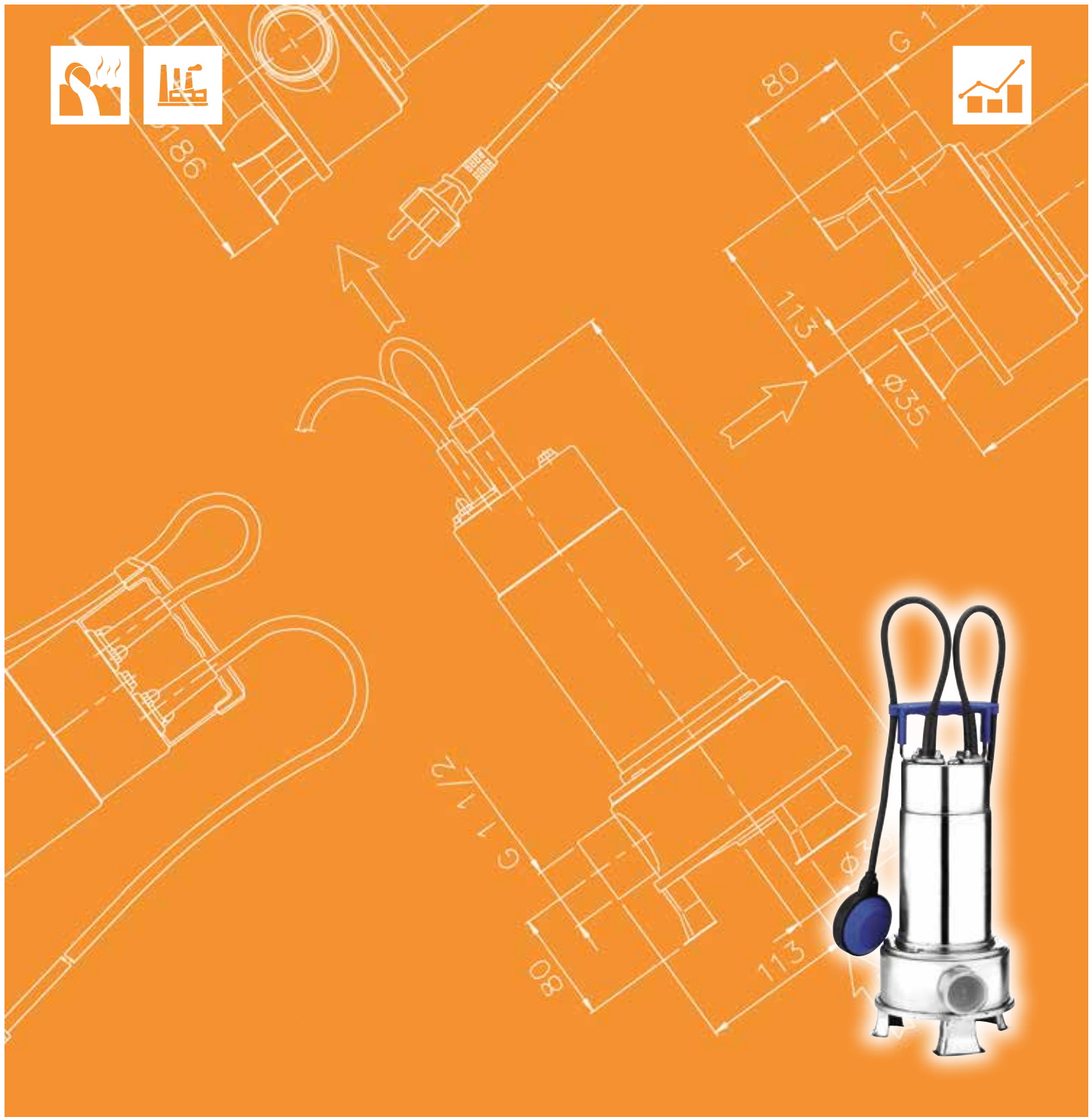




Japanese Technology since 1912

RIGHT

Data Book 50Hz



