

# **4949**

## **Suspension Arm Systems**

### **Product Drawings**

### **Last Updated 6/26/2008**

Rose-Bopla Enclosures  
7330 Executive Way  
Frederick, MD 21704  
301-696-9800  
[www.rose-bopla.com](http://www.rose-bopla.com)  
[rbinfo@pm-usa.com](mailto:rbinfo@pm-usa.com)

# Suspension Arm Systems



## TECHNICAL DATA:

- Color: Transport Gray B, similar to RAL 7043.
- Material:
  - Components—Aluminum, Steel
  - Round Tubing—galvanized steel tube, 48 x 4mm
- Finish: Powder-coat painted components
- Protection Classifications: IP 54, EN 60529.
- Foot 49496800, IP 40.
- Assembly: Cut the tubing. Slide components together. Tighten to required torque, 22 lbs. force (30 Newton Meters). Complete assembly instructions are provided with components.

Rose+Bopla's 4949 Suspension Arm System is designed to support or suspend machine control enclosures. When combined with our machine control systems, the 4949 offers a variety of

## 4949 Suspension Arm

options for setting up these units: as a vertical stand; a wall mounted system, or as a surface-mounted system.

Systems are designed to allow simple and rapid assembly. They are modular carrier systems for use in rugged industrial environments. Components are manufactured from welded steel and die cast aluminum, which offers maximum weight and load carrying capacity. This system overcomes vibration, fluid control, shock and corrosion problems commonly found in the machine tool industry. All couplings are fitted with vibration dampeners.








The 4949 system allows for easy retrofitting of existing factory machines with NC and CNC controls. It is also suited to new machinery packaging and will support or suspend Rose+Bopla's small and large aluminum machine control units.

Control wires are routed through the tubing, and components are totally protected from dust, cutting fluids, oil, and chips.

Based on standardized round steel tubing, 48mm in diameter, different system components are combined to create a variety of system structures, which assemble in a very short time. The length of the steel tubes can be easily adjusted, and are attached to system components with self-tapping Allen screws. A free cable passage, 40mm in diameter, is provided through the system components and tubing. Components include: vertical and horizontal wall brackets, base brackets, couplings, fixed and pivoting elbow couplings, fixed and pivoting foot stands and round galvanized steel tubing.






## Sample Constructions



DESCRIPTION	PART NUMBER	POSITION	MATERIAL	WEIGHT	DRAWING PG	
ROUND TUBING (10') 4mm Wall Thickness	10094158 45 10094158 85		Zinc Plated Steel Unpainted Steel 48 mm O.D.	30.80 lbs. (10 foot)	—	
WALL BRACKET (Vertical Exit)	49496200	Pivots 250°	Cast Aluminum	3.31 lbs.	17-234	
BASE BRACKET	49496600	Pivots 250°	Cast Aluminum w / Steel Sleeve	4.18 lbs.	17-234	
FOOT	49496800	Pivots 250°	Cast Aluminum	1.54 lbs.	17-235	
WALL BRACKET (Horizontal Exit)	49497000	Pivots 250°	Cast Aluminum	3.75 lbs.	17-235	
ELBOW	49497100	Fixed	Cast Aluminum	1.76 lbs.	17-236	
FOOT	49497200	Fixed	Cast Aluminum	1.65 lbs.	17-236	

**NOTE:** Tubing weight, 3.08 lbs. per foot. Maximum length for UPS shipment 9 feet (108"). Unpainted tubing must be painted prior to installation to ensure proper fit.

# Suspension Arm Systems

DESCRIPTION	PART NUMBER	POSITION	MATERIAL	WEIGHT	DRAWING PG	
COUPLING	49497300	Pivots 270°	Cast Aluminum	1.10 lbs.	17-237	
ELBOW COUPLING	49497500	Pivots 270°	Cast Aluminum	1.54 lbs.	17-237	
ANGLED ADAPTER 30°	49497600	30° Fixed Angle	Cast Aluminum	0.88 lbs.	17-238	
COUPLING	49497700	Pivots 270°	Cast Aluminum w / Flange Base	1.10 lbs.	17-238	
ELBOW COUPLING	49497800	Pivots 270°	Cast Aluminum w / Flange Base	1.54 lbs.	17-239	
ADAPTER FLANGE FOR EXTERNAL CABLE	49497900	Fixed	Cast Steel	8.82 lbs.	17-239	
TILTING ADAPTER	49498000	0°-45° Tilt	Cast Aluminum	1.32 lbs.	17-240	

**NOTE:** Tubing weight, 3.08 per foot. Maximum length for UPS shipment 9 feet (108"). Unpainted tubing must be painted prior to installation to insure proper fit.

