

APSm

Self-priming Peripheral Pump



Application

- Can be used to transfer clean water or other liquids similar to water in physical and chemical properties
- Suitable for small living water supply, automatic water sprinkler system, small air conditioner system or supporting equipment etc.

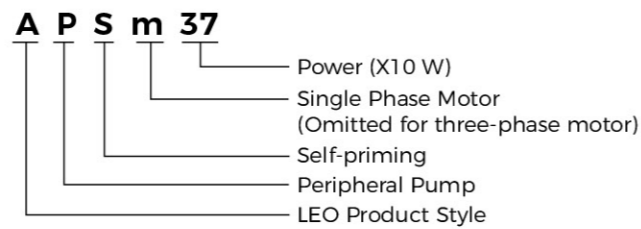
Pump

- Special anti-rust treatment for cast iron pump body and support
- Anti-block system for impeller
- Brass impeller
- AISI 304 shaft
- Max. liquid temperature: +60°C
- Max. suction: +8 m
- Self-priming

Motor

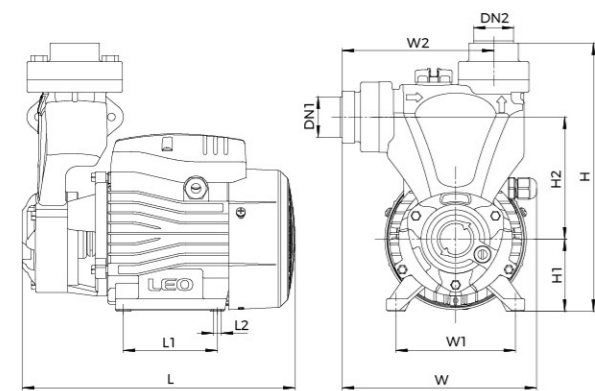
- Low noise & Long life bearing
- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Enclosures class: IPX4
- Max. ambient temperature: +50°C
- IE2 motor for APS110

Identification Codes



Technical Data

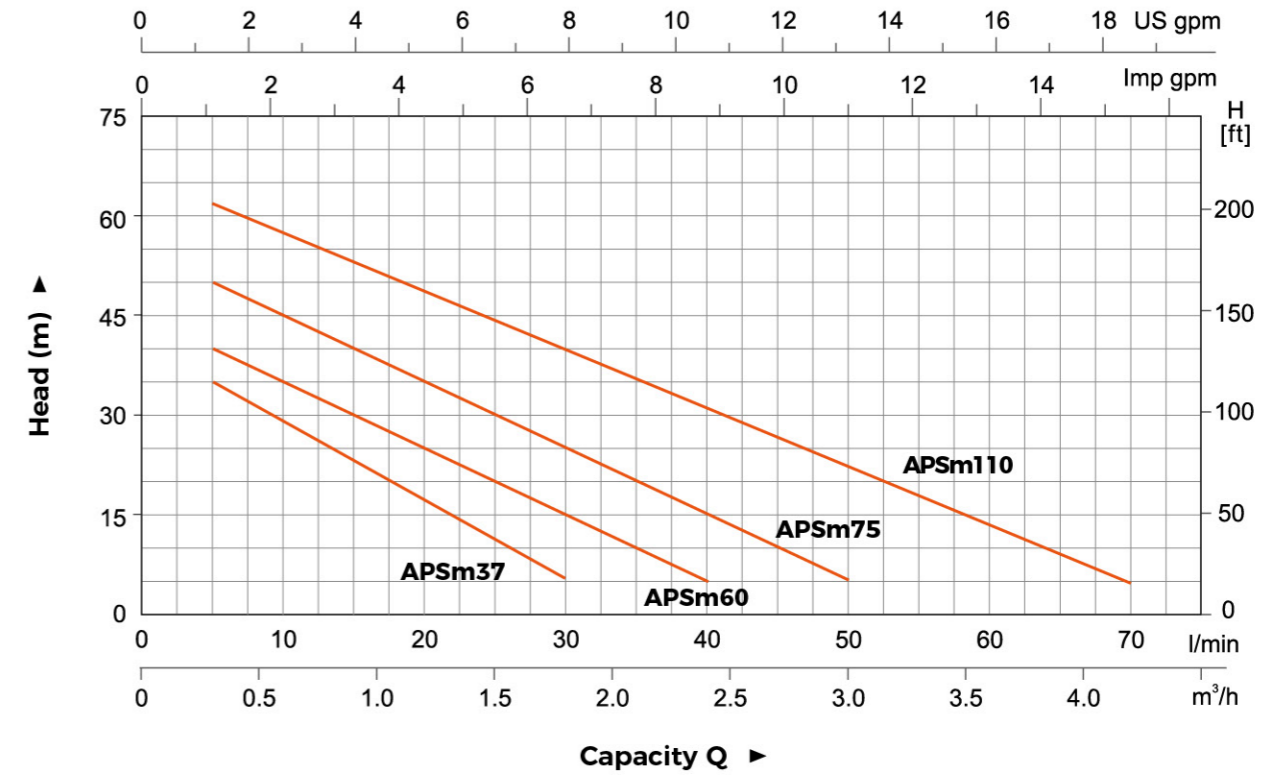
| Model | | Power | | Q(m ³ /h) | | | | | | | | | | | | | | | |
|--------------|-------------|-------|-----|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|--|--|
| Single Phase | Three Phase | kW | HP | 0 | 0.3 | 0.6 | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 3.0 | 3.3 | 3.6 | 4.2 | | | |
| | | | | Q(l/min) | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 55 | 60 | 70 | | |
| APSm37 | - | 0.37 | 0.5 | H (m) | 40 | 35 | 28 | 22 | 18 | 12 | 5 | - | - | - | - | - | | | |
| APSm60 | - | 0.6 | 0.8 | | 45 | 40 | 32 | 28 | 22 | 18 | 12 | 8 | 5 | - | - | - | | | |
| APSm75 | - | 0.75 | 1.0 | | 55 | 50 | 42 | 38 | 32 | 28 | 22 | 18 | 12 | 5 | - | - | | | |
| APSm110 | APS110 | 1.1 | 1.5 | | 65 | 60 | 55 | 50 | 45 | 40 | 35 | 30 | 25 | 20 | 15 | 10 | 5 | | |