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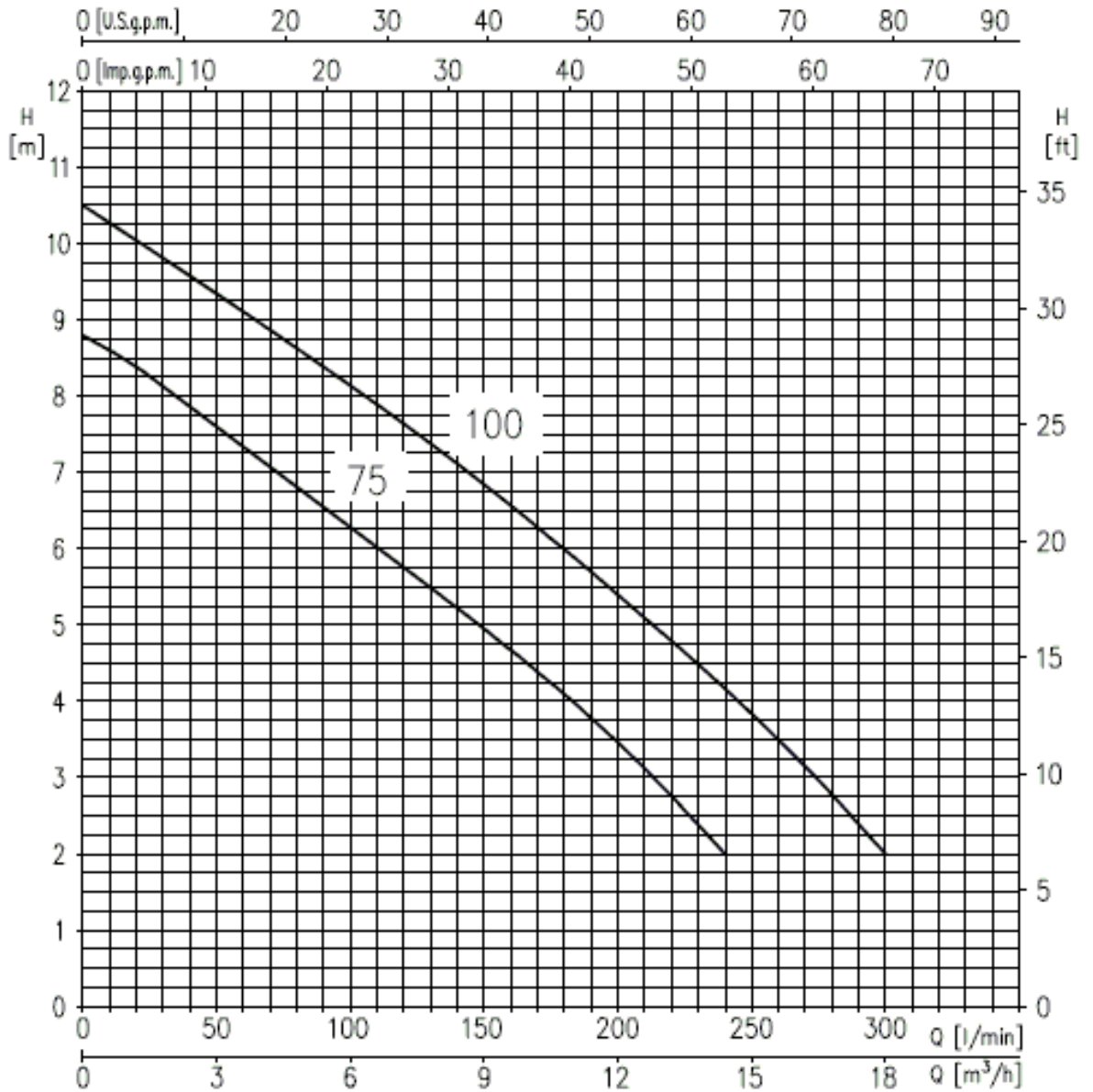
SPECIFICATION

