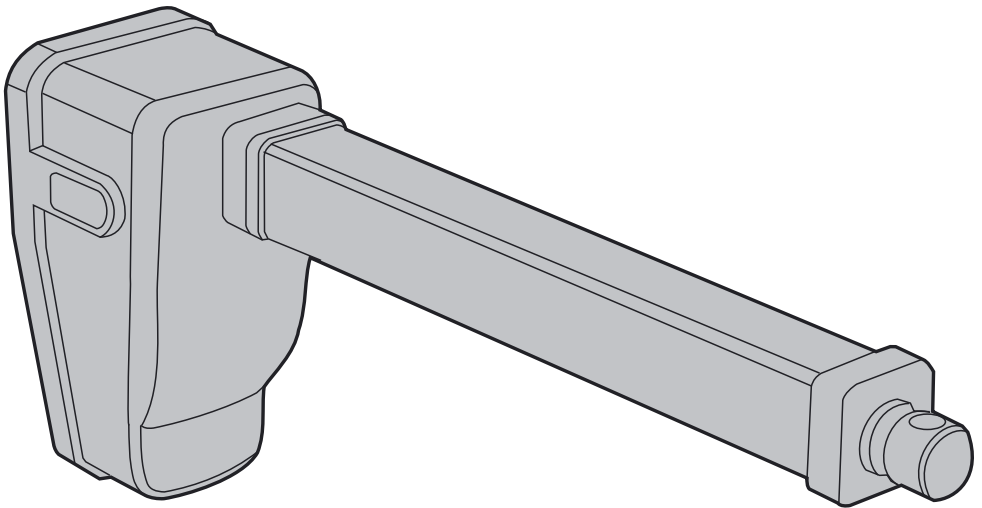


# *Installation manual for linear actuator Electrak E150*



12 VDC  
24 VDC  
36 VDC

## Basic mounting rules

<p>OK</p>	<p>Only install in these points</p> <p>Only use solid pins</p> <p>Pin part no: D603 205</p>
<p>OK</p>	<p>Restraining torque (the torque needed to prevent the extension tube from rotating) = 0 Nm (anti-rotation mechanism). The tube moves max. 7° before the anti-rotation mechanism stops the tube.</p> <p>max. 7°</p>
<p>Min. - 30 °C      Max. + 65 °C</p>	<p>IP56</p>

## Wire cross section

Motor voltage (VDC)	Amp. draw. (A)	Cross section (mm <sup>2</sup> )		
		Wire length (L)		
		3 m	6 m	10 m
12	0 - 13	1,5	2,5	4
24	0 - 7	1,5	1,5	1,5
36	0 - 5	1	1,5	1,5

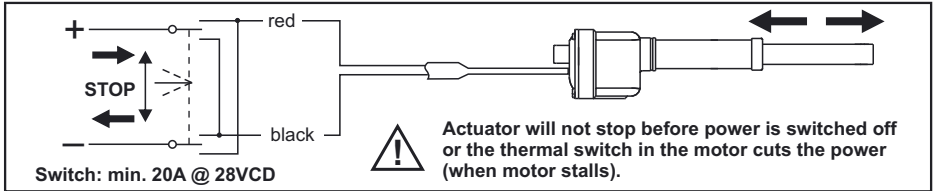
Table is based on ambient temperature = 30°C or less.

See table (mm<sup>2</sup>)

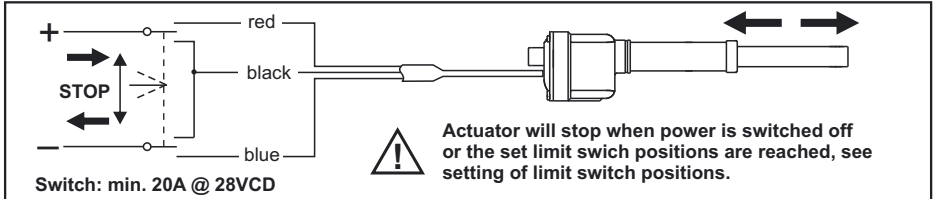
## Stall current

Motor voltage (VDC)	Max. stall current (A)
12	50
24	25
36	17

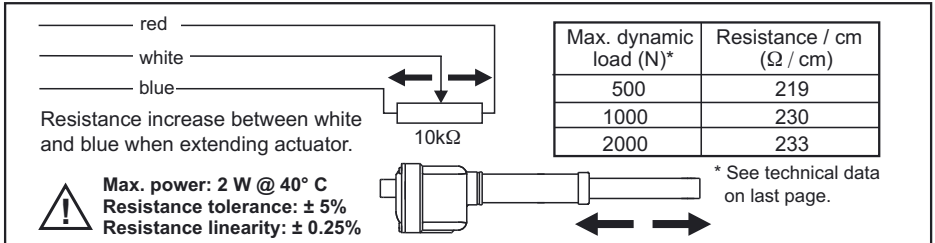
## Connection of actuator without limit switches



