

Flexibility with Assurance

Poz-E-Lok™ Modular Tooling System

- Swivel Bracket Mounts
- Swivel Brackets
- Swivel Bracket Arms
- Swivel Cup Mount
- Swivel Proximity Mounts
- Poz-E-Lok™ Z-Nest™ Components

• Point-to-Point (Polar) Design

 Lighter ergonomic end effector allows for fewer parts and stronger operating performance

Modular Steel Components with Face-to-Face Locking Teeth

- Increased resistance to damage provides faster recovery times
- The option to weld components in final assembly position on the steel boom offers improved stability.

Ease of Assembly

- Easy-to-use single bolt size requires only one wrench for the entire assembly
- Standard off the shelf boom are available in steel or aluminum worldwide
- Adjust into desired position and locks into place

Adjustable

- Single-Axis and Multi-Axis configurations for design flexibility
- Single-Axis Mounts rotate 360° in 7.5° increments
- Multi-Axis Mounts rotate 360° on perpendicular axis using 7.5° increments

Newly Designed 5-Axis Swivel Bracket Arm

 Enables vacuum cup to be repositioned and locked in 3D space through flexible wrist action and boom-mounted multi-axis swivel arms

• Compatible with Existing Components

 Poz-E-LokTM is designed to be compatible with Norgren Automotive products, including vacuum cups, grippers, Quik-Set®, and Robo-Set® mounts and adapters.

Covered by Patent No's 6,619,875; and 6,409,411. Additional patents may also apply



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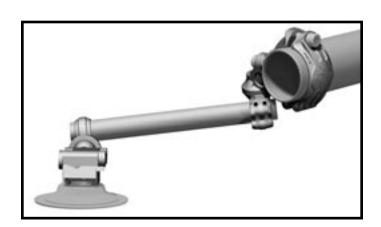
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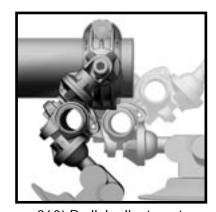
Introduction of Functionality

Poz-E-Lok™ Modular Tooling System is designed to offer a great deal of flexibility for point-to-point contact to the part. This allows for direct connection from the boom to the cup with one tube. By using additional swivel components a greater range of flexibility can be achieved.





Inter-locking teeth offers adjustability with assurance.



360° Radial adjustment in 7.5° increments directly from the boom.



arm rod, from the boom.



Infinite Linear adjustment along the boom.



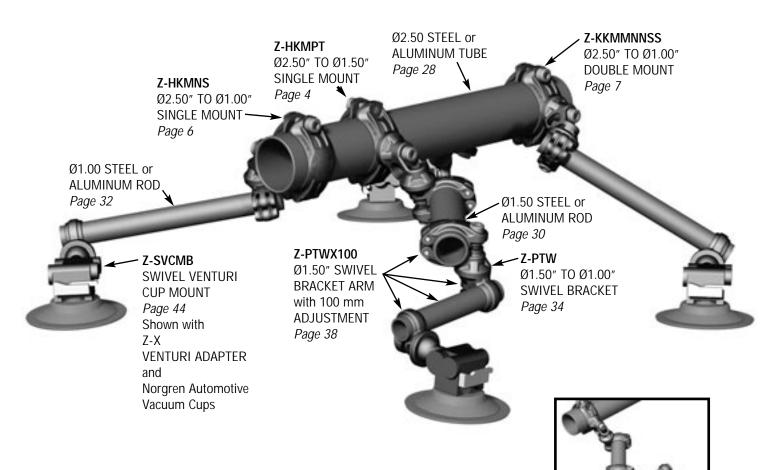
Infinite radial adjustment around the arm rod allows precise angular placement.



360° Radial adjustment in 7.5° increments for final cup adjustability with teeth-locking assurance.



Example of a Poz-E-Lok End-of-Arm Tool (For typical tooling applications, please refer to pages 60-66)



Poz-E-Lok™ Modular Tooling System shown with Z-PTW Ø1.50" to Ø1.00" Swivel Bracket with two swivel venturi vacuum cup mounts on a Ø1.00" boom rod.

Poz-E-LokTM tooling assemblies consist of parts cast with the Poz-E-LokTM "Z" logo followed by a letter to identify each part. The parts are also cast with the diameter sizes in both english and metric when applicable.

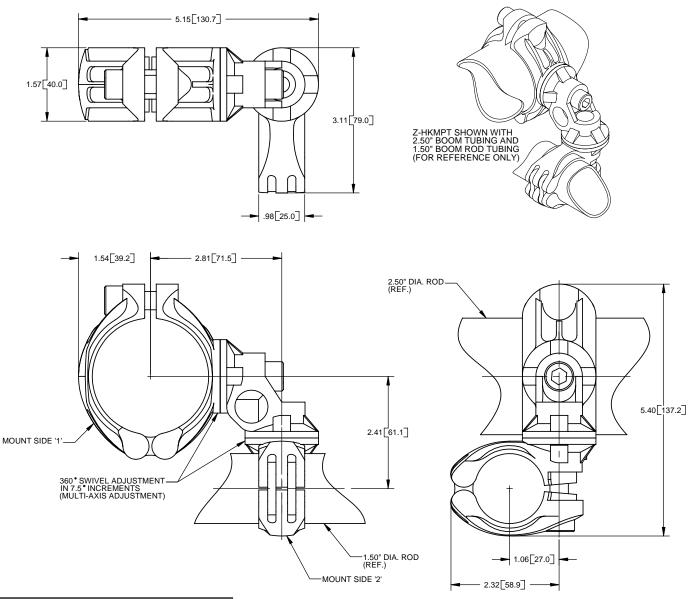
Identifying an assembly is as easy as taking note of the letters on each of the parts within the assembly. The collection of these letters make up the ordering information for that assembly. The combination of the letters in the ordering information makes ordering replacement parts simple and virtually error-proof.

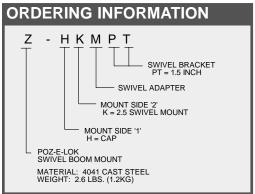




2.50" to 1.50" Single Multi-Axis Swivel Boom Mount

Z-HKMPT Overall Dimensions

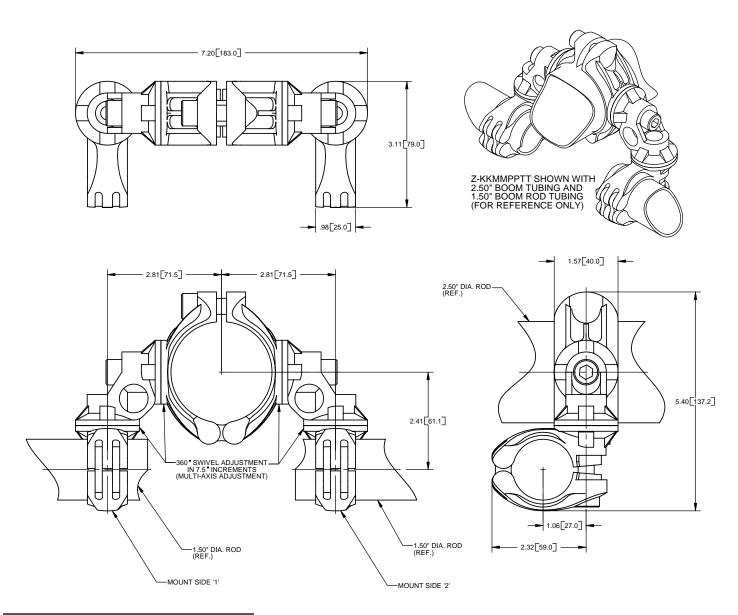


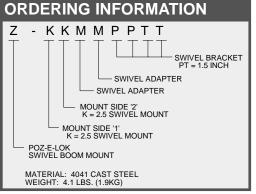


NOTE: ALL FASTENERS ARE M10 TORQUE ALL FASTENERS TO 40 FT-LBS (54 N-m) REQUIRED 57 FT-LBS (77 N-m) MAX.



2.50" to 1.50" Double Multi-Axis Swivel Boom Mount **Z-KKMMPPTT** Overall Dimensions

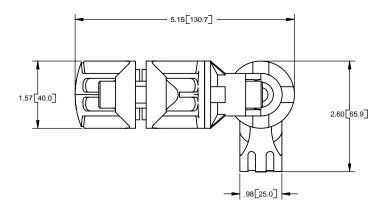


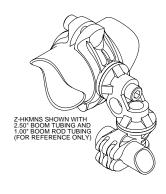


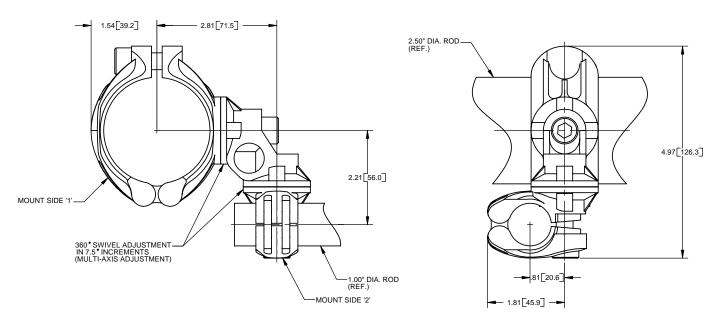
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2.50" to 1.00" Single Multi-Axis Swivel Boom Mount

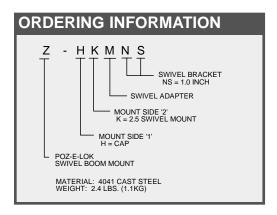
Z-HKMNS Overall Dimensions





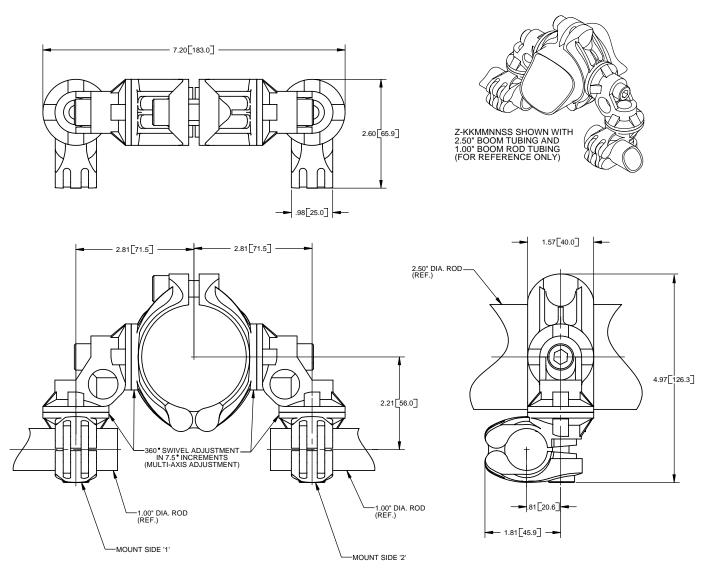


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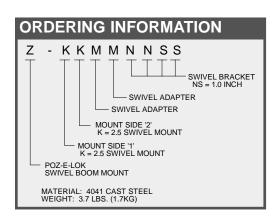




2.50" to 1.00" Double Multi-Axis Swivel Boom Mount **Z-KKMMNNSS** Overall Dimensions

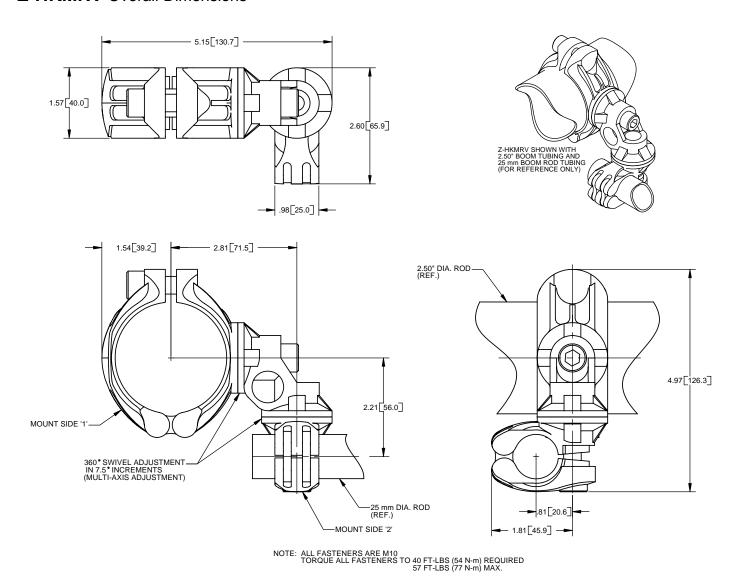


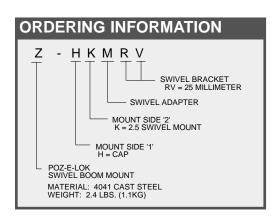
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2.50" to 25mm Single Multi-Axis Swivel Boom Mount

