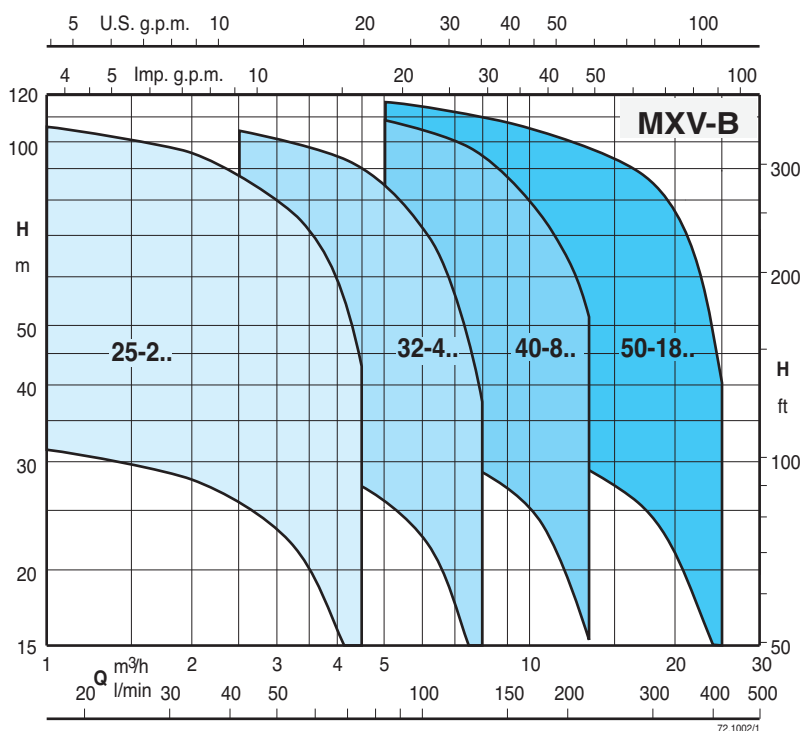




The electropumps MXV-B 25,32,40.. series comply with the European Regulation no. 547/2012 (MXV-B 50 series cannot be sold in the EU).

Coverage chart $n \approx 2900$ rpm



Construction

Vertical multi-stage close coupled pumps with suction and delivery connections of the same diameter and arranged along the same axis (in-line).

All parts that come into contact with the liquid, including wet-end covers, are in chrome-nickel stainless steel with corrosion-resistant bearing sleeves lubricated by the pumped liquid.

Applications

For water supply systems.

For clean non-explosive liquids, without solid, filamentary or abrasive matter and non-aggressive for stainless steel (with adaptation of sealing materials on request).

A universal pump for civil and industrial use, for pressure-boosting systems, fire-extinguishing systems, high-pressure washing plants, irrigation, agricultural uses and sport installations.

Operating conditions

Temperature of liquid: from -15°C to $+90^{\circ}\text{C}$.

Operating environment temperature: up to 40°C .

Maximum permissible pressure in pump casing: 16 bar.

Motor

2-pole induction motor, 50 Hz ($n \approx 2900$ rpm).

MXV-B: three-phase 230/400 V $\pm 10\%$ up to 3 kW;

400/690 V $\pm 10\%$ from 3,7 to 7,5 kW.

MXV-BM: single-phase 230 V $\pm 10\%$,

with thermal protector.

Capacitor inside the terminal box.

Insulation class F. Protection IP 54.

Motor suitable for operation with frequency converter from 2,2 kW.

Classification scheme IE2 for three-phase motors up to 5,5 kW, IE3 for 7,5 kW.

Constructed in accordance with: EN 60034-1, EN 60034-30.

EN 60335-1, EN 60335-2-41.

Materials (wetted parts)

| Component | Material |
|-----------------|-----------------------------|
| External jacket | |
| Suction casing | |
| Delivery casing | Chrome-nickel steel |
| Stage casing | 1.4301 EN 10088 (AISI 304) |
| Impeller | |
| Lower cover | |
| Upper cover | |
| Spacer sleeve | |
| Pump shaft | Chrome-nickel steel |
| Plug | 1.4305 EN 10088 (AISI 303) |
| Mechanical seal | Ceramic alumina/Carbon/EPDM |
| ISO 3069 - KU | |
| Wear ring | PTFE |
| O-ring | NBR |

Special features on request

- Other voltages.
- Frequency 60 Hz.
- Protection IP 55.
- Special mechanical seal
- Pump casing seal rings in FPM.
- Higher or lower liquid or ambient temperatures.
- Flanges to screw, in chrome-nickel steel.
- Motor suitable for operation with frequency converter up to 1,5 kW.