Dimension

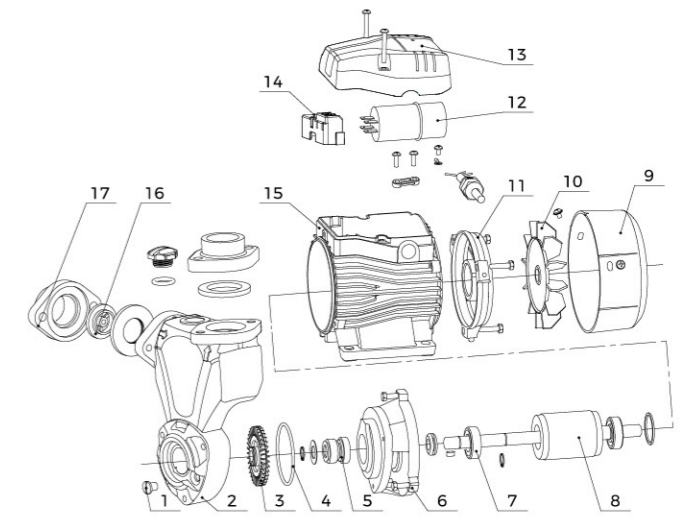
| Model | DN1 | DN2 | L (mm) | W (mm) | H (mm) | L1 (mm) | W1 (mm) | W2 (mm) | H1 (mm) | H2 (mm) | L2 (mm) |
|---------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| APSm37 | | | 237 | 165 | 230 | 80 | 100 | 128 | 63 | 106 | 8.5 |
| APSm60 | 1" | 1" | 260 | 174 | 251 | 90 | 112 | 132 | 73 | 120 | 8.5 |
| APSm75 | | | 270 | 179 | 260 | 90 | 112 | 141 | 73 | 130 | 8.5 |
| APSm110 | 1 1/2" | 1 1/2" | 310 | 200 | 292 | 100 | 125 | 160 | 86 | 138 | 9 |

