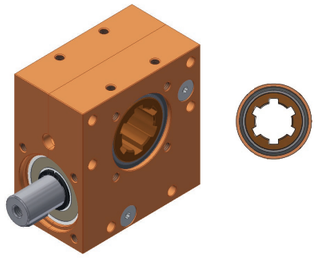
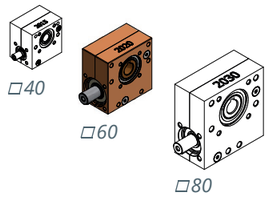
Worm gear reducer Ket-Motion 2020 K

With splined shaft connection



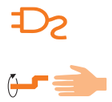


Description

Universally usable and maintenance-free worm gear unit with an **axis distance of 20 mm** and with nine different reduction ratios. The aluminium or zinc housing is encapsulated to prevent the escape of grease and the ingress of dust. The worm gear pair is left-handed. The direction of rotation on the shaft is arbitrary.

Special features

- **Axis distance 20 mm**
- Maintenance-free grease lubrication
- Aluminium housing, anodized
  (Color on customer request) or
  Zinc housing in a material-saving design
- 9 reduction ratios from 1:1 to 65:1
- Backlash on the drive shaft 1° ± 0.5°, (for i=1:1 2°± 0.5°)
- Duty cycle of 20 % at 5 min (1 min ON, 4 min OFF)
- Service life of 1,000 hours with:
  - full load and
  - input speed of 500 rpm and
  - duty cycle 20% with 5 min and
  - ambient temperature 20 °C

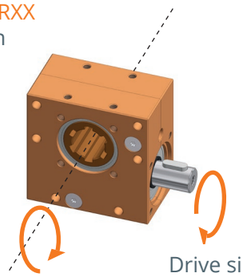


Variant key

Ket-Motion	Configuration of drive side	
2020.00	**S**	With one drive pin
	D	With through going axis
	Housing: Material & Optics	
	0	Alu, orange anodized (standard)
	1	Alu, silver anodized
	Xi	Alu, Color according to customer requirements
	Z	Zinc die-cast housing
	Configuration of output side	
	K	Splined shaft connection
	Reduction ratio R	
	RXX	9 Reduction variants of R01 (i= 1:1) to R65 (i=65:1)
2020.00-	**S**	**0** **K** **R65** **Example**

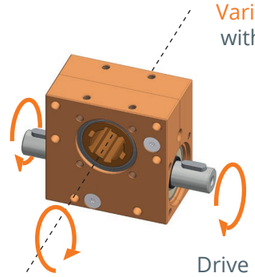
Variant 2020.00-**S**0KRXX
with one drive pin

S



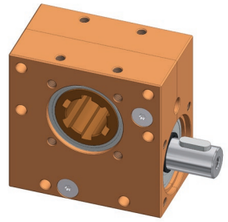
Variant 2020.00-**D**0KRXX
with through going axis

D

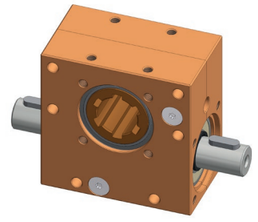


2020 K Gearbox with aluminium housing, anodized

With one drive pin
2020.00-S0KRXX



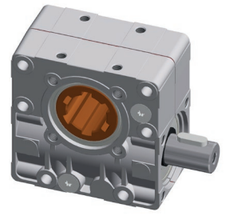
With through-screw
2020.00-D0KRXX



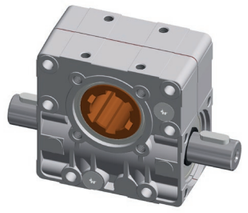
- Lower point load due to full-surface contact during bolting
- Free choice of color through anodizing
- Noble design in the visible area

2020 K Gearbox with material-saving zinc housing

With one drive pin
2020.00-SZKRXX



With through-screw
2020.00-DZKRXX



- Lower CO2 imprint than ALU
- Cost-optimized
- Industrial Design

Technical data

Item number	*Reduction ratio i*	*Self-locking static*	*Output-speed n in min-1*	*Max. output-torque M in Nm*	*Max. drive-torque M in Nm*	*Drive side*		*Degree of efficiency %*
						Radial-force1) FR in N	*Axial-force2) FA in N*	
2020.00-XXKR65	65 : 1	Yes	100/500/1000	4.5/3.8/3	0.2/0.2/0.2	500	500	29
2020.00-XXKR40	40 : 1	Yes	100/500/1000	5.5/4.8/4	0.4/0.3/0.3	400	400	39
2020.00-XXKR30	30 : 1	No	100/500/1000	8.5/7/5.5	0.6/0.5/0.4	350	350	45
2020.00-XXKR23	23 : 1	No	100/500/1000	10/8/6	0.9/0.7/0.5	250	250	50
2020.00-XXKR18	18 : 1	No	100/500/1000	11/9/7	1.1/0.9/0.7	250	250	55
2020.00-XXKR15	15 : 1	No	100/500/1000	12/10/8	1.5/1.3/1	250	200	52
2020.00-XXKR13	13 : 1	No	100/500/1000	15/13/11	2.1/1.8/1.5	200	200	56
2020.00-XXKR05	5 : 1	No	100/500/1000	10/8/6	2.9/2.3/1.7	200	200	70
2020.00-XXKR01*	1 : 1	No	100/500/1000	1.5/1/0.65	2.1/1.4/0.9	250	250	73

