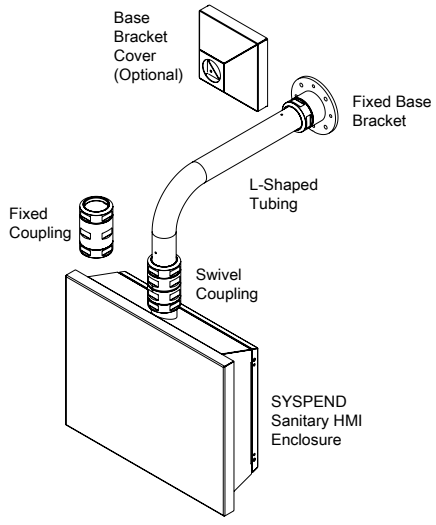
SYSPEND HMI SANITARY SYSTEM OVERVIEW

The Syspend Sanitary HMI (Human-Machine Interface) System is a Type 304 stainless steel enclosure series and suspension system designed to enclose, protect and suspend lightweight HMI devices up to a maximum load of 90 lb. (40.8 kg) in NEMA Type 4X environments.

The system features a modular design for application versatility and is specifically designed to meet the demanding needs of sanitary environments. The entire system meets Type 4X and IP69K requirements for high-pressure, high-temperature washdown applications.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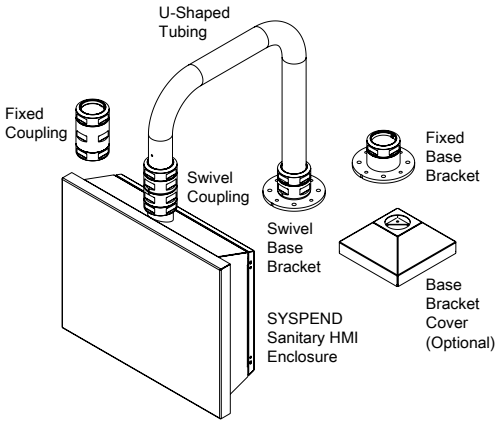
Fixed
Coupling
Swivel
Coupling
SYSPEND
Sanitary HMI
Enclosure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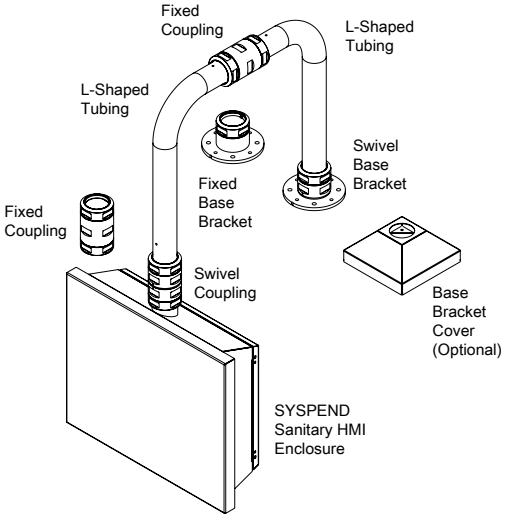
Enclosure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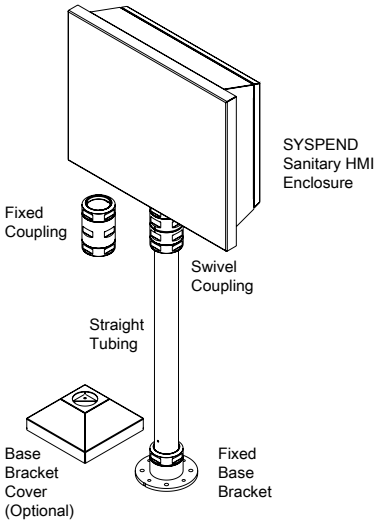
SYSPEND
Sanitary HMI
Enclosure


SYSPEND
Sanitary HMI
Enclosure
Fixed
Coupling
Swivel
Coupling
Straight
Tubing
Base
Bracket
Cover
(Optional)
Fixed
Base
Bracket

89047417

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SYSPEND HMI SANITARY ENCLOSURE, TYPE 4X

INDUSTRY STANDARDS

UL 508A Listed; Type 4, 4X, 12; File No. E61997
cUL Listed per CSA C22.2 No 94; Type 4, 4X, 12; File No. E61997

NEMA/EEMAC Type 4, 4X, 12
IEC 60529, IP66, IP69K

APPLICATION

Specifically designed to house process control equipment in sanitary washdown environments, particularly food and beverage manufacturing. The enclosure features many clean design elements and meets Type 4X and IP69K requirements for high-pressure, high-temperature washdown applications.

