

# NEMA 3R, 4, 12, and 13 HMI Enclosures



## Applications

Designed to house Human-Machine Interfaces (HMI) and electrical and electronic controls, instruments and components. Provides protection from dust, oil, and water. For outdoor application a drip shield and drain vent is recommended.

## Construction

- 0.075in carbon steel
- Seams continuously welded and ground smooth
- Reinforced with suspension or pedestal mounting provisions
- Concealed hinge rear access door
- Removable front screw cover for easy installation of cutouts, HMI, and components
- Poured-in-place oil- and water-resistant gasket
- Black 1/4-turn latches
- Operate latches with a screwdriver
- Ground studs on door and body

## Finish

- RAL7035 gray powder coated

## Listings

- NEMA Type 3R, 4, 12, and 13
- cULus Listed Type 3R, 4, and 12 [File E69392]
- CSA Type 3R, 4, and 12
- IEC 60529
- IP66



Front View



Rear View

Note: Compatible with Saginaw Aluminum and Adjustable Suspension Arm Components.

## NEMA 3R, 4, 12, and 13 HMI Enclosures

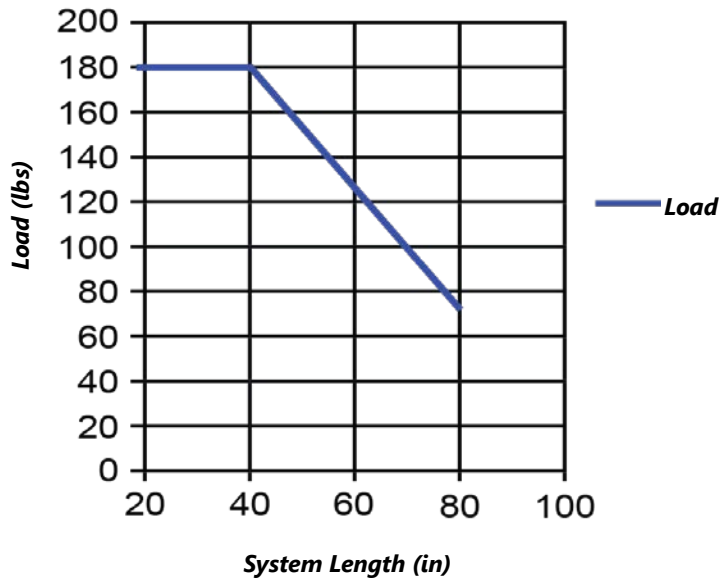
RAL7035	Price	Size HxWxD	Weight	Max Front Cutout Area	Optional Subpanel	Drawing Link
<b>SCE-12HMI1606LP</b>	\$476.00	12.27 x 16.27 x 7.25 [312 x 413 x 184]	22.30 [10.11]	9.5 x 13.5 [241 x 343]	<a href="#">SCE-12P10</a>	<a href="#">PDF</a>
<b>SCE-12HMI1610LP</b>	\$505.00	12.27 x 16.27 x 11.25 [312 x 413 x 286]	22.17 [10.05]	9.5 x 13.5 [241 x 343]	<a href="#">SCE-12P10</a>	<a href="#">PDF</a>
<b>SCE-14HMI1806LP</b>	\$517.00	14.27 x 18.27 x 7.25 [362 x 464 x 184]	38.20 [17.32]	11.5 x 15.5 [292 x 394]	<a href="#">SCE-14P12</a>	<a href="#">PDF</a>
<b>SCE-14HMI1810LP</b>	\$548.00	14.27 x 18.27 x 11.25 [362 x 464 x 286]	27.00 [12.24]	11.5 x 15.5 [292 x 394]	<a href="#">SCE-14P12</a>	<a href="#">PDF</a>
<b>SCE-16HMI2006LP</b>	\$561.00	16.27 x 20.27 x 7.25 [413 x 515 x 184]	32.50 [14.74]	13.5 x 17.5 [343 x 445]	<a href="#">SCE-16P14</a>	<a href="#">PDF</a>
<b>SCE-16HMI2010LP</b>	\$592.00	16.27 x 20.27 x 11.25 [413 x 515 x 286]	30.50 [13.83]	13.5 x 17.5 [343 x 445]	<a href="#">SCE-16P14</a>	<a href="#">PDF</a>
<b>SCE-20HMI2406LP</b>	\$613.00	20.27 x 24.27 x 7.25 [515 x 616 x 184]	42.80 [19.41]	17.5 x 21.5 [445 x 546]	N/A	<a href="#">PDF</a>
<b>SCE-20HMI2410LP</b>	\$661.00	20.27 x 24.27 x 11.25 [515 x 616 x 286]	50.40 [22.86]	17.5 x 21.5 [445 x 546]	N/A	<a href="#">PDF</a>

