Hydraulic Unit

Model CP□M-U / CP□N-UR
Model CQ□M-U / CQ□N-UR

Converts Factory Compressed Air into Hydraulic Pressure.
Compact Hydraulic Unit Composed of Pump, Non-Leak Valve, Pressure Relief Valve, Pressure Switch and Oil Tank

*Applicable Clamp Models*

- GBB
- GBE
- GBC
- GBF
- GBM
- GBR

**Energy Saving**

The pump drives (consumes the air pressure) only during pressurization. After the pressurization, air pressure and hydraulic pressure reach equilibrium and the pump stops. Air consumption is zero after the pressurization is completed.

**Maintains Hydraulic Pressure with Non-Leak Valve**

Non-leak valve (BA valve) maintains hydraulic pressure even when air supply is stopped preventing the mold from falling.

**Maintains Set Pressure with Pressure Relief Valve**  ※ Only when selecting the pressure relief valve.

The set pressure: 25MPa is maintained by the pressure relief valve (BR valve) even when hydraulic pressure rises during IMM operation.

**Pressure Supply when Hydraulic Pressure Decreases**

The pump drives and supplies pressure when the hydraulic pressure in the circuit decreases because of the temperature reduction etc. This ensures a constant clamping force.

**A Wide Range of Variations**

Select a tank from 5 ℓ and 10 ℓ and a pump from four variations for the most suitable hydraulic unit according to the clamp system.
Specifications

<table>
<thead>
<tr>
<th>Model No.</th>
<th>CPBM000</th>
<th>CPBN000</th>
<th>CPDM000</th>
<th>CPDN000</th>
<th>CPCM000</th>
<th>CP-CN000</th>
<th>CPEM000</th>
<th>CEN000</th>
<th>CQCN000</th>
<th>CQEM000</th>
<th>CQEN000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Hydraulic Pressure MPa</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withstanding Pressure MPa</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature °C</td>
<td>0 ~ 70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Use Frequency

<table>
<thead>
<tr>
<th>Pump</th>
<th>Model No.</th>
<th>Set Discharge Pressure MPa</th>
<th>Discharge Oil/4 Load l/min</th>
<th>Set Air Pressure MPa</th>
<th>Air Consumption m³/min</th>
<th>max</th>
<th>max</th>
<th>max</th>
<th>max</th>
<th>max</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A87000-0</td>
<td>25</td>
<td>1.36</td>
<td>0.45</td>
<td>0.4</td>
<td>0</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>AD7300-0</td>
<td>22.5</td>
<td>1.32</td>
<td>0.41</td>
<td>0.4</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>AC7001-0</td>
<td>22.5</td>
<td>4.00</td>
<td>0.41</td>
<td>0.4</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>AE7300-0</td>
<td>22.5</td>
<td>3.74</td>
<td>0.47</td>
<td>0.4</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>AC7000-0</td>
<td>22.5</td>
<td>2.79</td>
<td>0.43</td>
<td>0.4</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>AE7300-0</td>
<td>22.5</td>
<td>2.70</td>
<td>0.47</td>
<td>0.4</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>AE7300-0</td>
<td>22.5</td>
<td>2.79</td>
<td>0.43</td>
<td>0.4</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>AE7300-0</td>
<td>22.5</td>
<td>2.70</td>
<td>0.47</td>
<td>0.4</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Main Components