FEATURES

- Enclosure provides modern, flat-screen monitor-style aesthetics
- Integrated side handles allow for easy repositioning of enclosure
- Fully concealed gasket area provides complete protection in washdown environments
- 20-degree sloped top facilitates runoff of water and cleaning solutions and prohibits the placement of objects on the top of the enclosure
- Slanted flange trough collar prohibits pooling of fluids along the top edge of the enclosure opening
- Enclosure can be flipped for either pendant or pedestal mounting
- Hinges are shielded by door
- Suspension arm adapter provided with enclosure; provides means of attachment to the Syspend Sanitary Suspension System and Syspend VHDS-Motion Arm
- Suspension arm adapter can be installed backwards to provide 40-degree tilt for pedestal applications
- Internal support plate included with each enclosure provides extra rigidity for suspension mounting
- Flat area provided for installing optional H2Omit Vent Drain to provide means of removing condensed moisture from the enclosure
- Optional adapter available for mounting enclosure to the Syspend VHDS-Motion arm

SPECIFICATIONS

- Constructed from 1.2-mm thick (18 gauge) Type 304 stainless steel
- Seams continuously welded and ground smooth
- One-piece, closed-cell silicone gasket
- Bonding provision on door; grounding stud on body
- Door secured with two stainless steel quarter-turn latches with flush slotted insert
- Panel studs on door fit optional NEMA-style panels
- Furnished hardware kit consists of illustrated instruction sheet, grounding hardware, internal support plate, suspension arm adapter and hardware for attaching the support plate and adapter

FINISH

External surfaces have a #3 brushed finish

MODIFICATION AND CUSTOMIZATION

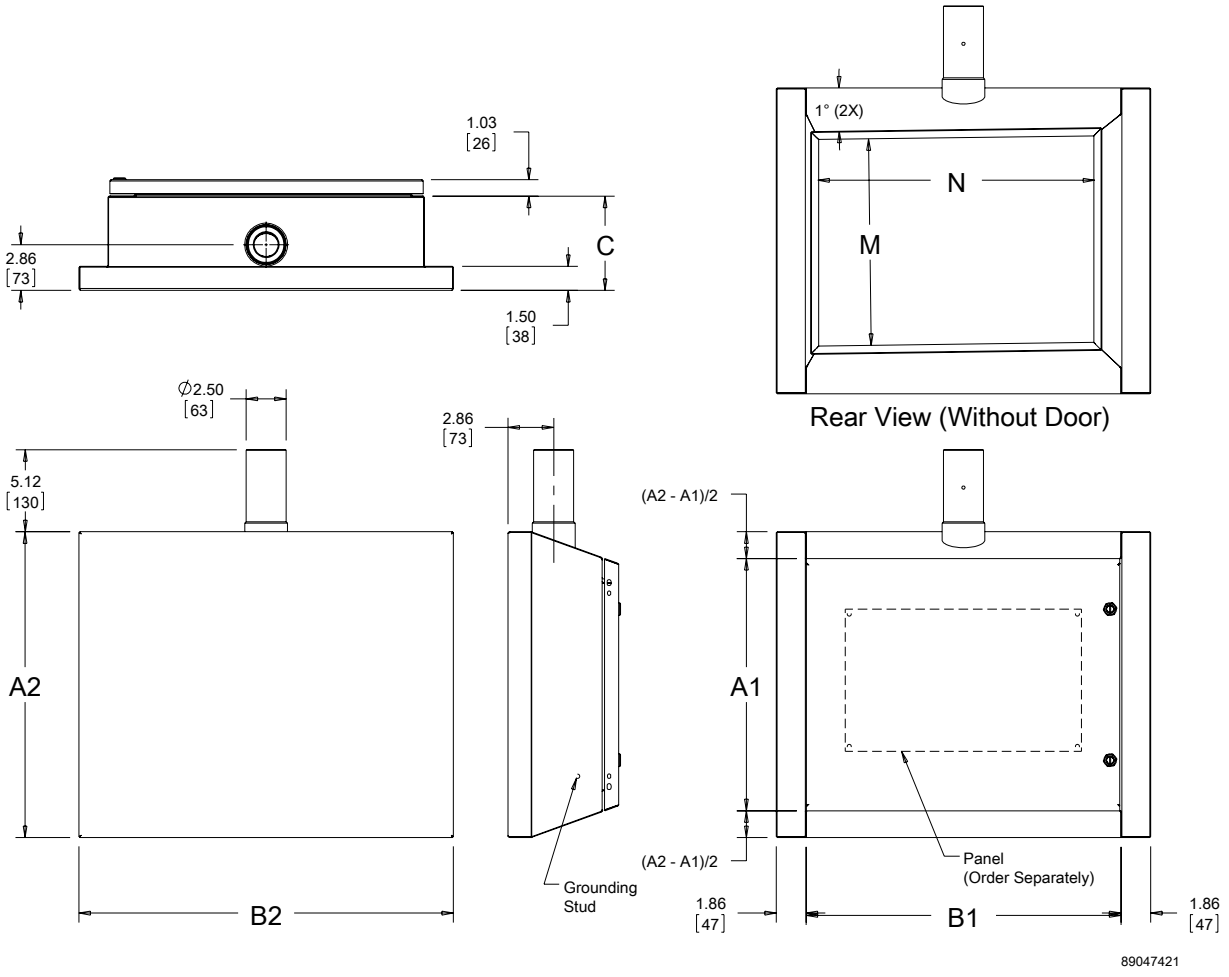
nVent HOFFMAN excels at modifying and customizing products to your specifications. Contact your local nVent HOFFMAN sales office or distributor for complete information.

