DJ2A Technical Information

HINAKA
中日流體傳動股份有限公司
精心／精品／精誠／精業

DJ2A
Air Multi Stages Unclamping Cylinder



■ Operating pressure (kgf/cm^2)

Have to make sure the operating pressure tolerance to be within ± 0.1MPa (1kgf/cm^2). Suggest to set the operating pressure for 0.6MPa (6kgf/cm^2)

■ Unclamping total stroke (mm)

Total stroke must include the reserved distance between cylinder hitting head and spindle.

■ Reserved distance (mm) between cylinder hitting head and spindle.

The suggested best reserved distance is 0.5mm.

■ Total output force (kgf)

Please reserve the total output force of spindle and plus 20%~30%

■ Voltage of solenoid valve

■ Use with tool magazine BT30#, BT40#, BT50#

■ Push-stroke of spindle (mm)

■ Clamping force of spindle (kgf)

Specification:

Operating pressure	Compressed air with 0.4MPa~0.6MPa(4kgf/cm^2~6kgf/cm^2)
Working temperature range	0℃~60℃
Total stroke	13,15,17
Voltage	DV24, AC110, 220

Scope of application:

■ Belt and gear drive spindle. The clamping force of spindle is within 1000KG.

■ Under the condition of tool magazine matching, T to T tool change speed can reach 1~1.2 seconds.

■ Customers can install a bell accessories to suit the coolant through spindle system.

Precautions:

■ In order to achieve fast tool changing, the customer must ensure that the air pressure source is sufficient or install a 6L air tank.

■ In order to achieve quick tool changing, ϕ 12 air pressure pipes must be installed in the air inlet and outlet holes.

DJ2A Codification key

Codification key

DJ2A - 160 M 15 T3 P 1V

1. Air Multi Stages Unclamping Cylinder
2. Bore diameter
3. Magnetic sensing device
   - **M**: with sensor
   - **N**: without sensor
4. Stroke (mm)
5. Stage numbers
6. Switch
   - **P**: Proximity Switch
     (E2E-X2D1-N thread: M8×1.0 or same specification proximity switch)
   - **L**: Limited Switch (SHL-Q55)
   - **H**: Proximity Switch mounting clip
   - **M**: Proximity Switch (Riko/RN04-N)
   - **F**: no accessories required
7. Solenoid valve
   - **1V**: 4-way-2-position quick solenoid valve
   - **2V**: 5-way 2-position solenoid valve

DJ2A Characters / Circuit

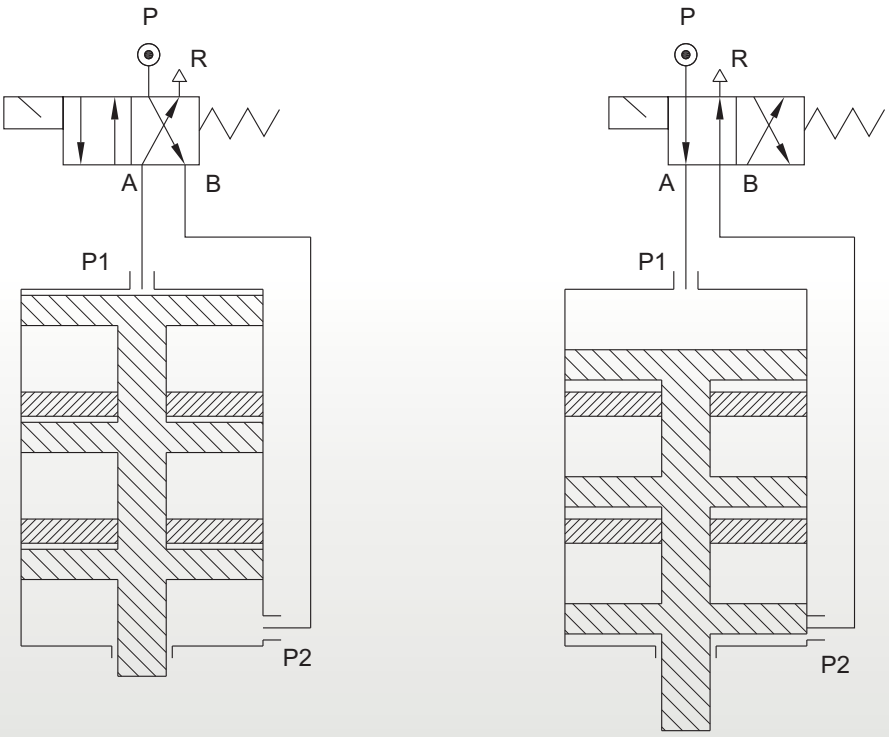
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Product features:

- Completely driven by air, multi stages to get more output force.
- Suitable for Belt-Drive Spindle and Gear Spindle.
- Direct installation above the spindle for unclamping tool changing.
- With adapter plate, you can interchange DJ2A with BPT (Air-Oil Boosting Unclamping Cylinder).
- Flash tool changing. Tool changing is less than 1 second.
- The control valve of the boosting unclamping cylinder perfectly fits on the rear cover and connects built-in pipe and therefore not only saving the component and assembly cost but also lasting sustained and having great compressed air.
- DJ2A is completely driven by air, no need oil, that can avoid the harm to the high speed spindle bearing due to oil-leakage.

