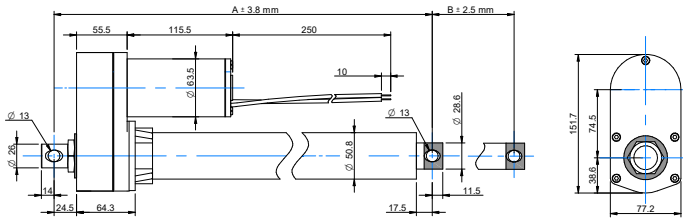
Motor wiring



	Red	Black
Extend	+	-
Retract	-	+

DMA Series / ball screw / 102 - 610mm / 7000N

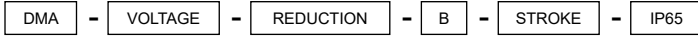
DRAWING (mm)



PHOTO



MODEL NO. DESIGNATION



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. dynamic load (A)	28/14	18/9	13/7	13/7	11/5.5
Max. dynamic load (N)	2600	3500	4500	6000	7000
Max. static load (N)	13600	13600	13600	13600	13600
Speed at max. dynamic load (mm/s)	47.2	26.7	14.3	9.8	7.4
Speed at no load (mm/s)	67.1	33.5	16.8	11.2	8.4

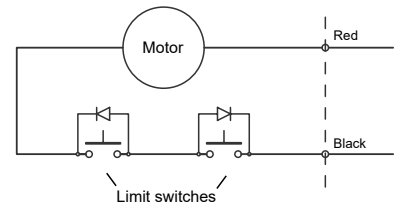
ACTUATOR STROKE DATA

Stroke length and version B (mm)	102	153	203	305	457	610
Retracted length A (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	Length, type and connector
Voltage	12 or 24 VDC	36 or 48 VDC
Screw type	Ball screw	
Noise level	≤ 70 dB (A)	
Life time	4 million mm total stroke	
Limit switches	N/A	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
Stroke tolerance	±2.5 mm	
Duty cycle	25%	
Max. duty operational time	1 min. max. dynamic load	
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	-50°C~+65°C
Manufacturing quality standards	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	

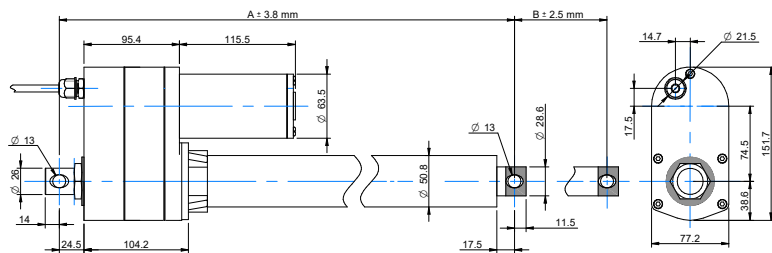
Motor wiring



	Red	Black
Extend	+	-
Retract	-	+

DMA Series / ball screw / 102 - 610mm / 7000N / potentiometer (POT)

DRAWING
(mm)



PHOTO



MODEL NO. DESIGNATION



Example: DMA-12-20-B-305-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. dynamic load (A)	28/14	18/9	13/7	13/7	11/5.5
Max. dynamic load (N)	2600	3500	4500	6000	7000
Max. static load (N)	13600	13600	13600	13600	13600
Speed at max. dynamic load (mm/s)	47.2	26.7	14.3	9.8	7.4
Speed at no load (mm/s)	67.1	33.5	16.8	11.2	8.4

ACTUATOR STROKE DATA

Stroke length B (mm)	102	153	203	305	457	610
Retracted length A (mm)	342	393	444	546	775	928
Feedback (Ω /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

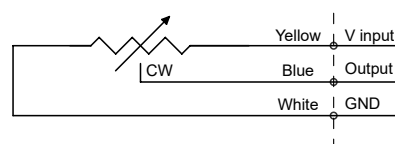
ACTUATOR FEATURES AND STANDARD DATA

	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM DC motor	
Cable	Flying wire 250 mm	Length, type and connector
Voltage	12 or 24 VDC	36 or 48 VDC
Screw type	Ball screw	
Noise level	≤ 70 dB (A)	
Life time	4 million mm total stroke	
Limit switches	N/A	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
Stroke tolerance	± 2.5 mm	
Duty cycle	25%	
Max. duty operational time	1 min. max. dynamic load	
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	-50°C~+65°C
Manufacturing quality standards	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	

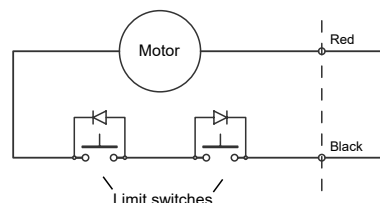
POTENTIOMETER FEATURES AND DATA

Type	Wire wound
Resistance	0.3 - 9.7 k Ω
Resolution	0.025%
Resistance tolerance	$\pm 5\%$
Linearity	$\pm 0.25\%$
Cable	3+2 wires 250 mm