<table>
<thead>
<tr>
<th>Non-Leak Valve</th>
<th>Model No.</th>
<th>JF1030</th>
<th>JF1030</th>
<th>JF1030</th>
<th>JF1040</th>
<th>JF1040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Switch</td>
<td>Model No.</td>
<td>JBA2700-0G</td>
<td>JBA2700-0G</td>
<td>JBA2700-0G</td>
<td>JBA2700-0G</td>
<td>JBA2700-0G</td>
</tr>
<tr>
<td>For Clamp</td>
<td>Operation Mode/Set Pressure MPa</td>
<td>INC. 17.6</td>
<td>INC. 17.6</td>
<td>INC. 17.6</td>
<td>INC. 17.6</td>
<td>INC. 17.6</td>
</tr>
<tr>
<td>Relief Valve</td>
<td>Set Pressure</td>
<td>-</td>
<td>BSN11-0</td>
<td>BSN11-0</td>
<td>BSN11-0</td>
<td>BSN11-0</td>
</tr>
<tr>
<td>Suction Filter</td>
<td>Model No.</td>
<td>JF1030</td>
<td>JF1030</td>
<td>JF1030</td>
<td>JF1030</td>
<td>JF1030</td>
</tr>
<tr>
<td></td>
<td>Filtration Degree</td>
<td>174 μm (100 Mesh)</td>
<td>174 μm (100 Mesh)</td>
<td>174 μm (100 Mesh)</td>
<td>174 μm (100 Mesh)</td>
<td>174 μm (100 Mesh)</td>
</tr>
</tbody>
</table>

Notes:
1. If hydraulic viscosity is higher than specified, action time will be longer. Please use equivalent hydraulic oil to ISO-VG-32.
2. If using it at low temperature, action time will be longer because the viscosity of hydraulic oil becomes higher.
3. When setting a pressure gauge to a hydraulic circuit, install a damper or use an oil-filled (glycerin) pressure gauge in order to prevent damage caused by pressure surging.
4. Provide enough space at the top of the unit taking into consideration the maintenance of the pump.

Pump Performance Curve

![Pump Performance Curve](image)

Circuit Symbol

This shows the circuit symbol of CPBM000-3UR-5.
1. Unit

- P: For Small/Medium Clamp (5 l Tank)
- Q: For Large Clamp (10 l Tank)

2. Pump Model

- B: AB Pump
- D: AD Pump
- C: AC Pump
- E: AE Pump

Note:
1. For Large Clamp Unit (10 l Tank), only 2 Pump Model C: AC pump and E: AE pump can be installed.

3. Pressure Code

- M: Working Pressure 25MPa, Pressure Switch Set Pressure INC. 17.6MPa
- N: Working Pressure 25MPa, Pressure Switch Set Pressure INC. 17.6MPa with Pressure Relief Valve

4. Fluid Code

- 0: General Hydraulic Oil
- G: Water・Glycol (Iron Tank)
- S: Silicon Oil
- F: Fatty Acid Esteral

5. Design No.

- 0: Revision Number

6. Circuit Symbol (Indicate with the number of circuits and circuit symbol)

- U: For Clamp Double Solenoid
- R: With Pressure Relief Valve

Note:
1. For R: Pressure Relief Valve Pressure Code is "N".

7. Voltage Code

- 1: AC100V (50/60Hz)
- 2: AC200V (50/60Hz)
- 3: AC110V (50/60Hz)
- 4: AC220V (50/60Hz)
- 5: DC24V

8. Option

- Blank: Standard (-Common)
- C: +Common
- D: Digital Pressure Sensor
- E: Without Filter Regulator
- F: Manual-Drain Filter Regulator
- G: With Primary Pressure Gauge
- H: With Piping Block on the Left
- J: With Air Regulator
- K0: With Pressure Gauge for Each Circuit (Without Primary Pressure Gauge)
- K1: With Color Displayed Pressure Gauge for Each Circuit (Without Primary Pressure Gauge)
- KG0: With Pressure Gauge for Each Circuit (With Primary Pressure Gauge)
- KG1: With Color Displayed Pressure Gauge for Each Circuit (With Primary Pressure Gauge)
- L: With Pressure Switch Light
- N: Piping Port NPT Thread, Pressure Gauge in both PSI/MPa
- P: Pressure Gauge in both PSI/MPa
- Q0: With Oil Level Switch (ON when Oil Level Drops)
- Q1: With Oil Level Switch (OFF when Oil Level Drops)
- T: Iron Tank (CP□□: only 5 l tank can be selected.)  

