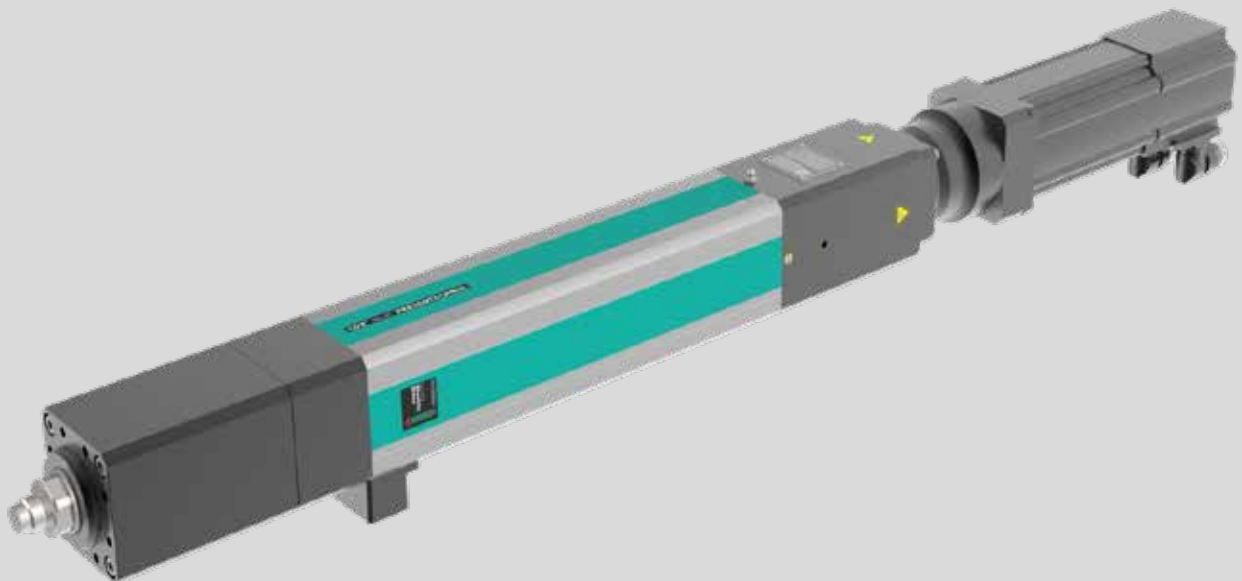


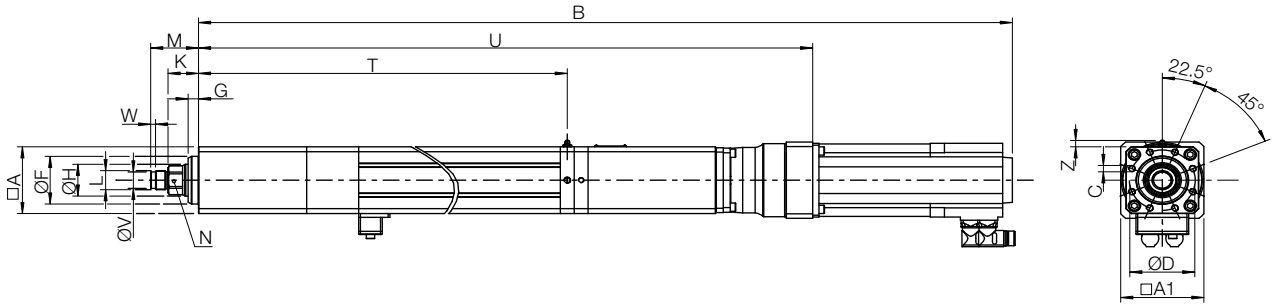
TOX®-ElectricDrive Type EX-F

Data sheet 40.60
2021 / 03



TOX[®]-ElectricDrive servo drive

Type EX-F, 5 – 100 kN with planetary roller screw



Dimensions and weights

Preferred series (short delivery time)

