



# **SERVO-DRIVE**

Installation Instructions for the installer



# Installation Instructions

### About these instructions

SERVO-DRIVE from Blum, Inc. is a high-quality product that simplifies everyday kitchen tasks. These instructions are intended for installers of cabinets equipped with SERVO-DRIVE. To install cabinets equipped with SERVO-DRIVE and to ensure its safe operation, please note the following:

# **AWARNING**

 CAREFULLY READ THE SERVO-DRIVE INSTALLATION INSTRUCTIONS BEFORE ATTEMPTING TO INSTALL, REPAIR OR REMOVE ANY SERVO-DRIVE PRODUCT. TO AVOID SERIOUS INJURY OR DEATH, FOLLOW THE SAFETY INFORMATION AND INSTALLATION INSTRUCTIONS IN THIS DOCUMENT.



**AWARNING A CAUTION** The following symbols indicate important safety instructions.

# **AWARNING**

### Safety instructions

- Failure to follow any of the instructions provided in the Installation Instructions will result in the voiding of all product warranties and may result in less-than optimum system performance, improper system performance, damage to system components and unsafe conditions for users and installers.
- SERVO-DRIVE complies with current safety standards; however, SERVO-DRIVE must be installed as defined in the Installation Instructions to ensure safe operation for all users. There are certain risk factors if these instructions are not followed.
- SERVO-DRIVE must be installed by a professional familiar with safe practices in installing electrical systems and components and in compliance with all applicable codes.
- Installation, setup, initial operation, maintenance, repairs, replacement and removal of SERVO-DRIVE and its components must be undertaken exclusively by a qualified professional installer in accordance with the instructions contained in the Installation Instructions.
- Switch off the power and/or unplug the SERVO-DRIVE power cord before cleaning, inspecting or servicing the SERVO-DRIVE components.
- Under no circumstances should you attempt to open the SERVO-DRIVE power supply or drive units.

# **AWARNING**

■ USE PROPER CARE IN SETTING UP THE ELECTRICAL SYSTEM FOR SERVO-DRIVE, BLUM, INC. IS NOT RESPONSIBLE FOR DAMAGES, INCLUDING INCIDENTAL AND CONSEQUENTIAL DAMAGES THAT MAY ARISE OUT OF NONCOMPLIANCE WITH THESE INSTALLATION INSTRUCTIONS; BLUM IS NOT RESPONSIBLE FOR INJURY OR DEATH THAT MAY RESULT FROM MISUSE OF SERVO-DRIVE OR FAILURE TO FOLLOW THESE INSTRUCTIONS.

### Intended use

SERVO-DRIVE supports the opening of drawers in cabinets. It may be used only under the following conditions:

- In cabinets installed in dry, interior rooms.
- In combination with Blum TANDEM or TANDEMBOX runner systems within permitted technical specifications.
- Technical specifications for Blum TANDEM and TANDEMBOX runner systems can be found in the Blum product catalog.
- For additional information, please contact a Blum distributor.



# Structural changes and replacement parts

- Structural changes to the SERVO-DRIVE assembly and replacement parts are not permitted without the permission of Blum, Inc. Structural changes may affect the performance of the system or compromise system safety.
- Damaged or malfunctioning components must be replaced.
- Use only original replacement parts from Blum, Inc.
- Any cabling damage should be immediately corrected by a qualified professional installer.
- Blum distance bumpers (item 4 below) must be attached to the back of the drawer front or to the face of the cabinet in order to maintain the required 3 (1/8") gap to activate the drawer.