Designation

MXV-B M 25-205

Series _____

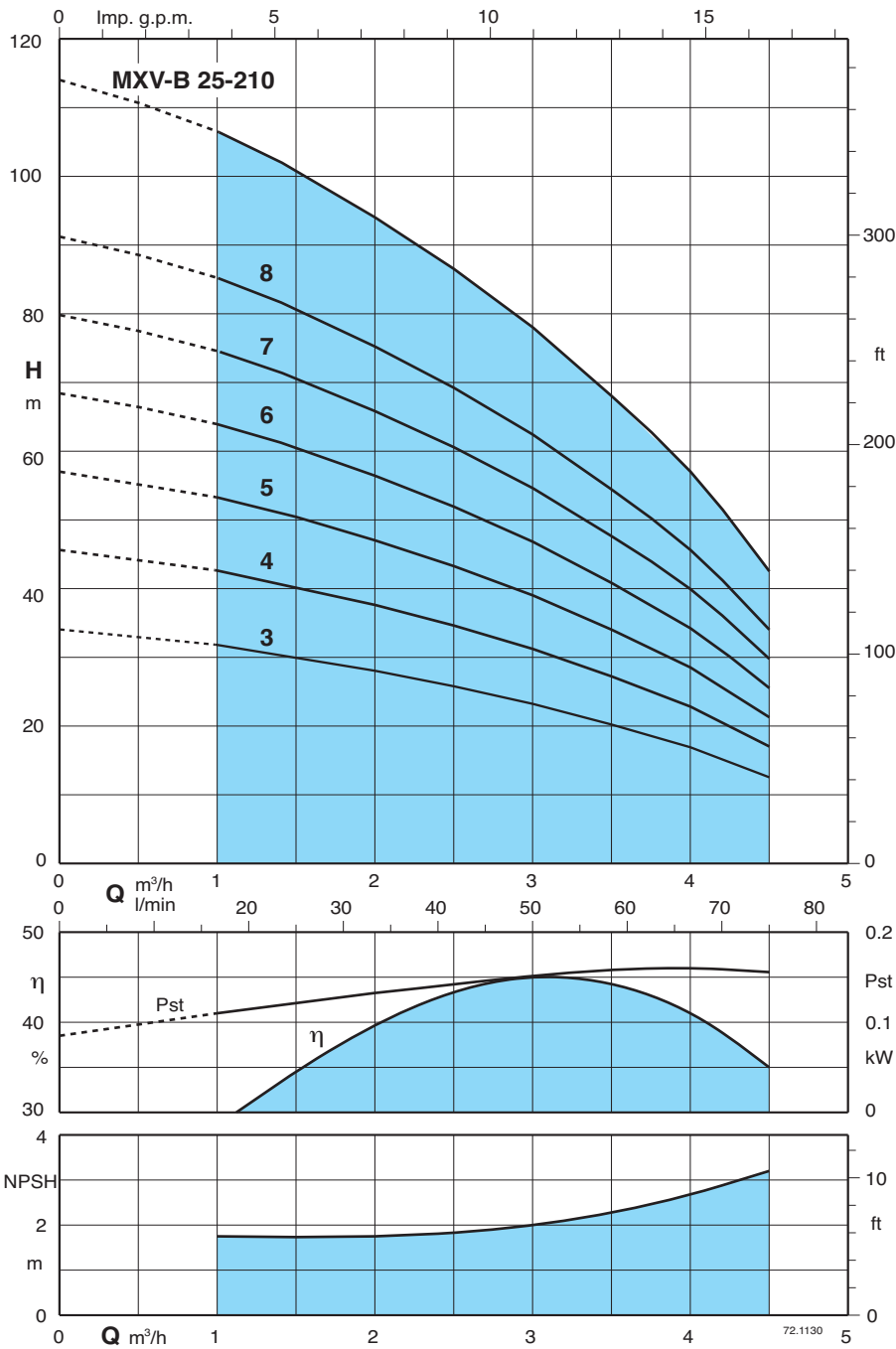
Single-phase motor (up to 2.2 kW) _____

DN ports in mm _____

Rated capacity in m³/h _____

Number of stages _____

Characteristic curves and performance $n \approx 2900$ rpm



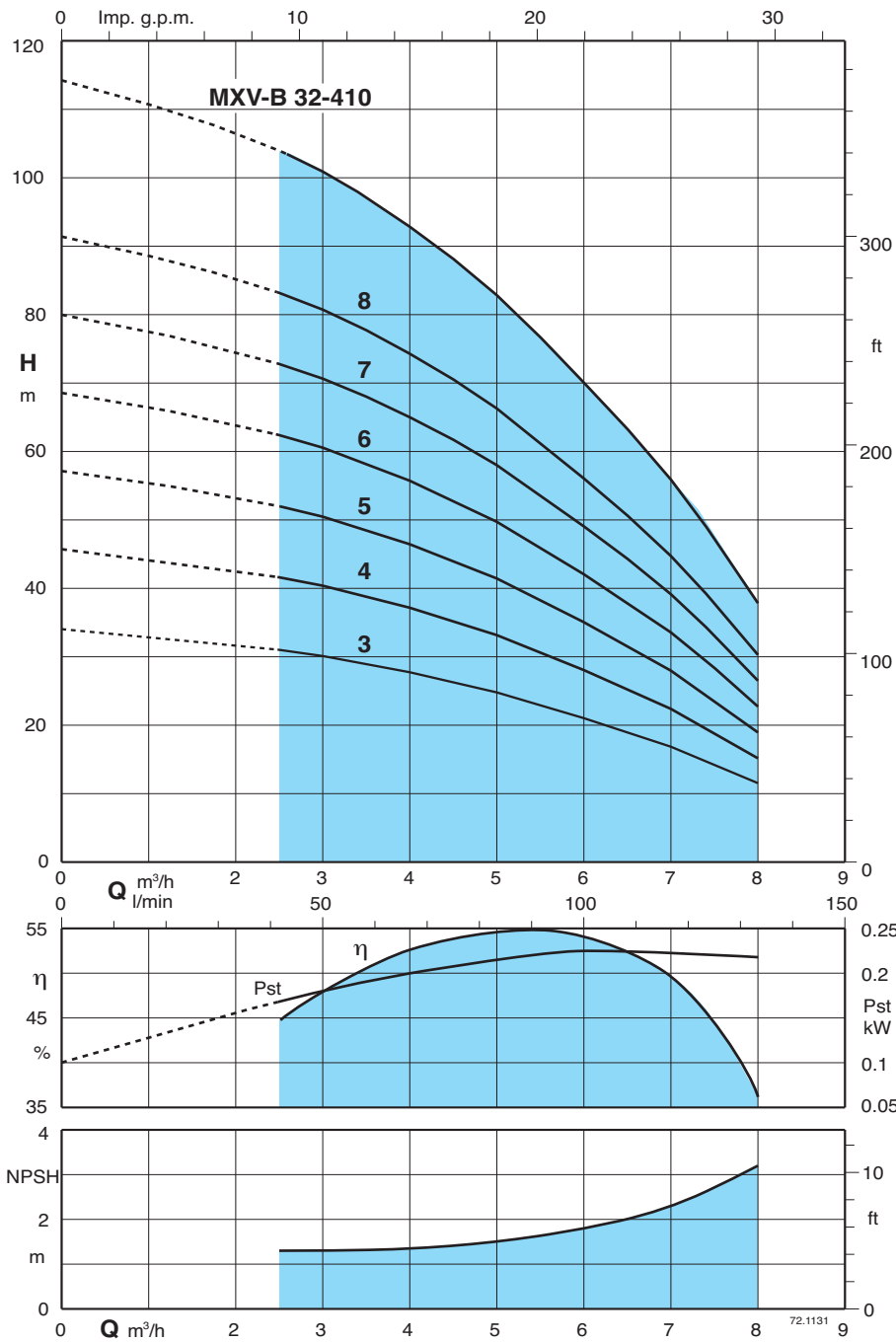
Test results with clean cold water, without gas content.
 A safety margin of + 0.5 m is recommended for the NPSH value.
 Tolerances in accordance with UNI EN ISO 9906:2012

Head and power values valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$.

Pst = Power with reference to one stage.
 P1 Max. power input.
 P2 Rated motor power output.

| 3 ~ | 230 V 400 V | | 1 ~ | 230 V P1 | | P2 | | m³/h Q l/min | H | | | | | | | | |
|--------------|-------------|-----|---------------|----------|-----|------|-----|--------------------|------|------|------|------|------|------|------|------|------|
