

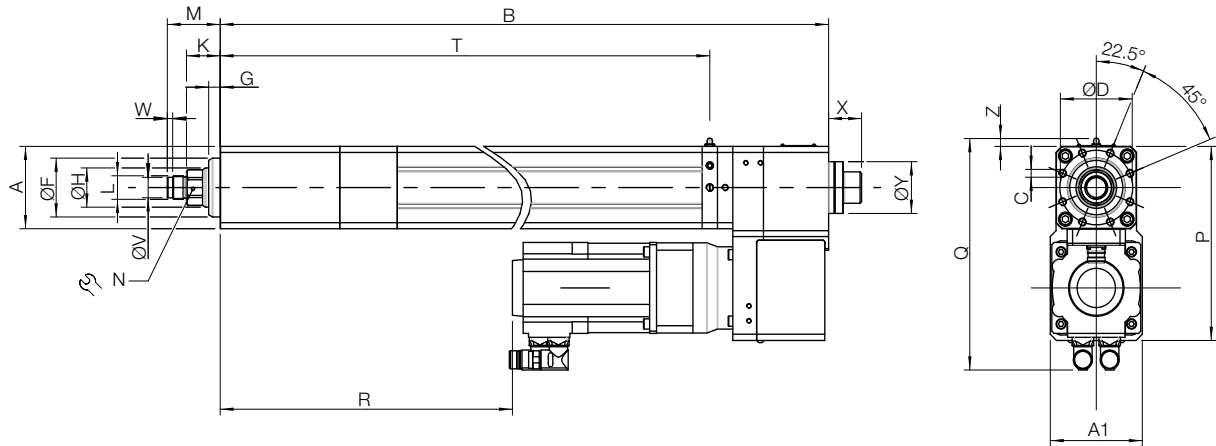
# TOX®-ElectricDrive Type EQ-K

Data sheet 40.40  
2020/11



# TOX<sup>®</sup>-ElectricDrive servo drive

## Type EQ-K, 2 – 100 kN with ball screw



### Dimensions and weights

### Preferred series (short delivery time)

Type	Stroke length mm	Max. nominal force kN	Weight approx. kg
EQ-K 002.XXX.150	150	2	13.5
EQ-K 002.XXX.250	250	2	14.5
EQ-K 005.XXX.150	150	5	19
EQ-K 005.XXX.300	300	5	21
EQ-K 010.XXX.150	150	10	37
EQ-K 010.XXX.300	300	10	39
EQ-K 010.XXX.450	450	10	41
EQ-K 030.XXX.150	150	30	61
EQ-K 030.XXX.300	300	30	65
EQ-K 030.XXX.450	450	30	69
EQ-K 060.XXX.150	150	60	..99
EQ-K 060.XXX.300	300	60	102
EQ-K 060.XXX.450	450	60	105
EQ-K 100.XXX.150	150	100	168
EQ-K 100.XXX.300	300	100	178
EQ-K 100.XXX.450	450	100	188

Type	A	A1	B	C	D	F <sub>17</sub>	G	H	K <sup>1)</sup>	L	M <sup>1)</sup>	N	P	Q	R	T	V <sub>g6</sub>	W	X	Y	Z
EQ-K 002.XXX.150	70	70	475	8x M6x12	60	50	10	25	24	M12x1.5	36	22	160	201	254	547	-	-	33	42	10
EQ-K 002.XXX.250	70	70	575	8x M6x12	60	50	10	25	24	M12x1.5	36	22	160	201	354	647	-	-	33	42	10
EQ-K 005.XXX.150	70	70	606	8x M6x12	60	50	10	30	28	M12x1.5	40	27	162	206	280	497	-	-	33	42	10
EQ-K 005.XXX.300	70	70	756	8x M6x12	60	50	10	30	28	M12x1.5	40	27	162	206	430	647	-	-	33	42	10
EQ-K 010.XXX.150	90	90	703	8x M8x16	80	65	10	40	26	M22x2	46	36	198	253	308	585	18	7	35	52	10
EQ-K 010.XXX.300	90	90	853	8x M8x16	80	65	10	40	26	M22x2	46	36	198	253	458	735	18	7	35	52	10
EQ-K 010.XXX.450	90	90	1003	8x M8x16	80	65	10	40	26	M22x2	46	36	198	253	608	885	18	7	35	52	10
EQ-K 030.XXX.150	105	120	817	8x M10x20	95	75	15	50	44	M30x2	69	41	248	296	405	662	26	7	43	66	10
EQ-K 030.XXX.300	105	120	967	8x M10x20	95	75	15	50	44	M30x2	69	41	248	296	555	812	26	7	43	66	10
EQ-K 030.XXX.450	105	120	1117	8x M10x20	95	75	15	50	44	M30x2	69	41	248	296	705	962	26	7	43	66	10
EQ-K 060.XXX.150	130	130	875	8x M12x24	115	90	17	60	42	M30x2	67	55	295	336	382	702	26	7	46	75	10
EQ-K 060.XXX.300	130	130	1025	8x M12x24	115	90	17	60	42	M30x2	67	55	295	336	532	852	26	7	46	75	10
EQ-K 060.XXX.450	130	130	1175	8x M12x24	115	90	17	60	42	M30x2	67	55	295	336	682	1002	26	7	46	75	10
EQ-K 100.XXX.150	160	160	1000	8x M16x32	135	105	17	75	42	M39x2	77	65	345	378	439	789	-	-	58	90	10
EQ-K 100.XXX.300	160	160	1150	8x M16x32	135	105	17	75	42	M39x2	77	65	345	378	589	939	-	-	58	90	10
EQ-K 100.XXX.450	160	160	1300	8x M16x32	135	105	17	75	42	M39x2	77	65	345	378	739	1089	-	-	58	90	10

<sup>1)</sup> Dimension refers to zero position of drive. Reference position = zero position - 3 mm.