# Suspension Arm Systems

Standard Features

- 49496200 Wall Bracket (vertical exit), cast aluminum with inner steel tube and plain bearing. Pivot 250°.

Wall Bracket

Technical drawing of the Wall Bracket (49496200) showing two views: a side view and a front view. The side view shows a vertical assembly with a top flange of diameter 48 (Ø48), a main body height of 184.5, a base width of 79.5, and a base thickness of 7. A cable passage is indicated on the side. The front view shows a square base with a central circular opening of diameter 40 (Ø40) and four mounting holes of diameter 9 (Ø9) at the corners. The base dimensions are 108 by 108, with a central square area of 85 by 85. The mounting holes are spaced 115 apart horizontally and 95 apart vertically. A cable passage is also indicated on the front view.

Standard Features

- 49496600 Base Bracket, cast aluminum with inner steel tube and flange fastening. Pivot 250°.

Base Bracket

Technical drawing of the Base Bracket (49496600) showing two views: a top view and a side view. The top view shows a square base with a central circular opening of diameter 40 (Ø40) and four mounting holes of diameter 9 (Ø9) at the corners. The base dimensions are 106 by 106, with a central square area of 80 by 80. The mounting holes are spaced 106 apart horizontally and 106 apart vertically. A cable passage is indicated on the top view. The side view shows a vertical assembly with a top flange of diameter 48 (Ø48), a main body height of 136.5, a base width of 171, and a base thickness of 18. A cable passage is indicated on the side view.

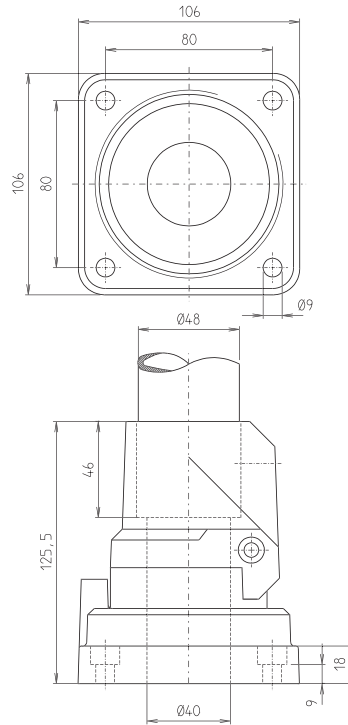
49496800

Page 8-3

**Standard Features**

- 49496800 Foot, cast aluminum with inner steel tube and plain bearing. Pivot 250°.

**Pivoting Foot**



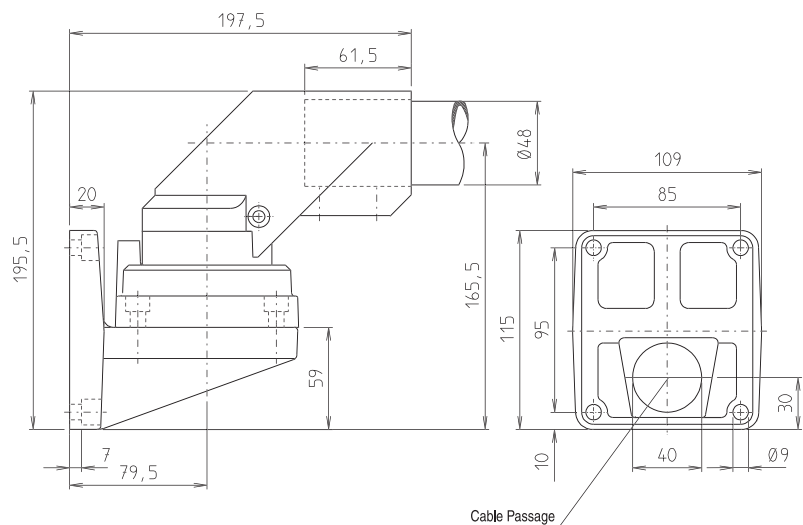
49497000

Page 8-3

**Standard Features**

- 49497000 Wall Bracket (horizontal exit), cast aluminum with inner steel tube and plain bearing. Pivot 250°.

