

Technical Catalog

Clamps *Series AKUT*



Clamp Cylinder-Tolerance Power Type AKUT Series

Features

1. A compact clamp based on the curve driven principle, providing a constant clamping force.
Material thickness compensation function, with a compensation range of $\pm 1.2^\circ$.
2. High-strength aluminum alloy housing with variety of optional installation surfaces.
3. Equipped with standard mounting hole clamp arm, compatible with AKUS series.
4. The opening angle can be steplessly adjusted from 15° to 135° .
5. Open the position pneumatic buffer.
6. Pneumatic locking of terminal position optional.



Standard Specifications

Bore	mm	40	40.5	50	63
Action		Double Acting Type			
Used Fluid		Compressed Air (Filtered Through A Filter $\leq 25 \mu\text{m}$)			
Operating Pressure Range	MPa (kgf/cm ²)	0.6 (6.1)			
Operating Temperature Range	°C	-10 ~ 60 (Non-freezing State)			
Lubrication ^①		Not Required			
Clamping Torque ^②	N ⋅ m	120	120	200	400
Maximum Holding Torque	N ⋅ m	380	380	800	1500
Minimum Use Frequency		1-Second Clamping Or 1-Second Opening			
Opening Angle		10°~135° (Steplessly Adjustable)		15°~135° (Steplessly Adjustable)	
Weight ^③	kg	2.0	2.2	4.1	5
Port	G	1/8		1/4	

Note: ① If lubrication is required, please use turbine No.1 oil ISO VG32; ② Refers to the clamping torque at 0.5MPa; ③ includes standard clamp arm weight (Z01).

Order Code

AKUT	V	50	—	Z01	W12
Series	Installation Method ^① of Clamp Arm	Bore mm	—	Clamp Arm Type ^②	Sensor ^③
	Blank Horizontal Installation V Vertical Installation	40 Ø40 40.5 Ø40 50 Ø50 63 Ø63	—	Z00 Without Clamp Arm R01 Right Side Type Z01 Intermediate Type L01 Left Side Type	W00 Without Sensor W12 M12 Inductive Sensor PNP W12N M12 Inductive Sensor NPN W12T Anti-strong Magnetic M12 Inductive Sensor PNP

Note: ① Refer to the definition of clamp arm installation method.

② For other types of clamp arm, refer to the clamp arm configuration table.

For the clamp arm dimensions, refer to AKUS/H/K accessory series;

③ Refer to AKUS/H/K accessory series for the sensors.

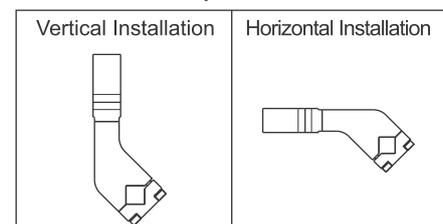
④ When the clamp arm of the cylinder with the diameter of 40 is installed vertically, the maximum opening angle is 105° .

When the clamp arm of the cylinder with the diameter of 40.5 is installed vertically, the maximum opening angle is 105° .

When the clamp arm of the cylinder with the diameter 50/63 is installed vertically, the maximum opening angle is 95° .

P	—	105
Pneumatic Self-locking	—	Opening Angle ^④
Blank Without Self-locking	—	10~135 40=Bore
P Pneumatic Self-locking in The Clamping State	—	10~135 40.5=Bore
PL Pneumatic Self-locking in The Clamping And Opening State	—	15~135 50/63=Bore

● Definition of Clamp Arm Installation Method



Order Example

A tolerance clamp cylinder- power type with the diameter: 50mm; tolerance horizontal installation, clamp arm: Z01, W12 sensor, self-locking in clamping open state, and an opening angle 135° .