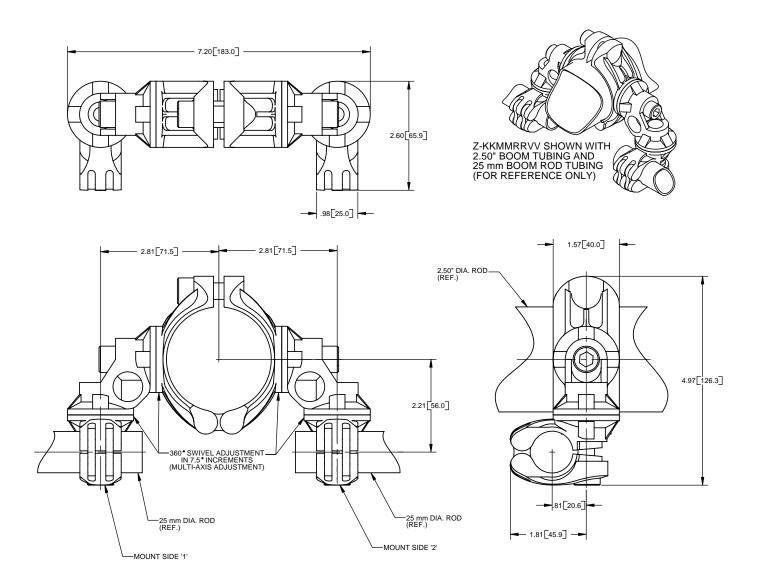
Z-HKMRV Overall Dimensions



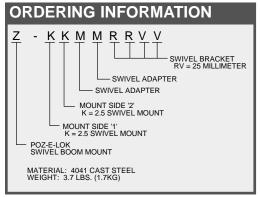




2.50" to 25mm Double Multi-Axis Swivel Boom Mount **Z-KKMMRRVV** Overall Dimensions

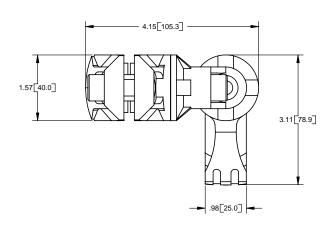


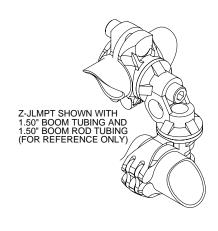
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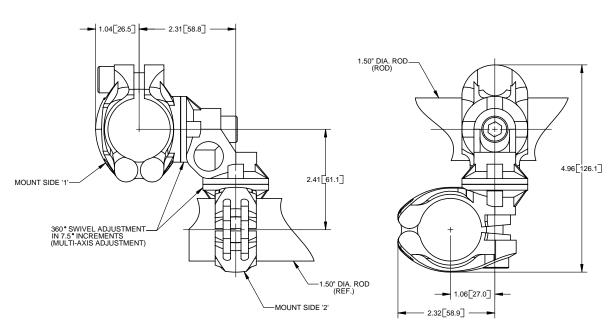


1.50" to 1.50" Single Multi-Axis Swivel Boom Mount

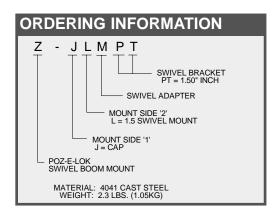
Z-JLMPT Overall Dimensions





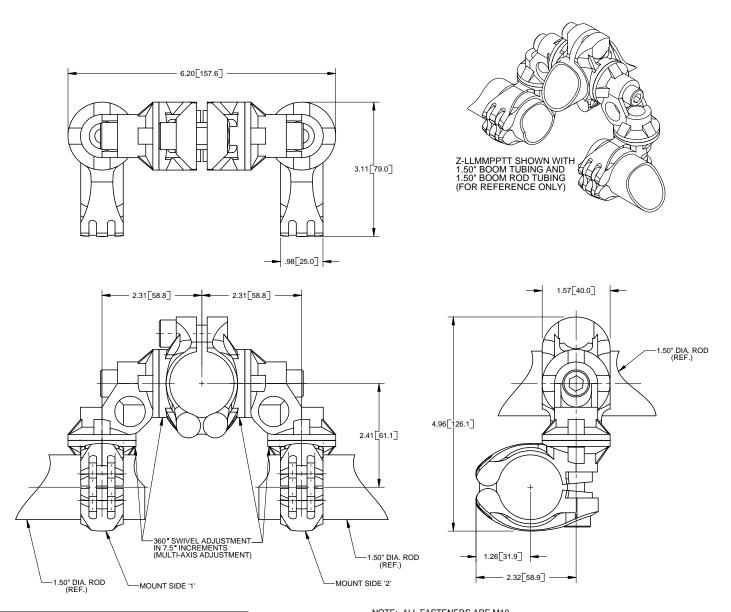


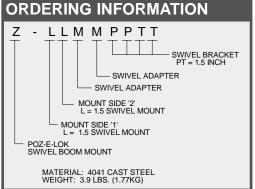
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1.50" to 1.50" Double Multi-Axis Swivel Boom Mount **Z-LLMMPPTT** Overall Dimensions

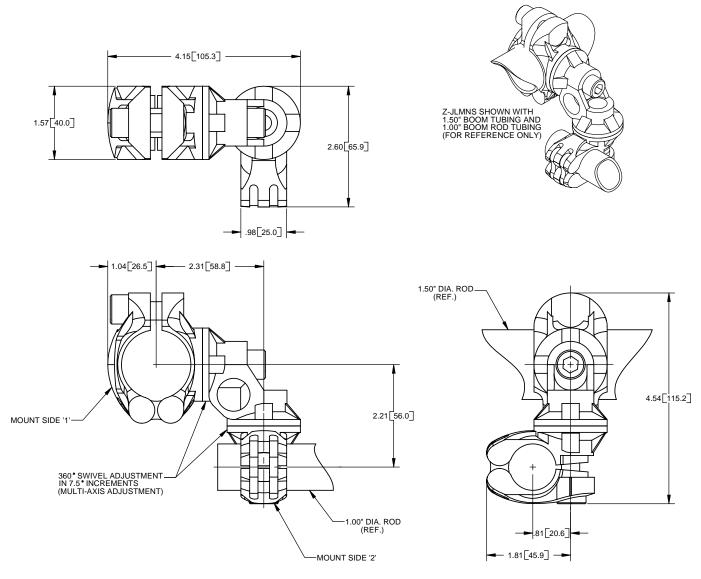


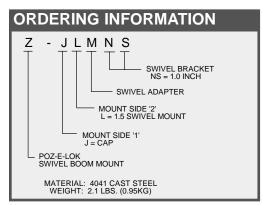


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1.50" to 1.00" Single Multi-Axis Swivel Boom Mount

Z-JLMNS Overall Dimensions

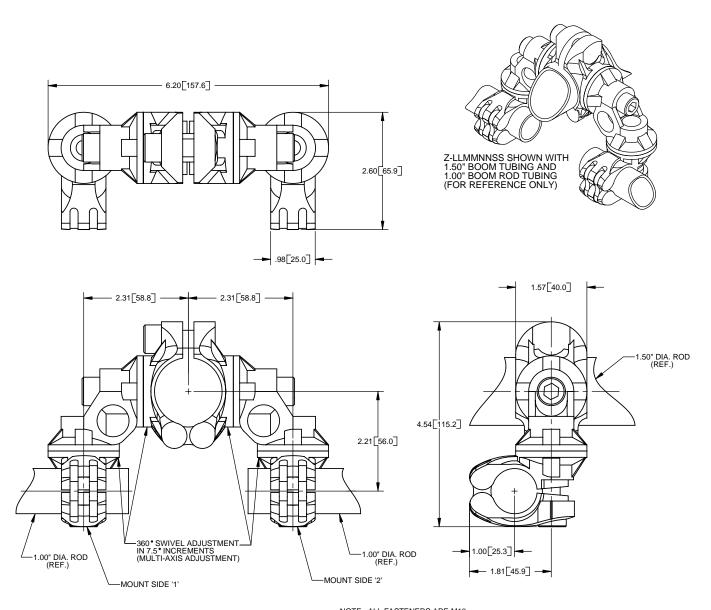


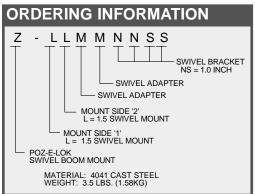


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1.50" to 1.00" Double Multi-Axis Swivel Boom Mount **Z-LLMMNNSS** Overall Dimensions

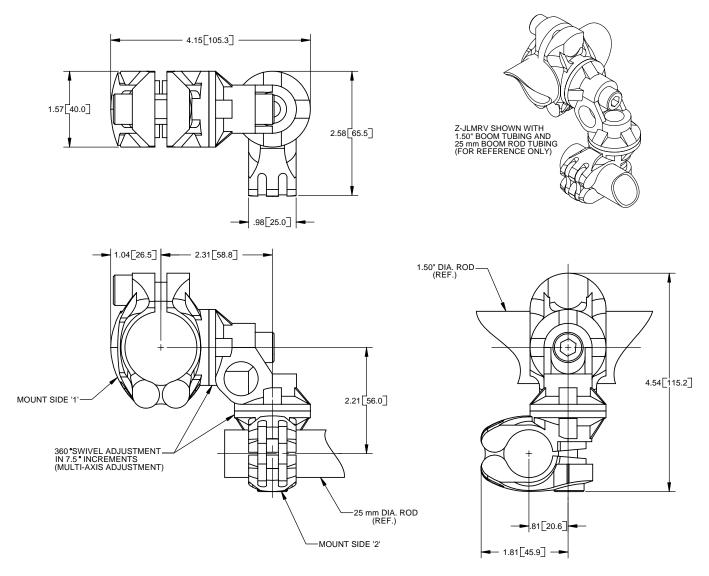


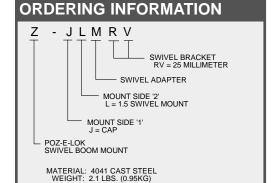


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1.50" to 25mm Single Multi-Axis Swivel Boom Mount

Z-JLMRV Overall Dimensions

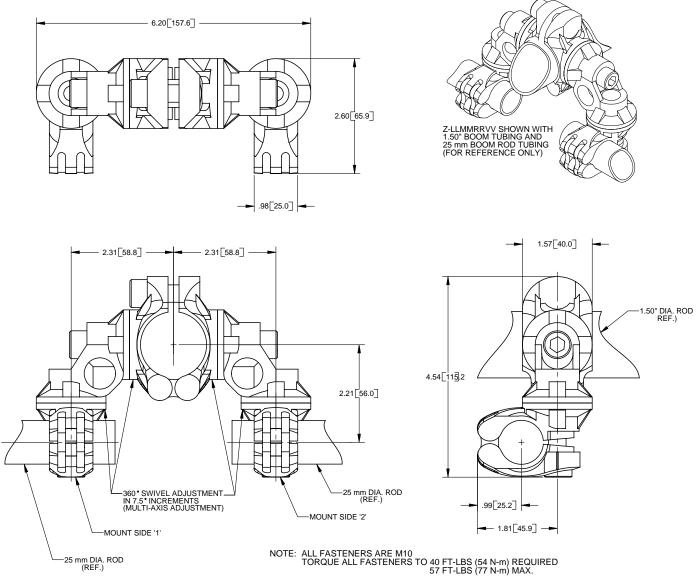


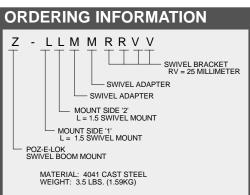


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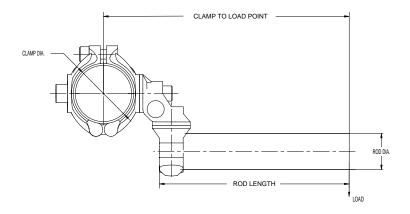


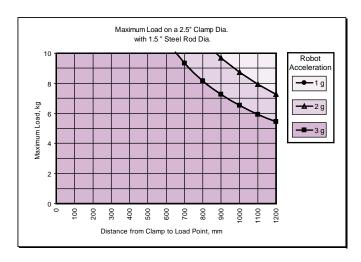
1.50" to 25mm Double Multi-Axis Swivel Boom Mount **Z-LLMMRRVV** Overall Dimensions





2.50" to 1.50" Swivel Boom Mount Moment Load Charts





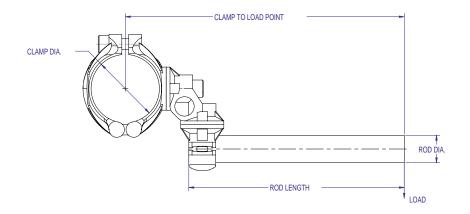


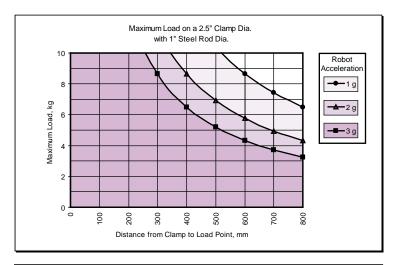
Moment load charts are to be used as general tooling application guidelines. Please use discretion if automation equipment operates with excessive vibration.