Note: Dimensions in inches [millimeters].  
Weight in pounds [kilograms]

# Aluminum Suspension System Overview



## Suspension System without Intermediate Joint



## Applications

Designed for use with the SCE HMI enclosures, to allow operators to easily move or position an HMI to an ergonomic and comfortable working position. Made of heavy-duty, reliable construction. Suspension systems can be assembled in a multitude of configurations that allow for machine-, wall-, top-, and floor-mount options.

## Construction

- Cast aluminum couplings.
- Extruded aluminum tubes (6060T66).
- Rotating couplings have adjustable tensioner brakes to control movement while in use.
- Rigid, durable bearings in all rotating couplings withstand the stress of continuous use.
- Open or closed tube design.
- Open tube allows for easy access to lay in wiring, with easy to install push fit rubber cover.
- Closed tube acts as conduit for feeding wiring.
- Removable access covers on all couplings with 90 degree turn.
- Hardware and gasket included for installation of coupling to tube.

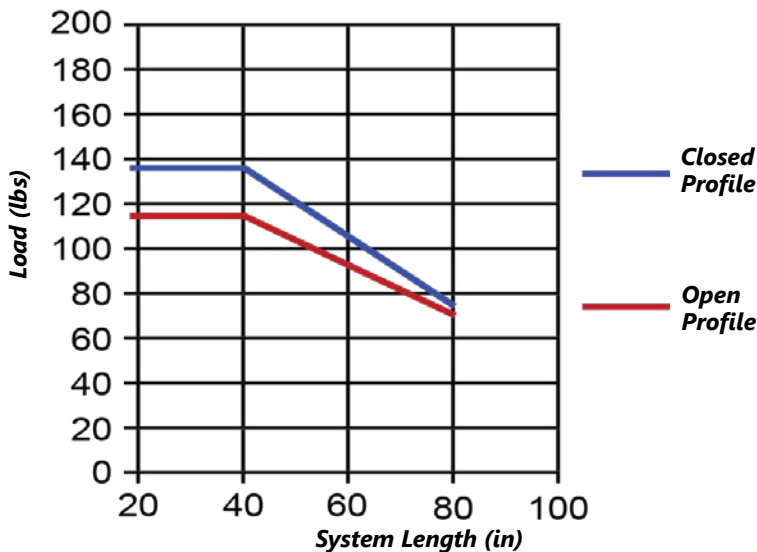
## Finish

- RAL7035 gray powder coated

## Listings

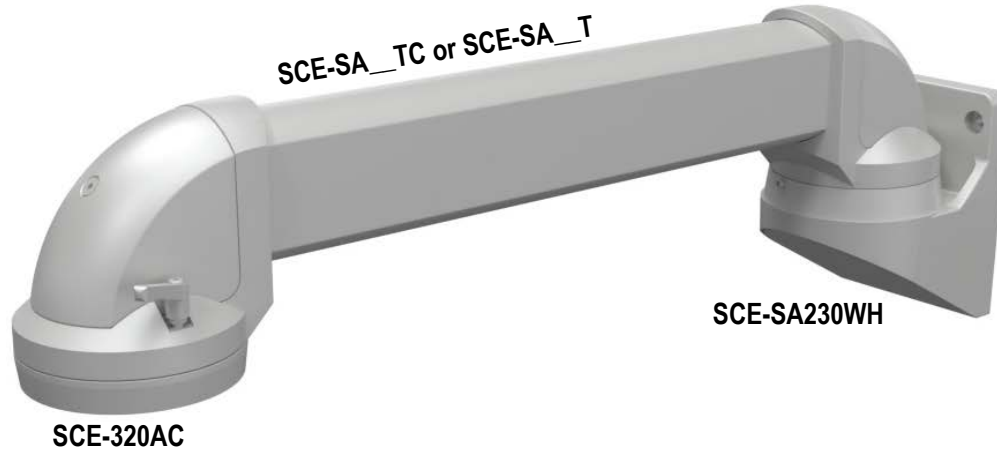
- NEMA Type 3R, 4, 12, and 13
- IEC 60529
- IP66

