TECHNICAL DATA SHEET

ALab™ OS-T Plus Series Overhead Stirrer

LCD digital timed overhead stirrer · 30 / 50 / 100 L [H_2O] · 40 to 400 N·cm · up to 150,000 mPa·s



ALab™ OS-T Plus Series Overhead Stirrer

The ALab™ OS-T Plus Series overhead stirrer; image shown for reference.

CONTENTS

01 Product Overview

02 Core Advantages

03 Specifications

04 Applications

ACS MATERIAL, LLC

959 E Walnut St., Suite 100

Pasadena, CA 91106, USA

Phone +1 (866) 227-0656

Fax +1 (781) 518-0284

contact@acsmaterial.com

Revision Date **10/22/2026**

SECTION I

Product Overview

The ALab™ OS-T Plus Series comprises three LCD digital timed overhead stirrer models for 30, 50 and 100 L of water and viscosities up to 150,000 mPa·s. A brushless DC motor holds the set speed (±3 rpm) by adjusting the torque automatically as the sample viscosity changes.

The LCD shows speed, torque, timing and temperature; a paddle "through-the-top" design eases container replacement; an external PT1000 inlet displays the sample temperature; RS485, Type-C and USB connect to a PC; there is no external transformer.

SECTION II

Core Advantages

- **Speed** — constant, ±3 rpm
- **Viscosity** — up to 150,000 mPa·s
- **Timer** — up to 99 h 59 min
- **Torque** — 40 / 60 / 400 N·cm
- **Shaft** — through-the-top, chuck 0.5 to 10 mm
- **Interface** — RS485, Type-C, USB

SECTION III

Specifications

Technical data — OS-T40-Plus / OS-T60-Plus / OS-T400-Plus

Specifications	
Brand	ALab™ by ACS Material
Series	OS-T Plus (OS-T40-Plus, OS-T60-Plus, OS-T400-Plus)
ACS Cat. No.	ALOST40P, ALOST60P, ALOT400P (parent ALOST)
Product type	LCD digital timed overhead stirrer
Max. stirring volume [H_2O]	30 L / 50 L / 100 L (see the model table)
Speed range	50 to 2200 rpm (OS-T40-Plus, OS-T60-Plus); A gear 10 to 400 rpm, B gear 50 to 2000 rpm (OS-T400-Plus)
Speed control accuracy	±3 rpm
Time settings range	0 min to 99 h 59 min
Max. torque	40 / 60 / 400 N·cm
Max. viscosity	10,000 / 50,000 / 150,000 mPa·s
Motor type	Brushless DC motor
Speed display	LCD
Torque display	LCD
Forward and reverse rotation	OS-T40-Plus and OS-T60-Plus: forward, reverse, intermittent mixing; OS-T400-Plus: —
Temperature display accuracy	0.1°C
External temperature sensor	PT1000 (accuracy ±0.2°C)
Overload protection display	LCD
Chuck clamp range diameter	0.5 to 10 mm
Data interface	RS485, Type-C, USB
Voltage, frequency	100 to 240 V, 50/60 Hz
Motor input / output, power, dimensions, weight	See the model table
Permissible ambient temperature and humidity	5 to 40°C, 80% RH
Protection class	IP42

The three models

Model	Max. vol.	Speed range	Torque	Viscosity	Motor in/out	Power	W × H × D	Weight	ACS Cat. No.
OS-T40-Plus	30 L	50 to 2200 rpm	40 N·cm	10,000 mPa·s	60 W / 50 W	70 W	90 × 240 × 227 mm	3.5 kg	ALOST 40P
OS-T60-Plus	50 L	50 to 2200 rpm	60 N·cm	50,000 mPa·s	110 W / 100 W	120 W	90 × 240 × 227 mm	3.5 kg	ALOST 60P
OS-T400-Plus	100 L	A: 10 to 400 rpm; B: 50 to 2000 rpm	400 N·cm	150,000 mPa·s	180 W / 170 W	300 W	101 × 270 × 264 mm	5.2 kg	ALOT400P

SECTION IV

Applications

Chemical synthesis and materials science; food analysis (homogenization for sample pretreatment); biopharmaceuticals; food processing; cosmetics; building materials.

Specifications are per the tables above.

Revision Date: 10/23/2026

DISCLAIMER

ALab™ is a trademark of ACS Material, LLC. ACS Material, LLC believes that the information in this Technical Data Sheet is accurate and represents the best and most current information available to us. ACS Material makes no representations or warranties, either express or implied, regarding the suitability of the equipment for any application or the accuracy of the information contained within this document. Specifications are typical and may vary by model; assess product details and application suitability for the intended use. Accordingly, ACS Material will not be responsible for damages resulting from use of or reliance upon this information.