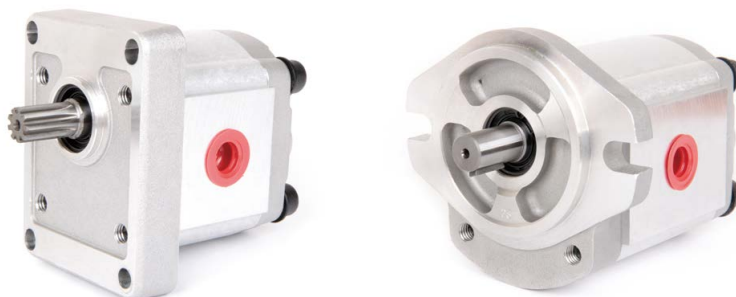
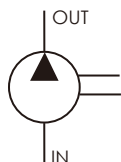


# HGP-3A

- Displacement : 2~35 cc/rev
- Max. Pressure : 250 kgf/cm<sup>2</sup>  
( 3500psi )
- Flange : SAE 2-bolt, DIN 4-bolt,  
European 4-bolt



## SCHEMATIC SYMBOL



## ORDER CODES

|               |   |          |   |           |   |          |   |           |   |           |   |           |
|---------------|---|----------|---|-----------|---|----------|---|-----------|---|-----------|---|-----------|
| <b>HGP-3A</b> | - | <b>F</b> | - | <b>13</b> | - | <b>R</b> | - | <b>X1</b> | - | <b>2B</b> | - | <b>P1</b> |
| <b>1</b>      |   | <b>2</b> |   | <b>3</b>  |   | <b>4</b> |   | <b>5</b>  |   | <b>6</b>  |   | <b>7</b>  |

|          |                             |  |                     |
|----------|-----------------------------|--|---------------------|
| <b>1</b> | <b>Model Name</b>           | <b>HGP-3A</b>  |                     |
| <b>2</b> | <b>Mounting</b>             | <b>F</b>   | flange type         |
|          |                             | <b>L</b>   | foot type           |
| <b>3</b> | <b>Delivery Capacity</b>    | <b>2, 3, 4, 6, 8, 11, 13, 14, 17, 19, 23, 25, 28, 30, 33, 35</b>                                     |                     |
| <b>4</b> | <b>Rotation Direction</b>   | <b>R</b>   | clockwise           |
|          |                             | <b>L</b>   | counter - clockwise |
|          |                             | <b>M</b>   | hydraulic motor *   |
| <b>5</b> | <b>Shaft Type *</b>         | <b>X:</b> straight shaft <b>Y:</b> spline shaft <b>Z:</b> taper shaft                                |                     |
| <b>6</b> | <b>Flange Mounting Type</b> | <b>2B</b>  | SAE 2-bolt          |
|          |                             | <b>4BD</b>   | DIN 4-bolt          |
|          |                             | <b>4BE</b>   | European 4-bolt     |
| <b>7</b> | <b>Inlet and Outlet *</b>   | <b>F:</b> flange type(F1~F6) <b>G:</b> G, BSP, PF(G1~G2)<br><b>P:</b> PT(P1~P2) <b>U:</b> UNF(U1~U2) |                     |

\* The dimension of shafts and inlet & outlet sizes please refer to Page 19.

