

WORM GEAR REDUCERS

Microcon is authorized distributor of worm gear reducers manufactured by TOS Znojmo. Sets with suitable stepper motor are also available.



MRT Series



MRTK Series

RT Series	MRT Series	MRTK Series
General Description		
Worm gear reducer with ingoing shaft end and without a motor mounting flange.	Worm gear reducer with hollow ingoing shaft end in combination with a motor mounting flange.	Worm gear reducer with ingoing shaft end in combination with a motor mounting flange.
Where to Use		
Worm gear reducers are recommended for very low speed rotary motion applications (up to 2 rev./sec). The worm gear reducers can be used also to achieve high resolution or to avoid reversibility at higher gear ratios. Stepper motor systems provide very high torque at the low speed range. Consequently worm gear reducers are not necessary for the majority of linear applications. Their using is advantageous for most rotary applications.		
	The direct interconnection MRT Series / stepper motor is recommended in applications with 6410-001, CD6410M modules (patented digital electronic damping reduces instability at speeds in middle of operating range).	The interconnection MRTK Series with stepper motor using Oldham flexible coupler (assembly with screws going through spacers) provides smooth operation with standard microstepping stepper drives.
Max. Output Torque (Nm) [Frame Size]		
18 [28], 44 [40], 81 [50], 142 [60], 182 [70], 298 [80], 580 [100], 850 [120], 1 520 [150], 2 387 [180]		
Gear Ratio		
7,5:1; 10:1; 12,5:1; 15:1; 20:1; 25:1; 30:1; 40:1; 50:1; 60:1; 80:1; 100:1 (100:1 gear ratio is not available for frame size 28)		
Efficiency		
up to 93%		

The TOS Znojmo product catalogue is available for further details. Stock items according to the table on the following page.

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The worm gear reducers can be supplied completed with stepper motors. The interconnection MRTK Reducer Series with stepper motor uses Oldham flexible coupler and spacers. The direct interconnection MRT Reducer Series with stepper motor is recommended in applications with 6410-001 and CD6410M modules with patented digital electronic damping reducing instability in middle speed ranges.

Model	Suitable stepper motors	Model	Suitable stepper motors
MRTK-28-10-A/B3-56/65	SM2321-1400, SM2321-1800	MRTK-50-30-A/B3-71/100	SL34-3550, SM31 Series
MRTK-28-30-A/B3-56/65	SL23-1012 (2812), SM2317-0800	MRTK-50-60-A/B3-71/100	SL34-2530
MRTK-28-60-A/B3-56/65	SL23-0704	MRTK-70-10-A/B3-80/130	SM42 Series
MRTK-40-10-A/B3-71/100	SL34-3550, SM31 Series	MRTK-70-30-A/B3-80/130	SM41 Series
MRTK-40-20-A/B3-71/100	SL34-2530	MRT-70-10-A/B3-80/130	SM42 Series + 6410-001, CD6410M
MRTK-50-10-A/B3-71/100	SM32, SM33 Series	MRT-70-30-A/B3-80/130	SM41 Series + 6410-001, CD6410M

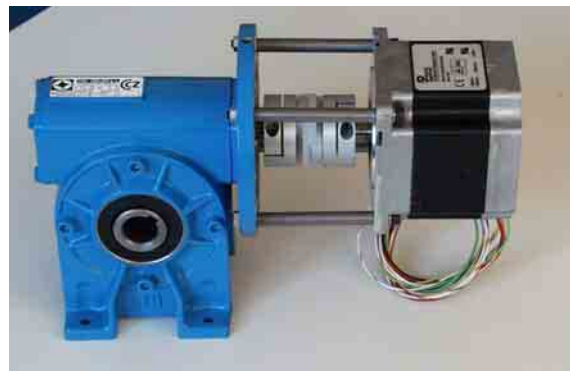
Ordering example: MRTK-28-10-A/B3-56/65

MRTK-28 series and frame size
10 gear ratio 10:1
A/B3 version / mounting (standard - see pictures below)
56/65 motor frame size / pitch circle diameter of frame holes

Additional worm gear reducer models (other gear ratio, frame sizes or versions, etc.) - see the TOS Znojmo worm gear reducers catalogue.



MRTK28 / SM2317-0800
10 Nm



MRTK40 / SM31-4304S
27 Nm