

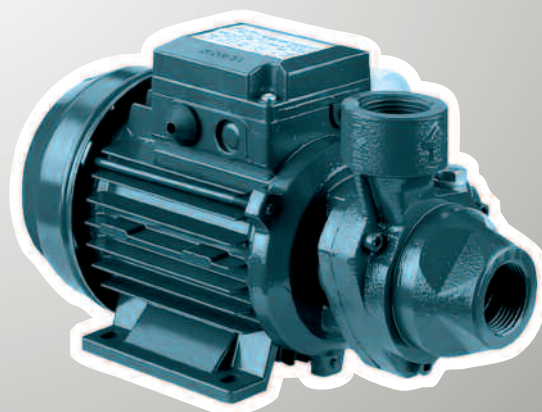


**EBARA**

# PRA

## PERIPHERAL ELECTRIC PUMPS

60 Hz



## PERIPHERAL ELECTRIC PUMPS

in cast iron



Cast iron peripheral electric pumps.

### APPLICATIONS

- Domestic uses
- Boilers power supply
- Booster units

### TECHNICAL DETAILS

- Silent
- Practical
- Easy to transport
- Available also in the nickel-plated version (PRN 056 model)

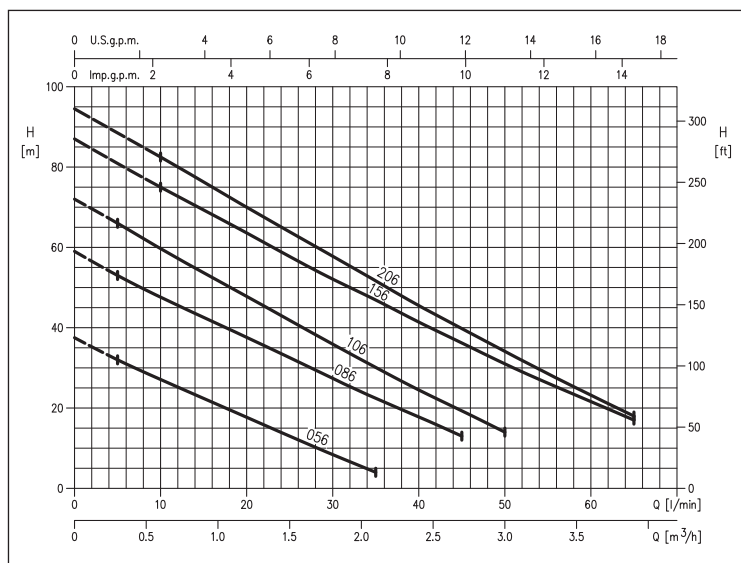
### TECHNICAL DATA

- Maximum working pressure:
  - 6 bar for PRA 056
  - 7.5 bar for PRA 086
  - 12 bar for the rest of the range
- Maximum temperature of the liquid: 80°C
- Asynchronous motor 2 poles
- Class of insulation F
- IP44 Protection rating
- 110-115V  $\pm 6\%$ , 60Hz single phase voltage, 220-230V  $\pm 6\%$ , 60Hz single phase voltage, 220/380V -6%+10%, 60Hz three phase voltage
- Permanent capacitor inserted and thermo-amperometric protection with automatic rearm incorporated for the single phase motor
- Protection under user's responsibility for the three phase version
- G1 discharge connection
- G1 suction connection

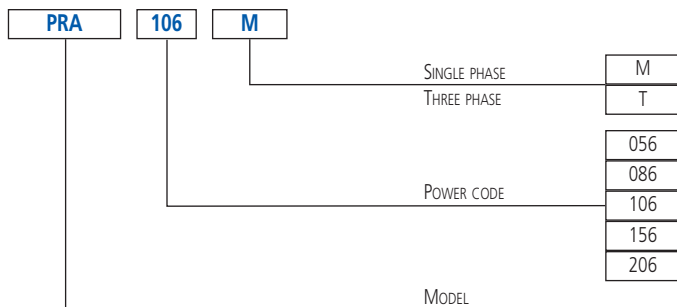
### MATERIALS

- Pump body and bracket in cast iron
- Shaft in 1.0736 for PRA 056, in AISI 303 (parti in contact with the liquid) for the rest of the range
- Impeller in brass
- Mechanical seal in Carbon/Ceramic/NBR