BULLETIN: VM9

Standard Product

Catalog Number	AxBxC mm/in.	A1 mm/in.	B1 mm/in.	A2 mm/in.	B2 mm/in.	M x N mm/in.	Steel Panel	Product Weight (kg)	Product Weight (lb.)
S303015SS	300 x 300 x 150 11.81 x 11.81 x 5.91	300 11.81	300 11.81	385 15.17	394 15.53	228 x 238 8.97 x 9.35	A8P6	6.9	15.3
S304015SS	300 x 400 x 150 11.81 x 15.75 x 5.91	300 11.81	400 15.75	385 15.17	494 19.46	228 x 338 8.97 x 13.29	A10P8	8.0	17.7
S404015SS	400 x 400 x 150 15.75 x 15.75 x 5.91	400 15.75	400 15.75	485 19.11	494 19.46	328 x 337 12.92 x 13.26	A12P10	9.4	20.7
S405015SS	400 x 500 x 150 15.75 x 19.68 x 5.91	400 15.75	500 19.68	485 19.11	594 23.40	323 x 437 12.92 x 17.20	A16P10	10.7	23.6
S505015SS	500 x 500 x 150 19.68 x 19.68 x 5.91	500 19.68	500 19.68	585 23.04	585 23.40	428 x 48 16.87 x 17.25	A16P10	12.2	27.0
S506015SS	500 x 600 x 150 19.68 x 23.62 x 5.91	500 16.68	600 23.62	585 23.04	694 27.34	428 x 538 16.87 x 21.19	A18P16	13.7	30.2
S303020SS	300 x 300 x 200 11.81 x 11.81 x 7.87	300 11.81	300 11.81	421 16.59	394 15.53	233 x 237 9.15 x 9.33	A8P6	7.8	17.2
S304020SS	300 x 400 x 200 11.81 x 15.75 x 7.87	300 11.81	400 15.75	421 16.59	494 19.46	233 x 337 9.15 x 13.26	A10P8	9.0	19.9
S404020SS	400 x 400 x 200 15.75 x 15.75 x 7.87	400 15.75	400 15.75	521 20.52	494 19.46	332 x 338 13.09 x 13.29	A12P10	10.5	23.1
S405020SS	400 x 500 x 200 15.75 x 19.68 x 7.87	400 15.375	500 19.68	521 20.52	594 23.40	332 x 438 13.09 x 17.23	A16P10	11.9	26.2
S505020SS	500 x 500 x 200 19.68 x 19.68 x 7.87	500 19.68	500 19.68	621 24.46	594 23.40	432 x 438 17.01 x 17.23	A16P10	13.5	29.8
S506020SS	500 x 600 x 200 19.68 x 23.62 x 7.87	500 19.68	600 23.62	621 24.46	694 27.34	432 x 538 17.01 x 21.17	A18P16	15.1	33.3

Enclosure dimensions are based upon the rear door; non-usable space on front face provides required area for heat dissipation.