Hydraulic Performance Curves



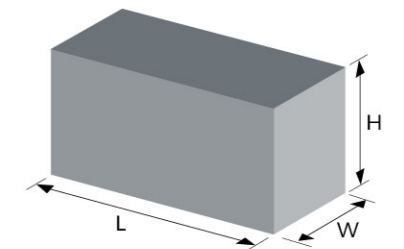
Material Table

| No. | Part | Material |
|-----|--------------------------|----------|
| 1 | Screw | Q235 |
| 2 | Pump body | HT200 |
| 3 | Impeller | HPb59-1 |
| 4 | O-ring | NBR |
| 5 | Mechanical seal | |
| 6 | Pump support | HT200 |
| 7 | Deep groove ball bearing | |
| 8 | Rotor | |
| 9 | Fan cover | PP |
| 10 | Fan | PP-GF10 |
| 11 | End plate | ADC12 |
| 12 | Capacitor | |
| 13 | Cover box | PP-GF20 |
| 14 | Wiring base assembly | PC |
| 15 | Stator | |
| 16 | Check valve | |
| 17 | Water inlet connector | HT200 |



Package Information

| Model | GW (Kgs) | L (mm) | W (mm) | H (mm) | Quantity (PCS/20 TEU) |
|---------|----------|--------|--------|--------|-----------------------|
| APSm37 | 7.2 | 275 | 200 | 265 | 2040 |
| APSm60 | 11.2 | 300 | 215 | 290 | 1736 |
| APSm75 | 12.7 | 300 | 215 | 290 | 1365 |
| APSm110 | 19.04 | 355 | 240 | 320 | 998 |



APSm

Automatic Self-priming
Peripheral Pump



Application

- Can be used to transfer clean water or other liquids similar to water in physical and chemical properties
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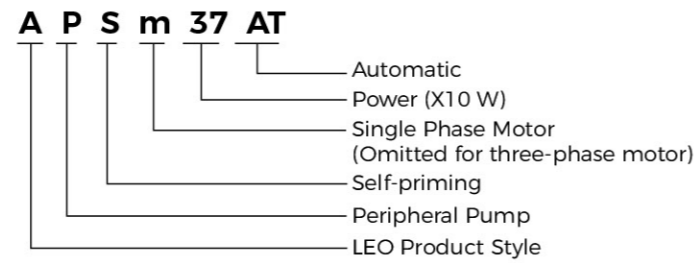
Pump

- 2-Seconds delayed start after plug into the socket to avoid potential danger caused by electric sparks
- Non-water protection
- Automatical detection if there is coming water from pump inlet
- Anti-blocking protection
- Operating status display (Powering up/Running/No water)

Motor

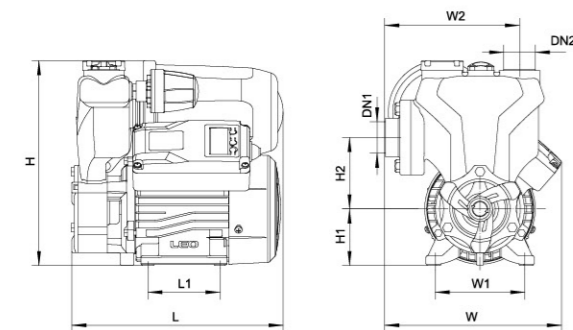
- Low noise & Long life bearing
- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Enclosures class: IPX4
- Max. ambient temperature: +50 °C