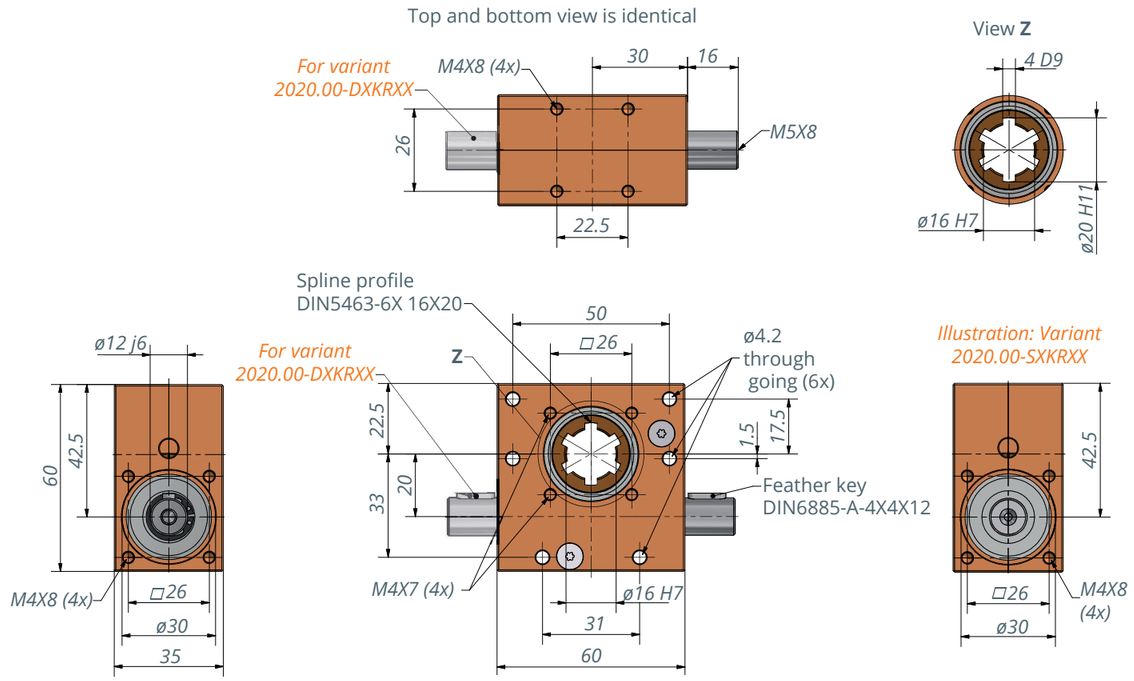
1) The values of F_R apply only when F_A = 0 N
2) The values of F_A apply only when F_R = 0 N