SYSPEND HMI SANITARY SYSTEM

INDUSTRY STANDARDS

Maintains NEMA Type 4, 4X and 12 and IEC IP66, IP69K enclosure ratings when properly installed per Hoffman instructions.i>

APPLICATION

Specifically designed to support the Syspend Sanitary HMI Enclosure in sanitary washdown environments, particularly food and beverage manufacturing. The suspension system supports up to 90 lb. (40.8 kg) at 3.3 ft. (1 m). Its modular design with multiple tube lengths and bent tubes allows for application versatility. The entire system meets Type 4X and IP69K requirements for high-pressure, high-temperature washdown applications.

FEATURES

- Type 304 stainless steel construction provides corrosion resistance and ease of cleaning
- Syspend-Lok attachment method prevents tubes from turning and pulling out of fittings and provides a watertight connection
- Straight, L- and U-shaped tubes available in various lengths to provide design flexibility
- Swivel and fixed couplings provide rigid connection point between tubes or between tube and enclosure
- Swivel and fixed base brackets provide secure attachment to wall, floor or machine with easy leveling capability
- Swivel fittings provide 330-degree rotation
- Optional base bracket cover can be used on wall, floor or machine* to cover exposed hardware on fixed base bracket (not intended to be mounted directly to a large enclosure)

SPECIFICATIONS

- Tubes and fittings constructed of Type 304 stainless steel
- Syspend-Lok Wrench Head included with each fitting to secure fittings to tubes

FINISH

External surfaces have a #3 brushed finish

NOTES

* Syspend HMI Sanitary Systems are not intended to be mounted directly to large enclosures.

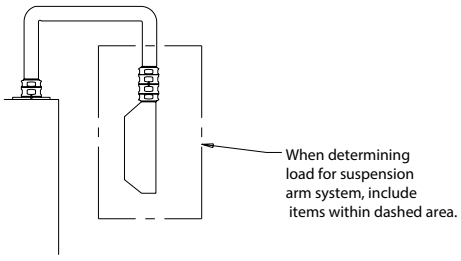
MODIFICATION AND CUSTOMIZATION

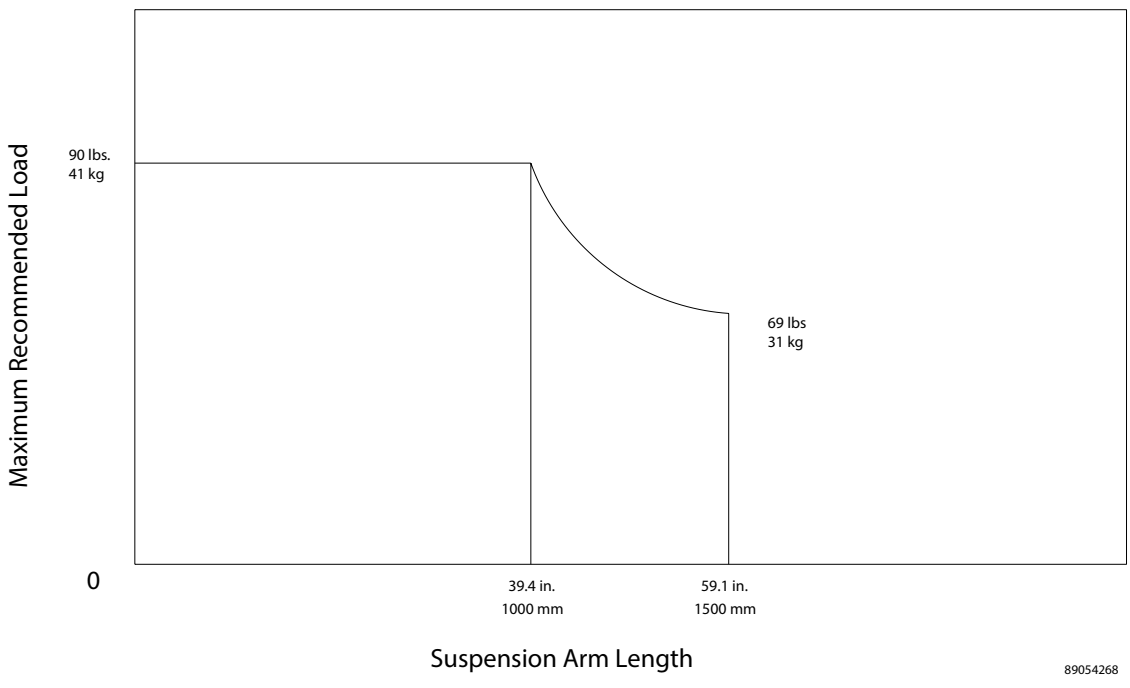
nVent HOFFMAN excels at modifying and customizing products to your specifications. Contact your local nVent HOFFMAN sales office or distributor for complete information.