Correct order code: AKUT50-Z01W12PL-135

Clamp Cylinder-Tolerance Power Type AKUT Series

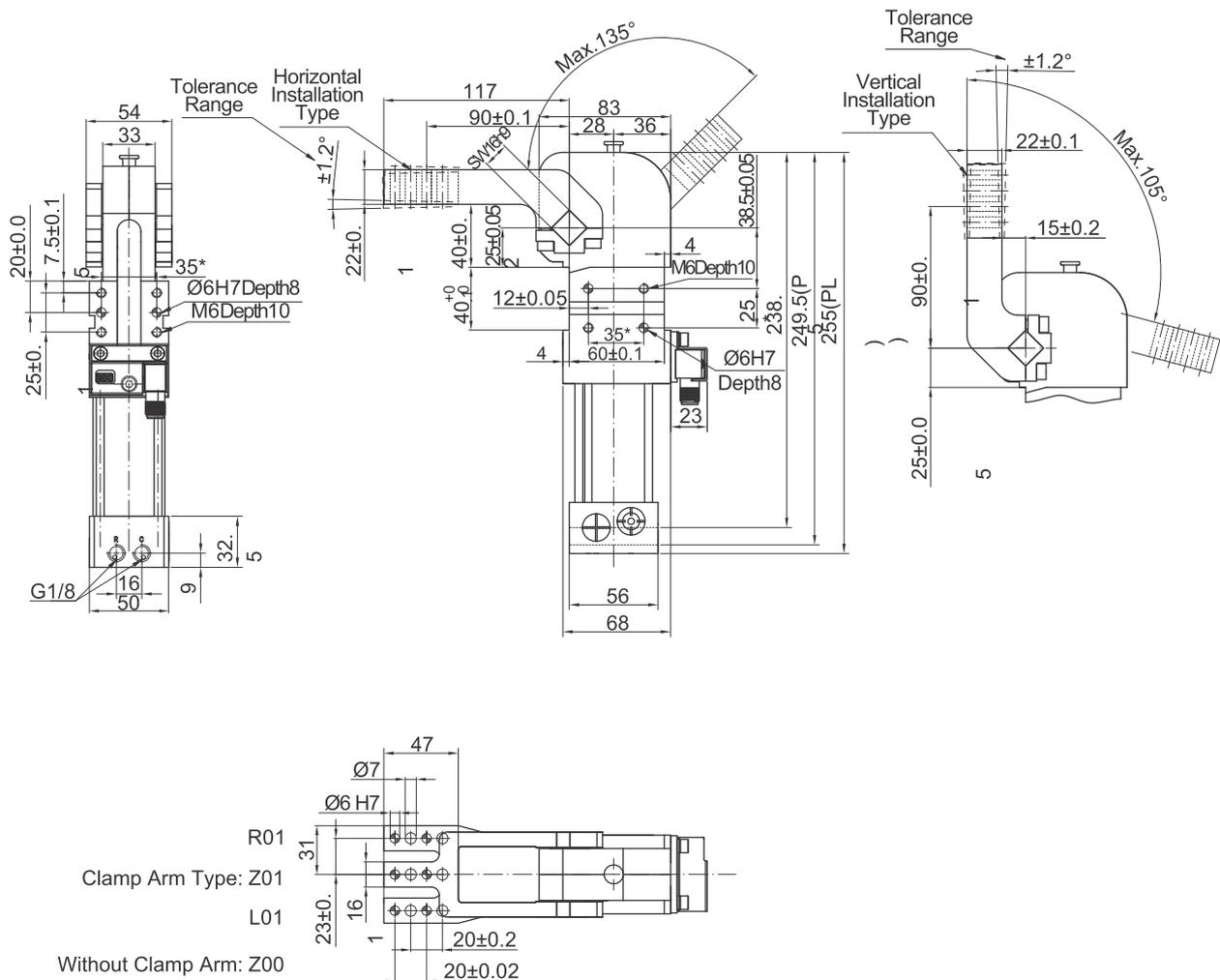
Clamp Arm Configuration Table

Bore (mm)	Standard Clamp Arm (Pin Hole Ø 6)			Clamp Arm Offset 45 (Pin Hole Ø 6)			Clamp Arm Offset 45 (Pin Hole Ø 8)			Standard Clamp Arm (Pin Hole Ø 8)			
	Right Side Type	Intermediate Type	Left Side Type	Right Side Type	Intermediate Type	Left Side Type	Right Side Type	Intermediate Type	Left Side Type	Right Side Type	Intermediate Type	Left Side Type	
40	R01	Z01	L01	R02	Z02	L02	R03	Z03	L03	R04	Z04	L04	
40.5				—	—	—	—	—	—	—	—	—	—
50				R02	Z02	L02	R03	Z03	L03	R04	Z04	L04	
63				—	—	—	—	—	—	—	—	—	—

Bore (mm)	Clamp Arm Offset 0 (Pin Hole Ø 6)			Clamp Arm Offset 0 (Pin Hole Ø 8)			Clamp Arm Offset 45 (Pin Hole Ø 6)		
	Right Side Type	Intermediate Type	Left Side Type	Right Side Type	Intermediate Type	Left Side Type	Right Side Type	Intermediate Type	Left Side Type
40	R05	Z05	L05	R06	Z06	L06	—	—	—
40.5	—	—	—	—	—	—	R60	Z60	L60
50	—	—	—	—	—	—	—	—	—
63	—	—	—	—	—	—	—	—	—

Ext. Dimensions [mm]

