



Clean water



Industrial use

### ※ Electric pumps for industrial use



#### PERFORMANCE RANGE

- Flow rate up to **50 l/min** (3.0 m<sup>3</sup>/h)
- Head up to **100 m**

#### INSTALLATION AND USE

Designed for pumping diesel/naphtha and **clean water** free from abrasive particles and non-corrosive liquids that do not harm the pump's components.

Their hydraulic characteristics, compactness, and small size make them ideal for industrial applications such as chillers, air conditioners, coolers, and boiler feed systems.

#### PUMP BODY

The **pump body** is made of **CW617N brass**, which guarantees protection against rust and oxidation.

#### APPLICATION LIMITS

- Manometric suction head up to **8 m**
- Liquid temperature between **-10 °C** and **+90 °C**
- Ambient temperature between **-10 °C** and **+40 °C**
- Maximum working pressure **10 bar**

#### AVAILABLE UPON REQUEST

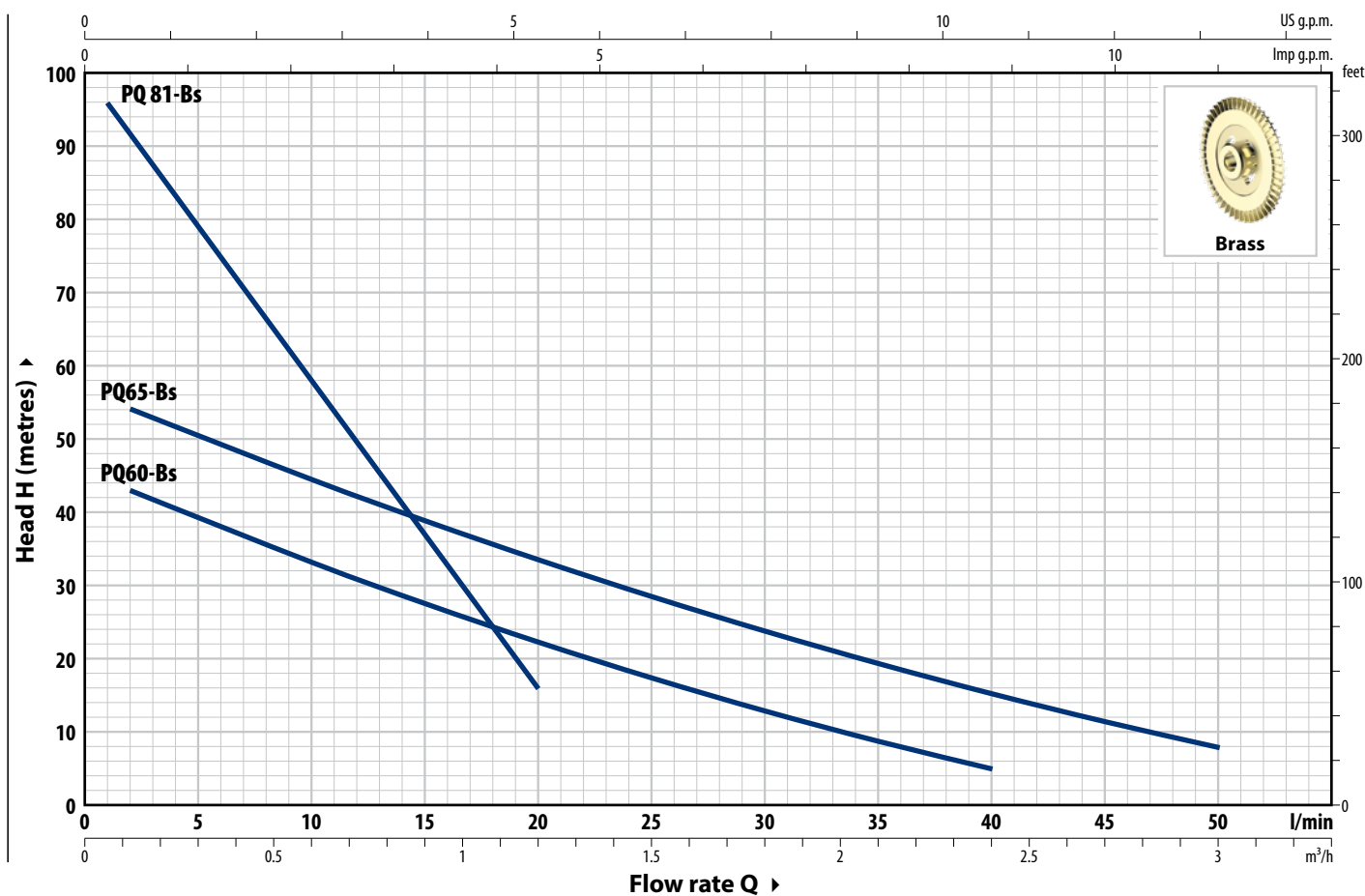
- ※ Mechanical seal options available
- ※ Protection rating IP 55 (only for PQ81-Bs and PQ65-Bs)
- ※ Different voltage or frequency