### PERFORMANCE CURVES (according to ISO 9906 Attachment A)



### IDENTIFICATION CODE



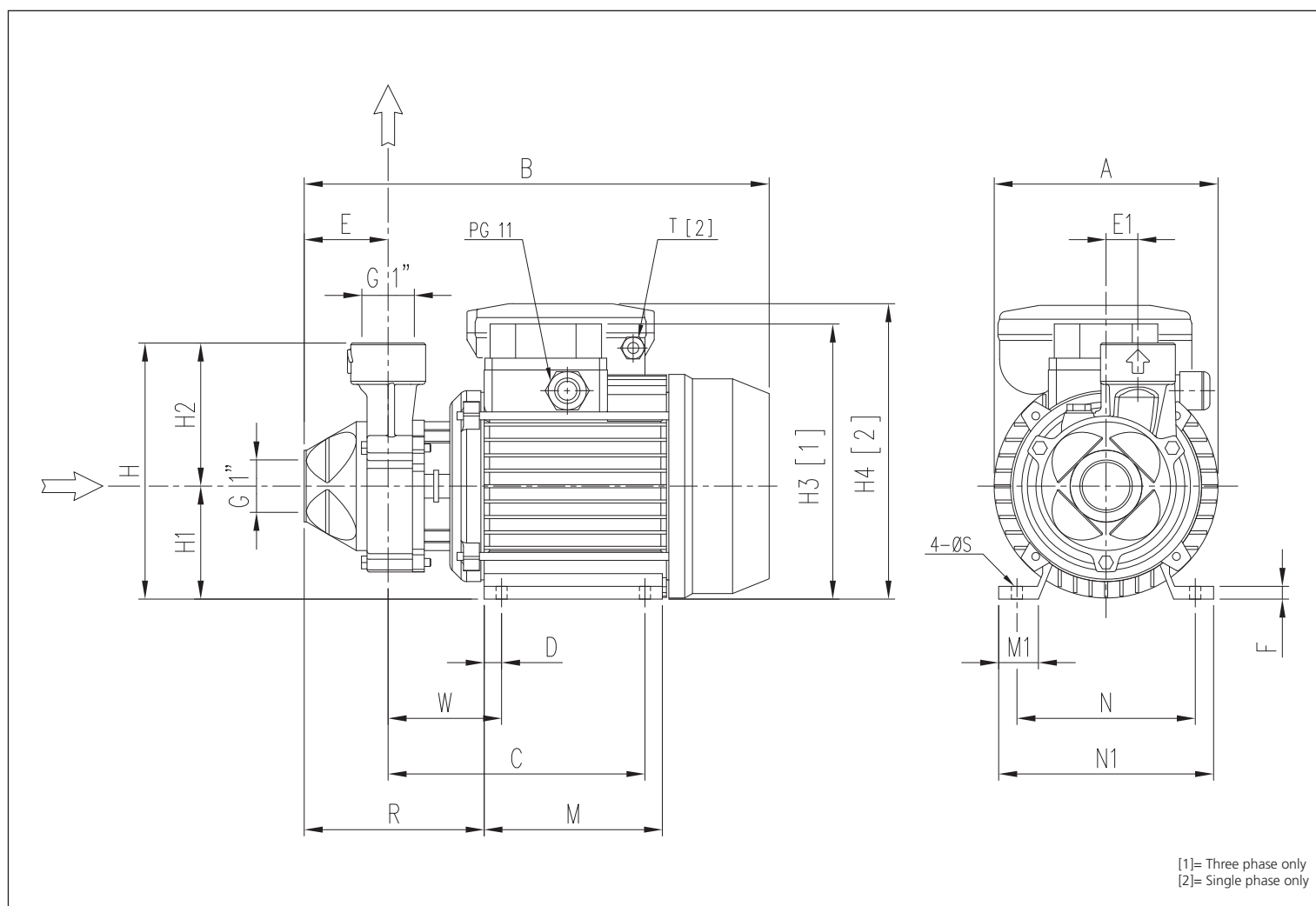
## PERIPHERAL ELECTRIC PUMPS

in cast iron

### PERFORMANCE TABLE

| Model                             |                         | P <sub>2</sub> |      | Q=Flow rate         |           |           |           |           |           |           |         |           |           |
|-----------------------------------|-------------------------|----------------|------|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|---------|-----------|-----------|
| Single phase<br>110-115V/220-230V | Three phase<br>220/380V | [HP]           | [kW] | l/min 5<br>m³/h 0,3 | 10<br>0,6 | 20<br>1,2 | 30<br>1,8 | 35<br>2,1 | 40<br>2,4 | 45<br>2,7 | 50<br>3 | 60<br>3,6 | 65<br>3,9 |
|                                   |                         |                |      | H=Head [m]          |           |           |           |           |           |           |         |           |           |
| PRA 056 M                         | PRA 056 T               | 0,5            | 0,37 | 32,0                | 27,0      | 17,7      | 8,4       | 4,0       | -         | -         | -       | -         | -         |
| PRA 086 M                         | PRA 086 T               | 0,8            | 0,6  | 53,0                | 48,0      | 37,6      | 27,5      | 22,2      | 17,9      | 13,0      | -       | -         | -         |
| PRA 106 M                         | PRA 106 T               | 1              | 0,75 | 66,0                | 60,0      | 48,0      | 35,9      | 30,1      | 24,5      | 19,4      | 14,0    | -         | -         |
| PRA 156 M                         | PRA 156 T               | 1,5            | 1,1  | -                   | 75,0      | 63,5      | 52,0      | 47,0      | 41,5      | 36,2      | 31,0    | 21,8      | 17,0      |
| -                                 | PRA 206 T               | 2              | 1,5  | -                   | 82,5      | 70,0      | 57,8      | 51,6      | 45,5      | 39,8      | 34,1    | 23,2      | 18,0      |

