# TA Series - DC or AC Voltage, 1/4 to 1.0 HP

THOMAS®
An Ingersoll Rand Business

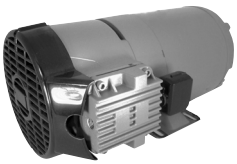
## FEATURES

>Oil-less design
>Permanently lubricated and sealed bearings
>Cast iron cylinders
>PTFE piston rings and skirts
>Long service free life
>Field service capability
>Totally enclosed motor
>Low vibration
>Quiet operation
>Low profile

Declaration documentation available upon request

## TYPICAL APPLICATIONS

>Air Suspension
>Central Tire Inflation
>Defense Equipment Manufacturing
>Fire Suppression Systems
>Kneeler Suspension Systems
>Load Leveling Air Suspension Systems
>Pneumatic Doors
>Wheel Flange Lubrication



## BASE MODELS

**DC Voltage**

**TA-3101-DC (270024)**
(12V DC)

**TA-4101-DC (270025)**
(12V DC)

**TA-4102-DC (270047)**
(24V DC)

**TA-5102-DC (270058)**
(12V DC)

**AC Voltage**

**TA-3101 (270005)**
(115/230/60/1)

**TA-4101 (270015)**
(115/230/60/1)

**TA-4102 (270010)**
(115/230/60/1)

**TA-4172 (270072)**
(115/230/60/1)

**TA-5102 (270011)**
(115/230/60/1)

**TA-5102 (270040)**
(110/220-240/50/1)

**TA-5102 (270043)**
(190/380/50/3 &
208-230/460/60/3)

**TA-5172 (270073)**
(115/230/60/1)

**TA-5172 (270078)**
(110/220-240/50/1)

**TA-6102 (270012)**
(115/230/60/1)

**TA-6102 (270044)**
(190/380/50/3 &
208-230/460/60/3)

**TA-6172 (270080)**
(115/230/60/1)

**TA-6172 (270082)**
190/380/50/3 & 208-230/460/60/3)

**Articulated Piston**

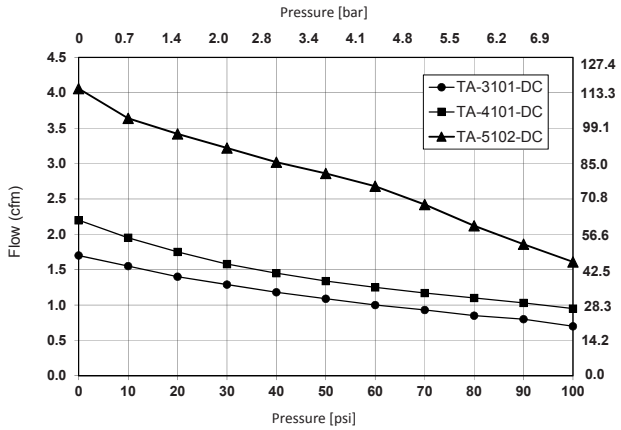
# TA Series - DC

| Flow | Up to 4.0 cfm (113.2 l/min) |
|---|---|
| Max. pressure | Up to 100 psig (6.9 bar) |
| **Max. vacuum** | **N/A** |

TA-3101-DC
TA-4101-DC

Oil-less

TA-5102-DC




NOTE: All test values are nominal and for reference only. They are not guaranteed maximum or minimum limits, nor do they imply mean or median.

| PERFORMANCE DATA | | | | |
|---|---|---|---|---|
| Model number | TA-3101-DC | TA-4101-DC | TA-4101-DC | TA-5102-DC |
| Manufacturing code | 270024 | 270025 | 270047 | 270058 |
| Number of cylinders | 1 | 1 | 1 | 2 |
| Nominal voltage input | 12V DC | 12V DC | 24V DC | 12V DC |
| Max. open air flow | 1.70 cfm (48.1 l/min) | 2.20 cfm (62.2 l/min) | 2.20 cfm (62.2 l/min) | 4.00 cfm (115.0 l/min) |
| Max. rated pressure | 100 psi (6.9 bar) | 100 psi (6.9 bar) | 100 psi (6.9 bar) | 100 psi (6.9 bar) |
| Current at rated pressure | 26.0A | 28.0A | 18.5A | 45.0A |
| Power at rated pressure | 330W | 340W | 440W | 540W |
| Max. pressure restart | 100 psi (6.9 bar) | 100 psi (6.9 bar) | 100 psi (7.0 bar) | 100 psi (7.0 bar) |
| Max. vacuum | N/A | N/A | N/A | N/A |
| Max. vacuum restart | N/A | N/A | N/A | N/A |