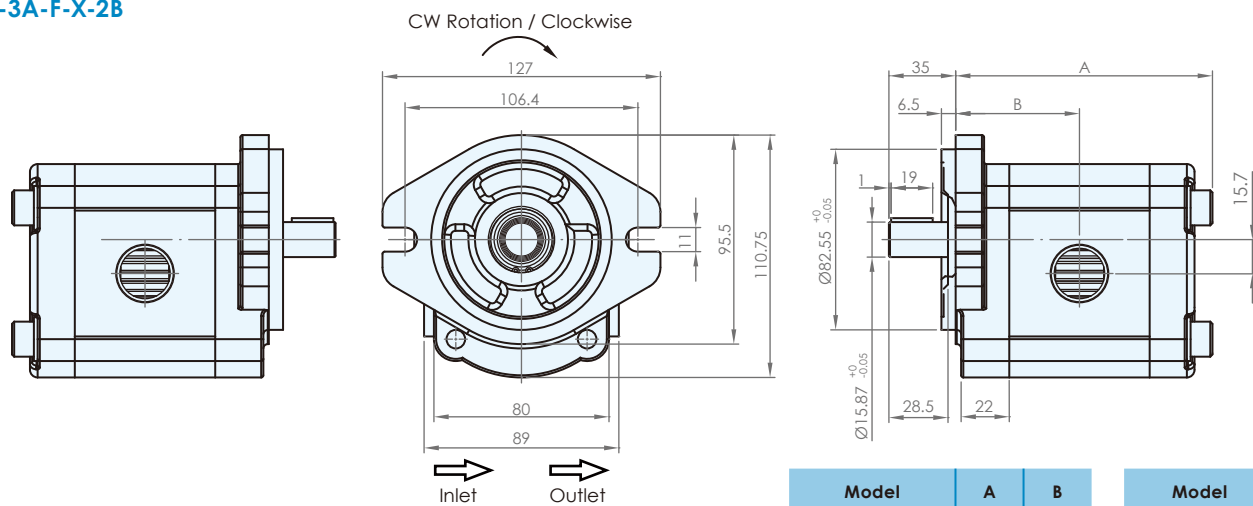
\* Please contact the local distributors to obtain the specifications of hydraulic motors.

## SPECIFICATIONS

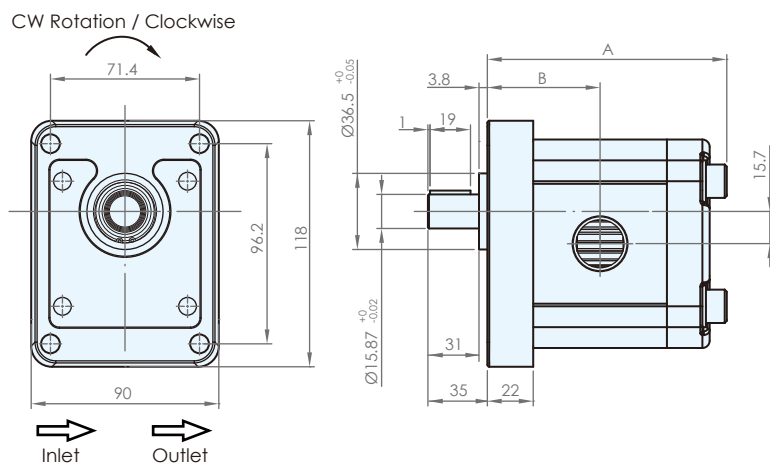
| Model     | Accurate Displacement Capacity (cc/rev) | Operational Pressure (kgf/cm <sup>2</sup> ) | Max. Pressure (kgf/cm <sup>2</sup> ) | Speed (r.p.m.) |      |      | Weight (kg) |
|-----------|---|---|--------------------------------------|----------------|------|------|-------------|
|           |   |   |                                      | Rate           | Max. | Min. |             |
| HGP-3A-2  | 2                                       | 210   | 250                                  | 1800           | 4000 | 700  | 2.19        |
| HGP-3A-3  | 3                                       | 210   | 250                                  | 1800           | 4000 | 700  | 2.23        |
| HGP-3A-4  | 4                                       | 210   | 250                                  | 1800           | 4000 | 700  | 2.29        |
| HGP-3A-6  | 6                                       | 210   | 250                                  | 1800           | 4000 | 700  | 2.37        |
| HGP-3A-8  | 8.4                                     | 210   | 250                                  | 1800           | 3500 | 700  | 2.45        |
| HGP-3A-11 | 11                                      | 210   | 250                                  | 1800           | 3000 | 600  | 2.60        |
| HGP-3A-13 | 13                                      | 210   | 250                                  | 1800           | 3000 | 600  | 2.70        |
| HGP-3A-14 | 14.3                                    | 210   | 250                                  | 1800           | 3000 | 500  | 2.76        |
| HGP-3A-17 | 16.5                                    | 210   | 250                                  | 1800           | 3000 | 500  | 2.87        |
| HGP-3A-19 | 19.2                                    | 210   | 250                                  | 1800           | 3000 | 500  | 2.99        |
| HGP-3A-23 | 23                                      | 210   | 250                                  | 1800           | 3000 | 500  | 3.19        |
| HGP-3A-25 | 25                                      | 175   | 210                                  | 1800           | 2800 | 500  | 3.24        |
| HGP-3A-28 | 28                                      | 175   | 210                                  | 1800           | 2500 | 500  | 3.35        |
| HGP-3A-30 | 30                                      | 175   | 210                                  | 1800           | 2500 | 500  | 3.45        |
| HGP-3A-33 | 33                                      | 140   | 175                                  | 1200           | 2500 | 500  | 3.60        |
| HGP-3A-35 | 35                                      | 125   | 140                                  | 1200           | 2500 | 500  | 3.71        |

