



AKT Clamp Cylinder Welding/Internal Clamping Type



Features

- Suitable for positioning and internal clamping.
- High accuracy and repeatability for positioning applications.
- Built-in magnet, for sensor signal.
- Suitable for Automotive and other welding industry.


Specifications

Internal Clamping Specifications		226	450	613	673	783
Bore	mm	32			63	
Stroke	mm		10		15	20
Hole Clamping Range	mm	Ø20.5 ~ Ø24.0	Ø43.0 ~ Ø46.5	Ø58.3 ~ Ø62.3	Ø64.3 ~ Ø68.3	Ø72.0 ~ Ø79.5
Action		Double Acting				
Fluid		Air				
Operating Pressure Range	MPa (kgf/cm ²)	0.1 ~ 1.0 (1.5~ 10.2)				
Operating Temperature Range	°C	0 ~ 60				
Lubrication ^①		Not Required				
Cushion		No				
Repeatability		± 0.03				
Port	Rc	M5X0.8			1/4	

Note: ① Use only Turbine Oil ISO VG32 for lubricant, if required.



Order Code

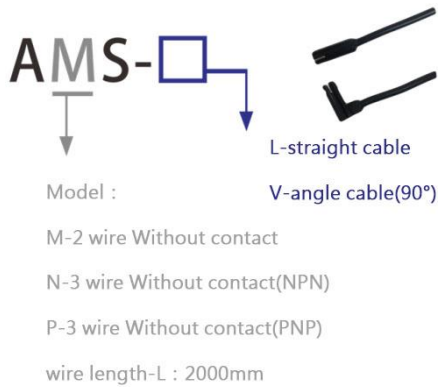
AKT	B	32	X	613
Series ^①	Mounting ^②	Bore mm		Hole Clamping Range mm ^③
	A Front	32	Ø32	226 Ø20.5 ~ Ø24.0
	B Side	63	Ø63	450 Ø43.0 ~ Ø46.5
				613 Ø58.3 ~ Ø62.3
				673 Ø64.3 ~ Ø68.3
				783 Ø72.0 ~ Ø79.5

Note: ① Auto Switch need to order separately, Refer to Auto Switch Table.

② Refer to Mounting table.

③ Refer to Selection and Configuration Table.

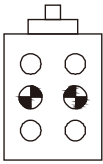
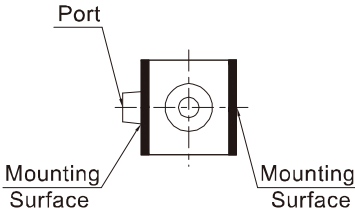
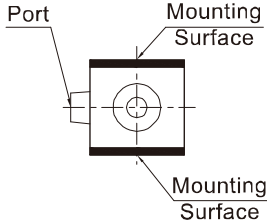
Magnetic Switch Model List



Selection and Configuration

Bore (mm)	Hole Clamping Range (mm)				
	226	450	613	673	783
32	●	—	—	—	—
63	—	●	●	●	●

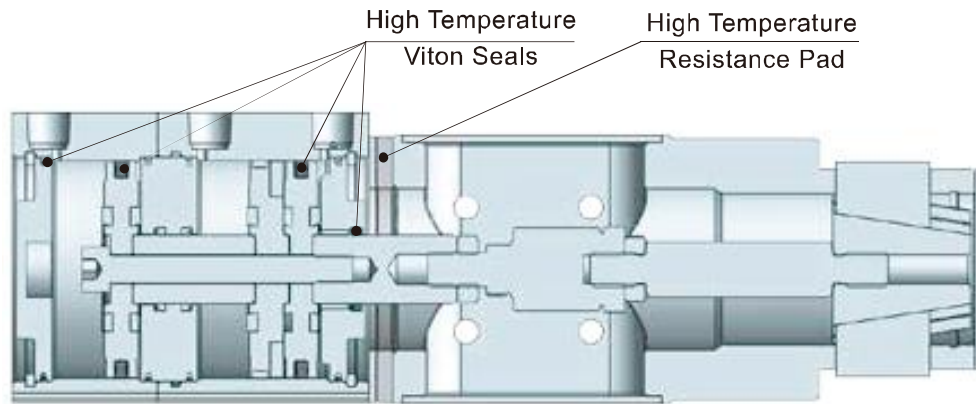
Mounting

Mounting Type	Front	Side
 <p>○ Mounting Holes ● Dowel Pin Holes</p>		



Internal Structure

High Temperature Viton seals and High Temperature Resistance pad design are suitable for welding industrial occasions.