## Suspension System with Intermediate Joint

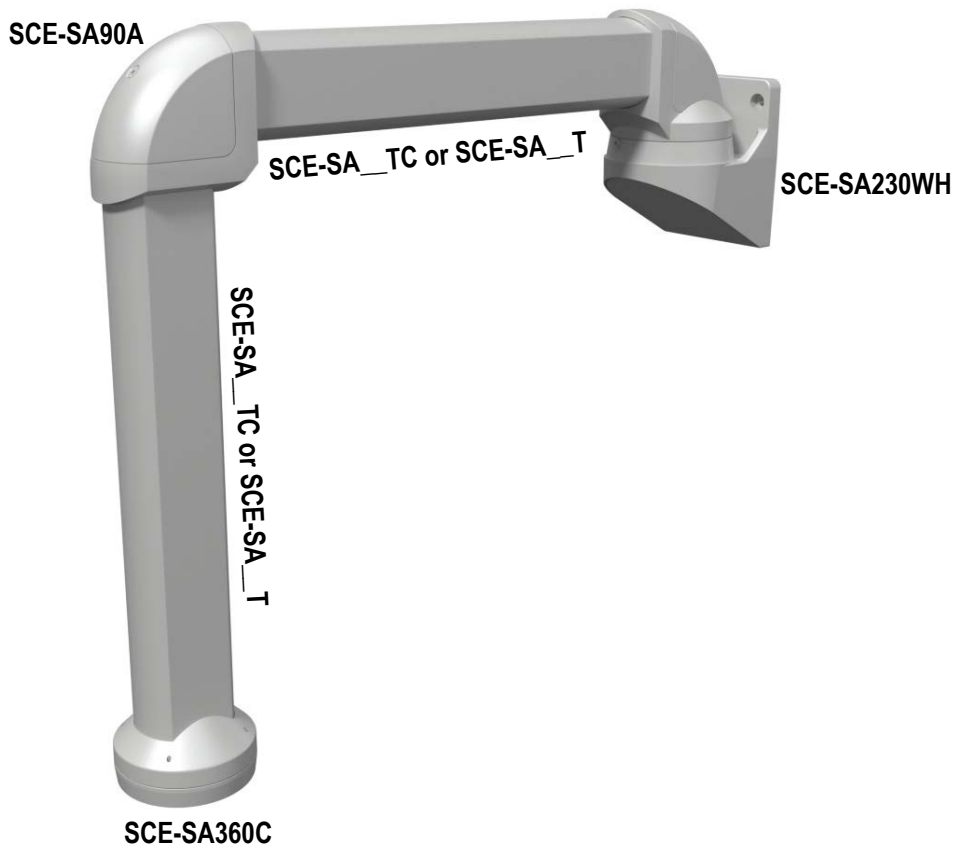


**Notes: With Intermediate Joint - Max. Tube Length:**  
 Closed Profile: • 60" distance between wall hinge, top mounted joint and intermediate joint • 60" distance between angle and intermediate joint Complete length max. 80"  
 Open Profile: • 40" distance between wall hinge, top mounted joint and intermediate joint • 40" distance between angle and intermediate joint Complete length max. 80"

