



WORLD LEADER IN STEADY REST TECHNOLOGY

www.arobotech.com

About us

Arobotech Systems is the world leader in providing steady rests for use on grinding machines. Grinding AUTO REST[®] is recognized as the industry standard.

Sales and service are provided from our World Headquarters in Madison Heights, Michigan with additional sales and/or service locations in Germany, Japan, China, India and Korea.



How it works

Accuracy

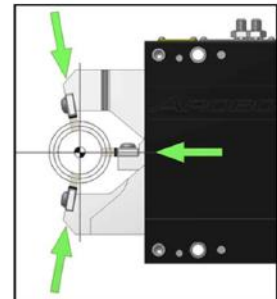
Arobotech Systems offers the original sliding wedge design with unsurpassed clamping accuracy. Each Grinding AUTO REST[®] must repeat within .001mm during testing to pass our rigorous certification criteria.

Self-Centering

The straight-line motion produced by the sliding wedge design gives Grinding AUTO REST[®] its unique self-centering capability. This feature automatically centers any size within each model's clamping range.

Follow Down Operation

This feature allows the Grinding AUTO REST[®] to support the part at the point of grind. The dynamic self-centering ability compensates for the changing part size to keep the workpiece on center throughout the grind cycle.



Benefits of use

Quality improvements

- Improve roundness – Our Follow Down feature supports the diameter being ground
- Better size control by keeping the workpiece stable throughout the grind cycle
- Improve concentricity – Our Self-Centering feature automatically compensates for under- and over-sized parts

Other benefits

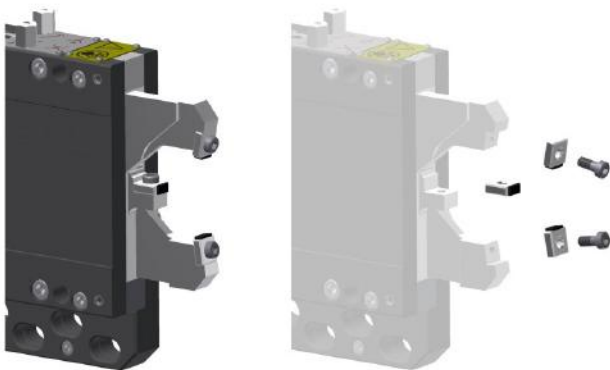
- Reduce scrap by reliably holding the workpiece accurately in place every time
- Improve cycle time with more aggressive grinding
- Accurately support workpiece without using a tailstock
- Models available from 1 to 250mm diameters
- Quick change-over

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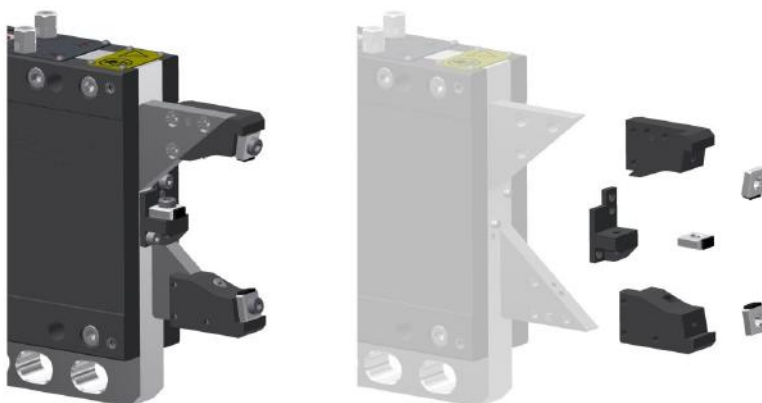
Tooling Configurations

Grinding AUTO REST® model and configuration is chosen based on workpiece size and grinding technical requirement. Models that feature wear pads mounted directly to the arms often represent the best value. Nest design required for larger sizes and special features (offset, extended, etc.)



Direct Mounted Pads

- Pads ordered by set (3 per set)
- Set number specifies clamping range
- Offset and special pads available - contact sales@arobotech.com



Nest Mounted Pads

- Nests ordered by set (3 per set)
- Set number specifies clamping range
- Alternate angle center nests available in the event of quality issues
- Offset and special nests available - contact sales@arobotech.com
- Offset and special pads available - contact sales@arobotech.com

Product Overview - O.D. Models

Available features:

- Arm Retraction For Part Loading
- Fixed or Follow Down Operation
- 2-Axis Centerline Adjustment
- Visible Zero Adjustment Screws
- Upper Arm Gage Clearance
- Position Feedback Sensors
- Lower Mounting Rail

*Side Mount Cylinder

*** See Data Sheet For Specific Features of Each Model ***



OD Grinding Models - Direct Mounted Pad Design

Model		GR-081	GC28601A	GC29222Y	GR-3520V	GR-6030V
Clamp Range	mm	1 – 8**	2.5 – 15**	2 – 27	15 – 35	20 - 60
Pad Set 1		1 – 3	2.5 – 8	2 – 7	15 – 30	20 - 50
Pad Set 2		2.5 - 8	5 – 10.5	7 – 27	20 - 35	30 - 60
Pad Set 3			9.5 - 15	4 – 21		

** Limited Clamping Force - Light Duty Only

OD Grinding Models - Nest Mounted Pad Design

Model		GR-055V	GR-115V	GR-320V-W
Maximum Size	mm	40	60	90
Nest Set 1		10 – 20	15 – 30	10 – 30
Nest Set 2		20 – 30	30 – 45	30 – 50
Nest Set 3		30 - 40	45 - 60	50 - 70
Nest Set 4				70 – 90

OD Grinding Models - Nest Mounted Pad Design

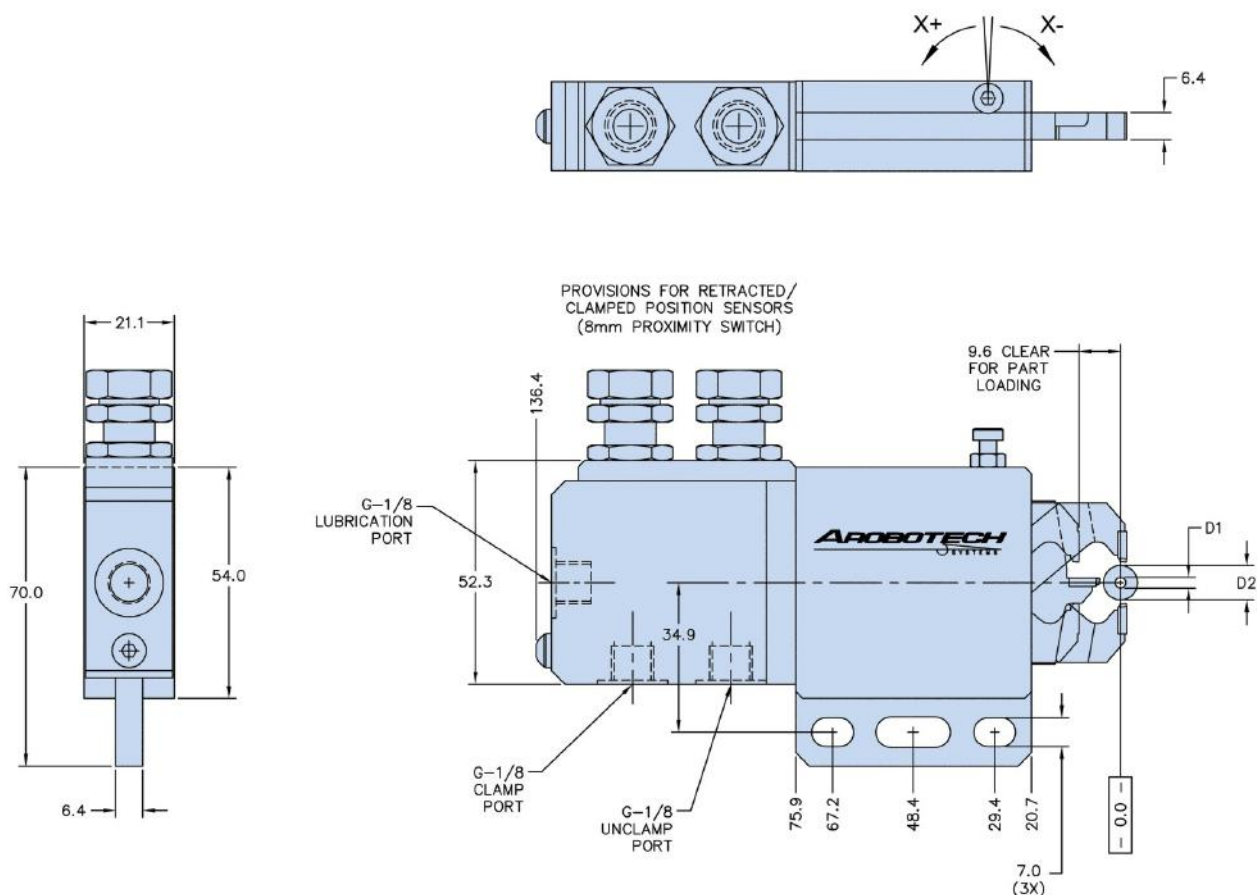
Model		GC26345A	GC32363A	GC32615A
Maximum Size	mm	120	150	210
Nest Set 1	mm	30 – 60	30 – 70	30 – 90
Nest Set 2	mm	60 – 90	70 – 110	90 – 150
Nest Set 3	mm	90 - 120	110 – 150	150 - 210

Contact sales@arobotech.com for free assistance

- Model selection
- Process review
- Special models
- 3D Models
- Accessories
- Machine integration
- Modifications
- Special features
- Mounting Bases
- Spare Parts

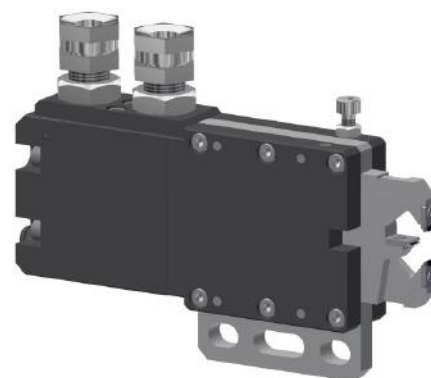
GR-081

Grinding AUTO REST®



Pad Set			1	2
Minimum Clamp Diameter	D1	mm	1	2.5
Maximum Clamp Diameter	D2	mm	3	8

X-Axis Adjustment Range	mm	±0.06
Y-Axis Adjustment Range	mm	N/A
Piston Area	cm ²	1.98
Cylinder Stroke	mm	15
Operating Pressure	bar	10 – 27
Maximum Pressure	bar	32
Air Purge Pressure	bar	N/A
Lubrication Volume	cm ³	0.02 – 0.03
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	1

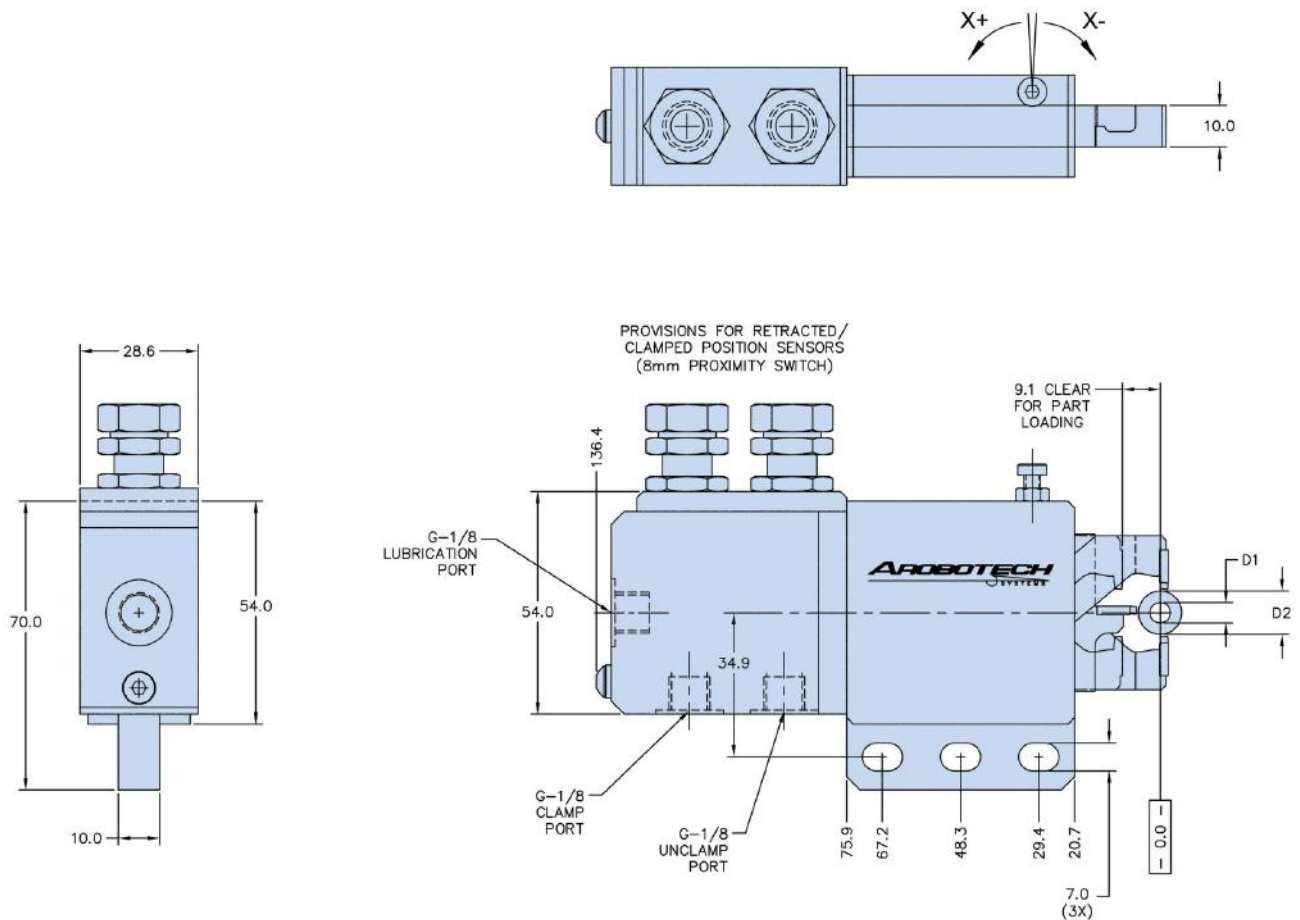


Included Features:

- * Arm Retraction For Part Loading
- * Fixed or Follow Down Operation
- * X-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Lower Mounting Rail

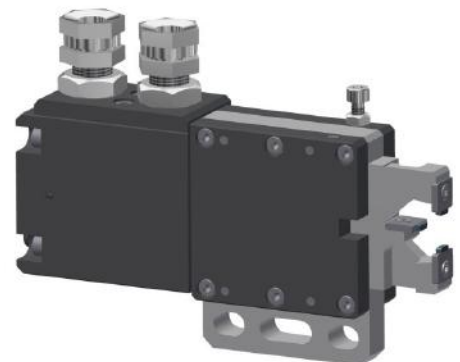
Items Required To Use This Product:

- * Set of Wear Pads
- * Mounting Base



Pad Set			1	2	3
Minimum Clamp Diameter	D1	mm	2.5	5	9.5
Maximum Clamp Diameter	D2	mm	8	10.5	15

X-Axis Adjustment Range	mm	±0.06
Y-Axis Adjustment Range	mm	N/A
Piston Area	cm ²	2.85
Cylinder Stroke	mm	15
Operating Pressure	bar	10 – 27
Maximum Pressure	bar	32
Air Purge Pressure	bar	N/A
Lubrication Volume	cm ³	0.02 – 0.03
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	1.2