Theoretical Output (N)

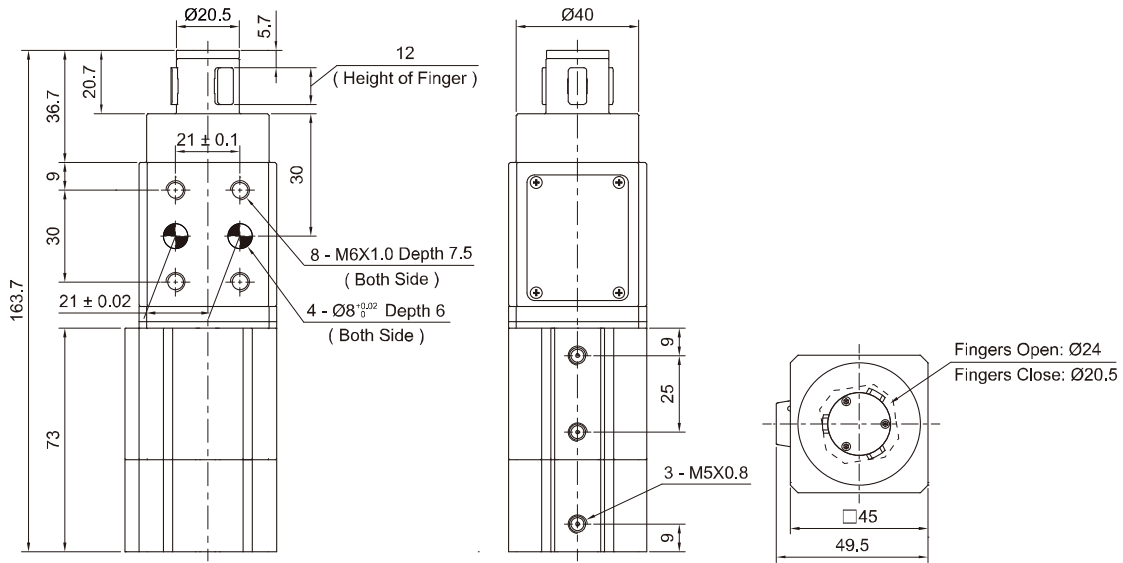
Model	Action	Operating Pressure Range (MPa)										
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	
AKT□32X226	Finger Open	160.6	321.6	482.4	643.0	804.0	964.6	1125.4	1286.2	1447.0	1607.6	
AKT□63X450		643.0	1286.2	1929.2	2612.0	3215.4	3858.4	4571.8	5225.0	5878.0	6531.2	
AKT□63X613												
AKT□63X673												
AKT□63X783												

Note: Above data the theoretical output value, the Energy Loss Value that caused by Friction is not consider, for reference only.

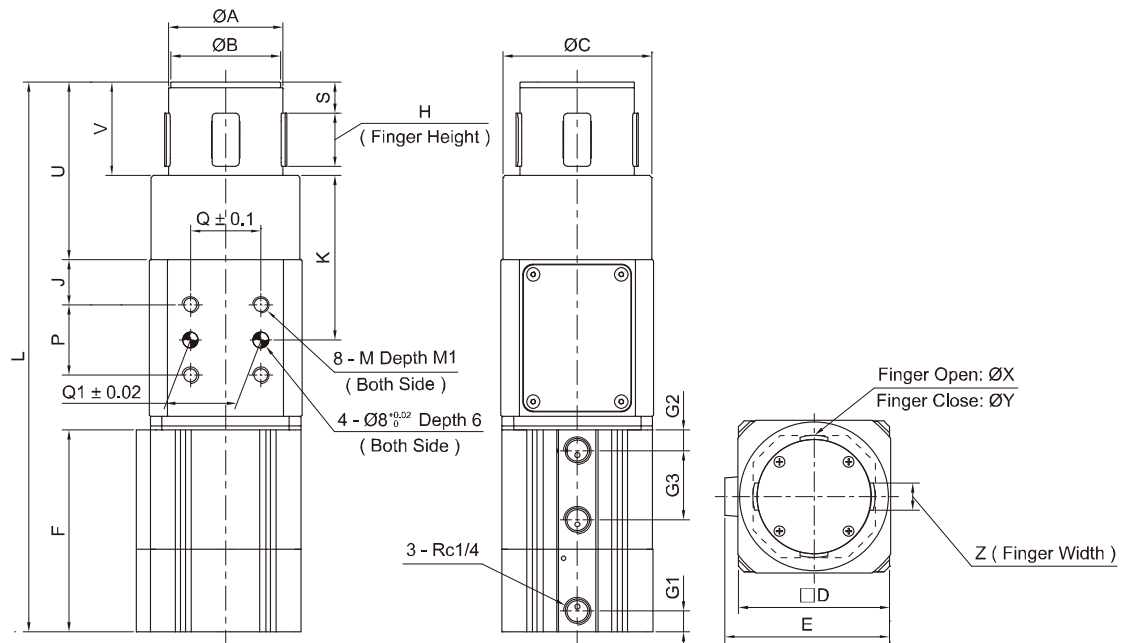


Ext. Dimensions (mm)

