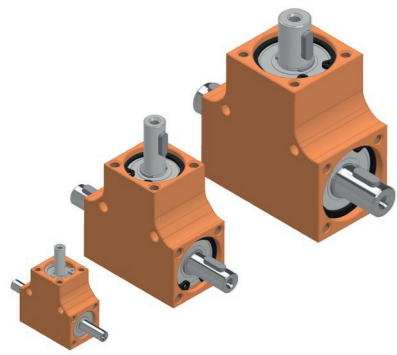


# Angular gear Ket-Bee 200X T-Gearbox in synchronization

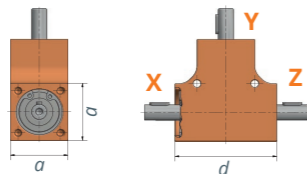

A bevel gearbox family with through-going shaft consisting of 10 sizes for versatile use as an angular gearbox. The gearbox is characterised by a compact design with maximum torque, sturdiness and smooth power transmission.



## Special features

- Maintenance-free and silent running thanks to hardened steel bevel gears
- Aluminium housing, anodized
- Ratio 1:1
- Permitted operating temp. -20°C to +60°C
- Backlash at drive shaft  $3^\circ \pm 1^\circ$
- Duty cycle 20 % at 5 min (1 min ON, 4 min OFF)
- Lifetime of 1000 hours with:
  - full load and
  - input speed of 500 rpm and
  - duty cycle 20% with 5 min

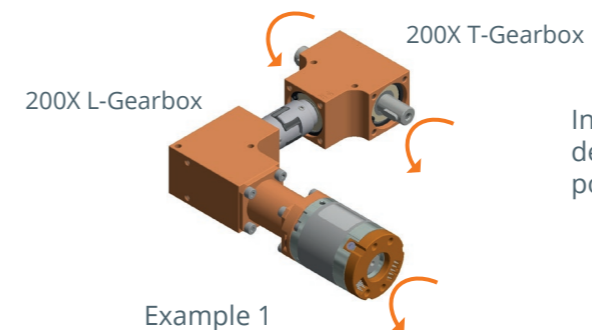


Ket-Bee T-Gearbox 90°		Max. torque (Speed-dependent)									
2000.00-	0.04 to 0.28	Nm	□ 15 mm	26 mm							
2001.00-	0.05 to 0.35	Nm	□ 18 mm	32 mm							
2002.00-	0.15 to 0.75	Nm	□ 20 mm	35 mm							
2003.00-	0.5 to 2.5	Nm	□ 24 mm	42 mm							
2004.00-	0.75 to 4	Nm	□ 26 mm	46 mm							
2005.00-	1 to 5	Nm	□ 30 mm	53 mm							
2006.00-	1.5 to 8	Nm	□ 32 mm	56 mm							
2007.00-	2 to 10	Nm	□ 35 mm	60 mm							
2008.00-	2.5 to 12	Nm	□ 40 mm	68 mm							
2009.00-	3 to 14	Nm	□ 45 mm	77 mm							
<b>Gearboxtype</b>											
T T-gearbox: Through-going shaft											
<b>Housing: Material &amp; Optics</b>											
0 Alu, orange anodized (standard)  * Color according to customer requirements											
1 Alu, silber anodized											
<b>Configuration of shaft &amp; direction of rotation</b>											
A X,Y,Z: Solid shafts with feather key/ X,Z in synchronisation *at 2000 gearbox no feather key											
<b>Shaft Ø in mm per gearbox-type (Dimension m)</b>											
XX Example: „06“ for 2001											
	m: for 2000	m: for 2001	m: for 2002	m: for 2003	m: for 2004	m: for 2005	m: for 2006	m: for 2007	m: for 2008	m: for 2009	mm
	04	06	06	08	08	08	10	12	12	12	
<b>Ratio R</b>											
R1 i = 1:1											
2002.00-	T	0	A	06	R1	Example: 2002.00-T0A06R1					

