



PERFORMANCE RANGE

- Flow rate up to **45 l/min** (2.7 m³/h)
- Head up to **90 m**

APPLICATION LIMITS

- Manometric suction lift up to **8 m**
- Liquid temperature between **-10 °C** and **+90 °C**
- Ambient temperature between **-10 °C** and **+40 °C** (+45 °C for PQA 60)
- Max. working pressure **10 bar**
- Continuous service **S1**

CONSTRUCTION AND SAFETY STANDARDS

| | |
|-------------|-------------|
| EN 60335-1 | EN 60034-1 |
| IEC 60335-1 | IEC 60034-1 |
| CEI 61-150 | CEI 2-3 |



CERTIFICATIONS

COMPANY WITH MANAGEMENT SYSTEM
CERTIFIED BY DNV
ISO 9001: QUALITY
ISO 14001: ENVIRONMENT AND SAFETY



INSTALLATION AND USE

Suitable for use with clean water that does not contain abrasive particles and liquids that are not chemically aggressive towards the materials from which the pump is made.

The RYTON and brass pump body construction guarantees against the formation of rust and oxidation. As a result of these characteristics these pumps are suitable for use in industrial applications such as cooling, conditioning and boiler feed.

The pump should be installed in an enclosed environment, or at least sheltered from inclement weather.

PATENTS - TRADE MARKS - MODELS

- Motor bracket: patented n° IT1243605

OPTIONALS AVAILABLE ON REQUEST

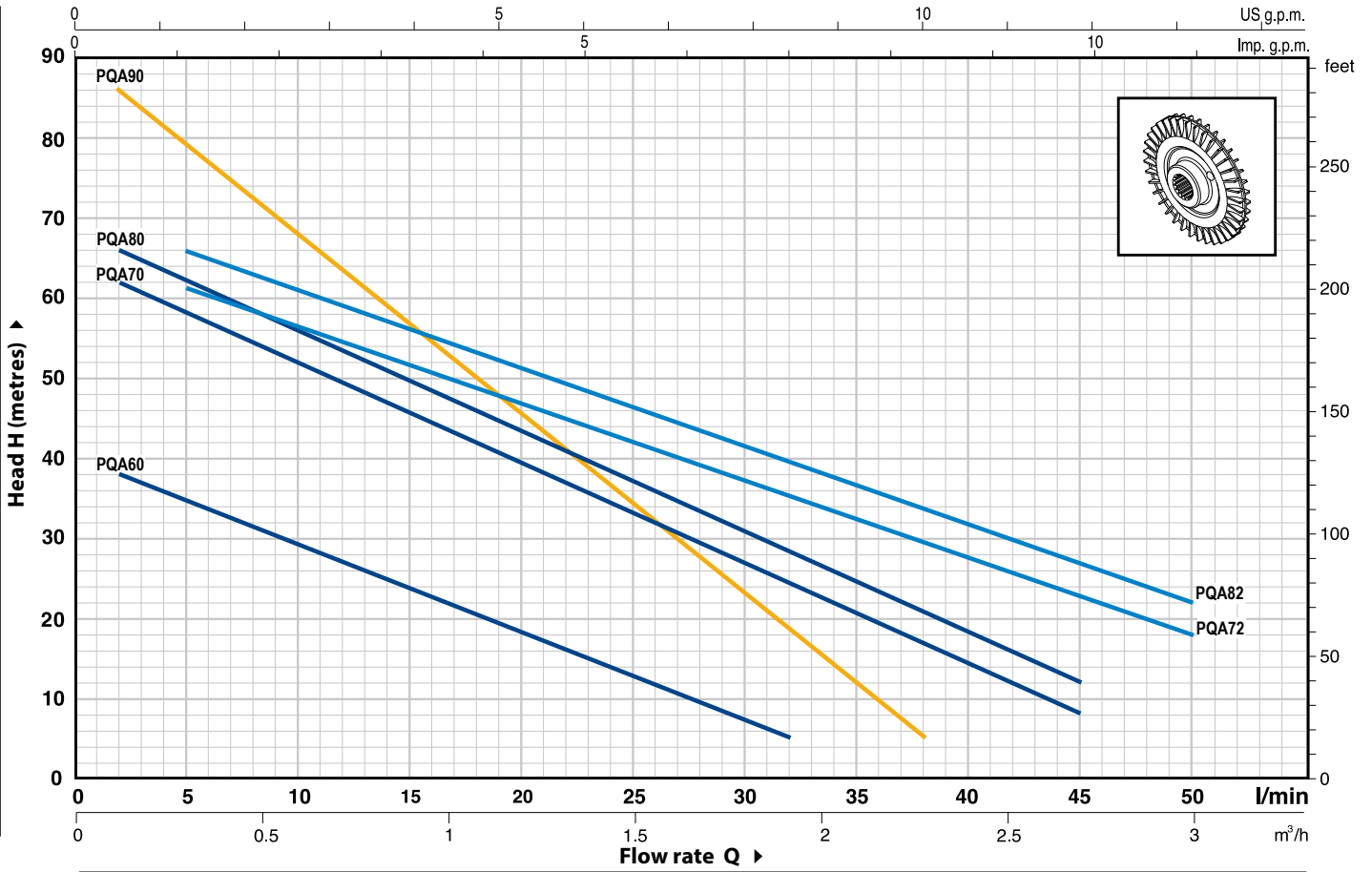
- Special mechanical seal
- EN 10088-3 - 1.4401 (AISI 316) stainless steel motor shaft
- Other voltages or 60 Hz frequency
- IP X5 class protection for PQA 70-72-80-82-90