## DIMENSIONS (unit : mm)

### HGP-3A-F-X-2B



### HGP-3A-F-X-4BE

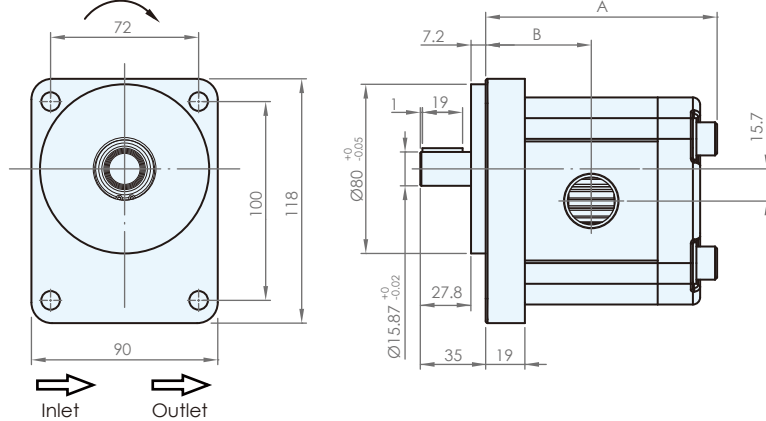


| Model         | A    | B    | Model        | A    | B    |
|---------------|------|------|--------------|------|------|
| HGP-3A-2-4BE  | 97.4 | 44.7 | HGP-3A-2-2B  | 97.4 | 46.7 |
| HGP-3A-3-4BE  | 99   | 45.5 | HGP-3A-3-2B  | 99   | 47.5 |
| HGP-3A-4-4BE  | 101  | 46.5 | HGP-3A-4-2B  | 101  | 48.5 |
| HGP-3A-6-4BE  | 105  | 48   | HGP-3A-6-2B  | 105  | 50   |
| HGP-3A-8-4BE  | 109  | 49.5 | HGP-3A-8-2B  | 109  | 51.5 |
| HGP-3A-11-4BE | 113  | 52   | HGP-3A-11-2B | 113  | 54   |
| HGP-3A-13-4BE | 117  | 54   | HGP-3A-13-2B | 117  | 56   |
| HGP-3A-14-4BE | 119  | 55   | HGP-3A-14-2B | 119  | 57   |
| HGP-3A-17-4BE | 123  | 57   | HGP-3A-17-2B | 123  | 59   |
| HGP-3A-19-4BE | 127  | 59   | HGP-3A-19-2B | 127  | 61   |
| HGP-3A-23-4BE | 134  | 63   | HGP-3A-23-2B | 134  | 65   |
| HGP-3A-25-4BE | 137  | 64   | HGP-3A-25-2B | 137  | 66   |
| HGP-3A-28-4BE | 141  | 66   | HGP-3A-28-2B | 141  | 68   |
| HGP-3A-30-4BE | 145  | 68   | HGP-3A-30-2B | 145  | 70   |
| HGP-3A-33-4BE | 150  | 71   | HGP-3A-33-2B | 150  | 73   |
| HGP-3A-35-4BE | 154  | 73   | HGP-3A-35-2B | 154  | 75   |