Item.-Nr.	Speed n in rpm	Max. torque M in Nm	Radial and axial load*		Part weight in kg
			F <sub>R</sub> in N	F <sub>A</sub> in N	
2000.00-T0A04R1	100/500/1000	0.28/0.08/0.04	48	48	0.03
2001.00-T0A06R1	100/500/1000	0.35/0.1/0.05	60	60	0.06
2002.00-T0A06R1	100/500/1000	0.75/0.3/0.15	100	100	0.07
2003.00-T0A08R1	100/500/1000	2.5/1/0.5	120	120	0.13
2004.00-T0A08R1	100/500/1000	4/1.5/0.75	140	140	0.17
2005.00-T0A08R1	100/500/1000	5/2/1	240	240	0.19
2006.00-T0A10R1	100/500/1000	8/3/1.5	550	550	0.24
2007.00-T0A12R1	100/500/1000	10/4/2	550	550	0.40
2008.00-T0A12R1	100/500/1000	12/5/2.5	600	600	0.59
2009.00-T0A12R1	100/500/1000	14/6/3	750	750	0.80

\* The values of F<sub>R</sub> apply only when F<sub>A</sub> = 0 N  
The values of F<sub>A</sub> apply only when F<sub>R</sub> = 0 N

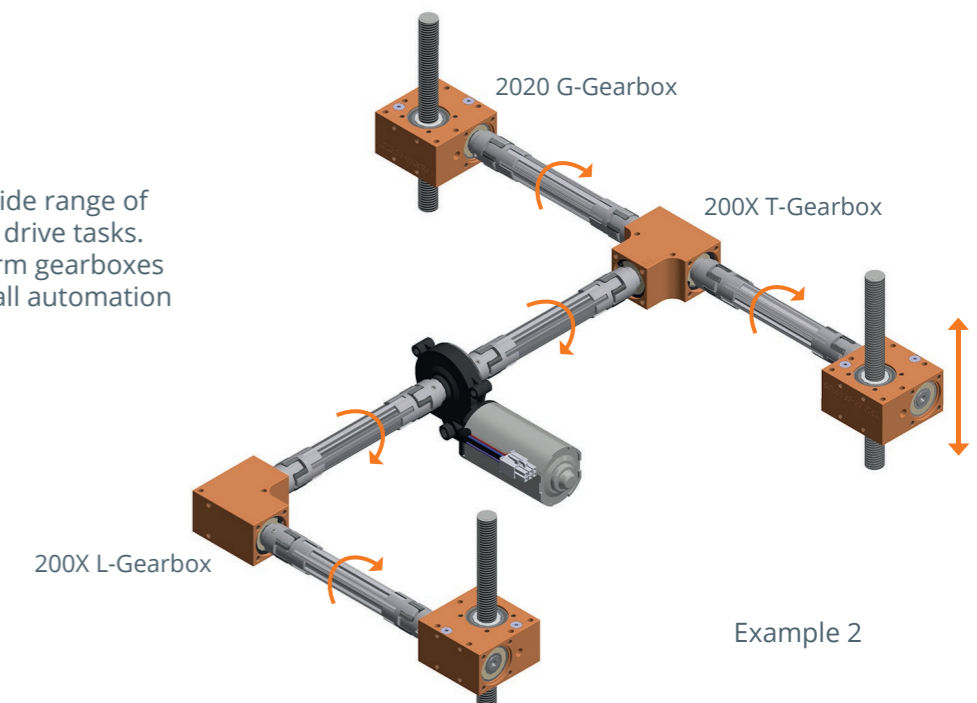
## Application example



Example 1

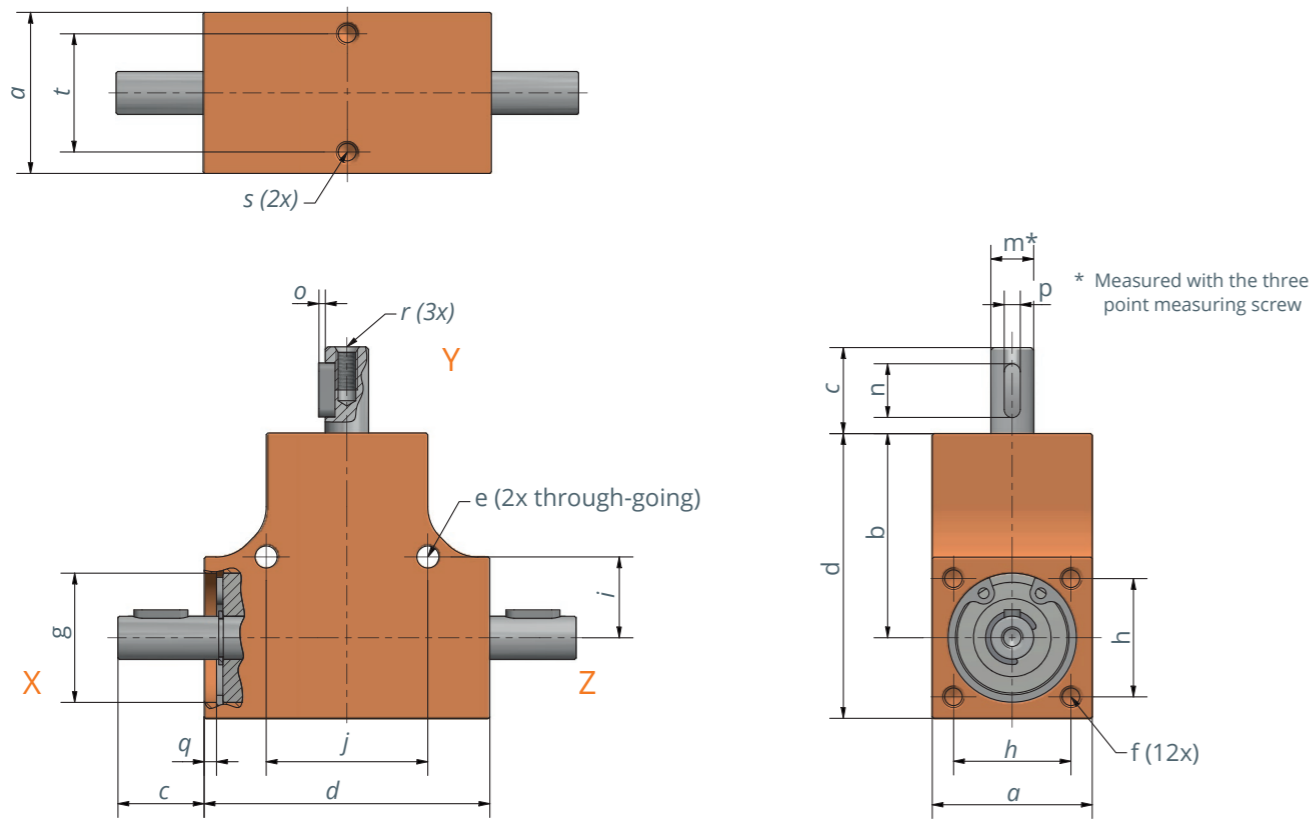
In our Ket-Bee family, we offer gearboxes for a simple 90° deflection (200x L-gearbox) as well as for a splitting of the power transmission to two drives (200x T-gearbox).

Our standard components offer a wide range of options for efficiently implementing drive tasks. Thanks to numerous variants of worm gearboxes from the Ket-Motion series, almost all automation tasks can be mastered with ease.



