

# Printing Ink Supply System

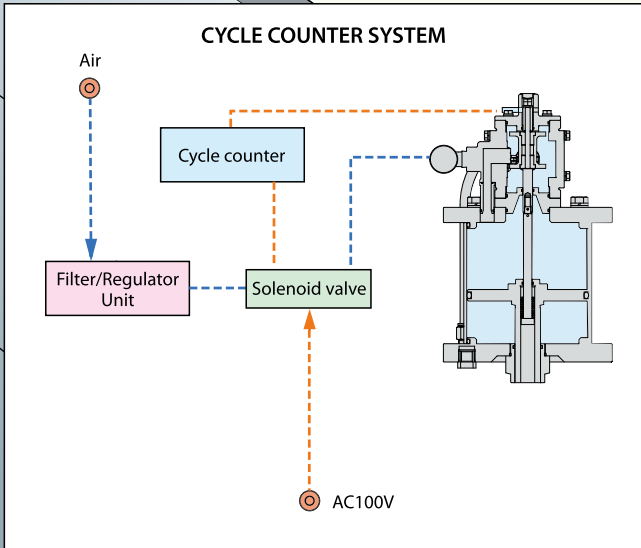
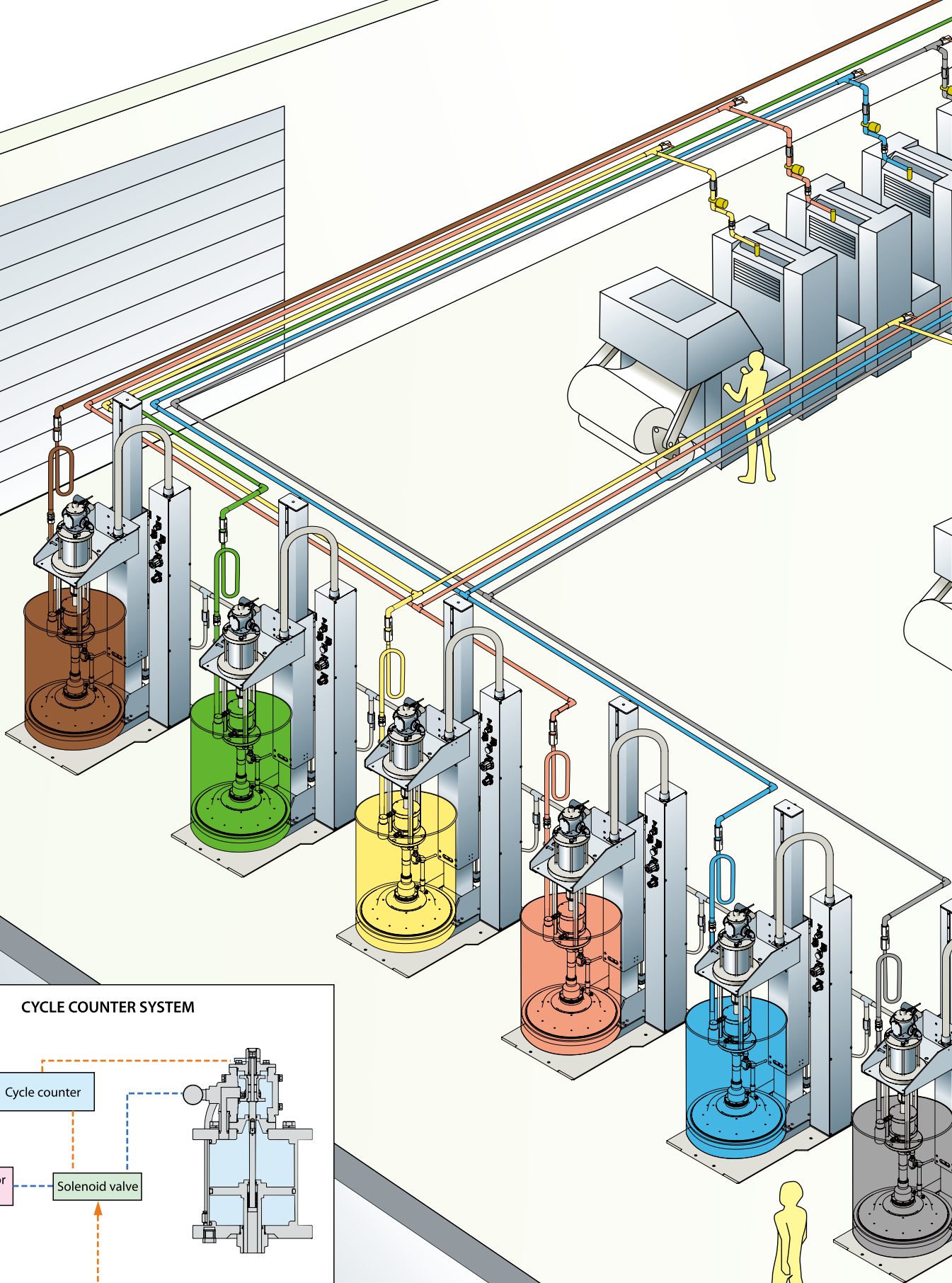
Yamada

