Technical Catalog

Clamps

Series AKUH

GHPC®
Tecnologia em Produtos Pneumáticos

Features

Clamp Cylinder-Integrated Manual And Automatic Power Type
AKUH 40 - 80 Series

1. Designed crank connecting rod mechanism, a large load-bearing capacity.
2. Opening angle steplessly adjustable.
3. Controlled both pneumatically and manually.
4. The clamping position is self-locked in case of air supply disconnection.
5. Installed at the front, back, left, or right.
6. Integrated with sensors.
7. Varioety of clamp arm models available to meet different customer needs.

Standard Specifications

Bore mm	40	50	63	80
Action	Double Acting Type			
Used Fluid	Compressed Air (Filtered Through A Filter ≤ 25 μm)			
Operating Pressure Range MPa (kgf/cm^2)	0.6 (6.1)			
Operating Temperature Range ℃	-10 ~ 60 (Non-freezing State)			
Lubrication①	Not Required			
Clamping Torque② N·m	120	160	380	800
Maximum Holding Torque N·m	380	800	1500	2500
Minimum Use Frequency	1-Second Clamping Or 1-Second Opening			
Opening Angle	10° ~ 110° (5° Per Tap Position)	5° ~ 120° (Steplessly Adjustable)		
Weight kg	2.2	3.8	5	17
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.

Order Code

AKUH — V — 63 — Z01 — W12 — ER

Series

Installation Method of Clamp Arm①

Blank	Horizontal Installation
V	Vertical Installation

Bore mm

40	Ø40
50	Ø50
63	Ø63
80	Ø80

Clamp Arm Type②

Z00	Without Clamp Arm
R01	Right Side Type
Z01	Intermediate Type
L01	Left Side Type

Sensor③

W00	Without Sensor
W12	M12 Inductive Sensor PNP
W12N	M12 Inductive Sensor NPN
W12T	Anti-strong Magnetic M12 Inductive Sensor PNP
W05	Pneumatic Control Sensor

Option④

Blank	None
ER	Right Mounted Stopper
EL	Left Mounted Stopper

C — 105

Sensor Shield⑤

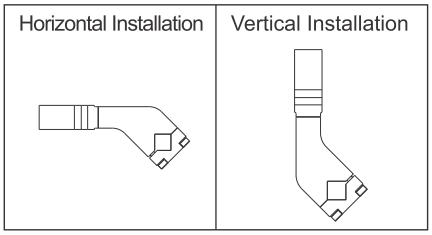
Blank	None
C	Sensor Shield

Opening Angle⑥

10°~110°	40 Bore
5°~120°	50 Ω α 63 Ω α 80 Bore

Note: ① Refer to the definition of clamp arm installation method.
② Other types of clamp arms can be found in the clamp arm configuration table.
See the AKUS/H/K accessory series for clamp arm dimensions.
③ See the AKUS/H/K accessory series for the sensor parameters.
④ Applicable to 50/63 cylinder diameter; angle of 30°/ 45°/ 60°/ 75°/ 90°/ 105°/ 120°/ 135°.
⑤ Generally used for manual workstation protection sensors.
⑥ When the clamp arm is installed vertically, the maximum opening angle is 105°.
When the clamp arm is installed horizontally, the maximum opening angle is 120°.
When the clamp arm of the cylinder with the diameter of 40 is installed vertically and horizontally, the maximum opening angle is 110°.
When the 02/03 type clamp arm of the cylinder with the diameter of 40 is installed horizontally, the maximum opening angle is 105°.
⑦ If you need to order sensors or clamp arms for this series separately, please contact us.
⑧ The left installation type handle is provided by default before delivery out of the factory.
If you need to place an order on the right installation type, please indicate your requirement or adjust it on site;
The handle rod is shipped separately and the customer shall weld it on site.

● Definition of Clamp Arm Installation Method



Order Example

A clamp cylinder- integrated manual and automatic power Type with the diameter: 63mm; opening angle: 35°; clamp arm: standard clamp arm; pin hole 6; intermediate type, horizontal installation; sensor: PNP solenoid sensor.
Correct order code: AKUH63-Z01W12-35