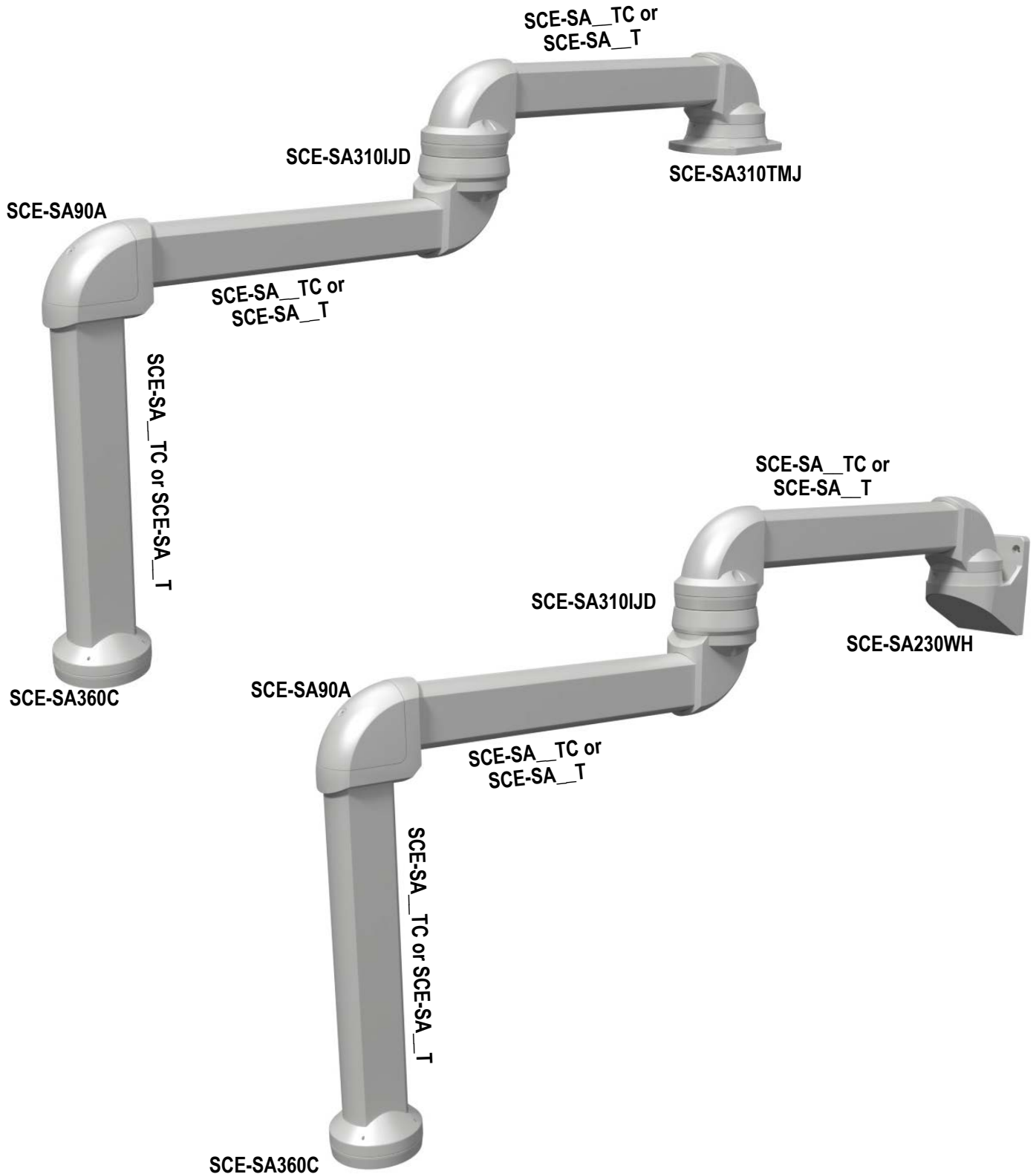
# Suspension Arm Configuration Examples



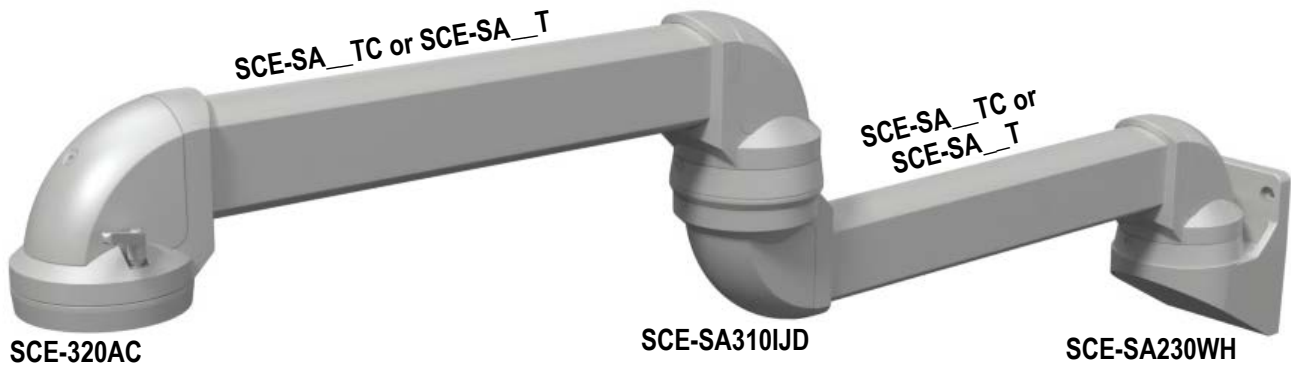
# Suspension Arm Configuration Examples



# Suspension Arm Configuration Examples



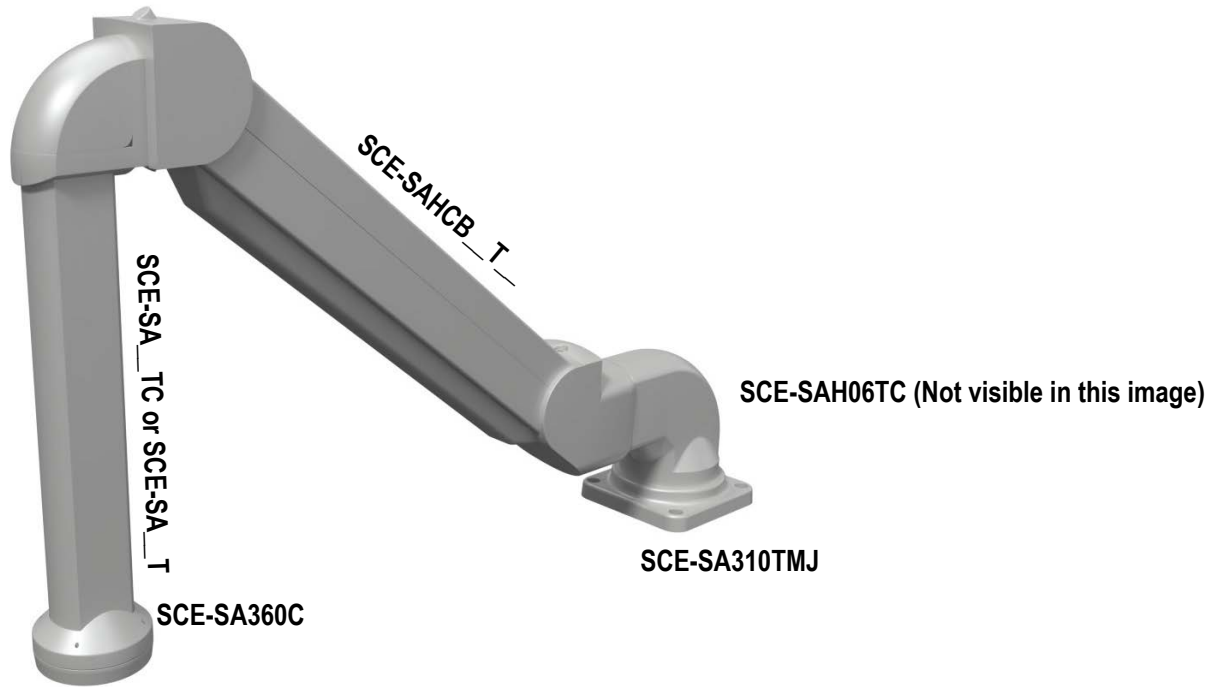
# Suspension Arm Configuration Examples



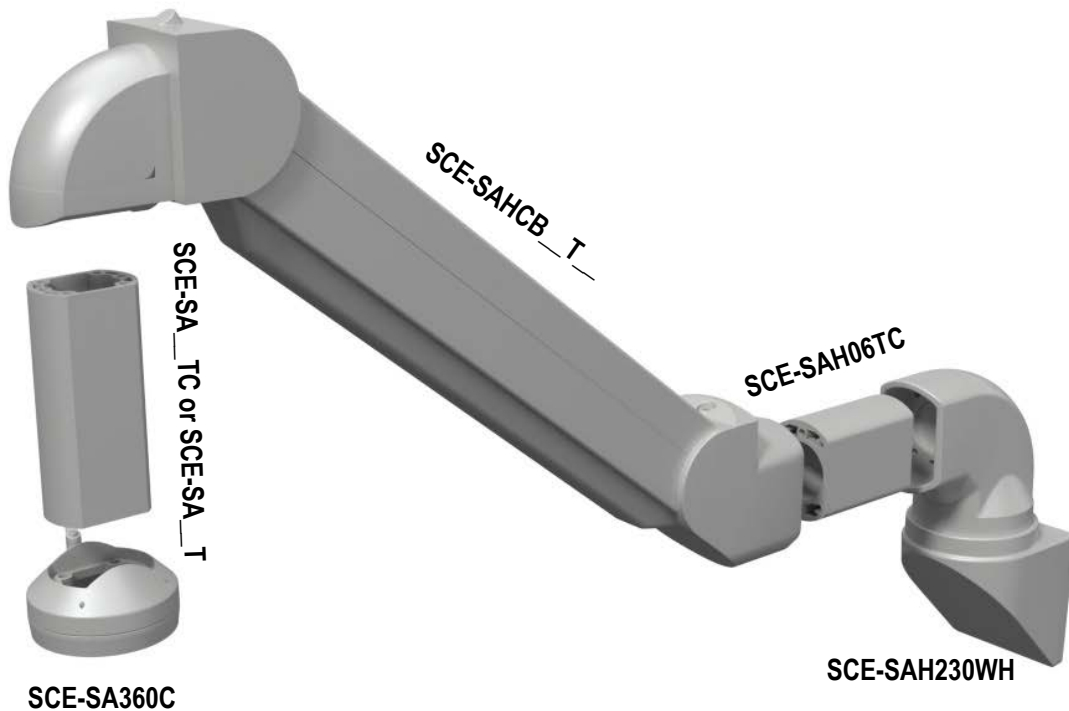
Note: Assemblies demonstrate two enclosure mounting options using the same suspension arm components



# Height Adjustable Suspension Arm Configuration Examples



Note: When assembled, profile tube SCE-SAH06TC is enclosed and not visible from some perspectives.



