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



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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





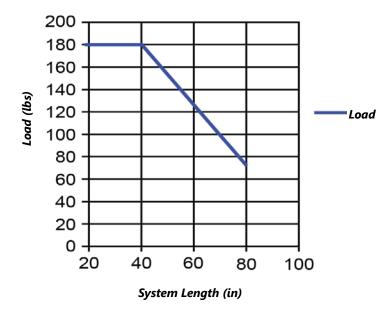
Note: Compatible with Saginaw Aluminum and Adjustable Suspension Arm Components.

NEMA 3R, 4, 12, and 13 HMI Enclosures							
RAL7035	Price	Size HxWxD	Weight	Max Front Cutout Area	Optional Subpanel	Drawing Link	
SCE-12HMI1606LP	\$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]	SCE-12P10	PDF	
SCE-12HMI1610LP	\$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]	SCE-12P10	<u>PDF</u>	
SCE-14HMI1806LP	\$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]	SCE-14P12	<u>PDF</u>	
SCE-14HMI1810LP	\$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]	SCE-14P12	<u>PDF</u>	
SCE-16HMI2006LP	\$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]	SCE-16P14	<u>PDF</u>	
SCE-16HMI2010LP	\$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]	SCE-16P14	<u>PDF</u>	
SCE-20HMI2406LP	\$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	PDF	
SCE-20HMI2410LP	\$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	<u>PDF</u>	
	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.

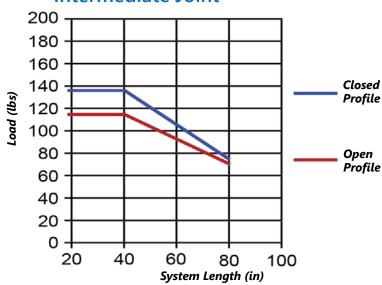
Finish

• RAL7035 gray powder coated

Listings

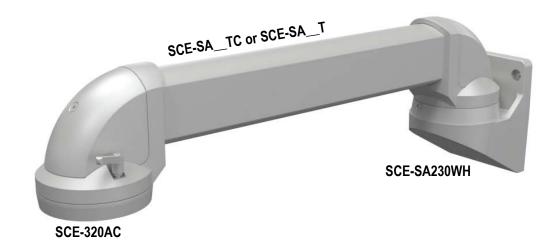
- NEMA Type 3R, 4, 12, and 13
- IEC 60529
- IP66

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"





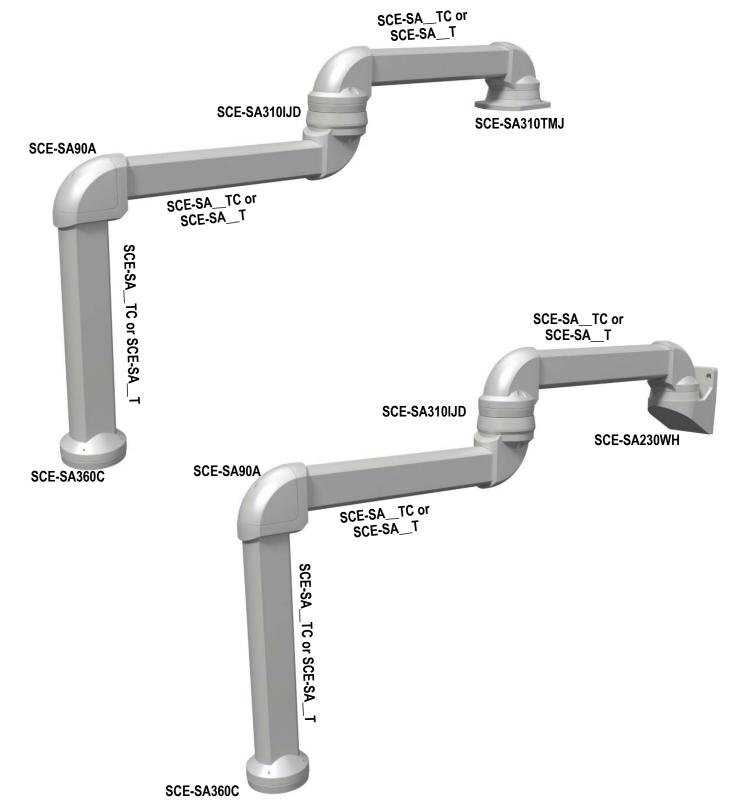














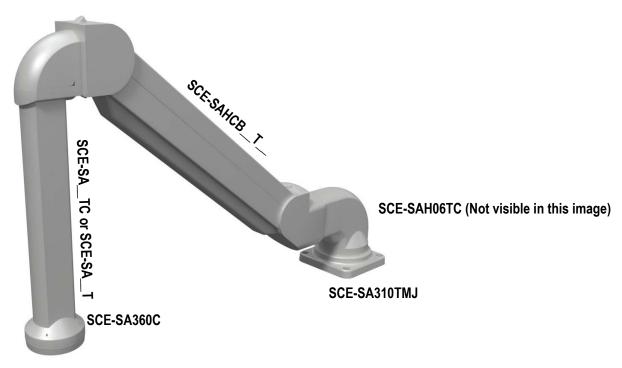


Note: Assemblies demonstrate two enclosure mounting options using the same suspension arm components

