

# Kitagawa UPR-A Series

Lightweight, Large Through-Hole Air Chucks



**UPR-A SERIES**



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Kitagawa Renowned  
Quality & Accuracy  
in a NEW Series of  
Large Through-Hole  
Self Contained,  
Air Chucks

## UPR-A SERIES KEY FEATURES

3/32"x90 degree master jaw serrations

Substantially smaller, lightweight body design

New Design allows faster cycle times and many cost saving benefits

Moments of inertia reduced for faster spindle acceleration and deceleration

Less weight on the spindle drive reduces wear and tear on lathe

Unique design non return valve requires no weekly maintenance

Pressure check chuck with valves in place

Correct clamping pressure for tubular workpieces

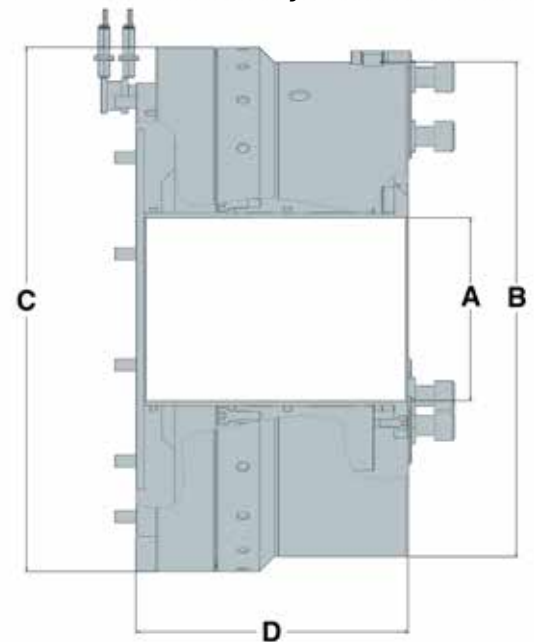
Reduced piston size and air volume, faster actuation

Lower energy consumption and operating costs

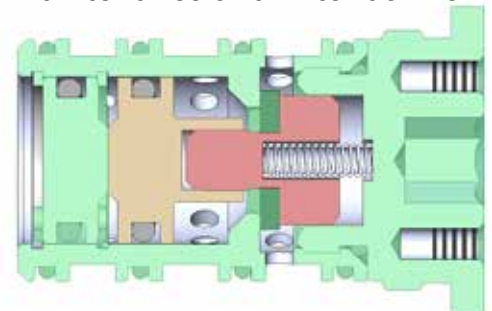
Direct replacement for ATS Style Air Chucks



UPR-A Chuck Body Side View A-D



Face Seal Design Reduces  
Maintenance and Extends Life



*Pressure test chuck and valves with valve in place. A non-wear face seal ensures no weekly maintenance and extended system longevity for improved ROI.*