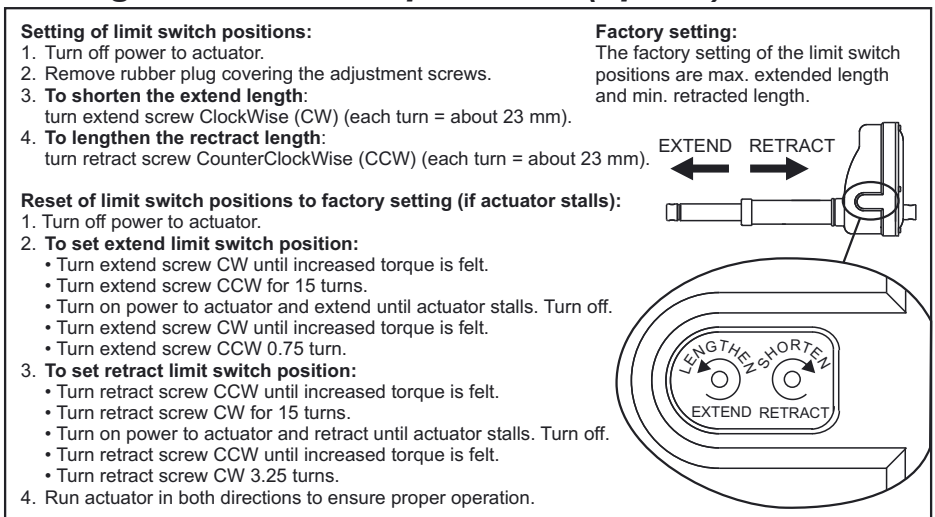
## Connection of actuator with limit switches (option)



## Connection of potentiometer (option)



## Setting of limit switch positions (option)



### CAUTION!

Always turn the power off before working on the actuator or the wiring.

# Technical data

	<b>DF12</b>	<b>DF24</b>	<b>DF36</b>
Motor	DC-motor with auto reset thermal switch	DC-motor with auto reset thermal switch	DC-motor with auto reset thermal switch
Supply voltage	12 Vdc (10 – 16 Vdc)	24 Vdc (20 – 28 Vdc)	36 Vdc (32 – 40 Vdc)
Max. current	13 A	6.5 A	4.3 A
Max. stall current	50 A	25 A	17 A
Max. dynamic load for screw lead 1* for screw lead 2* for screw lead 4*	2000 N 1000 N 500 N	2000 N 1000 N 500 N	2000 N 1000 N 500 N
Max. static load	2 × max. dyn. load	2 × max. dyn. load	2 × max. dyn. load
Speed @ min. load for screw lead 1* for screw lead 2* for screw lead 4*	19 mm/s 35 mm/s 71 mm/s	19 mm/s 35 mm/s 71 mm/s	19 mm/s 35 mm/s 71 mm/s
Speed @ max. load for screw lead 1* for screw lead 2* for screw lead 4*	13 mm/s 25 mm/s 51 mm/s	13 mm/s 25 mm/s 51 mm/s	13 mm/s 25 mm/s 51 mm/s
End play max. for screw lead 1* for screw lead 2* for screw lead 4*	0.5 mm 0.5 mm 1.2 mm	0.5 mm 0.5 mm 1.2 mm	0.5 mm 0.5 mm 1.2 mm
Duty cycle	25 % @ 20° C	25 % @ 20° C	25 % @ 20° C
Restraining torque	0 Nm	0 Nm	0 Nm
Ambient temperature	– 30 to + 65° C	– 30 to + 65° C	– 30 to + 65° C
Lubrication	for life	for life	for life
Brake	yes, centrifugal or self-locking (500 N)	yes, centrifugal or self-locking (500 N)	yes, centrifugal or self-locking (500 N)
Protection class	IP 56	IP 56	IP 56
Options**	<ul style="list-style-type: none"> <li>• Potentiometer feedback 10kΩ, 10 turns (option PO and MP)</li> <li>• Adjustable end limit switches (option LS and ML)</li> <li>• Potentiometer feedback and adjustable end limit switches (option PL)</li> <li>• Clevis at 90° (option M3, ML and MP).</li> </ul>		

\* See the tenth position on the type designation label on the actuator e.g. DF24–10W5**2**M30LS.

\*\* See the two last positions on the type designation label on the actuator e.g. DF24–10W52M30**LS**.

**Always install fuse and / or thermal breaker between motor and power supply to protect actuator, wiring and other items.**

**TOLLO LINEAR AB**

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1999 dw110368gb-0611

Box 9053, SE-291 09 Kristianstad, Sweden  
Tel. +46 (0)44-246700 Fax. +46 (0)44-244085

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