

Pneumatic components (Total Air system)

Safety Precautions

Be sure to read this section before use.

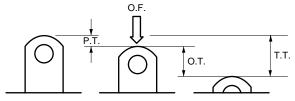
Refer to Intro Page 63 for precautions for general pneumatic components.

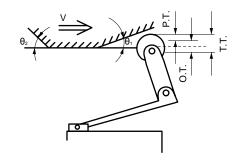
Mounting, installation and adjustment

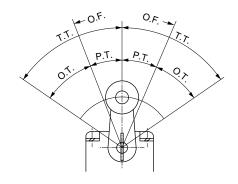
ACAUTION

- Do not move the component more than the total movement (T.T.).
 - Actuator operation codes used in the catalog are shown below.

Code	Explanation	
O.F.	Necessary force for operation	
P.T.	Action before valve open	
O.T.	Action after valve open	
T.T.	Total movement	



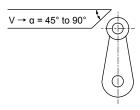




■ Dog

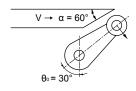
- · Set the dog angle θ to 45 degree or less.
- If the dog speed is high, set θ to a small value.
- The dog operation position and depth should be designed to "P.T. + O.T./2".
- Design the cam and dog so that the lever returns gradually.

(1) $V \le 0.2 \text{ m/s}$



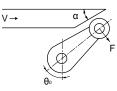
α	Vmax(m/s)
90°	0.05°
75°	0.07°
60°	0.1°
45°	0.2°

(2) $V \le 0.1 \text{ m/s}$



Set the arm parallel to the dog's cut face so that the force is applied at a right angle to the arm. Generally, $\alpha = 60^{\circ}$ and $\theta = 30^{\circ}$ are desirable for dog design and arm design.

(3) $V \le 2 \text{ m/s}$

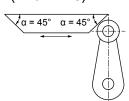


Vmax (max. speed) increases when the angle is reduced. The arm always should be set parallel to the dog's cut face.

α = 90-θ	Vmax(m/s)
40°	0.7°
35°	0.9°
30°	1.3°
25°	2.0°

(4) When the dog is exceeded

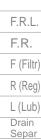
(V≤0.2 m/s)



Set the arm perpendicularly so that $\alpha = 45^{\circ}$.

 $V \le 0.2$ m/s is preferred.

- Do not use the mechanical valve body as a mechanical stopper.
- Do not apply excessive force when operating the toggle switch (MS-*-TG).



Mech
Press SW
Res press
exh valve

SlowStart

Anti-bac/Bacremove Filt
Film
Resist FR

Oil-ProhR

Med
Press FR
No Cu/
PTFE FRL

Outdrs FRL

Adapter
Joiner

Adapter Joiner Press Gauge CompFRL

PrecsR VacF/R Clean FR

ElecPneuR
AirBoost
Speed Ctrl

Silncr CheckV/ other

Nozzle Air Unit

Fit/Tube

PrecsCompn
Electro
Press SW
ContactSW

AirSens
PresSW
Cool
Air Flo
Sens/Ctrl

TotAirSys (Total Air) TotAirSys (Gamma) Gas generator RefrDry

WaterRtSens

DesicDry HiPolymDry

MainFiltr Dischrg etc

Ending