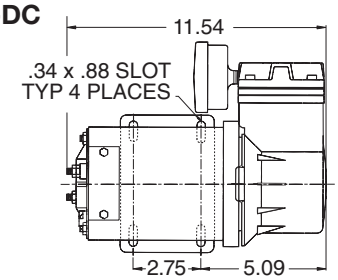
| ELECTRICAL DATA | | | | |
|---|---|---|---|---|
| Motor type | Permanent Magnet | Permanent Magnet | Permanent Magnet | Permanent Magnet |
| Motor locked rotor current | 156A | 198A | 122A | 230A |
| Thermal Protector | No | No | No | No |
| Capacitor Value | N/A | N/A | N/A | N/A |
| Horsepower | 1/4 | 1/3 | 1/3 | 1/2 |

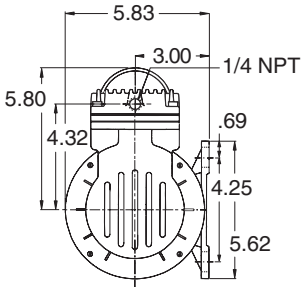
| GENERAL DATA | | | | |
|---|---|---|---|---|
| Operating ambient temperature | 32°F to 104°F (0°C TO 40°C) | 32°F to 104°F (0°C TO 40°C) | 32°F to 104°F (0°C TO 40°C) | 32°F to 104°F (0°C TO 40°C) |
| Net weight | 22 lbs (10.0 kg) | 22 lbs (10.0 kg) | 25 lbs (11.3 kg) | 40 lbs (18.1 kg) |

## PRODUCT DIMENSIONS

### TA-3101-DC, TA-4101-DC

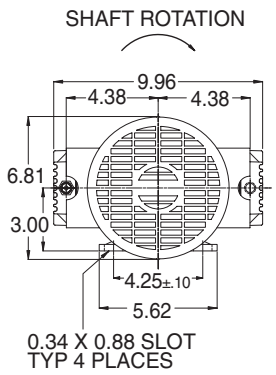
270024, 270025 & 270047

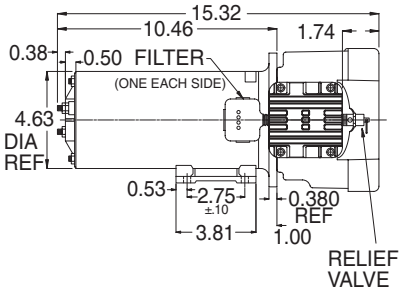



### TA-5102

270058



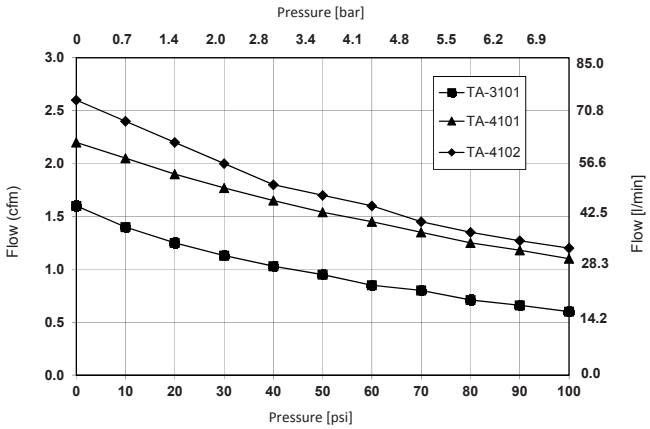
# TA Series - AC

| Flow | Up to 2.6 cfm (73.6 l/min) |
|---|---|
| Max. pressure | Up to 100 psig (6.9 bar) |
| Max. vacuum | N/A |

TA-3101
TA-4101

Oil-less

TA-4102




TA Series Flow at Pressure Curve

NOTE: All test values are nominal and for reference only. They are not guaranteed maximum or minimum limits, nor do they imply mean or median.