50Hz

Rev. J

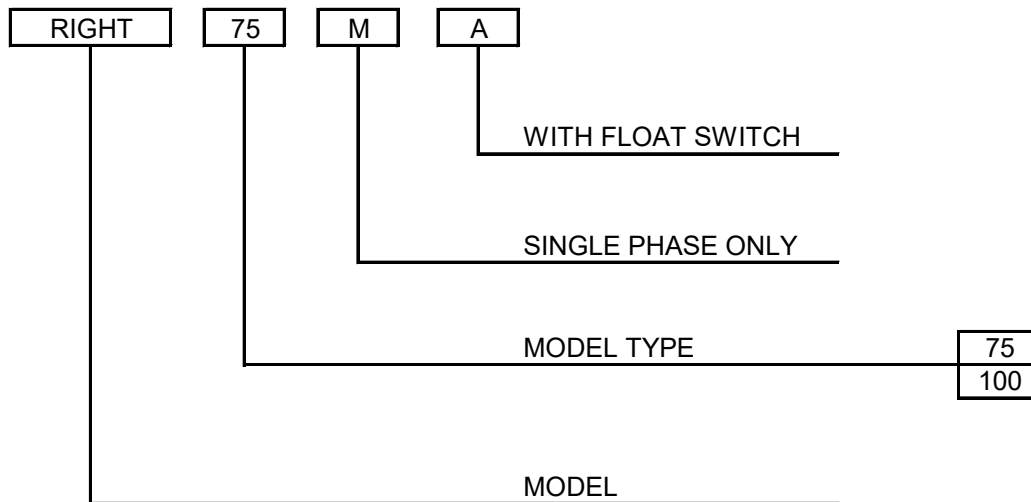
| PUMP | | |
|-----------------------------|----------------------|-----------------------------------------------------------------------|
| Liquid Handled | Type of liquid | Clean and dirty water |
| | Max [°C] | 50° |
| | Max solids size [mm] | 35 spherical |
| Maximum immersion [m] | | 2 (with power cable length 5 m) 7 (with power cable length 10 m) |
| Construction | Impeller | Open vortex type |
| | Shaft seal type | Double mechanical seal |
| | Bearing | Sealed ball bearing |
| Pipe Connection | Suction-Flange [mm] | 35 open |
| | Discharge- [inch] | G1½ UNI ISO 228 |
| Material | Casing | AISI 304 |
| | Impeller | AISI 304 |
| | Casing cover | AISI 304 |
| | Shaft seal | Pump side: SiC/SiC/NBR Motor side: Carbon/Ceramic/NBR |
| | Seal cover | AISI 304 |
| | Shaft | AISI 303 (Wet extension) |
| | Lubricating liquid | White mineral oil: Esso Marcol 152 (180 cc) |
| Applicable standard of test | | ISO 9906 Annex A |

| MOTOR | | | |
|-------------------------------------|----------------------|---------------------------------|---------|
| Type | Submersible dry type | | |
| | Single Phase | Three Phase | |
| No. of Poles | 2 | | |
| Rotation speed [min ⁻¹] | ≈ 2875 | | |
| Insulation Class | F | | |
| Protection degree | IP X8 | | |
| kW/HP Rating | [kW] | 0.55 ÷ 0.75 | |
| | [HP] | 0.75 ÷ 1 | |
| Frequency [Hz] | 50 | | |
| Voltage [V] | 230 ± 10% | 400 ± 10% | |
| Capacitor | Built in | - | |
| Over load protection | Built in | User to provide | |
| Float Switch | Optional | N/A | |
| Float Switch Cable | Material | H07RN-F | |
| | Size | 3G1 | |
| Power cable | length [m] | 5 (only for internal usage); 10 | |
| | material | H07RN-F | H07RN-F |
| | size | 3G1 | 4G1 |
| Dimensions of cable entry | Cable Gland | | |



| Pump Type | | Power | | Q=Capacity | | | | | | | | |
|-----------------------------------|-------------|-------|------|------------|-----|-----|-----|-----|-----|-----|------|-----|
| Single Phase | Three Phase | [kW] | [HP] | l/min | 0 | 40 | 80 | 120 | 160 | 200 | 240 | 300 |
| | | | | m³/h | 0 | 2,4 | 4,8 | 7,2 | 9,6 | 12 | 14,4 | 18 |
| H=Total manometric head in meters | | | | | | | | | | | | |
| RIGHT 75 M | RIGHT 75 | 0,55 | 0,75 | 8,8 | 7,8 | 6,8 | 5,7 | 4,7 | 3,4 | 2 | - | - |
| RIGHT 100M | RIGHT 100 | 0,75 | 1 | 10,5 | 9,5 | 8,6 | 7,6 | 6,6 | 5,4 | 4,2 | 2 | 2 |

TYPE KEY:



PERFORMANCE CURVE SPECIFICATIONS

The specifications below qualify the curves shown on the following pages.