GUARANTEE

2 years subject to terms and conditions

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min HS= 0 m

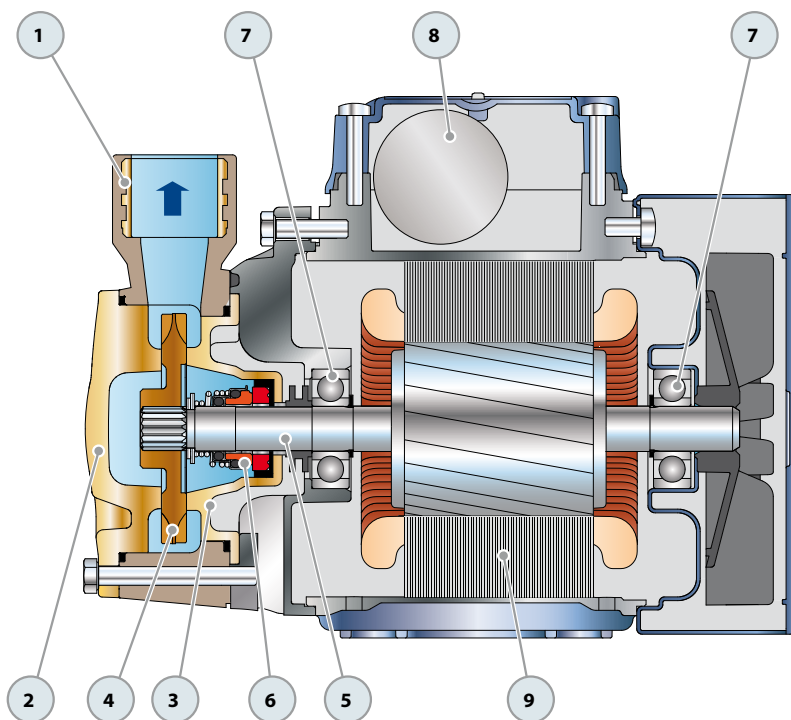


| MODEL | | POWER | | Q | H metres | | | | | | | | | | | | | | |
|--------------|-------------|-------|------|----------|----------|----|-----|-----|------|------|------|------|------|------|------|-----|-----|--|--|
| Single-phase | Three-phase | kW | HP | | m³/h | 0 | 0.1 | 0.3 | 0.6 | 0.9 | 1.2 | 1.5 | 1.8 | 1.9 | 2.3 | 2.7 | 3.0 | | |
| | | | | l/min | 0 | 2 | 5 | 10 | 15 | 20 | 25 | 30 | 32 | 38 | 45 | 50 | | | |
| PQAm 60 | PQA 60 | 0.37 | 0.50 | H metres | 40 | 38 | 35 | 29 | 23.5 | 18 | 12.5 | 7 | 5 | | | | | | |
| PQAm 70 | PQA 70 | 0.55 | 0.75 | | 65 | 62 | 58 | 52 | 45.5 | 39.5 | 33 | 27 | 24 | 16.5 | 8 | | | | |
| PQAm 72 | PQA 72 | 0.55 | 0.75 | | 65 | - | 62 | 57 | 52 | 47 | 42 | 37.5 | 35.5 | 29.5 | 22.5 | 18 | | | |
| PQAm 80 | PQA 80 | 0.75 | 1 | | 70 | 66 | 62 | 56 | 49.5 | 43 | 37 | 31 | 28 | 20.5 | 12 | | | | |
| PQAm 82 | PQA 82 | 0.75 | 1 | | 70 | - | 66 | 61 | 56 | 51 | 46 | 41.5 | 39.5 | 34 | 26.5 | 22 | | | |
| PQAm 90 | PQA 90 | 0.75 | 1 | | 90 | 86 | 79 | 68 | 56.5 | 45.5 | 34 | 23 | 18.5 | 5 | | | | | |