### DIMENSIONS



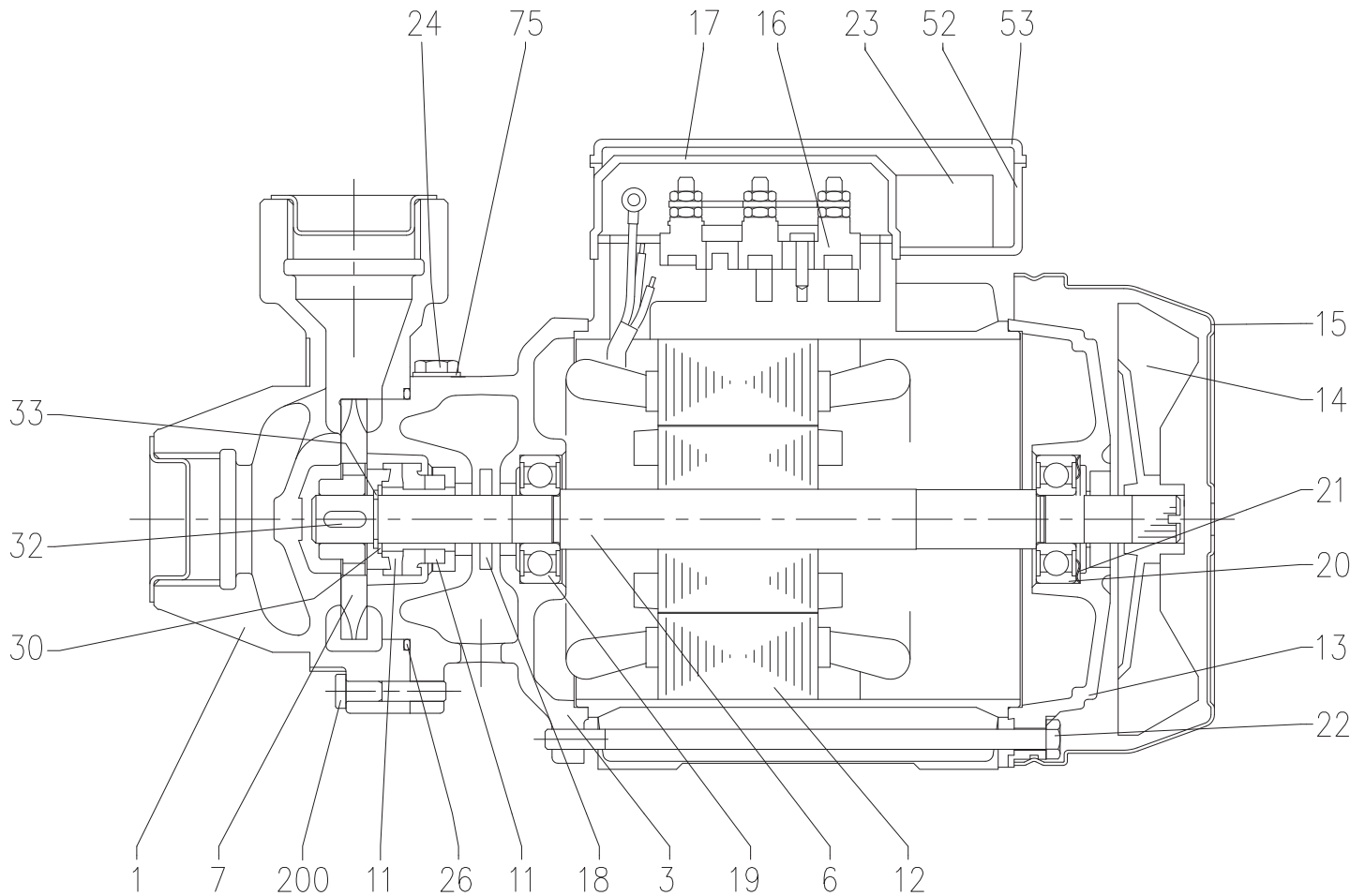
### DIMENSIONAL TABLE

| Model     | Dimensions [mm] |       |       |    |      |    |    |     |    |    |     |     |     |    |     |     |     |        |      |   | Weight [kg] |
|-----------|-----------------|-------|-------|----|------|----|----|-----|----|----|-----|-----|-----|----|-----|-----|-----|--------|------|---|-------------|
|           | A               | B     | C     | D  | E    | E1 | F  | H   | H1 | H2 | H3  | H4  | M   | M1 | N   | N1  | R   | T      | W    | S |             |
| PRA 056 M | 125             | 263,5 | 151   | 10 | 50   | 20 | 7  | 143 | 63 | 80 | -   | 160 | 100 | 22 | 100 | 120 | 111 | PG11   | 71   | 7 | 5,6         |
| PRA 056 T | 125             | 265,5 | 151   | 10 | 50   | 20 | 7  | 143 | 63 | 80 | 156 | -   | 100 | 22 | 100 | 120 | 111 | -      | 71   | 7 | 5,6         |
| PRA 086 M | 141             | 290,5 | 161,3 | 11 | 52,7 | 20 | 9  | 161 | 71 | 90 | -   | 178 | 112 | 25 | 112 | 135 | 113 | PG11   | 71,3 | 7 | 9,2         |