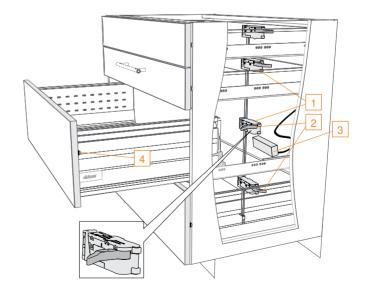


# Power supply and electronics

- Use proper care in setting up the electrical system for SERVO-DRIVE.
- An on/off switch is recommended. Otherwise, the SERVO-DRIVE power cord must be plugged into a readily accessible, dedicated Ground Fault Circuit Interrupter (GFCI) outlet. If such a circuit is not available, a licensed electrician should be employed to install a dedicated GFCI circuit including circuit breaker, wiring and outlet.
- Only one SERVO-DRIVE power supply may be used per SERVO-DRIVE circuit.
- Maintain safe distances to the power supply as indicated in this document.
- Do not install the power supply in an area that is, or may become, wet.
- SERVO-DRIVE may only be connected to a power supply that corresponds to the type and frequency listed on the nameplate.
- SERVO-DRIVE is the only device that should be connected to the power supply.
- Take care in routing the cables to avoid sharp corners and tight bends.
- Do not press on the lever arm (item 2 below).

# Description

- 1 Drive Unit
- 2 Lever Arm
- 3 Power supply
- 4 Blum distance bumper

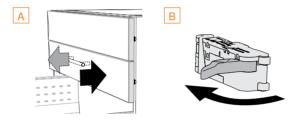


# Installation Instructions

### **Function**

When the front of the drawer is briefly pushed or the handle is briefly pulled, as shown in figure A, the lever arm (item 2, pg 3) of the drive unit (item 1, pg 3) swivels forward as shown in figure B and opens the drawer a short distance. This function is only triggered by a brief push or pull.

- The SERVO-DRIVE power supply (item 3, pg 3) provides power to the drive unit. (item 1, page 3).
- The SERVO-DRIVE power supply function can be checked via the operating mode display LED (refer to "component identification" section).
- If the LED is not illuminated, there is either no power arriving at the power supply or the power supply has malfunctioned (item 7, pg 5).



# **AWARNING**

# Cleaning

- While SERVO-DRIVE components can be gently cleaned using a moist cloth, make sure that no water, liquid cleaners, cleaning fluid or harsh cleaning products come in contact with the SERVO-DRIVE components. Electric shock hazard may result.
- Avoid contact with any combustible materials on the surface of the power supply housing.

# Disposal

Any worn-out, damaged, or malfunctioning SERVO-DRIVE components should be disposed of in a separate collection for electrical appliances in accordance with local regulations.

#### Serial tag

The following serial tag can be found on the SERVO-DRIVE power supply:



# Component identification



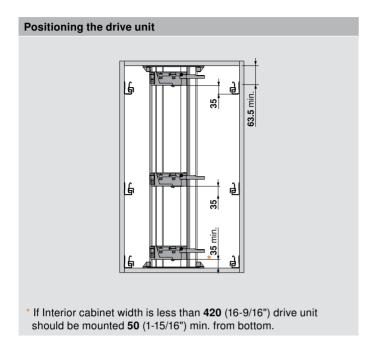
# Components 1 Top adapter Vertical aluminum profile Power supply Wall mount bracket 5 Drive unit Bottom adapter Operating mode display (LED) 8 Selector switch (mode) Selector switch (power) Lever arm 5 Blum distance bumper 6 11

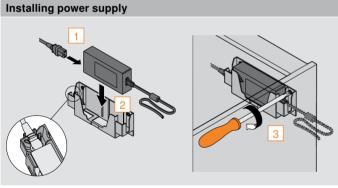
1 Cable for distribution
2 Cable for communication
3 Cable for vertical aluminum profile
4 Cable connector
5 Power cable
6 Synchronization cable

