

TCB Series - Optimization of Performance and Cost



Performance Data

TCB series planetary reducer has modular design compact structure with high reliability and efficiency. It is a perfect optimization of both performance and cost.

TCB140		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	535	650	600	550	500	-	445	340	535	650	600	550	500	650	600	550	500	445	
Emergency Stop Torque	T_2	Nm	$T_1 \times 3$										$T_1 \times 3$									
Nominal Input Speed	S_1	rpm	2000										2000									
Maximum Input Speed	S_2	rpm	4000										4000									
Maximum Output Torque	T_a	Nm	$T_1 \times 3 \times 60\%$										$T_1 \times 3 \times 60\%$									
Maximum Radial Force	F_r	N	9400										9400									
Maximum Axial Force	F_b	N	4700										4700									
Torsional Rigidity	-	Nm/arcmin	50										50									
Efficiency	η	%	≥ 97										≥ 94									
Service Life	-	h	20000										20000									
Noise	-	dB	≤ 65										≤ 65									
Weight	-	Kg	17										19.8									
Backlash	p_0		-										-									
	p_1	arcmin	≤ 3										≤ 5									
	p_2		≤ 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	kg.cm ²	9.21	7.54	7.42	7.25	7.14	7.07	-	7.03											2.57	

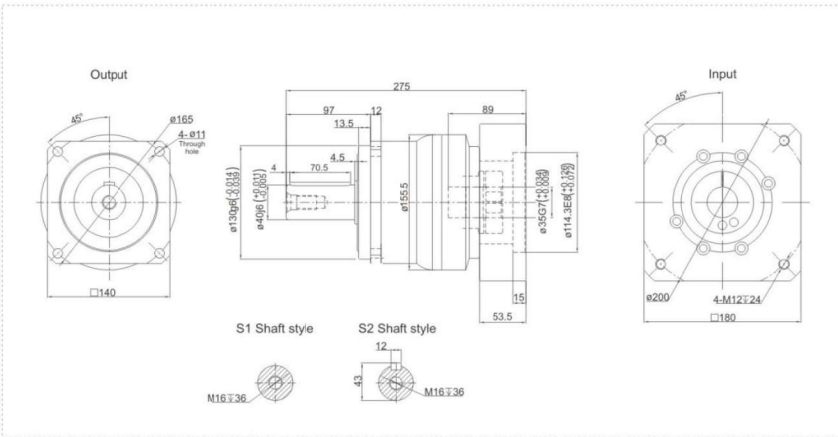
Notes:

- ① Speed ratio ($i = \text{Sin}/\text{Sout}$)
- ② When the output speed is 100 rpm, it acts on the center of the output shaft.
- ③ For continuous operation, the service life is no less than 10,000 hours.
- ④ 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.

TCB140 Series

TCB140 One Stage



TCB140 Two Stage