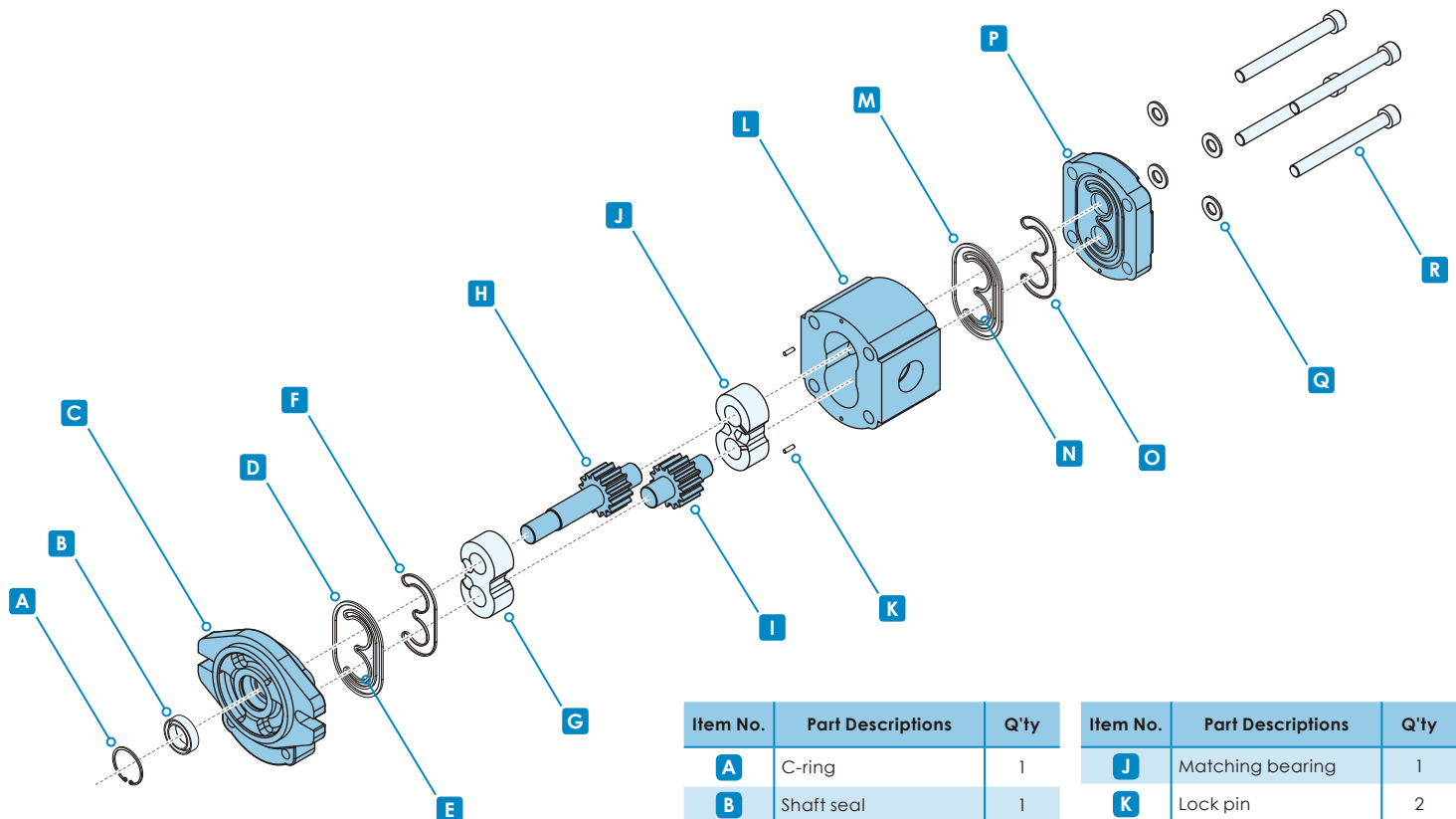
**DIMENSIONS** (unit : mm )