Type	Stroke length mm	Max. nominal force kN	Weight kg
EX-F 005.XXX.150	150	5	22
EX-F 005.XXX.300	300	5	24
EX-F 010.XXX.150	150	10	37
EX-F 010.XXX.300	300	10	39
EX-F 030.XXX.150	150	30	66
EX-F 030.XXX.300	300	30	70
EX-F 060.XXX.150	150	60	114
EX-F 060.XXX.300	300	60	119
EX-F 100.XXX.150	150	100	170
EX-F 100.XXX.300	300	100	179

Type	A	A1	B	C	D	F ₇₇	G	H	K ¹⁾	L	M ¹⁾	N	T	U	V _{g6}	W	Z
EX-F 005.XXX.150	70	90	883	8x M6x12	60	50	10	30	28	M12x1.5	40	27	497	620	–	–	10
EX-F 005.XXX.300	70	90	1033	8x M6x12	60	50	10	30	28	M12x1.5	40	27	647	770	–	–	10
EX-F 010.XXX.150	90	90	1120	8x M8x16	80	65	10	40	26	M22x2	46	36	585	858	18	7	10
EX-F 010.XXX.300	90	90	1270	8x M8x16	80	65	10	40	26	M22x2	46	36	735	1008	18	7	10
EX-F 030.XXX.150	105	120	1284	8x M10x20	95	75	15	50	44	M30x2	69	41	662	1016	26	7	10
EX-F 030.XXX.300	105	120	1434	8x M10x20	95	75	15	50	44	M30x2	69	41	812	1166	26	7	10
EX-F 060.XXX.150	130	150	1422	8x M12x24	115	90	17	60	42	M30x2	67	55	702	1140	26	7	10
EX-F 060.XXX.300	130	150	1572	8x M12x24	115	90	17	60	42	M30x2	67	55	852	1290	26	7	10
EX-F 100.XXX.150	160	150	1562	8x M16x32	135	105	17	75	42	M39x2	77	65	789	1240	–	–	10
EX-F 100.XXX.300	160	150	1712	8x M16x32	135	105	17	75	42	M39x2	77	65	939	1390	–	–	10

¹⁾ Dimension refers to zero position of drive. Reference position = zero position - 3 mm.

Dimensions in mm

Specifications EX-F	005	010	030	060	100
Mechanical					
Nominal pressing force	5 kN	10 kN	30 kN	60 kN	100 kN
Nominal pulling force	3 kN	3 kN	8 kN	17 kN	30 kN
Max. speed ¹⁾	800 mm/s	550 mm/s	500 mm/s	350 mm/s	300 mm/s
Repeatability ²⁾	± 0.01 mm				
Max. tool weight without brake ⁵⁾	5 kg	10 kg	15 kg	25 kg	35 kg
with motor holding brake ⁶⁾	25 kg	125 kg	250 kg	500 kg	600 kg
Sensors					
Force transducer measuring range ³⁾	0.25 – 5 kN	0.5 – 10 kN	1.5 – 30 kN	3 – 60 kN	5 – 100 kN
Accuracy	≤ ± 0.5 % of nominal pressing force				
Resolver	■	■	■	■	■
Resolution (theoretically)	0.00593 mm	0.00370 mm	0.00370 mm	0.00296 mm	0.00296 mm
Electrical					
Protection class ⁴⁾	IP 54				
Mains supply	see data sheet 40.18 System & Components				
Climatic conditions	+ 10° to + 40° C, from 40° C performance loss, max. 55° C; air moisture < 75 %, without condensation				

¹⁾ Special versions on request

²⁾ In thermal transient condition

³⁾ Recommended operating range 5 – 100 %

⁴⁾ Optional: Protection class IP 65

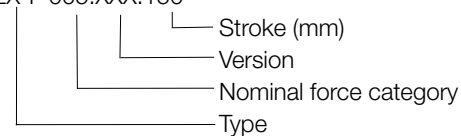
⁵⁾ For higher weights, the tool can sink in de-energized condition

⁶⁾ Higher tool weights on request

A wide range of accessories is available for the servo drive type EX-F (see data sheet 40.90, TOX®-ElectricDrive Accessories).