Tolerances according to ISO 9906 Annex A

The curves refer to effective speed of asynchronous motors at 50 Hz

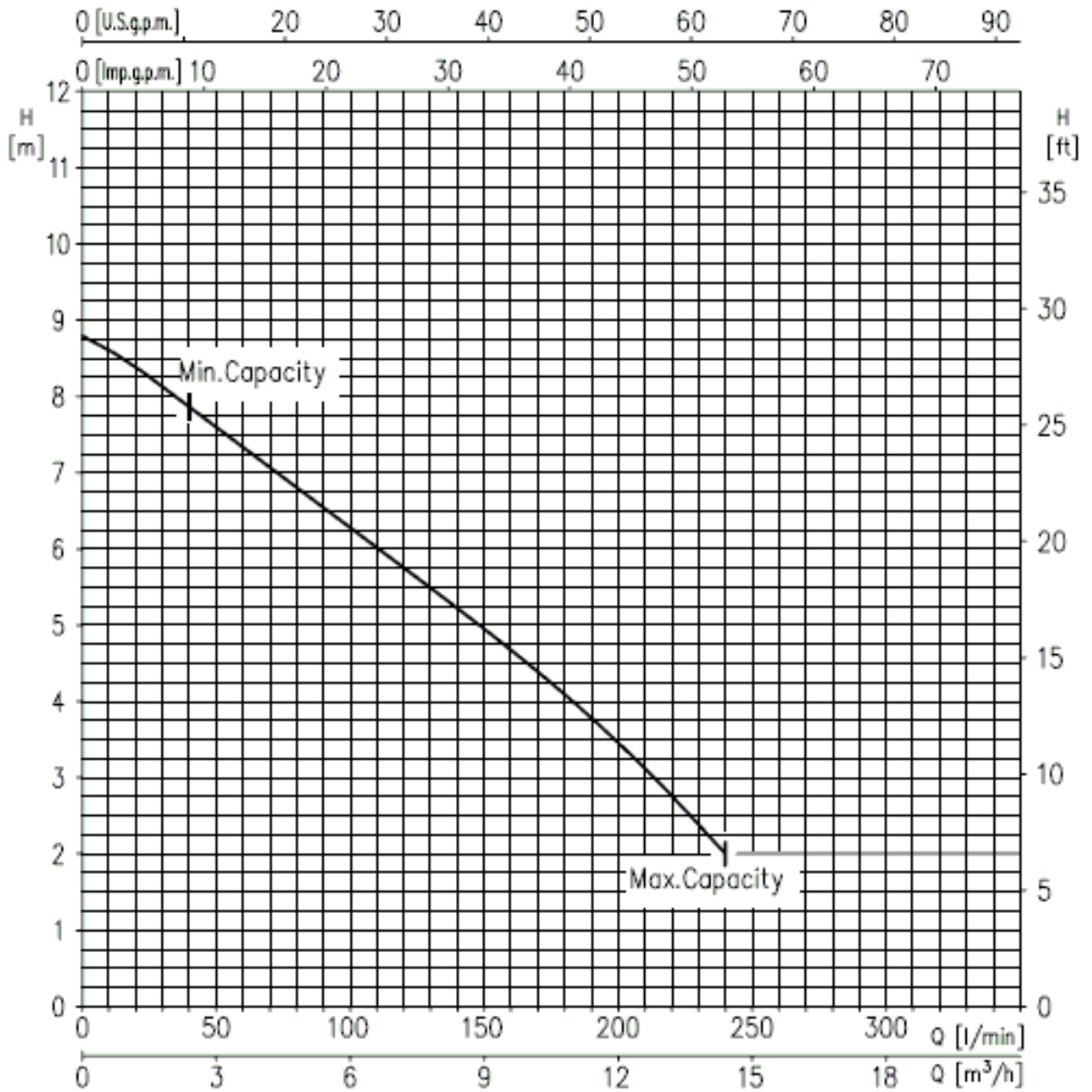
Measurements were carried out with clean water at 20°C of temperature and with a kinematic viscosity of $\nu = 1 \text{ mm}^2/\text{s}$ (1 cSt)

In order to avoid the risk of over-heating, the pumps should not be used at a flow rate below 10% of best efficiency point.