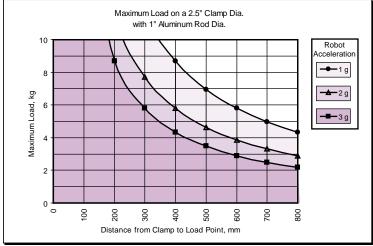


2.50" to 1.00"/25mm Swivel Boom Mount

Moment Load Charts

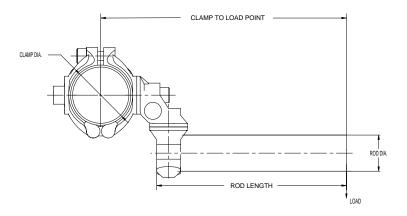


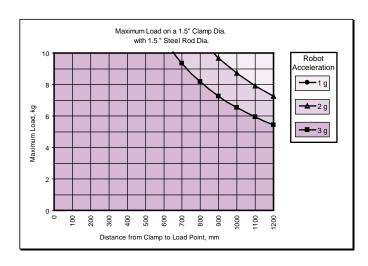


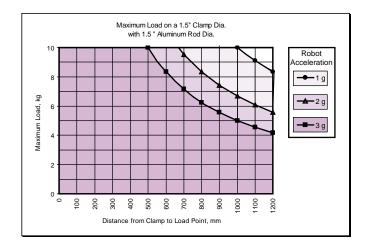


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1.50" to 1.50" Swivel Boom Mount Moment Load Charts





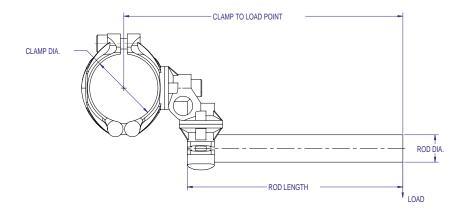


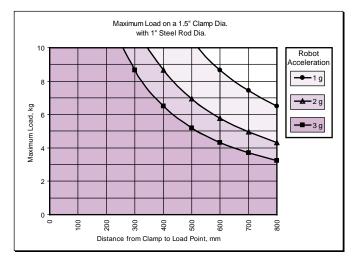
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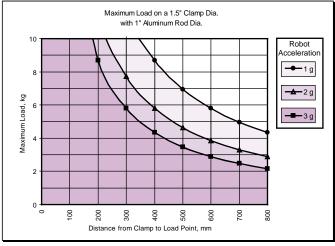


1.50" to 1.00"/25mm Swivel Boom Mount

Moment Load Charts

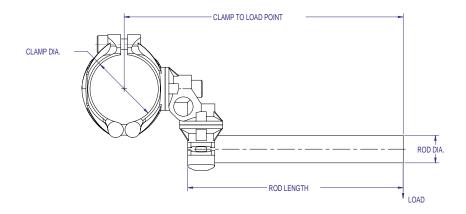


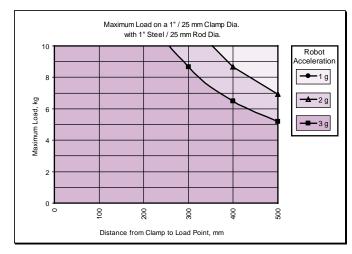


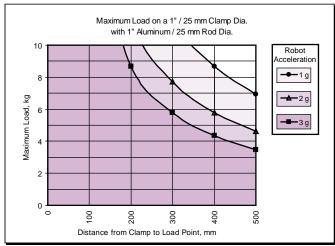


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1.00"/25mm to 1.00"/25mm Swivel Boom Mount Moment Load Charts





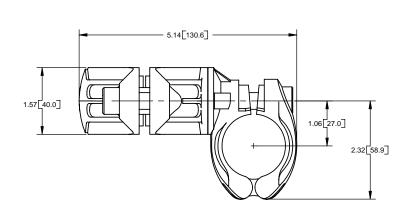


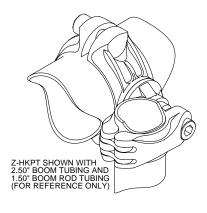
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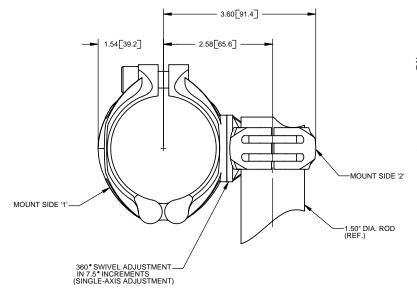
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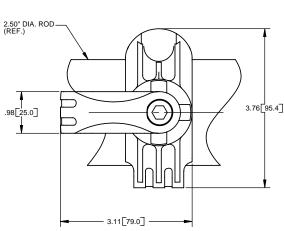
2.50" to 1.50" Single Swivel Boom Mount

Z-HKPT Overall Dimensions

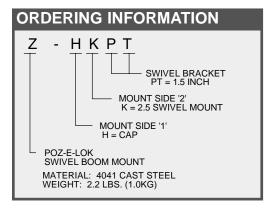






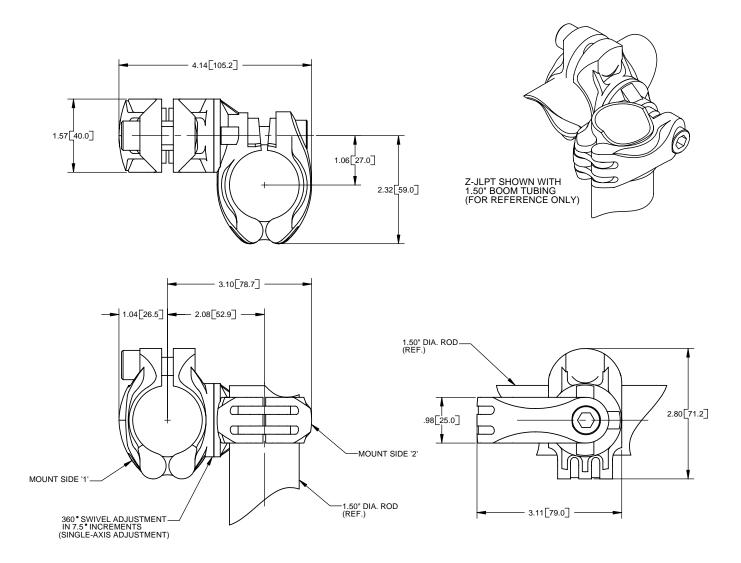


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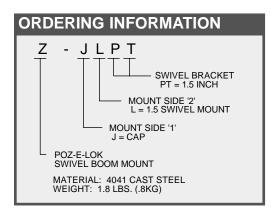




1.50" to 1.50" Single Swivel Boom Mount **Z-JLPT** Overall Dimensions

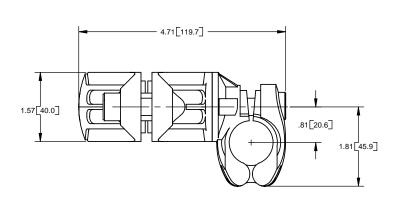


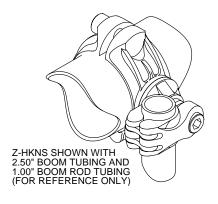
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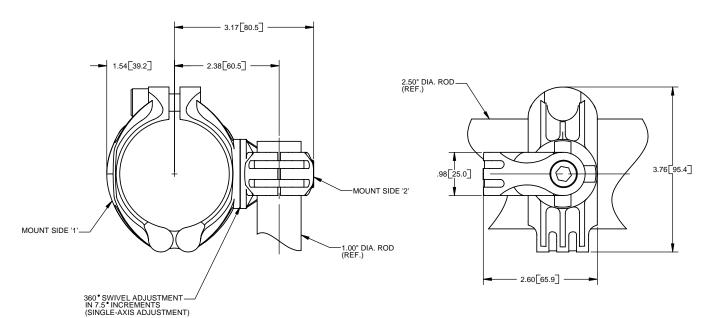


2.50" to 1.00" Single Swivel Boom Mount

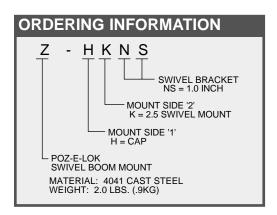
Z-HKNS Overall Dimensions





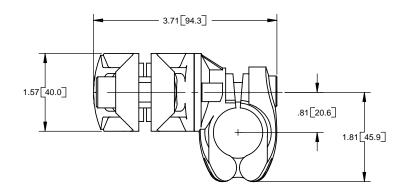


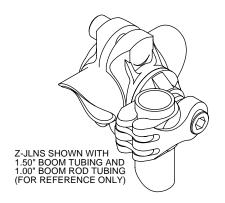
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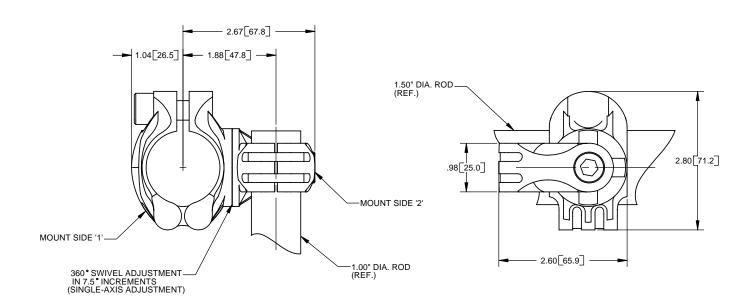




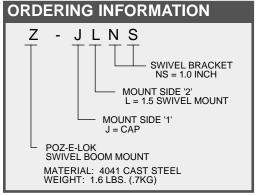
1.50" to 1.00" Single Swivel Boom Mount **Z-JLNS** Overall Dimensions





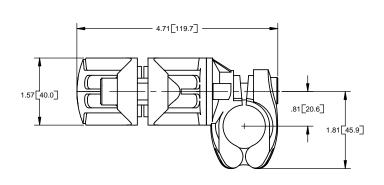


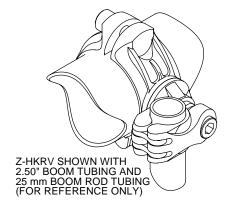
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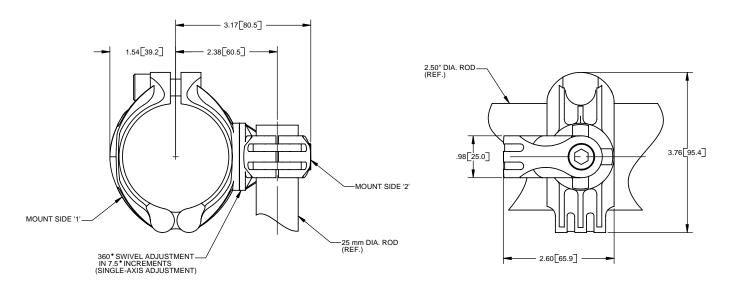


2.50" to 25mm Single Swivel Boom Mount

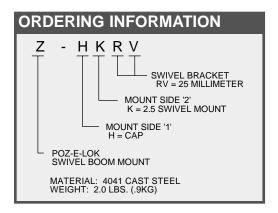
Z-HKRV Overall Dimensions





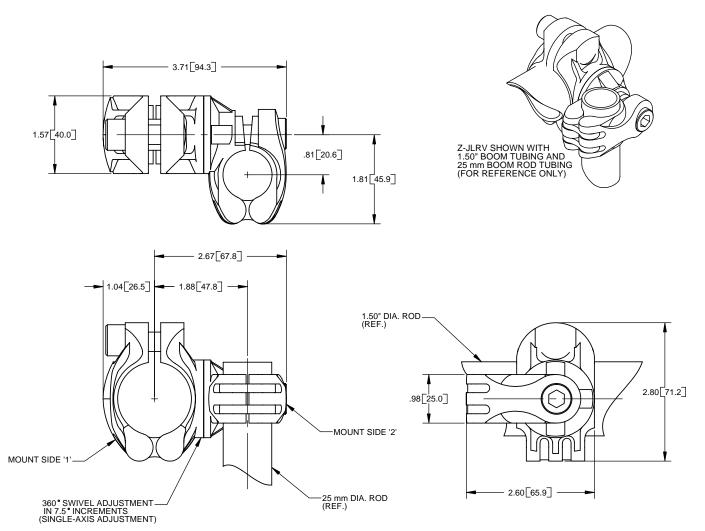


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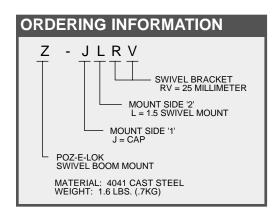




