

TSL-CRA-TA40

Ø40 mm Robot Joint Module | Harmonic Gearbox

Compact integrated joint module with 50:1 / 100:1 harmonic reduction options.



Reduction Ratio	Rated Torque	Peak Torque	Supply Voltage
50:1 / 100:1	1.8 / 2.4 N·m	3.3 / 4.8 N·m	10-60 V

1. Electrical, Mechanical and Control Parameters

Parameter	Unit	50:1	100:1
Rated Torque @ Motor Input 2000 rpm	N·m	1.8	2.4
Allowable Peak Torque (Start/Stop)	N·m	3.3	4.8
Maximum Allowable Average Load Torque	N·m	2.3	3.3
Instantaneous Maximum Allowable Torque	N·m	6.6	9
Outer Diameter	mm	40	40
Overall Length	mm	55.55	55.55
Hollow Shaft Diameter	mm	6	6
Weight (Without Brake)	kg	0.21	0.21
Weight (With Brake)	kg	0.23	0.23
Operating Temperature Range	°C	-40 to 80	-40 to 80
Service Life	h	7000	7000
Installation Method	-	Face Mounting	Face Mounting
Repeat Positioning Accuracy	arcsec	35	18
Absolute Positioning Accuracy	arcsec	120	100
Communication Interface	-	CAN 2.0B	CAN 2.0B
Baud Rate	Mbps	1	1
Output Peak Speed	rpm	80	40
Supply Voltage	V	10-60 (24 V recommended)	10-60 (24 V recommended)
Rated Power	W	30	25
Peak Power	W	90	80
Version Model	-	V1	V1
IP Rating	-	IP54	IP54

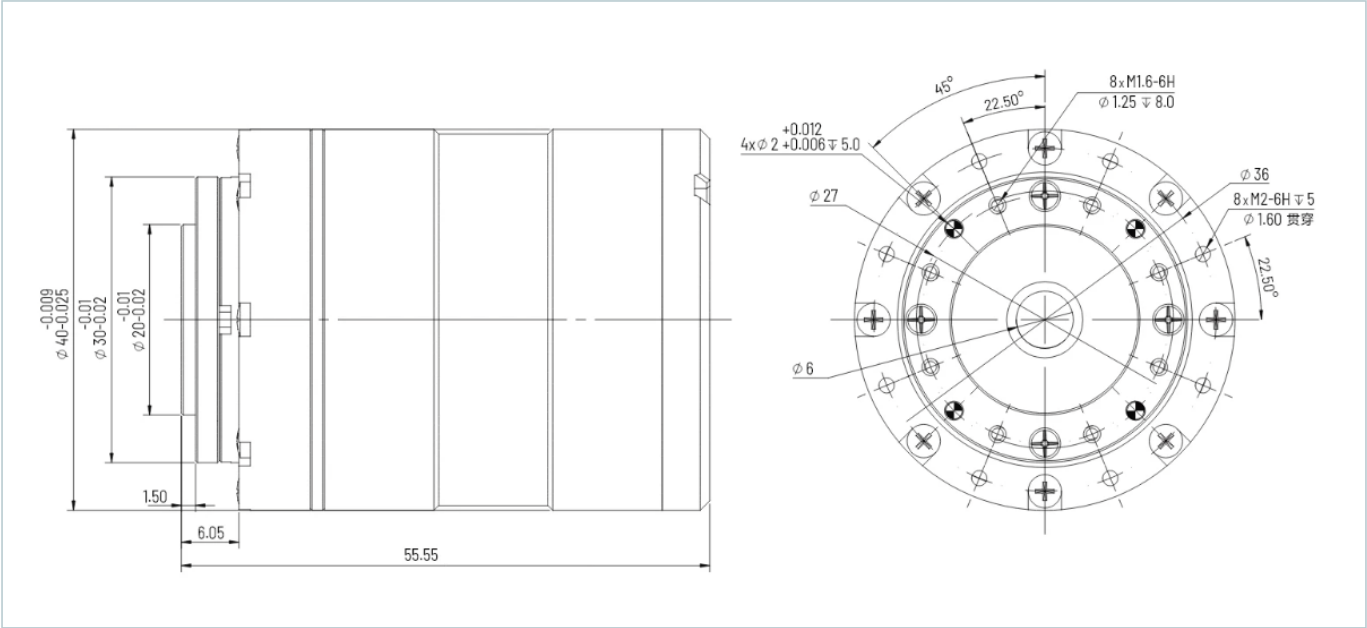
Parameters are for reference only. Final specifications and installation dimensions are subject to the approved drawing.

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2. Dimension Drawing

All dimensions are in millimeters unless otherwise specified.



Configuration	Ø40 mm harmonic robot joint module
Reduction Ratio Options	50:1 / 100:1
Overall Length	55.55 mm
Outer Diameter	Ø40 mm
Hollow Shaft Bore	Ø6 mm through
Front Interface	Ø30 mm and Ø20 mm pilot diameters; see drawing for tolerances
Mounting Features	4 × Ø2 precision holes; 8 × M1.6-6H and 8 × M2-6H threaded holes
Installation Method	Face mounting

Drawing: TSL-CRA-TA40 - Ø40 × 55.55 mm Version	Version V1.0 Updated 2026-07-18
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