**Wall Bracket**

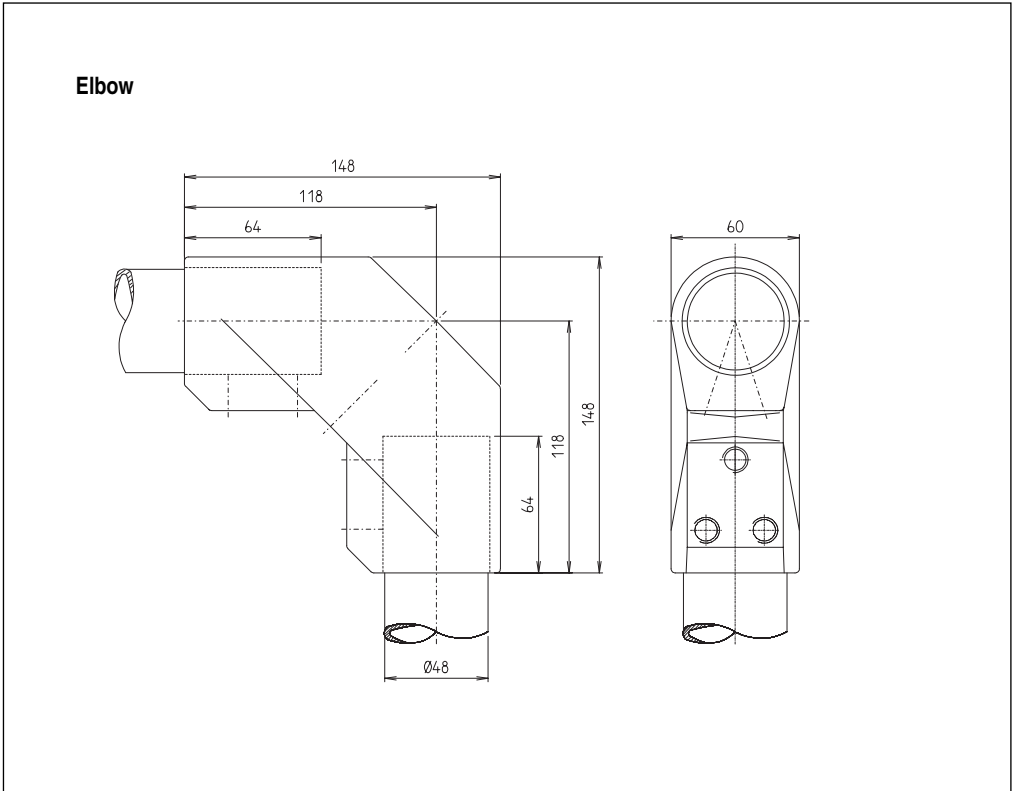


Dimensional Drawings

# Suspension Arm Systems

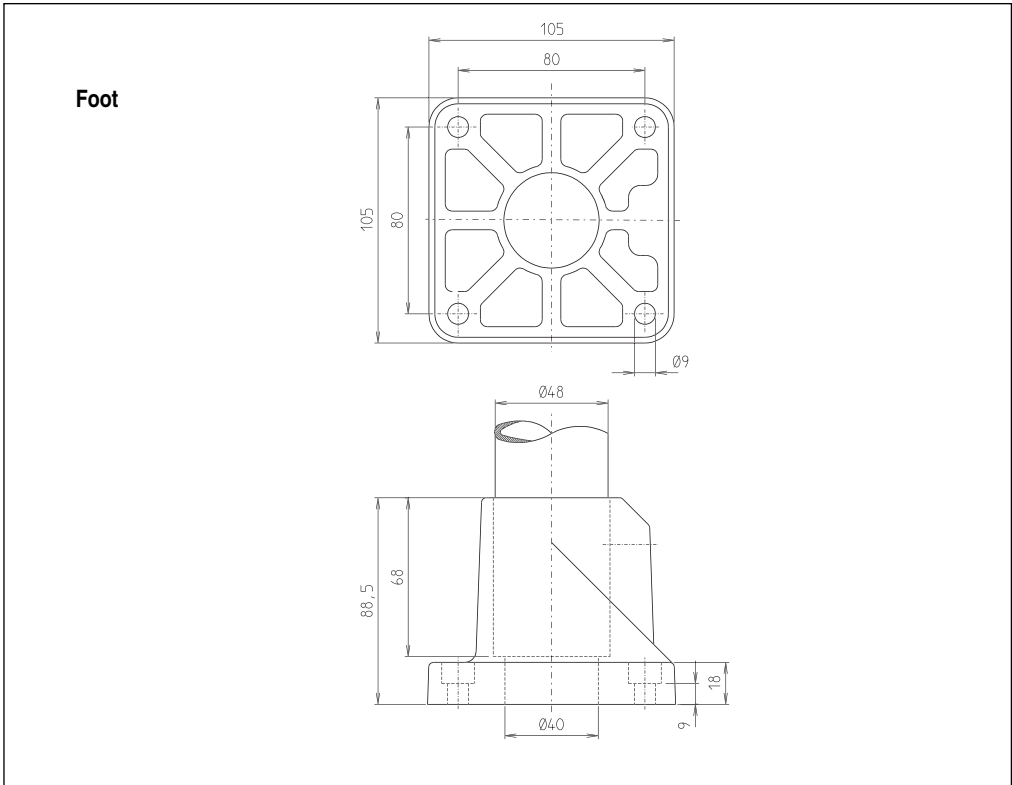
Standard Features

- 49497100 Elbow, cast aluminum, fixed at 90°.



Standard Features

- 49497200 Foot, cast aluminum, fixed.



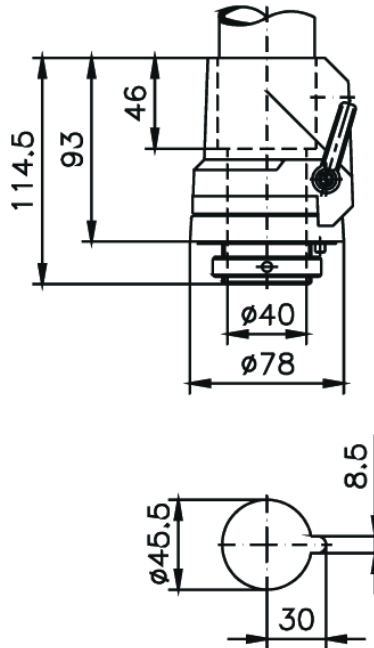


**49497300**

**Page 8-4**

**Standard Features**

- **49497300** Coupling, cast aluminum with inner steel tube fitting through enclosure hole. Center of motion infinitely variable using clamping lever. Pivot 270°.