SYSTEM LOAD CAPACITY

The Syspend Sanitary HMI System load graph is the result of load capacity tests. Please contact nVent HOFFMAN for specific application information.

Load Diagram





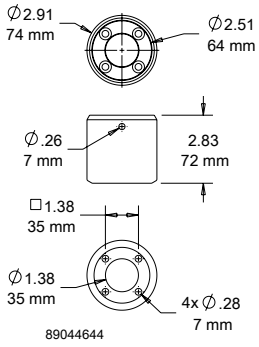
SYSPEND VHDS-MOTION ARM ADAPTER

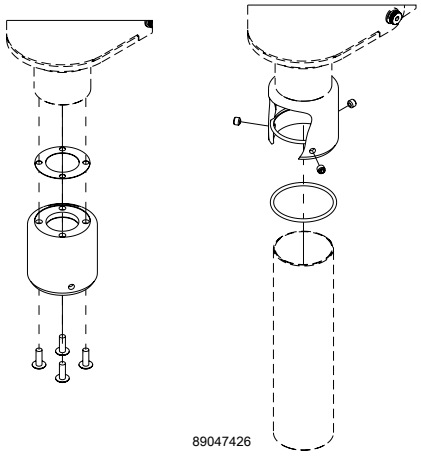
Attaches the Syspend Sanitary HMI Enclosure to the VHDS-Motion Arm.

- Type 304 stainless steel
- Attaches with set screws to the Syspend Sanitary HMI Enclosure
- Bolts directly to the VHDS-Motion Arm (only campatible with VHDS26 and VHDS36 models with revision level A or greater)

BULLETIN: VM9

Catalog Number	Description	Weight (kg)	Weight (lb.)
SVHDSA	SYSPEND VHDS-Motion Arm Adapter	.73	1.6

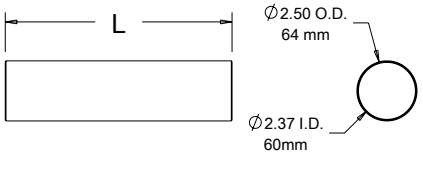




STRAIGHT TUBING

- Type 304 polished stainless steel
- Outer diameter of 64 mm (2.50 in.)
- Inner diameter of 60 mm (2.37 in.)
- 2-mm (.06-in.) wall thickness

BULLETIN: VM9



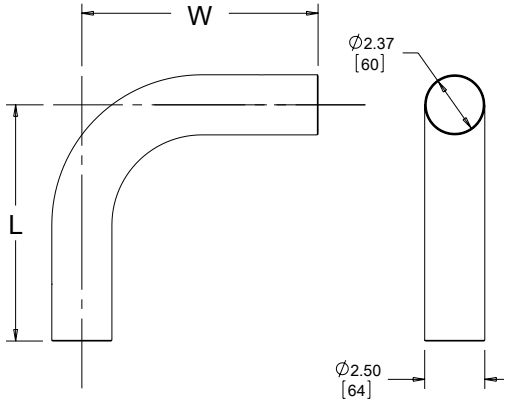
Catalog Number	L (mm)	L (in.)	Weight (kg)	Weight (lb.)
ST250SS	250	9.84	.45	1.0
ST500SS	500	19.68	1.61	3.55
ST750SS	750	29.53	2.27	5.0
ST1000SS	1000	39.37	2.72	6.0
ST1250SS	1250	49.21	3.88	8.55
ST1500SS	1500	59.06	4.58	10.1