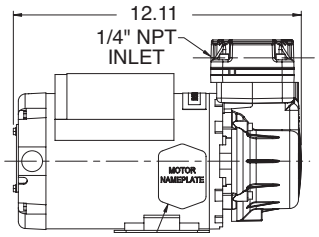
| PERFORMANCE DATA | | | |
|---|---|---|---|
| Model number | TA-3101 | TA-4101 | TA-4102 |
| Manufacturing code | 270005 | 270015 | 270010 |
| Number of cylinders | 1 | 1 | 2 |
| Nominal voltage input | 115/230/60/1 | 115/230/60/1 | 115/230/60/1 |
| Max. open air flow | 1.60 cfm (45.3 l/min) | 2.20 cfm (62.2 l/min) | 2.60 cfm (73.6 l/min) |
| Max. rated pressure | 100 psi (6.9 bar) | 100 psi (6.9 bar) | 100 psi (6.9 bar) |
| Current at rated pressure | 5.0/2.5A | 5.0/2.5A | 8.0/4.0A |
| Power at rated pressure | 350W | 430W | 450W |
| Max. pressure restart | 100 psi (6.9 bar) | 100 psi (6.9 bar) | 100 psi (6.9 bar) |
| Max. vacuum | N/A | N/A | N/A |
| Max. vacuum restart | N/A | N/A | N/A |

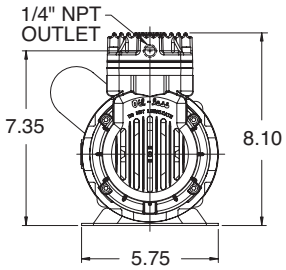
| ELECTRICAL DATA | | | |
|---|---|---|---|
| Motor type | Capacitor Start | Capacitor Start/Run | Capacitor Start |
| Motor locked rotor current | 23.3/11.9A | 23.2A | 34.8/18.0A |
| Thermal Protector | Yes | Yes | Yes |
| Capacitor Value | 270 mfd | 243mfd/20mfd | 243 mfd |
| Horsepower | 1/4 | 1/3 | 1/3 |

| GENERAL DATA | | | |
|---|---|---|---|
| Operating ambient temperature | 32°F to 104°F (0°C TO 40°C) | 32°F to 104°F (0°C TO 40°C) | 32°F to 104°F (0°C TO 40°C) |
| Net weight | 21 lbs (9.5 kg) | 24 lbs (10.9 kg) | 36 lbs (16.3 kg) |