Clamp Cylinder-Integrated Manual And Automatic Power Type
AKUH 40 - 80 Series

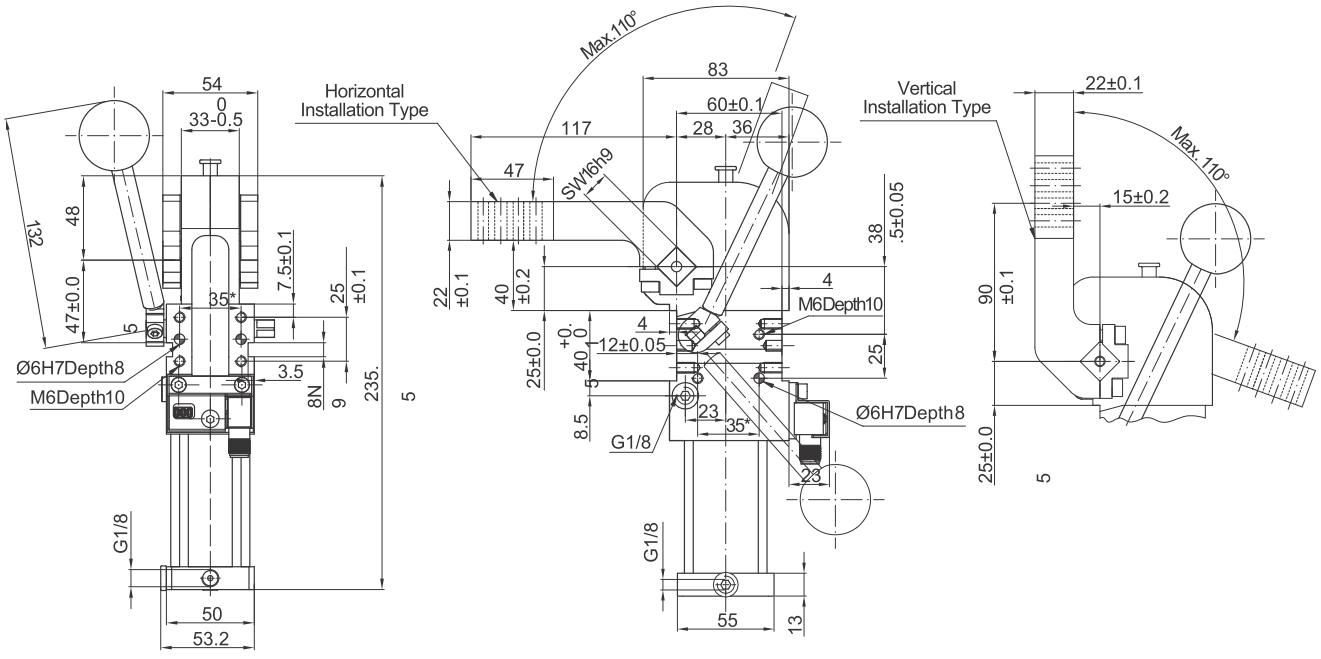
Clamp Arm Configuration Table

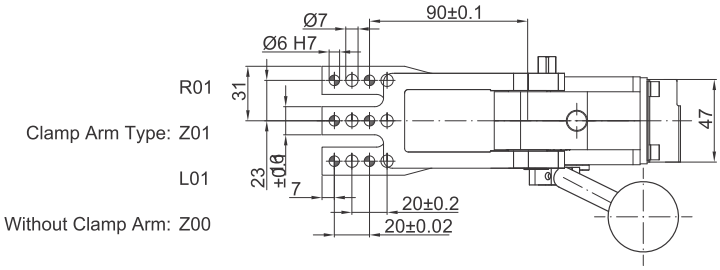
Bore (mm)	Standard Clamp Arm (Pin Hole Ø 6)			Clamp Arm Offset 45 (Pin Hole Ø 6)			Clamp Arm Offset 45 (Pin Hole Ø 8)		
	Right Side Type	Intermediate Type	Left Side Type	Right Side Type	Intermediate Type	Left Side Type	Right Side Type	Intermediate Type	Left Side Type
40	R01	Z01	L01	R02	Z02	L02	R03	Z03	L03
50									
63									
80									

Bore (mm)	Standard Clamp Arm (Pin Hole Ø 8)			Clamp Arm Offset 0 (Pin Hole Ø 6)			Clamp Arm Offset 0 (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
40	R04	Z04	L04	R05	Z05	L05	R06	Z06	L06
50				—	—	—	—	—	—
63				—	—	—	—	—	—
80				—	—	—	—	—	—

Ext. Dimensions 槽=槽 (mm)