L-SHAPED TUBING

- Type 304 polished stainless steel
- Outer diameter of 64 mm (2.50 in.)
- Inner diameter of 60 mm (2.37 in.)
- 2-mm (.06-in.) wall thickness

BULLETIN: VM9

Catalog Number	L mm/in.	W mm/in.	Weight (kg)	Weight (lb.)
ST250250SS	250 9.84	250 9.84	1.41	3.1
ST500240SS	500 19.68	240 9.45	2.20	4.85
ST500500SS	500 19.68	500 19.68	3.28	7.24
ST1000500SS	1000 39.37	500 19.68	5.76	12.7

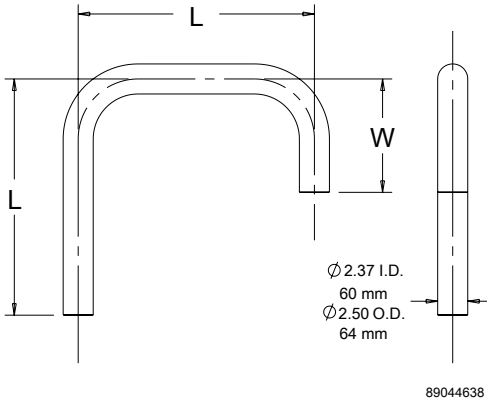


U-SHAPED TUBING

- Type 304 polished stainless steel
- Outer diameter of 64 mm (2.50 in.)
- Inner diameter of 60 mm (2.37 in.)
- 2-mm (.06-in.) wall thickness

BULLETIN: VM9

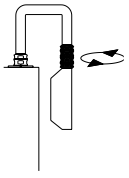
Catalog Number	L mm/in.	W mm/in.	Weight (kg)	Weight (lb.)
ST500240500SS	500 19.68	240 9.45	3.76	8.3
ST800500800SS	800 31.50	500 19.68	7.26	16.0



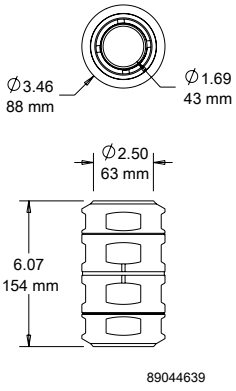
SWIVEL COUPLING

- Provides means of attaching enclosure to tube
- Allows enclosure to rotate 330-degrees
- Syspend-Lok attachment method prevents tubes from turning and pulling out of fittings and provides a water-tight connection
- Type 304 polished stainless steel
- Includes Syspend-Lok Wrench Head for attaching coupling to tubes (strap wrench or spanner wrench that opens to 80 mm or greater can also be used)

BULLETIN: VM9



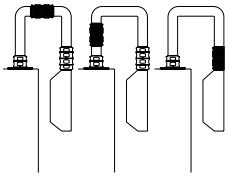
Catalog Number	Description	Weight (kg)	Weight (lb.)
SSCSS	Swivel Coupling	4.54	10



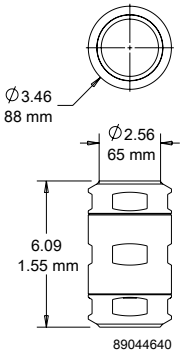
FIXED COUPLING

- Provides secure means of joining two tubes together
- Can also provide attachment of enclosure to tube when enclosure rotation is not desired
- Syspend-Lok attachment method prevents tubes from turning and pulling out of fittings and provides a water-tight connection
- Type 304 polished stainless steel
- Includes Syspend-Lok Wrench Head for attaching coupling to tubes (strap wrench or spanner wrench that opens to 80 mm or greater can also be used)

BULLETIN: VM9



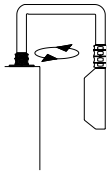
Catalog Number	Description	Weight (kg)	Weight (lb.)
SFCSS	Fixed Coupling	3.54	7.5