# UPR-A SERIES TECHNICAL SPECIFICATIONS

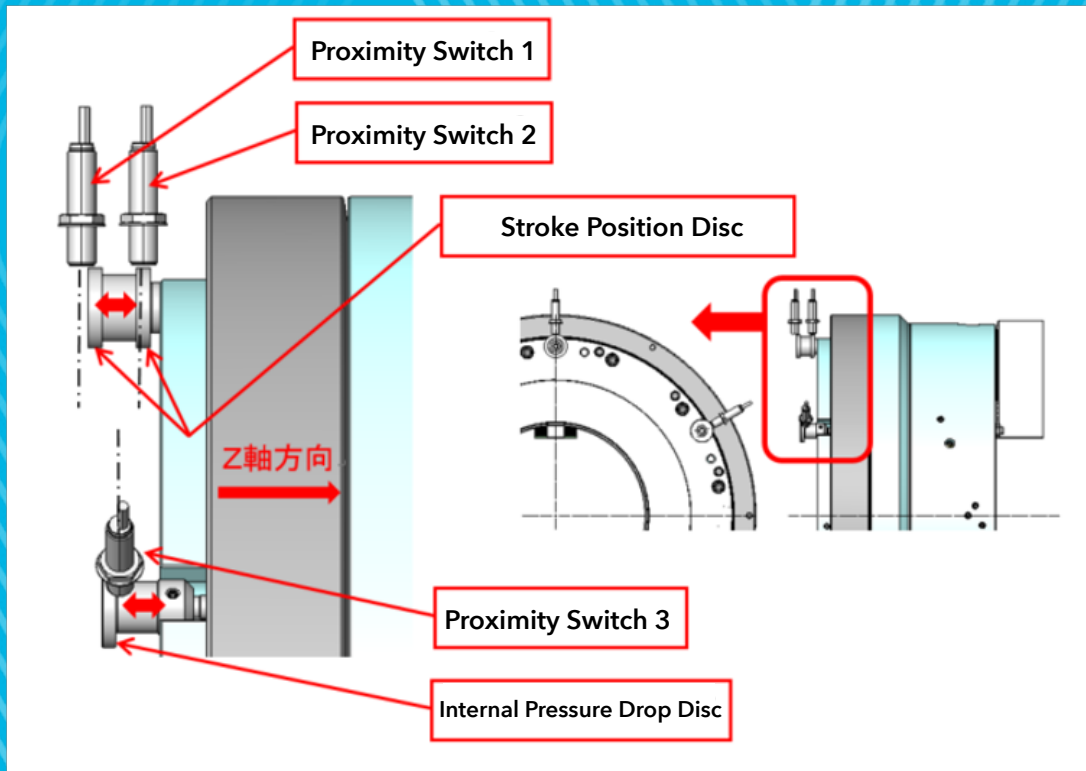
AIR CHUCK MODEL		UPR530A185	UPR600A275	UPR650A325	UPR710A375
<b>SPECIFICATIONS</b>					
STATIC GRIPPING FORCE (kN)		105	120	147	162
AIR PRESSURE (Mpa)		0.5	0.5	0.6	0.6
PISTON O.D. (mm)		355	485	535	595
PISTON STROKE (mm)		53.9	53.9	53.9	53.9
JAW STROKE (TOTAL DIAMETER)		50.8	50.8	50.8	50.8
ROTATION SPEED (RPM)		1300	1100	1000	750
MASS (kg)		301	378	468	518
<b>EXTERNAL AND INSTALLATION DIMENSIONS</b>					
THROUGH HOLE (mm/in)	<b>A</b>	185 (7.28")	275 (10.82")	325 (12.79")	375 (14.76")
O.D. (mm)	<b>B</b>	500	590	655	718
SUPPLY RING O.D. (mm)	<b>C</b>	530	615	685	735
BODY LENGTH (mm)	<b>D</b>	275	275	283	283
PILOT DIAMETER (mm)		365H7	415H7	510H7	560H7
P.C.D. MOUNTING BOLT P.C.D. (mm)		434	519	580	630
MOUNTING BOLT SIZE (mm)		12xM12	12xM12	12xM16	12xM16
SUPPLY RING MOUNTING P.C.D. (mm)		510	595	666	716
SCREW SIZE FOR SUPPORT		6xM8x20	6xM8x20	6xM8x20	6xM8x20
DETECTION OF JAW STROKE (mm)		432	508	580	620
DETECTION OF CHUCK DECOMPRESSION (mm)		432	508	580	620
<b>OTHER SPECIFICATIONS</b>					
DETECTION OF JAW STROKE		See Built-in Internal Pressure Drop and Stroke Detection Diagram			
DETECTION OF CHUCK DECOMPRESSION					
SERRATION		3/32"x 90°			
I.D. GRIPPING		X			
PLACE/PHASE OF AIR SUPPLY		Not Set			
LOCK VALVE/CHECK VALVE		Non-Wear	Non-Wear	Non-Wear	Non-Wear
NOTES					

\* Specifications subject to change without notice.