- **AKUH40 Solenoid Sensor**



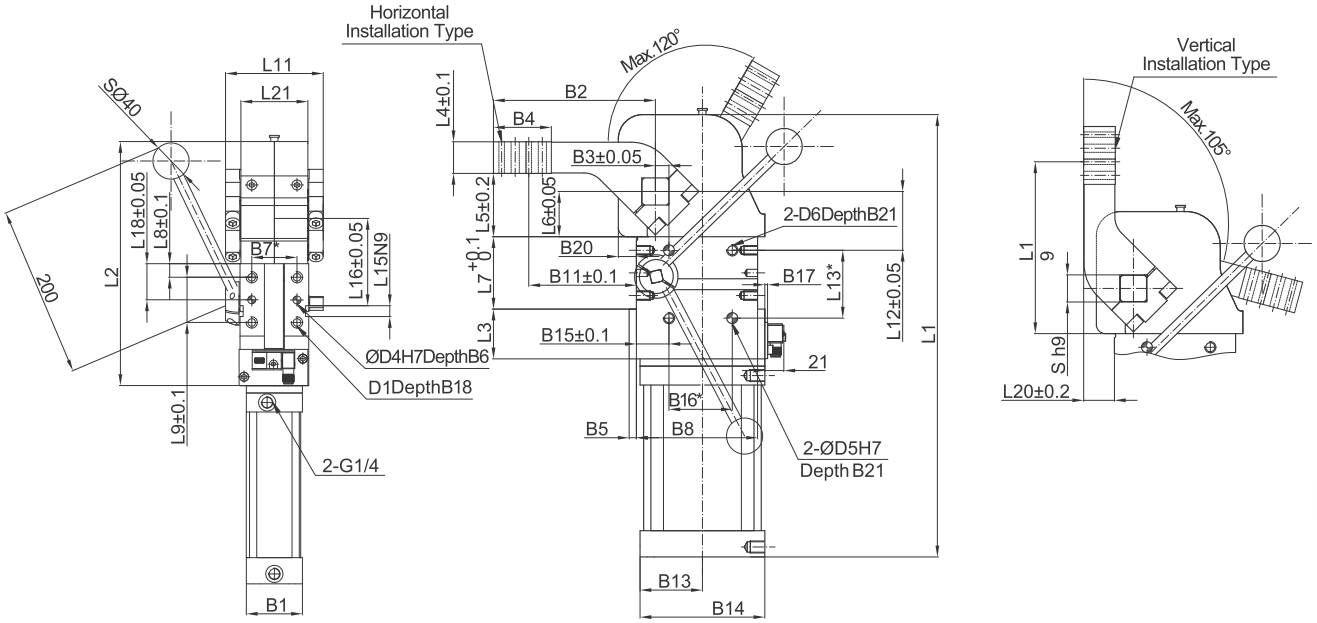


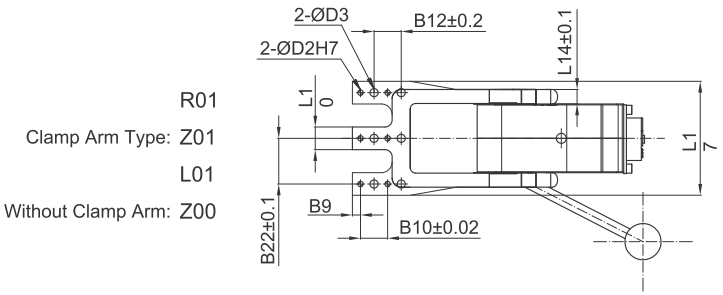
Note: *The tolerance of the pin hole is ± 0.02, and the tolerance of the threaded hole is ± 0.1; a throttle valve and a three-position five-way intermediate release valve must be equipped during installation. The throttle valve and the three-position five-way intermediate release valve are not within the scope of supply.

Clamp Cylinder-Integrated Manual And Automatic Power Type
AKUH40 - 80 Series

Ext. Dimensions (mm)

- **AKUH 50-80 Solenoid Sensor**





R01
Clamp Arm Type: Z01
L01
Without Clamp Arm: Z00

Bore	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16
50	45	144	10	64	6.5	8	30	93	9	30	92	30	47	94	23	50
63	52	144	10	64	7.5	10	30	93	9	30	92	30	53	106	23	50
80	62	179	15	64	8	12	50	134	9	30	119	30	70	140	36	70

Bore	B17	B18	B19	B20	B21	B22	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4
50	4.5	11	3.5	10.5	12	34	M8	6	9	8	10	M10	317	178	35	28
63	7.5	11	3.5	12	12	37	M8	6	9	8	10	M10	341	185	35	28
80	8	15	3.5	20	14	50.5	M10	6	9	8	12	M12	490	270	55	35

Bore	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17	L18	L19	L20	L21	S
50	51.5	36.5	55	11	32	20	68	55	45	10	12	71.5	88	27	141.5	30	45	19
63	51.5	36.5	55	11	32	20	78	55	45	12	12	71.5	94	27	141.5	30	52	22
80	70	50	80	15	50	25	108	65	75	16	12	96.5	126	40	190	34	74	30

Note: ① *The tolerance of the pin hole is ± 0.02, and the tolerance of the threaded hole is ± 0.1; a throttle valve and a three-position five-way intermediate release valve must be equipped during installation. The throttle valve and the three-position five-way intermediate release valve are not within the scope of supply.
② The pitch of M8 is 1.25; the pitch of M10 is 1.5; the pitch of M12 is 2.0 in the table.

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.