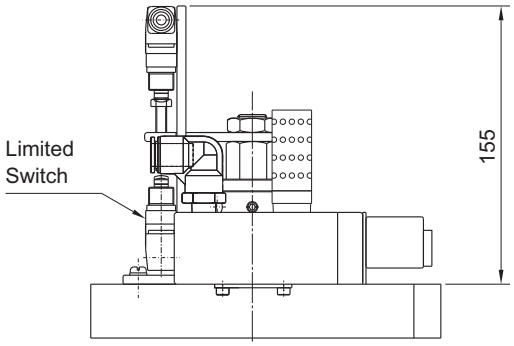


Circuit:

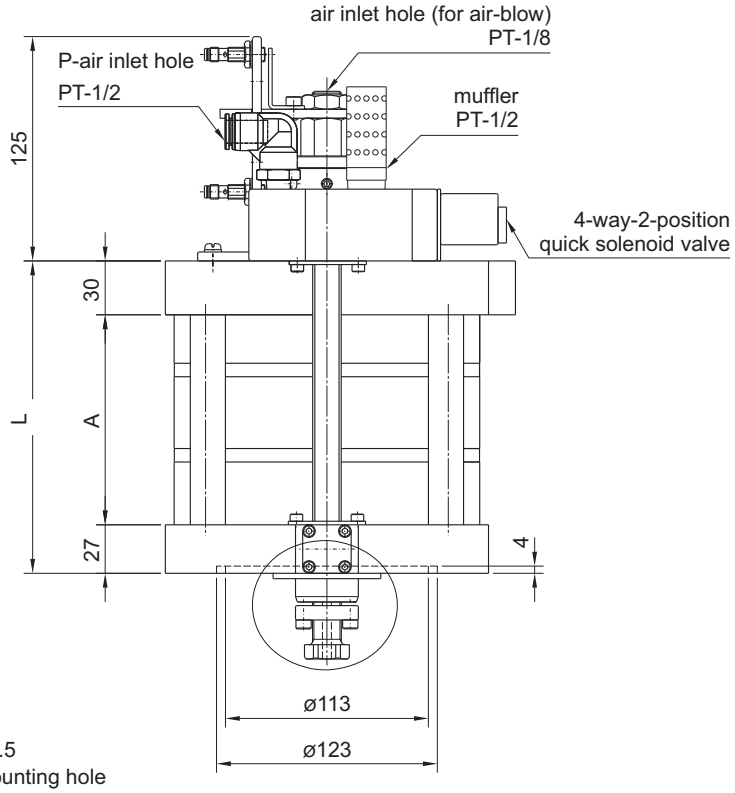


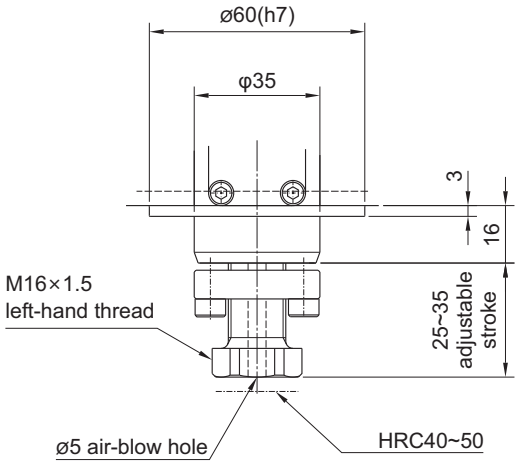
DJ2A Dimension:

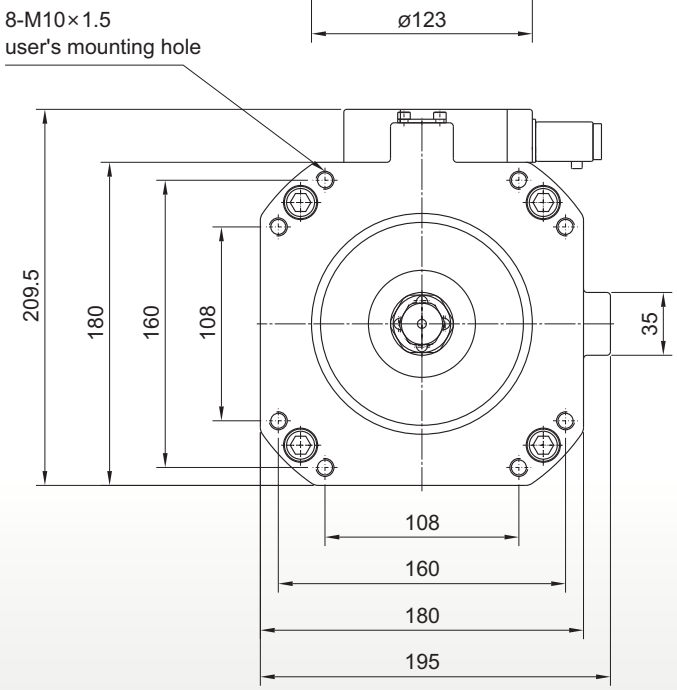
Limited Switch Installation



Proximity Switch Installation







unit: mm

Specifications	A	L	theoretical boosted output force (kgf)		
			4	5	6
2.5T×ST13	66	123	1567	1959	2352
2.5T×ST15	70	127			
2.5T×ST17	74	131			
3.5T×ST13	111	168	2331	2914	3499
3.5T×ST15	117	174			
3.5T×ST17	123	180			
4.5T×ST13	157	214	3095	3869	4646
4.5T×ST15	165	222			
4.5T×ST17	173	230			
5.5T×ST13	202	259	3859	4824	5793
5.5T×ST15	212	269			
5.5T×ST17	222	279			