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## Equipped with Built-in Internal Pressure Drop and Stroke Detection



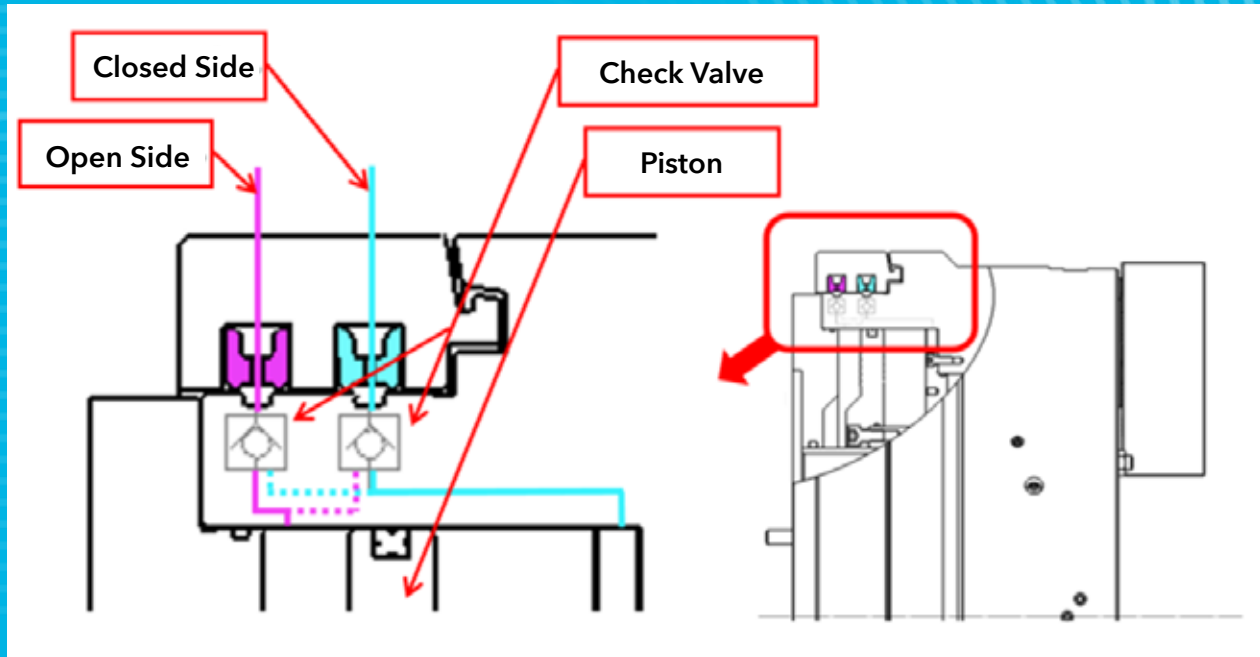
The stroke position detection disc and the internal pressure drop detection disc move in the Z-axis direction. They are arranged so that their trajectories do not overlap when the chuck rotates. Therefore, there is no risk of the internal pressure drop detection disc being falsely detected by proximity switches 1 and 2, nor of the stroke detection disc being falsely detected by proximity switch 3.

During chuck rotation, signals from proximity switches 1, 2, and 3 are detected once per revolution. By monitoring these signals and linking the changes in stroke position and internal pressure drop with the machine's program, it is possible to implement safety measures, such as stopping the machine when an abnormal condition occurs.



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## Optional Jaw Jogging Control Allows Pipe Shimming Without Fully Opening the Jaws



*Safely and easily jog the jaws open to facilitate shimming of out-of-round pipe in your application without fully opening or closing each actuation.*

Each of the "open-side" and "close-side" circuits that actuate the piston is equipped with an independent check valve. This allows for jog feed operation (requires a separate air control unit), where the jaws can be opened or closed with a short stroke and held in that position. With this feature, the workpiece can be reclamped without fully extending the jaws.



# Kitagawa UPR-A Large Through-Hole, Self Contained Air Chucks for Oil & Gas



➤ *Lighterweight Air Chucks for Pipe Threading Available in 4 New Models*

➤ *UPR530A185 with 185mm/7.28" Through-Hole*

➤ *UPR600A275 with 275mm/10.82" Through-Hole*

➤ *UPR650A325 with 325mm/12.79" Through-Hole*

➤ *UPR710A375 with 375mm/14.76" Through-Hole*

Visit <https://kitagawa-usa.com/oil-gas-chucks/> to learn more  
about our portfolio of Oil & Gas Workholding Solutions



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