# Aluminum Suspension Arm Profiles



## Applications

Allows operators to easily move or position an HMI to an ergonomic and comfortable working position. Suspension Systems can be assembled in a multitude of configurations that allow for machine-, wall-, top-, and floor-mount options

## Construction

- Cast aluminum couplings
- Extruded aluminum tubes (6060T66)
- Rotating couplings have adjustable tensioner brakes to control movement while in use
- Rigid, durable bearing in all rotating couplings withstand the stress of continuous use
- Open or closed tube design
- Open tube allows for easy access to lay in wiring with easy to install push fit rubber cover
- Closed tube acts as conduit for feeding wiring
- Removable access covers on all couplings with 90° turn
- Hardware and gasket included for installation of coupling to tube

## Finish

- RAL7035 gray powder coated

### Closed Tube Suspension Arm Profile

Part	Price	Length	Drawing Link
<a href="#">SCE-SA08TC</a>	\$136.00	8.0 [203]	<a href="#">PDF</a>
<a href="#">SCE-SA20TC</a>	\$121.00	20.0 [508]	<a href="#">PDF</a>
<a href="#">SCE-SA39TC</a>	\$197.00	30.0 [762]	<a href="#">PDF</a>
<a href="#">SCE-SA30TC</a>	\$368.00	39.0 [991]	<a href="#">PDF</a>
<a href="#">SCE-SA79TC</a>	\$349.00	79.0 [2007]	<a href="#">PDF</a>

Note: Dimensions in inches [millimeters].