Potentiometer wiring



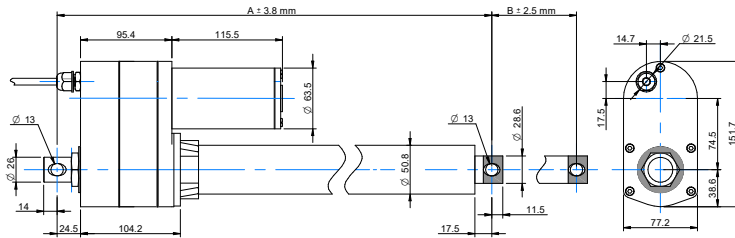
Motor wiring



	Red	Black
Extend	+	-
Retract	-	+

DMA Series / ball screw / 102 - 610mm / 7000N / adjustable limit switches (LT)

DRAWING (mm)



PHOTO



MODEL NO. DESIGNATION

DMA	-	VOLTAGE	-	REDUCTION	-	B	-	STROKE	-	LT	-	IP65
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Example: DMA-12-20-B-305-LT-IP65

ACTUATOR DATA

Reduction	5	10	20	30	40
Voltage (VDC)	12/24	12/24	12/24	12/24	12/24
Current at max. dynamic load (A)	28/14	18/9	13/7	13/7	11/5.5
Max. dynamic load (N)	2600	3500	4500	6000	7000
Max. static load (N)	13600	13600	13600	13600	13600
Speed at max. dynamic load (mm/s)	47.2	26.7	14.3	9.8	7.4
Speed at no load (mm/s)	67.1	33.5	16.8	11.2	8.4

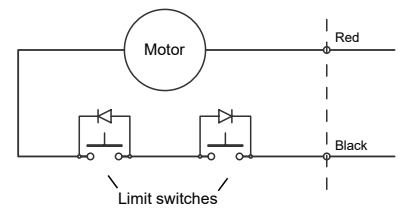
ACTUATOR STROKE DATA

Stroke length B (mm)	102	153	203	305	457	610
Retracted length A (mm)	399	450	501	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	Length, type and connector
Voltage	12 or 24 VDC	36 or 48 VDC
Screw type	Ball screw	
Noise level	≤ 70 dB (A)	
Life time	4 million mm total stroke	
Limit switches	Yes	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
Stroke tolerance	± 2.5 mm	
Duty cycle	25%	
Max. duty operational time	1 min. max. dynamic load	
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 tem-	-26°C~+65°C	-50°C~+65°C
Manufacturing quality stand-	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	

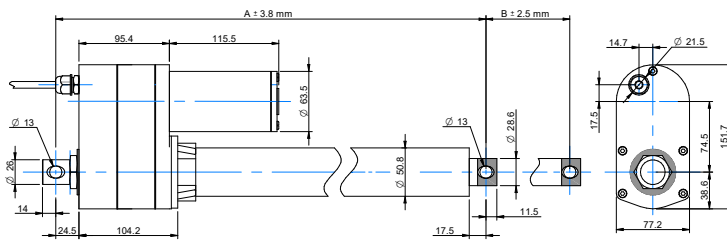
Motor wiring



	Red	Black
Extend	+	-
Retract	-	+

DMA Series / ball screw / 102 - 610mm / 3500N / adjustable limit switch (LT) & potentiometer (POT)

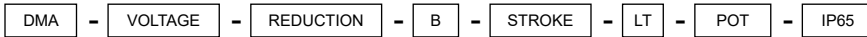
DRAWING
(mm)



PHOTO



MODEL NO. DESIGNATION



Example: DMA-12-20-B-305-LT-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. dynamic load (A)	28/14	18/9	13/7	13/7	11/5.5
Max. dynamic load (N)	2600	3500	4500	6000	7000
Max. static load (N)	13600	13600	13600	13600	13600
Speed at max. dynamic load (mm/s)	47.2	26.7	14.3	9.8	7.4
Speed at no load (mm/s)	67.1	33.5	16.8	11.2	8.4

ACTUATOR STROKE DATA

Stroke length B (mm)	102	153	203	305	457	610
Retracted length A (mm)	399	450	501	680	832	985
Feedback (Ω/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

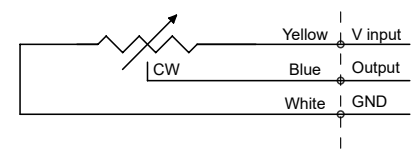
ACTUATOR FEATURES AND STANDARD DATA

	STANDARD	CUSTOMIZATION OPTIONS
Type	Electric linear actuator	
Motor type	Brush PM DC motor	
Cable	Flying wire 250 mm	Length, type and connector
Voltage	12 or 24 VDC	36 or 48 VDC
Screw type	Ball screw	
Noise level	≤ 70 dB (A)	
Life time	4 million mm total stroke	
Limit switches	Yes	
Overload protection	By clutch	
Direction movement	By reversing voltage polarity	
Stroke tolerance	± 2.5 mm	
Duty cycle	25%	
Max. duty operational time	1 min. max. dynamic load	
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	-50°C~+65°C
Manufacturing quality standards	ISO 9001:2008	
RoHS	Yes	
CE label	Yes	

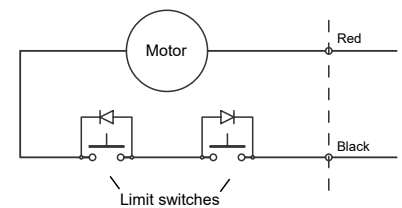
POTENTIOMETER FEATURES AND DATA

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

Potentiometer wiring



Motor wiring



	Red	Black
Extend	+	-
Retract	-	+