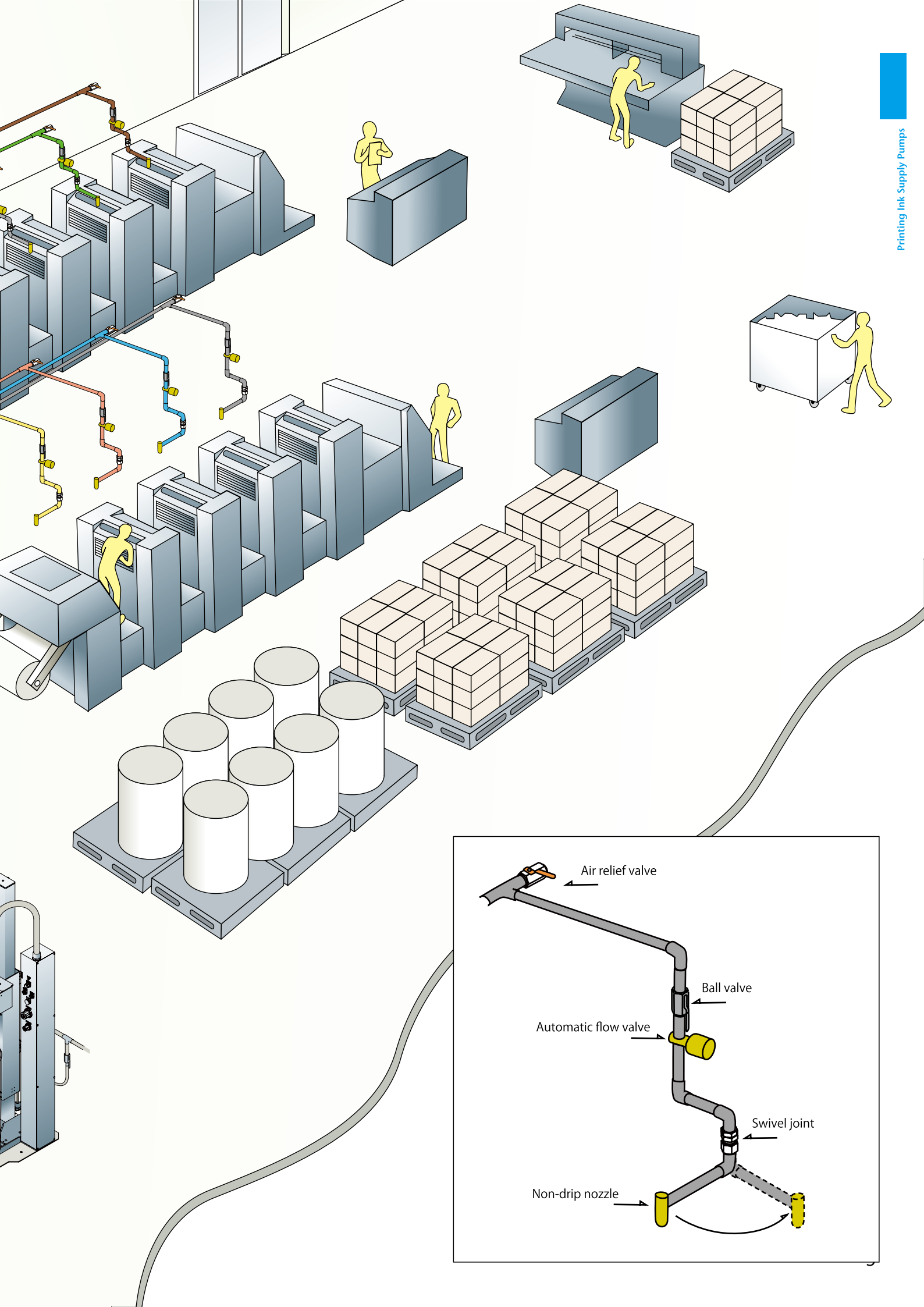
2009/2010



# Ink Supply System for Commercial Printing

System for web offset printing.





## Pump Technology Specifically Designed for Printing Inks

- Stable operation with mechanical Switching valve
- Quiet operation
- Outside accessible Air valve
- Anti-freezing design
- Improves pump life
- Compact design
- The transformable sealing Inductor plate



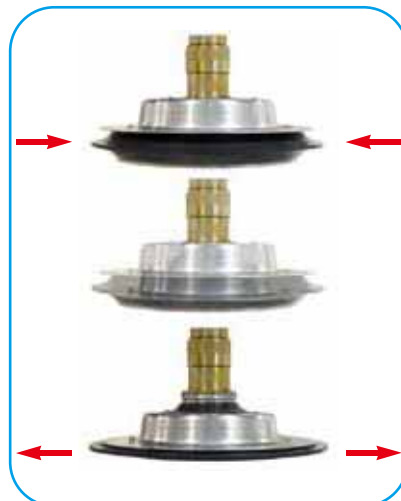
**Air Motor**



**Oil Container**



**Inductor Plate**



### Model Indication

Shovel Type

Pump Ratio

IP □ □ □ S □ □ - □ □ □

Air Motor Size

- ED : Drum Type, with Drum Dolly, with Control Sequencer
- AD : Drum Type, with Drum Dolly, with Mechanical L/S
- AB : Drum Type, Flat Base, with Mechanical L/S (NPT)
- ABE : Drum Type, Flat Base, with Mechanical L/S (BSP)
- TS : Bulk & TOTE Type, Bracket-Mounting, Single Inlet Port
- TSW : Bulk & TOTE Type, Bracket-Mounting, Dual Inlet Ports
- TE : Bulk & TOTE Type, Floor-Mount, Dual Inlet Ports
- PC : Pail Type, Portable
- PB : Pail Type, Stationary

**Patent Pending**

Inductor Plate Mechanism  
 Japan No. 3096458  
 No. 3297661  
 U.S. No. 6.422.430

**The Unique Inductor Plate**

The transformable sealing systems designed to allow for very easy and clean drum changes.