### Open Tube Suspension Arm Profile

Part	Price	Length	Drawing Link
<a href="#">SCE-SA20T</a>	\$188.00	20.0 [508]	<a href="#">PDF</a>
<a href="#">SCE-SA39T</a>	\$290.00	39.0 [991]	<a href="#">PDF</a>
<a href="#">SCE-SA79T</a>	\$470.00	79.0 [2007]	<a href="#">PDF</a>

Note: Dimensions in inches [millimeters].



# Heavy Duty Counter Balance Suspension Arms



## Applications

Allows operators to easily move or position an HMI to an ergonomic and comfortable working position. Suspension Systems can be assembled in a multitude of configurations that allow for machine-, wall-, top-, and floor-mount options

## Construction

- Rotating couplings have adjustable tensioner brakes to control movement while in use
- Closed tube acts as conduit for feeding wiring

## Finish

- RAL7035 gray powder coated end couplings

### Heavy Duty Counter Balance Suspension Arms

Part	Price	Load Capacity	Drawing Link
<a href="#">SCE-SAHC44T70</a>	\$3,205.00	44-70 [19.95 x 31.75]	<a href="#">PDF</a>
<a href="#">SCE-SAHC70T97</a>	\$3,307.00	70-97 [31.75 x 43.99]	<a href="#">PDF</a>
<a href="#">SCE-SAHC97T132</a>	\$3,384.00	97-132 [43.99 x 59.86]	<a href="#">PDF</a>
<b>Note: Weight in pounds [kilograms]</b>			

# Heavy-Duty Counter-Balance Suspension Arm Mounting Components



## Applications

Used to mount a Heavy-Duty Adjustable Arm to a vertical or Horizontal surface. Require SCE-SAH06TC to connect to adjustable arm.

## Construction

- Cast aluminum couplings
- Extruded aluminum tubes (6060T66)
- Rotating couplings have adjustable tensioner brakes to control movement while in use
- Rigid, durable bearing in all rotating couplings withstand the stress of continuous
- Removable access covers on all couplings with 90° turn
- Hardware and gasket included for installation of coupling to tube

Top-Mounted Swivel		
Part Number	Price	Drawing Link
<a href="#">SCE-SAH310TMJ</a>	\$1,062.00	<a href="#">PDF</a>

Mounts to horizontal surface, and offers up to 310° of arm rotation. Requires [SCE-SAH06TC](#) to connect to a Heavy Duty Height Adjustable Arm.



[SCE-SAH310TMJ](#)

Wall-Mount Swivel Base		
Part Number	Price	Drawing Link
<a href="#">SCE-SAH230WH</a>	\$1,078.00	<a href="#">PDF</a>

Mounts to horizontal surface, and offers up to 230° of arm rotation. Requires [SCE-SAH06TC](#) to connect to a Heavy Duty Height Adjustable Arm.



[SCE-SAH230WH](#)

Heavy-Duty Suspension Arm Profile			
Part	Price	Length	Drawing Link
<a href="#">SCE-SAH06TC</a>	\$146.00	6.0 [152]	<a href="#">PDF</a>
Note: Weight in pounds [kilograms]			



[SCE-SAH06TC](#)

# Light Duty Counter Balance Suspension Arms



## Applications

Allows operators to easily move or position an HMI to an ergonomic and comfortable working position. Suspension Systems can be assembled in a multitude of configurations that allow for machine-, wall-, top-, and floor-mount options.

## Construction

- Rotating couplings have adjustable tensioner brakes to control movement while in use
- Closed tube acts as conduit for feeding wiring

## Finish

- Natural Aluminum end couplings

Light Duty Counter Balance Suspension Arms			
Part	Price	Load Capacity	Drawing Link
<a href="#">SCE-SACB11T31</a>	\$1,430.00	11-31 [4.99 x 14.06]	<a href="#">PDF</a>
<a href="#">SCE-SACB31T55</a>	\$1,457.00	31-55 [14.06 x 24.94]	<a href="#">PDF</a>

Note: Weight in pounds [kilograms]



# Suspension Arm Base Fittings



## Applications

Connects a suspension arm profile tube to the horizontal or vertical base. Cables and wires originating in the base feed through the coupling towards the HMI enclosure.