| | A | A | | A | kW | kW | HP | | 0 | 1 | 1,5 | 2 | 2,5 | 3 | 3,5 | 4 | 4,5 |
| MXV-B 25-203 | 3,3 | 1,9 | MXV-BM 25-203 | 5,8 | 1,1 | 0,75 | 1 | m | 34 | 32 | 30 | 28 | 26 | 23,5 | 20,5 | 17 | 12,5 |
| MXV-B 25-204 | 3,3 | 1,9 | MXV-BM 25-204 | 5,8 | 1,1 | 0,75 | 1 | | 44 | 42,5 | 40 | 37,5 | 34,5 | 31 | 27 | 22,5 | 17 |
| MXV-B 25-205 | 3,3 | 1,9 | MXV-BM 25-205 | 5,8 | 1,1 | 0,75 | 1 | | 56 | 53 | 50 | 47 | 43 | 39 | 34 | 28 | 21 |
| MXV-B 25-206 | 4,7 | 2,7 | MXV-BM 25-206 | 7,4 | 1,5 | 1,1 | 1,5 | | 68 | 63,5 | 60,5 | 56 | 51,5 | 46,5 | 40,5 | 34 | 25 |
| MXV-B 25-207 | 4,7 | 2,7 | MXV-BM 25-207 | 7,4 | 1,6 | 1,1 | 1,5 | | 79,5 | 74 | 70,5 | 65,5 | 60 | 54,5 | 47,5 | 39,5 | 30 |
| MXV-B 25-208 | 7,5 | 4,3 | MXV-BM 25-208 | 9,2 | 2 | 1,5 | 2 | | 91 | 85 | 80,5 | 75 | 69 | 62 | 54 | 45,5 | 34 |
| MXV-B 25-210 | 7,5 | 4,3 | MXV-BM 25-210 | 9,2 | 2,3 | 1,5 | 2 | | 114 | 106 | 101 | 94 | 86 | 78 | 68 | 57 | 42 |