#### PATENTS - TRADE MARKS - MODELS

- Motor bracket: Patent No. IT1243605
- Community Model No. 009068877-0001

## CURVES AND PERFORMANCE DATA – HS=0 m

**60 Hz**



TYPE		POWER (P <sub>2</sub> )		3~	Q	m³/h	0	0.06	0.12	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	
Single-ph.	Three-ph.	kW	HP			l/min	0	1	2	5	10	15	20	25	30	35	40	45	50	
PQm 60-Bs	PQ 60-Bs	0.37	0.50	IE3	H metres	45.5	–	43	39	33	27.5	22.3	17.4	12.9	8.8	5				
PQm 65-Bs	PQ 65-Bs	0.55	0.75			56.5	–	54	50	44.5	39	33.5	28.5	23.8	19.4	15.3	11.5	8		
PQm 81-Bs	PQ 81-Bs	0.55	0.75			100	96	92	79	58	37	16								

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

Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

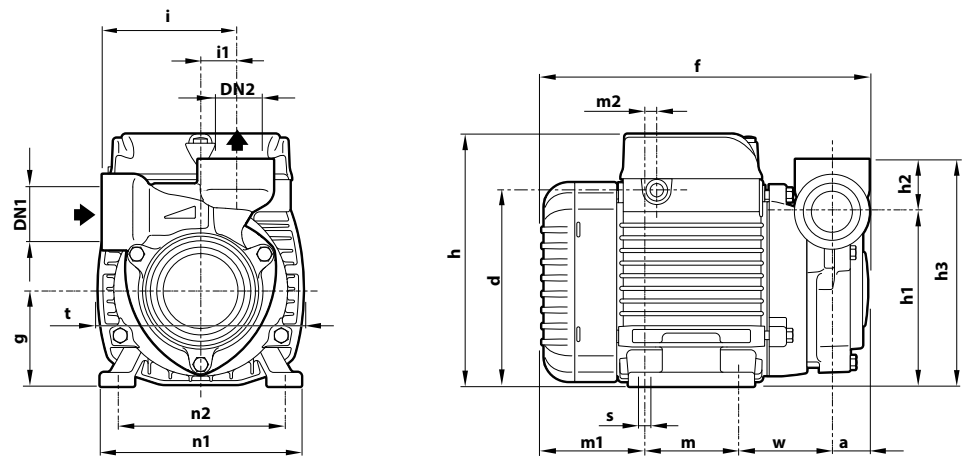
## ABSORPTION

TYPE	VOLTAGE
Single-phase	220 V
PQm 60-Bs	2.8 A
PQm 65-Bs	5.1 A
PQm 81-Bs	4.3 A

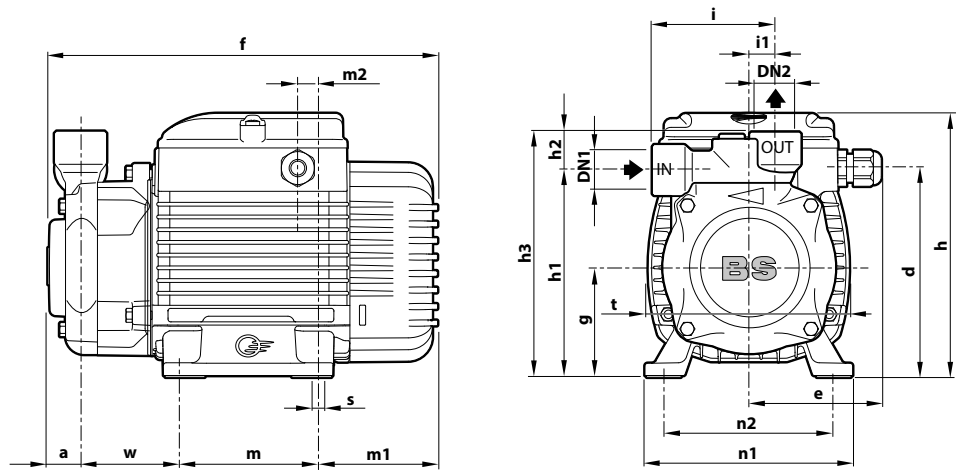
TYPE	VOLTAGE	
Three-phase	220 V - Δ	380 V - Y
PQ 60-Bs	2.0 A	1.15 A
PQ 65-Bs	3.2 A	1.85 A
PQ 81-Bs	2.8 A	1.6 A

DIMENSIONS AND WEIGHT

PQ 60-Bs



PQ 65-Bs – PQ 81-Bs



TYPE		PORTS		DIMENSIONS mm																			kg						
Single-ph.	Three-ph.	DN1	DN2	a	d	e	f	g	h	h1	h2	h3	i	i1	m	m1	m2	n1	n2	t	w	s	1~	3~					
