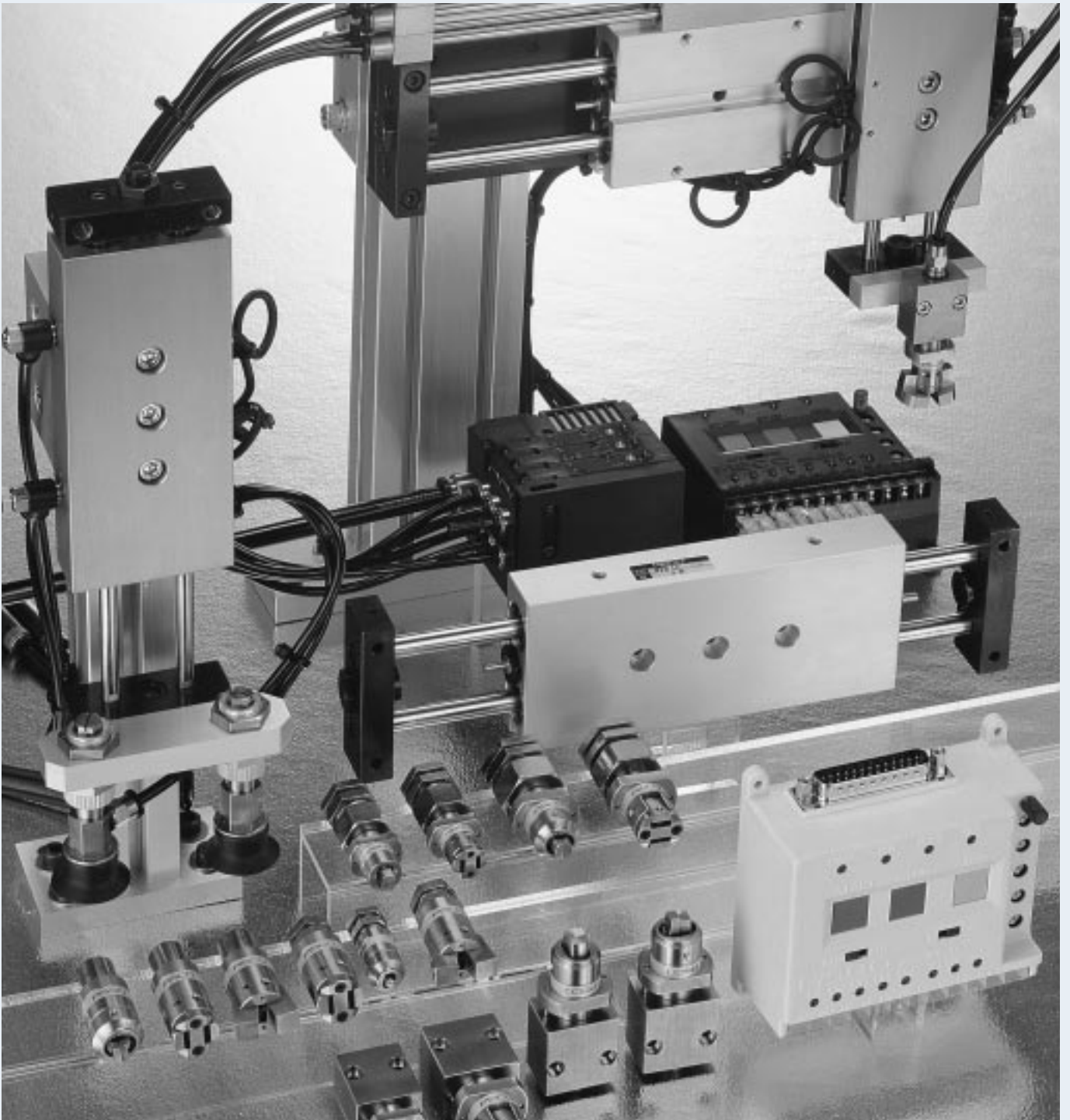


# Actuator Series

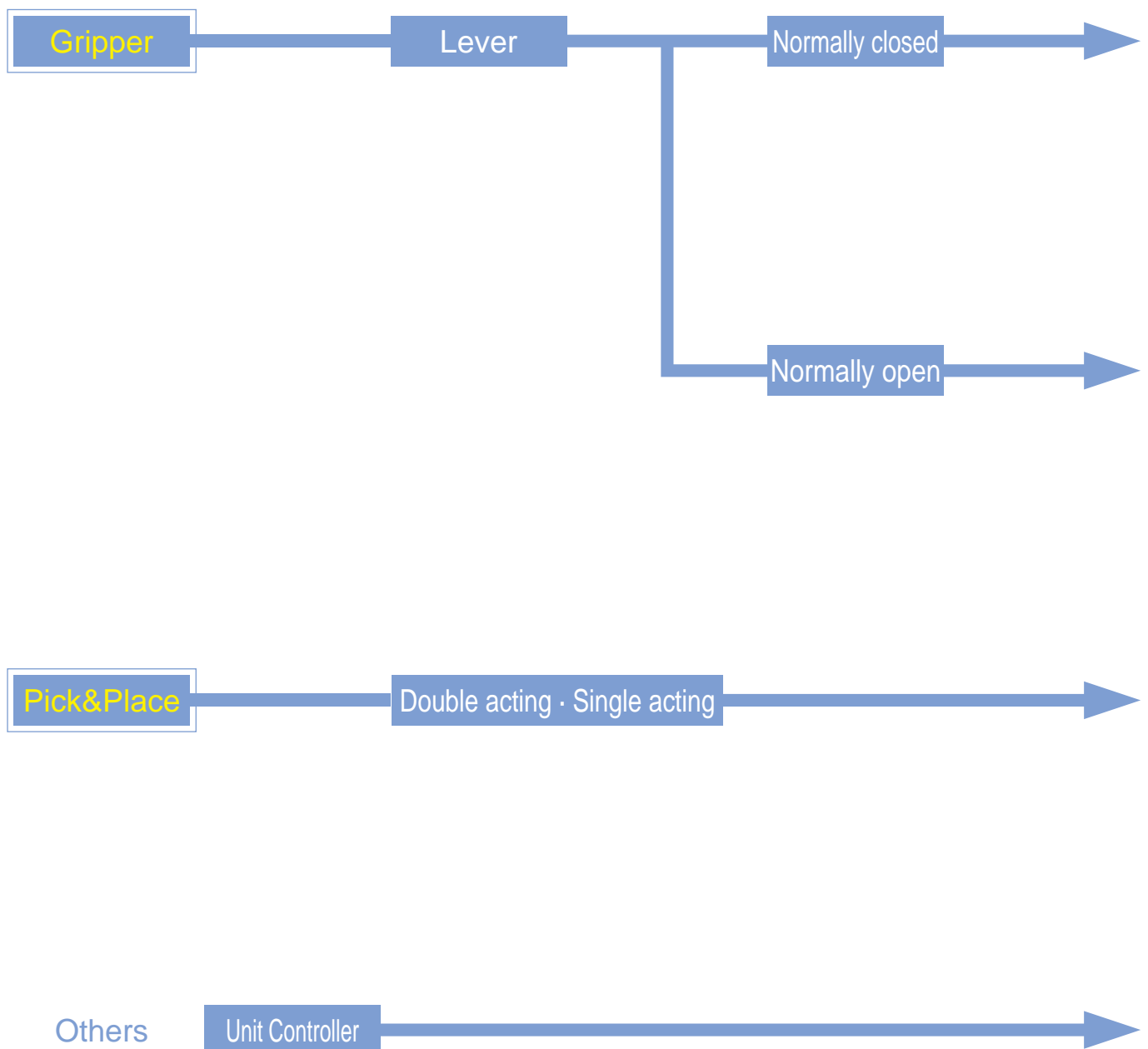


- Closing Gripper Series.....P.520
- Blank Finger.....P.524
- Opening Gripper Series.....P.526
- Pick & Place.....P.534
- Unit Controller.....P.544

## Actuator Series

Coming in a wide variety of types, pitches, and sizes, PISCO supplies actuator(drive devices) required for FA(factory automation) to all applications of pneumatic piping. Related devices are also available.