Characteristic curves and performance $n \approx 2900$ rpm



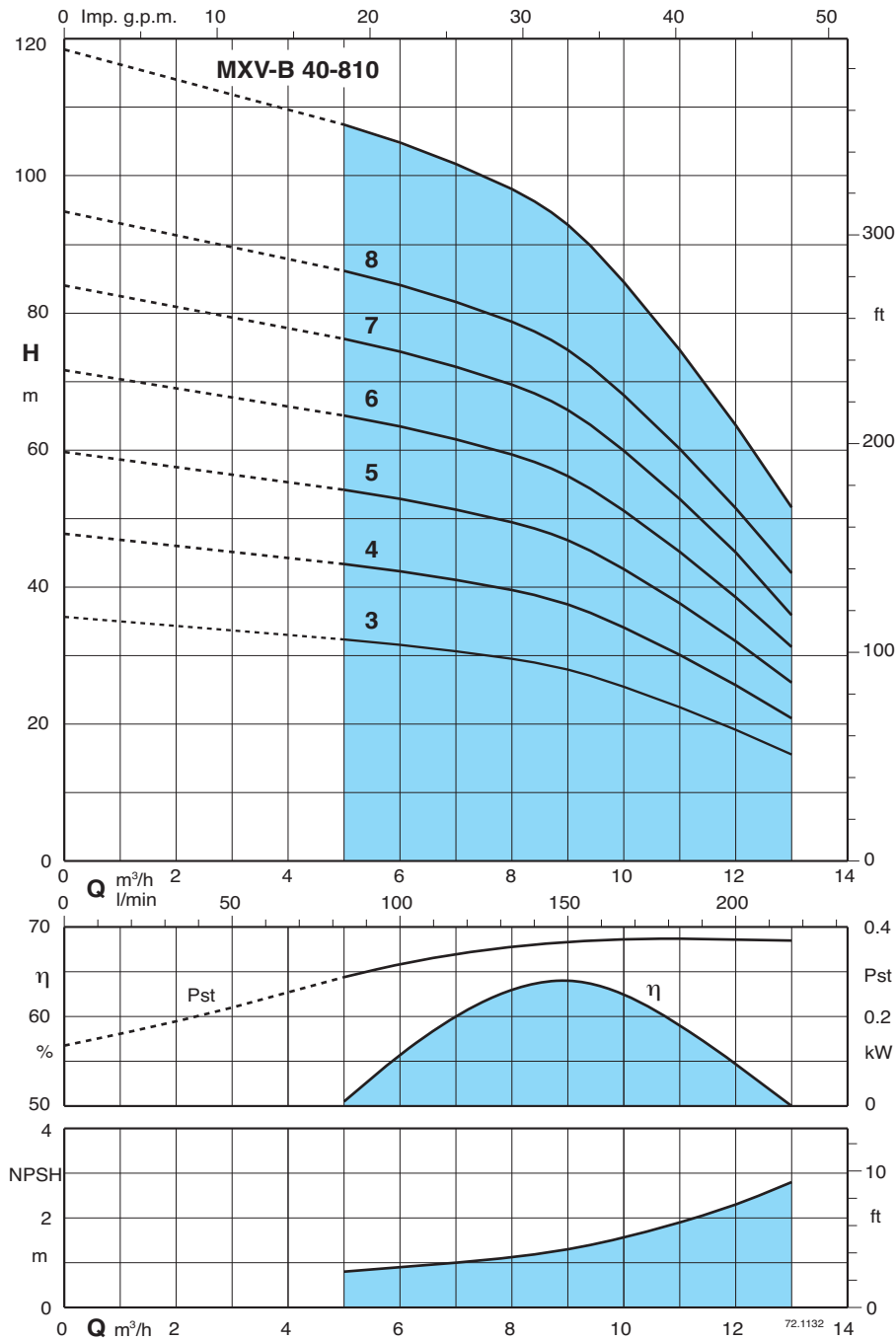
Test results with clean cold water, without gas content.
 A safety margin of + 0.5 m is recommended for the NPSH value.
 Tolerances in accordance with UNI EN ISO 9906:2012

Head and power values valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$.