| PRA 086 T | 141             | 292   | 161,3 | 11 | 52,7 | 20 | 8  | 161 | 71 | 90 | 172 | -   | 112 | 25 | 112 | 135 | 113 | -      | 71,3 | 7 | 9,2         |
| PRA 106 M | 141             | 290,5 | 161,3 | 11 | 52,7 | 20 | 9  | 161 | 71 | 90 | -   | 178 | 112 | 25 | 112 | 135 | 113 | PG11   | 71,3 | 7 | 9,7         |
| PRA 106 T | 141             | 292   | 161,3 | 11 | 52,7 | 20 | 8  | 161 | 71 | 90 | 172 | -   | 112 | 25 | 112 | 135 | 113 | -      | 71,3 | 7 | 9,7         |
| PRA 156 M | 160             | 330,5 | 191   | 12 | 56   | 20 | 10 | 175 | 80 | 95 | -   | 212 | 124 | 26 | 125 | 152 | 135 | PG13,5 | 91   | 9 | 14,5        |
| PRA 156 T | 160             | 335   | 191   | 12 | 56   | 20 | 10 | 175 | 80 | 95 | 199 | -   | 124 | 26 | 125 | 152 | 135 | -      | 91   | 9 | 14,5        |
| PRA 206 T | 160             | 348   | 191   | 12 | 56   | 20 | 10 | 175 | 80 | 95 | 199 | -   | 124 | 26 | 125 | 152 | 135 | -      | 91   | 9 | 15,8        |