Identification Codes



Technical Data

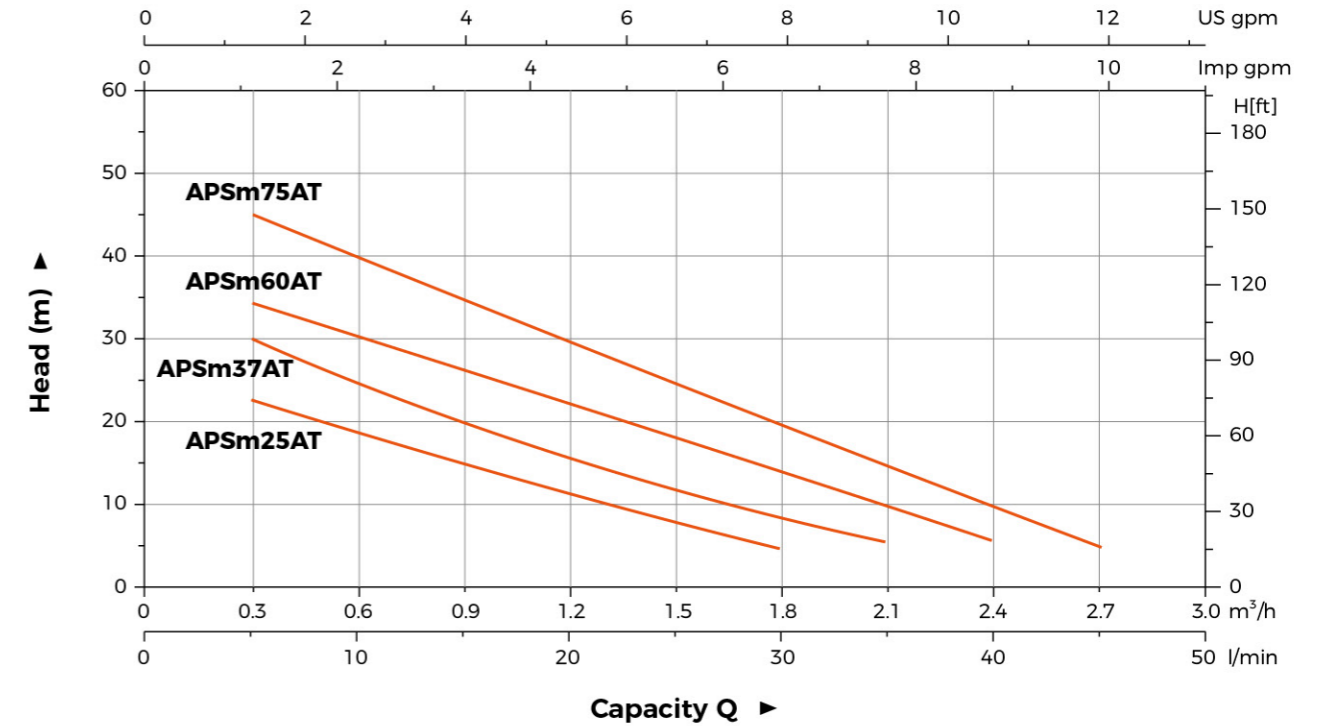
| Model | Power | | Q(m ³ /h) | 0 | 0.3 | 0.6 | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 2.7 |
|----------|-------|-----|----------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | kW | HP | | | | | | | | | | | |
| APSm25AT | 0.25 | 0.3 | H (m) | 25 | 22 | 20 | 15 | 10 | 8 | 5 | - | - | - |
| APSm37AT | 0.37 | 0.5 | | 35 | 30 | 25 | 20 | 15 | 12 | 8 | 5 | - | - |
| APSm60AT | 0.6 | 0.8 | | 40 | 35 | 30 | 25 | 22 | 18 | 15 | 10 | 5 | - |
| APSm75AT | 0.75 | 1.0 | | 50 | 45 | 40 | 35 | 30 | 25 | 18 | 15 | 10 | 5 |



Dimension

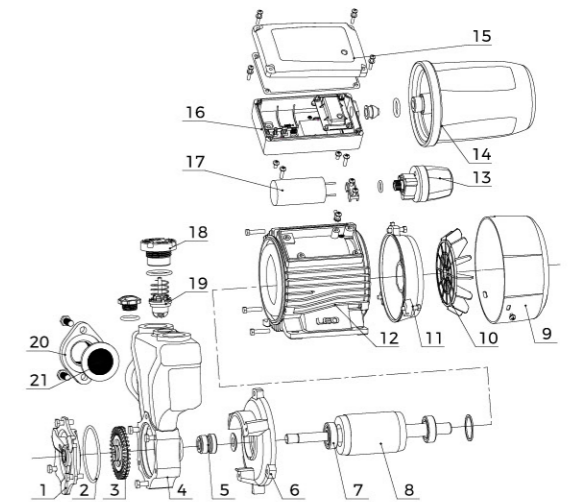
| Model | DN1 | DN2 | L (mm) | W (mm) | H (mm) | L1 (mm) | W1 (mm) | W2 (mm) | H1 (mm) | H2 (mm) |
|----------|-----|-----|--------|--------|--------|---------|---------|---------|---------|---------|
| APSm25AT | 1" | 1" | 235 | 200 | 228 | 80 | 100 | 160 | 63 | 80 |
| APSm37AT | | | 235 | 200 | 228 | 80 | 100 | 160 | 63 | 80 |
| APSm60AT | | | 257 | 216 | 242 | 90 | 112 | 161 | 71 | 85 |
| APSm75AT | | | 257 | 216 | 242 | 90 | 112 | 161 | 71 | 85 |