Printing INK

## Drum Type (with Drum Dolly and Control Sequencer)

# ED Series IP 140S25-ED IP 200S25-ED IP 250S20-ED

Pneumatic pump units with an electric control sequencer. They come with a DD-200 drum dolly.

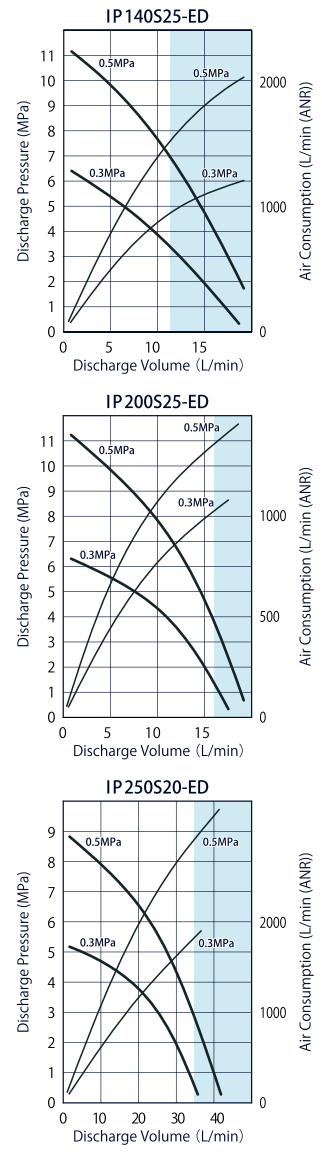


IP 140S25-ED  
(881052)

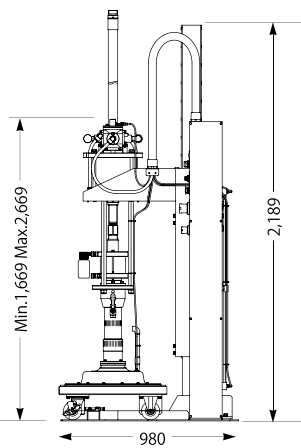
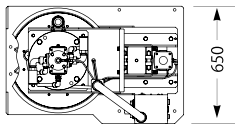
IP 200S25-ED  
(881053)

IP 250S20-ED  
(881054)

### Performance Curves



### Dimensions



DD-200  
Drum Dolly



### Pump Specifications

| Model No.                                 | 881052                 | 881053               | 881054               |      |
|---|------------------------|----------------------|----------------------|------|
| Model                                     | IP 140S25-ED           | IP 200S25-ED         | IP 250S20-ED         |      |
| Ratio                                     | 25×1                   | 25×1                 | 20×1                 |      |
| Air Motor Size (mm)                       | φ140                   | φ200                 | φ250                 |      |
| Stroke Length (mm)                        | 150                    |                      |                      |      |
| Pump Capacity (mL)                        | 160                    | 320                  | 650                  |      |
| Cycle per Liter Discharge                 | 6.3                    | 3.1                  | 1.5                  |      |
| Air Consumption per Liter Discharge (ANR) | (0.3MPa)               | 78.1                 | 80.3                 | 60.9 |
|   | (0.5MPa)               | 106.8                | 109.9                | 83.0 |
| Air Supply Pressure Range (MPa)           | 0.5~1.0 (Pump 0.2~0.7) |                      |                      |      |
| Air Supply Port Size (inch)               | Rc 1/2                 |                      |                      |      |
| Discharge Port Size (inch)                | G 3/4 <sup>F</sup>     | G 1 1/2 <sup>F</sup> | G 1 1/2 <sup>F</sup> |      |
| Weight (kg) ※Except Accessories           | 247                    | 260                  | 282                  |      |



**Drum Type (Flat Base with Mechanical L/S)**

# AB, ABE Series

IP 140S25-AB IP 200S25-AB IP 250S20-AB  
IP 140S25-ABE IP 200S25-ABE IP 250S20-ABE

Pneumatic pump units with a mechanical limit switch.



IP 140S25-AB  
(881046)

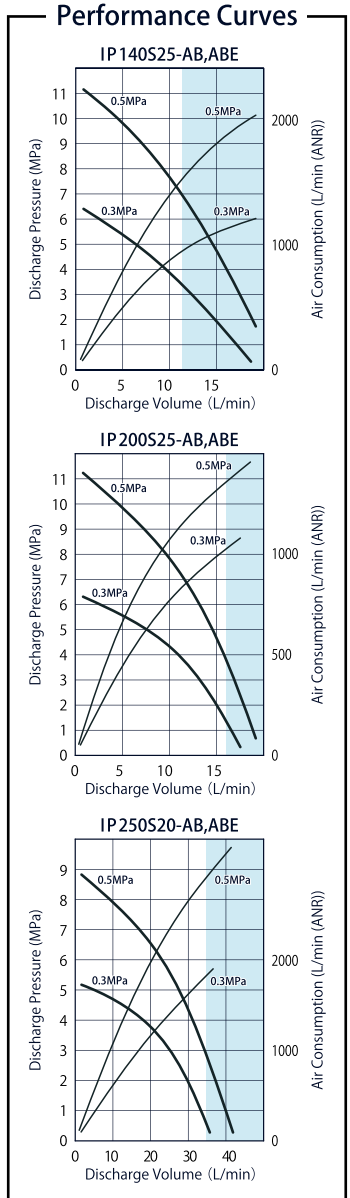
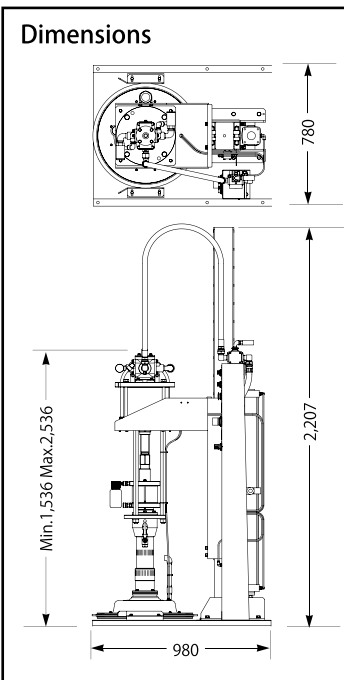
IP 140S25-ABE  
(881059)