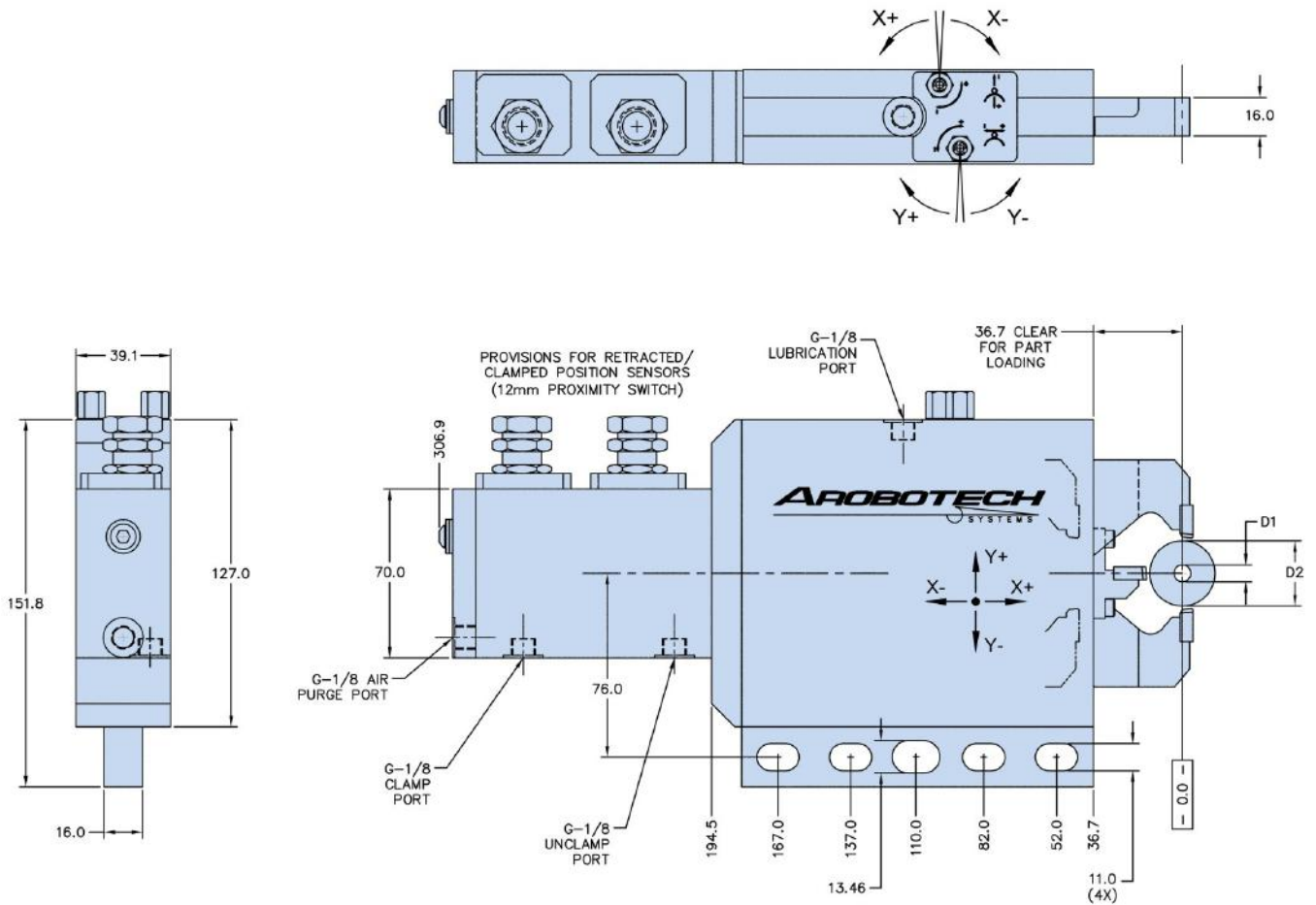


- Included Features:**
- * Arm Retraction For Part Loading
 - * Fixed or Follow Down Operation
 - * X-Axis Centerline Adjustment
 - * Position Feedback Sensors
 - * Lower Mounting Rail

- Items Required To Use This Product:**
- * Set of Wear Pads
 - * Mounting Base

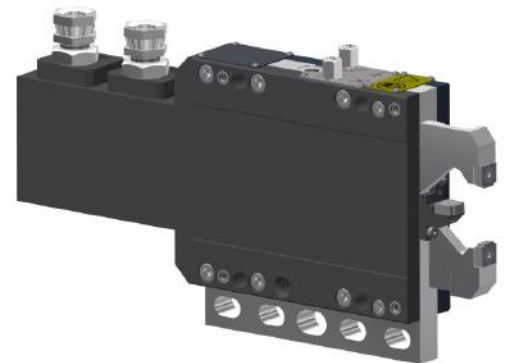
GC29222Y

Grinding AUTO REST®



Pad Set			1	2	3
Minimum Clamp Diameter	D1	mm	2	7	4
Maximum Clamp Diameter	D2	mm	7	27	21

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	6.12
Cylinder Stroke	mm	60
Operating Pressure	bar	15 – 30
Maximum Pressure	bar	45
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.03 – 0.04
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	5

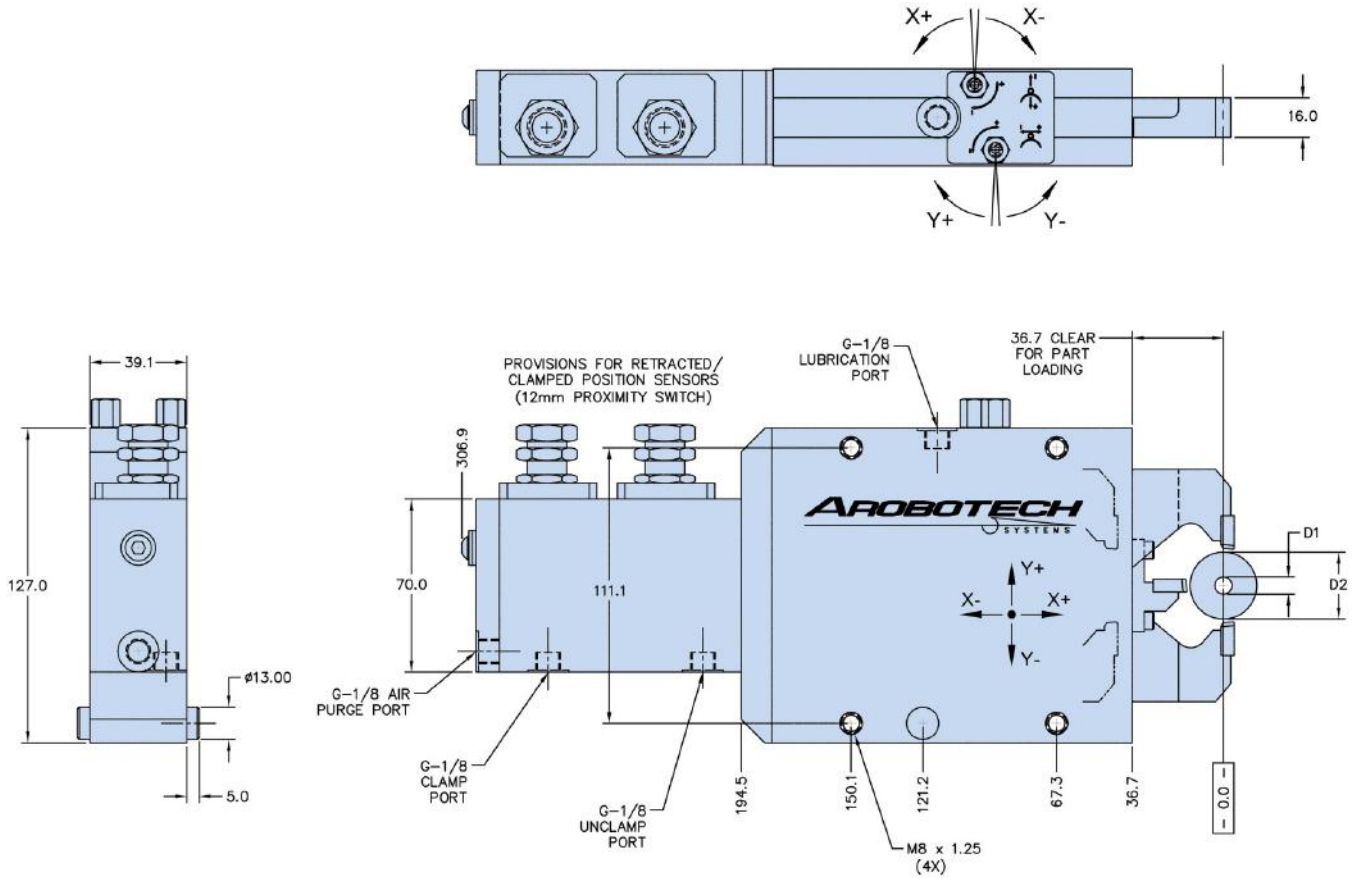


Included Features:

- * Arm Retraction For Part Loading
- * Fixed or Follow Down Operation
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws

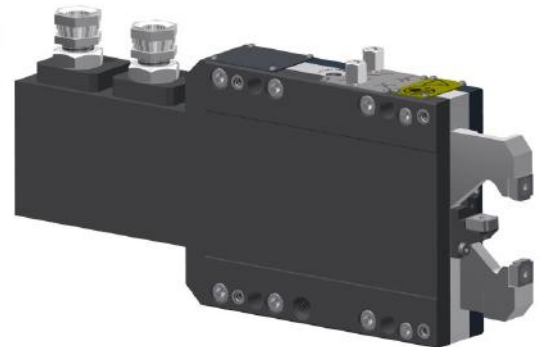
Items Required To Use This Product:

- * Set of Wear Pads
- * Mounting Base



Pad Set			1	2	3
Minimum Clamp Diameter	D1	mm	2	7	4
Maximum Clamp Diameter	D2	mm	7	27	21

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	6.12
Cylinder Stroke	mm	60
Operating Pressure	bar	15 – 30
Maximum Pressure	bar	45
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.03 – 0.04
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	5



Included Features:

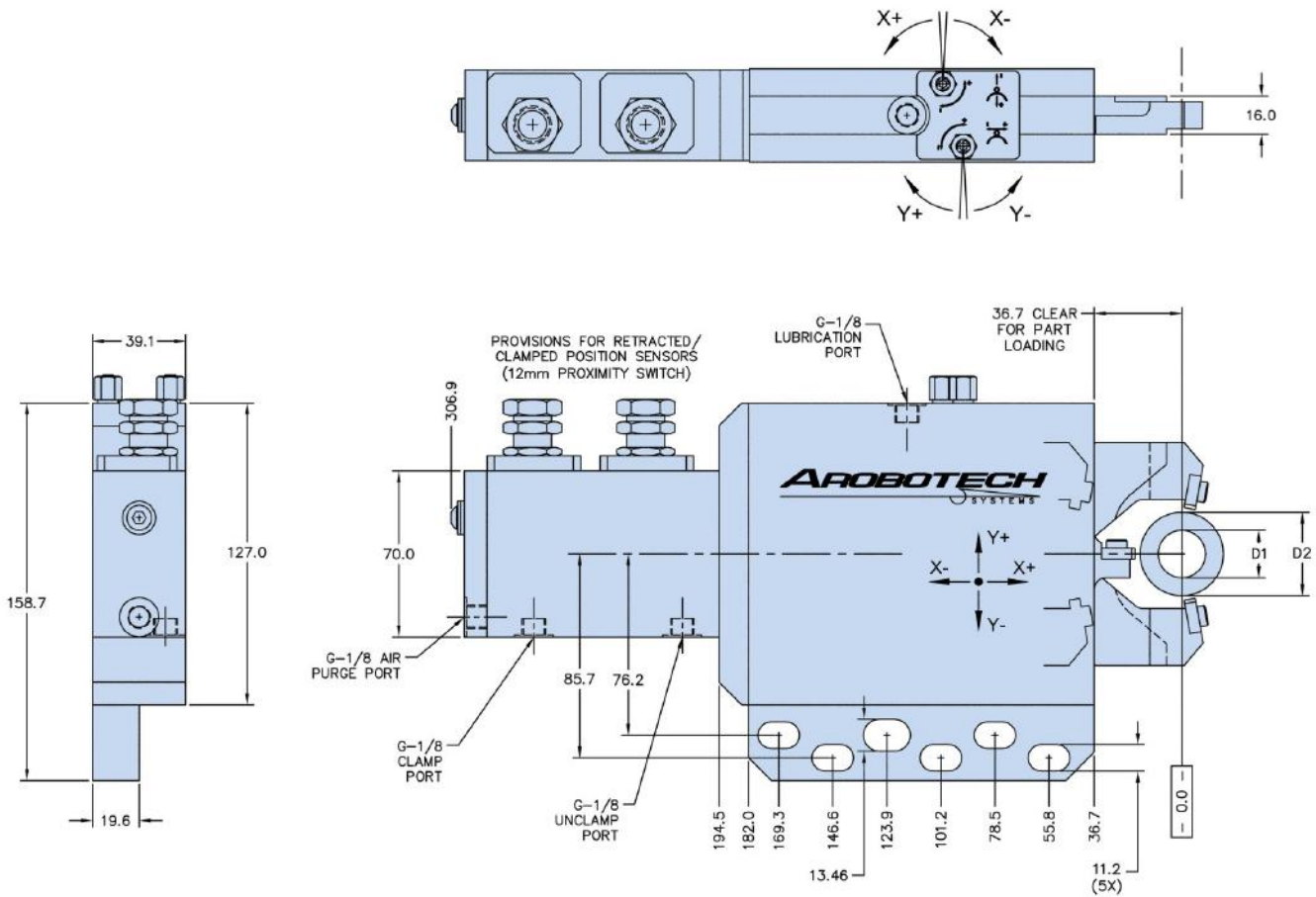
- * Arm Retraction For Part Loading
- * Fixed or Follow Down Operation
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws

Items Required To Use This Product:

- * Set of Wear Pads
- * Mounting Base

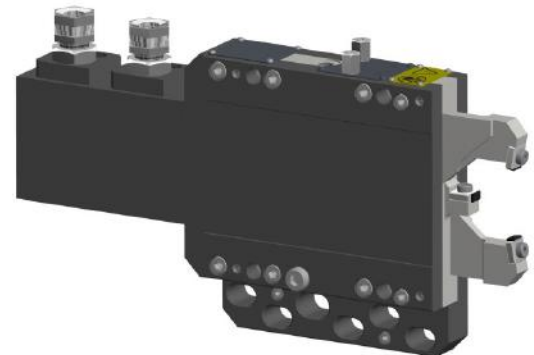
GR-3520V

Grinding AUTO REST®



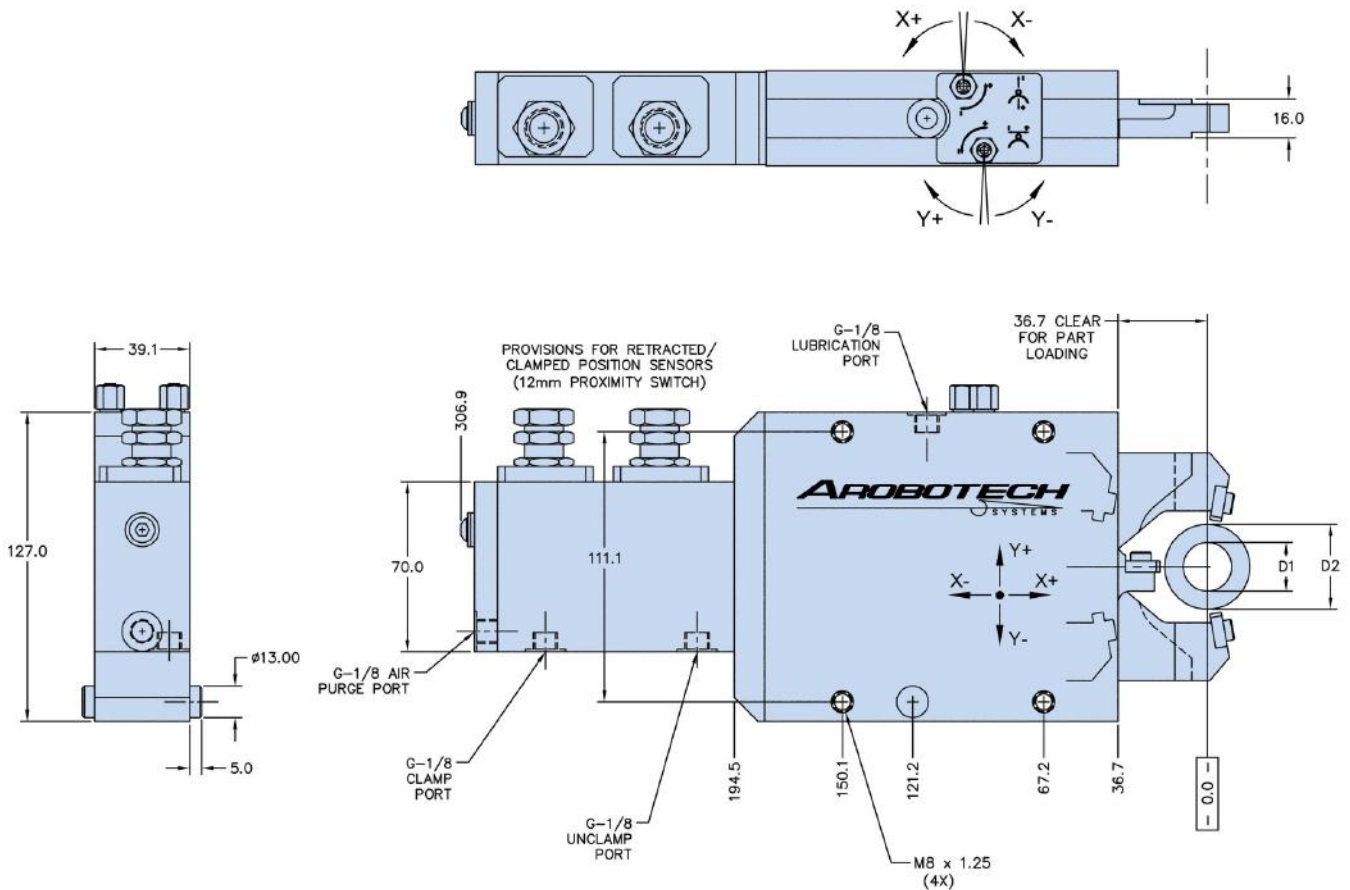
Pad Set			1	2
Minimum Clamp Diameter	D1	mm	15	20
Maximum Clamp Diameter	D2	mm	30	35

