TECHNICAL DATA SHEET

Polytevo Series Benchtop Single-Screw Extruder

Benchtop micro single-screw extruder · 16 mm screw · L/D 14:1 · 0.1–20 rpm · RT to 380°C · PLC touch screen



Polytevo Series Benchtop Single-Screw Extruder (ACS-7008B16) — representative configuration

The Polytevo Series Benchtop Single-Screw Extruder (ACS-7008B16) is an AC 220 V electric benchtop micro extruder with a PLC color touch screen. Image shown for reference; final configuration is confirmed in the quotation.

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 **11/13/2026**

SECTION I

Product Overview

Polytevo Series Benchtop Single-Screw Extruder (ACS-7008B16) is a benchtop micro single-screw extruder with a 16 mm screw (L/D 14:1), a rated screw speed of 0.1–20 rpm, RT to 380°C and a PLC color touch screen with one-button operation, for teaching demonstrations and small-batch extrusion.

The ACS-7008B16 is a small, AC 220 V electric single-screw extruder for teaching demonstrations at universities, innovation centers and research units, and for do-it-yourself small-batch extrusion. A PLC human-machine interface with a color touch screen gives simple one-button operation and easy maintenance.

SECTION II

Core Advantages

— **AC 220 V electric benchtop unit** An electric benchtop unit with a small footprint.

— **16 mm screw, L/D 14:1** Compression ratio 3:1; screw in 38CrMoAlA nitrided alloy steel.

— **Three SSR heating zones** Three SSR-controlled heating zones and one air-cooling zone; RT to 380°C.

— **One-button PLC touch screen** PLC human-machine interface with a color touch screen; simple operation and easy maintenance.

— **Wide speed range** Rated screw speed of 0.1–20 rpm from a 400 W servo motor with a 1:50 planetary reducer.

— **For teaching and small batches** Suited to teaching demonstrations, university and research laboratories, and DIY small-batch extrusion.

SECTION III

Specifications

Technical data — ACS-7008B16

Specifications	
Parameter	**Specification**
Brand	Polytevo Series by ACS Material
Product Name	Polytevo Series Benchtop Single-Screw Extruder
Model	ACS-7008B16
SKU #	ERP7BSX1
Product type	Benchtop micro single-screw extruder
Screw diameter	16 mm
Screw L/D	14:1
Screw compression ratio	3:1
Screw material	38CrMoAlA nitrided alloy steel
Screw speed	Rated 0.1–20 rpm
Temperature range	Heating zones 1/2/3: RT to 380°C (die: 380°C)
Heating method	Three SSR-controlled heating zones and one air-cooling zone
Main motor power	400 W (servo motor)
Drive system	1:50 planetary reducer
Cooling device	Cooling fan
Power supply	AC 220 V ±10%
Machine size (W × D × H)	About 650 × 660 × 745 mm
Weight	About 58 kg
Operating environment	Ambient temperature 0–40°C, relative humidity ≤80%

Scope of delivery

— **Standard configuration:** the benchtop single-screw extruder with its PLC control system; die and downstream equipment are confirmed in the quotation.

— **Scope of supply** — final accessories and scope of supply are confirmed in the quotation.

SECTION IV

Applications

For teaching demonstrations at universities, innovation centers and research units, and for DIY small-batch extrusion.

Product value: a compact 16 mm benchtop single-screw extruder (0.1–20 rpm, RT to 380°C) with one-button PLC touch-screen operation.

Revision Date: 11/13/2026

DISCLAIMER

Polytevo Series is a product line 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; confirm product details and application suitability at the time of quotation. Accordingly, ACS Material will not be responsible for damages resulting from use of or reliance upon this information.