IP 200S25-AB  
(881032)

IP 200S25-ABE  
(881060)

IP 250S20-AB  
(881033)

IP 250S20-ABE  
(881061)



**Pump Specifications**

| Model No.                                 | 881046                 | 881059               | 881032                 | 881060                 | 881033                 | 881061                 |
|---|------------------------|----------------------|------------------------|------------------------|------------------------|------------------------|
| Model                                     | IP140S25-AB            | IP140S25-ABE         | IP200S25-AB            | IP200S25-ABE           | IP250S20-AB            | IP250S20-ABE           |
| Ratio                                     | 25×1                   |                      | 25×1                   |                        | 20×1                   |                        |
| Air Motor Size (mm)                       | φ140                   |                      | φ200                   |                        | φ250                   |                        |
| Stroke Length (mm)                        | 150                    |                      |                        |                        |                        |                        |
| Pump Capacity (mL)                        | 160                    |                      | 320                    |                        | 650                    |                        |
| Cycle per Liter Discharge                 | 6.3                    |                      | 3.1                    |                        | 1.5                    |                        |
| Air Consumption per Liter Discharge (ANR) | (0.3MPa)               | 78.1                 | 80.3                   | 60.9                   |                        |                        |
|   | (0.5MPa)               | 106.8                | 109.9                  | 83.0                   |                        |                        |
| Air Supply Pressure Range (MPa)           | 0.5~1.0 (Pump 0.2~0.7) |                      |                        |                        |                        |                        |
| Air Supply Port Size (inch)               | NPT 3/4 <sup>F</sup>   | BSP 3/4 <sup>F</sup> | NPT 3/4 <sup>F</sup>   | BSP 3/4 <sup>F</sup>   | NPT 3/4 <sup>F</sup>   | BSP 3/4 <sup>F</sup>   |
| Discharge Port Size (inch)                | NPT 3/4 <sup>F</sup>   | BSP 3/4 <sup>F</sup> | NPT 1 1/2 <sup>F</sup> | BSP 1 1/2 <sup>F</sup> | NPT 1 1/2 <sup>F</sup> | BSP 1 1/2 <sup>F</sup> |
| Weight (kg) ※Except Accessories           | 240                    |                      | 250                    |                        | 273                    |                        |



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**Drum Type (with Drum Dolly and Mechanical L/S)**

**AD Series** **IP 140S25-AD IP 200S25-AD**  
**IP 250S20-AD**

Pneumatic pump units with a mechanical limit switch and an automatic pump stop valve.

They come with a DD-200 drum dolly.



IP 140S25-AD  
(881048)

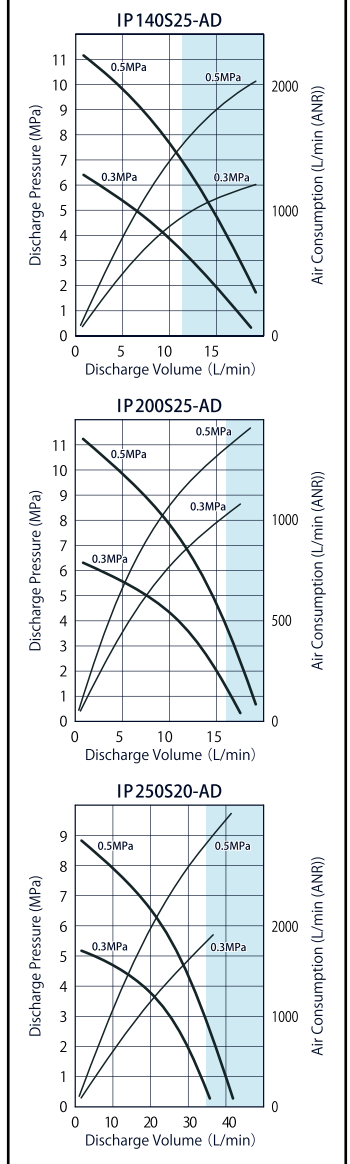


IP 200S25-AD  
(881049)

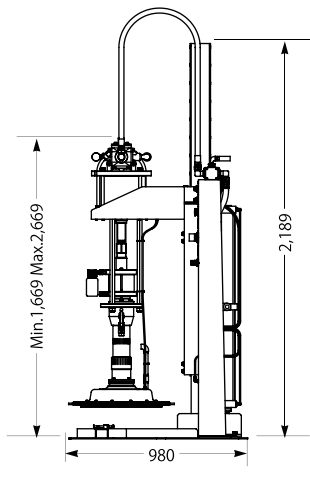
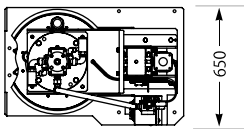


IP 250S20-AD  
(881050)