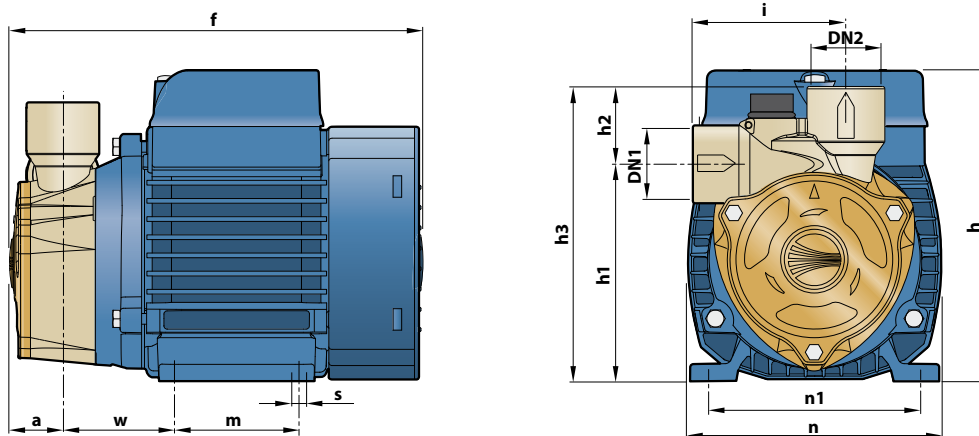
Q = Flow rate H = Total manometric head HS = Suction height

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3.

| POS. | COMPONENT | CONSTRUCTION CHARACTERISTICS | | | | |
|---------|-----------------|---|-------------------------|------------------------|------------------------|------------------|
| 1 | PUMP BODY | RYTON, complete with threaded metallic port inserts in compliance with ISO 228/1 | | | | |
| 2 | BODY PLATE | Brass | | | | |
| 3 | MOTOR BRACKET | Aluminium with brass insert (patented), reduces the risk of impeller seizure | | | | |
| 4 | IMPELLER | Brass, with peripheral radial vanes | | | | |
| 5 | MOTOR SHAFT | Stainless steel EN 10088-3 - 1.4104 | | | | |
| 6 | MECHANICAL SEAL | Seal | Shaft | Materials | | |
| | | <i>Model</i> | <i>Diameter</i> | <i>Stationary ring</i> | <i>Rotational ring</i> | <i>Elastomer</i> |
| | | MG1-12 | Ø 12 mm | Silicon carbide | Graphite | NBR |
| 7 | BEARINGS | Pump | Model | | | |
| | | PQA 60 | 6201 ZZ / 6201 ZZ | | | |
| | | PQA 70-72-80-82-90 | 6203 ZZ / 6203 ZZ | | | |
| 8 | CAPACITOR | Pump | Capacitance | | | |
| | | <i>Single-phase</i> | <i>(230 V or 240 V)</i> | <i>(110 V)</i> | | |
| | | PQAm 60 | 10 µF 450 VL | 25 µF 250 VL | | |
| | | PQAm 70-72 | 16 µF 450 VL | 60 µF 250 VL | | |
| | | PQAm 80-82 | 20 µF 450 VL | 60 µF 250 VL | | |
| PQAm 90 | 20 µF 450 VL | 60 µF 250 VL | | | | |
| 9 | ELECTRIC MOTOR | <p>PQAm: single-phase 230 V - 50 Hz with thermal overload protector built-in to the winding.</p> <p>PQA: three-phase 230/400 V - 50 Hz.</p> <p>➔ Pumps fitted with the three-phase motor option offer IE2 (IEC 60034-30) class high performance</p> <ul style="list-style-type: none"> - Insulation: F class. - Protection: IP X4. | | | | |