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	6.12
Cylinder Stroke	mm	60
Operating Pressure	bar	15 – 30
Maximum Pressure	bar	45
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.03 – 0.04
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	5.5



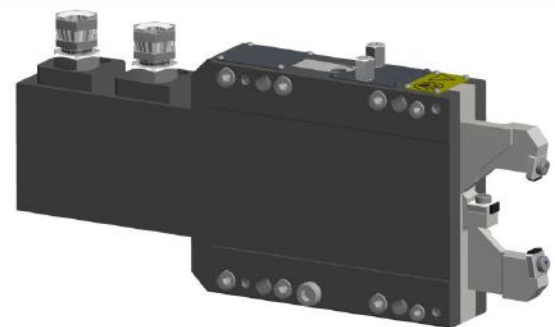
- Included Features:
- * Arm Retraction For Part Loading
 - * Fixed or Follow Down Operation
 - * 2-Axis Centerline Adjustment
 - * Position Feedback Sensors
 - * Visible Zero Adjustment Screws
 - * Lower Mounting Rail

- Items Required To Use This Product:
- * Set of Wear Pads
 - * Mounting Base



Pad Set			1	2
Minimum Clamp Diameter	D1	mm	15	20
Maximum Clamp Diameter	D2	mm	30	35

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	6.12
Cylinder Stroke	mm	60
Operating Pressure	bar	15 – 30
Maximum Pressure	bar	45
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.03 – 0.04
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	5.5



Included Features:

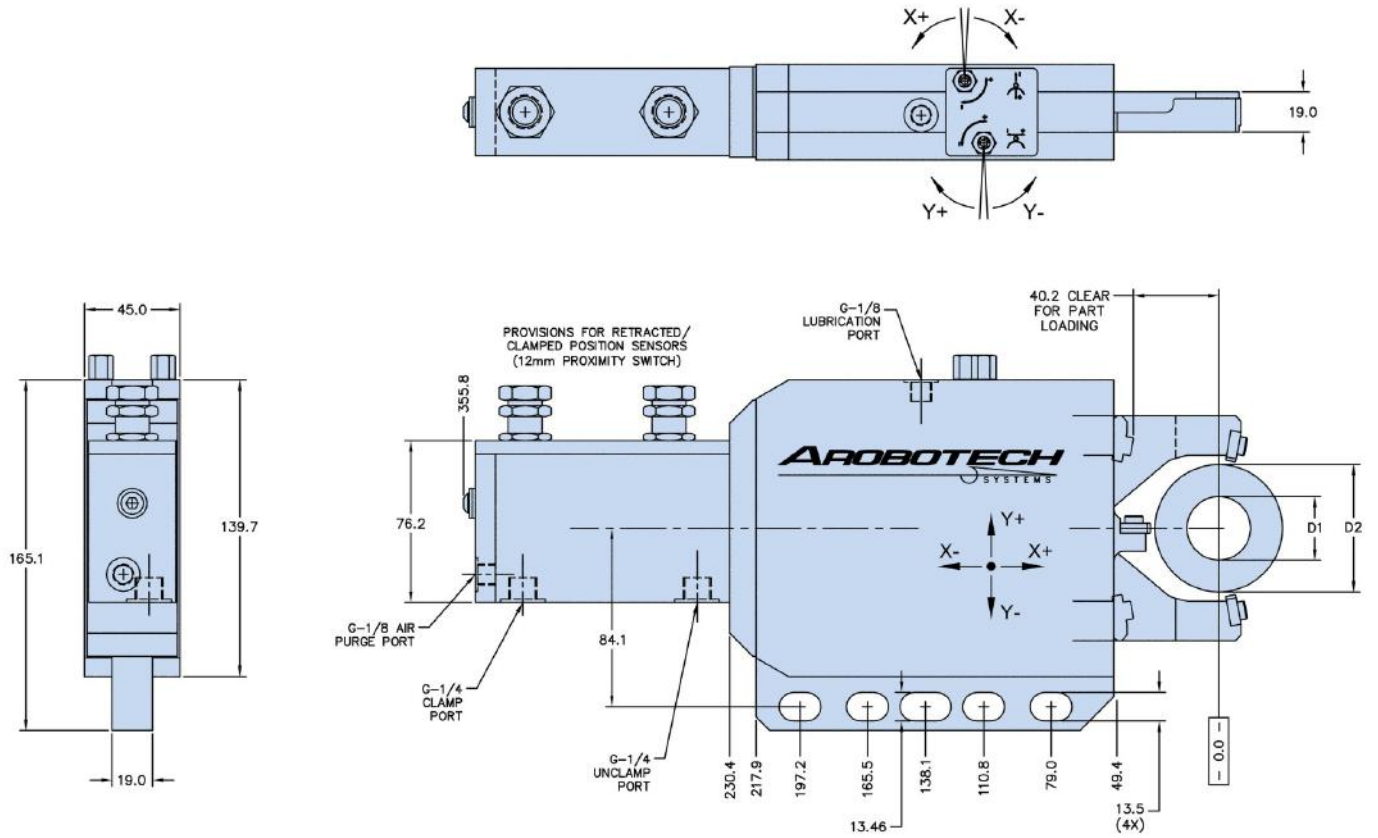
- * Arm Retraction For Part Loading
- * Fixed or Follow Down Operation
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws

Items Required To Use This Product:

- * Set of Wear Pads
- * Mounting Base

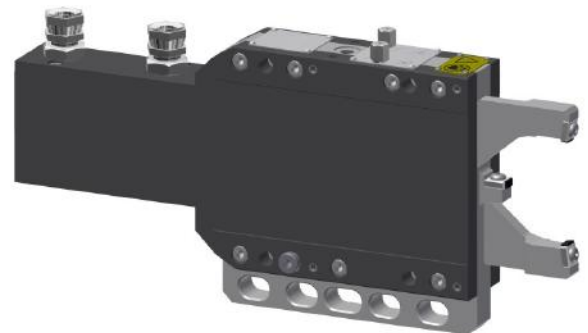
GR-6030V

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Pad Set			1	2
Minimum Clamp Diameter	D1	mm	20	30
Maximum Clamp Diameter	D2	mm	50	60

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	6.40
Cylinder Stroke	mm	72
Operating Pressure	bar	15 – 30
Maximum Pressure	bar	45
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.04 – 0.06
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	10.2

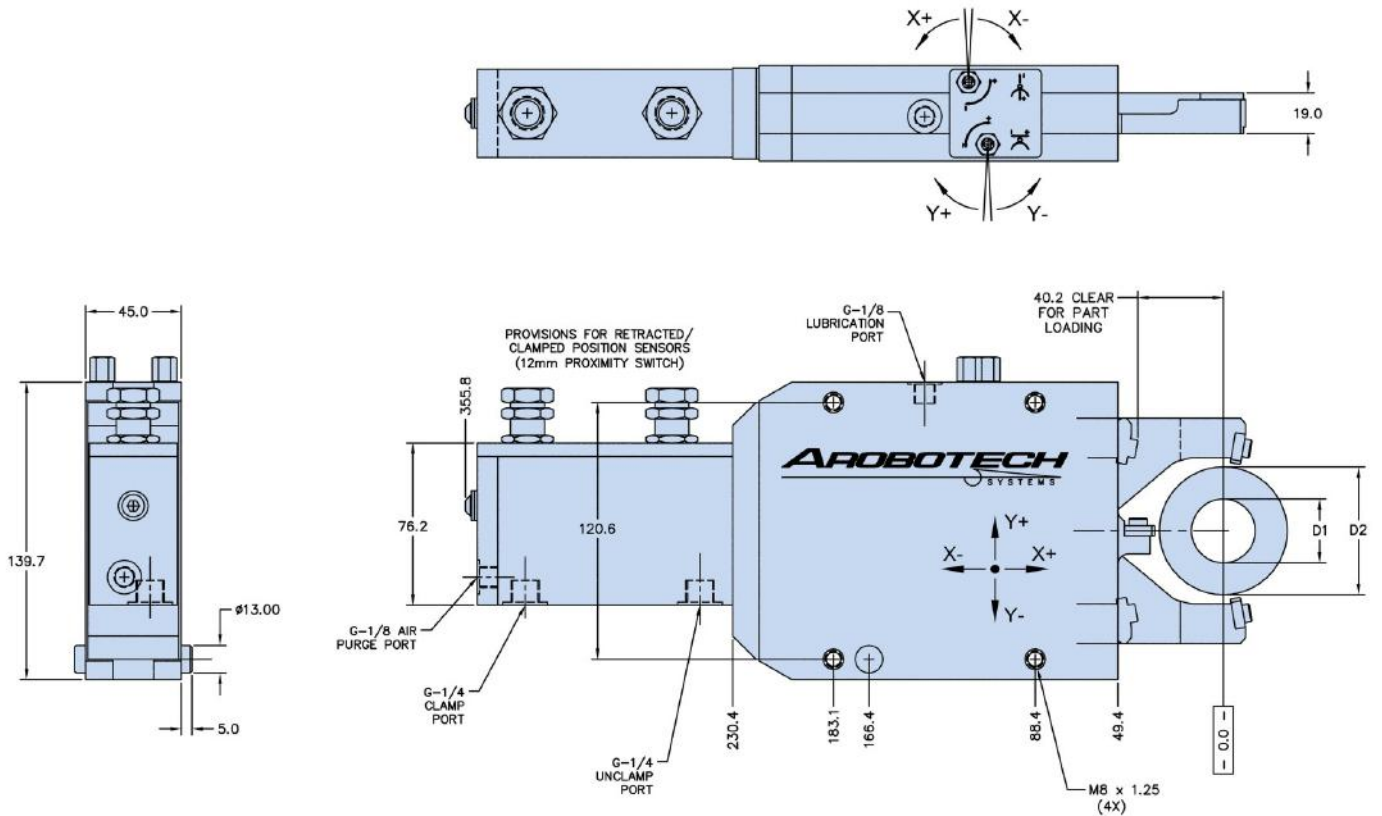


Included Features:

- * Arm Retraction For Part Loading
- * Fixed or Follow Down Operation
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws
- * Lower Mounting Rail

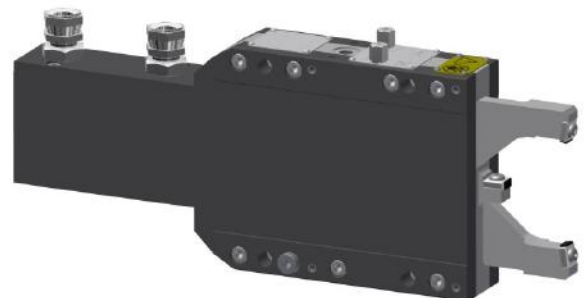
Items Required To Use This Product:

- * Set of Wear Pads
- * Mounting Base



Pad Set			1	2
Minimum Clamp Diameter	D1	mm	20	30
Maximum Clamp Diameter	D2	mm	50	60

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	6.40
Cylinder Stroke	mm	72
Operating Pressure	bar	15 – 30
Maximum Pressure	bar	45
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.04 – 0.06
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	10.2



Included Features:

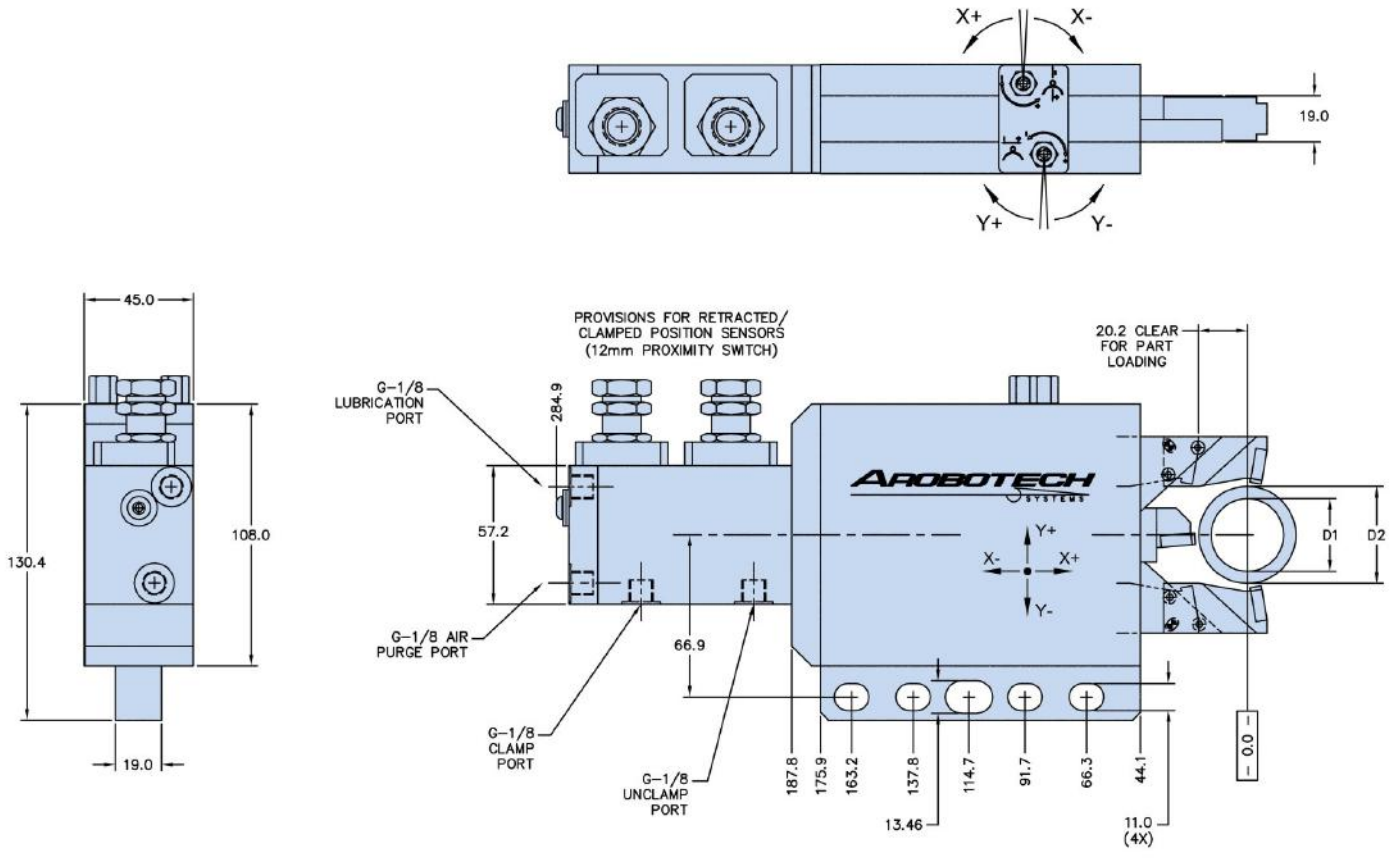
- * Arm Retraction For Part Loading
- * Fixed or Follow Down Operation
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws

Items Required To Use This Product:

- * Set of Wear Pads
- * Mounting Base

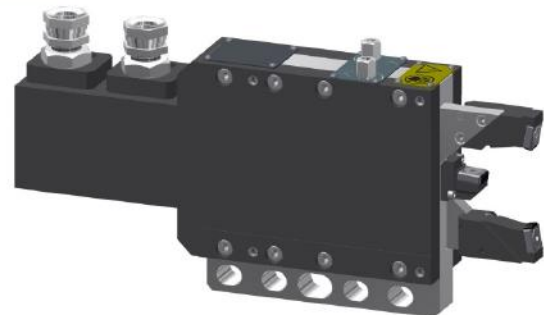
GR-055V

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Nest Set			1	2	3
Minimum Clamp Diameter	D1	mm	10	20	30
Maximum Clamp Diameter	D2	mm	20	30	40

X-Axis Adjustment Range	mm	±0.11
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	6.40
Cylinder Stroke	mm	36
Operating Pressure	bar	7 – 28
Maximum Pressure	bar	28
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.03 – 0.04
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	6.8