Notes:
1. When selecting N, Piping Port NPT Thread, dimensions in the specification sheet and other documents are in inches.
2. Iron Tank is the standard option for CP□□□□□□: 10 l Tank.
3. Please contact us for specifications and external dimensions for these options.
4. The external dimensions for five circuits and six circuits are different. Please contact us for detail.
**External Dimensions : CPB**

*This drawing shows CPBN000-3UR standard model. Please contact us for external dimensions for options.*

- Conduit Hole 1-Ø 28
- JBA Pressure Switch
- BA Valve
- 4-M10x1.5 Bolt Hole
  - M10x1.5x20 Bolt (Included)
  - JIS Spring Washer

**External Dimensions : CPD**

*This drawing shows CPDN000-3UR standard model. Please contact us for external dimensions for options.*

- Conduit Hole 1-Ø 28
- JBA Pressure Switch
- BA Valve
- 4-M10x1.5 Bolt Hole
  - M10x1.5x20 Bolt (Included)
  - JIS Spring Washer
- **External Dimensions : CPC**

  This drawing shows CPCN000-3UR standard model. Please contact us for external dimensions for options.

- **External Dimensions : CPE**

  This drawing shows CPEN000-3UR standard model. Please contact us for external dimensions for options.
External Dimensions : CQC
※ This drawing shows CQCN000-3UR standard model. Please contact us for external dimensions for options.

External Dimensions : CQE
※ This drawing shows CQEN000-3UR standard model. Please contact us for external dimensions for options.
Hydraulic Unit

Converting Factory Compressed Air into Hydraulic Pressure.
Compact Hydraulic Unit Composed of Pump, Non-Leak Valve, Pressure Relief Valve, Pressure Switch and Oil Tank

- **Applicable Clamp Models**
  - GWA
  - GLA

- **Energy Saving**
  The pump drives (consumes the air pressure) only during pressurization. After the pressurization, air pressure and hydraulic pressure reach equilibrium and the pump stops. Air consumption is zero after the pressurization is completed.

- **Maintains Hydraulic Pressure with Non-Leak Valve**
  Non-leak valve (BA valve) maintains hydraulic pressure even when air supply is stopped preventing the mold from falling.

- **Maintains Set Pressure with Pressure Relief Valve**
  - Only when selecting the pressure relief valve.
  The set pressure: 14MPa is maintained by the pressure relief valve (BR valve) even when hydraulic pressure rises during IMM operation.

- **Pressure Supply when Hydraulic Pressure Decreases**
  The pump drives and supplies pressure when the hydraulic pressure in the circuit decreases because of the temperature reduction etc. This ensures a constant clamping force.

- **A Wide Range of Variations**
  Select a tank from 5 ℓ and 10 ℓ and a pump from four variations for the most suitable hydraulic unit according to the clamp system.
Specifications