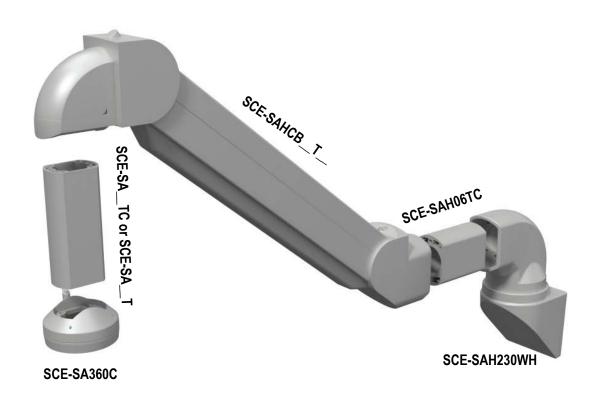


Height Adjustable Suspension Arm Configuration Examples





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



Aluminum Suspension Arm Profiles



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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 floormount 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

Closed Tube Suspension Arm Profile					
Part	Price	Length	Drawing Link		
SCE-SA08TC	\$136.00	8.0 [203]	<u>PDF</u>		
SCE-SA20TC	\$121.00	20.0 [508]	<u>PDF</u>		
SCE-SA39TC	\$197.00	30.0 [762]	<u>PDF</u>		
SCE-SA30TC	\$368.00	39.0 [991]	<u>PDF</u>		
SCE-SA79TC	\$349.00	79.0 [2007]	<u>PDF</u>		
Note: Dimensions in inches [millimeters].					

Open Tube Suspension Arm Profile				
Part	Price	Length	Drawing Link	
SCE-SA20T	\$188.00	20.0 [508]	<u>PDF</u>	
SCE-SA39T	\$290.00	39.0 [991]	<u>PDF</u>	
SCE-SA79T	\$470.00	79.0 [2007]	PDF	

Note: Dimensions in inches [millimeters].

Finish

• RAL7035 gray powder coated

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 floormount 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		
SCE-SAHCB44T70	\$3,205.00	44-70 [19.95 x 31.75]	PDF		
SCE-SAHCB70T97	\$3,307.00	70-97 [31.75 x 43.99]	<u>PDF</u>		
SCE-SAHCB97T132	\$3,384.00	97-132 [43.99 x 59.86]	<u>PDF</u>		
Note: Weight in pounds [kilograms]					

Enclosures: HMI and Suspension Arms tENS-261

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			
SCE-SAH310TMJ	\$1,062.00	<u>PDF</u>	

Mounts to horizontal surface, and offers up to 310° of arm rotation. Requires <u>SCE-SAH06TC</u> to connect to a Heavy Duty Height Adjustable Arm.



SCE-SAH310TMJ

Wall-Mount Swivel Base			
Part Number	Price	Drawing Link	
SCE-SAH230WH	\$1,078.00	<u>PDF</u>	

Mounts to horizontal surface, and offers up to 230° of arm rotation. Requires <u>SCE-SAH06TC</u> to connect to a Heavy Duty Height Adjustable Arm.



SCE-SAH230WH

Heavy-Duty Suspension Arm Profile					
Part	Price	Length	Drawing Link		
SCE-SAH06TC	\$146.00	6.0 [152]	PDF		
Note: Weight in pounds [kilograms]					



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 floormount 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					
SCE-SACB11T31	\$1,430.00	11-31 [4.99 x 14.06]	<u>PDF</u>		
SCE-SACB31T55	\$1,457.00	31-55 [14.06 x 24.94]	PDF		
Note:Weight in pounds [kilograms]					



Enclosures: HMI and Suspension Arms tENS-260

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	
SCE-SA230WH	\$444.00	<u>PDF</u>	

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



Top-Mount Swivel			
Part Number Price Drawing Link			
SCE-SA310TMJ	\$377.00	<u>PDF</u>	

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



SCE-SA310TMJ

Enclosures: HMI and Suspension Arms tENS-263

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			
SCE-SA310IJ	\$538.00	PDF	

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	
SCE-SA310IJD	\$538.00	PDF	

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



90° Angle		
Part Number	Price	Drawing Link
SCE-SA90A	\$158.00	<u>PDF</u>

Fixed 90° elbow.



SCE-SA90A

Aluminum Suspension Arm Couplings

SAGINAW CONTROL & ENGINEERING

Connects suspension arm profiles to HMI enclosures.

Angle Coupling		
Part Number	Price	Drawing Link
SCE-SA320AC	\$264.00	PDF

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



SCE-SA320AC

Swivel Coupling		
Part Number	Price	Drawing Link
SCE-SA360C	\$167.00	<u>PDF</u>

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



SCE-SA360C

Inclining Adaptor		
Part Number	Price	Drawing Link
SCE-SA45IA	\$593.00	PDF

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



Fixed Coupling		
Part Number	Price	Drawing Link
SCE-SAFC	\$86.00	PDF

Fixed coupling between HMI enclosure and suspension arm.



<u>www.automationdirect.com</u> Enclosures: HMI and Suspension Arms tENS-265

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
SCE-SAFFS	\$83.00	PDF

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
SCE-SATFS	\$241.00	PDF

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
SCE-SAMM	\$38.50	<u>PDF</u>



www.automationdirect.com Enclosures: HMI and Suspension Arms tENS-267