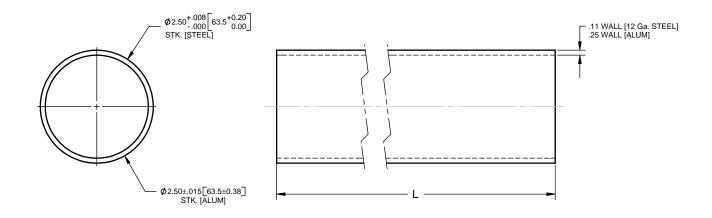
1.50" to 25mm Single Swivel Boom Mount **Z-JLRV** Overall Dimensions

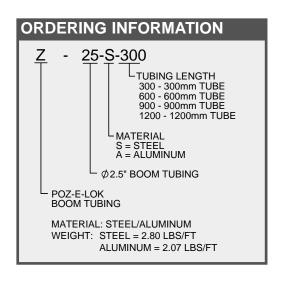


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2.50" Boom Tubing Overall Dimensions

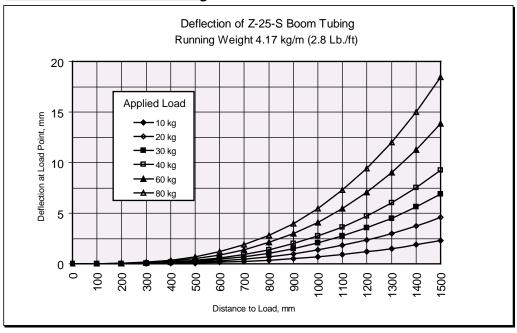




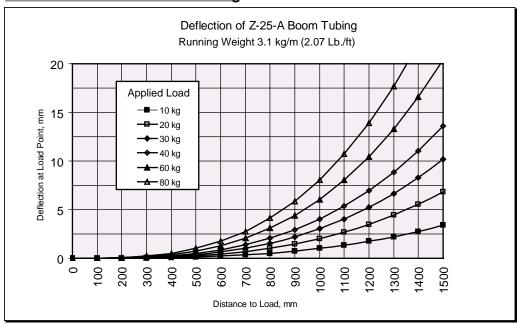


2.50" Boom Tubing Deflection Charts

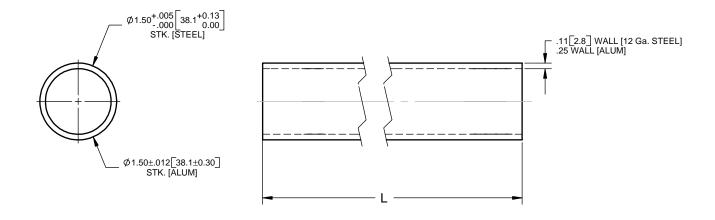
2.50 Inch Diameter Steel Tubing

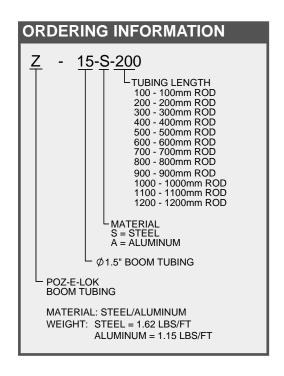


2.50 Inch Diameter Aluminum Tubing



1.50" Boom Tubing Overall Dimensions

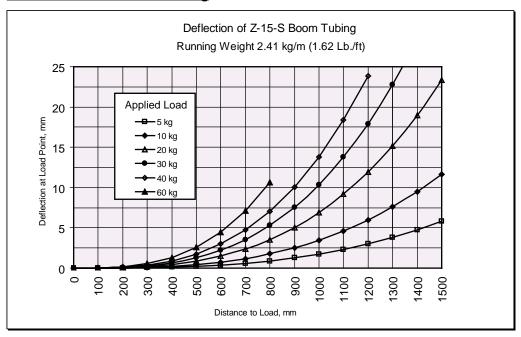




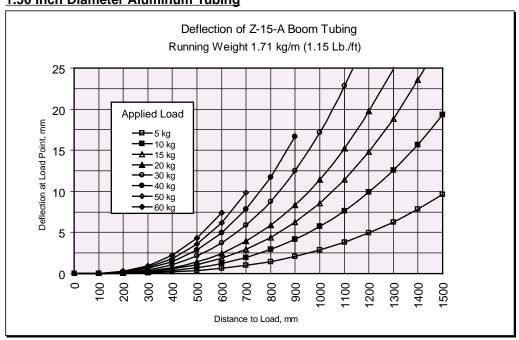


1.50" Boom Tubing Deflection Charts

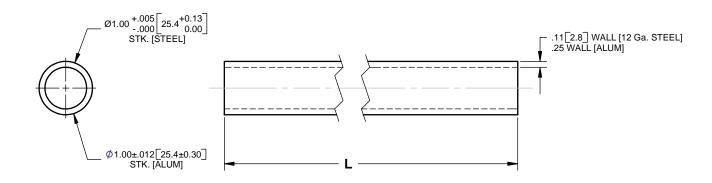
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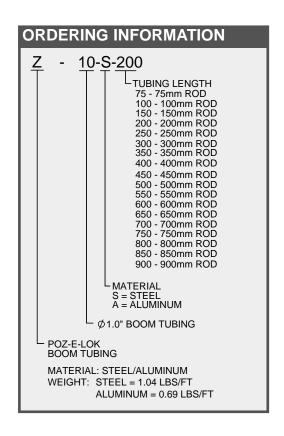


1.50 Inch Diameter Aluminum Tubing



1.00" Boom Tubing Overall Dimensions

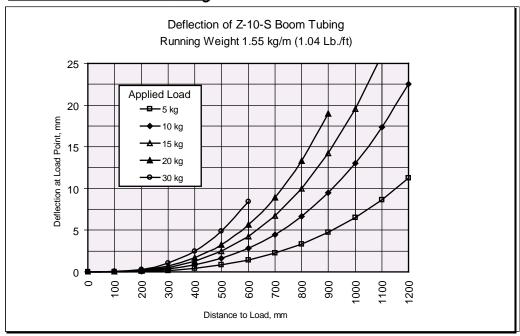




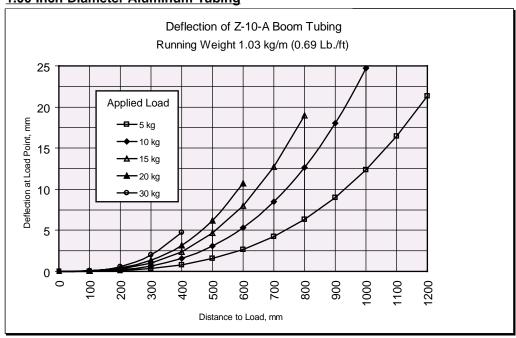


1.00" Boom Tubing Deflection Charts

1.00 Inch Diameter Steel Tubing

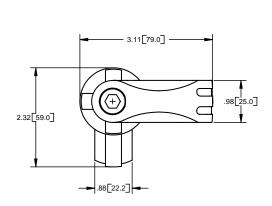


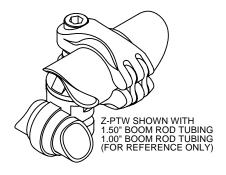
1.00 Inch Diameter Aluminum Tubing

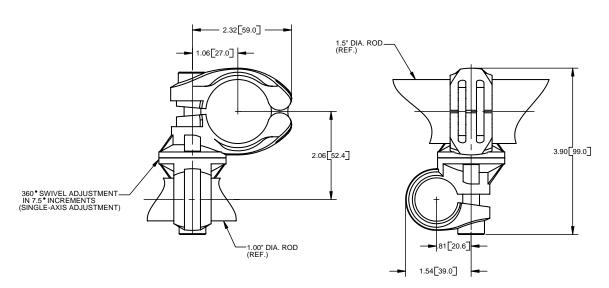


1.50" to 1.00" Swivel Bracket

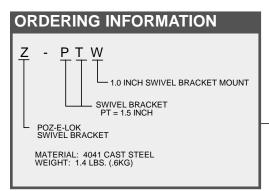
Z-PTW Overall Dimensions





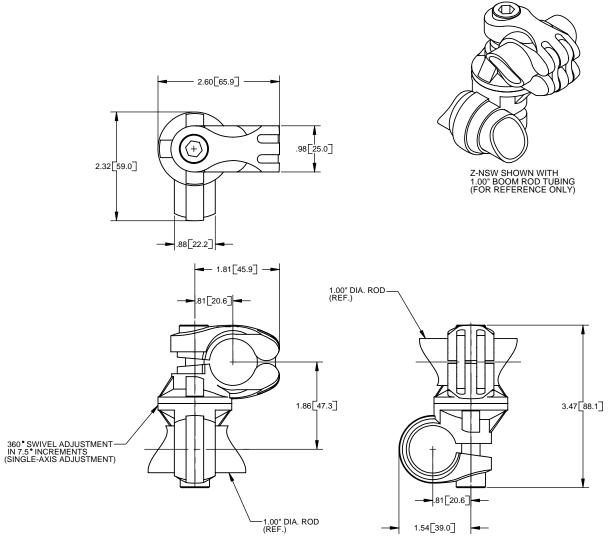


NOTE: ALL FASTENERS ARE M10 TORQUE ALL FASTENERS TO 40 FT-LBS (54 N-m) REQUIRED 57 FT-LBS (77 N-m) MAX.

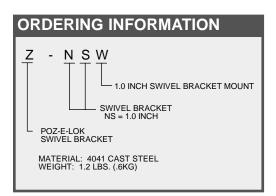




1.00" to 1.00" Swivel Bracket **Z-NSW** Overall Dimensions

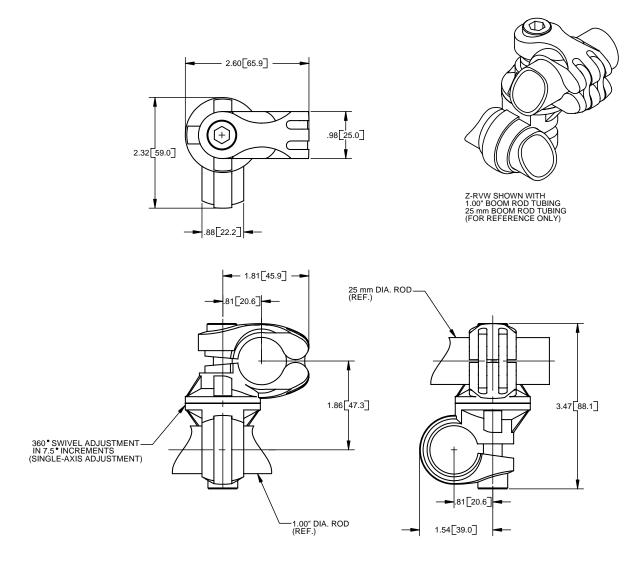


NOTE: ALL FASTENERS ARE M10 TORQUE ALL FASTENERS TO 40 FT-LBS (54 N-m) REQUIRED 57 FT-LBS (77 N-m) MAX.

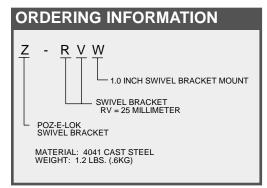


1.00" to 25mm Swivel Bracket

Z-RVW Overall Dimensions

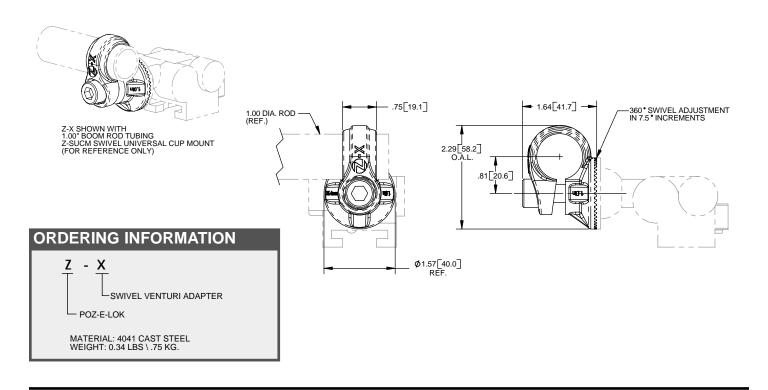


NOTE: ALL FASTENERS ARE M10 TORQUE ALL FASTENERS TO 40 FT-LBS (54 N-m) REQUIRED 57 FT-LBS (77 N-m) MAX.