## PERIPHERAL ELECTRIC PUMPS

in cast iron

### SECTIONAL VIEW



### MATERIALS TABLE

| Ref. | Name                    | Material           | Ref. | Name                        | Material                   |
|------|-------------------------|--------------------|------|-----------------------------|----------------------------|
| 1    | Pump body               | Cast iron          | 20   | Bearing (motor side)        | -                          |
| 3    | Motor bracket           | Cast iron          | 21   | Adjusting ring              | Steel C70                  |
| 6    | Shaft with rotor        | [3]                | 22   | Tie-rod                     | Galvanised Fe 42           |
| 7    | Impeller                | Brass              | 23   | Capacitor [2]               | -                          |
| 11   | Mechanical seal         | Carbon/Ceramic/NBR | 24   | Priming plug                | Brass                      |
| 12   | Motor frame with stator | -                  | 26   | O-Ring                      | NBR                        |
| 13   | Motor cover             | Aluminium          | 30   | Washer                      | AISI 304                   |
| 14   | Fan                     | PP                 | 32   | Key                         | AISI 316                   |
| 15   | Fan cover               | Galvanised Fe P04  | 33   | Seeger ring                 | AISI 304                   |
| 16   | Terminal box            | -                  | 52   | Capacitor box [2]           | ABS                        |
| 17   | Terminal box cover [1]  | Aluminium          | 53   | Capacitor box cover [2] [4] | ABS                        |
| 18   | Splash ring             | NBR                | 75   | Washer                      | Aluminium                  |
| 19   | Bearing (pump side)     | -                  | 200  | Screw                       | Zn Steel Cl. 8.8 ISO 898-1 |

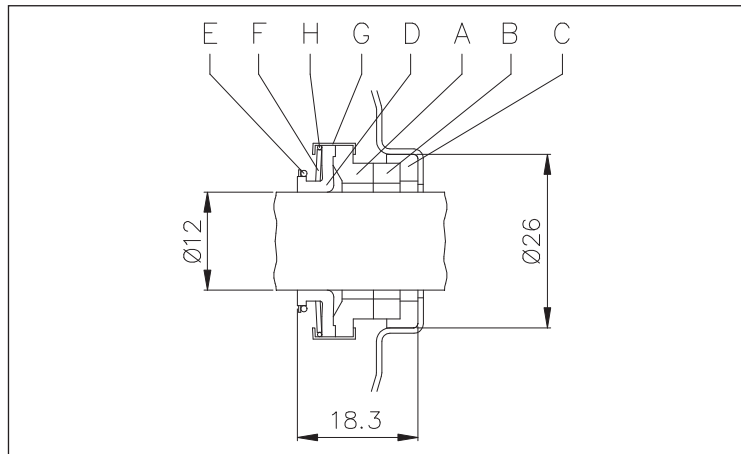
[1]= For three phase only [2]= For single phase only

[3]= Material: 1.0736 for PRA 056, AISI 303 (part in contact with the liquid) for the rest of the range [4]= With gasket in NBR for PRA 056-086-106 single phase versions

## PERIPHERAL ELECTRIC PUMPS

in cast iron

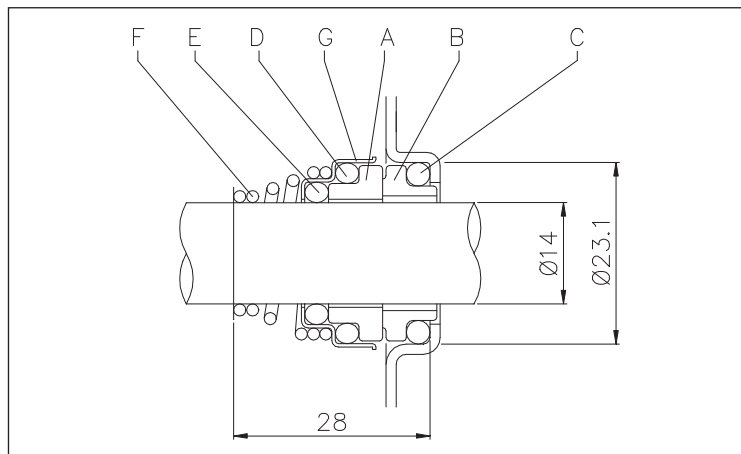
### MECHANICAL SEAL for PRA 056 - 086 - 106