Hydraulic Performance Curves



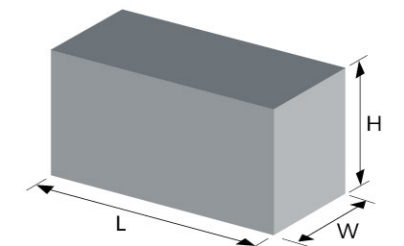
Material Table

| No. | Part | Material | No. | Part | Material |
|-----|--------------------------|----------|-----|-----------------------|-----------|
| 1 | Pump Cover | Cu | 13 | Pressure switch | |
| 2 | O-ring | NBR | 14 | Pressure tank | |
| 3 | Impeller | HPb59-1 | 15 | Terminal box cover | ABS |
| 4 | Pump body | HT200 | 16 | Cover box | ABS |
| 5 | Mechanical seal | | 17 | Capacitor | |
| 6 | Pump support | HT200 | 18 | Pump cranium | PA66-GF30 |
| 7 | Deep groove ball bearing | | 19 | Check valve | |
| 8 | Rotor | | 20 | Water inlet connector | HT200 |
| 9 | Fan cover | PP | 21 | Gasket | NBR |
| 10 | Fan | PP-GF10 | | | |
| 11 | End plate | ADC12 | | | |
| 12 | Stator | | | | |



Package Information

| Model | GW (Kgs) | L (mm) | W (mm) | H (mm) | Quantity (PCS/20'TEU) |
|----------|----------|--------|--------|--------|-----------------------|
| APSm25AT | 9.23 | 290 | 245 | 275 | 1408 |
| APSm37AT | 9.79 | 290 | 245 | 275 | 1408 |
| APSm60AT | 12.85 | 315 | 285 | 300 | 980 |
| APSm75AT | 13.5 | 315 | 285 | 300 | 980 |



Identification Codes

24 V T T S - G1 S

- Stainless Steel Cover (Iron Tank without S)
- Cover Thread
- Stainless Steel Tank (Iron Tank without S)
- Actual Capacity=Nominal Capacity
- Pressure Tank
- Tank Type
- S: Vertical Flat Tank V: Vertical Tank
- C: Horizontal Tank F: Vertical Tank with Foot Base
- Nominal Tank Capacity

Tank



| Model | Max. Pressure (bar) | Nominal Capacity (L) | Actual Capacity (L) | Membrane | Max. Temp (°C) | Connection |
|-------|---------------------|----------------------|---------------------|----------|----------------|------------|
| 24ST | 8 | 24 | 20 | Epdm | 60 | G1" |
| 24STT | 8 | 24 | 24 | Epdm | 60 | G1" |



| Model | Max. Pressure (bar) | Nominal Capacity (L) | Actual Capacity (L) | Membrane | Max. Temp (°C) | Connection |
|-------|---------------------|----------------------|---------------------|----------|----------------|------------|
| 2VT | 8 | 2 | 2 | Epdm | 60 | G1/2" |
| 4VT | 8 | 4 | 4 | Epdm | 60 | G1" |
| 5VT | 8 | 5 | 5 | Epdm | 60 | G1" |
| 8VT | 8 | 8 | 8 | Epdm | 60 | G1" |
| 19VT | 8 | 19 | 18 | Epdm | 60 | G1" |
| 24VT | 8 | 24 | 20 | Epdm | 60 | G1" |
| 24VTT | 8 | 24 | 24 | Epdm | 60 | G1" |



| Model | Max. Pressure (bar) | Nominal Capacity (L) | Actual Capacity (L) | Membrane | Max. Temp (°C) | Connection |
|-------|---------------------|----------------------|---------------------|----------|----------------|------------|
| 19CT | 8 | 19 | 18 | Epdm | 60 | G1" |
| 24CT | 8 | 24 | 20 | Epdm | 60 | G1" |
| 24CTT | 8 | 24 | 24 | Epdm | 60 | G1" |

*For capacity < 50L, pressure gauge is optional.
For capacity ≥ 50L, pressure gauge is standard.