• AKUT40 Solenoid Sensor

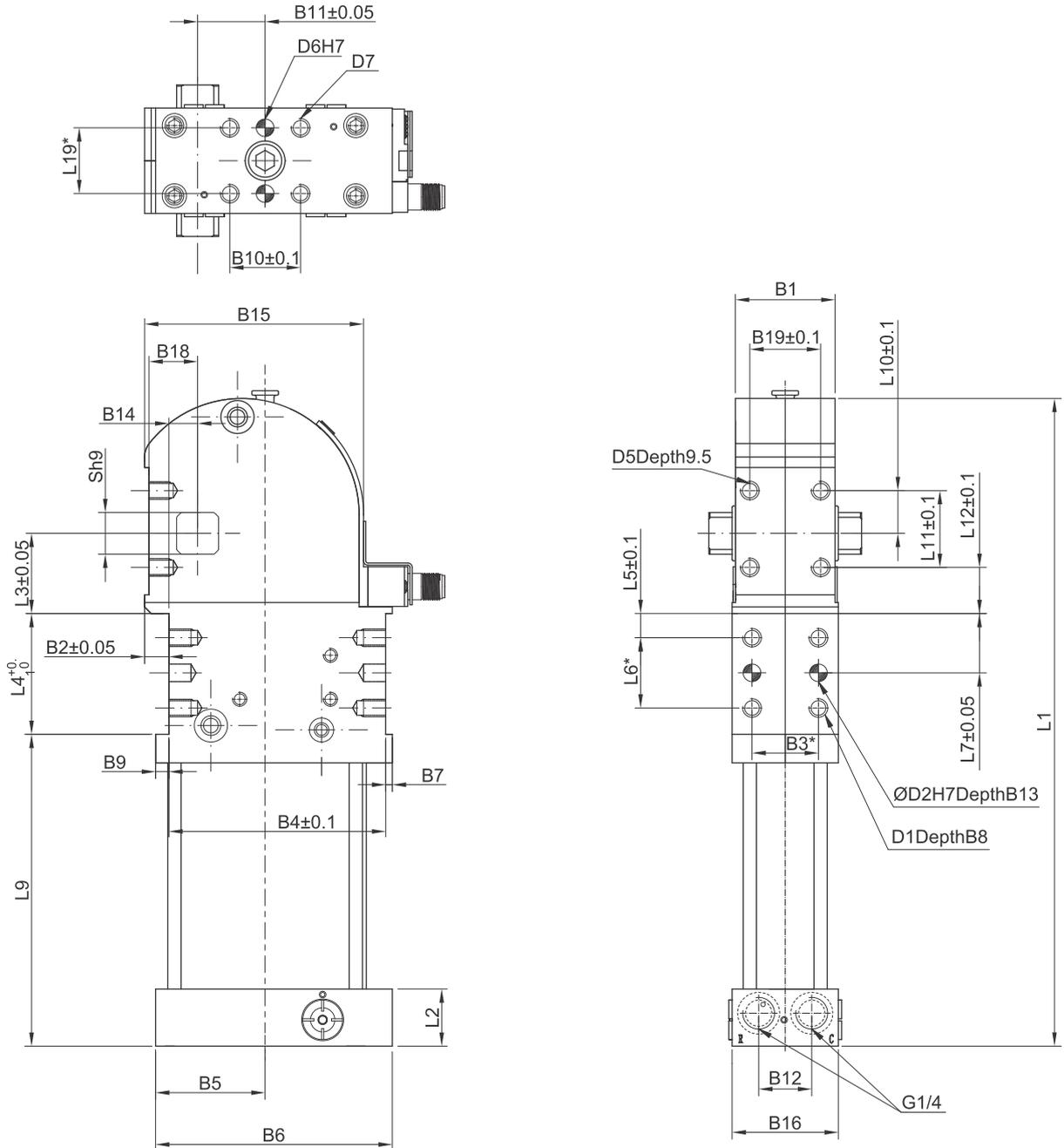


Note: *The tolerance of the pin hole is ± 0.02 , and the tolerance of the threaded hole is ± 0.1 ; a throttle valve must