**Performance Curves**



**Dimensions**



DD-200  
Drum Dolly



**Pump Specifications**

| Model No.                                 | 881048                 | 881049       | 881050       |      |
|---|------------------------|--------------|--------------|------|
| Model                                     | IP 140S25-AD           | IP 200S25-AD | IP 250S20-AD |      |
| Ratio                                     | 25 × 1                 | 25 × 1       | 20 × 1       |      |
| Air Motor Size (mm)                       | φ140                   | φ200         | φ250         |      |
| Stroke Length (mm)                        | 150                    |              |              |      |
| Pump Capacity (mL)                        | 160                    | 320          | 650          |      |
| Cycle per Liter Discharge                 | 6.3                    | 3.1          | 1.5          |      |
| Air Consumption per Liter Discharge (ANR) | (0.3MPa)               | 78.1         | 80.3         | 60.9 |
|   | (0.5MPa)               | 106.8        | 109.9        | 83.0 |
| Air Supply Pressure Range (MPa)           | 0.5~1.0 (Pump 0.2~0.7) |              |              |      |
| Air Supply Port Size (inch)               | Rc 3/4                 |              |              |      |
| Discharge Port Size (inch)                | Rc 3/4                 | Rc 1 1/2     | Rc 1 1/2     |      |
| Weight (kg) ※Except Accessories           | 249                    | 262          | 284          |      |

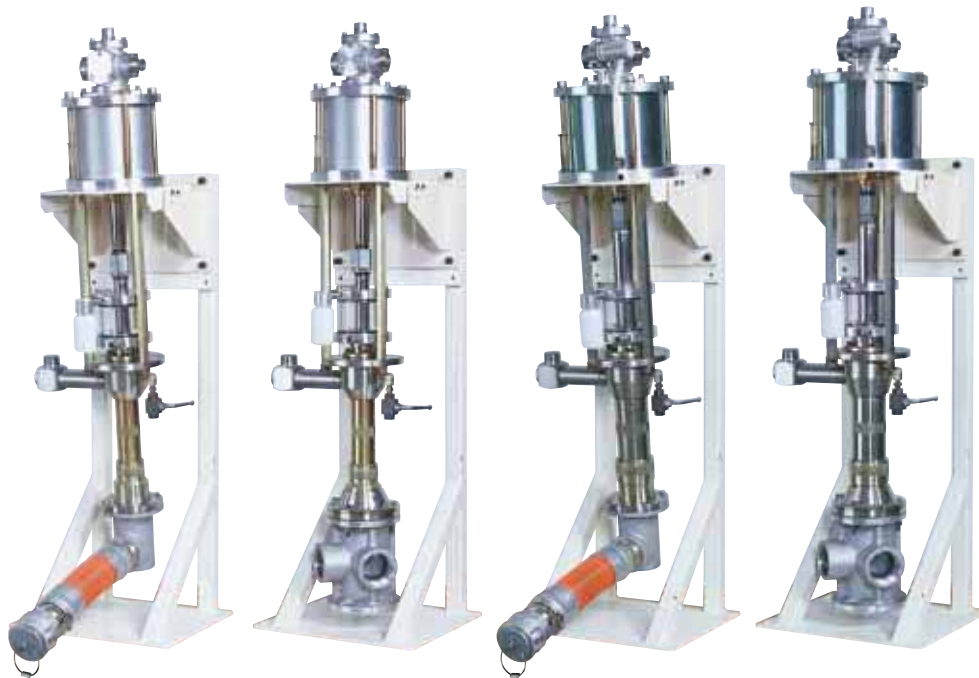


**Bulk & TOTE Type (Bracket-Mounting)**

**TS Series** IP 200S25-TS (H) IP 200S25-TS (L)  
IP 250S20-TS (H) IP 250S20-TS (L)

**TSW Series** IP 200S25-TSW (H) IP 200S25-TSW (L)  
IP 250S20-TSW (H) IP 250S20-TSW (L)

Two types of inlet and two height positions are available.



IP 200S25-TS (H)  
(881093)

IP 200S25-TSW (H)  
(881095)

IP 250S20-TS (H)  
(881094)

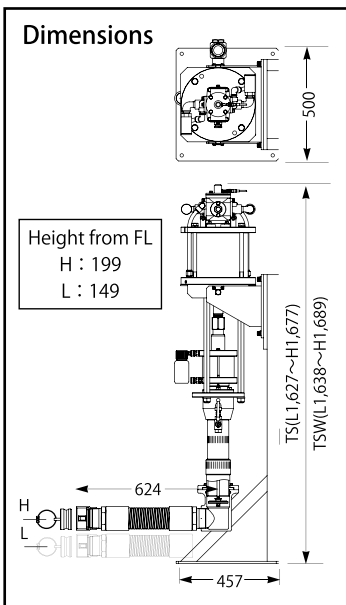
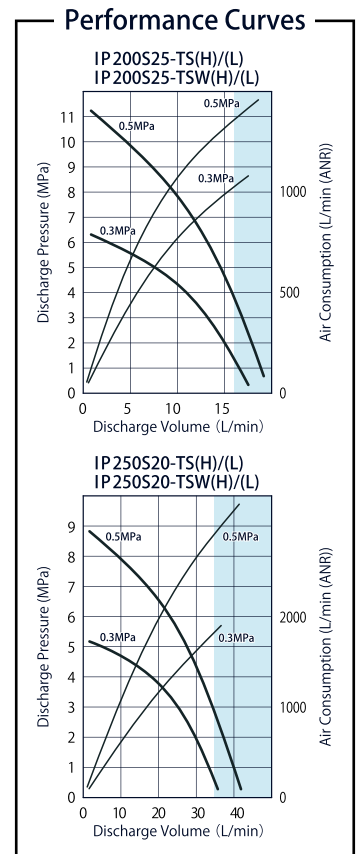
IP 250S20-TSW (H)  
(881096)