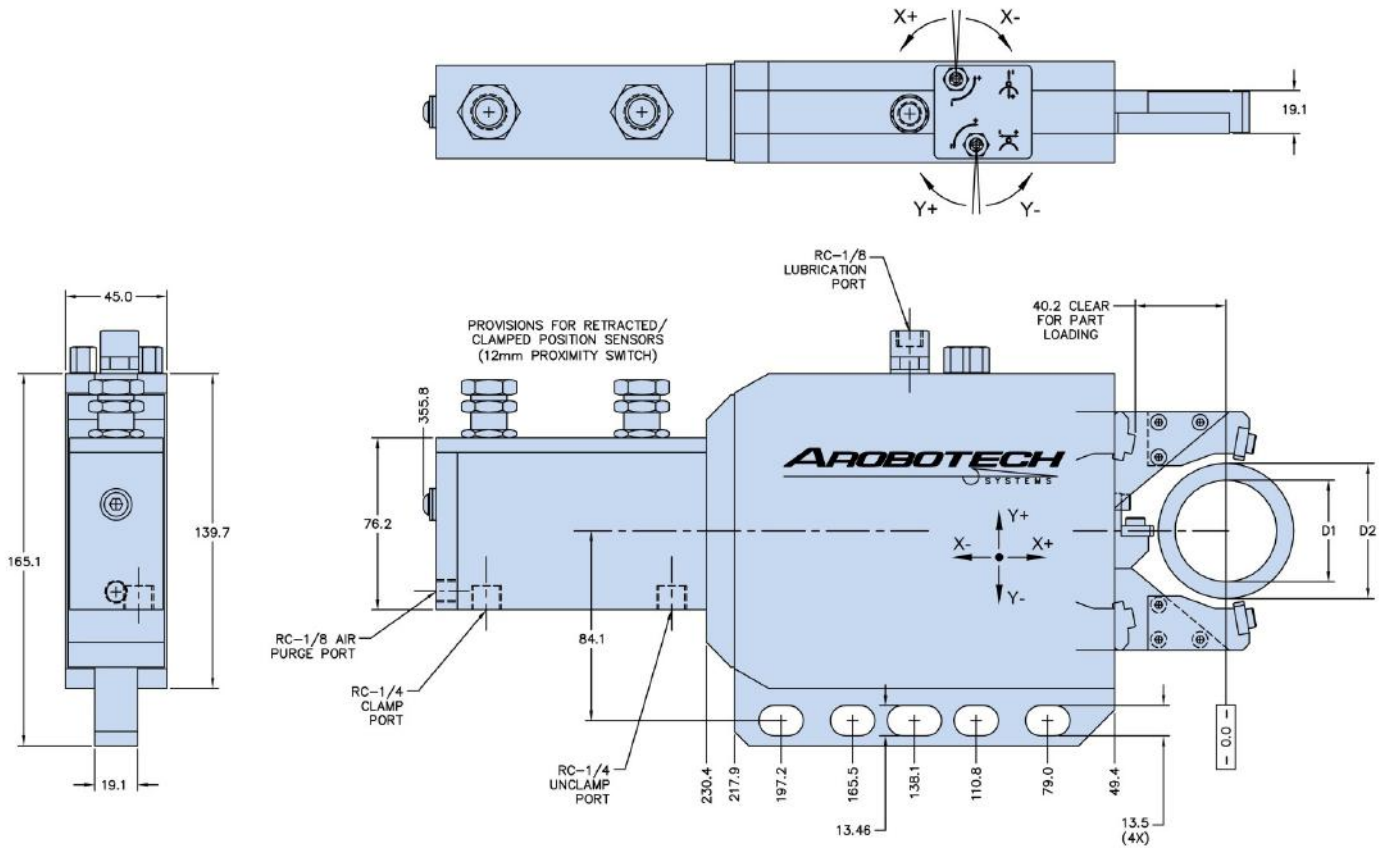


Included Features:

- * Arm Retraction For Part Loading
- * Fixed or Follow Down Operation
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws
- * Lower Mounting Rail

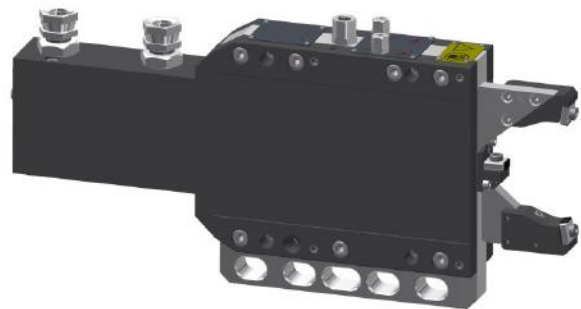
Items Required To Use This Product:

- * Set of Nests
- * Set of Wear Pads
- * Mounting Base



Nest Set			1	2	3
Minimum Clamp Diameter	D1	mm	15	30	45
Maximum Clamp Diameter	D2	mm	30	45	60

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	6.4
Cylinder Stroke	mm	64.5
Operating Pressure	bar	15 – 30
Maximum Pressure	bar	45
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.04 – 0.06
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	9

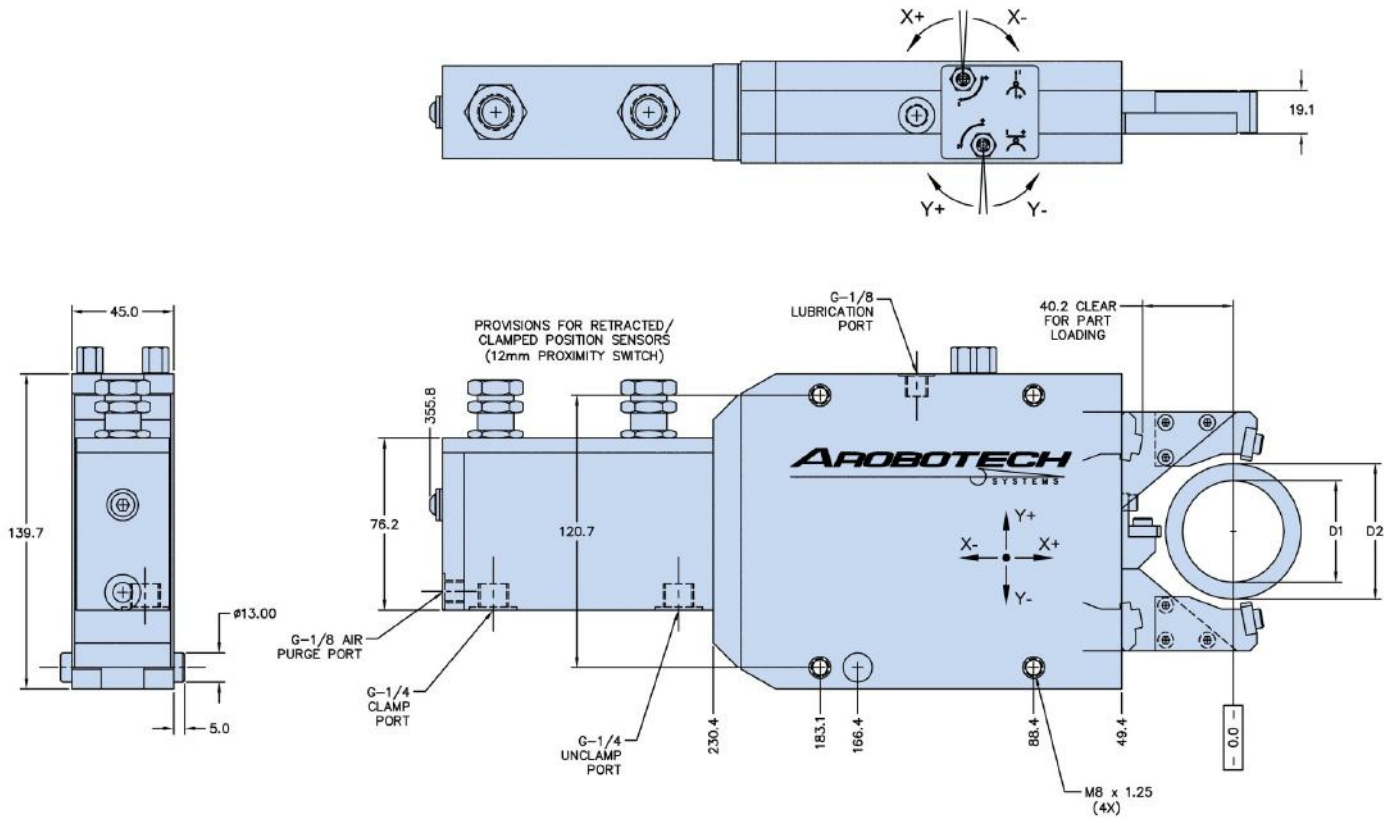


- Included Features:
- * Arm Retraction For Part Loading
 - * Fixed or Follow Down Operation
 - * 2-Axis Centerline Adjustment
 - * Position Feedback Sensors
 - * Visible Zero Adjustment Screws
 - * Lower Mounting Rail

- Items Required To Use This Product:
- * Set of Nests
 - * Set of Wear Pads
 - * Mounting Base

GR-115V-S

Grinding AUTO REST®



Nest Set			1	2	3
Minimum Clamp Diameter	D1	mm	15	30	45
Maximum Clamp Diameter	D2	mm	30	45	60

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	6.4
Cylinder Stroke	mm	64.5
Operating Pressure	bar	15 – 30
Maximum Pressure	bar	45
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.04 – 0.06
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	9

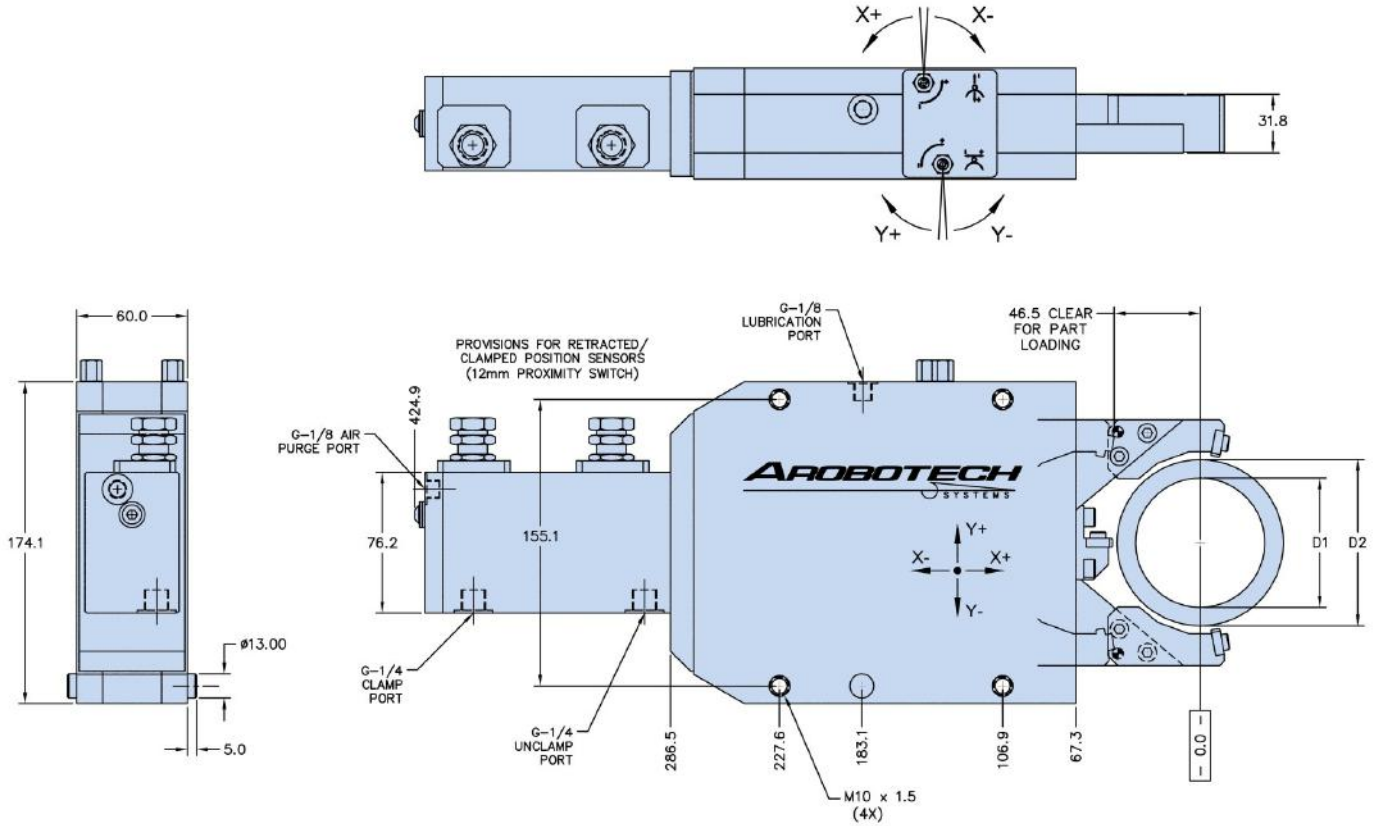


Included Features:

- * Arm Retraction For Part Loading
- * Fixed or Follow Down Operation
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws

Items Required To Use This Product:

- * Set of Nests
- * Set of Wear Pads
- * Mounting Base



Nest Set			1	2	3	4
Minimum Clamp Diameter	D1	mm	10	30	50	70
Maximum Clamp Diameter	D2	mm	30	50	70	90

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	11.4
Cylinder Stroke	mm	76
Operating Pressure	bar	15 – 30
Maximum Pressure	bar	45
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.05 – 0.10
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	19



Included Features:

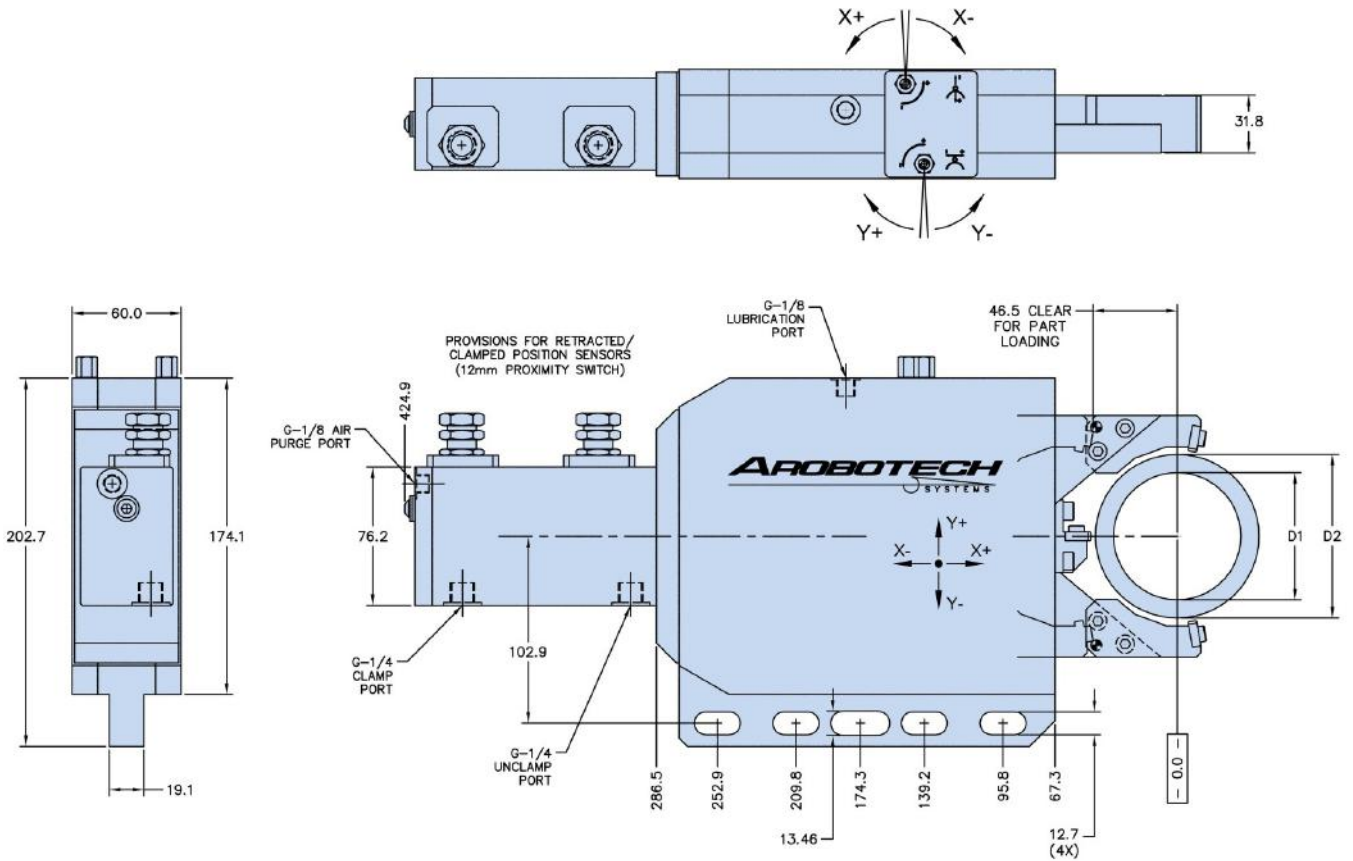
- * Arm Retraction For Part Loading
- * Fixed or Follow Down Operation
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws

Items Required To Use This Product:

- * Set of Nests
- * Set of Wear Pads
- * Mounting Base

GR-320V-W-L

Grinding AUTO REST®



Nest Set			1	2	3	4
Minimum Clamp Diameter	D1	mm	10	30	50	70
Maximum Clamp Diameter	D2	mm	30	50	70	90

