

TF Series - High-end Design and Premium Performance



Performance Data

The TF series reducer targets those applications requiring extremely smooth operation even at high axial or radial load at high speed. The enhanced load bearing capacity guarantees its design precision at almost any demanding condition.

TF140		One Stage										Two Stage										
Speed Ratio	i	3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100		
Nominal Output Torque	T_1	Nm	340	545	650	600	555	500	-	460	340	545	650	600	555	500	650	600	555	500	460	
Emergency Stop Torque	T_2	Nm	$T_1 \times 3$										$T_1 \times 3$									
Nominal Input Speed	S_1	rpm	3000										3000									
Maximum Input Speed	S_2	rpm	6000										6000									
Maximum Output Torque	T_4	Nm	$T_1 \times 3 \times 60\%$										$T_1 \times 3 \times 60\%$									
Maximum Radial Force	F_r	N	14000										14000									
Maximum Axial Force	F_a	N	11400										11400									
Torsional Rigidity	-	Nm/arcmin	50										50									
Efficiency	η	%	≥ 97										≥ 94									
Service Life	-	h	30000										30000									
Noise	-	dB	≤ 65										≤ 65									
Weight	-	Kg	18										16.6									
Backlash	P0	arcmin	≤ 1										≤ 3									
	P1	arcmin	≤ 3										≤ 5									
	P2	arcmin	≤ 5										≤ 7									
Operating Temperature	-	$^{\circ}\text{C}$	-20-90										-20-90									
Lubrication	-		Synthetic Grease										Synthetic Grease									
Protection Class	-		IP65										IP65									
Mounting Position	-		Any Direction										Any Direction									
Moment of Inertia	J	$\text{kg}\cdot\text{cm}^2$	9.2	7.5	7.4	7.2	7.1	7.0	-	7.0			2.71								2.57	

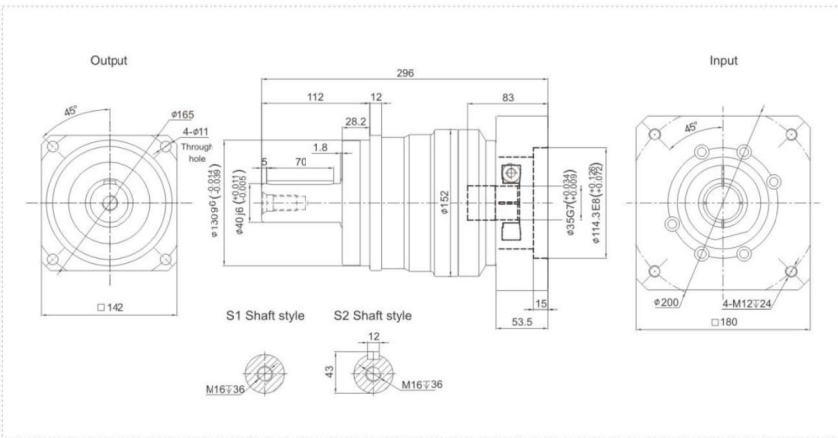
Notes:

- Speed ratio ($i = \text{Sin}/\text{Sout}$)
- When the output speed is 100 rpm, it acts on the center of the output shaft.
- For continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, $i=10$

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

TF140 Series

TF140 One Stage



TF140 Two Stage