* Backlash on the output shaft 2°± 0.5°

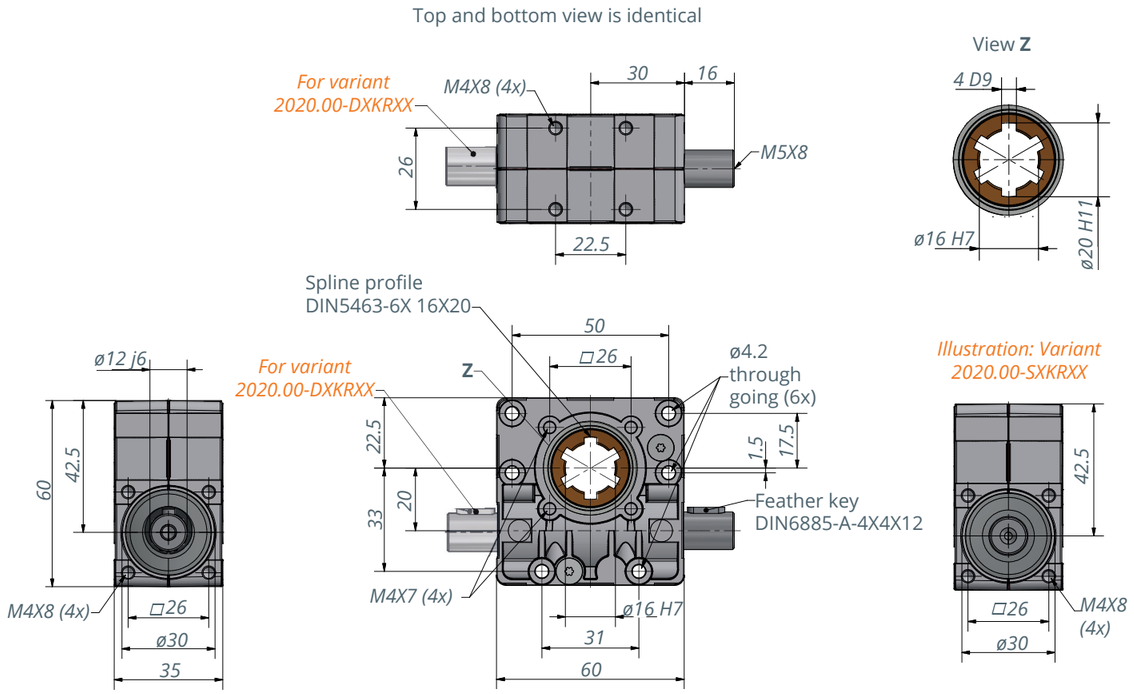
Technical notes

- Variant with **splined shaft connection**: Permissible force on drive side F_A= 120 N at F_R= 0 N and F_R= 120 N at F_A= 0 N
- The positions of the feather keys as standard in variant D are not in line. Possible on enquiry if needed

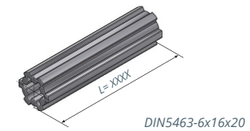
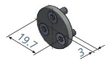
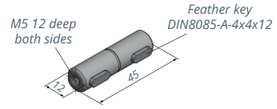
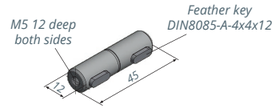
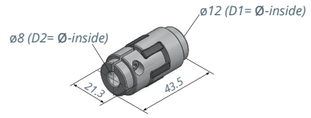
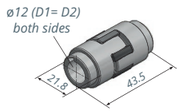
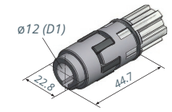
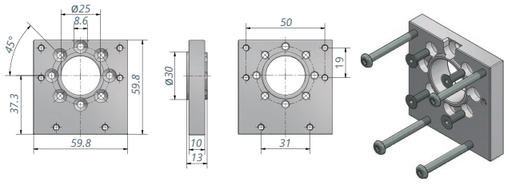
Variant with **Aluminium housing**: With one drive pin or through going axis



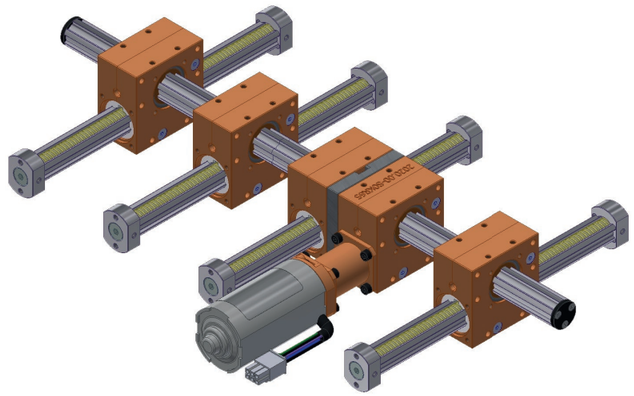
Variant with **Zinc housing**: With one drive pin or through going axis