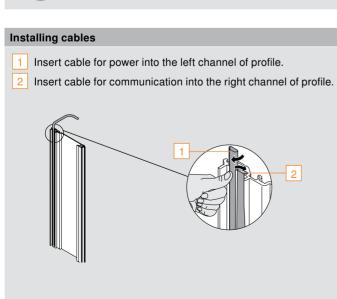
8

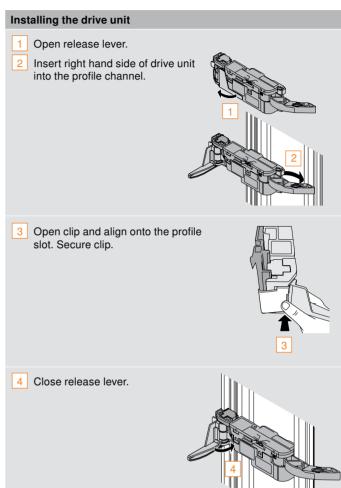
# Installation instructions

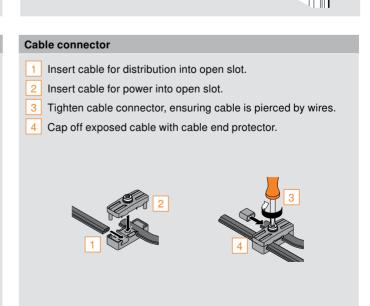
Additional applications can be found in the SERVO-DRIVE brochure at www.blum.com







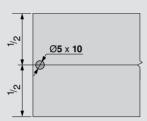




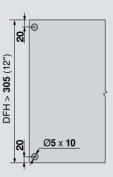


#### Installing Blum distance bumpers

For drawer heights **305** (12") or less 2 distance bumpers are required. Center bumpers vertically left/right side of drawer front.



For drawer heights **305** (12") and higher 4 distance bumpers are required. Place bumpers on 4 corners of drawer front.

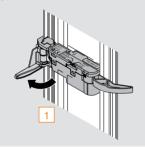


NOTE: Blum distance bumpers provide a necessary travel of 2 mm

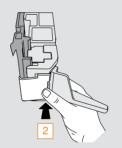
DFH = drawer front height

### **Drive unit removal**

1 Open release lever.



2 Lift up clip.



3 Pull outward and lift off of profile.

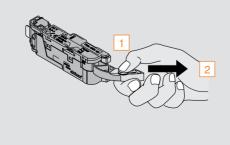


NOTE: For easy replacement mark the current location of the drive unit on the vertical aluminum profile

#### Lever arm extension

The drive unit comes with lever arm extension pre-attached. The lever arm extension must be removed for cabinet widths of **305** (12") or less.

- 1 Press release button
- 2 Pull



#### Cable connector

- 1 Operating mode display (LED)
- 2 Selector switch mode

Multiple: when set to "Multiple" drive units move simultaneously Single: only one drive unit moves (standard setting)