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	11.4
Cylinder Stroke	mm	76
Operating Pressure	bar	15 – 30
Maximum Pressure	bar	45
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.05 – 0.10
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	19



Included Features:

- * Arm Retraction For Part Loading
- * Fixed or Follow Down Operation
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws
- * Lower Mounting Rail

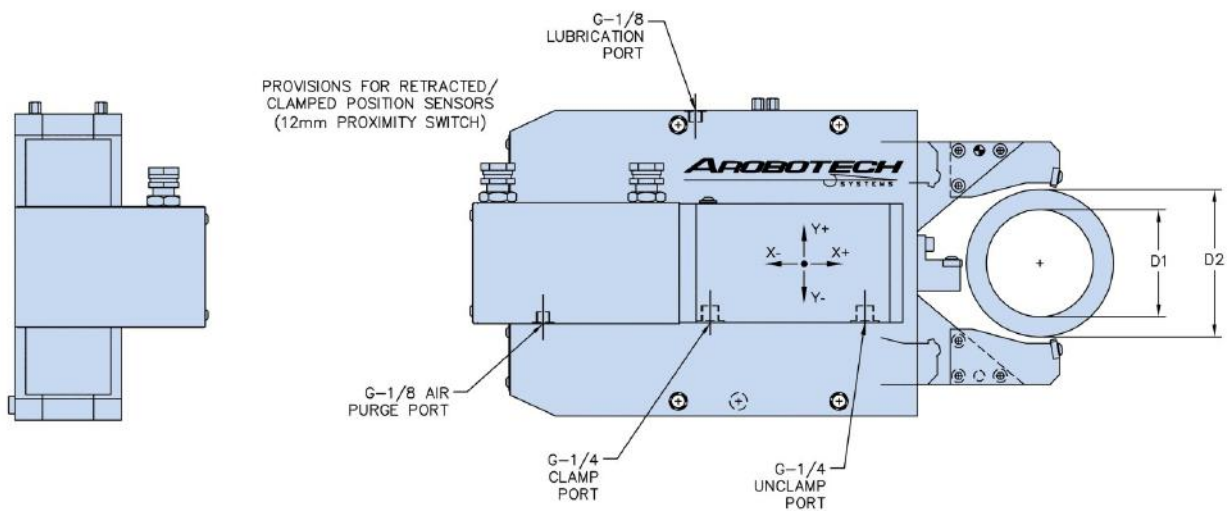
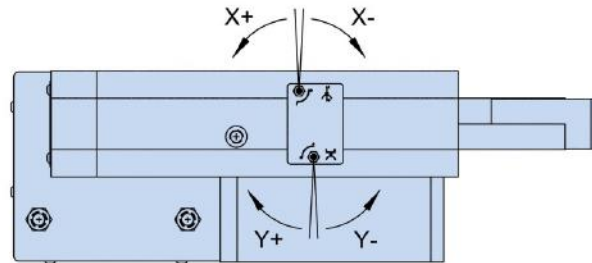
Items Required To Use This Product:

- * Set of Nests
- * Set of Wear Pads
- * Mounting Base

Large O.D.

Grinding AUTO REST®

Contact sales@arobotech.com for full dimensional information of these models



Model GC26345A

Pad Set			1	2	3
Minimum Clamp Diameter	D1	mm	30	60	90
Maximum Clamp Diameter	D2	mm	60	90	120

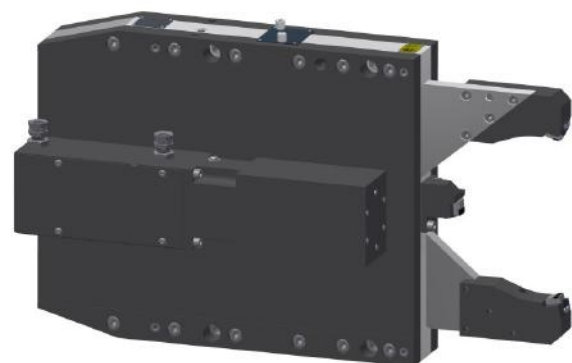
Model GC32363A

Pad Set			1	2	3
Minimum Clamp Diameter	D1	mm	30	70	110
Maximum Clamp Diameter	D2	mm	70	110	150

Model GC32615A

Pad Set			1	2	3
Minimum Clamp Diameter	D1	mm	30	90	150
Maximum Clamp Diameter	D2	mm	90	150	210

Contact sales@arobotech.com for full dimensional information of these models



- Included Features:
- * Arm Retraction For Part Loading
 - * Fixed or Follow Down Operation
 - * 2-Axis Centerline Adjustment
 - * Position Feedback Sensors
 - * Visible Zero Adjustment Screws
 - * Side Mount Cylinder

- Items Required To Use This Product:
- * Set of Nests
 - * Set of Wear Pads
 - * Mounting Base

Product Overview - Crankshaft Models

Available features:

- Arm Retraction For Part Loading
- Extended Reach for Counterweight Clearance
- Fixed or Follow Down Operation
- 2-Axis Centerline Adjustment
- Visible Zero Adjustment Screws
- Upper Arm Gage Clearance
- Position Feedback Sensors
- Side Mount Cylinder

*** See Data Sheet For Specific Features of Each Model ***



Model		GR-1000V **				GC13689A **				GR-1150V-SDG			
Clamping Range	mm	42 – 82				51 – 90				35 - 95			
Nest Size 1		42 - 50				38 - 51				35 - 55			
Nest Size 2		50 - 58				51 - 64				55 - 75			
Nest Size 3		58 - 66				64 - 77				75 - 95			
Nest Size 4		66 - 74				77 - 90							
Nest Size 5		74 - 82											

** Models GR-1000V and GC13689A Available With Side Mount Cylinder (-C) – See Data Sheet

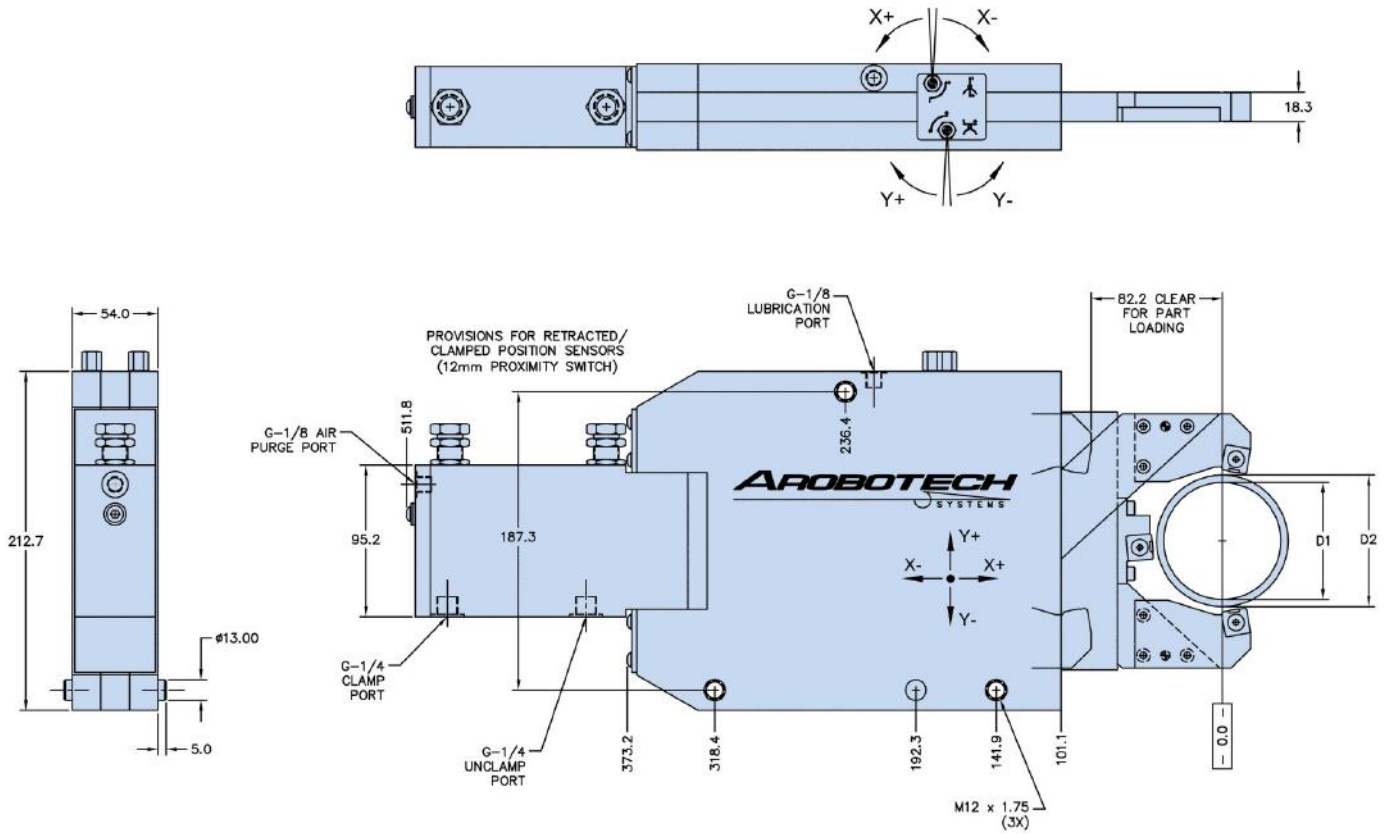
** Model GR-1000V Available With Upper Arm Gage Clearance (-SDG) – See Data Sheet

Model		GR-1350V-SDG				GC31275A			
Clamping Range	mm	43 to 95				75 to 125			
Nest Size 1		43 – 56				75 - 85			
Nest Size 2		56 - 69				85 - 95			
Nest Size 3		69 - 82				95 - 105			
Nest Size 4		82 – 95				105 - 115			
Nest Size 5						115 - 125			

Model		GC30916A				GC29036A				GC33679A			
Clamping Range	mm	52 – 140				60 – 150				80 - 200			
Nest Size 1		52 – 74				60 – 90				80 – 120			
Nest Size 2		74 – 96				90 – 120				120 – 160			
Nest Size 3		96 - 118				120 - 150				160 - 200			
Nest Size 4		118 - 140											

Contact sales@arobotech.com for free assistance

- Model selection
- Process review
- Special models
- 3D Models
- Accessories
- Machine integration
- Modifications
- Special features
- Mounting Bases
- Spare Parts



Nest Set			1	2	3	4	5
Minimum Clamp Diameter	D1	mm	42	50	58	66	74
Maximum Clamp Diameter	D2	mm	50	58	66	74	82

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	11.4
Cylinder Stroke	mm	108
Operating Pressure	bar	7 – 17
Maximum Pressure	bar	20
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.10 – 0.15
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	29



Included Features:

- * Arm Retraction For Part Loading
- * Extended Reach for C'Wt Clearance
- * Fixed or Follow Down Operation
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws

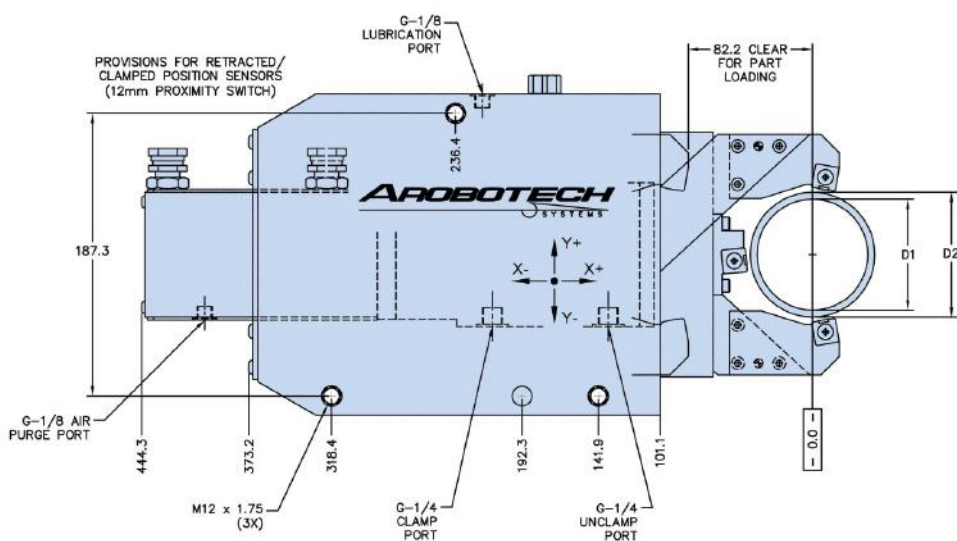
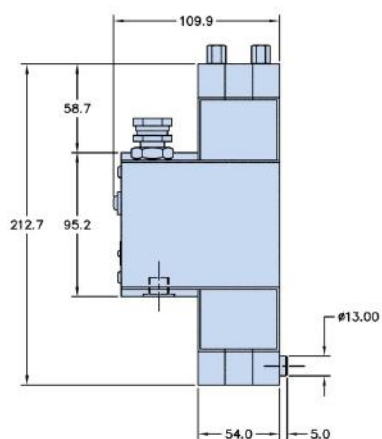
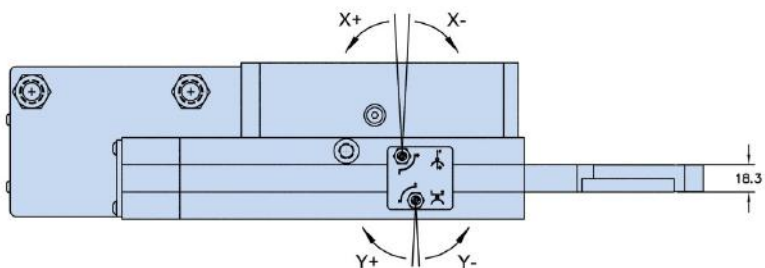
Items Required To Use This Product:

- * Set(s) of Nests
- * Set of Wear Pads
- * Mounting Base

GR-1000V-C

Grinding AUTO REST®

**** Model GR-1000V-C can be ordered with LH or RH Side Mount Cylinder**



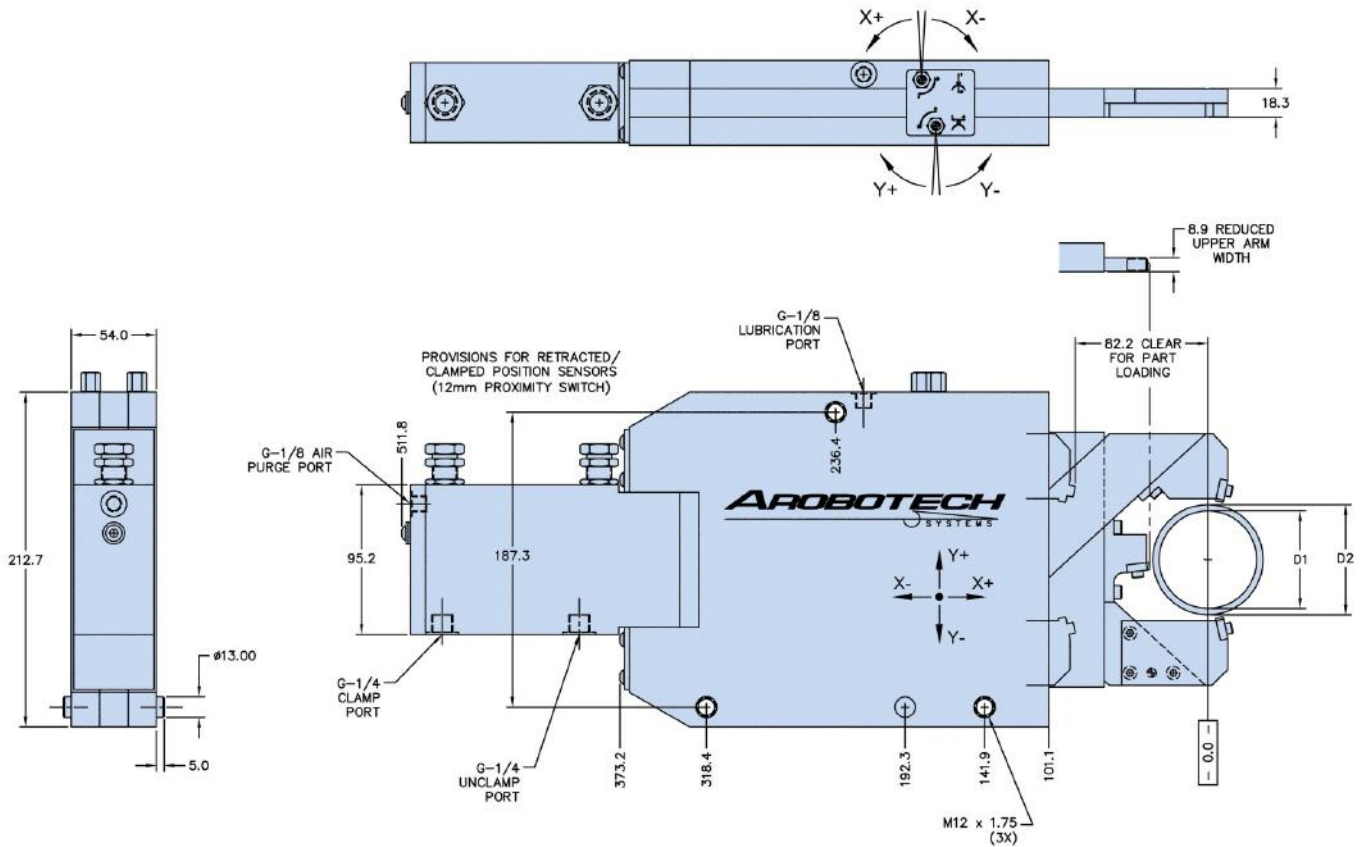
Nest Set			1	2	3	4	5
Minimum Clamp Diameter	D1	mm	42	50	58	66	74
Maximum Clamp Diameter	D2	mm	50	58	66	74	82