be equipped during installation, which is not within the scope of supply;

Clamp Cylinder-Tolerance Power Type
AKUT Series

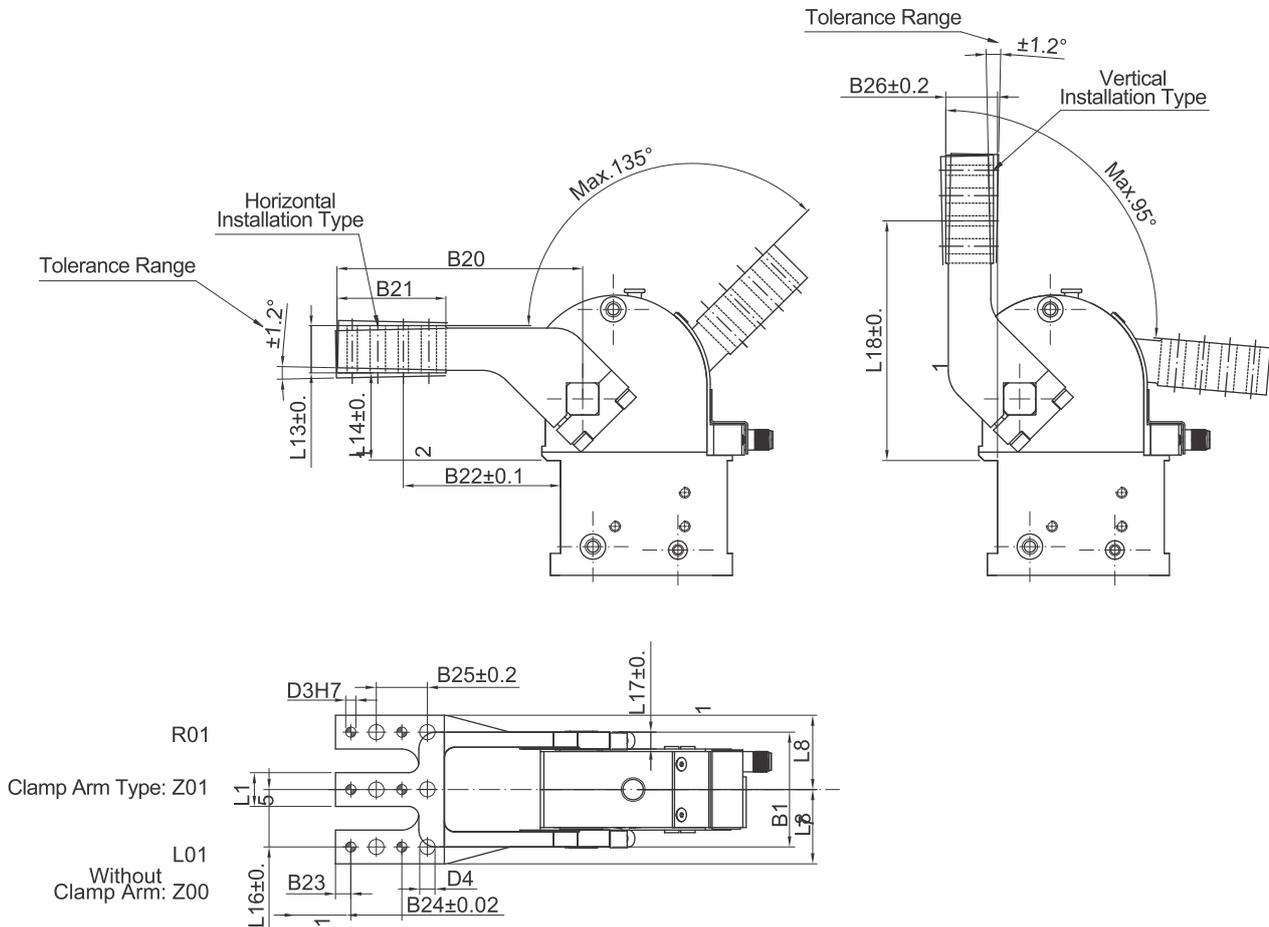
Ext. Dimensions [mm]