Symbols explanation:

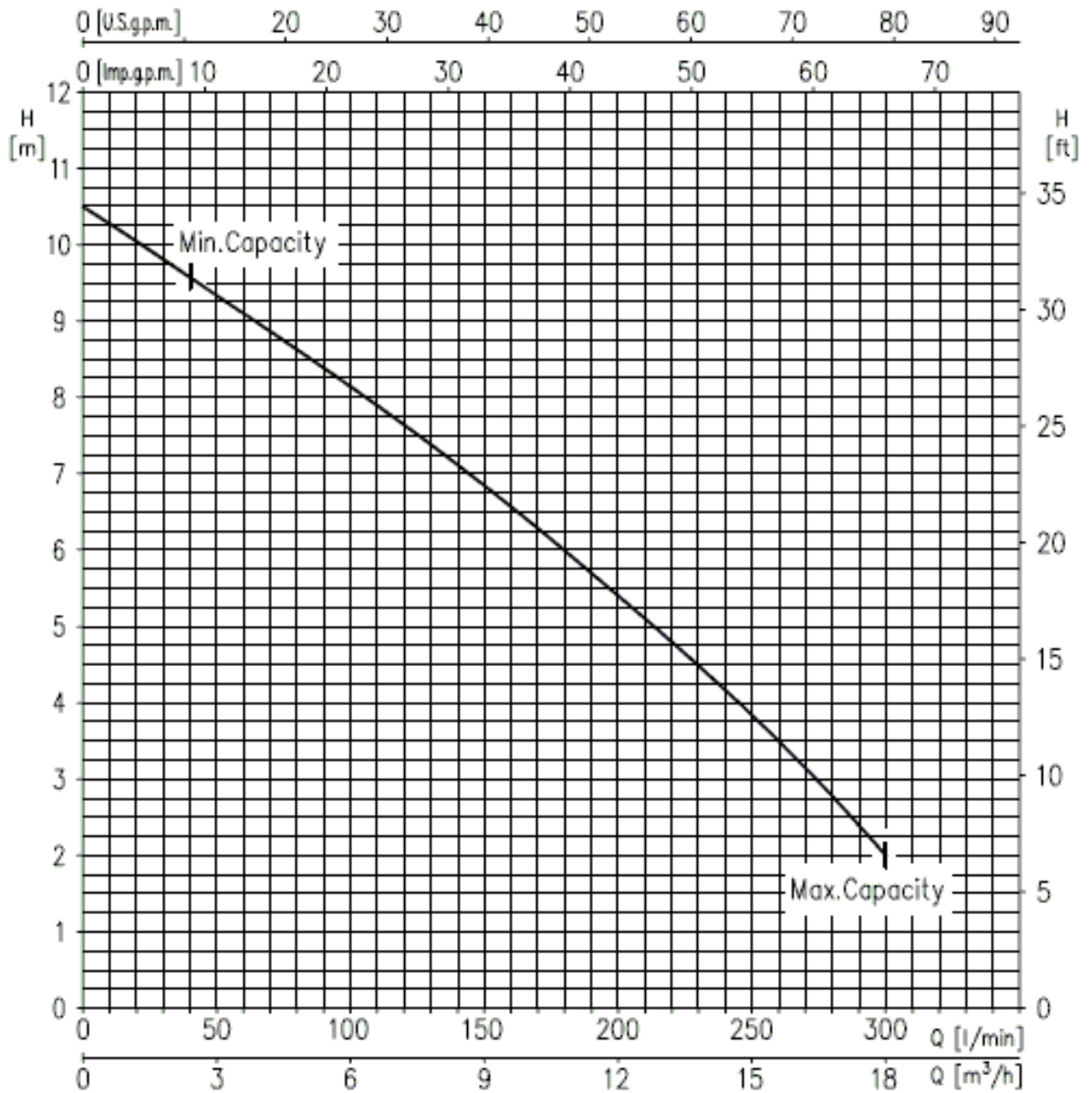
- Q = volume flow rate
- H = total head

RIGHT 75 (0.55 kW) – impeller diameter = 100 mm



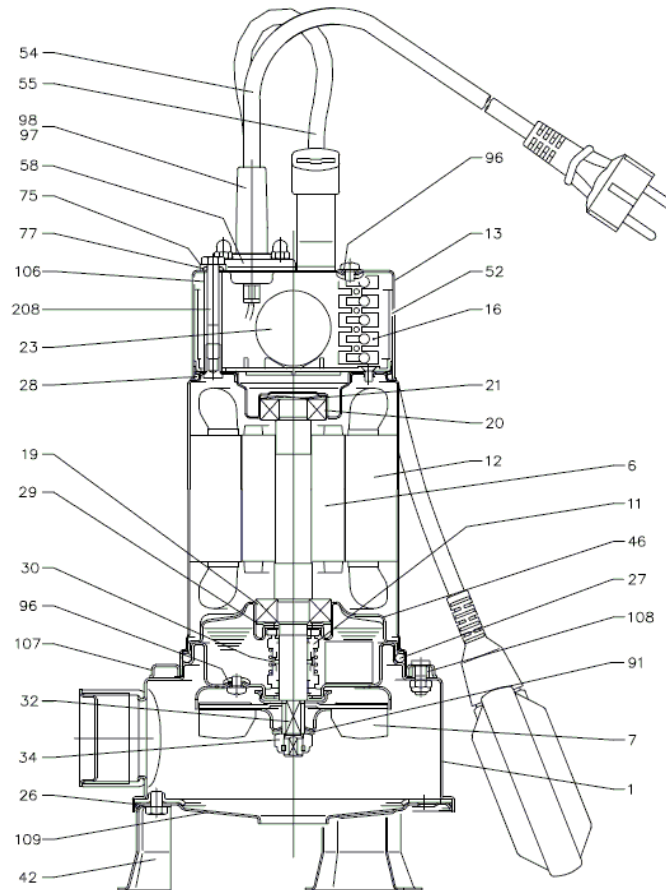
Rotation speed $\approx 2875 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

RIGHT 100 (0.75 kW) – impeller diameter = 100 mm



Rotation speed $\approx 2875 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

SECTIONAL VIEW



| N° | PART NAME | MATERIAL | Q.TY | N° | PART NAME | MATERIAL | Q.TY |
|----|--------------------------|--------------------|------|-----|--------------------------|---------------------------------------|------|
| 1 | Casing | AISI 304 | 1 | 42 | Foot | AISI 304 | 3 |
| 6 | Shaft w ith rotor | AISI 303 | 1 | 46 | Low er bearing bracket | AISI 304 | 1 |
| 7 | Impeller | AISI 304 | 1 | 52 | Capacitor box | PA66 glass fibre reinforced class V-0 | 1 |