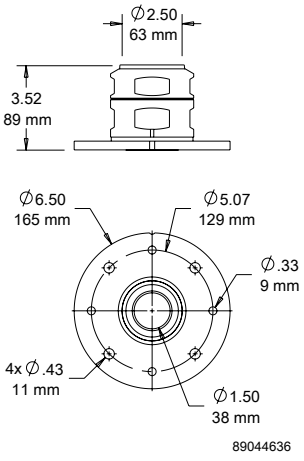
SWIVEL BASE BRACKET

- Provides means of attaching tube to the floor or a machine
- Provides 330-degree rotation
- Syspend-Lok attachment method prevents tubes from turning and pulling out of fittings and provides a water-tight connection
- Type 304 polished stainless steel
- Includes Syspend-Lok Wrench Head for attaching base bracket to tubes (strap wrench or spanner wrench that opens to 80 mm or greater can also be used)
- Includes 4 set screws that provides means of leveling the entire suspension system
- Surface mounting hardware not included

BULLETIN: VM9



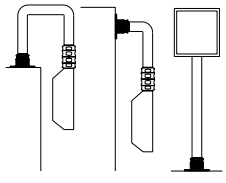
Catalog Number	Description	Weight (kg)	Weight (lb.)
SSBBSS	Swivel Base Bracket	3.72	8.2



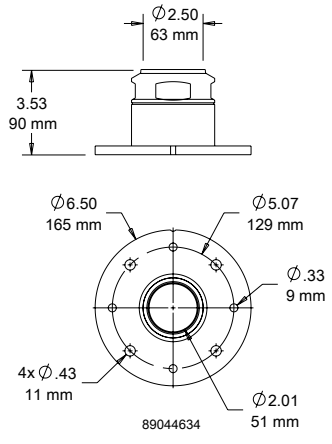
FIXED BASE BRACKET

- Provides means of attaching tube to a wall, floor or machine
- Does not provide rotation
- Syspend-Lok attachment method prevents tubes from turning and pulling out of fittings and provides a water-tight connection
- Type 304 polished stainless steel
- Includes Syspend-Lok Wrench Head for attaching base bracket to tubes (strap wrench or spanner wrench that opens to 80 mm or greater can also be used)
- Includes 4 set screws that provide means of leveling the entire suspension system
- Surface mounting hardware not included
- Optional bracket cover available to hide all exposed mounting hardware

BULLETIN: VM9



Catalog Number	Description	Weight (kg)	Weight (lb.)
SFBBSS	Fixed Base Bracket	3.63	8

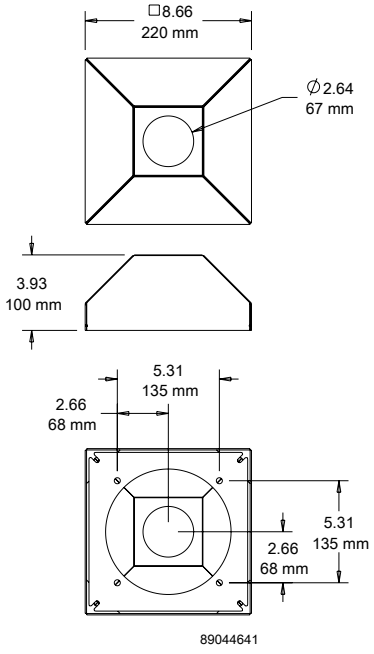


BASE BRACKET COVER

- Covers the fixed base bracket (not compatible with the swivel base bracket)
- Provides means of covering all exposed mounting hardware
- Simply snaps into place over the base bracket
- Type 304 polished stainless steel

BULLETIN: VM9

Catalog Number	Description
SBCSS	Base Bracket Cover

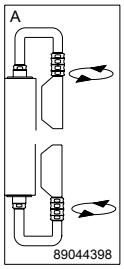


SYSPEND SANITARY ENCLOSURE SYSTEM CONFIGURATIONS

SYSPEND SANITARY HMI SYSTEM CONFIGURATIONS

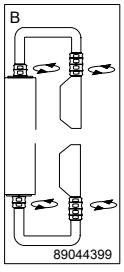
Note to Specifier:
Select suspension system sizing using the Syspend Sanitary HMI System load capacity chart.