3 Selector switch power

Half: for short nominal lengths
Full: standard setting

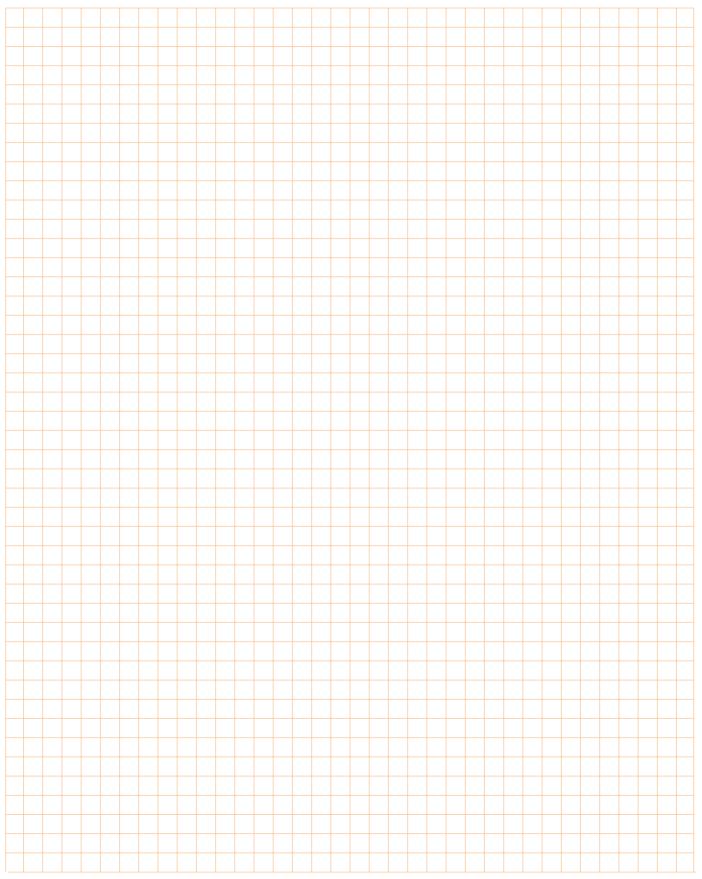
# Troubleshooting guide

Problem	Possible cause	Remedy	
SERVO-DRIVE will not work for all drawers in kitchen when pushing or pulling.	GFCI outlet reset switch tripped	Reset GFCI	
	Dedicated on/off switch is in the "off" position	Turn switch to "on" position	
	Blum power supply malfunction	Reset GFCI  If necessary, contact authorized electrician	
SERVO-DRIVE will not work for an entire cabinet when pushing or pulling.	Damage to cabling	Repair damage to cabling	
SERVO-DRIVE will not work for an individual drawer when pushing or pulling.	Drawer is blocked by an object	Open drawer manually Remove object	
	Drive unit not connected properly	Reconnect drive unit	
	Drive unit malfunction	Replace defective drive unit	
SERVO-DRIVE will only work when pulling not pushing	Drive unit malfunction	Replace defective drive unit	
	Blum distance bumper malfunction	Replace Blum distance bumper	
NOTE: If SERVO-DRIVE should fail for all drawers, you can open drawers manually. For handle-less drawers, start with the bottom drawer.			

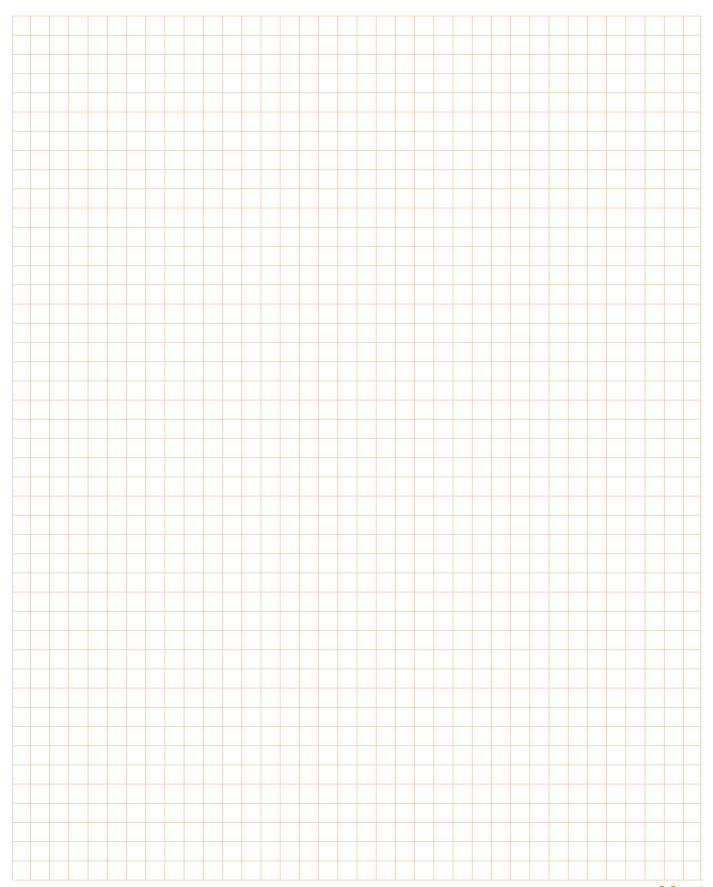


Problem	Possible cause	Remedy
Drawer opens forcefully.	For short nominal lengths, the selector switch "Power" on the drive unit is set incorrectly	Set selector switch "Power" to "Half"
		Remove lever arm extension
Drawer does not sufficiently open.	Drawer unit: Selector switch "Power" is set incorrectly	Set selector switch "Power" to "Full"
	Lever arm extension for drive unit is not installed for cabinet widths larger than <b>305</b> (12")	Install lever arm extension for drive unit
	Drawer is too heavy for one drive unit	Install a second drive unit with a synchronization cable to the vertical aluminum profile
Several drawers open simultaneously	Drive unit: Selector switch "Mode" is set incorrectly	Set selector switch "Mode" to "Single"

# Notes







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