DIMENSIONS AND WEIGHT



| MODEL | | PORTS | | DIMENSIONS mm | | | | | | | | | | | | kg | |
|--------------|-------------|-------|-----|---------------|-----|-----|-------|------|-----|------|----|-----|--------|----|---|------------|------------|
| Single-phase | Three-phase | DN1 | DN2 | a | f | h | h1 | h2 | h3 | i | m | n | n1 | w | s | 1~ | 3~ |
| PQAm 60 | PQA 60 | ½" | ½" | 25 | 192 | 145 | 96 | 33 | 129 | 72.5 | 55 | 118 | 93-100 | 53 | 7 | 4.7 | 4.7 |
| PQAm 70 | PQA 70 | | | | | | 116.5 | 32.5 | 149 | | | | | | | 9.4 | 8.4 |
| PQAm 72 | PQA 72 | 1" | 1" | 28 | 258 | 179 | 121 | 30 | 151 | 83 | 90 | 138 | 112 | 62 | 7 | 9.5 | 8.5 |
| PQAm 80 | PQA 80 | ½" | ½" | | | | 116.5 | 32.5 | 149 | 72.5 | | | | | | 9.4 | 8.4 |
| PQAm 82 | PQA 82 | 1" | 1" | 28 | 258 | 179 | 121 | 30 | 151 | 83 | 90 | 138 | 112 | 62 | 7 | 9.5 | 8.5 |
| PQAm 90 | PQA 90 | ½" | ½" | | | | | 35 | 156 | 76 | | | | | | 9.5 | 8.5 |

ABSORPTION

| MODEL | VOLTAGE (single-phase) | | |
|--------------|------------------------|--------------|---------------|
| | 230 V | 240 V | 110 V |
| Single-phase | 230 V | 240 V | 110 V |
| PQAm 60 | 2.5 A | 2.4 A | 5.2 A |
| PQAm 70 | 6.2 A | 5.5 A | 10.8 A |
| PQAm 72 | 6.2 A | 5.5 A | 10.8 A |
| PQAm 80 | 6.3 A | 5.5 A | 10.8 A |
| PQAm 82 | 6.3 A | 5.5 A | 10.8 A |
| PQAm 90 | 5.6 A | 5.1 A | 11.5 A |

| MODEL | VOLTAGE (three-phase) | | | |
|-------------|-----------------------|---------------|--------------|--------------|
| | 230 V | 400 V | 240 V | 415 V |
| Three-phase | 230 V | 400 V | 240 V | 415 V |
| PQA 60 | 2.0 A | 1.15 A | 1.9 A | 1.1 A |
| PQA 70 | 4.2 A | 2.4 A | 3.7 A | 2.2 A |
| PQA 72 | 4.2 A | 2.4 A | 3.7 A | 2.2 A |
| PQA 80 | 4.2 A | 2.4 A | 3.7 A | 2.2 A |
| PQA 82 | 4.2 A | 2.4 A | 3.7 A | 2.2 A |
| PQA 90 | 4.2 A | 2.4 A | 3.8 A | 2.2 A |

PALLETIZATION

| MODEL | | GROUPAGE | | | | CONTAINER | | | |
|--------------|-------------|------------|--------|------|------|------------|--------|------|------|
| Single-phase | Three-phase | n° pumps | H (mm) | kg | | n° pumps | H (mm) | kg | |
| | | | | 1~ | 3~ | | | 1~ | 3~ |
| PQAm 60 | PQA 60 | 238 | 1240 | 1143 | 1143 | 306 | 1563 | 1462 | 1462 |
| PQAm 70 | PQA 70 | 102 | 1280 | 983 | 881 | 170 | 2040 | 1622 | 1452 |
| PQAm 72 | PQA 72 | 120 | 1310 | 1160 | 1040 | 180 | 1900 | 1730 | 1550 |
| PQAm 80 | PQA 80 | 102 | 1280 | 983 | 881 | 170 | 2040 | 1622 | 1452 |
| PQAm 82 | PQA 82 | 120 | 1310 | 1160 | 1040 | 180 | 1900 | 1730 | 1550 |
| PQAm 90 | PQA 90 | 102 | 1280 | 993 | 891 | 170 | 2040 | 1639 | 1469 |