**HGP-3A-F-X-4BD**

CW Rotation / Clockwise



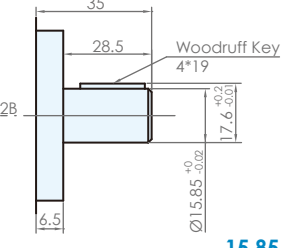
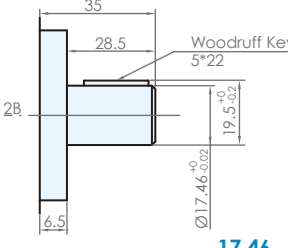
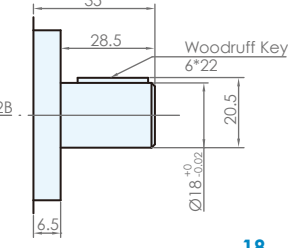
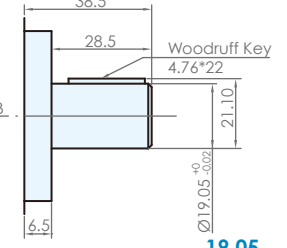
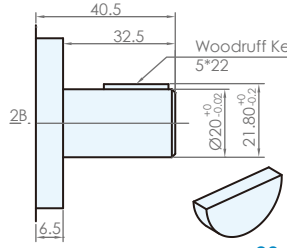
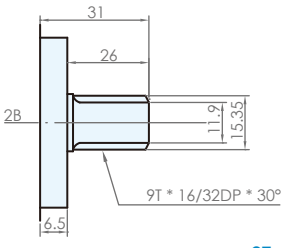
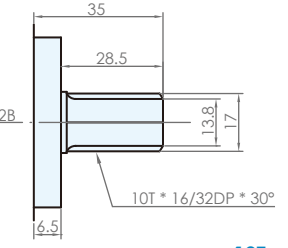
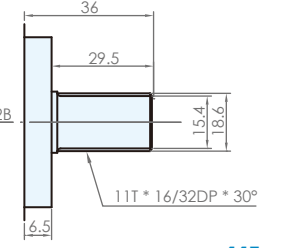
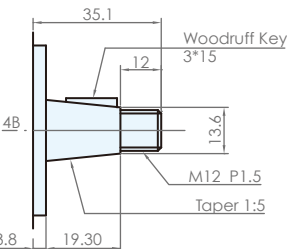
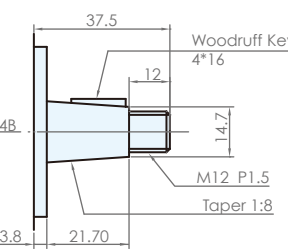
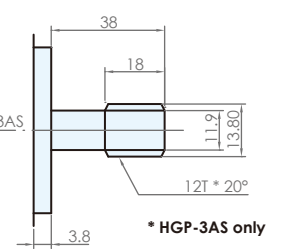
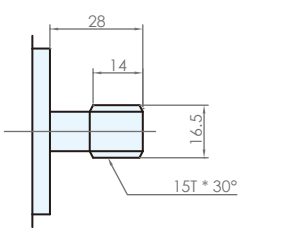
| Model         | A    | B    |
|---------------|------|------|
| HGP-3A-2-4BD  | 97.4 | 41.7 |
| HGP-3A-3-4BD  | 99   | 42.5 |
| HGP-3A-4-4BD  | 101  | 43.5 |
| HGP-3A-6-4BD  | 105  | 45   |
| HGP-3A-8-4BD  | 109  | 46.5 |
| HGP-3A-11-4BD | 113  | 49   |
| HGP-3A-13-4BD | 117  | 51   |
| HGP-3A-14-4BD | 119  | 52   |
| HGP-3A-17-4BD | 123  | 54   |
| HGP-3A-19-4BD | 127  | 56   |
| HGP-3A-23-4BD | 134  | 60   |
| HGP-3A-25-4BD | 137  | 61   |
| HGP-3A-28-4BD | 141  | 63   |
| HGP-3A-30-4BD | 145  | 65   |
| HGP-3A-33-4BD | 150  | 68   |
| HGP-3A-35-4BD | 154  | 70   |

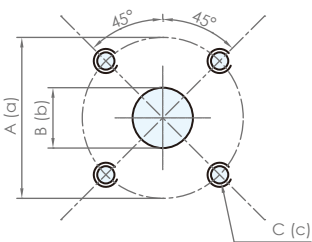
**DECOMPOSITION CHARTS**


| Item No. | Part Descriptions | Q'ty |
|----------|-------------------|------|
| <b>A</b> | C-ring            | 1    |
| <b>B</b> | Shaft seal        | 1    |
| <b>C</b> | Front cover       | 1    |
| <b>D</b> | O-ring            | 1    |
| <b>E</b> | Back-up ring      | 1    |
| <b>F</b> | Bush lobe seal    | 1    |
| <b>G</b> | Matching bearing  | 1    |
| <b>H</b> | Drive gear        | 1    |
| <b>I</b> | Drive gear        | 1    |