<table>
<thead>
<tr>
<th>Model No.</th>
<th>CPBK000</th>
<th>CPBL000</th>
<th>CPDK000</th>
<th>CPDL000</th>
<th>CPCK000</th>
<th>CPCL000</th>
<th>CPEK000</th>
<th>CPEL000</th>
<th>CQCK000</th>
<th>CQCL000</th>
<th>CQEK000</th>
<th>CQUEL000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Hydraulic Pressure</td>
<td>MPa</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withstanding Pressure</td>
<td>MPa</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tank Capacity</td>
<td>$\ell$</td>
<td>5 $\ell$ (Actual Amount for Use 3.7 $\ell$ : H.L.5 $\ell$ - L.L.1.3 $\ell$)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10 $\ell$ (Actual Amount for Use 7.2 $\ell$ : H.L.10 $\ell$ - L.L.3 $\ell$)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>°C</td>
<td>0 ~ 70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Use Frequency</th>
<th>Pump</th>
<th>Less than 20 Cycles / Day</th>
<th>Pressure Rising Time</th>
<th>Less than 2.5 min. / Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model No.</td>
<td>Set Discharge Pressure</td>
<td>MPa</td>
<td>A66000-0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Discharge Oil/Order/Load</td>
<td>$\ell$/min</td>
<td>1.80 1.76 4.20 3.95 4.52 4.47 12.7 12.5 4.52 4.47 12.7 12.5 4.52 4.47 12.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Set Air Pressure</td>
<td>MPa</td>
<td>0.41 0.37 0.41 0.37 0.43 0.41 0.43 0.41 0.43 0.41 0.43 0.41 0.43 0.41 0.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Air Consumption</td>
<td>m$^3$/min</td>
<td>max. 0.4</td>
</tr>
<tr>
<td></td>
<td>Model No.</td>
<td>Filtration Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-Leak Valve</td>
<td>Model No.</td>
<td>BAS011-0</td>
<td>BASR11-0</td>
</tr>
<tr>
<td></td>
<td>Pressure Switch</td>
<td>Model No.</td>
<td>JBA2700-0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(For Clamp)</td>
<td>Operation Mode</td>
<td>Set Pressure</td>
<td>MPa</td>
</tr>
<tr>
<td></td>
<td>Pressure Relief Valve</td>
<td>Model No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Set Pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes:</td>
<td>1. If hydraulic viscosity is higher than specified, action time will be longer. Please use equivalent hydraulic oil to ISO-VG-32.</td>
<td>2. If using it at low temperature, action time will be longer because the viscosity of hydraulic oil becomes higher.</td>
<td>3. When setting a pressure gauge to a hydraulic circuit, install a damper or use an oil-filled (glycerin) pressure gauge in order to prevent damage caused by pressure surging.</td>
<td>4. Provide enough space at the top of the unit taking into consideration the maintenance of the pump.</td>
</tr>
</tbody>
</table>

Pump Performance Curve

This shows the circuit symbol of CPBLO0-2PPR-5.
**Model No. Indication**

**C P B L 0 0 0 - 2 PPR - 5 -**

1 Unit

- **P** : For Small/Medium Clamps (5ℓ Tank)
- **Q** : For Large Clamps (10ℓ Tank)

Note:
1. For Large Clamp Unit (10ℓ Tank), only **P** Pump Model
2. Pump Model **C** : AC pump
3. **E** : AE pump can be installed.

2 Pump Model

- **B** : AB Pump
- **D** : AD Pump
- **C** : AC Pump
- **E** : AE Pump

Note:
1. **B** : AB Pump and **D** : AD Pump can be selected only when selecting 1 Unit **P** : For Small/Medium Clamp (5ℓ Tank).

3 Pressure Code

- **K** : Working Pressure 14MPa, Pressure Switch Set Pressure INC. 9.8MPa
- **L** : Working Pressure 14MPa, Pressure Switch Set Pressure INC. 9.8MPa with Pressure Relief Valve

4 Fluid Code

- **0** : General Hydraulic Oil
- **G** : Water Glycol (Iron Tank)
- **S** : Silicon Oil
- **F** : Fatty Acid Ester

5 Design No.

- **0** : Revision Number

6 Circuit Symbol (Indicate with the number of circuits and circuit symbol)

- **P** : For Clamp Double Solenoid
- **R** : With Pressure Relief Valve

Note:
1. For **R** : Pressure Relief Valve Pressure Code is “L”.

7 Voltage Code

1. **1** : AC100V (50/60Hz)
2. **2** : AC200V (50/60Hz)
3. **3** : AC110V (50/60Hz)
4. **4** : AC220V (50/60Hz)
5. **5** : DC24V

8 Option

- **Blank** : Standard (~Common)
- **C** : +Common
- **D** : Digital Pressure Sensor
- **E** : Without Filter Regulator
- **F** : Manual Drain Filter Regulator
- **G** : With Primary Pressure Gauge
- **H** : With Piping Block on the Left
- **J** : With Air Regulator
- **K0** : With Pressure Gauge for Each Circuit (Without Primary Pressure Gauge)
- **K1** : With Color Displayed Pressure Gauge for Each Circuit (Without Primary Pressure Gauge)
- **KG0** : With Pressure Gauge for Each Circuit (With Primary Pressure Gauge)
- **KG1** : With Color Displayed Pressure Gauge for Each Circuit (With Primary Pressure Gauge)
- **L** : With Pressure Switch Light
- **N** : Piping Port NPT Thread, Pressure Gauge in both PSI/MPa
- **P** : Pressure Gauge in both PSI/MPa
- **Q0** : With Oil Level Switch (ON when Oil Level Drops)
- **Q1** : With Oil Level Switch (OFF when Oil Level Drops)
- **T** : Iron Tank (CP□□□: only 5ℓ tank can be selected.)