Pst = Power with reference to one stage.
 P1 Max. power input.
 P2 Rated motor power output.

| 3 ~ | 230 V 400 V | | 1 ~ | 230 V P1 | | P2 | | m³/h Q l/min | | | | | | | | | | |
|----------------|-------------|-----|---------------|----------|-----|------|-----|--------------------|------|------|------|------|------|------|------|------|-------|-------|
| | A | A | | A | kW | kW | HP | | 0 | 2,5 | 3 | 3,5 | 4 | 4,5 | 5 | 6 | 7 | 8 |
| MXV-B 32-403 | 3,3 | 1,9 | MXV-BM 32-403 | 5,8 | 1,1 | 0,75 | 1 | H m | 0 | 41,6 | 50 | 58,3 | 66,6 | 75 | 83,3 | 100 | 116,6 | 133,3 |
| MXV-B 32-404 | 4,7 | 2,7 | MXV-BM 32-404 | 7,4 | 1,5 | 1,1 | 1,5 | | 34 | 31 | 30,5 | 29 | 28 | 26,5 | 25 | 21 | 17 | 11,5 |
| MXV-B 32-405 | 4,7 | 2,7 | MXV-BM 32-405 | 7,4 | 1,6 | 1,1 | 1,5 | | 45 | 41,5 | 40 | 38,5 | 36,5 | 34,5 | 32,5 | 27,5 | 22 | 14,5 |
| MXV-B 32-406 | 7,5 | 4,3 | MXV-BM 32-406 | 9,2 | 2 | 1,5 | 2 | | 56 | 51,5 | 50 | 48 | 46 | 43,5 | 41 | 34,5 | 27,5 | 18,5 |
| MXV-B 32-407 | 7,5 | 4,3 | MXV-BM 32-407 | 9,2 | 2,3 | 1,5 | 2 | | 68 | 62 | 60 | 58 | 55,5 | 52,5 | 49,5 | 42 | 33,5 | 22,5 |
| MXV-B 32-408/A | 9,15 | 5,3 | | | | 2,2 | 3 | | 79,5 | 72,5 | 70,5 | 68 | 65 | 61,5 | 58 | 49 | 39 | 26,5 |
| MXV-B 32-410/A | 9,15 | 5,3 | | | | 2,2 | 3 | | 91 | 83 | 80,5 | 78 | 74 | 70 | 66 | 56 | 44,5 | 30 |
| | | | | | | | | | 114 | 104 | 101 | 97,5 | 93 | 88 | 83 | 70 | 56 | 38 |

Characteristic curves and performance $n \approx 2900$ rpm



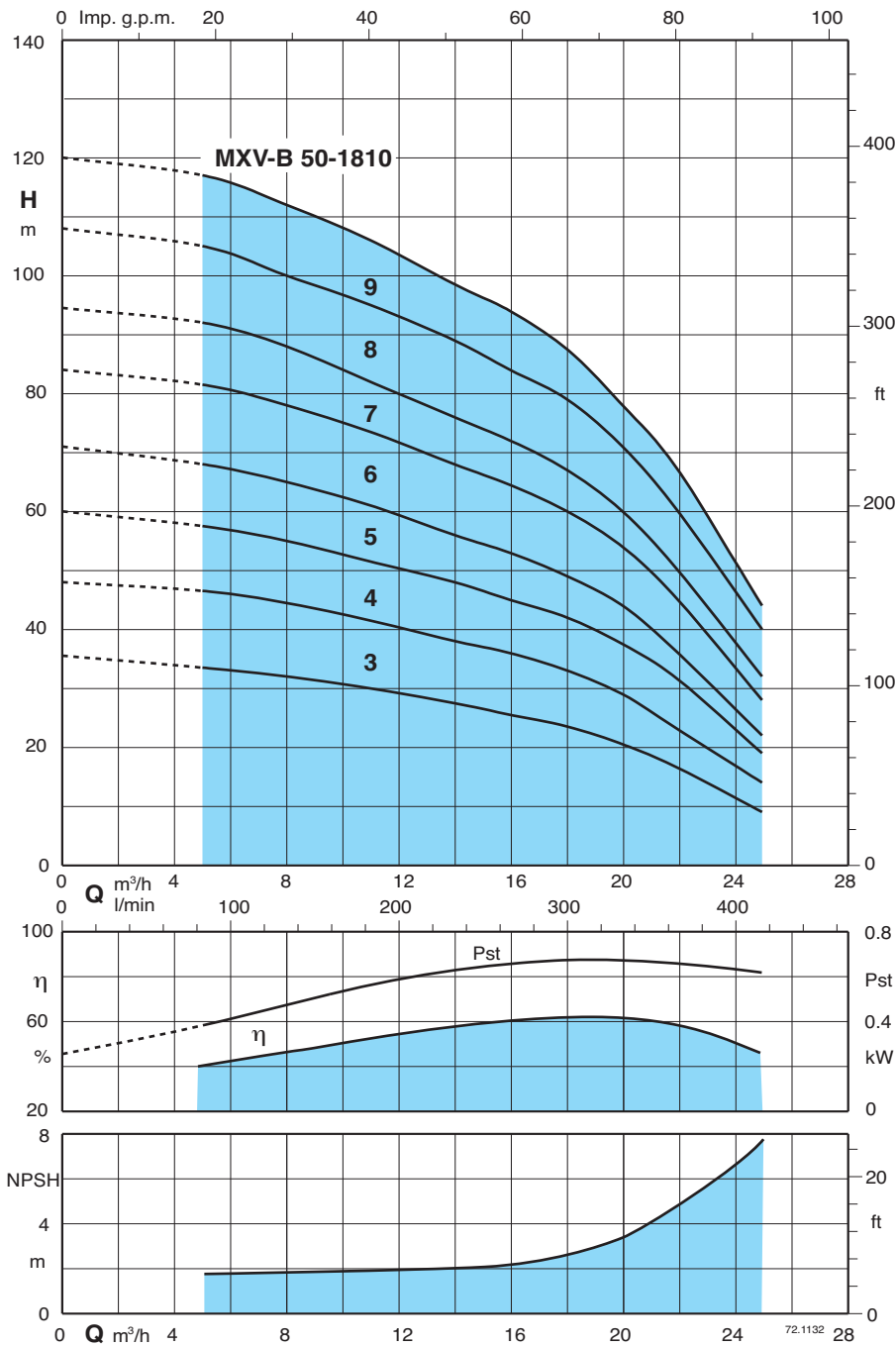
Test results with clean cold water, without gas content.
 A safety margin of + 0.5 m is recommended for the NPSH value.
 Tolerances in accordance with UNI EN ISO 9906:2012