Tank



| Model | Max. Pressure (bar) | Nominal Capacity (L) | Actual Capacity (L) | Membrane | Max. Temp (°C) | Connection |
|--------|---------------------|----------------------|---------------------|----------|----------------|------------|
| 50CT | 8 | 50 | 36 | Epdm | 60 | G1" |
| 50CTT | 8 | 50 | 50 | Epdm | 60 | G1" |
| 60CTT | 8 | 60 | 60 | Epdm | 60 | G1" |
| 100CT | 8 | 100 | 80 | Epdm | 60 | G1" |
| 100CTT | 8 | 100 | 100 | Epdm | 60 | G1" |



| Model | Max. Pressure (bar) | Nominal Capacity (L) | Actual Capacity (L) | Membrane | Max. Temp (°C) | Connection |
|--------|---------------------|----------------------|---------------------|----------|----------------|------------|
| 50FT | 8 | 50 | 36 | Epdm | 60 | G1" |
| 50FTT | 8 | 50 | 50 | Epdm | 60 | G1" |
| 60FTT | 8 | 60 | 60 | Epdm | 60 | G1" |
| 100FT | 8 | 100 | 80 | Epdm | 60 | G1" |
| 100FTT | 8 | 100 | 100 | Epdm | 60 | G1" |
| 200FTT | 8 | 200 | 200 | Butyl | 60 | G1½" |
| 300FTT | 8 | 300 | 300 | Butyl | 60 | G1½" |
| 500FTT | 8 | 500 | 500 | Butyl | 60 | G1½" |

*For capacity < 50L, pressure gauge is optional.
For capacity ≥ 50L, pressure gauge is standard.

3-Way / 5-Way



| Model | Connection | Length |
|-------|------------|---------|
| 3TA | G1" | 70 , 80 |
| 5TA | G1" | 80 , 90 |
| 5TB | G1" | 80 , 90 |

Foot Valve



FVA

| Model | Connection |
|---------|------------|
| FVA1 | 1" |
| FVA1.25 | 1¼" |
| FVA1.5 | 1½" |
| FVA2 | 2" |
| FVA3 | 3" |

- Stainless Steel mesh
- Can be used as a check valve

Accessories

Flexible Hose



| Model | FH12.8-01(L=128mm) | FH44-03(L=440mm) |
|------------------|---|------------------|
| Inlet | G3/4" | G1" |
| Outlet | G3/8" | G1" |
| Material | Stainless steel wire | |
| Operating Limits | Fluid temperature up to 35°C Max. ambient temperature 40°C | |

Filter



| Model | WF-01B | WF-02B |
|------------------|---|---------|
| Inlet/Outlet | 1" x 1" | 1" x 1" |
| Capacity | 1L | 2L |
| Max. Pressure | 5 bar | 5 bar |
| Operating Limits | Fluid temperature up to 35°C Max. ambient temperature 40°C | |

Pressure Gauge



Axial

Radial

PG - P 40 A

A: Axial; R: Radial
Size (40mm, 50mm, 60mm)
P: Plastic; S: Iron sheet; SS: Stainless steel
Pressure gauge

- Two connection types: (1)G1/4" (2)M10x1
- For 40mm gauge, the scale: 0 - 6 bar
- For 50mm gauge, the scale: 0 - 10 bar or 0 - 6 bar
- Back/bottom connection

Automatic Pump Controller



PS-04A

| | | | |
|--------------------------|-----------------------------------|-------------------|------------|
| Rated Voltage | 110-120VAC | 220-240VAC | 110-240VAC |
| Rated Frequency | 50-60Hz | | |
| Max. Current | 10(6)A | | |
| Max. Power(P1) | 0.55kW(110-120VAC) | 1.1kW(220-240VAC) | |
| Starting Pressure | 1.0bar, 1.5bar, 2.2bar | | |
| Max. Working Pressure | 10bar | | |
| Screw Size | R1", NPT1"; G1", G1-1/4"; G1-1/2" | | |
| Protection Class | IP65 | | |
| Max. Working Temperature | 60 °C | | |



PS-04B

| | | | |
|--------------------------|------------------------|-------------------|------------|
| Rated Voltage | 110-120VAC | 220-240VAC | 110-240VAC |
| Rated Frequency | 50-60Hz | | |
| Max. Current | 10(6)A | | |
| Max. Power(P1) | 0.55kW(110-120VAC) | 1.1kW(220-240VAC) | |
| Starting Pressure | 1.2bar, 1.5bar, 2.2bar | | |
| Max. Working Pressure | 10bar | | |
| Screw Size | R1" | | |
| Protection Class | IP65 | | |
| Max. Working Temperature | 60 °C | | |