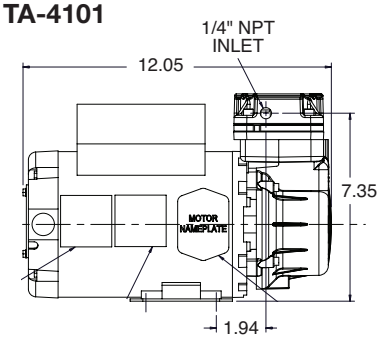
## PRODUCT DIMENSIONS

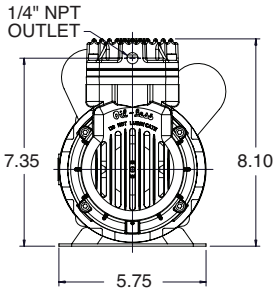
### T-3101



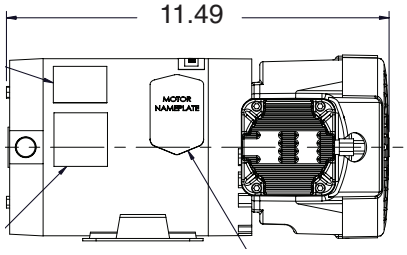



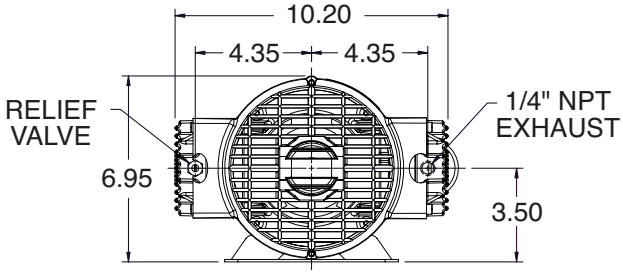

### TA-4101




### TA-4102



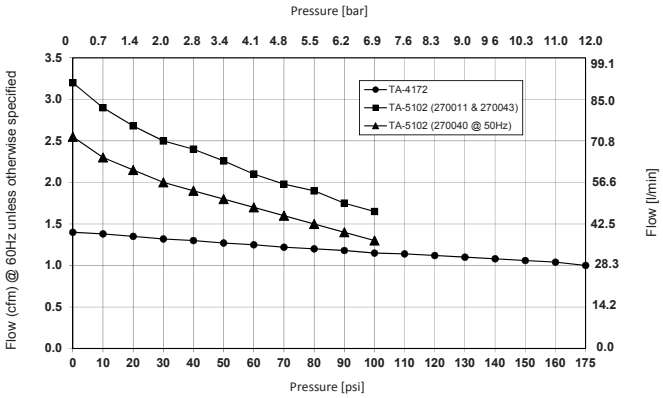



# TA Series - AC

| Flow | Up to 3.2 cfm (90.6 l/min) |
|---|---|
| Max. pressure | Up to 175 psig (12.0 bar) |
| **Max. vacuum** | **N/A** |

TA-4172
TA-5102

Oil-less




**TA Series Flow at Pressure Curve**

NOTE: All test values are nominal and for reference only. They are not guaranteed maximum or minimum limits, nor do they imply mean or median.

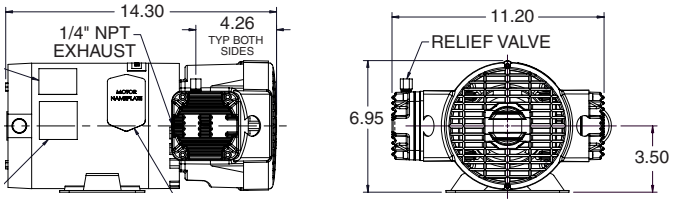
| PERFORMANCE DATA | | | | |
|---|---|---|---|---|
| Model number | TA-4172 | TA-5102 | TA-5102 | TA-5102 |
| Manufacturing code | 270072 | 270011 | 270040 | 270043 |
| Number of cylinders | 2 | 2 | 2 | 2 |
| Nominal voltage input | 115/230/60/1 | 115/230/60/1 | 110/220-240/50/1 | 190/380/50/3<br>208-230/460/60/3 |
| Max. open air flow | 1.40 cfm (39.6 l/min) | 3.20 cfm (90.6 l/min) | 2.55 cfm (72.2 l/min) | 3.20 cfm (90.6 l/min) |
| Max. rated pressure | 175 psi (12.0 bar) | 100 psi (6.9 bar) | 100 psi (6.9 bar) | 100 psi (6.9 bar) |
| Current at rated pressure | 8.0/4.0A | 7.2/3.6A | 8.2/4.3A | 2.0/0.95A |
| Power at rated pressure | 450W | 760W | 670W | 628W |
| Max. pressure restart | 175 psi (12.0 bar) | 100 psi (6.9 bar) | 100 psi (6.9 bar) | 100 psi (6.9 bar) |
| Max. vacuum | N/A | N/A | N/A | N/A |
| Max. vacuum restart | N/A | N/A | N/A | N/A |

| ELECTRICAL DATA | | | | |
|---|---|---|---|---|
| Motor type | Capacitor Start | Capacitor Start | Capacitor Start | Polyphase |
| Motor locked rotor current | 34.8/18.0A | 37.0/19.7A | 39.0/19.5A | 12.5/6.0A |
| Thermal Protector | Yes | Yes | Yes | No |
| Capacitor Value | 243 mfd | 324 mfd | 324 mfd | N/A |
| Horsepower | 1/3 | 1/2 | 1/2 | 1/2 |