IP 200S25-TS (L)  
(881044)

IP 200S25-TSW (L)  
(881062)

IP 250S20-TS (L)  
(881045)

IP 250S20-TSW (L)  
(881063)



**Pump Specifications**

| Model No.                                 | 881093            | 881044                 | 881095               | 881062            | 881094                 | 881045           | 881096               | 881063            |
|---|-------------------|------------------------|----------------------|-------------------|------------------------|------------------|----------------------|-------------------|
| Model                                     | IP 200S25-TS (H)  | IP 200S25-TS (L)       | IP 200S25-TSW (H)    | IP 200S25-TSW (L) | IP 250S20-TS (H)       | IP 250S20-TS (L) | IP 250S20-TSW (H)    | IP 250S20-TSW (L) |
| Ratio                                     | 25 × 1            |                        |                      |                   | 20 × 1                 |                  |                      |                   |
| Air Motor Size (mm)                       | φ200              |                        |                      |                   | φ250                   |                  |                      |                   |
| Stroke Length (mm)                        | 150               |                        |                      |                   |                        |                  |                      |                   |
| Pump Capacity (mL)                        | 320               |                        |                      |                   | 650                    |                  |                      |                   |
| Cycle per Liter Discharge                 | 3.1               |                        |                      |                   | 1.5                    |                  |                      |                   |
| Air Consumption per Liter Discharge (ANR) | (0.3MPa) 80.3     |                        | (0.5MPa) 109.9       |                   | (0.3MPa) 60.9          |                  | (0.5MPa) 83.0        |                   |
| Air Supply Pressure Range (MPa)           | 0.2~0.7           |                        |                      |                   |                        |                  |                      |                   |
| Air Supply Port Size (inch)               | Rc 1/2            | NPT 3/4 <sup>F</sup>   |                      | Rc 1/2            | NPT 3/4 <sup>F</sup>   |                  |                      |                   |
| Discharge Port Size (inch)                | R 1 1/2           | NPT 1 1/2 <sup>M</sup> |                      | R 1 1/2           | NPT 1 1/2 <sup>M</sup> |                  |                      |                   |
| Inlet Port Size (inch)                    | 3" female coupler |                        | 2-NPT 3 <sup>F</sup> |                   | 3" female coupler      |                  | 2-NPT 3 <sup>F</sup> |                   |
| Weight (kg) ※Except Accessories           | 140               |                        | 145                  |                   | 160                    |                  | 165                  |                   |



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**Bulk & TOTE Type (Floor-Mounting)**

**TE Series** IP 140S12-TE IP 200S25-TE  
IP 250S20-TE

Dual inlet type.



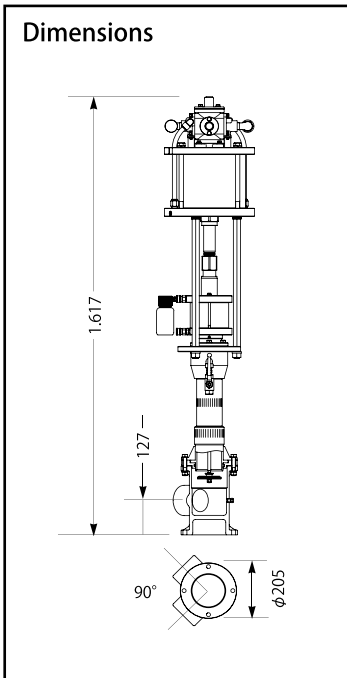
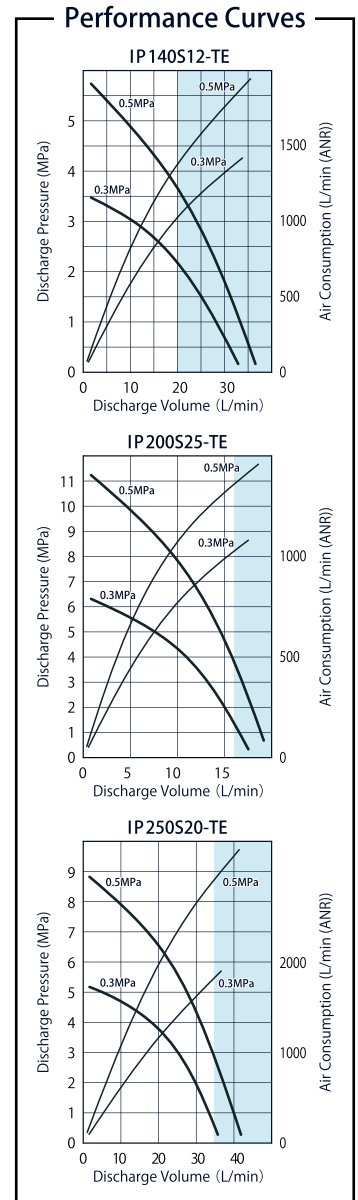
IP 140S12-TE (881051)



IP 200S25-TE (881030)



IP 250S20-TE (881031)