PQm 60-Bs	PQ 60-Bs	¾"	¾"	21.5	112	–	192	56	145.5	101	30	131	76	20	55	62	8	116	100	118	53.5	7	5.0	5.0					
PQm 65-Bs	PQ 65-Bs			24			226			108		138																7.0	6.4
PQm 81-Bs	PQ 81-Bs			18	119.5	76.5		63	153					119	22	141	71	15		80			69	8.5	120		117	55	

PALLET CAPACITY

TYPE		NO. OF PUMPS
Single-ph.	Three-ph.	
PQm 60-Bs	PQ 60-Bs	238
PQm 65-Bs	PQ 65-Bs	216
PQm 81-Bs	PQ 81-Bs	160

## CONSTRUCTION FEATURES

<b>1 Pump body</b>	Brass with ISO 228/1 threaded ports	
<b>2 Motor bracket</b>	Aluminium with brass cover with anti-lock front shim function (patented)	
<b>3 Impeller</b>	Brass, radial peripheral vane type	
<b>4 Mechanical seal</b>	Type	Materials
	<b>ST1-12</b>	Silicon carbide / Graphite / NBR
<b>5 Motor shaft</b>	Stainless steel <b>AISI 431</b>	
<b>6 Electric motor</b>	<p><b>PQm-Bs:</b> single-phase 220 V - 60 Hz with winding integrated thermal motor protection</p> <p><b>PQ-Bs:</b> three-phase 220/380 V - 60 Hz</p> <ul style="list-style-type: none"> <li>– The three-phase pumps are fitted with high performance motors in class <b>IE3</b> (IEC 60034-30-1)</li> <li>– Continuous running duty <b>S1</b></li> <li>– Insulation: class F</li> <li>– Protection rating: IPX4</li> </ul>	