| 11 | Mechanical seal | Ceramic/Carbon/NBR | 1 | 54 | Submersible pow er cable | - | 1 |
| 12 | Motor frame w ith stator | - | 1 | 55 | Float sw itch [1] | - | 1 |
| 13 | Cover | AISI 304 | 1 | 58 | Cable gland | AISI 304 | 1 |
| 16 | Terminal | - | 1 | 75 | Washer | AISI 303 | 1 |
| 19 | Low er ball bearing | - | 1 | 77 | "O" Ring | NBR | 1 |
| 20 | Upper ball bearing | - | 1 | 91 | Washer | AISI 304 | 1 |
| 21 | Adjusting w asher | AISI 304 | 1 | 96 | "O" Ring | NBR | 1 |
| 23 | Capacitor [2] | - | 1 | 97 | Cable connector | NBR | 1 |
| 26 | "O" Ring | NBR | 1 | 98 | Cable connector [1] | NBR | 1 |
| 27 | "O" Ring | NBR | 1 | 106 | Spacer | AISI 304 | 1 |
| 28 | "O" Ring | NBR | 1 | 107 | Stopper ring | AISI 304 | 1 |
| 29 | Washer | AISI 304 | 1 | 108 | Gasket | NBR | 1 |
| 30 | Mechanical seal spacer | Brass | 1 | 109 | Suction cover | AISI 304 | 1 |
| 32 | Key | AISI 304 | 1 | 208 | Screw | AISI 304 | 1 |
| 34 | Nut | AISI 303 | 1 | - | - | - | - |