A



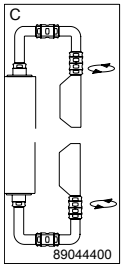
Description	Qty.	Catalog Number
Fixed Base Bracket	1	SFBBSS
Swivel Coupling	1	SSCSS
U-Shaped Tubing	1	ST500240500SS ST800500800SS

B



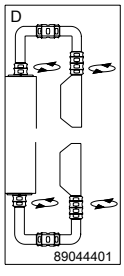
Description	Qty.	Catalog Number
Swivel Base Bracket	1	SSBBSS
Swivel Coupling	1	SSCSS
U-Shaped Tubing	1	ST500240500SS ST800500800SS

C



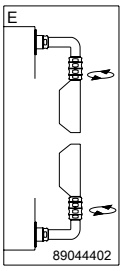
Description	Qty.	Catalog Number
Fixed Base Bracket	1	SFBBSS
Fixed Coupling	1	SFCSS
L-Shaped Tubing	2	ST250250SS ST500240SS ST500500SS ST1000500SS
Swivel Coupling	1	SSCSS

D



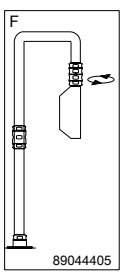
Description	Qty.	Catalog Number
Fixed Coupling	1	SFCSS
L-Shaped Tubing	2	ST250250SS ST500240SS ST500500SS ST1000500SS
Swivel Base Bracket	1	SSBBSS
Swivel Coupling	1	SSCSS

E



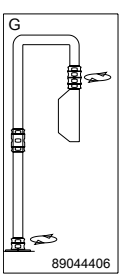
Description	Qty.	Catalog Number
Fixed Base Bracket	1	SFBBSS
L-Shaped Tubing	2	ST250250SS ST500240SS ST500500SS ST1000500SS
Swivel Coupling	1	SSCSS

F



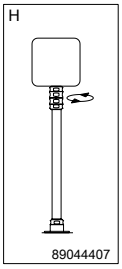
Description	Qty.	Catalog Number
Fixed Base Bracket	1	SFBBSS
Fixed Coupling	1	SFCSS
Swivel Coupling	1	SSCSS
Straight Tubing	1	ST250SS ST500SS ST750SS ST1000SS ST1250SS ST1500SS
U-Shaped Tubing	1	ST500240500SS ST800500800SS
Base Bracket Cover	1	SBCSS

G



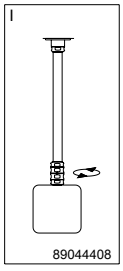
Description	Qty.	Catalog Number
Swivel Base Bracket	1	SSBBSS
Straight Tubing	1	ST250SS ST500SS ST750SS ST1000SS ST1250SS ST1500SS
Fixed Coupling	1	SFCSS
U-Shaped Tubing	1	ST500240500SS ST800500800SS
Swivel Coupling	1	SSCSS

H



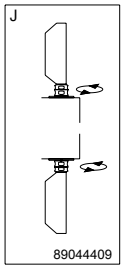
Description	Qty.	Catalog Number
Fixed Base Bracket	1	SFBBSS
Straight Tubing	1	ST250SS ST500SS ST750SS ST1000SS ST1250SS ST1500SS
Swivel Coupling	1	SSCSS
Base Bracket Cover	1	SBCSS

I



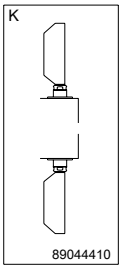
Description	Qty.	Catalog Number
Fixed Base Bracket	1	SFBBSS
Straight Tubing	1	ST250SS ST500SS ST750SS ST1000SS ST1250SS ST1500SS
Swivel Coupling	1	SSCSS

J



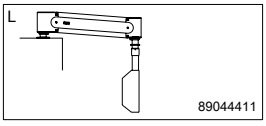
Description	Qty.	Catalog Number
Swivel base Bracket	1	SSBBSS

K

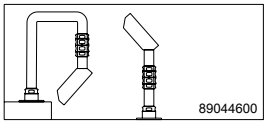


Description	Qty.	Catalog Number
Fixed Base Bracket	1	SFBBSS

L



Description	Qty.	Catalog Number
VHDS Motion Arm Adapter	1	SVHDSA



Enclosure adapter can be flipped for angled viewing.

Notes