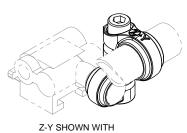




Swivel Bracket Adaptor **Z-X** Overall Dimensions

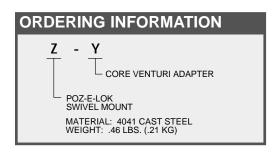


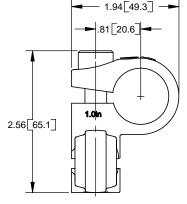
Core Bracket Adaptor **Z-Y** Overall Dimensions

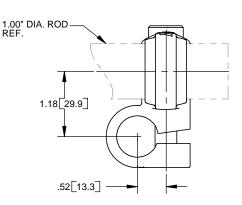


Z-Y SHOWN WITH 1.00" BOOM TUBING AND Z-CUCM CUP MOUNT (FOR REFERENCE ONLY)



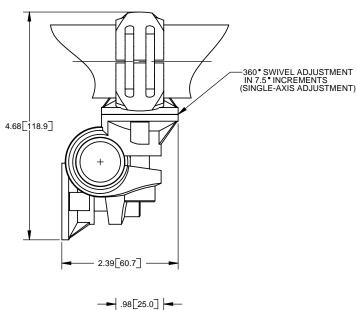


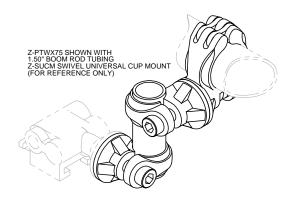


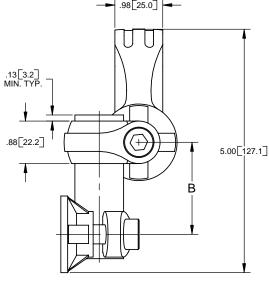


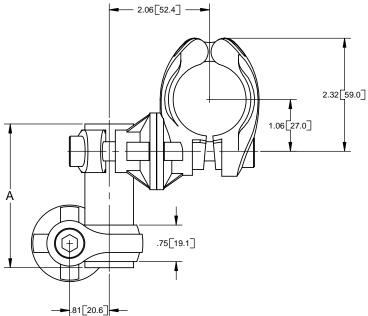
1.50" Swivel Bracket Arm

Z-PTWXxxx Overall Dimensions









Z - P T W X 75 ROD LENGTH (ADJUSTMENT) 75 = 75mm (3") 100 = 100mm (4") 150 = 150mm (6") 2200 = 200mm (8") 2200 = 250mm (10") 300 = 300mm (12") VENTURI ADAPTER X = SWIVEL ADAPTER X = SWIVEL BRACKET MOUNT SWIVEL BRACKET PT = 1.5 INCH

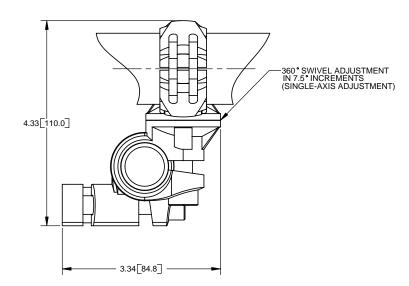
NOTE: ALL FASTENERS ARE M10 TORQUE ALL FASTENERS TO 40 FT-LBS (54 N-m) REQUIRED 57 FT-LBS (77 N-m) MAX.

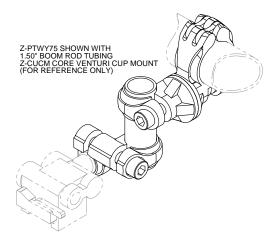
A [mm]	B Min [mm]	B Max [mm]	WEIGHT
			LBS[KG.]
75	20.6	40.0	1.9 [0.86]
100	20.6	73.0	2.0 [0.91]
150	20.6	123.0	2.1 [0.95]
200	20.6	173.0	2.2 [0.99]
250	20.6	223.0	2.3 [1.04]
300	20.6	273.0	2.4 [1.09]
	75 100 150 200 250	75 20.6 100 20.6 150 20.6 200 20.6 250 20.6	100 20.6 73.0 150 20.6 123.0 200 20.6 173.0 250 20.6 223.0

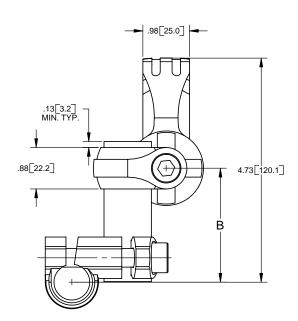


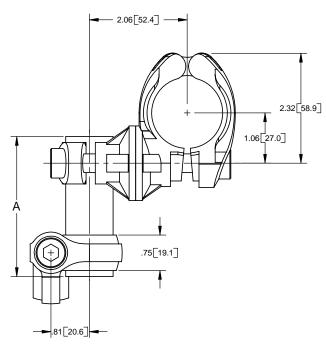
1.50" Core Bracket Arm

Z-PTWYxxx Overall Dimensions







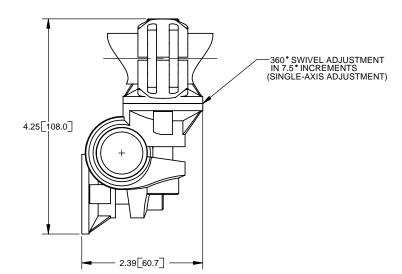


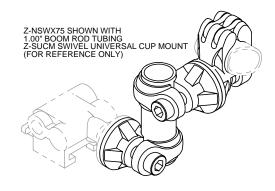
NOTE: ALL FASTENERS ARE M10 TORQUE ALL FASTENERS TO 40 FT-LBS (54 N-m) REQUIRED 57 FT-LBS (77 N-m) MAX.

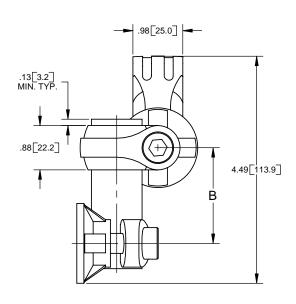
PART No.	A [mm]	B Min [mm]	B Max [mm]	WEIGHT
				LBS[KG.]
Z-PTWY75	75	33.7	61.1	1.9 [0.86]
Z-PTWY100	100	33.7	86.1	2.0 [0.91]
Z-PTWY150	150	33.7	136.1	2.1 [0.95]
Z-PTWY200	200	33.7	186.1	2.3 [1.05]
Z-PTWY250	250	33.7	236.1	2.4 [1.10]
Z-PTWY300	300	33.7	286.1	2.6 [1.18]

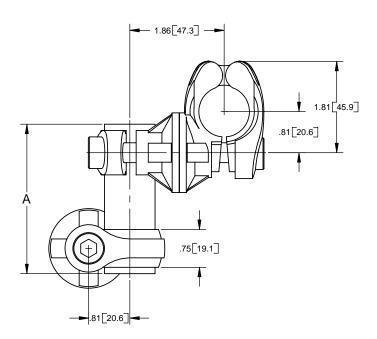
1.00" Swivel Bracket Arm

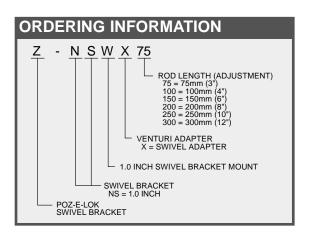
Z-NSWXxxx Overall Dimensions











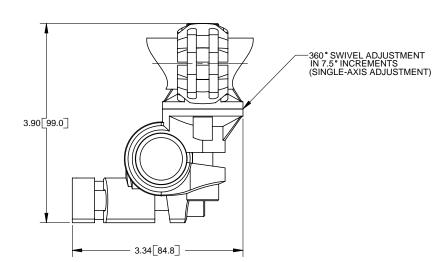
NOTE: ALL FASTENERS ARE M10 TORQUE ALL FASTENERS TO 40 FT-LBS (54 N-m) REQUIRED 57 FT-LBS (77 N-m) MAX.

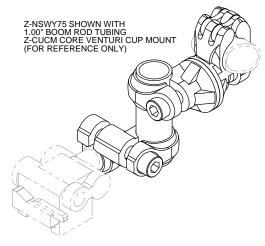
DADT No	Λ [mm]	n] B Min [mm]	B Max [m m]	WEIGHT
PART No. A [n	A [IIIIII]			LBS[KG.]
Z-NSWX75	75	20.6	40.0	1.7 [0.78]
Z-NSWX100	100	20.6	73.0	1.8 [0.82]
Z-NSWX150	150	20.6	123.0	1.9 [0.86]
Z-NSWX200	200	20.6	173.0	2.0 [0.91]
Z-NSWX250	250	20.6	223.0	2.1 [0.95]
Z-NSWX300	300	20.6	273.0	2.2 [1.0]

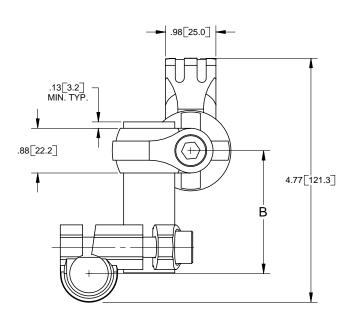


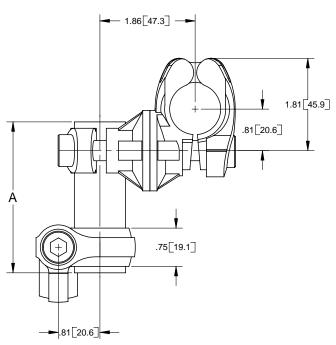
1.00" Core Bracket Arm

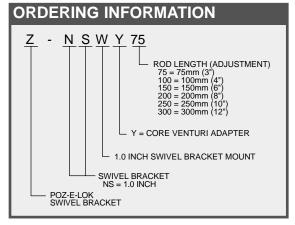
Z-NSWYxxx Overall Dimensions









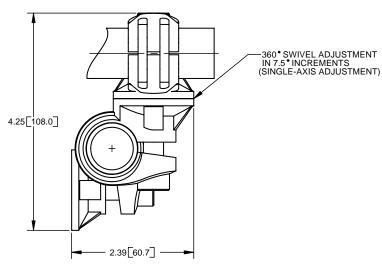


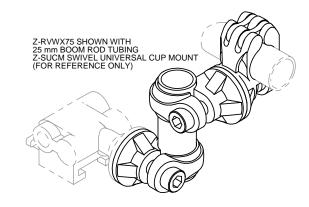
NOTE: ALL FASTENERS ARE M10 TORQUE ALL FASTENERS TO 40 FT-LBS (54 N-m) REQUIRED 57 FT-LBS (77 N-m) MAX.

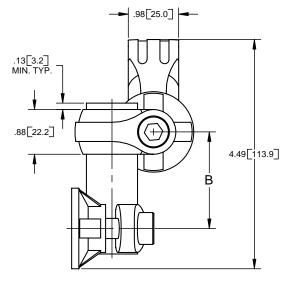
DADTNA	A [mm]	D. Min. Inc. no. 1	B Max [mm]	WEIGHT
PART NO.		B Min [mm]		LBS[KG.]
Z-NSWY75	75	33.7	61.1	1.7 [0.78]
Z-NSWY100	100	33.7	86.1	1.8 [0.82]
Z-NSWY150	150	33.7	136.1	1.9 [0.86]
Z-NSWY200	200	33.7	186.1	2.1 [0.95]
Z-NSWY250	250	33.7	236.1	2.2 [1.00]
Z-NSWY300	300	33.7	286.1	2.3 [1.05]

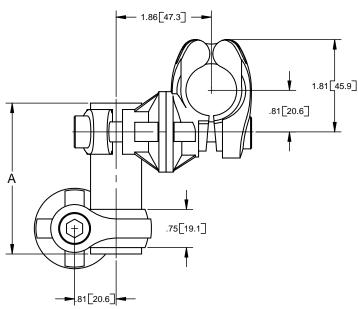
25mm Swivel Bracket Arm

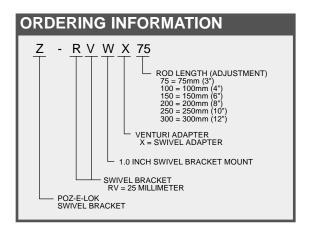
Z-RVWXxxx Overall Dimensions











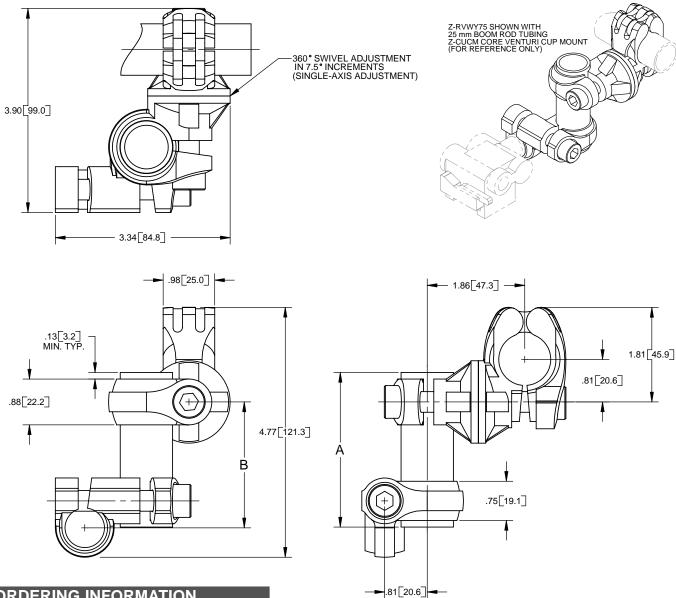
NOTE: ALL FASTENERS ARE M10 TORQUE ALL FASTENERS TO 40 FT-LBS (54 N-m) REQUIRED 57 FT-LBS (77 N-m) MAX.