### MATERIALS TABLE for PRA 056 - 086 - 106

| Ref. | Name            | Material |
|------|-----------------|----------|
| A    | Rotating part   | Carbon   |
| B    | Fixed part      | Ceramic  |
| C    | Gasket          | NBR      |
| D    | Bellows         | NBR      |
| E    | Ring            | AISI 304 |
| F    | Spring          | AISI 304 |
| G    | Structure/frame | AISI 304 |
| H    | Retainer ring   | AISI 304 |

### MECHANICAL SEAL for PRA 156 - 206



### MATERIALS TABLE for PRA 156 - 206

| Ref. | Name            | Material |
|------|-----------------|----------|
| A    | Rotating part   | Ceramic  |
| B    | Fixed part      | Carbon   |
| C    | O-Ring          | NBR      |
| D    | O-Ring          | NBR      |
| E    | O-Ring          | NBR      |
| F    | Spring          | AISI 316 |
| G    | Structure/frame | AISI 304 |

### ELECTRIC DATA TABLE

| Model                             |                         | P <sub>2</sub> |      | Capacitor      |                |                |                | P <sub>1</sub> |             | Absorbed Current [A] |          |             |      |
|-----------------------------------|-------------------------|----------------|------|----------------|----------------|----------------|----------------|----------------|-------------|----------------------|----------|-------------|------|
| Single phase<br>110-115V/220-230V | Three phase<br>220/380V | [HP]           | [kW] | Single phase   |                | Single phase   |                | Single phase   | Three phase | Single phase         |          | Three phase |      |
|                                   |                         |                |      | 110-115V<br>μF | V <sub>c</sub> | 220-230V<br>μF | V <sub>c</sub> | [kW]           | [kW]        | 110-115V             | 220-230V | 220V        | 380V |
| PRA 056 M                         | PRA 056 T               | 0,5            | 0,37 | 31,5           | 250            | 8              | 450            | 0,58           | 0,56        | 5,5                  | 2,8      | 1,9         | 1,1  |
| PRA 086 M                         | PRA 086 T               | 0,8            | 0,6  | 60             | 250            | 14             | 450            | 1,37           | 1,33        | 12,5                 | 6,3      | 4,0         | 2,3  |
| PRA 106 M                         | PRA 106 T               | 1              | 0,75 | 60             | 250            | 20             | 450            | 1,54           | 1,0         | 15,3                 | 7,1      | 2,9         | 1,7  |
| PRA 156 M                         | PRA 156 T               | 1,5            | 1,1  | -              | -              | 35             | 450            | 2,2            | 2,0         | -                    | 10,4     | 5,7         | 3,3  |
| -                                 | PRA 206 T               | 2              | 1,5  | -              | -              | -              | -              | -              | 2,9         | -                    | -        | 8,1         | 4,7  |

## EBARA Pumps Europe network

### HEAD OFFICE

#### EBARA Pumps Europe S.p.A.

Via Pacinotti, 32  
36040 Brendola (VI), Italy  
Phone +39 0444 706811 - Fax +39 0444 405811

Italian sales:  
e-mail: ordini@ebaraeurope.com

Export sales:  
e-mail: exportsales@ebaraeurope.com

Technical Customer Service (TCS):  
e-mail: technical\_customer\_service@ebaraeurope.com  
Phone +39 0444 706902/923

Marketing & Marketing Communication:  
e-mail: marketing@ebaraeurope.com

### ITALIAN SALES NETWORK

#### NORTH Region:

(Valle d'Aosta, Piemonte, Lombardia, Liguria, Trentino  
Alto Adige, Veneto, Friuli Venezia Giulia, Emilia Romagna)  
Regional Manager cell.: +39 348 8732512  
e-mail: nord@ebaraeurope.com  
Phone +39 0444 706811 - Fax +39 0444 405811

#### CENTRAL Region:

(Toscana, Umbria, Marche, Lazio, Abruzzo, Molise)  
Regional Manager cell.: +39 335 6423286  
e-mail: centro@ebaraeurope.com  
Phone +39 0444 706811 - Fax +39 0444 405811

