

Electrak® Non-driven Actuator FA14

» Ordering Key - see page 84
» Glossary - see page 85

Load up to 6800 N



Standard Features and Benefits

- Actuator with a flange where a customer supplied motor can be mounted
- Rugged and robust
- Withstands very harsh environments
- Stainless steel extension tube
- Corrosion free aluminium cover tube
- Acme or ball screw drive
- Trunnion mounting possible
- Overload clutch for mid and end of stroke protection
- T-slot grooves in the cover tube for magnetic sensors
- Maintenance free

General Specifications

Parameter	FA14
Screw type	acme or ball
Internally restrained	yes
Manual override	no, optional
Holding brake	
acme screw versions	no, self-locking
ball screw versions	yes
End of stroke protection	overload clutch
Mid stroke protection	overload clutch
Certificates	CE
Options	<ul style="list-style-type: none"> • manual override • alternative adaptor positions • custom color*

* Contact customer support

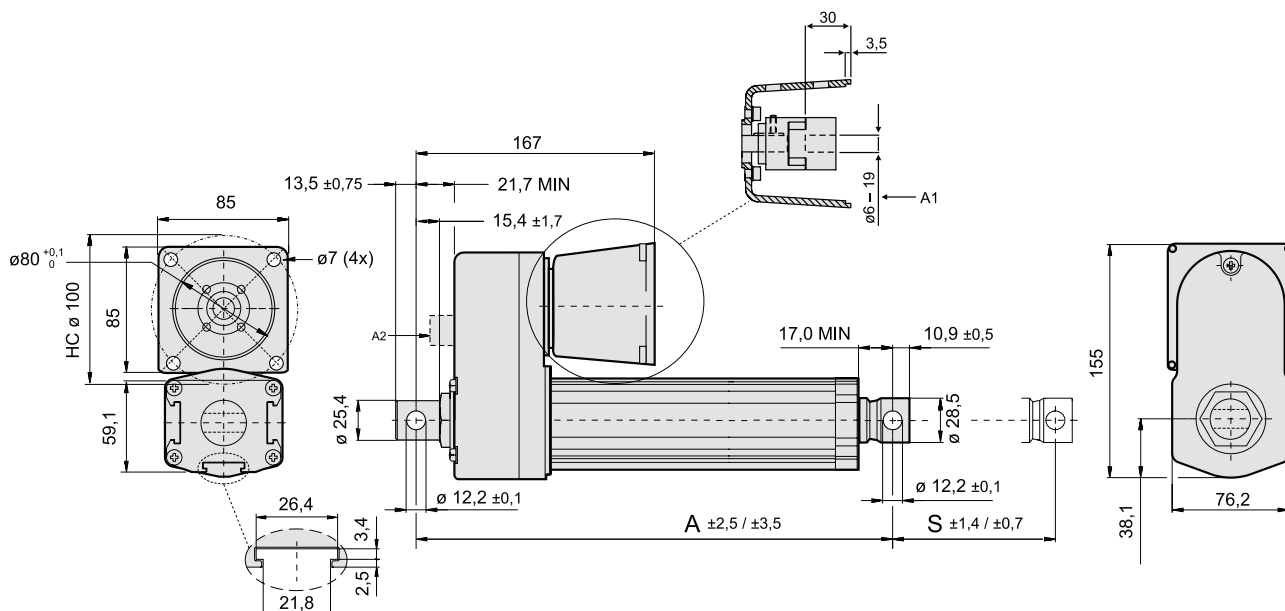
Performance Specifications

Parameter		FA14
Maximum load, dynamic / static	[N]	
FA14-05A65 (acme screw)		1100 / 11350
FA14-10A65 (acme screw)		2250 / 11350
FA14-20A65 (acme screw)		2250 / 11350
FA14-05B65 (ball screw)		2250 / 18000
FA14-10B65 (ball screw)		4500 / 18000
FA14-20B65 (ball screw)		4500 / 18000
FA14-21B65 (ball screw)		6800 / 18000
Maximum speed at max. load*	[mm/s]	
FA14-05A65 (acme screw)		32
FA14-10A65 (acme screw)		18
FA14-20A65 (acme screw)		12
FA14-05B65 (ball screw)		37
FA14-10B65 (ball screw)		19
FA14-20B65 (ball screw)		12
FA14-21B65 (ball screw)		11
Maximum input torque	[Nm]	1,8
Maximum input speed	[rpm]	3000
Standard stroke lengths	[mm]	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600
Operating temperature limits	[°C]	-25 – +65
End play, maximum	[mm]	1,0
Restraining torque	[Nm]	0

* Recommended maximum speed

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S: stroke, tolerance acme / ball screw

A: retracted length, tolerance acme / ball screw

A1: minimum/maximum input shaft bore in the coupling (supplied with a 6 mm hole)

A2: manual override input (optional)

Note: The standard flange for FA14 is IEC 80.