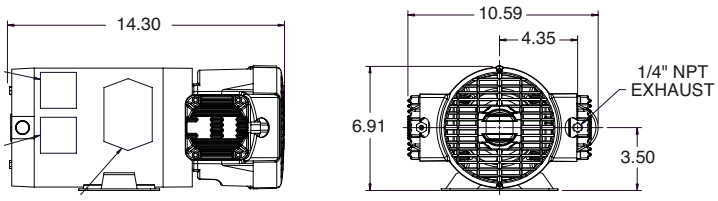
| GENERAL DATA | | | | |
|---|---|---|---|---|
| Operating ambient temperature | 32°F to 104°F (0°C TO 40°C) | 32°F to 104°F (0°C TO 40°C) | 32°F to 104°F (0°C TO 40°C) | 32°F to 104°F (0°C TO 40°C) |
| Net weight | 45 lbs (20.4 kg) | 37 lbs (16.8 kg) | 37 lbs (16.8 kg) | 37 lbs (16.8 kg) |

## PRODUCT DIMENSIONS

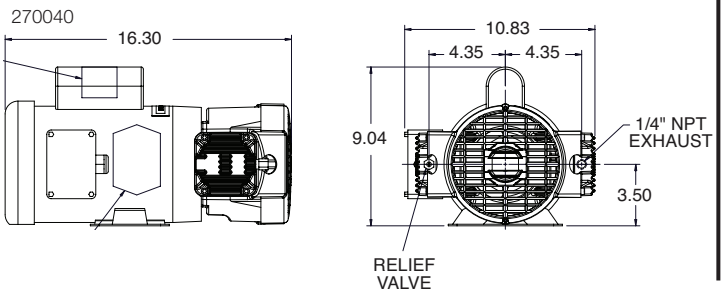
### TA-4172
270072



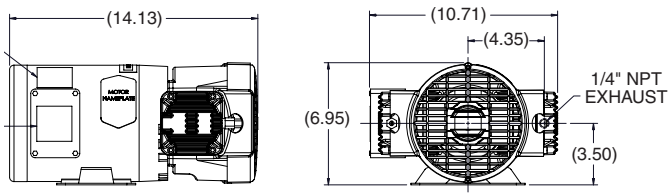

### TA-5102
270011




### TA-5102
270040



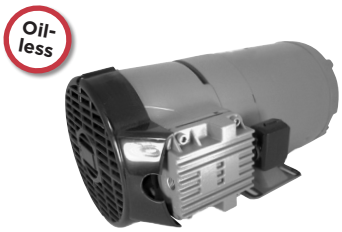

### TA-5102
270043



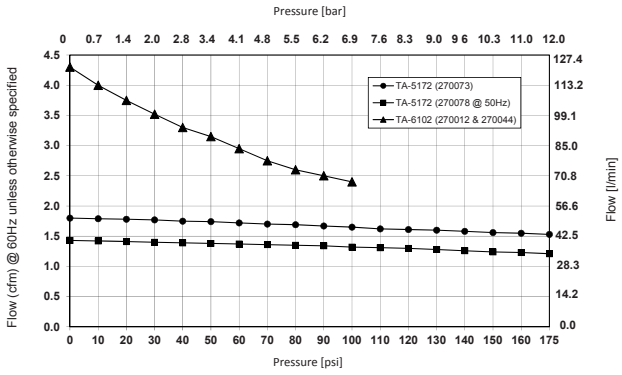
# TA Series - AC

| Flow | Up to 4.3 cfm (121.7 l/min) |
|---|---|
| Max. pressure | Up to 175 psig (12.0 bar) |
| **Max. vacuum** | **N/A** |

TA-5172




TA-6102




TA Series Flow at Pressure Curve

NOTE: All test values are nominal and for reference only. They are not guaranteed maximum or minimum limits, nor do they imply mean or median.