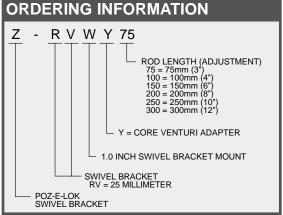
PART No.	A [mm]	B Min [mm]	B Max [mm]	WEIGHT
PART NO.				LBS[KG.]
Z-RVWX75	75	20.6	40.0	1.7 [0.78]
Z-RVWX100	100	20.6	73.0	1.8 [0.82]
Z-RVWX150	150	20.6	123.0	1.9 [0.86]
Z-RVWX200	200	20.6	173.0	2.0 [0.91]
Z-RVWX250	250	20.6	223.0	2.1 [0.95]
Z-RVWX300	300	20.6	273.0	2.2 [1.0]



Poz-E-Lok™ Modular Tooling 25mm Core Bracket Arm 7 DVWV2024 O → # Discourse Arm

Z-RVWYxxx Overall Dimensions





NOTE: ALL FASTENERS ARE M10 TORQUE ALL FASTENERS TO 40 FT-LBS (54 N-m) REQUIRED 57 FT-LBS (77 N-m) MAX.

PART No.	A [mm]	B Min [mm]	B Max [mm]	WEIGHT
				LBS[KG.]
Z-RVWY75	75	33.7	61.1	1.7 [0.78]
Z-RVWY100	100	33.7	86.1	1.8 [0.82]
Z-RVWY150	150	33.7	136.1	1.9 [0.86]
Z-RVWY200	200	33.7	186.1	2.1 [0.95]
Z-RVWY250	250	33.7	236.1	2.2 [1.00]
Z-RVWY300	300	33.7	286.1	2.3 [1.05]

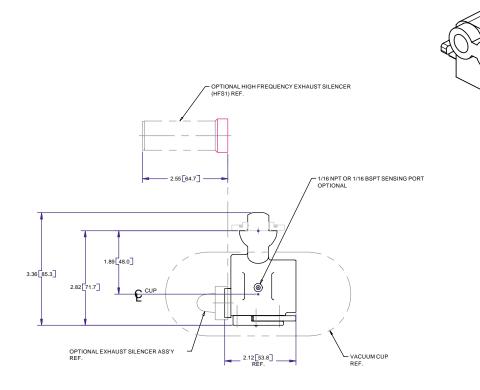
Automation Product Solutions

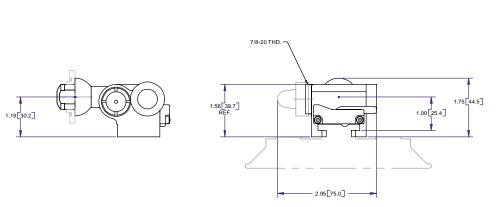
Poz-E-Lok™ Modular Tooling

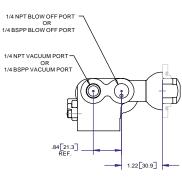
Swivel Venturi Cup Mount

Z-SVCMB-x-x-x Overall Dimensions

(See page 43 for ordering information.)

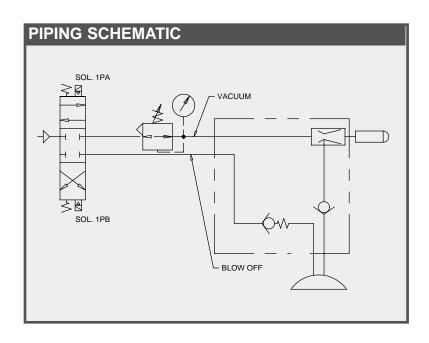




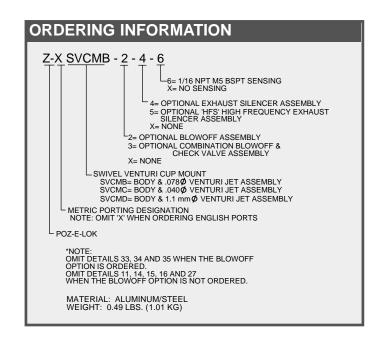




Poz-E-Lok[™] Modular Tooling Swivel Venturi Cup Mount Z-SVCMB-x-x-x Piping Schematic



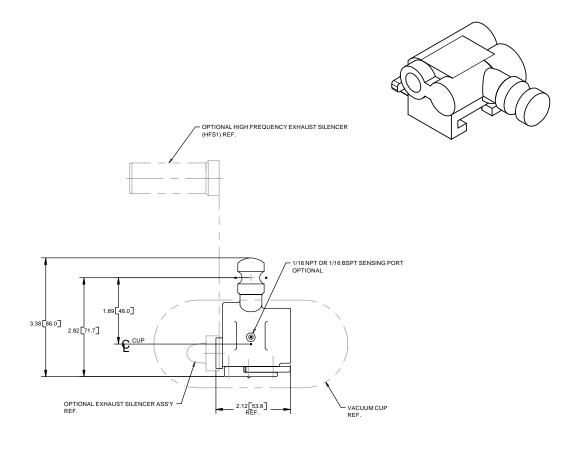
Swivel Venturi Cup Mount **Z-SVCMB** Ordering Information

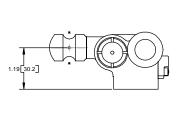


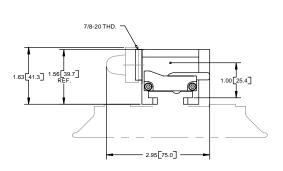
Core Venturi Cup Mount

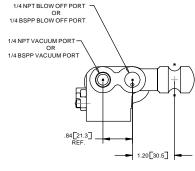
Z-CVCMB-x-x-x Overall Dimensions

(See page 45 for ordering information.)





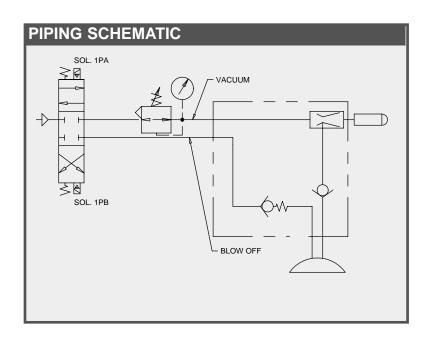




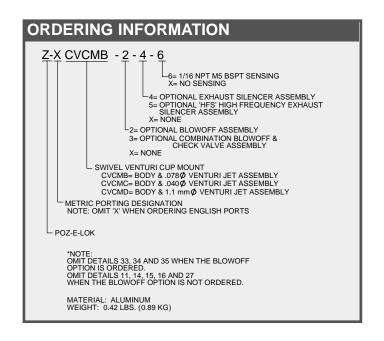


Poz-E-Lok[™] Modular Tooling Core Venturi Cup Mount

Z-CVCMB-x-x-x Piping Schematic

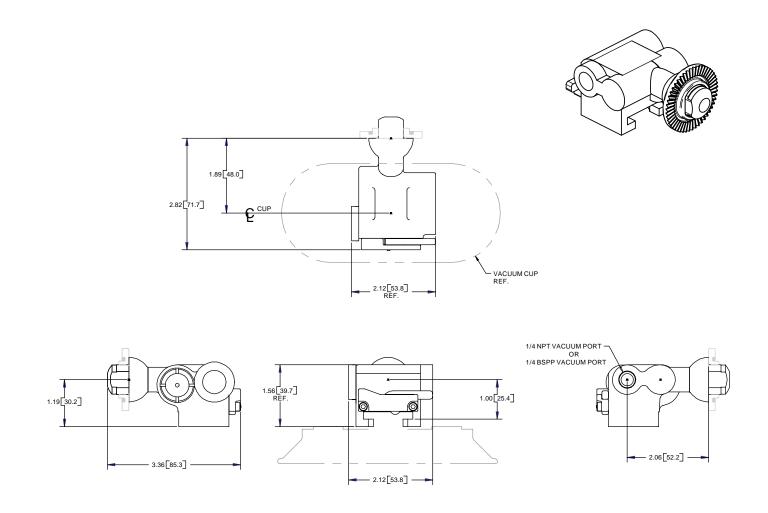


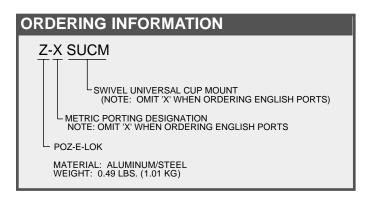
Core Venturi Cup Mount **Z-CVCMB-x-x-x** Ordering Information



Swivel Universal Cup Mount

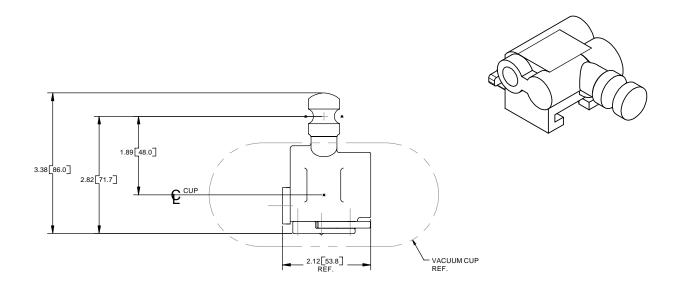
Z-SUCM Overall Dimensions

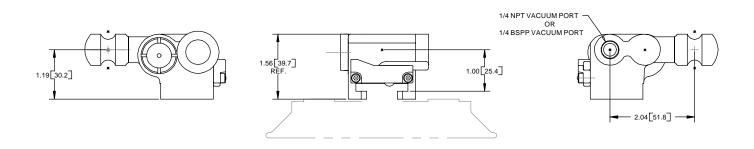


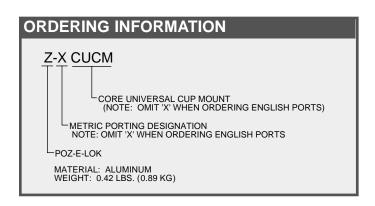




Core Universal Cup Mount **Z-CUCM** Overall Dimensions

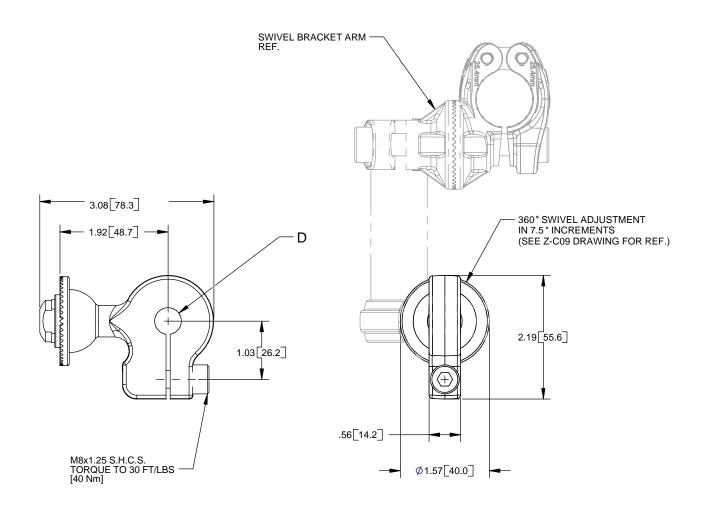


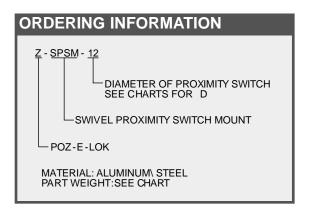




Poz-E-Lok[™] Modular Tooling Swivel Proximity Switch Mount

Z-SPSM-xx Overall Dimensions



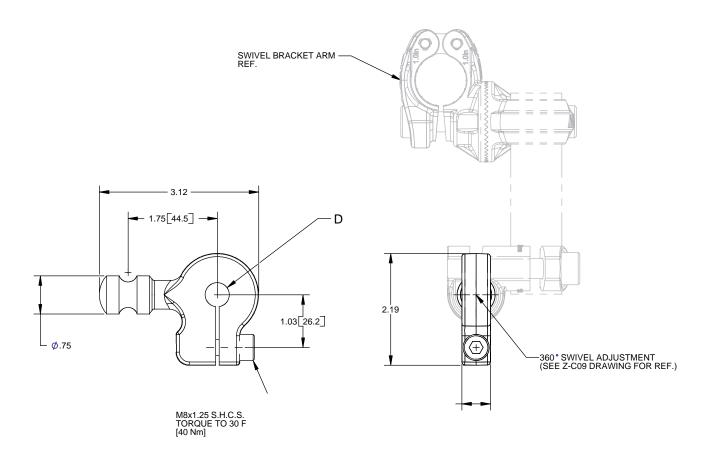


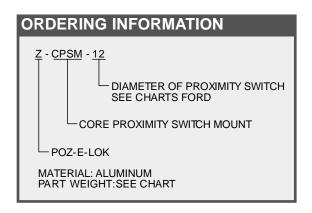
Part No.	D	Weight
Z-SPSM-12	12mm	4.7 oz. / 132 g.
Z-SPSM-18	18mm	4.5 oz. / 127 g.
Z-SPSM-25	25mm	4.2 oz. / 118 g.
Z-SPSM-30	30mm	3.9 oz. / 110 g.