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	11.4
Cylinder Stroke	mm	108
Operating Pressure	bar	7 – 17
Maximum Pressure	bar	20
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.10 – 0.15
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	29



- Included Features:**
- * Arm Retraction For Part Loading
 - * Extended Reach for C'Wt Clearance
 - * Fixed or Follow Down Operation
 - * 2-Axis Centerline Adjustment
 - * Position Feedback Sensors
 - * Visible Zero Adjustment Screws
 - * Side Mount Cylinder

- Items Required To Use This Product:**
- * Set(s) of Nests
 - * Set of Wear Pads
 - * Mounting Base



Nest Set			1	2	3	4	5
Minimum Clamp Diameter	D1	mm	42	50	58	66	74
Maximum Clamp Diameter	D2	mm	50	58	66	74	82

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	11.4
Cylinder Stroke	mm	108
Operating Pressure	bar	7 – 17
Maximum Pressure	bar	20
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.10 – 0.15
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	29



Included Features:

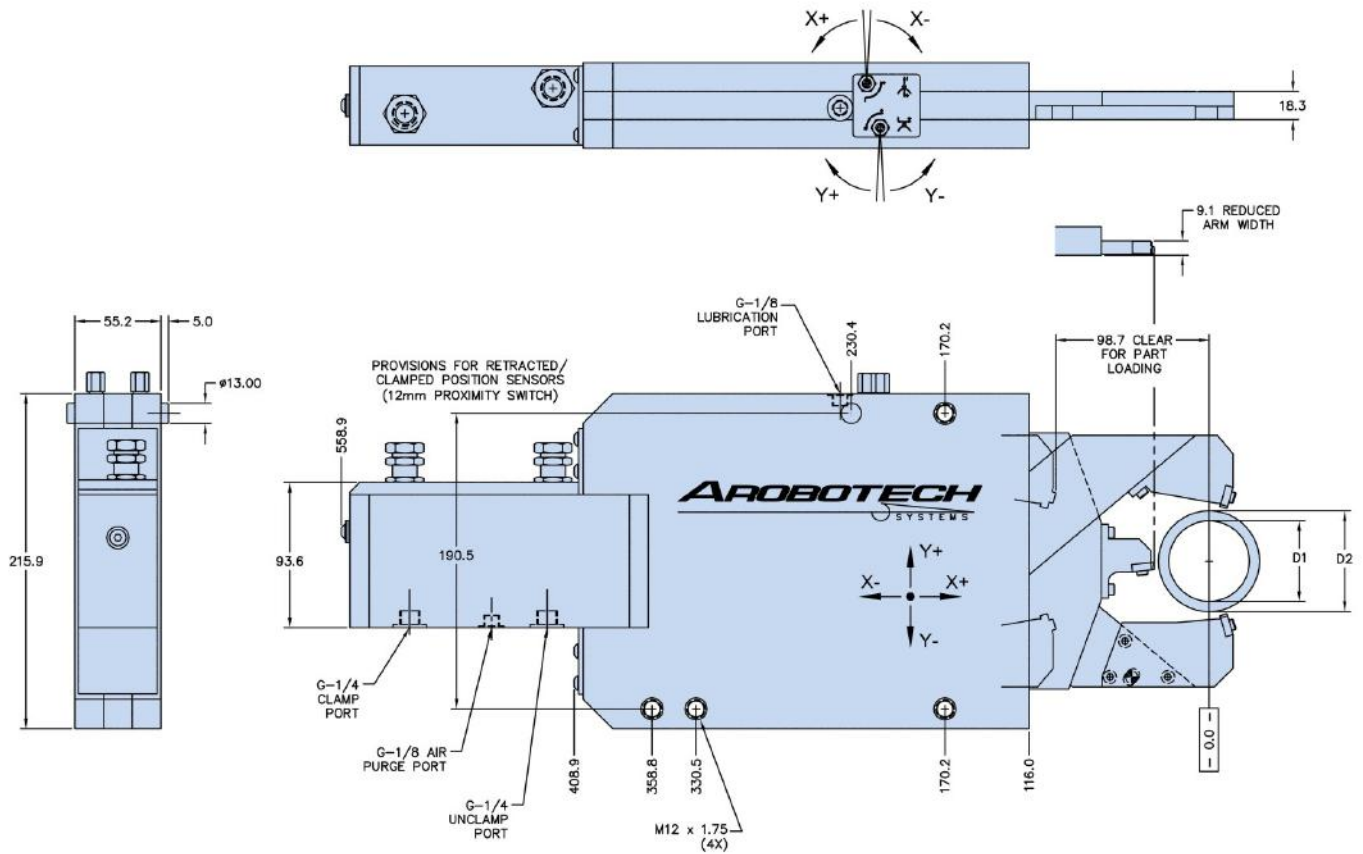
- * Arm Retraction For Part Loading
- * Extended Reach for C'Wt Clearance
- * Fixed or Follow Down Operation
- * Upper Arm Gage Clearance
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws
- * Side Mount Cylinder

Items Required To Use This Product:

- * Set(s) of Nests
- * Set of Wear Pads
- * Mounting Base

GC13689A

Grinding AUTO REST®



Nest Set			1	2	3	4
Minimum Clamp Diameter	D1	mm	38	51	64	77
Maximum Clamp Diameter	D2	mm	51	64	77	90

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	11.4
Cylinder Stroke	mm	127
Operating Pressure	bar	10 – 21
Maximum Pressure	bar	24
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.10 – 0.15
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	32



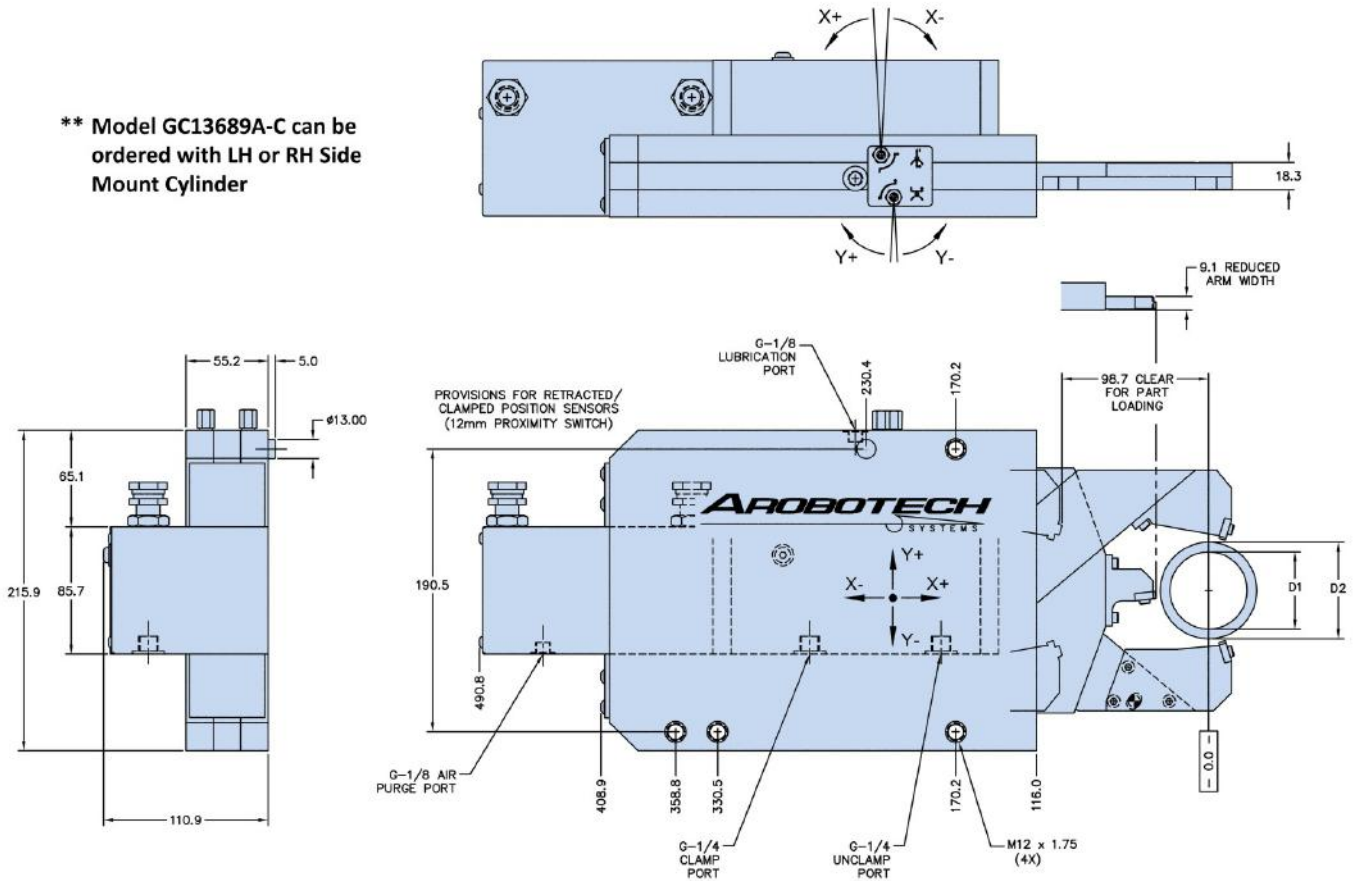
Included Features:

- * Arm Retraction For Part Loading
- * Extended Reach for C'Wt Clearance
- * Fixed or Follow Down Operation
- * Upper Arm Gage Clearance
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws

Items Required To Use This Product:

- * Set(s) of Nests
- * Set of Wear Pads
- * Mounting Base

**** Model GC13689A-C can be ordered with LH or RH Side Mount Cylinder**



Nest Set			1	2	3	4
Minimum Clamp Diameter	D1	mm	38	51	64	77
Maximum Clamp Diameter	D2	mm	51	64	77	90

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	11.4
Cylinder Stroke	mm	127
Operating Pressure	bar	10 – 21
Maximum Pressure	bar	24
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.10 – 0.15
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	32



Included Features:

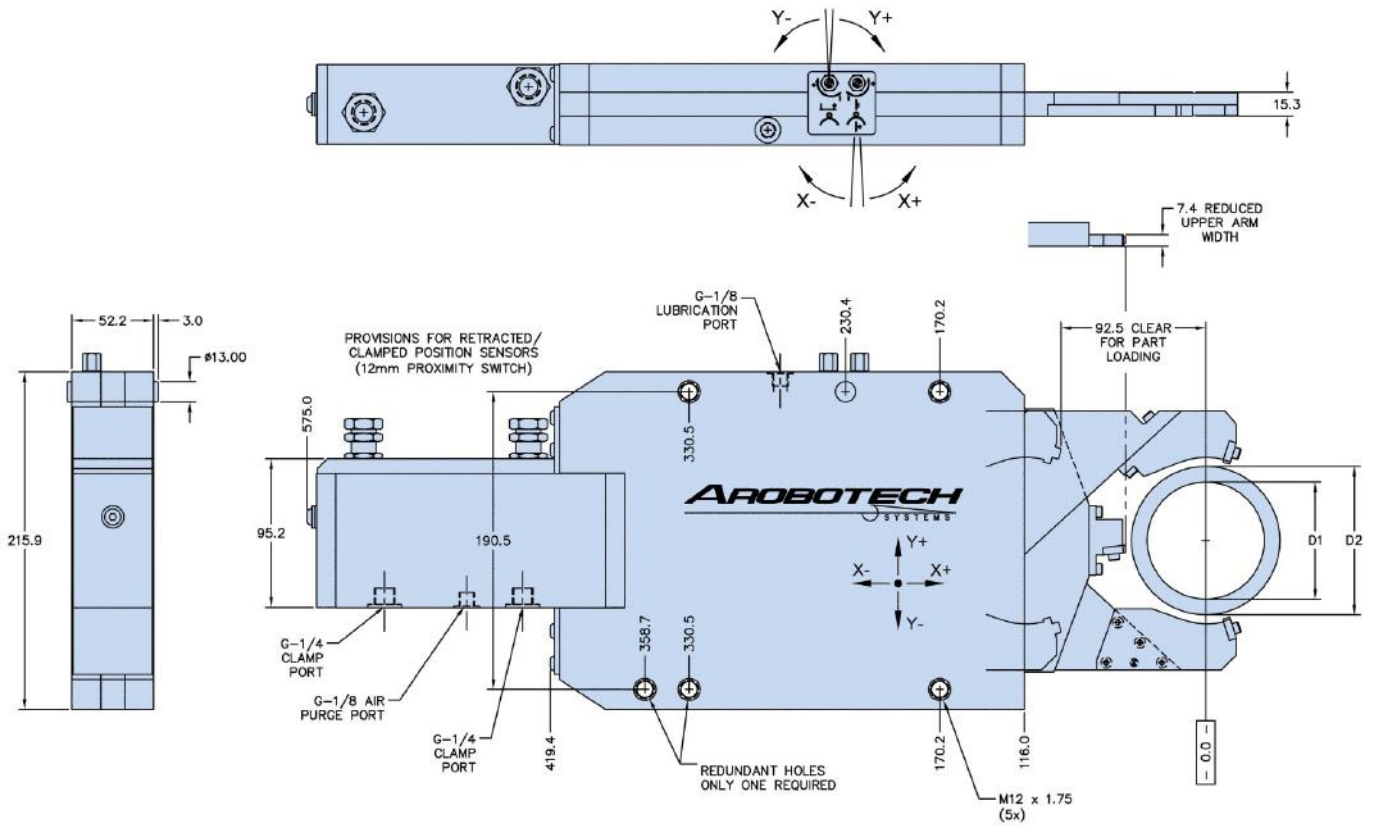
- * Arm Retraction For Part Loading
- * Extended Reach for C'Wt Clearance
- * Fixed or Follow Down Operation
- * Upper Arm Gage Clearance
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws
- * Side Mount Cylinder

Items Required To Use This Product:

- * Set(s) of Nests
- * Set of Wear Pads
- * Mounting Base

GR-1150V-SDG

Grinding AUTO REST®



Nest Set			1	2	3	4
Minimum Clamp Diameter	D1	mm	15	35	55	75
Maximum Clamp Diameter	D2	mm	35	55	75	95

X-Axis Adjustment Range	mm	±0.28
Y-Axis Adjustment Range	mm	±0.50
Piston Area	cm ²	11.4
Cylinder Stroke	mm	127
Operating Pressure	bar	10 – 21
Maximum Pressure	bar	24
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.10 – 0.15
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	32