### Wall-Mount Swivel Base

Part Number	Price	Drawing Link
<a href="#">SCE-SA230WH</a>	\$444.00	<a href="#">PDF</a>

Mounts to vertical surface, and offers up to 230° of arm rotation.



[SCE-SA230WH](#)

### Top-Mount Swivel

Part Number	Price	Drawing Link
<a href="#">SCE-SA310TMJ</a>	\$377.00	<a href="#">PDF</a>

Mounts to horizontal surface, and offers up to 310° of arm rotation.



[SCE-SA310TMJ](#)

# Angle Fittings and Intermediate Swivel Joints



Allows operators to easily move or position an HMI to an ergonomic and comfortable working position

Intermediate Swivel Joint		
Part Number	Price	Drawing Link
<b>SCE-SA310IJ</b>	\$538.00	<a href="#">PDF</a>

Intermediate coupling steps up between two Saginaw Aluminum arm profiles. Offers 310° of arm rotation.



**SCE-SA310IJ**

Drop-down Intermediate Swivel Joint		
Part Number	Price	Drawing Link
<b>SCE-SA310IJD</b>	\$538.00	<a href="#">PDF</a>

Intermediate coupling steps down between two Saginaw Aluminum arm profiles. Offers 310° of arm rotation.



**SCE-SA310IJD**

90° Angle		
Part Number	Price	Drawing Link
<b>SCE-SA90A</b>	\$158.00	<a href="#">PDF</a>

Fixed 90° elbow.



**SCE-SA90A**

# Aluminum Suspension Arm Couplings



Connects suspension arm profiles to HMI enclosures.

Angle Coupling		
Part Number	Price	Drawing Link
<a href="#">SCE-SA320AC</a>	\$264.00	<a href="#">PDF</a>

Connects HMI enclosure to horizontal suspension arm. Offers 320° degrees of enclosure rotation.



[SCE-SA320AC](#)

Swivel Coupling		
Part Number	Price	Drawing Link
<a href="#">SCE-SA360C</a>	\$167.00	<a href="#">PDF</a>

Connects HMI enclosure to vertical suspension arm. Offers 360° of enclosure rotation.



[SCE-SA360C](#)

Inclining Adaptor		
Part Number	Price	Drawing Link
<a href="#">SCE-SA45IA</a>	\$593.00	<a href="#">PDF</a>

Install between HMI Enclosure and an HMI Enclosure Coupling ([SCE-SA320AC](#), [SCE-SA360C](#), or [SCE-SAFC](#)) for an up to 45° angle tilt.



[SCE-SA45IA](#)

Fixed Coupling		
Part Number	Price	Drawing Link
<a href="#">SCE-SAFC</a>	\$86.00	<a href="#">PDF</a>

Fixed coupling between HMI enclosure and suspension arm.



[SCE-SAFC](#)

# Aluminum Suspension Arm Floor Stand



Allows operators to easily move or position an HMI to an ergonomic and comfortable working position

Fixed Floor Stand		
Part Number	Price	Drawing Link
<b>SCE-SAFFS</b>	\$83.00	<a href="#">PDF</a>

Mounts to horizontal surface for fixed coupling between the mounting base and a vertical suspension arm.



[SCE-SAFFS](#)

Turntable Floor Stand		
Part Number	Price	Drawing Link
<b>SCE-SATFS</b>	\$241.00	<a href="#">PDF</a>

Mounts to horizontal base for rotating coupling between the mounting base and a vertical suspension tube.



[SCE-SATFS](#)

# Monitor Mounting Bracket



## Application

Designed for use with Suspension System, allows easily installation of most Monitors to the suspension system for ergonomic and comfortable working position. Heavy-duty, reliable construction. Suspension Systems can be assembled in a multitude of configurations that allow for machine mount, wall mount, top mount, and floor mount options.

Includes a large and small monitor adapter bracket for VESA MIS D standard 75 x 75mm or 100 x 100mm mounting patterns.

## Finish

Powder coated Black Textured finish.

Monitor Mounting Bracket		
Part Number	Price	Drawing Link
<a href="#">SCE-SAMM</a>	\$38.50	<a href="#">PDF</a>