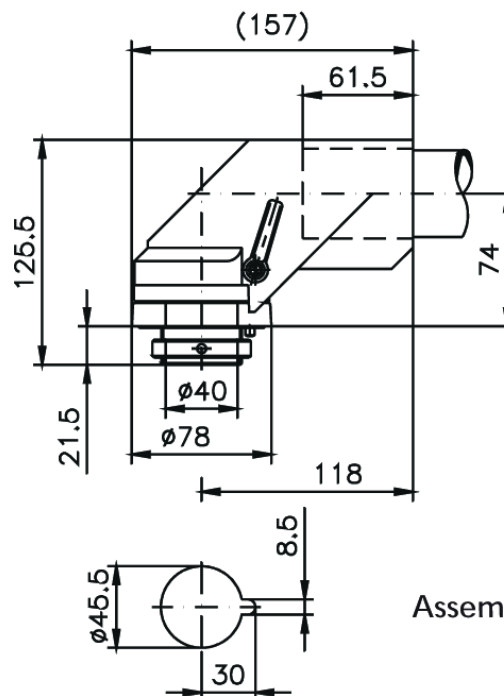
Assembly drill hole

**49497500**

**Page 8-4**

**Standard Features**

- **49497500** Elbow Coupling, cast aluminum with inner steel fitting through enclosure hole. Center of motion infinitely variable using clamping lever. Pivot 270°.



Assembly drill hole



# Suspension Arm Systems

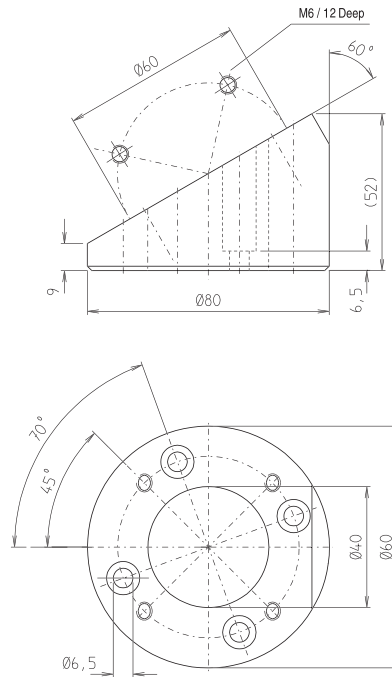
49497600

Page 8-4, 8-13

## Standard Features

- **49497600** Angled Adapter 30°, cast aluminum. Screw fastening to coupling. Slope angle 30°.