■ $\phi 32$



■ $\phi 63$

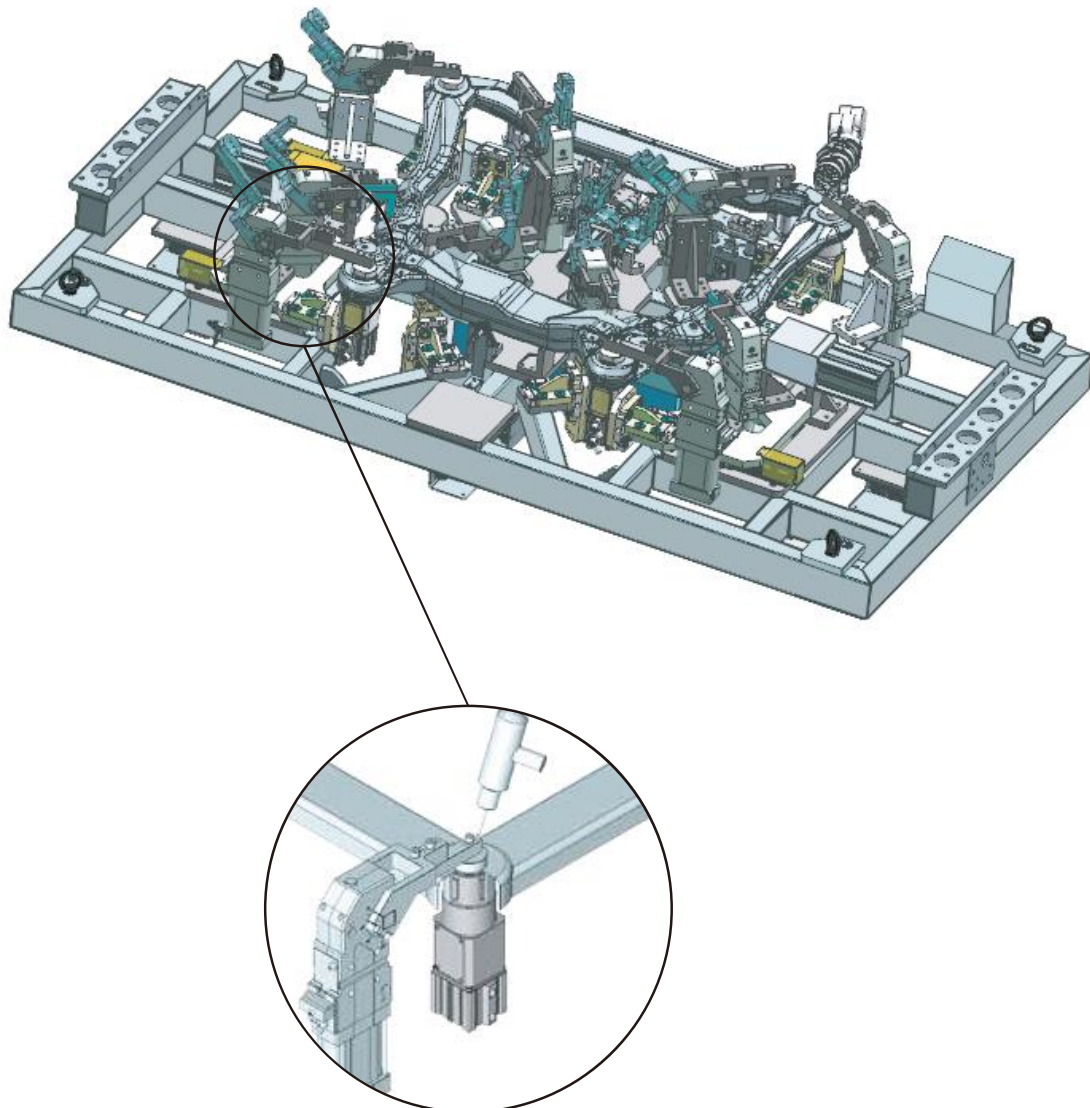


Hole Clamping Range	A	B	C	D	E	F	G1	G2	G3	H	J	K
450	43	42.8	60	77	84	93	10.5	10.5	30.5	20	9	44
613	58.3	58.2	76	77	84	103	10.5	10.5	35.5	27	23	84
673	64.3	64	—	77	84	103	10.5	10.5	35.5	27	31	49
783	72	71.5	—	77	84	113	10.5	10.5	40.5	33	37	55

Hole Clamping Range	L	M	M1	P	Q	Q1	S	U	V	X	Y	Z
450	203	M6X1.0	9.5	30	42	42	6.5	51	31	46.5	43	12
613	280.8	M8X1.25	16	36	36	36	16	90.8	47.8	62.3	58.3	14
673	241	M8X1.25	16	36	28	28	15	—	46	68.3	64.3	14
783	265	M8X1.25	16	36	40	36	8	—	46	79.5	72	14



Applications



After the workpiece is positioned, the power clamp will clamp the workpiece, for automatic welding robot to start the welding operation on the workpiece.