• AKUT50-63 Solenoid Sensor



Clamp Cylinder-Tolerance Power Type AKUT Series

Ext. Dimensions (mm)



Note: *The tolerance of the pin hole is ± 0.02 , and the tolerance of the threaded hole is ± 0.1 ; a throttle valve must be equipped during installation, which is not within the scope of supply;

Type	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	B17	B18
AKUT50	45	11	30	98	49.5	107	3	11	6	32	30.5	24	10	13	99	48	68	22
AKUT63	52	15	30	105	56.5	119	4	11	10	32	33.5	30	10	13	107	54	78	25.5

Type	B19	B20	B21	B22	B23	B24	B25	B26	D1	D2	D3	D4	D5	D6	D7	L1 (Blank/P/PL)	L2 (Blank/P/PL)	L3
AKUT50	32	144	64	92	9	30	30	30	M8	8	6	9	M8	8	M8	295/295/307	26/26/38	36.5
AKUT63	39	144	64	92	9	30	30	30	M8	8	6	9	M8	8	M8	305/305/317	26/26/38	36.5

Type	L4	L5	L6	L7	L8	L9 (Blank/P/PL)	L10	L11	L12	L13	L15	L15	L16	L17	L18	L19	S
AKUT50	55	11	32	27	44	142/142/154	20	35.5	21	28	51.5	20	34	10	141.5	30	19
AKUT63	55	11	32	27	47	152/152/164	20.5	40.5	16.5	28	51.5	20	37	12	141.5	30	22

Note: ① The screw pitch of M8 in the table is 1.25.



Precauções

- A GHPC do Brasil não se responsabiliza pelo uso indevido, mau uso, do equipamento.
- A utilização de máquinas e equipamentos pneumáticos deve ser feita apenas por profissionais qualificados.
- Não exceder as especificações descritas no catálogo, afim de evitar danos à integridade física do produto e/ou operador.
- Garantir o total cuidado no manuseio e instalação do produto afim de evitar choques e/ou quedas à peça. Caso venha acontecer, mesmo que aparentemente intacto, poderá ter causado danos à sua função.
- Garantir total limpeza dos tubos e conexões antes de serem conectados ao produto.