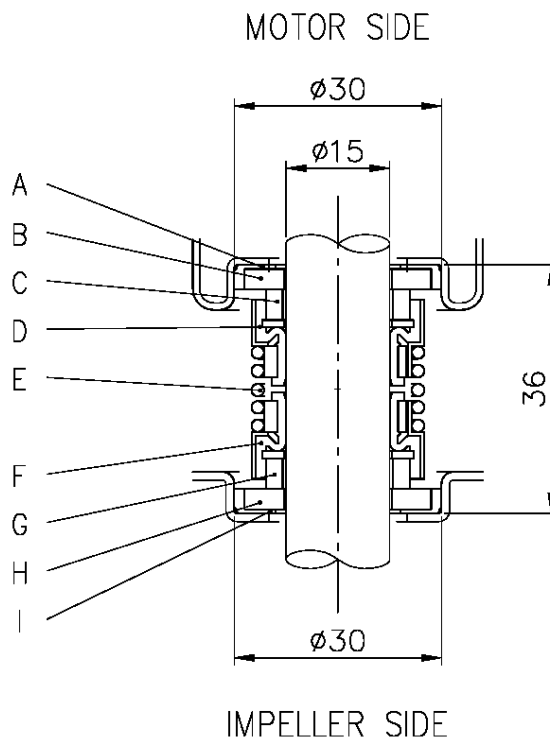
[1] Only for single phase version with float switch

[2] Only for single phase version

BEARINGS

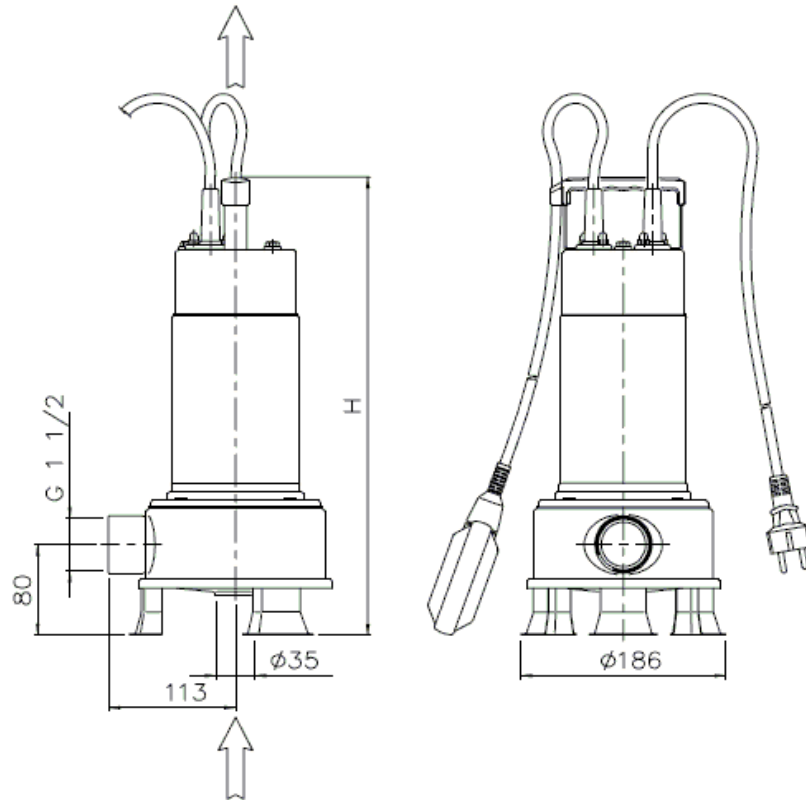
| Type pumps | | Ball Bearing | |
|--------------|-------------|--------------|----------|
| Single Phase | Three Phase | Pump side | Fan side |
| RIGHT 75 M | RIGHT 75 | 6203 ZZ | 6202 ZZ |
| RIGHT 100 M | RIGHT 100 | 6203 ZZ | 6202 ZZ |

MECHANICAL SEAL



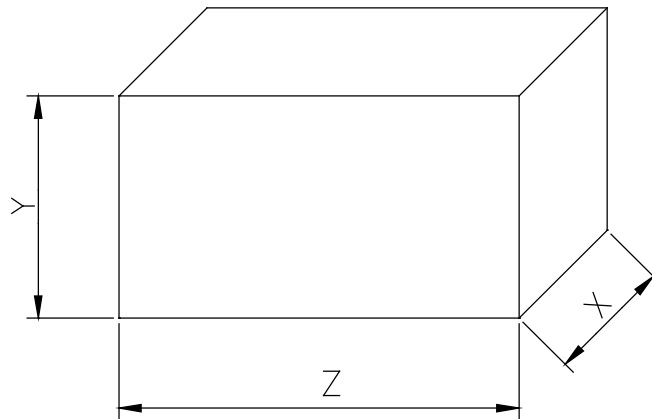
| REF | PART NAME | MATERIAL |
|-----|------------|-----------------|
| A | Rubber cup | NBR |
| B | Seat | Ceramic |
| C | Seal face | Carbon |
| D | Bellow | NBR |
| E | Spring | AISI 304 |
| F | Bellow | NBR |
| G | Seal face | Silicon carbide |
| H | Seat | Silicon carbide |
| I | Rubber cup | NBR |