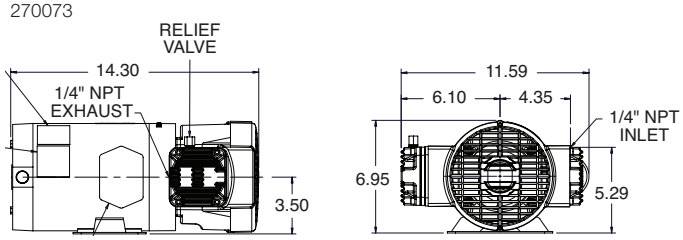
| PERFORMANCE DATA | | | | |
|---|---|---|---|---|
| Model number | TA-5172 | TA-5172 | TA-6102 | TA-6102 |
| Manufacturing code | 270073 | 270078 | 270012 | 270044 |
| Number of cylinders | 2 | 2 | 2 | 2 |
| Nominal voltage input | 115/230/60/1 | 110/220-240/50/1 | 115/230/60/1 | 190/380/50/3<br>208-230/460/3 |
| Max. open air flow | 1.80 cfm (50.9 l/min) | 1.43 cfm (40.4 l/min) | 4.30 cfm (121.7 l/min) | 4.30 cfm (121.7 l/min) |
| Max. rated pressure | 175 psi (12.0 bar) | 175 psi (12.0 bar) | 100 psi (6.9 bar) | 100 psi (6.9 bar) |
| Current at rated pressure | 7.3/3.6A | 8.2/4.3A | 10.6/5.3A | 2.8/1.4A |
| Power at rated pressure | 760W | 670W | 825W | 800W |
| Max. pressure restart | 175 psi (12.0 bar) | 175 psi (12.0 bar) | 100 psi (6.9 bar) | 100 psi (6.9 bar) |
| Max. vacuum | N/A | N/A | N/A | N/A |
| Max. vacuum restart | N/A | N/A | N/A | N/A |

| ELECTRICAL DATA | | | | |
|---|---|---|---|---|
| Motor type | Capacitor Start | Capacitor Start | Capacitor Start | Polyphase |
| Motor locked rotor current | 34.8/18.0A | 39.0/19.5A | 60.0/30.0A | 17.0/8.5A |
| Thermal Protector | Yes | Yes | Yes | No |
| Capacitor Value | 324 mfd | 324 mfd | 378 mfd | N/A |
| Horsepower | 1/2 | 1/2 | 3/4 | 3/4 |

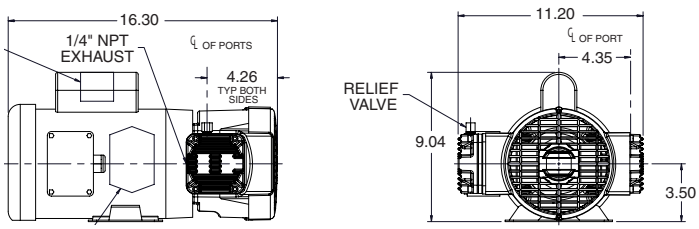
| GENERAL DATA | | | | |
|---|---|---|---|---|
| Operating ambient temperature | 32°F to 104°F (0°C TO 40°C) | 32°F to 104°F (0°C TO 40°C) | 32°F to 104°F (0°C TO 40°C) | 32°F to 104°F (0°C TO 40°C) |
| Net weight | 51 lbs (23.1 kg) | 51 lbs (23.1 kg) | 45 lbs (20.4 kg) | 45 lbs (20.4 kg) |