Stroke (S)	[mm]	50	100	150	200	250	300	350	400	450	500	550	600
Retracted length (A), acme screw models	[mm]	216,7	266,7	316,7	366,7	416,7	466,7	566,7	616,7	666,7	716,7	766,7	816,7
Retracted length (A), ball screw models	[mm]	269,6	319,6	369,6	419,6	469,6	519,6	619,6	669,6	719,6	769,6	819,6	869,6
Weight, acme screw models	[kg]	3,5	3,7	4,0	4,2	4,5	4,7	5,0	5,2	5,5	5,7	6,0	6,3
Weight, ball screw models	[kg]	4,2	4,5	4,7	5,0	5,2	5,5	5,7	6,0	6,2	6,5	6,7	7,0

Optional Flanges Overview

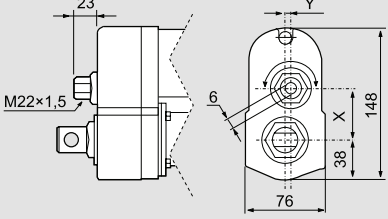
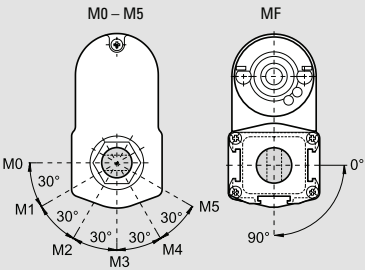
Description	Outer dimension on flange [mm]	Flange inner diameter [mm]	Hole circle (HC) [mm]	Pilot Spigot Ø	Total length [mm]
Nema 23	Ø90	38,1	Ø66,675	38,1	68
Nema 34	92x92	74	Ø100	80	91,5
IEC 63 B14	Ø90	-	Ø75	60	64
Servo 80, S80	92x92	-	Ø100	80	71
IL348	85x85	-	Ø100	73	71
AKM3x-AN	Ø90	50	Ø75	60	73
AKM4x-AN	92x92	74	Ø100	80	91,5

Note: Optional flanges are available separately as conversion kits. Part number see page 84.

Ordering Keys

Non-driven Actuators

Electrak PPA-M			
1	2	3	4
PPA00 -	01B65 -	24	N-XXX
1. Model PPA00 - = Electrak PPA-M	2. Dynamic load capacity 01B65 - = 6670 N	3. Stroke 04 = 4 inch (101,6 mm) 06 = 6 inch (152,4 mm) 08 = 8 inch (203,2 mm) 12 = 12 inch (304,8 mm) 18 = 18 inch (457,2 mm) 24 = 24 inch (609,6 mm) 36 = 36 inch (914,4 mm)	4. Bellows option N-XXX = no bellows N-XXC = bellows

FA14																
1	2	3	4	5												
FA14 -	10A65M	35	M2	N												
1. Model FA14 - = Electrak FA14	2. Dynamic / static load capacity and screw type 05A65M = 1100 / 11350 N, acme 10A65M = 2250 / 11350 N, acme 20A65M = 2250 / 11350 N, acme 05B65M = 2250 / 18000 N, ball 10B65M = 4500 / 18000 N, ball 20B65M = 4500 / 18000 N, ball 21B65M = 6800 / 18000 N, ball	3. Stroke 05 = 50 mm 10 = 100 mm 15 = 150 mm 20 = 200 mm 25 = 250 mm 30 = 300 mm 35 = 350 mm 40 = 400 mm 45 = 450 mm 50 = 500 mm 55 = 550 mm 60 = 600 mm	4. Rear / front adapter hole position¹ M0 = both adaptors at 0° (standard) M1 = rear adaptor at 30°, front at 0° M2 = rear adaptor at 60°, front at 0° M3 = rear adaptor at 90°, front at 0° M4 = rear adaptor at 120°, front at 0° M5 = rear adaptor at 150°, front at 0° MF = rear and front adaptor at 90° 5. Options N = no option HW = manual override ²	2 Dimensions for manual override option.  <table border="1"> <thead> <tr> <th>Model</th> <th>X</th> <th>Y</th> </tr> </thead> <tbody> <tr> <td>05A(B)65M</td> <td>49,6</td> <td>0,0</td> </tr> <tr> <td>10A(B)65M</td> <td>43,3</td> <td>5,2</td> </tr> <tr> <td>20(21)A(B)65M</td> <td>38,9</td> <td>0,0</td> </tr> </tbody> </table>	Model	X	Y	05A(B)65M	49,6	0,0	10A(B)65M	43,3	5,2	20(21)A(B)65M	38,9	0,0
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20(21)A(B)65M	38,9	0,0														
		¹ Definition of adapter hole positions. 														

Flanges for FA14			
Description	Part Number	Description	Part Number
Nema 23	D390887	IL348	D389819
Nema 34	D389984	Akm3x-AN	D390930
IEC 63 B14	D390820	Akm4x-AN	D389939
Servo 80, S80	D390822		