Poz-E-Lok[™] Modular Tooling Core Proximity Switch Mount

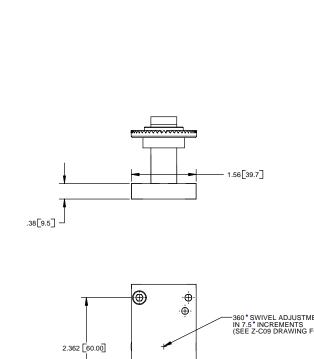
Z-CPSM-xx Overall Dimensions

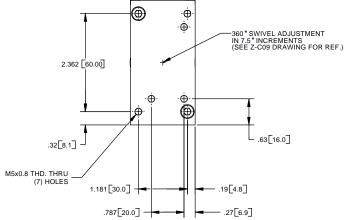


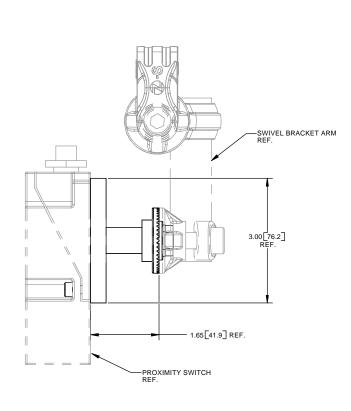


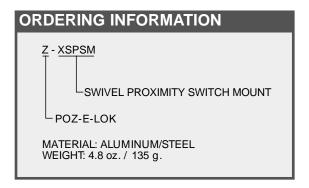
Part No.	D	Weight
Z-CPSM-12	12mm	3.5 oz. / 98 g.
Z-CPSM-18	18mm	3.3 oz. / 93 g.
Z-CPSM-25	25mm	3.0 oz. / 84 g.
Z-CPSM-30	30mm	2.7 oz. / 76 g.

Poz-E-Lok[™] Modular Tooling Swivel Proximity Switch Mount Plate Z-XSPSM Overall Dimensions



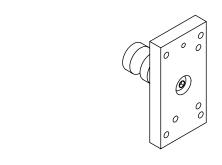


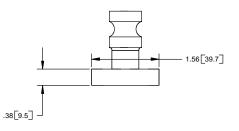


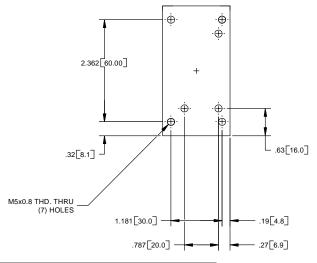


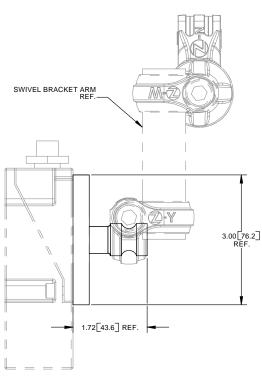


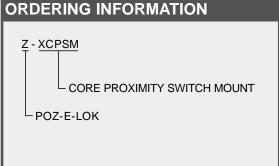
Core Proximity Switch Mount Plate **Z-XCPSM** Overall Dimensions





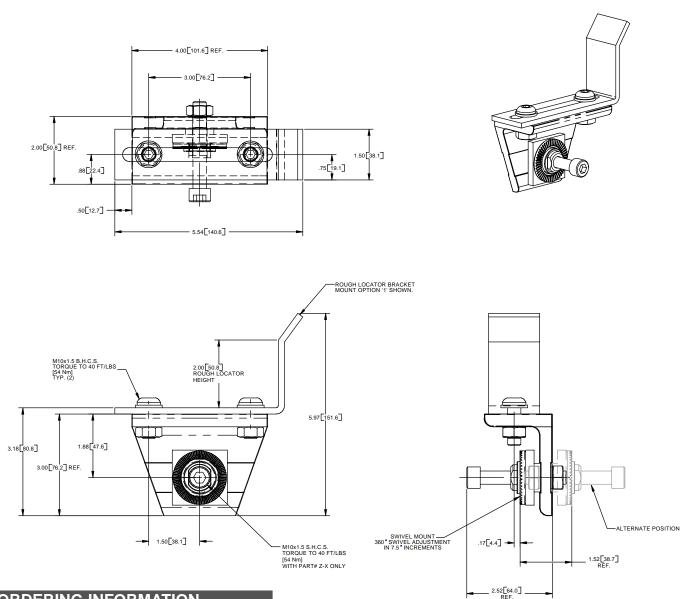


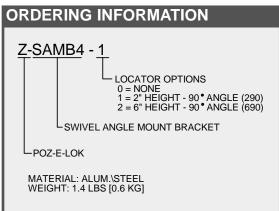




Z-Nest™ Swivel Angle Bracket Mount

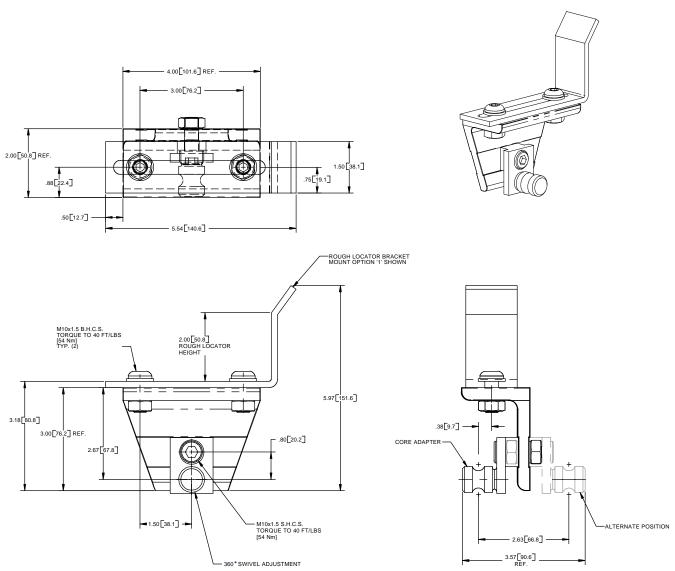
Z-SAMB4 Overall Dimensions

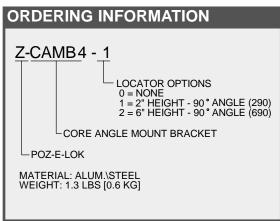






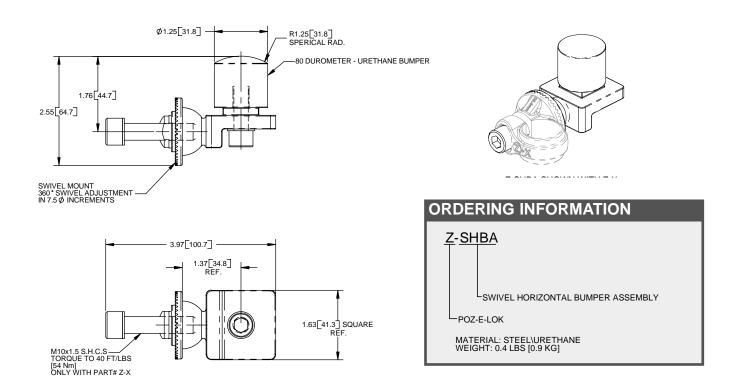
Poz-E-Lok[™] Modular Tooling Z-Nest[™] Core Angle Bracket Mount Z-CAMB4 Overall Dimensions



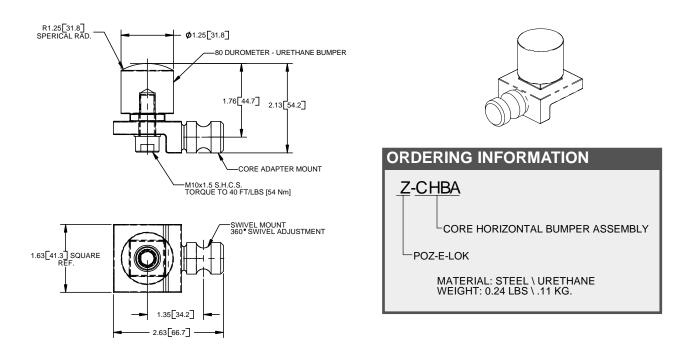


Z-Nest™ Horizontal Bumper Assembly

Z-SHBA Overall Dimensions



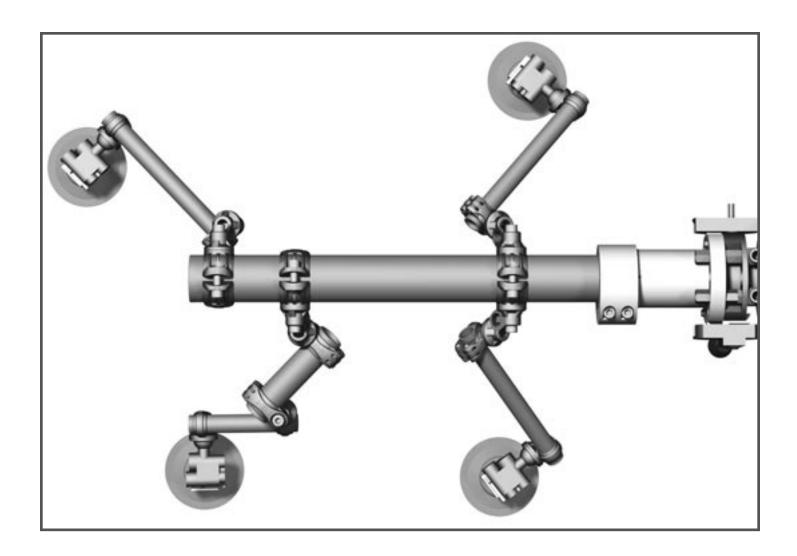
Z-CHBA Overall Dimensions



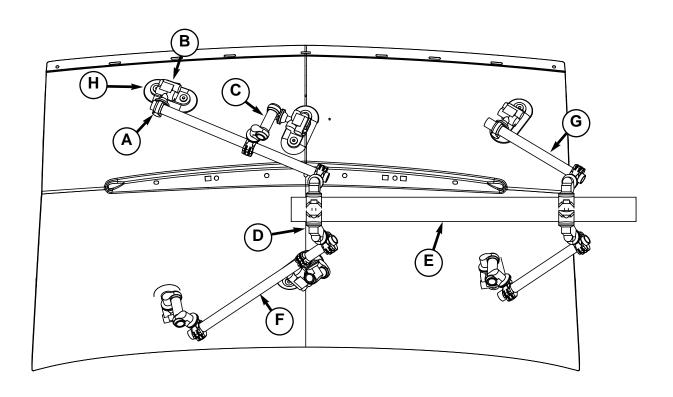


by Norgren Automotive

Typical Tooling Applications



Typical Tool for a Outer Deck Lid

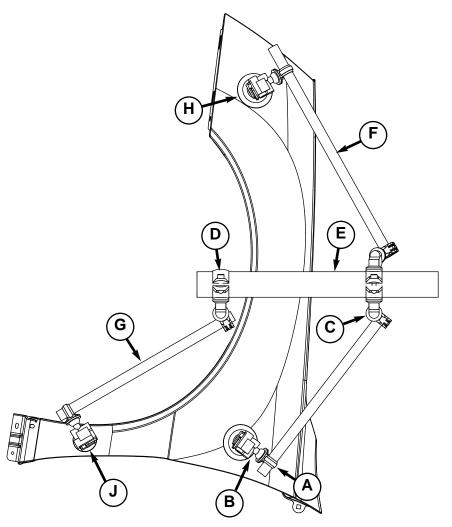


SAMPLE TOOL PARTS LIST

DETAIL	PART NUMBER	QUAN	DESCRIPTION
Α	Z-X	2	Poz-e-Lok SWIVEL VENTURI ADAPTER
В	Z-SUCM	6	Poz-e-Lok SWIVEL CUP MOUNT
С	Z-NSWX100	4	Poz-e-Lok SWIVEL BRACKET ARM
D	Z-KKMMNNSS	2	Poz-e-Lok 2.5IN SWIVEL BOOM MOUNT
Е	Z-25-S-900	1	Poz-e-Lok 2.5 BOOM TUBING
F	Z-10-S-500	2	Poz-e-Lok 1.0 BOOM ROD TUBING
G	Z-10-S-300	2	Poz-e-Lok 1.0 BOOM ROD TUBING
Н	OVCS25	6	OVAL VACUUM CUP