PUMP



| Type pumps | | Dimension H [mm] | Weight [kg] | |
|--------------|-------------|---------------------|--------------|-------------|
| Single Phase | Three Phase | | Single Phase | Three Phase |
| RIGHT 75 M | RIGHT 75 | 405 | 10 | 10 |
| RIGHT 100 M | RIGHT 100 | 430 | 11,5 | 11,5 |

PACKING

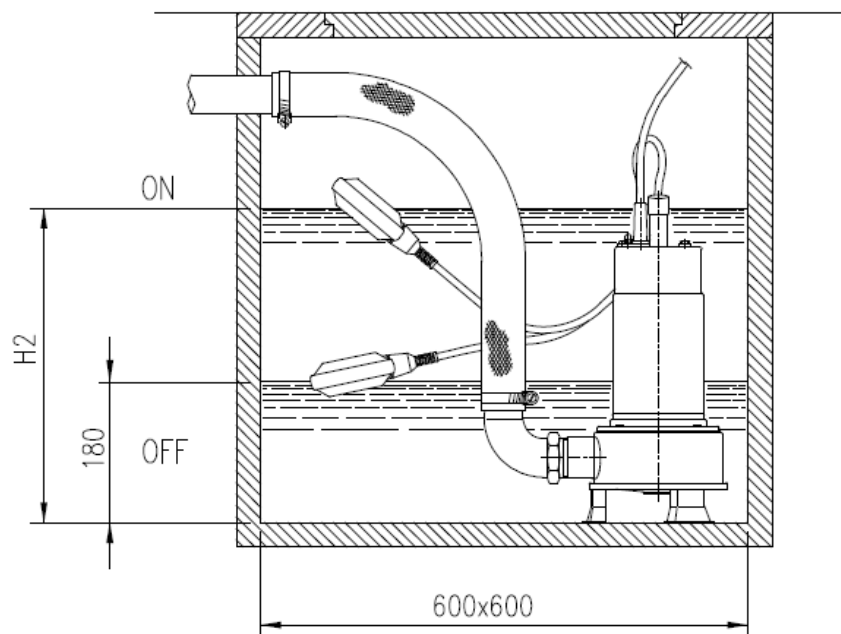


| Type pumps | | Packing [mm] | | | Weight [kg] | |
|--------------|-------------|--------------|-----|-----|--------------|-------------|
| Single Phase | Three Phase | Z | X | Y | Single Phase | Three Phase |
| RIGHT 75 M | RIGHT 75 | 450 | 195 | 245 | 10,7 | 10,7 |
| RIGHT 100 M | RIGHT 100 | 450 | 195 | 245 | 12,2 | 12,2 |

MOTOR DATA

| Pump Type | | Power | | Capacitor Single Phase | | Input [kW] | | Full load current [A] | | Locked rotor current [A] | |
|--------------|-------------|-------|------|---------------------------|------|-----------------|----------------|--------------------------|----------------|-----------------------------|-------------|
| Single Phase | Three Phase | [kW] | [HP] | [μF] | [Vc] | Single Phase | Three Phase | Single Phase | Three Phase | Single Phase | Three Phase |
| RIGHT 75 M | RIGHT 75 | 0,55 | 0,75 | 20 | 450 | 1,0 | 0,95 | 4,8 | 2,1 | 19,5 | 12 |
| RIGHT 100 M | RIGHT 100 | 0,75 | 1 | 31,5 | 450 | 1,20 | 1,2 | 5,7 | 2,6 | 24,5 | 16 |

INSTALLATION



| Pump type | Dimensions [mm] |
|-----------|-----------------|
| | H2 |
| RIGHT 75 | 410 |
| RIGHT 100 | 430 |