PS-04C

| | | | |
|--------------------------|------------------------|-------------------|------------|
| Rated Voltage | 110-120VAC | 220-240VAC | 110-240VAC |
| Rated Frequency | 50-60Hz | | |
| Max. Current | 10(6)A | | |
| Max. Power(P1) | 0.55kW(110-120VAC) | 1.1kW(220-240VAC) | |
| Starting Pressure | 1.2bar, 1.5bar, 2.2bar | | |
| Max. Working Pressure | 10bar | | |
| Screw Size | G1" | | |
| Protection Class | IP54 | | |
| Max. Working Temperature | 60 °C | | |

* 1 bar=14.50PSI

Automatic Pump Controller



PS-04D

| | | | |
|---------------------------------|------------------------------|------------|---------|
| Rated Voltage | 110-240VAC | 220-240VAC | 380VAC |
| Rated Frequency | 50-60Hz | | |
| Max. Current | 30(16)A | | |
| Max. Power(P1) | 1.1kW | 2.2kW | 4.0kW |
| Starting Pressure | 1.2bar, 1.5bar, 2.2bar | | |
| Max. Working Pressure | 10bar | | |
| Screw Size | G1", G1-1/4", G1-1/2", NPT1" | | G1-1/2" |
| Protection Class | IP65 | | |
| Max. Working Temperature | 60 °C | | |



PS-04E

| | | | |
|---------------------------------|-------------------|-------------------|------------|
| Rated Voltage | 110-120VAC | 220-240VAC | 110-240VAC |
| Rated Frequency | 50-60Hz | | |
| Max. Current | 30(16)A | | |
| Max. Power(P1) | 1.1kW(110-120VAC) | 2.2kW(220-240VAC) | |
| Starting Pressure | 0.8bar - 6.7bar | | |
| Max. Working Pressure | 8bar | | |
| Screw Size | G1" | | |
| Protection Class | IP65 | | |
| Max. Working Temperature | 60 °C | | |



PS-04E-1

| | | | |
|---------------------------------|-------------------|-------------------|------------|
| Rated Voltage | 110-120VAC | 220-240VAC | 110-240VAC |
| Rated Frequency | 50-60Hz | | |
| Max. Current | 30(16)A | | |
| Max. Power(P1) | 1.1kW(110-120VAC) | 2.2kW(220-240VAC) | |
| Starting Pressure | 1.5bar, 2.2bar | | |
| Max. Working Pressure | 8bar | | |
| Screw Size | G1" | | |
| Protection Class | IP65 | | |
| Max. Working Temperature | 60 °C | | |

* 1bar=14.50PSI

Automatic Pump Controller



PS-04T

| | | | |
|---------------------------------|--------------------|-------------------|------------|
| Rated Voltage | 110-120VAC | 220-240VAC | 110-240VAC |
| Rated Frequency | 50-60Hz | | |
| Max. Current | 10(6)A | | |
| Max. Power(P1) | 0.55kW(110-120VAC) | 1.1kW(220-240VAC) | |
| Starting Pressure | 1.2 - 2.5bar | | |
| Max. Working Pressure | 10bar | | |
| Screw Size | G1" | | |
| Protection Class | IP65 | | |
| Max. Working Temperature | 60 °C | | |



PS-04F

| | | | |
|---------------------------------|-------------------|--|--|
| Rated Voltage | 220-240V | | |
| Rated Frequency | 50-60Hz | | |
| Max. Current | 16(10)A | | |
| Max. Power(P1) | 1.8kW(220-240VAC) | | |
| Starting Pressure | 0.5-3bar | | |
| Max. Working Pressure | 10bar | | |
| Screw Size | G1" | | |
| Protection Class | IP65 | | |
| Max. Working Temperature | 60 °C | | |

Pressure Switch



PS-02A

| | | |
|-----------------------------------|--|------------|
| Rated Voltage | 110-120VAC | 220-240VAC |
| Frequency | 50/60 Hz | |
| Max. Current | 20A | 12A |
| Max. Power(P1) | 1.6kW | 1.9kW |
| Min. Cut-in | 1bar | |
| Max. Cut-out | 7bar | |
| Starting/Stopping Pressure | bar: 1.0/2.1; 1.4/2.8; 2.1/3.5; 2.8/4.2; 3.5/4.9; 4.9/7.0 | |
| Screw Size | Female: NPT1/4, ZG1/4 Male: NPT1/4, ZG1/4 Female revolving connector: G1/4, G3/8 | |
| Protection Class | IP20 | |
| Max. Working Temperature | 60°C | |