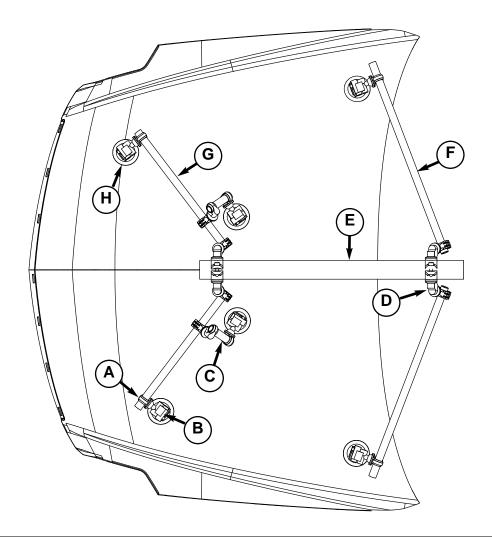


Poz-E-Lok™ Modular Tooling Typical Tool for a Outer Fender



	DL PARTS LIST		
DETAIL	PART NUMBER	QUAN	DESCRIPTION
Α	Z-X	3	Poz-e-Lok SWIVEL VENTURI ADAPTER
В	Z-SUCM	3	Poz-e-Lok SWIVEL CUP MOUNT
С	Z-KKMMNNSS	1	Poz-e-Lok 2.5IN SWIVEL BOOM MOUNT
D	Z-HKMNS	1	Poz-e-Lok 2.5IN SWIVEL BOOM MOUNT
E	Z-25-S-600	1	Poz-e-Lok 2.5 BOOM TUBING
F	Z-10-S-600	1	Poz-e-Lok 1.0 BOOM ROD TUBING
G	Z-10-S-500	2	Poz-e-Lok 1.0 BOOM ROD TUBING
Н	CVCS3-50	2	CONVOLUTED VACUUM CUP
J	CVCS2-50	1	CONVOLUTED VACUUM CUP

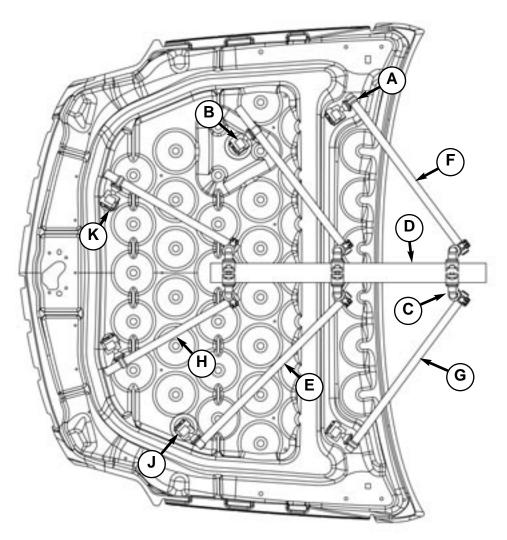
Typical Tool for a Outer Hood



	1		
IDETAIL	PART NUMBER	QUAN	DESCRIPTION
Α	Z-X	4	Poz-e-Lok SWIVEL VENTURI ADAPTER
В	Z-SUCM	6	Poz-e-Lok SWIVEL CUP MOUNT
С	Z-NSWX100	2	Poz-e-Lok SWIVEL BRACKET ARM
D	Z-KKMMNNSS	2	Poz-e-Lok 2.5IN SWIVEL BOOM MOUNT
E	Z-25-S-900	1	Poz-e-Lok 2.5 BOOM TUBING
F	Z-10-S-700	2	Poz-e-Lok 1.0 BOOM ROD TUBING
G	Z-10-S-500	2	Poz-e-Lok 1.0 BOOM ROD TUBING
Н	CVCS3-50	6	CONVOLUTED VACUUM CUP



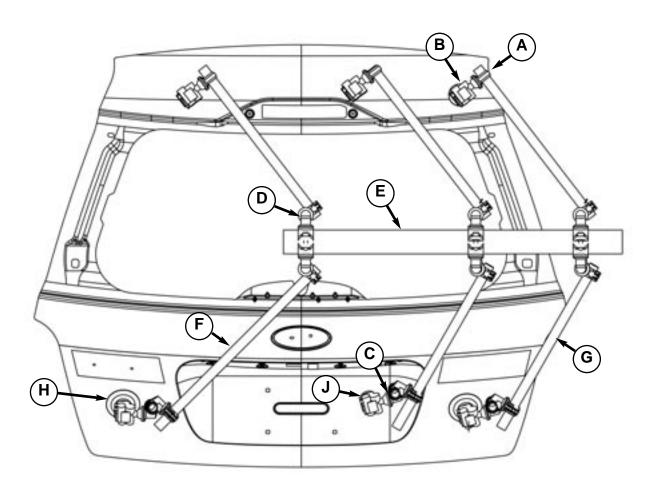
Typical Tool for a Inner Hood



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DETAIL	PART NUMBER	QUAN	DESCRIPTION	
Α	Z-X	6	Poz-e-Lok SWIVEL VENTURI ADAPTER	
В	Z-SUCM	6	Poz-e-Lok SWIVEL CUP MOUNT	
С	Z-KKMMNNSS	3	Poz-e-Lok 2.5IN SWIVEL BOOM MOUNT	
D	Z-25-S-900	1	Poz-e-Lok 2.5 BOOM TUBING	
Е	Z-10-S-700	1	Poz-e-Lok 1.0 BOOM ROD TUBING	
F	Z-10-S-650	2	Poz-e-Lok 1.0 BOOM ROD TUBING	
G	Z-10-S-600	1	Poz-e-Lok 1.0 BOOM ROD TUBING	
Н	Z-10-S-500	2	Poz-e-Lok 1.0 BOOM ROD TUBING	
J	CVCS3-50	2	CONVOLUTED VACUUM CUP	
K	CVCS2-50	4	CONVOLUTED VACUUM CUP	

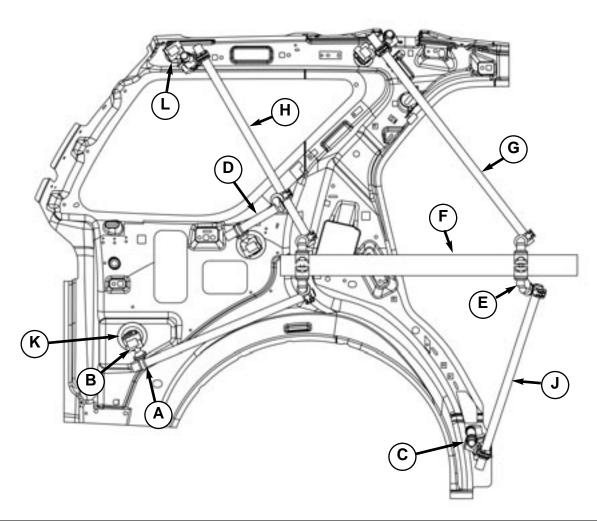
Typical Tool for a Lift Gate



DETAIL	PART NUMBER	QUAN	DESCRIPTION
А	Z-X	3	Poz-e-Lok SWIVEL VENTURI ADAPTER
В	Z-SUCM	6	Poz-e-Lok SWIVEL CUP MOUNT
С	Z-NSWX150	3	Poz-e-Lok SWIVEL BRACKET ARM
D	Z-KKMMNNSS	3	Poz-e-Lok 2.5IN SWIVEL BOOM MOUNT
E	Z-25-S-900	1	Poz-e-Lok 2.5 BOOM TUBING
F	Z-10-S-600	1	Poz-e-Lok 1.0 BOOM ROD TUBING
G	Z-10-S-500	5	Poz-e-Lok 1.0 BOOM ROD TUBING
Н	CVCS3-50	3	CONVOLUTED VACUUM CUP
J	CVCS2-50	3	CONVOLUTED VACUUM CUP



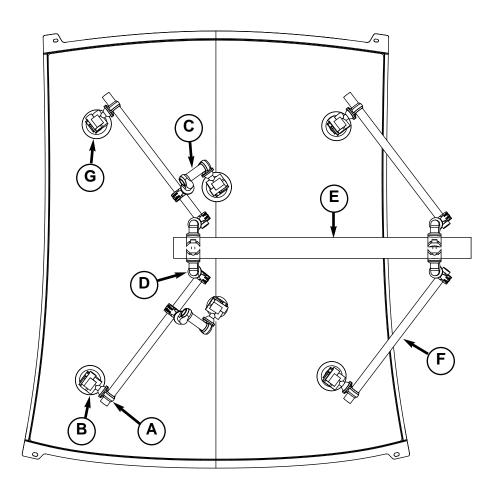
Typical Tool for a Quarter Inner Panel



SAMPLE TOOL PARTS LIST

DETAIL	PART NUMBER	QUAN	DESCRIPTION
Α	Z-X	1	Poz-e-Lok SWIVEL VENTURI ADAPTER
В	Z-SUCM	5	Poz-e-Lok SWIVEL CUP MOUNT
С	Z-NSWX200	1	Poz-e-Lok SWIVEL BRACKET ARM
D	Z-NSWX150	3	Poz-e-Lok SWIVEL BRACKET ARM
Е	Z-KKMMNNSS	2	Poz-e-Lok 2.5IN SWIVEL BOOM MOUNT
F	Z-25-S-900	1	Poz-e-Lok 2.5 BOOM TUBING
G	Z-10-S-800	1	Poz-e-Lok 1.0 BOOM ROD TUBING
Н	Z-10-S-700	1	Poz-e-Lok 1.0 BOOM ROD TUBING
J	Z-10-S-600	2	Poz-e-Lok 1.0 BOOM ROD TUBING
K	CVCS3-50	2	CONVOLUTED VACUUM CUP
L	CVCS2-50	3	CONVOLUTED VACUUM CUP

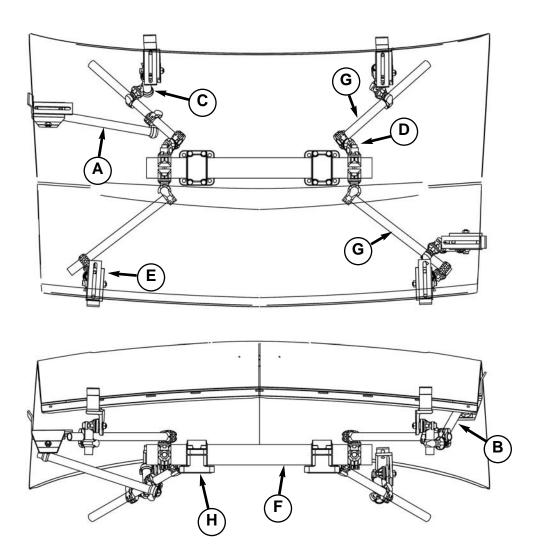
Typical Tool for a Roof Panel



SAMPLE TOOL PARTS LIST						
	DETAIL	PART NUMBER	QUAN	DESCRIPTION		
	Α	Z-X	4	Poz-e-Lok SWIVEL VENTURI ADAPTER		
	В	Z-SUCM	6	Poz-e-Lok SWIVEL CUP MOUNT		
	С	Z-NSWX100	2	Poz-e-Lok SWIVEL BRACKET ARM		
	D	Z-KKMMNNSS	2	Poz-e-Lok 2.5IN SWIVEL BOOM MOUNT		
	E	Z-25-S-900	1	Poz-e-Lok 2.5 BOOM TUBING		
	F	Z-10-S-500	4	Poz-e-Lok 1.0 BOOM ROD TUBING		
	G	CVCS3-50	6	CONVOLUTED VACUUM CUP		



Typical Z-Nest™ Tool for a Outer Deck Lid



S	SAMPLE TOOL PARTS LIST					
	DETAIL	PART NUMBER	QUAN	DESCRIPTION		
	А	Z-NSWX300	1	POS-E-LOK SWIVEL BRACKET ARM		
	В	Z-NSWX150	1	POS-E-LOK SWIVEL BRACKET ARM		
	С	Z-NSWX100	4	POS-E-LOK SWIVEL BRACKET ARM		
	D	Z-KKMMNNSS	2	POZ-E-LOK SWIVEL BOOM MOUNT		
	E	Z-SAMB4	6	POZ-E-LOK SWIVEL ANGLE MTG.		
	F	Z-25-S-700	1	POZ-E-LOK BOOM TUBING		
	G	Z-10-S-400	4	POZ-E-LOK BOOM TUBING		
	Н	TF2S	2	SADDLE FLANGE MOUNT		

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