**Pump Specifications**

| Model No.                                 | 881051                 | 881030       | 881031       |
|---|------------------------|--------------|--------------|
| Model                                     | IP 140S12-TE           | IP 200S25-TE | IP 250S20-TE |
| Ratio                                     | 12×1                   | 25×1         | 20×1         |
| Air Motor Size (mm)                       | φ140                   | φ200         | φ250         |
| Stroke Length (mm)                        | 150                    |              |              |
| Pump Capacity (mL)                        | 320                    | 320          | 650          |
| Cycle per Liter Discharge                 | 3.1                    | 3.1          | 1.5          |
| Air Consumption per Liter Discharge (ANR) | (0.3MPa)               | 38.3         | 80.3         |
|   | (0.5MPa)               | 52.4         | 109.9        |
| Air Supply Pressure Range (MPa)           | 0.2~0.7                |              |              |
| Air Supply Port Size (inch)               | NPT 3/4 <sup>F</sup>   |              |              |
| Discharge Port Size (inch)                | NPT 1 1/2 <sup>M</sup> |              |              |
| Inlet Port Size (inch)                    | 2-NPT 3 <sup>F</sup>   |              |              |
| Weight (kg) ※Except Accessories           | 70                     | 74           | 96           |



**Pail Type**

# IPP Series IPP 80S10-PC IPP 80S25-PB

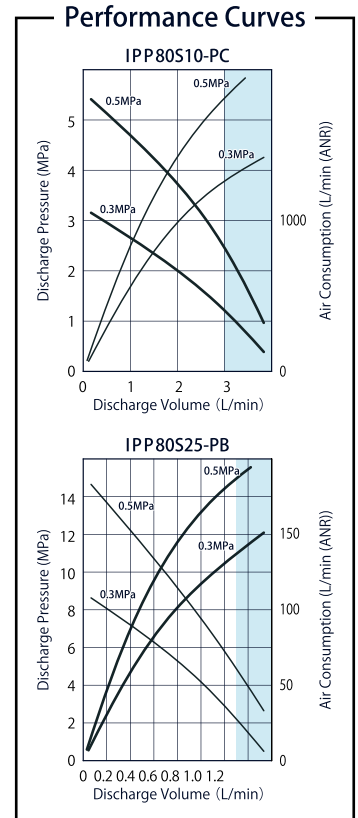
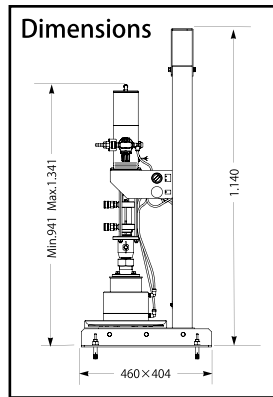
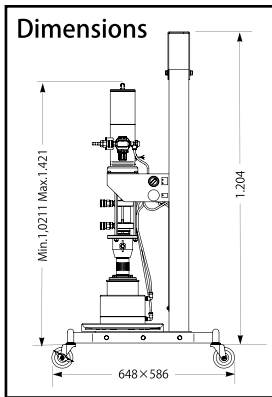
Both portable and stationary types are available.



IPP 80S10-PC  
(881012)



IPP 80S25-PB  
(880962)



**■ Pump Specifications**

| Model No.                                 | 881012                 | 880962       |
|---|------------------------|--------------|
| Model                                     | IPP 80S10-PC           | IPP 80S25-PB |
| Ratio                                     | 10×1                   | 25×1         |
| Air Motor Size (mm)                       | φ80                    | φ80          |
| Stroke Length (mm)                        | 70                     |              |
| Pump Capacity (mL)                        | 50                     | 21           |
| Cycle per Liter Discharge                 | 20.0                   | 47.6         |
| Air Consumption per Liter Discharge (ANR) | (0.3MPa)               | 36.3         |
|   | (0.5MPa)               | 49.5         |
| Air Supply Pressure Range (MPa)           | 0.5~1.0 (Pump 0.2~0.7) |              |
| Air Supply Port Size (inch)               | with Hose Coupler 1/4  |              |
| Discharge Port Size (inch)                | G 1/4                  |              |
| Weight (kg)                               | 50                     |              |



**■ Accessories**

Hose, Control Gun, Special Lift...etc. are available on request.



Printing INK

## Hydraulic Pump Unit

# IPH Series IPH 85S0.6

Large volume transfer unit for low viscosity application.

IPH 85S0.6  
(853971)