Head and power values valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$.

Pst = Power with reference to one stage.
 P1 Max. power input.
 P2 Rated motor power output.

| 3 ~ | 230 V 400 V | | 1 ~ | 230 V P1 | | P2 | | m³/h Q l/min | | | | | | | | | | | | | |
|----------------|-------------|-----|---------------|----------|-----|-----|-----|--------------------|------|------|------|-----|------|----|------|------|------|------|--|--|--|
| | A | A | | A | kW | kW | HP | | 0 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | | | |
| MXV-B 40-803 | 4,7 | 2,7 | MXV-BM 40-803 | 7,4 | 1,6 | 1,1 | 1,5 | H m | 35,5 | 32,5 | 31,5 | 31 | 29,5 | 28 | 25,5 | 22,5 | 19,5 | 15,5 | | | |
| MXV-B 40-804 | 7,5 | 4,3 | MXV-BM 40-804 | 9,2 | 2,3 | 1,5 | 2 | | 47 | 43 | 42 | 41 | 40 | 37 | 34 | 30 | 26 | 21 | | | |
| MXV-B 40-805/A | 9,15 | 5,3 | | | | 2,2 | 3 | | 59 | 54 | 53 | 51 | 50 | 47 | 43 | 38 | 32 | 26 | | | |
| MXV-B 40-806/A | 9,15 | 5,3 | | | | 2,2 | 3 | | 71 | 65 | 63 | 62 | 59 | 56 | 51 | 45 | 39 | 31 | | | |
| MXV-B 40-807/A | 11,5 | 6,6 | | | | 3 | 4 | | 83 | 76 | 74 | 72 | 69 | 66 | 60 | 53 | 45 | 36 | | | |
| MXV-B 40-808/A | 11,5 | 6,6 | | | | 3 | 4 | | 95 | 87 | 85 | 82 | 79 | 75 | 69 | 60 | 51 | 42 | | | |
| MXV-B 40-810/A | | 9,6 | | | | 3,7 | 5 | | 119 | 109 | 106 | 103 | 99 | 94 | 86 | 75 | 64 | 52 | | | |

Characteristic curves and performance $n \approx 2900$ rpm



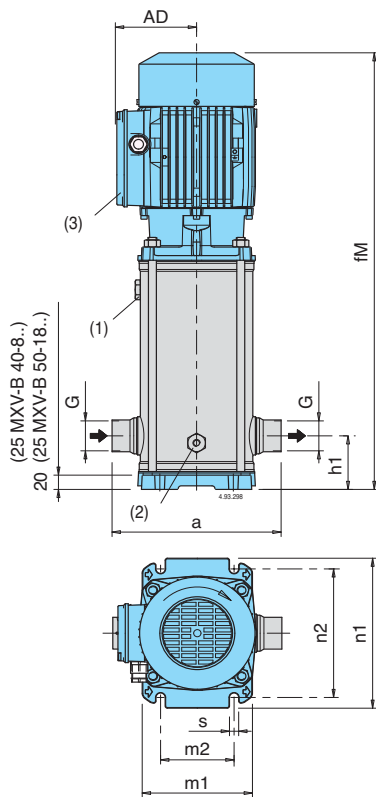
Test results with clean cold water, without gas content.
 A safety margin of + 0.5 m is recommended for the NPSH value.
 Tolerances in accordance with UNI EN ISO 9906:2012

Head and power values valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$.