## 30° Angled Adapter

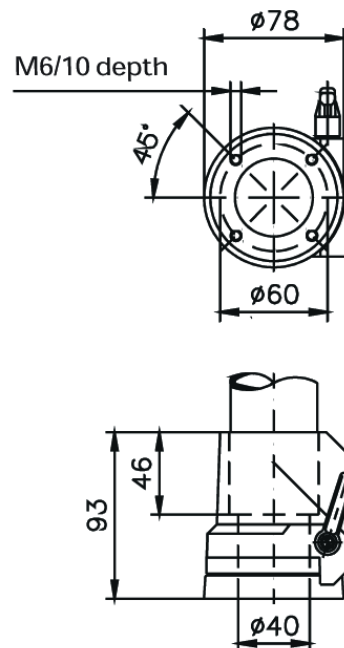


49497700

Page 8-4

## Standard Features

- **49497700** Coupling, cast aluminum with inner steel tube fitting through enclosure hole. Center of motion infinitely variable using clamping lever. Pivot 270°.





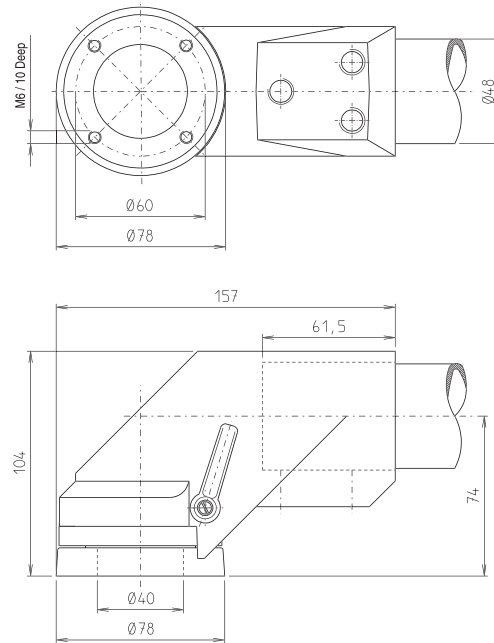
**49497800**

**Page 8-4**

**Standard Features**

- **49497800** Elbow Coupling, cast aluminum. Large surface flange fastening on enclosure. Center of motion infinitely variable using clamping lever. Pivot 270°.

**Elbow Coupling**



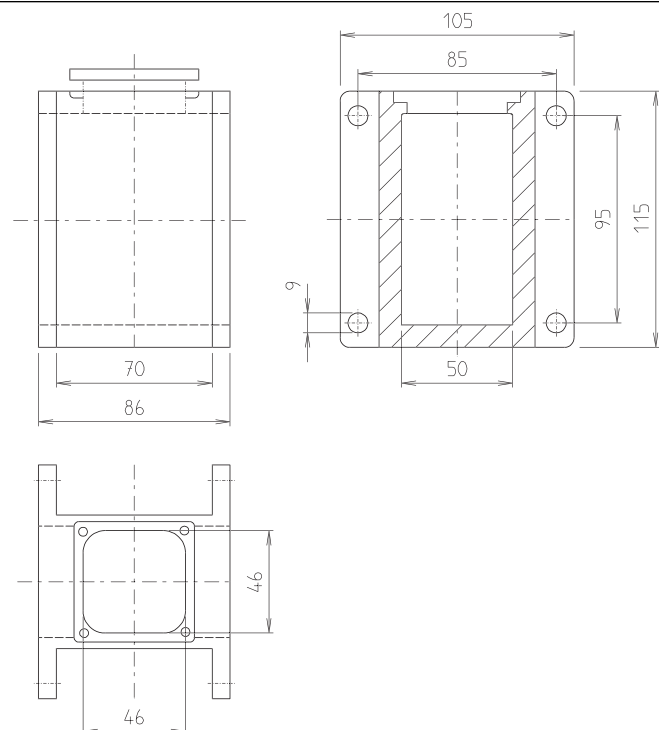
**49497900**

**Page 8-4, 8-13**

**Standard Features**

- **49497900** Adapter Flange, cast steel in combination with wall brackets as a cable lead-in, from bottom or top.

**Adapter Flange  
for External Cable**



# Suspension Arm Systems

Standard Features
<ul style="list-style-type: none"><li>• 49498000 Tilting Adapter, Aluminum, 0° to 45° angle.</li></ul>

Tilting Adapter