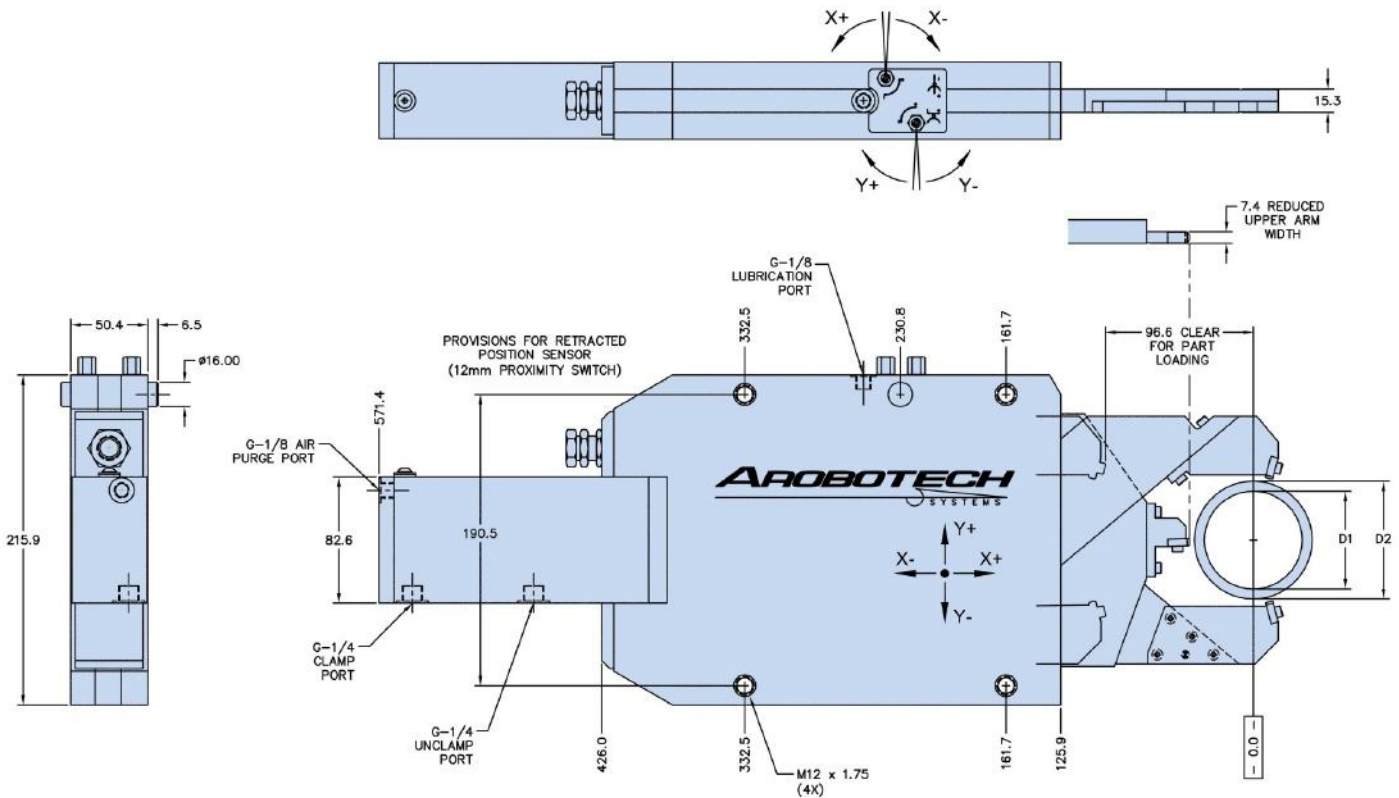


Included Features:

- * Arm Retraction For Part Loading
- * Extended Reach for C'Wt Clearance
- * Fixed or Follow Down Operation
- * Upper Arm Gage Clearance
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Extended Adjustment Range
- * Visible Zero Adjustment Screws

Items Required To Use This Product:

- * Set(s) of Nests
- * Set of Wear Pads
- * Mounting Base



Nest Set			1	2	3	4
Minimum Clamp Diameter	D1	mm	43	56	69	82
Maximum Clamp Diameter	D2	mm	56	69	82	95

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	11.4
Cylinder Stroke	mm	127
Operating Pressure	bar	10 – 25
Maximum Pressure	bar	35
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.15 – 0.20
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	24



Included Features:

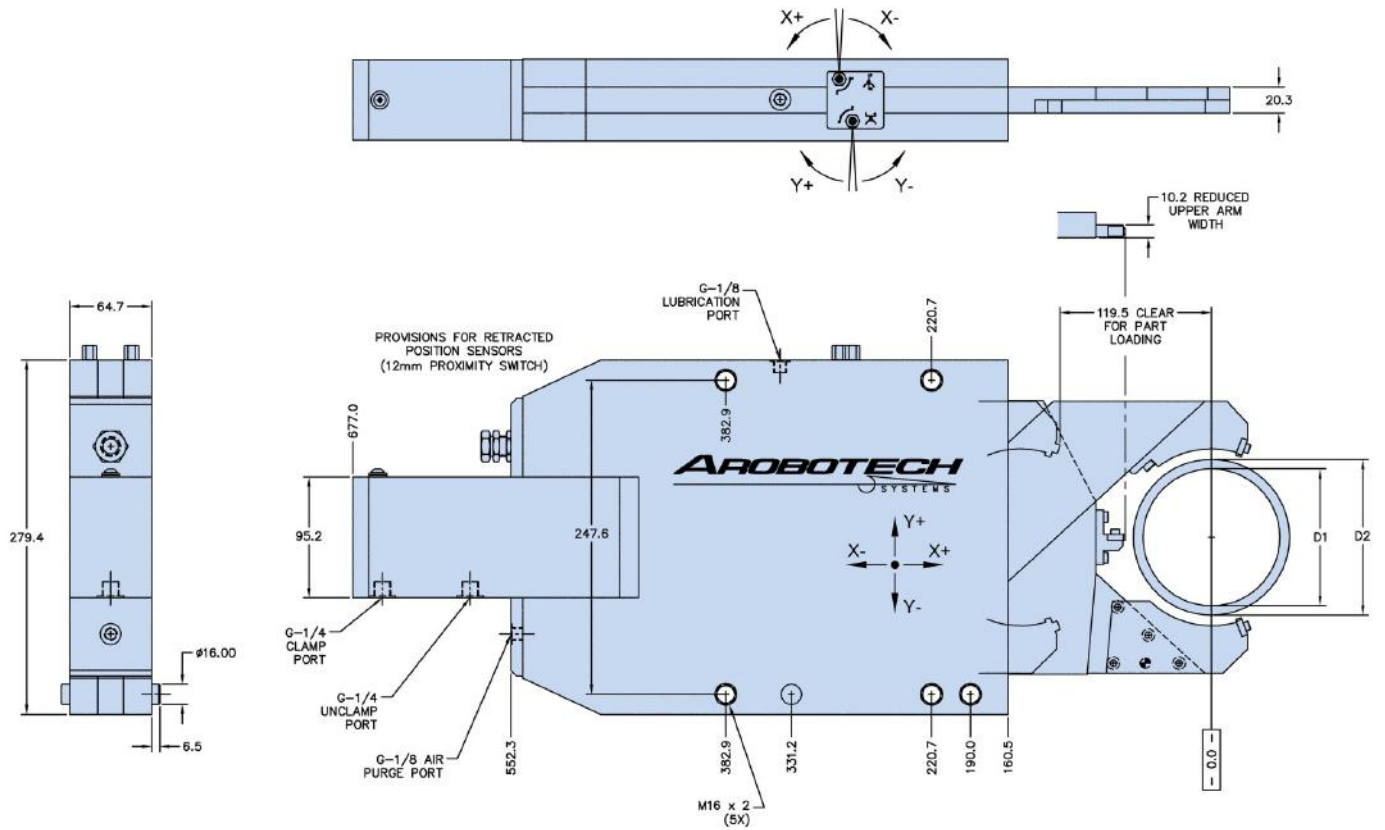
- * Arm Retraction For Part Loading
- * Extended Reach for C'Wt Clearance
- * Fixed or Follow Down Operation
- * Upper Arm Gage Clearance
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws

Items Required To Use This Product:

- * Set(s) of Nests
- * Set of Wear Pads
- * Mounting Base

GC31275A

Grinding AUTO REST®



Nest Set			1	2	3	4	5
Minimum Clamp Diameter	D1	mm	75	85	95	105	115
Maximum Clamp Diameter	D2	mm	85	95	105	115	125

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	20.3
Cylinder Stroke	mm	162
Operating Pressure	bar	10 – 17
Maximum Pressure	bar	21
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.15 – 0.20
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	54



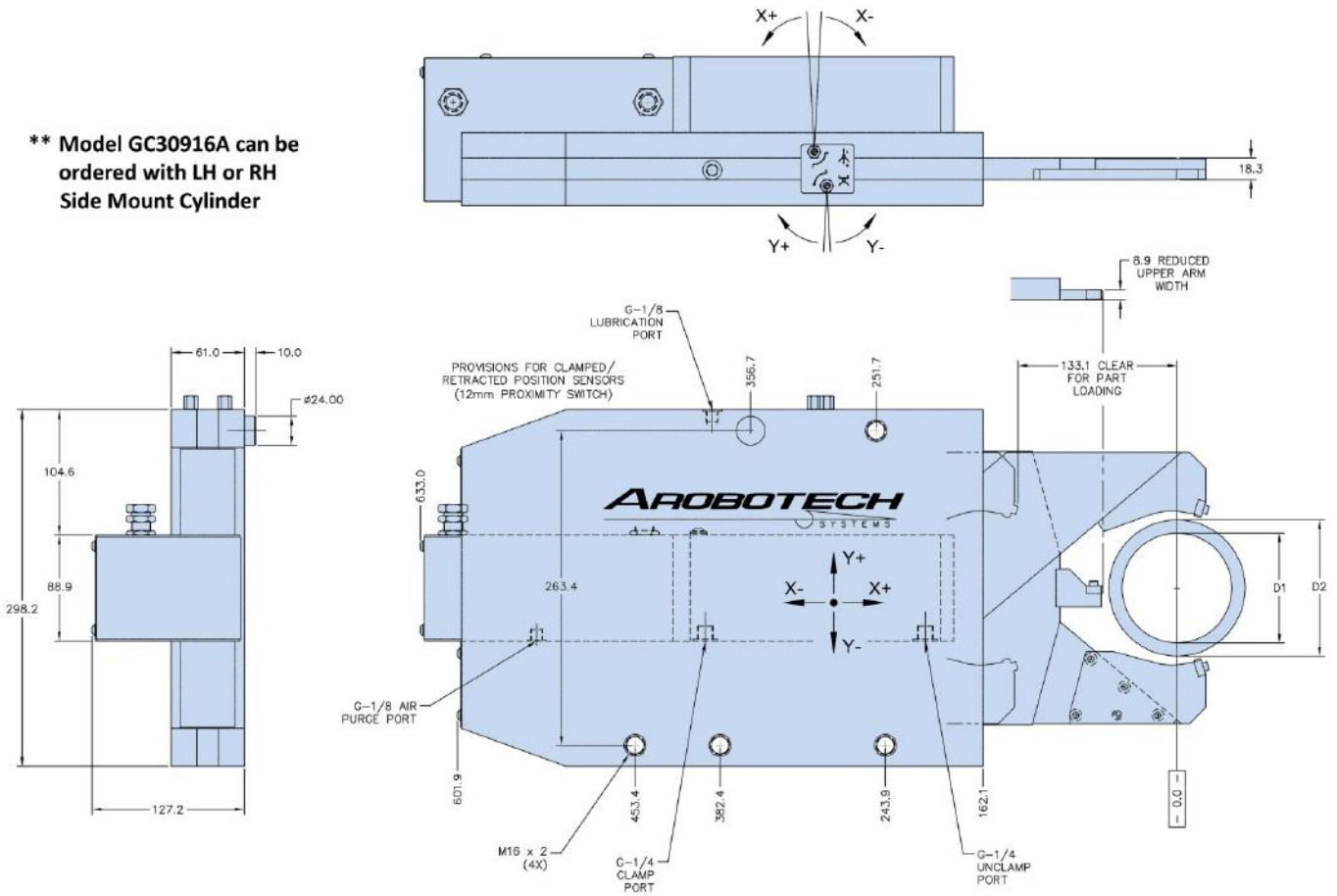
Included Features:

- * Arm Retraction For Part Loading
- * Extended Reach for C'Wt Clearance
- * Fixed or Follow Down Operation
- * Upper Arm Gage Clearance
- * 2-Axis Centerline Adjustment
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws

Items Required To Use This Product:

- * Set(s) of Nests
- * Set of Wear Pads
- * Mounting Base

** Model GC30916A can be ordered with LH or RH Side Mount Cylinder



Nest Set			1	2	3	4	5
Minimum Clamp Diameter	D1	mm	40	62	74	96	118
Maximum Clamp Diameter	D2	mm	62	74	96	118	140

X-Axis Adjustment Range	mm	±0.22
Y-Axis Adjustment Range	mm	±0.07
Piston Area	cm ²	17.4
Cylinder Stroke	mm	178
Operating Pressure	bar	10 – 21
Maximum Pressure	bar	27
Air Purge Pressure	bar	0.3 – 0.5
Lubrication Volume	cm ³	0.25 – 0.35
Lubrication Frequency		Working Cycle (or every 6 minutes)
Repeatability	mm	±0.001
Mass	kg	61



Included Features:

- * Arm Retraction For Part Loading
- * Extended Reach for C'Wt Clearance
- * Fixed or Follow Down Operation
- * 2-Axis Centerline Adjustment
- * Upper Arm Gage Clearance
- * Position Feedback Sensors
- * Visible Zero Adjustment Screws
- * Side Mount Cylinder

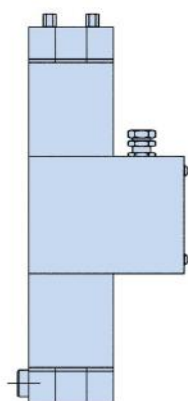
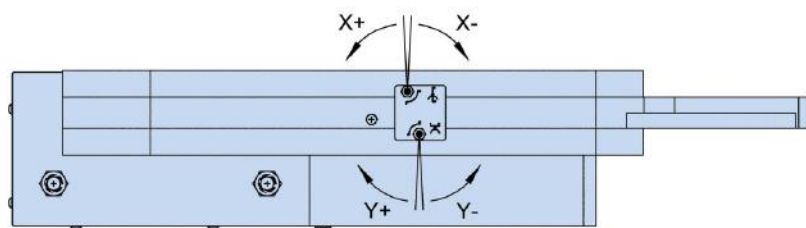
Items Required To Use This Product:

- * Set(s) of Nests
- * Set of Wear Pads
- * Mounting Base

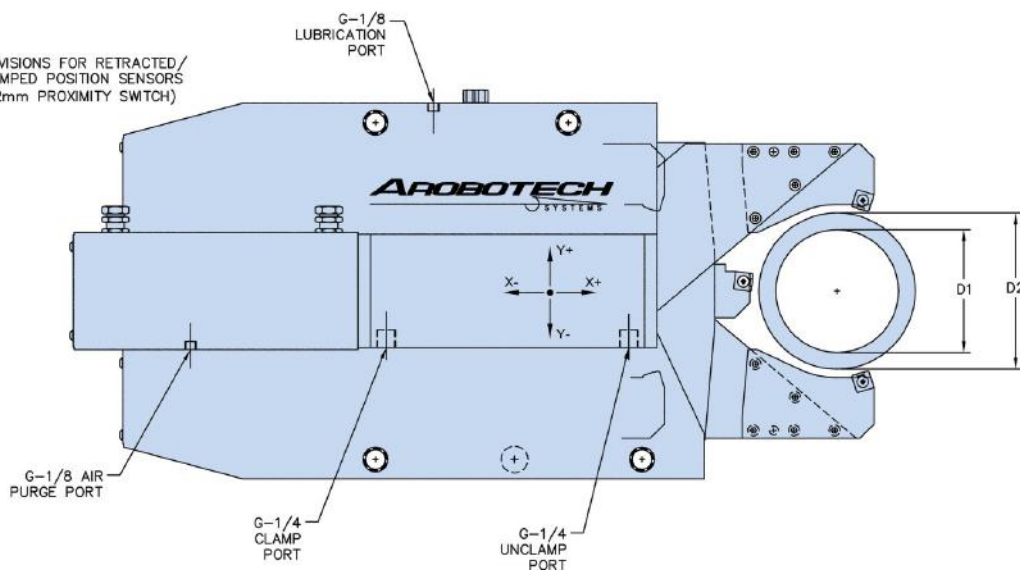
Large Crankshaft

Grinding AUTO REST®

Contact sales@arobotech.com for full dimensional information of these models



PROVISIONS FOR RETRACTED/
CLAMPED POSITION SENSORS
(12mm PROXIMITY SWITCH)

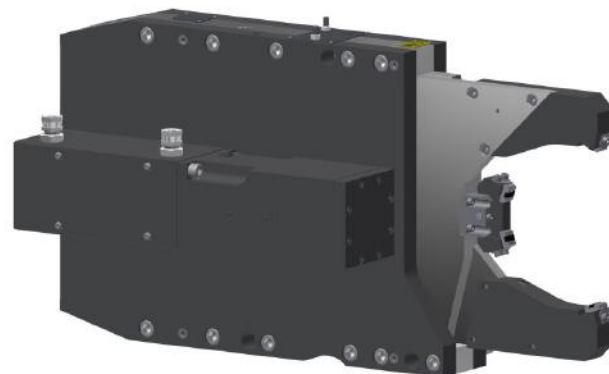


Model GC29036A

Pad Set			1	2	3
Minimum Clamp Diameter	D1	mm	60	90	120
Maximum Clamp Diameter	D2	mm	90	120	150

Model GC33679A

Pad Set			1	2	3
Minimum Clamp Diameter	D1	mm	80	120	160
Maximum Clamp Diameter	D2	mm	120	160	200



Contact sales@arobotech.com for full dimensional information of these models

- Included Features:
- * Arm Retraction For Part Loading
 - * Extended Reach for C'Wt Clearance
 - * Extended Clamping Range
 - * Fixed or Follow Down Operation
 - * Upper Arm Gage Clearance
 - * 2-Axis Centerline Adjustment
 - * Extended Adjustment Range
 - * Visible Zero Adjustment Screws

- Items Required To Use This Product:
- * Set(s) of Nests
 - * Set of Wear Pads
 - * Mounting Base



Warning! Grinding AUTO REST®s are hydraulically operated. Care must be taken at all times to avoid injury or damage to equipment

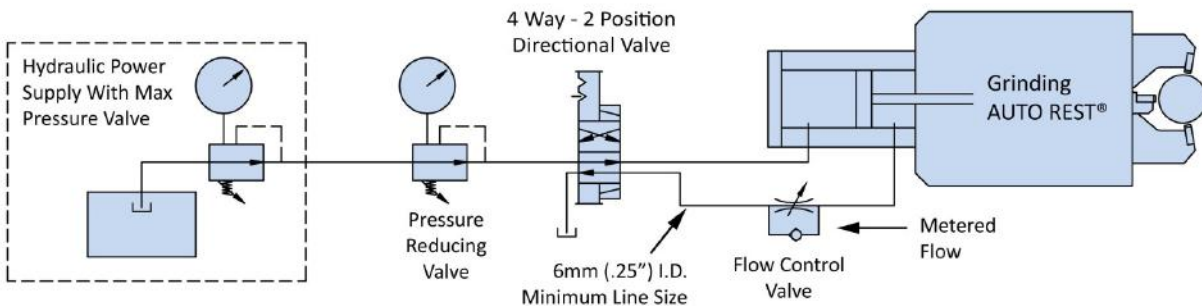


Under no circumstances will this document take precedent over the machine builder operating and safety guidelines

Hydraulic

Grinding AUTO REST® uses a single hydraulic cylinder to extend and clamp on the part. The same cylinder is then used to open and retract the arms. The basic hydraulic recommendation:

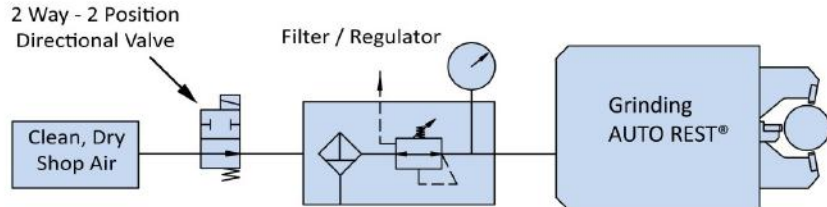
- Recommended Hydraulic Power Supply = 3GPM (11 LPM) @ 500 psi (34 bar) minimum. See operator's manual for specific model recommended operating pressure.
- 4 way – 2 position solenoid valve with a pressure reducing valve for each Grinding AUTO REST®.
- Flow control valve for each Grinding AUTO REST® - 1 second recommended clamping time.
- .25 (6mm) minimum hydraulic line size.