Pst = Power with reference to one stage.
 P1 Max. power input.
 P2 Rated motor power output.

| 3 ~ | 230 V 400 V | | P ₂ | | m ³ /h Q l/min | | | | | | | | | | |
|-----------------|-------------|------|----------------|-----|---------------------------------|------|------|------|------|------|------|------|------|------|----|
| | A | A | kW | HP | | 0 | 5 | 8 | 11 | 14 | 16 | 18 | 20 | 22 | 25 |
| MXV-B 50-1803/A | 9,15 | 5,3 | 2,2 | 3 | H m | 35,5 | 33,5 | 32 | 30 | 27,5 | 25,5 | 23,5 | 20,5 | 16,5 | 9 |
| MXV-B 50-1804/A | 11,5 | 6,6 | 3 | 4 | | 48 | 46,5 | 44,5 | 41,5 | 38 | 36 | 33 | 29 | 23 | 14 |
| MXV-B 50-1805/A | | 9,6 | 3,7 | 5 | | 60 | 57,5 | 55 | 51,5 | 48 | 45 | 42 | 37,5 | 31,5 | 19 |
| MXV-B 50-1806/A | | 9,6 | 4 | 5,5 | | 71 | 68 | 65 | 61 | 56 | 53 | 49 | 44 | 36 | 22 |
| MXV-B 50-1807/A | | 10,9 | 5,5 | 7,5 | | 84 | 81,5 | 78 | 73,5 | 68 | 64,5 | 60 | 54 | 45 | 28 |
| MXV-B 50-1808/A | | 10,9 | 5,5 | 7,5 | | 94,5 | 92 | 88 | 82 | 76 | 72 | 68 | 60 | 50 | 32 |
| MXV-B 50-1809/A | | 14,3 | 7,5 | 10 | | 108 | 105 | 100 | 95 | 89 | 84 | 79 | 71 | 60 | 40 |
| MXV-B 50-1810/A | | 14,3 | 7,5 | 10 | | 120 | 117 | 112 | 106 | 98 | 94 | 88 | 78 | 67 | 44 |

Dimensions and weights



- (1) Filling
- (2) Draining
- (3) Standard position of terminal box (for other positions rotate motor through 90° or 180°)