Notes:
1. When selecting **Option N** : Piping Port NPT Thread, dimensions in the specification sheet and other documents are in inches.
2. Iron Tank is the standard option for CP□□□: 10ℓ Tank.
3. Please contact us for specifications and external dimensions for these options.
4. The external dimensions for five circuits and six circuits are different. Please contact us for detail.
**External Dimensions：CPB**

※ This drawing shows CPBLO00-2PPR standard model. Please contact us for external dimensions for options.

**External Dimensions：CPD**

※ This drawing shows CPDL000-2PPR standard model. Please contact us for external dimensions for options.
**External Dimensions : CPC**

- This drawing shows CPCCL000-2PPR standard model. Please contact us for external dimensions for options.

![CPC Diagram](image)

**External Dimensions : CPE**

- This drawing shows CPECL000-2PPR standard model. Please contact us for external dimensions for options.

![CPE Diagram](image)
External Dimensions: CQC
※ This drawing shows CQCL000-2PPR standard model. Please contact us for external dimensions for options.

External Dimensions: CQE
※ This drawing shows CQEL000-2PPR standard model. Please contact us for external dimensions for options.
**External Dimensions : CPSH000 (Wall Mounted)**

- 3-M10x1.5x25 Bolt (Included)
- JIS Spring Washer
- 4-M10x1.5 Thread

<table>
<thead>
<tr>
<th>Hydraulic Unit Model No.</th>
<th>Dimension A</th>
<th>Dimension B</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPB</td>
<td>317</td>
<td>33</td>
</tr>
<tr>
<td>CPD</td>
<td>337</td>
<td>33</td>
</tr>
<tr>
<td>CPC</td>
<td>385</td>
<td>65</td>
</tr>
<tr>
<td>CPE</td>
<td>420</td>
<td>65</td>
</tr>
</tbody>
</table>

**External Dimensions : CPSR000 (Anti-Vibration Rubber)**

- 4-M10x1.5 Thread
- Round Rubber Vibration Isolators
- KA-50 (KURASHIKI KAKO)

<table>
<thead>
<tr>
<th>Hydraulic Unit Model No.</th>
<th>Dimension A</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPB</td>
<td>317</td>
</tr>
<tr>
<td>CPD</td>
<td>337</td>
</tr>
<tr>
<td>CPC</td>
<td>385</td>
</tr>
<tr>
<td>CPE</td>
<td>420</td>
</tr>
</tbody>
</table>
External Dimensions：CPSV000 (Floor Mounted)

<table>
<thead>
<tr>
<th>Hydraulic Unit Model No.</th>
<th>Dimension A</th>
<th>Dimension B</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPB</td>
<td>317</td>
<td>238</td>
</tr>
<tr>
<td>CPD</td>
<td>337</td>
<td>238</td>
</tr>
<tr>
<td>CPC</td>
<td>385</td>
<td>238</td>
</tr>
<tr>
<td>CPE</td>
<td>420</td>
<td>238</td>
</tr>
</tbody>
</table>

External Dimensions：CQSV000 (Floor Mounted)

<table>
<thead>
<tr>
<th>Hydraulic Unit Model No.</th>
<th>Dimension A</th>
<th>Dimension B</th>
<th>Dimension C</th>
</tr>
</thead>
<tbody>
<tr>
<td>CQC</td>
<td>385</td>
<td>283</td>
<td>48</td>
</tr>
<tr>
<td>CQE</td>
<td>420</td>
<td>283</td>
<td>48</td>
</tr>
</tbody>
</table>
Sales Offices across the World