Ordering example

EX-F 005.XXX.150



Version

003 Basic version

006 Motor holding brake

007 Includes holding time min 10s at min. 80% of nominal pressing force

053 Includes protection class IP65

302 Includes working piston with threaded holes on piston end

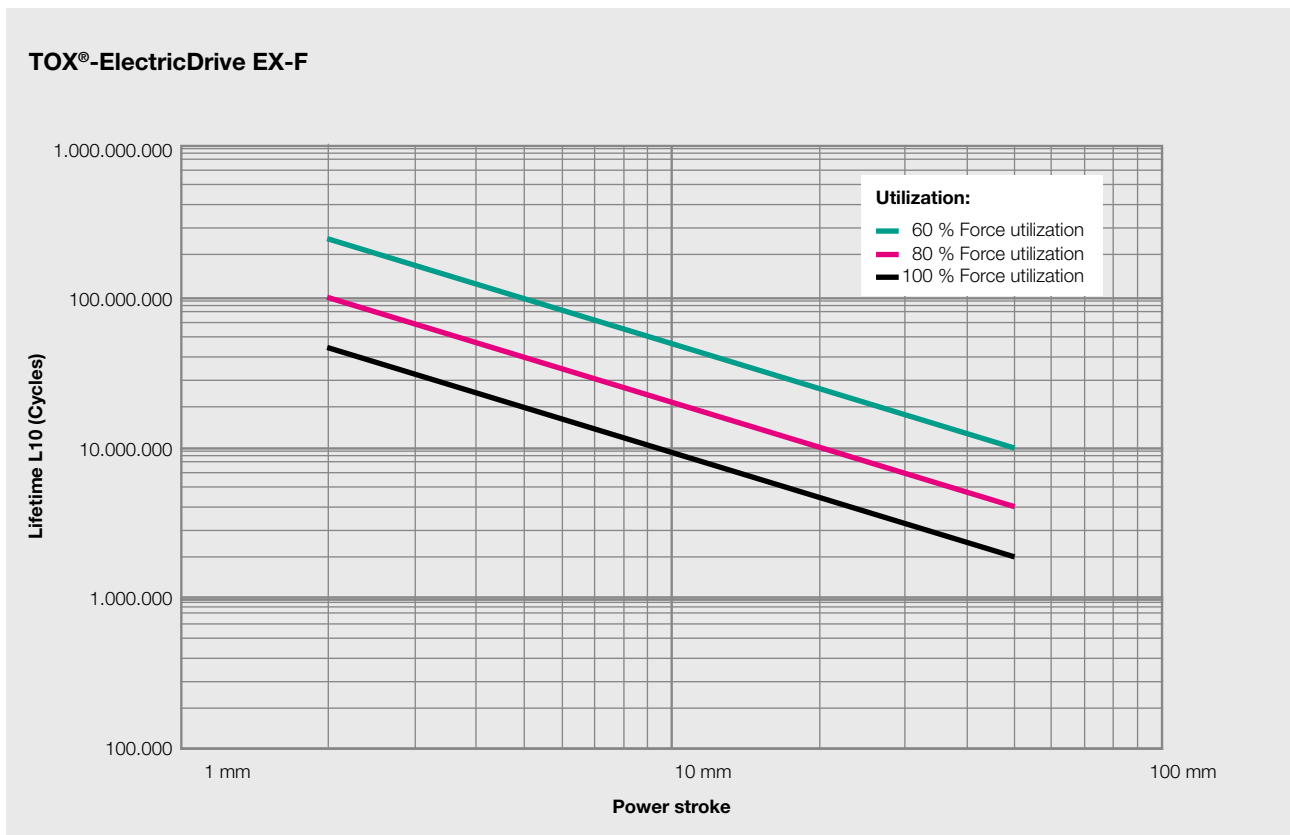
Further versions are available upon request!

Lifetime L10

The lifetime L10 is a complex calculation. The following factors influence the lifetime L10, in some cases considerably:

- Rate of force application
- Powerstroke
- Punching impact
- Application
- Revolutions per minute

Schematic illustration of the lifetime L10



We are happy to carry out the lifetime calculation for your application. Just ask us!