Air Purge

Grinding AUTO REST® uses Air Purge port to pressurize inside the body for maximum service life

0.3 to 0.5 bar Recommended pressure



Electrical

Machine control interface

Interface to machine control must be supplied by the machine builder. Arobotech Systems does not supply a machine control interface.

Position sensors

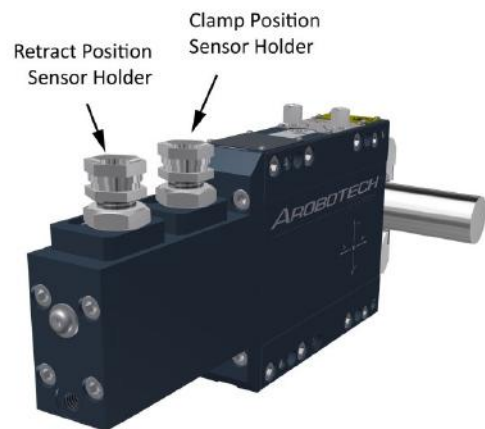
Each Grinding AUTO REST® has integrated sensor mounting for barrel type proximity sensor. Sensors are used to alert the machine control of the steady rest position. Please note that it is the responsibility of the customer to supply proximity sensors. See operator's manual for specific model sensor size.

Machine door

Prepare the machine so that the Grinding AUTO REST® can be operated in manual mode with the door open. Always follow valid safety regulations.

Lubrication

Machine must be capable of delivering lubrication oil to each Grinding AUTO REST® every 6 minutes or each working cycle (whichever is more frequent). See operator's manual for specific model volume recommendations.

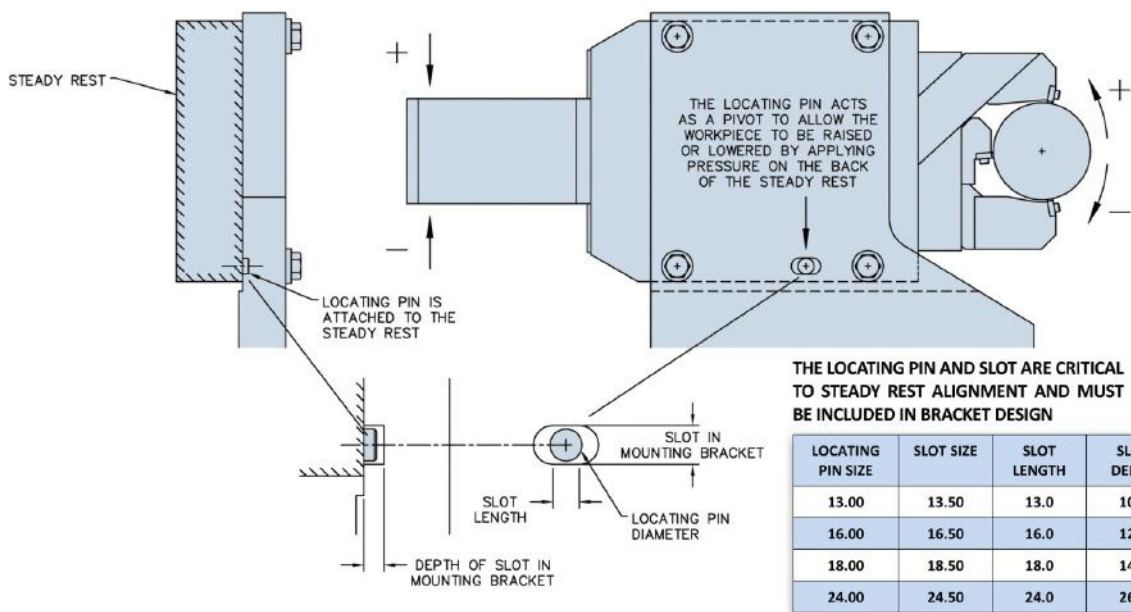
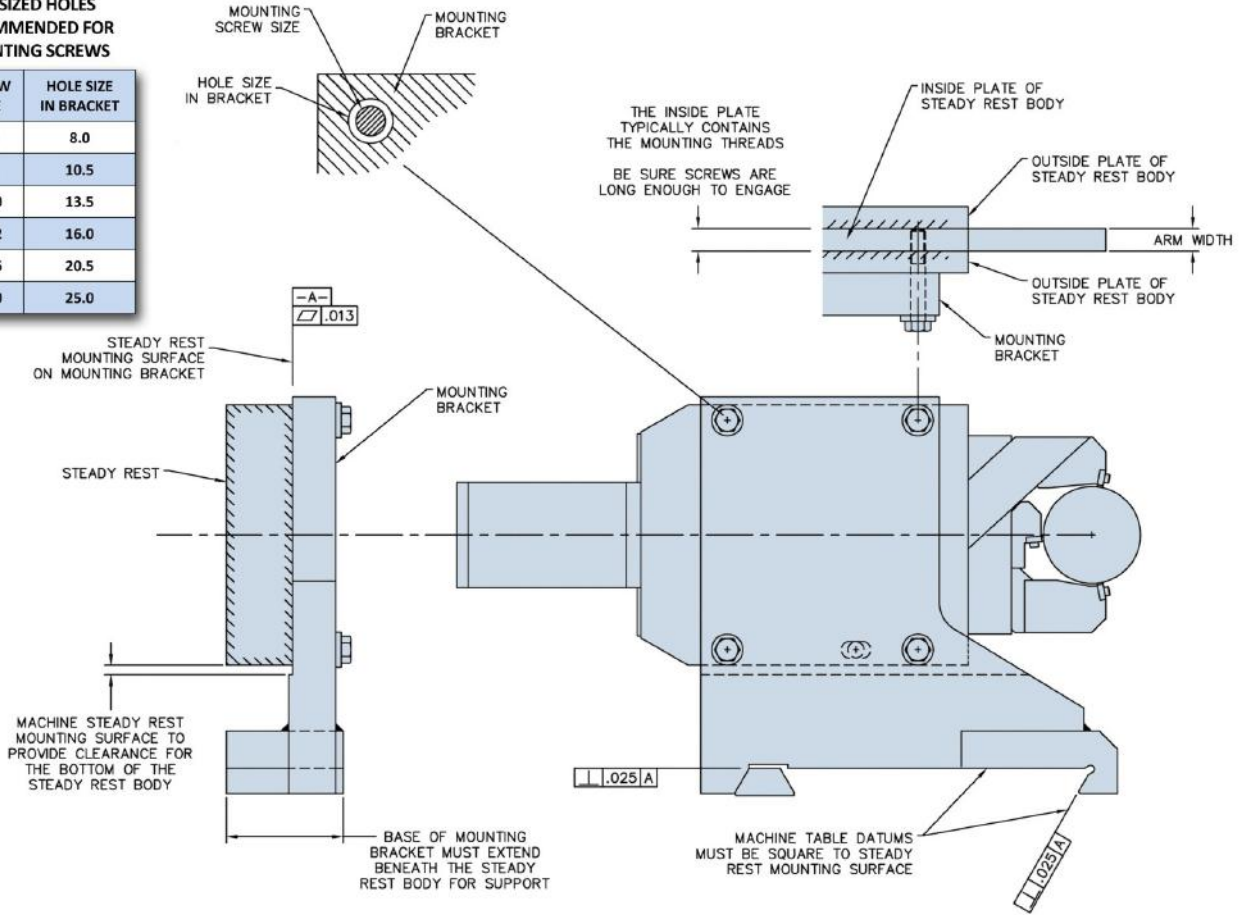


MOUNTING

Grinding AUTO REST®

OVER-SIZED HOLES RECOMMENDED FOR MOUNTING SCREWS

SCREW SIZE	HOLE SIZE IN BRACKET
M6	8.0
M8	10.5
M10	13.5
M12	16.0
M16	20.5
M20	25.0

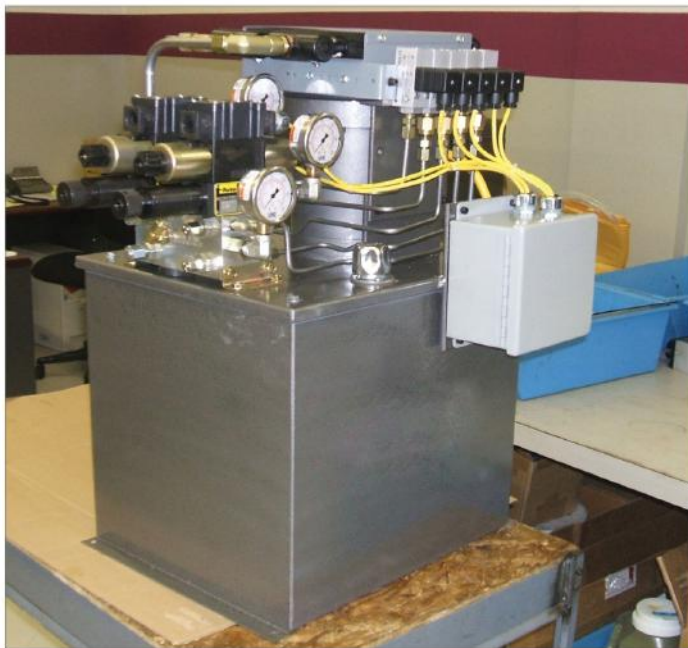
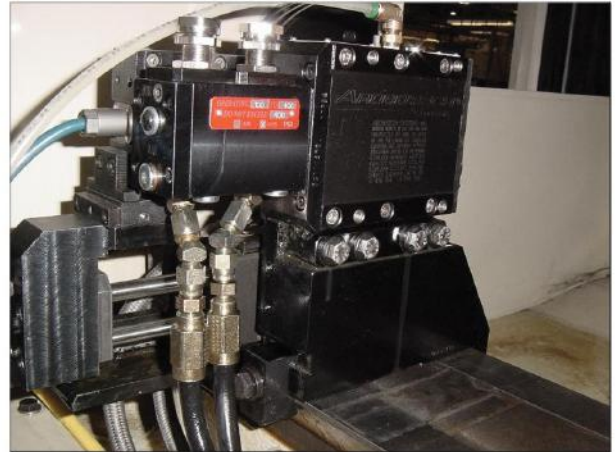


THE LOCATING PIN AND SLOT ARE CRITICAL TO STEADY REST ALIGNMENT AND MUST BE INCLUDED IN BRACKET DESIGN

LOCATING PIN SIZE	SLOT SIZE	SLOT LENGTH	SLOT DEPTH
13.00	13.50	13.0	10.0
16.00	16.50	16.0	12.0
18.00	18.50	18.0	14.0
24.00	24.50	24.0	26.0

Arobotech offers a full compliment of accessories for use with our Grinding AUTO REST® products

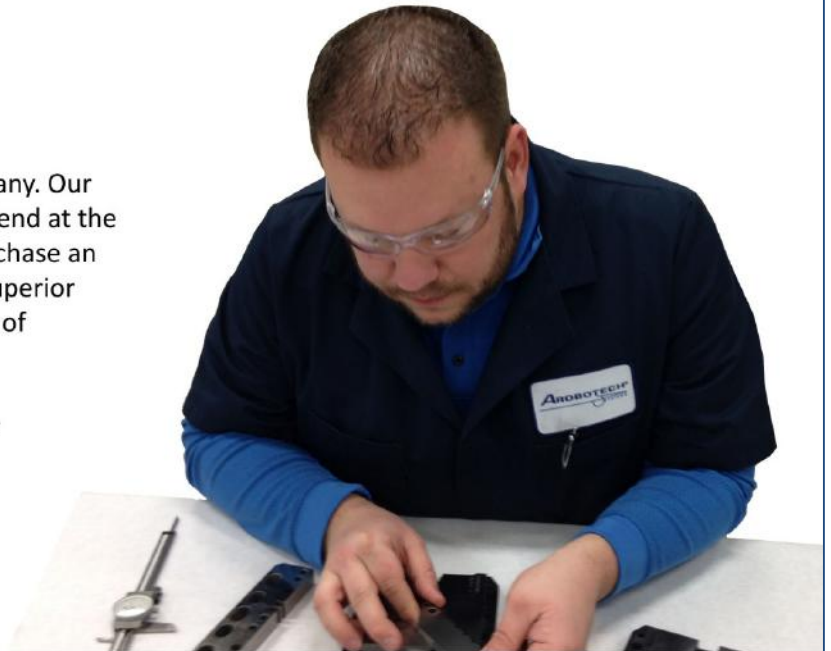
- Mounting Bracket
- Hydraulic Power Supply
- Lubricator
- Valve Package
- Pre-Position Vee Cradles
- Master Set Up Bar
- Alignment Gage
- Specialty Tooling



Our commitment

Arobotech Systems is a full service company. Our relationship with the customer does not end at the point of sale and delivery. When you purchase an Arobotech product you gain not only a superior workholding device, but also many years of experience with workholding solutions.

Arobotech offers full support of all of our products for their entire service life.



Available Services

Installation

Arobotech has experienced personnel to assist with Grinding AUTO REST® and accessories

Training

Our staff offers experienced on-site training for your engineering and production staff

Troubleshooting

We bring many years of experience to troubleshooting your Grinding AUTO REST® and grinding process. Contact service@arobotech.com for support. On site troubleshooting is available.

Repair and Reconditioning

See page 33

service@arobotech.com

Repair and Reconditioning Service

Arobotech offers complete repair and reconditioning service. Damaged or worn units can be returned for a free-of-charge performance / condition evaluation.

Old Unit



Repaired / Reconditioned Unit



Return for Evaluation

Authorized products may be returned to Arobotech for free-of-charge performance / condition evaluation with the following conditions:

- Label "Return for Evaluation"
- Include a description of the symptom or failure that prompted the return
- Include contact information
- Packaging should be sufficient to prevent damage during transit
- Customer is responsible for all shipping charges

Ship subject unit(s) to:
Arobotech Systems
1524 E. Avis Drive
Madison Heights, MI 48071
USA

Shipments from outside the United States also must have noted on all paperwork: **"These goods were manufactured in the United States and are being returned for repair"**

Shipping terms must be DDP

Contact us with any questions:
+001 248-588-9080
sales@arobotech.com

Notify us at sales@arobotech.com when shipment is made so we can track and prepare our evaluation team

Evaluation Report

Our team will perform a full evaluation and issue a report (including cost to repair / recondition). Please allow 2 weeks for the evaluation report after receipt at our facility.

Once the evaluation report is complete, we require one of the following actions within the 90 day evaluation period:

- Purchase order to begin repairs
- Return unit as is with no repair
- Scrap at our facility (written direction required)



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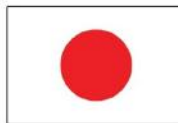
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WORLD LEADER IN STEADY REST TECHNOLOGY

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