* Max. working pressure=Max. cut out*1.5

Pressure Switch



PS-02B

| | | |
|-----------------------------------|--|------------|
| Rated Voltage | 110-120VAC | 220-240VAC |
| Frequency | 50/60 Hz | |
| Max. Current | 20A | 16A |
| Max. Power(P1) | 1.6kW | 2.6kW |
| Min. Cut-in | 1bar | |
| Max. Cut-out | 12bar | |
| Starting/Stopping Pressure | bar: 1.4/2.8; 2.1/3.5; 6.3/8.7; 9.6/12 | |
| Screw Size | Female: NPT1/4, G1/4 Male: ZG1/4, M14 Female revolving connector: G1/4 | |
| Protection Class | IP20 | |
| Max. Working Temperature | 60°C | |



PS-02C

| | | | |
|-----------------------------------|---|------------|--------|
| Rated Voltage | 110-120VAC | 220-240VAC | 400VAC |
| Frequency | 50/60 Hz | | |
| Max. Current | 16(8)A | | |
| Max. Power(P1) | 0.6kW | 1.3kW | 4.0kW |
| Min. Cut-in | 1bar | | |
| Max. Cut-out | 5.5bar | | |
| Starting/Stopping Pressure | bar: 1.2/2.4; 1.4/2.8; 1.5/3.0; 2.0/3.5; 3.5/4.9 | | |
| Screw Size | Female: NPT1/4, G1/4, Male: NPT1/4, G1/4, ZG1/4, Female revolving connector: G1/4, G3/8 | | |
| Protection Class | IP44 | | |
| Max. Working Temperature | 60°C | | |



PS-02D

| | | |
|-----------------------------------|--|------------|
| Rated Voltage | 110-120VAC | 220-240VAC |
| Frequency | 50/60 Hz | |
| Max. Current | 12A | |
| Max. Power(P1) | 1.0kW | 1.9kW |
| Min. Cut-in | 1.4bar | |
| Max. Cut-out | 6.9bar | |
| Starting/Stopping Pressure | bar: 1.4/2.8; 2.1/3.4; 2.8/4.1; 3.4/4.8 | |
| Screw Size | Female: G1/4, Male: ZG1/4, G1/4, NPT1/4 Female revolving connector: G1/4, G3/8 | |
| Protection Class | IP20 | |
| Max. Working Temperature | 60°C | |

* Max. working pressure=Max. cut out*1.5

Capacitor



2 wires

2(4) terminals

| Capacity(μF) | Type | Diameter(mm) | Length (mm) |
|--------------|-------------|--------------|-------------|
| 6 | 2 wires | 32 | 66 |
| 8 | 2 wires | 32 | 66 |
| 8 | 4 terminals | 35 | 72 |
| 10 | 2 wires | 34 | 62 |
| 10 | 4 terminals | 35 | 72 |
| 12 | 2 wires | 40 | 73 |
| 16 | 2 wires | 42 | 71 |
| 16 | 4 terminals | 42 | 73 |
| 20 | 2 wires | 42 | 74 |
| 20 | 4 terminals | 42 | 74 |
| 25 | 2 wires | 42 | 82 |
| 35 | 4 terminals | 42 | 70 |
| 40 | 2 wires | 42 | 82 |
| 40 | 4 terminals | 45 | 73 |
| 42.5 | 2 terminals | 51 | 100 |
| 45 | 2 terminals | 51 | 100 |
| 50 | 2 terminals | 51 | 100 |

Float Switch



FLO-01B

FLO-01B(With balance block)

| Model | FLO-01B | FLO-01B(With balance block) |
|-------------------------|---|-----------------------------|
| Specification | 16(8)A 125/250V | |
| Cable | H07RN-F/8-F 3G1.0mm2x0.55m/0.65m/0.75m/2m/3m/5m/10m | |
| Lifetime | 50000 cycles | |
| IP Protection | IP X8 | |
| Operating Limits | Fluid temperature up to 35°C Max. ambient temperature 40°C | |