### Classification Index



Product Name	Fluid Admitted	Service pressure range	Working vacuum	Service temperature	page
Closing Gripper Series	Air	29~102psi (0.2~0.7MPa)	—	32~140°F (0~60°C) (No freezing)	520
Opening Gripper series	Air	29~102psi (0.2~0.7MPa)	—	32~140°F (0~60°C) (No freezing)	526
Pick & Place	Air	21.3~102psi (0.15~0.7MPa)	Service speed range 4~20in./s 100~500mm/sec	32~140°F (0~60°C)	534
Unit Controller	—	—	—	Service ambient temperature range 32~131°F (0~55°C)	544

# Common Safety Instructions for Actuators

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Be sure to read the following instructions before selecting and using the PISCO devices. Also read the detailed instructions for individual series.

## Warning

1. Watch out for the moving parts of Actuator during operation. Provide safety means, such as a protective cover, where there is danger to human bodies.
2. Where trouble with power supply or air supply can cause performance drop, bodily injuries or damage to the equipment, provide safety means.
3. Use clean air, removing drainage and dirt. Impurities contained in compressed air cause malfunction.
4. Do not use Actuators in locations where they are exposed to water drops, oil drops or dust. Malfunction may result from such careless use.
5. Do not allow excessive external forces or shocks to act on the Actuator body. Also take care not to drop the Actuator, or damage to its body may result.

## Caution

1. Actuators can be used without lubrication. But when you do lubricate, use Turbine Oil Class 1 (ISO VG32). Once you started lubrication, continue it. Discontinuance may result in malfunction due to the loss of initial lubricant.

# Common Safety Instructions for Lever Grippers

## Warning

- 1.The holding force of the Closing Gripper Series changes in relation to the holding point. Much separation of the holding point from the lever fulcrum of the Lever Gripper and heavy fingers may shorten the gripper life and cause damage to the gripper body. Consult PISCO about such applications.
- 2.Use a model having a holding power sufficient for the weight of work to be held. Insufficient holding power may result in the drop of work.
- 3.Use the gripper with works of the size as specified in the work dimensions table in the manual. Use with works of wrong size can shorten life or result in unstable holding.
- 4.When installing a Blank Finger, use a proper tool and the recommended tightening torque in the table below and make certain that the Blank Finger is not dislocated from the master finger. Wrong torque or dislocation may cause malfunction, dislocation of the holding position or drop of work.

### ●Table : Recommended Tightening torque

Thread size	Tightening torque (N·m)
M2	0.6~0.8N·m (0.44~0.59lbf·ft)
M2.5	1.3~1.5N·m (0.96~1.11lbf·ft)

- 5.Do not allow lateral loads or shocks to act on the master finger. Damage to the finger or accuracy drop may result.
- 6.Use the floating panel mount type within the specified stroke range. Loading beyond the specified stroke may cause damage to the gripper body.
- 7.When light press-fitting is carried out by the work stopper of the Opening Gripper, use a press-fitting force equal to or below the level specified in the table below. The force beyond that may damage the gripper body.

### ●Table : Press-Fitting Force

Cylinder diameter (mm)	press-fitting force (N)
φ8 (0.31in.)	900 (202lbf)
φ10 (0.39in.)	1000 (225lbf)

- 8.When installing the piping to the floating panel mount type Gripper, be sure to tighten with a proper tool on the two-face cut portion of the body. Tightening by the use of other parts may damage the gripper body.