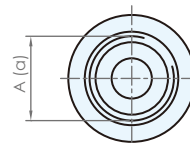
| Item No. | Part Descriptions | Q'ty |
|----------|-------------------|------|
| <b>J</b> | Matching bearing  | 1    |
| <b>K</b> | Lock pin          | 2    |
| <b>L</b> | Housing           | 1    |
| <b>M</b> | O-ring            | 1    |
| <b>N</b> | Back-up ring      | 1    |
| <b>O</b> | Bush lobe seal    | 1    |
| <b>P</b> | Rear cover        | 1    |
| <b>Q</b> | Bolt washer       | 4    |
| <b>R</b> | Bolt              | 4    |

**ADDITIONAL DIMENSION ( unit : mm )**
**Dimension of Shaft**

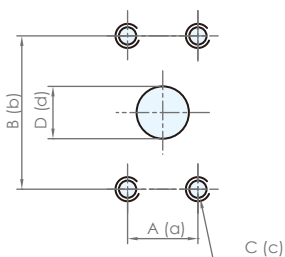
|   |   |   |   |
|---|---|---|---|
|  <p><b>X1</b></p> <p>15.85</p> |  <p><b>X2</b></p> <p>17.46</p> |  <p><b>X3</b></p> <p>18</p>   |  <p><b>X4</b></p> <p>19.05</p> |
|  <p><b>X5</b></p> <p>20</p>    |  <p><b>Y1</b></p> <p>9T</p>    |  <p><b>Y2</b></p> <p>10T</p>  |  <p><b>Y3</b></p> <p>11T</p>   |
|  <p><b>Z1</b></p> <p>1:5</p>  |  <p><b>Z2</b></p> <p>1:8</p>  |  <p><b>Y4</b></p> <p>12T</p> |  <p><b>Y5</b></p> <p>15T</p>  |

**Inlet and Outlet Size**

**Flange Type**

| Code | Inlet |      |    | Outlet |      |    |
|------|-------|------|----|--------|------|----|
|      | A     | B    | C  | a      | b    | c  |
| F1   | 40    | 18.5 | M6 | 35     | 14.5 | M6 |
| F2   | 40    | 18.5 | M8 | 30     | 14.5 | M6 |
| F3   | 40    | 18.5 | M8 | 40     | 14.5 | M8 |


**UNF**

| Code | Inlet         | Outlet       |
|------|---------------|--------------|
|      | A             | a            |
| U1   | 1 1/16"-12UN  | 7/8"-14UNF   |
| U2   | 1 5/16"-12UNF | 1 1/16"-12UN |


**Flange Type**

| Code | Inlet |       |             |      | Outlet |       |             |      |
|------|-------|-------|-------------|------|--------|-------|-------------|------|
|      | A     | B     | C           | D    | a      | b     | c           | d    |
| F4   | 17.48 | 38.1  | 5/16"-18UNC | 14.5 | 17.48  | 38.1  | 5/16"-18UNC | 14.5 |
| F5   | 22.23 | 47.63 | 3/8"-16UNC  | 18.5 | 17.48  | 38.1  | 5/16"-18UNC | 14.5 |
| F6   | 26.2  | 52.4  | 3/8"-16UNC  | 24   | 22.23  | 47.63 | 3/8"-16UNC  | 18.5 |

\* UNC : Unified Coarse Thread

**G, BSP, PF**

| Code | Inlet  | Outlet |
|------|--------|--------|
|      | A      | a      |
| G1   | G 3/4" | G 1/2" |
| G2   | G 1"   | G 3/4" |

**PT**

| Code | Inlet   | Outlet  | Applicable Model |
|------|---------|---------|------------------|
|      | A       | a       |                  |
| P1   | 3/4" PT | 1/2" PT | 3A-2 ~ 23        |
| P2   | 1" PT   | 3/4" PT | 3A-25 ~ 35       |