| Pump | Motor P ₂ | | G | | mm | | | | | | | Net weight | | |
|-----------------|----------------------|-----|---------|-----|----|-----|-----|-----|-----|-----|-----|------------|----------|-----------|
| | kW | HP | ISO 228 | a | h1 | fM | AD | n1 | n2 | m1 | m2 | s | MXV-B kg | MXV-BM kg |
| MXV-B(M) 25-203 | 0,75 | 1 | G 1 | 215 | 75 | 564 | 128 | 210 | 180 | 150 | 100 | 12,5 | 23 | 24 |
| MXV-B(M) 25-204 | 0,75 | 1 | G 1 | 215 | 75 | 565 | 128 | 210 | 180 | 150 | 100 | 12,5 | 23,5 | 24,5 |
| MXV-B(M) 25-205 | 0,75 | 1 | G 1 | 215 | 75 | 588 | 128 | 210 | 180 | 150 | 100 | 12,5 | 24,5 | 25,5 |
| MXV-B(M) 25-206 | 1,1 | 1,5 | G 1 | 215 | 75 | 612 | 128 | 210 | 180 | 150 | 100 | 12,5 | 26 | 27 |
| MXV-B(M) 25-207 | 1,1 | 1,5 | G 1 | 215 | 75 | 636 | 128 | 210 | 180 | 150 | 100 | 12,5 | 27 | 28 |
| MXV-B(M) 25-208 | 1,5 | 2 | G 1 | 215 | 75 | 660 | 128 | 210 | 180 | 150 | 100 | 12,5 | 30 | 31 |
| MXV-B(M) 25-210 | 1,5 | 2 | G 1 | 215 | 75 | 708 | 128 | 210 | 180 | 150 | 100 | 12,5 | 31 | 32 |
| MXV-B(M) 32-403 | 0,75 | 1 | G 1 1/4 | 215 | 75 | 564 | 128 | 210 | 180 | 150 | 100 | 12,5 | 24 | 25 |
| MXV-B(M) 32-404 | 1,1 | 1,5 | G 1 1/4 | 215 | 75 | 565 | 128 | 210 | 180 | 150 | 100 | 12,5 | 25 | 26 |
| MXV-B(M) 32-405 | 1,1 | 1,5 | G 1 1/4 | 215 | 75 | 588 | 128 | 210 | 180 | 150 | 100 | 12,5 | 26 | 27 |
| MXV-B(M) 32-406 | 1,5 | 2 | G 1 1/4 | 215 | 75 | 612 | 128 | 210 | 180 | 150 | 100 | 12,5 | 28 | 29 |
| MXV-B(M) 32-407 | 1,5 | 2 | G 1 1/4 | 215 | 75 | 636 | 128 | 210 | 180 | 150 | 100 | 12,5 | 29 | 30 |
| MXV-B 32-408/A | 2,2 | 3 | G 1 1/4 | 215 | 75 | 700 | 128 | 210 | 180 | 150 | 100 | 12,5 | 34 | - |
| MXV-B 32-410/A | 2,2 | 3 | G 1 1/4 | 215 | 75 | 748 | 128 | 210 | 180 | 150 | 100 | 12,5 | 35 | - |
| MXV-B(M) 40-803 | 1,1 | 1,5 | G 1 1/2 | 225 | 80 | 593 | 128 | 246 | 215 | 190 | 130 | 14 | 27 | 28 |
| MXV-B(M) 40-804 | 1,5 | 2 | G 1 1/2 | 225 | 80 | 593 | 128 | 246 | 215 | 190 | 130 | 14 | 28 | 29 |
| MXV-B 40-805/A | 2,2 | 3 | G 1 1/2 | 225 | 80 | 663 | 128 | 246 | 215 | 190 | 130 | 14 | 33 | - |
| MXV-B 40-806/A | 2,2 | 3 | G 1 1/2 | 225 | 80 | 693 | 128 | 246 | 215 | 190 | 130 | 14 | 34 | - |
| MXV-B 40-807/A | 3 | 4 | G 1 1/2 | 225 | 80 | 746 | 138 | 246 | 215 | 190 | 130 | 14 | 45 | - |
| MXV-B 40-808/A | 3 | 4 | G 1 1/2 | 225 | 80 | 776 | 138 | 246 | 215 | 190 | 130 | 14 | 49 | - |
| MXV-B 40-810/A | 3,7 | 5 | G 1 1/2 | 225 | 80 | 953 | 138 | 246 | 215 | 190 | 130 | 14 | 49 | - |
| MXV-B 50-1803/A | 2,2 | 3 | G 2 | 250 | 90 | 635 | 128 | 246 | 215 | 190 | 130 | 14 | 34 | - |
| MXV-B 50-1804/A | 3 | 4 | G 2 | 250 | 90 | 701 | 138 | 246 | 215 | 190 | 130 | 14 | 44 | - |
| MXV-B 50-1805/A | 3,7 | 5 | G 2 | 250 | 90 | 738 | 138 | 246 | 215 | 190 | 130 | 14 | 46,5 | - |
| MXV-B 50-1806/A | 4 | 5,5 | G 2 | 250 | 90 | 776 | 138 | 246 | 215 | 190 | 130 | 14 | 47,5 | - |
| MXV-B 50-1807/A | 5,5 | 7,5 | G 2 | 250 | 90 | 841 | 160 | 246 | 215 | 190 | 130 | 14 | 59 | - |
| MXV-B 50-1808/A | 5,5 | 7,5 | G 2 | 250 | 90 | 878 | 160 | 246 | 215 | 190 | 130 | 14 | 60 | - |
| MXV-B 50-1809/A | 7,5 | 10 | G 2 | 250 | 90 | 916 | 160 | 246 | 215 | 190 | 130 | 14 | 67 | - |
| MXV-B 50-1810/A | 7,5 | 10 | G 2 | 250 | 90 | 953 | 160 | 246 | 215 | 190 | 130 | 14 | 68 | - |

Regulation (EU) No 547/2012

- The benchmark for most efficient water pumps is MEI ≥ 0,70.
- The efficiency of a pump with a trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter.
- The operation of this water pump with variable duty points may be more efficient and economic when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system.

Features

Wider Range of Application

All parts that come into contact with the liquid, including wet-end covers, are in chrome-nickel stainless steel.
With corrosion-resistant seal rings and guide ring.

Low Cost Installation

Vertical construction with reduced pump height for installation in small spaces.
In-line connections to simplify the piping layout with the possibility of inserting the pump in straight pipe-lines.
Disassembly, inspection or cleaning of internal parts without removal of piping.

Robust and Reliable

The suction and discharge nozzles arranged in-line absorb the forces of the piping on the pump without the creation of distorting loads causing local friction and early wears.
The lantern brackets compact and robust design maintains a sure alignment between rotating and fixed parts, reducing vibration.
The upper cover design prevents entrapment of air around the mechanical seal.

Low-Noise Operation

The water filled shroud around the stages and thick external walls, work together for low-noise operation.