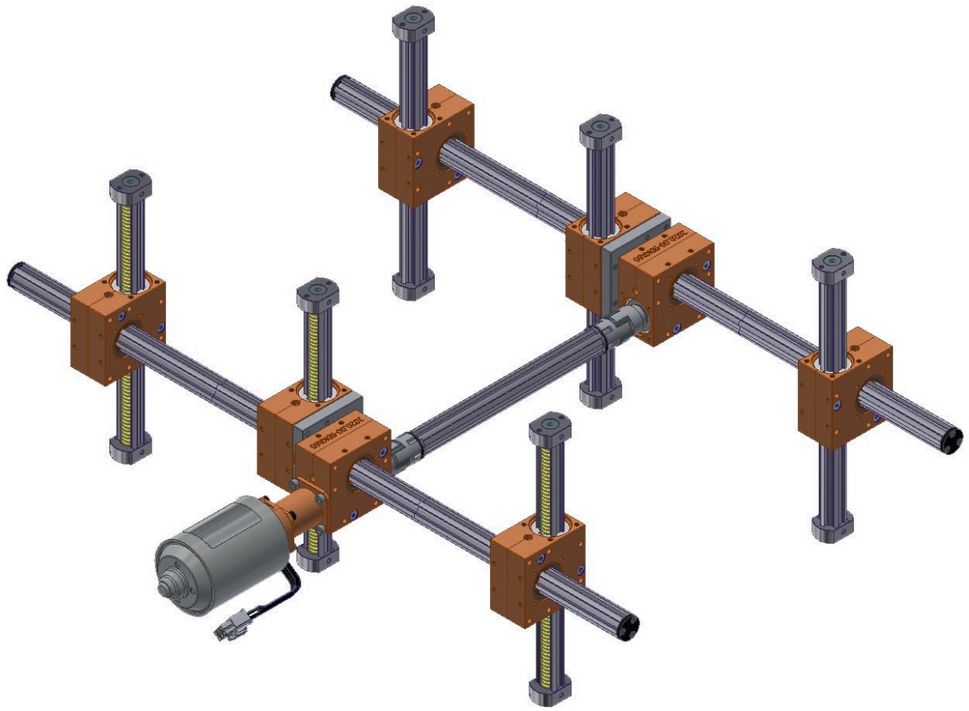
Mechanical accessories

	Item number	*Illustration*
Multifunction splined shaft profile	2010.11-V02LXXXX Preferred variant 2010.11-V02L1000	
End cap for splined shaft profile	2010.02-0001	
Alu Shaft ***(Gear connector)*** ***with feather key DIN6885-A-4x4x12***	5708.39-0000	
Steel Shaft ***(Gear connector)*** ***with feather key DIN6885-A-4x4x12***	5708.39-0001	
Claw coupling ***D1= 12/ D2= 8*** ***for shaft connection***	5790.12-0003	
Claw coupling ***D1= 12/ D2= 12*** ***for shaft connection***	5790.12-0001	
Claw coupling ***D1= 12*** ***for slinde shaft profile (DIN5463-6x12x20)***	5790.12-0007	
Mounting flange 45° latching	2010.15-0001	

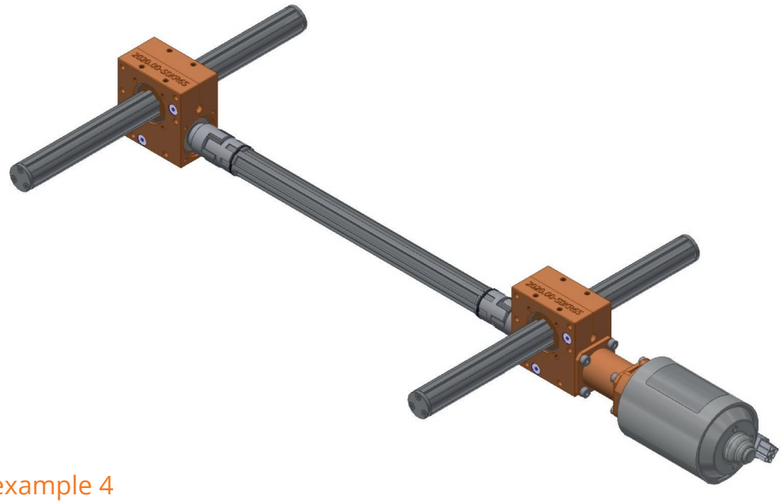
Application example 1



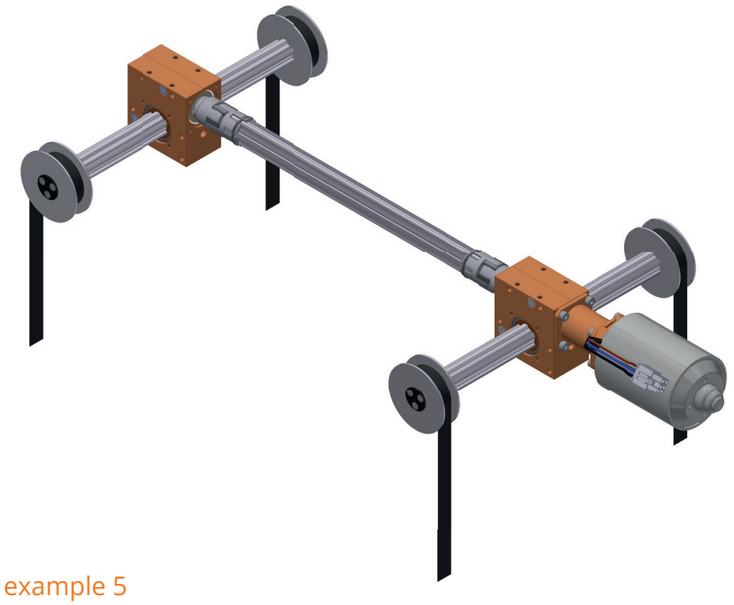
Application example 2



Application example 3



Application example 4



Application example 5