## PRODUCT DIMENSIONS

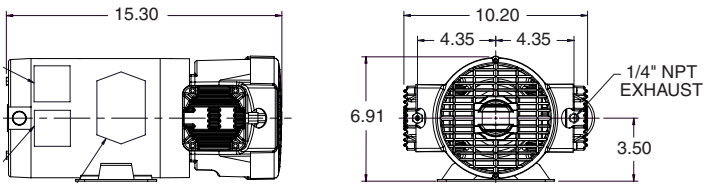
### TA-5172
270073



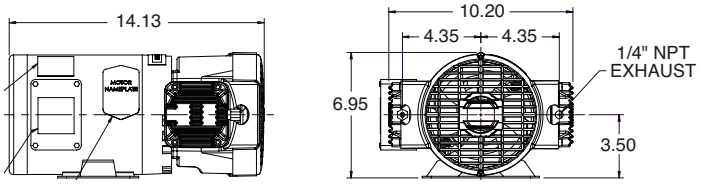

### TA-5172
270078




### TA-6102
270012




### TA-6102
270044

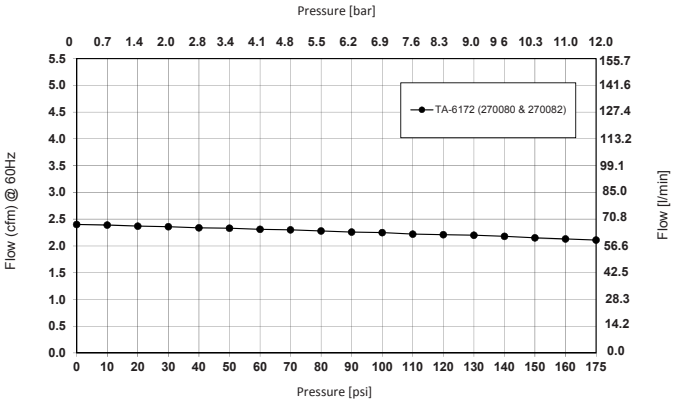


# TA Series - AC

| Flow | Up to 2.4 cfm (68.0 l/min) |
|---|---|
| Max. pressure | Up to 175 psig (12.0 bar) |
| **Max. vacuum** | **N/A** |

Oil-less

TA-6172
TA-7102




**TA Series Flow at Pressure Curve**

NOTE: All test values are nominal and for reference only. They are not guaranteed maximum or minimum limits, nor do they imply mean or median.

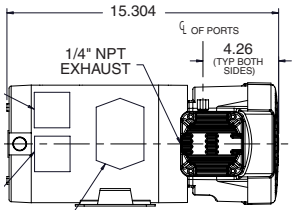
| PERFORMANCE DATA | | |
|---|---|---|
| Model number | TA-6172 | TA-6172 |
| Manufacturing code | 270080 | 270082 |
| Number of cylinders | 2 | 2 |
| Nominal voltage input | 115/230/60/1 | 190/380/50/3<br>208-230/460/60/3 |
| Max. open air flow | 2.40 cfm (67.9 l/min) | 2.40 cfm (67.9 l/min) |
| Max. rated pressure | 175 psi (12.0 bar) | 175 psi (12.0 bar) |
| Current at rated pressure | 10.6/5.3A | 2.8/1.4A |
| Power at rated pressure | 825W | 800W |
| Max. pressure restart | 175 psi (12.0 bar) | 175 psi (12.0 bar) |
| Max. vacuum | N/A | N/A |
| Max. vacuum restart | N/A | N/A |

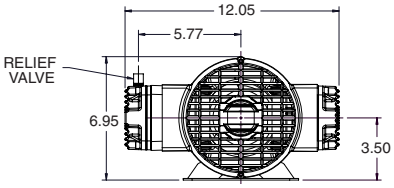
| ELECTRICAL DATA | | |
|---|---|---|
| Motor type | Capacitor Start | Polyphase |
| Motor locked rotor current | 60.0/30.0A | 17.0/8.5A |
| Thermal Protector | Yes | No |
| Capacitor Value | 378 mfd | N/A |
| Horsepower | 3/4 | 3/4 |

| GENERAL DATA | | |
|---|---|---|
| Operating ambient temperature | 32°F to 104°F (0°C TO 40°C) | 32°F to 104°F (0°C TO 40°C) |
| Net weight | 56 lbs (25.4 kg) | 56 lbs (25.4 kg) |

## PRODUCT DIMENSIONS

### TA-6172
270080

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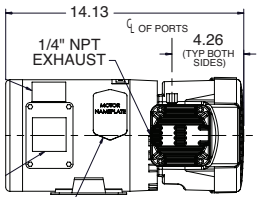


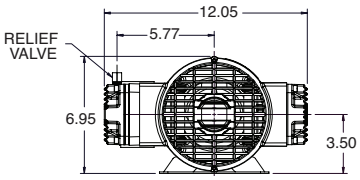

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