Dimensions in mm

Specifications EQ-K	002	005	010	030	060	100
<b>Mechanical</b>						
Nominal pressing force	2 kN	5 kN	10 kN	30 kN	60 kN	100 kN
Nominal pulling force	2 kN	3 kN	3 kN	8 kN	17 kN	30 kN
Max. speed	300 mm/s	220 mm/s	220 mm/s	200 mm/s	150 mm/s	150 mm/s
Repeatability <sup>1)</sup>	± 0.01 mm					
Max. tool weight without brake <sup>3)</sup>	5 kg	10 kg	15 kg	25 kg	40 kg	45 kg
with safety brake / motor holding brake	25 kg	25 kg	125 kg	300 kg	500 kg	850/1000 kg
<b>Sensors</b>						
Force transducer measuring range <sup>2)</sup>	without force transducer*	0.25 – 5 kN	0.5 – 10 kN	1.5 – 30 kN	3 – 60 kN	5 – 100 kN
Accuracy	ext. force transducer** ≤ ± 1 % of nominal pressing force					
Resolver	■	■	■	■	■	■
Resolution (theoretically)	0.00247 mm	0.00123 mm	0.00158 mm	0.00148 mm	0.00123 mm	0.00148 mm
<b>Electrical</b>						
Protection class	IP54					
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					

<sup>1)</sup> In thermal transient condition

<sup>2)</sup> Recommended operating range 5 – 100 %

<sup>3)</sup> For higher weights, the tool can sink in de-energized condition

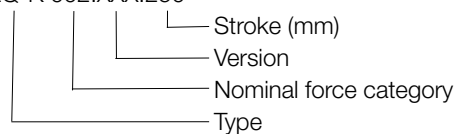
\*With TOX®-Force transducer ZPS 0002: 0.02 – 2 kN. Max. tool weight 5 kg

\*\*With TOX®-Force transducer ZPS 0002: ≤ ± 1 % of nominal pressing force

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

### Ordering example

EQ-K 002.XXX.250



### Version

003 Basic version

004 Safety brake

005 Safety brake with rotary encoder\*

006 Motor holding brake

\*Rotary encoder for safely reduced speed with TOX®-Controls, see brochure TOX®-ElectricDrive

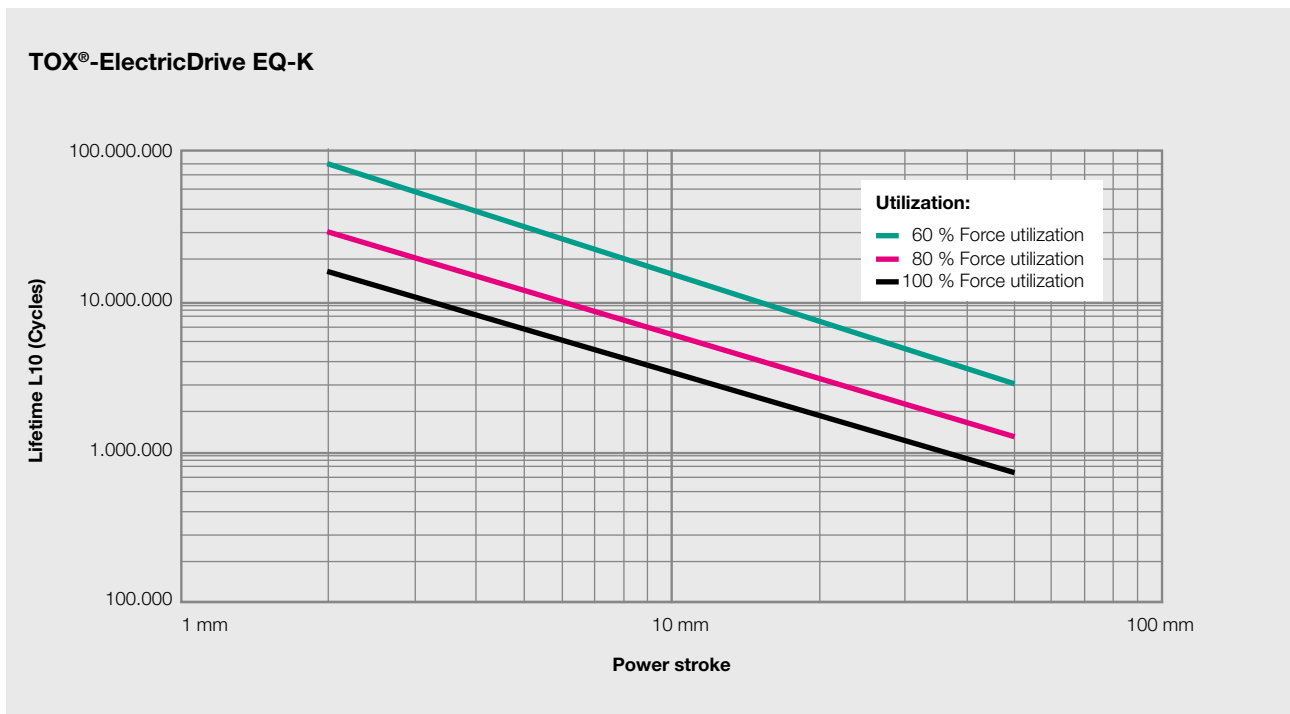
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## Lifetime L10

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!