Japan

**KOSMEK LTD.**

**TEL.** +81-78-991-5162  **FAX.** +81-78-991-8787

KOSMEK LTD. 1-5, 2-chome, Murotani, Nishi-ku, Kobe-city, Hyogo, Japan 651-2241

**Mexico**

**KOSMEK USA Mexico Office**

**TEL.** +52-442-161-2347

Blvd Jurica la Campana 1040, B Colonia Punta Juriquilla Queretaro, QRO 76230 Mexico

**Europe**

**KOSMEK EUROPE GmbH**

**TEL.** +43-463-287587  **FAX.** +43-463-287587-20

Schleppenplatz 2 9020 Klagenfurt am Wörthersee Austria

China

**KOSMEK (CHINA) LTD.**

**TEL.+86-21-54253000**  **FAX.+86-21-54253709**

Room601, RIVERSIDE PYRAMID No.55, Lane21, Pusan Rd, Pudong Shanghai 200125, China

**India**

**KOSMEK LTD. - INDIA**

**TEL.+91-9880561695**

F 203, Level-2, First Floor, Prestige Center Point, Cunningham Road, Bangalore -560052 India

**Thailand**

**Thailand Representative Office**

**TEL. +66-2-300-5132**  **FAX. +66-2-300-5133**

67 Soi 58, RAMA 9 Rd., Suanluang, Suanluang, Bangkok 10250, Thailand

**Taiwan**

**(Taiwan Exclusive Distributor)**

**TEL. +886-2-82261860**  **FAX. +886-2-82261890**

16F-4, No.2, Jian Ba Rd, Zhonghe District, New Taipei City Taiwan 23511

**Philippines**

**(Philippines Exclusive Distributor)**

**TEL.+63-2-310-7286**  **FAX.+63-2-310-7286**

Victoria Wave Special Economic Zone Mt. Apo Building, Brgy. 186, North Caloocan City, Metro Manila, Philippines 1427

**Indonesia**

**(Indonesia Exclusive Distributor)**

**TEL.+62-21-5818632**  **FAX.+62-21-5814857**

P.T PANDU HYDRO PNEUMATICS Ruko Green Garden Blok Z-Ⅱ No.51 Rt.005 Rw.008 Kedoya Utara-Kebon Jeruk Jakarta Barat 11520 Indonesia

### Sales Offices in Japan

**Head Office**

**TEL.078-991-5115**  **FAX.078-991-8787**

〒651-2241  兵庫県神戸市西区室谷2丁目1番5号

**Osaka Sales Office**

**TEL.048-652-8839**  **FAX.048-652-8828**

〒331-0815  堺市北区北条三丁目8161番

**Tokyo Sales Office**

**TEL.0566-74-8778**  **FAX.0566-74-8808**

〒446-0076  愛知県安城市愛海町2丁目10番地1

**Nagoya Sales Office**

**TEL.092-433-0424**  **FAX.092-433-0426**

〒812-0006  福岡県福岡市博多区上新田1丁目8-10-101

**Fukuoka Sales Office**

**TEL.074-252-4841**  **FAX.074-252-8385**

〒812-0006  福岡県福岡市博多区上新田1丁目8-10-101

FOR FURTHER INFORMATION ON UNLISTED SPECIFICATIONS AND SIZES, PLEASE CALL US.

SPECIFICATIONS IN THIS CATALOG ARE SUBJECT TO CHANGE WITHOUT NOTICE.
Global Network

Overseas Affiliates and Sales Offices
Distributors

Canada
U.S.A.

Europe

Asia

Brazil

Australia

Mexico

Japan

Korea

China

Taiwan

Philippines

Thailand

India

Singapore

Malaysia

Indonesia

FOR FURTHER INFORMATION ON UNLISTED SPECIFICATIONS AND SIZES, PLEASE CALL US.
SPECIFICATIONS IN THIS CATALOG ARE SUBJECT TO CHANGE WITHOUT NOTICE.