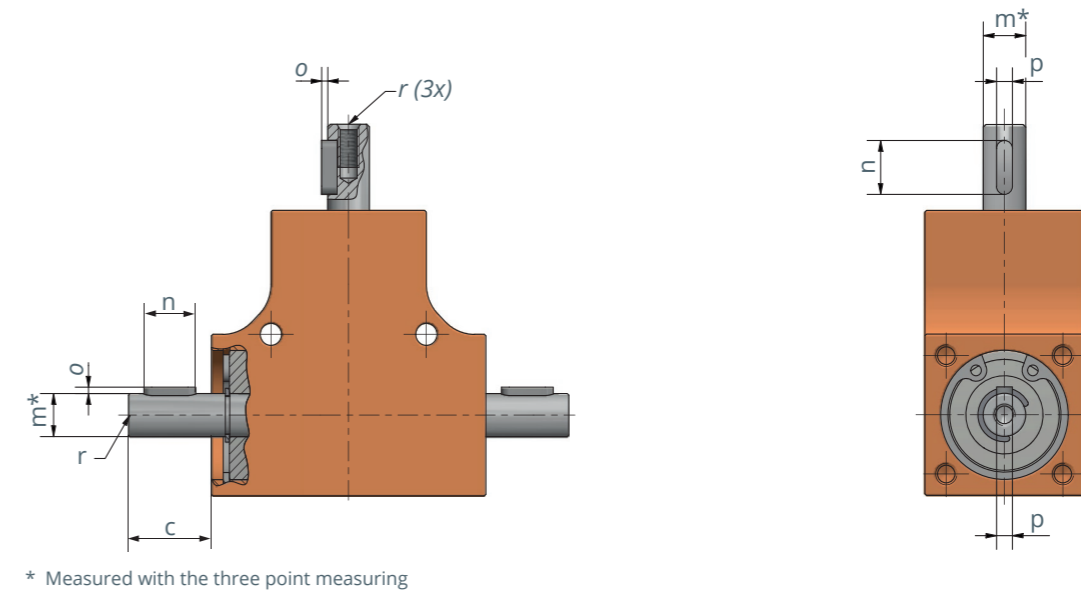
Example 2

## Dimensioning general



Gearbox-type	Dimensions in mm											
	a	b	d	e	f	g	h	i	j	q	s	t
2000	15	18.5	26	ø2.6	M2.5x4	ø11	11	8	16	1.1	M2.5x4	11
2001	18	23	32	ø3.1	M3x4	ø13	13	8.5	17	3.1	M3x4	13
2002	20	25	35	ø3.1	M3x6	ø16	15	10	20	2.25	M3x6	15
2003	24	30	42	ø4.1	M4x6	ø19	18	12	24	2	M4x6	18
2004	26	33	46	ø4.1	M4x8	ø22	20	14	26	2	M4x8	20
2005	30	38	53	ø4.1	M4x8	ø24	22	15	30	2.3	M4x8	22
2006	32	40	56	ø4.1	M4x10	ø28	24	17	34	2.8	M4x8	24
2007	35	42.5	60	ø4.1	M4x10	ø30	26	17.5	35	3.2	M4x8	26
2008	40	48	68	ø5.1	M5x10	ø32	30	20	40	3.5	M5x10	30
2009	45	54.5	77	ø5.1	M5x10	ø37	35	22.5	45	5	M5x10	35

## Dimensioning shaft



## Dimensioning of the shaft of gearbox type 2000.00-T0A04R1



Gearbox-type	ø Shaft	Shaft-length	Dimension featherkey			Threaded hole inside	Item- Nr.
			n	o	p		
2000	ø4j5	10	-	-	-	M2.5x5	2000.00-T0A04R1
2001	ø6j6	12	8	0.8	2	M3x8	2001.00-T0A06R1
2002	ø6j6 ø8j6	12 12	8 8	0.8 0.8	2 2	M3x6 M3x8	2002.00-T0A06R1 2002.00-T0A08R1
2003	ø8j6 ø10j6	16 16	10 12	1.2 1.5	3 4	M4x8 M4x8	2003.00-T0A08R1 2003.00-T0A10R1
2004	ø8j6 ø12j6	16 16	10 12	1.2 1.5	3 4	M4x8 M5x8	2004.00-T0A08R1 2004.00-T0A12R1
2005	ø8j6 ø12j6	16 16	10 12	1.2 1.5	3 4	M4x8 M5x8	2005.00-T0A08R1 2005.00-T0A12R1
2006	ø10j6 ø12j6	16 16	10 12	1.2 1.5	3 4	M4x8 M5x8	2006.00-T0A10R1 2006.00-T0A12R1
2007	ø12j6	16	12	1.5	4	M5x8	2007.00-T0A12R1
2008	ø12j6	16	12	1.5	4	M5x8	2008.00-T0A12R1
2009	ø12j6	16	12	1.5	4	M5x8	2009.00-T0A12R1