#### SOUTH Region:

(Campania, Basilicata, Puglia, Calabria, Sicilia)  
Regional Manager cell.: +39 335 6423316  
e-mail: sud@ebaraeurope.com  
Phone +39 0444 706811 - Fax +39 0444 405811

#### INDUSTRIAL Division:

Manager cell.: +39 335 6423302  
e-mail: industry@ebaraeurope.com  
Phone +39 0444 706811 - Fax +39 0444 405811

#### WASTEWATER Division:

Manager cell.: +39 335 6423290  
e-mail: ses@ebaraeurope.com  
Phone +39 0444 706811 - Fax +39 0444 405811

#### MILANO Branch:

Via Lainate, 62  
20017 Rho (MI)  
Phone +39 02 93507358 - Fax +39 0444 405975  
Branch Manager cell.: +39 335 5327276  
e-mail: mktgmil@ebaraeurope.com

#### CAGLIARI Branch:

Via del Fangario, 29  
09122 Cagliari  
Phone +39 070 274281 - Fax +39 0444 405960  
Branch Manager cell.: +39 335 6423320  
e-mail: mktgca@ebaraeurope.com

#### PALERMO Branch

Via Don L. Sturzo, 181/183  
Z.I. - 90044 Carini (PA)  
Phone +39 091 8669790 - Fax +39 0444 405980  
Branch Manager cell.: +39 335 6423316  
e-mail: mktgpa@ebaraeurope.com

### EXPORT NETWORK

#### EBARA Pumps Europe S.p.A. UNITED KINGDOM

Unit 7 - Zodiac Business Park  
High Road - Cowley Uxbridge  
Middlesex - UB8 2GU, United Kingdom  
Phone +44 1895 439027 - Fax +44 1895 439028  
e-mail: mktguk@ebaraeurope.com

#### EBARA ESPAÑA BOMBAS S.A.

C/Cormoranes 6 Y 8  
Poligono Ind. La Estación  
28320 Pinto (Madrid), Spain  
Phone +34 916.923.630 - Fax +34 916.910.818  
e-mail: marketing@ebara.es

#### EBARA Pumps Europe S.p.A. FRANCE

555, Rue Juliette Recamier  
69970 Chaponnay, France  
Phone +33 4 72769482 - Fax +33 805101071  
e-mail: mktgfr@ebaraeurope.com

#### EBARA Pumps Europe S.p.A. GERMANY

Ferdinand-Porsche-Ring 7  
63110 Rodgau-Jügesheim, Germany  
Phone +49 (0) 6106-660 99-0  
Fax +49 (0) 6106-660 99-45  
e-mail: mktgde@ebaraeurope.com

#### EBARA POMPY POLSKA Sp. z o.o.

ul. Działkowa 115  
02-234 Warszawa, Poland  
Phone +48 22 3909920 - Fax +48 22 3909929  
e-mail: mktgpl@ebaraeurope.com

#### EBARA Pumps Europe S.p.A. MIDDLE EAST

P.O. Box 54515  
Dubai Airport Free Zone  
Dubai, United Arab Emirates  
Phone +971 4 609 1040 - Fax +971 4 609 1038  
e-mail: mktgme@ebaraeurope.com

#### EBARA Pumps Europe S.p.A INDIA LIAISON OFFICE

Bhumiraj Costarica,  
Room No. 1503, Sector -18,  
Palm Beach Rd., Sanpada,  
Navi Mumbai, Maharashtra, India  
Phone +91 22 27812862/63/64  
Fax +91 22 27812865  
e-mail: mktgind@ebaraeurope.com

#### EBARA Pumps Europe S.p.A. RUSSIA

Phone +7 985 7672672  
e-mail: mktgrus@ebaraeurope.com



### EBARA Pumps Europe S.p.A.

Via Pacinotti, 32  
36040 Brendola (Vicenza), Italy  
Phone +39 0444 706811 - Fax +39 0444 405811  
e-mail: marketing@ebaraeurope.com  
www.ebaraeurope.com



### EBARA Corporation

11-1, Haneda Asahi-cho, Ohta-ku,  
Tokyo 144-8510  
Japan  
Phone +81 3 6275 7598 - Fax +81 3 5736 3193  
www.ebara.com