### ■ Pump Specifications

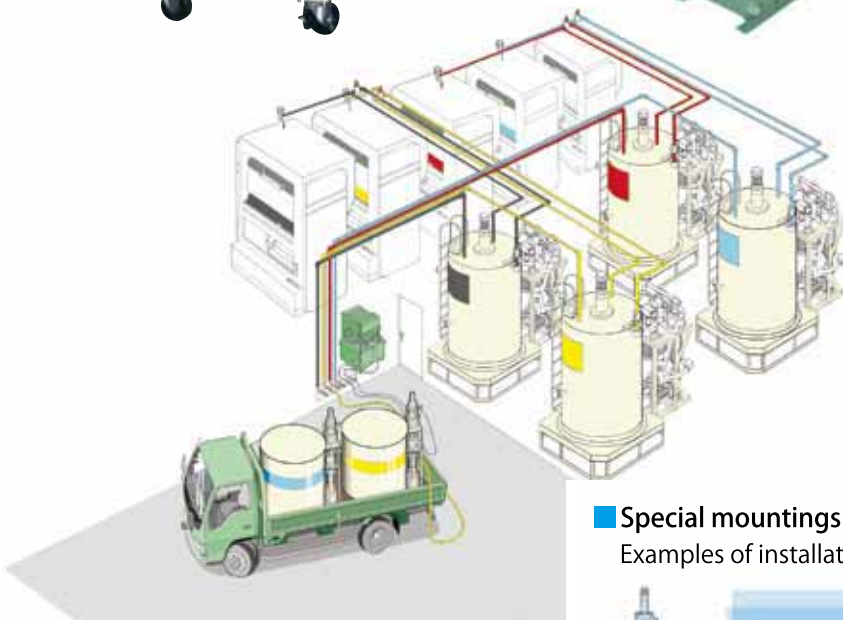
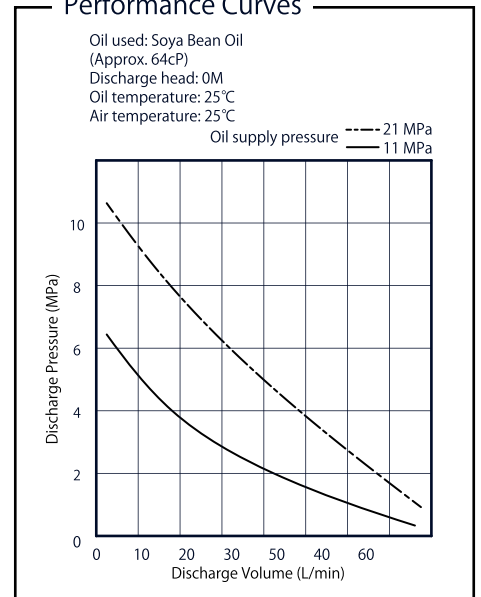
|                           |           |
|---------------------------|-----------|
| Model No.                 | 853971    |
| Model                     | IPH85S0.6 |
| Ratio                     | 0.6x1     |
| Drive Cylinder Size (mm)  | 85        |
| Suction Tube Size (mm)    | 145       |
| Stroke Length (mm)        | 80        |
| Pump Capacity (mL)        | 1,400     |
| Cycle per Liter Discharge | 0.7       |

Designed for transferring a large volume of low viscosity ink quickly to stationary tanks. Its large capacity and unique switching mechanism (PAT. P) achieves quick and quiet ink transfer.

Hydraulic Power Unit

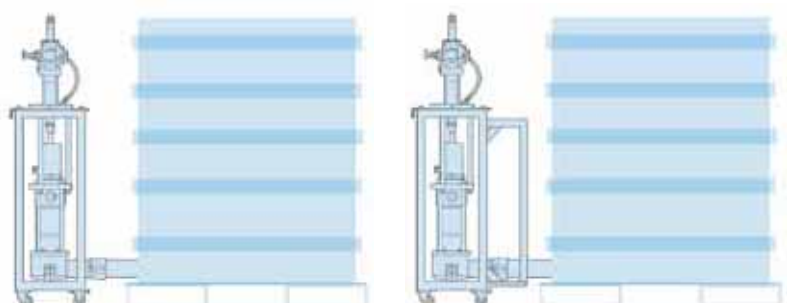


Performance Curves



### ■ Special mountings are available on request

Examples of installation



## Accessories

### Automatic Flow Gun



803685  
804001  
804023

803685 AF30M-15A

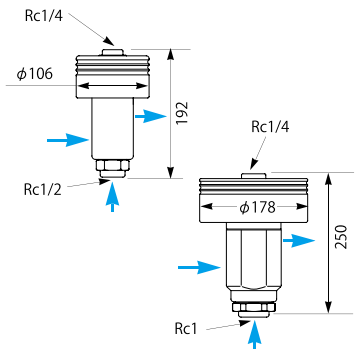
Valve Ratio: 45x1  
Maximum Working Pressure: 30MPa  
Maximum Air Supply Pressure: 0.7MPa  
Inlet/Outlet Port: Rc1/2" Air Supply Port: Rc1/4"

804001 AF20M-25A  
(without Sensor)

Valve Ratio: 30x1  
Maximum Working Pressure: 20MPa  
Maximum Air Supply Pressure: 0.7MPa  
Inlet/Outlet Port: Rc1" Air Supply Port: Rc1/4"

804023 AF20M-25AS  
(with Sensor)

Power Voltage: DC12V~24V\* Power Cord: 2M\*  
\*AF20M-25AS only



### Oil Evacuation Gun 853442 OS-200W

Used for evacuation oil from the oil container.



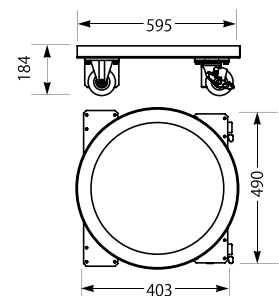
### Oil Supply Pump 853263 HOP-20W

Used to supply spindle oil (#10, additive-free) to the oil container.



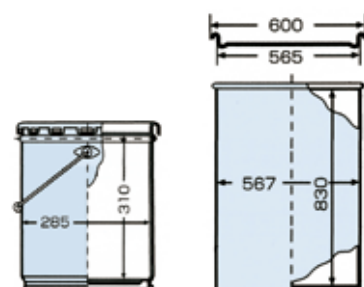
### Drum Dolly 803771 DD-200

Used with ED and AD type drum pump units.



### CAUTION

YAMADA Ink Supply Pump Inductor Plate is only suitable for straight drum/pail.



# MEMO

A series of horizontal dashed lines for writing.

# Printing Ink Supply System

## Pump Technology Specially Designed for Printing Inks



### The Yamada Corporation

has been a leading producer of industrial equipment since 1905 and of fluid handling products for over 60 years. As a pioneer of pumping technology, Yamada is known in many industries worldwide for its innovative products, superior quality, and unmatched reliability.



**⚠ WARNING** When selecting products published in this catalogue please confirm that you choose the correct version suited to your application and conditions.

■ YOUR LOCAL REPRESENTATIVE

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Specifications given herein may be changed at any time without prior notice

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FormNo. 910406E

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