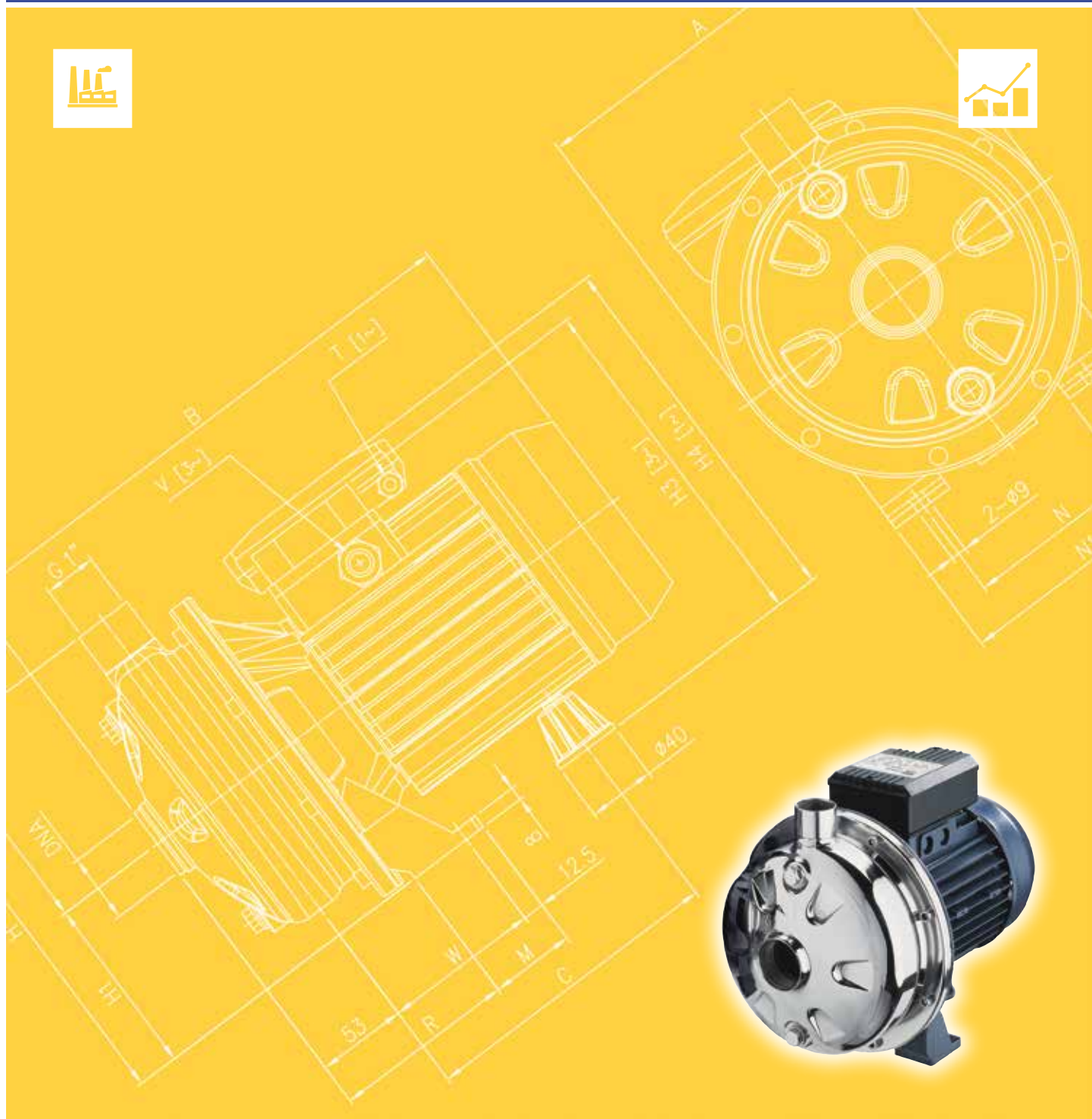




Japanese Technology since 1912

CDX

Data Book 60Hz



|                                       | Page           |
|---------------------------------------|----------------|
| <b>- SPECIFICATIONS</b>               | <b>200</b>     |
| PERFORMANCE RANGE and SELECTION CHART | 201            |
| TYPE KEY and CURVE SPECIFICATIONS     | 202            |
| PERFORMANCE CURVE CDX 70              | 203            |
| PERFORMANCE CURVE CDX 120             | 204            |
| PERFORMANCE CURVE CDX 200             | 205            |
| <br><b>- CONSTRUCTIONS</b>            | <br><b>300</b> |
| SECTIONAL VIEW                        | 300            |
| MECHANICAL SEAL                       | 301            |
| FLUID TEMPERATURE RANGE               | 303            |
| BEARINGS                              | 304            |
| THERMAL INSULATION                    | 305            |
| <br><b>- DIMENSIONS AND WEIGHT</b>    | <br><b>400</b> |
| PUMP                                  | 400            |
| PACKING                               | 401            |
| <br><b>- TECHNICAL DATA</b>           | <br><b>500</b> |
| MOTOR DATA                            | 500            |

## SPECIFICATIONS

60Hz

Rev. Q

| PUMP                           |                  |                                                                                |
|--------------------------------|------------------|--------------------------------------------------------------------------------|
| Liquid Handled                 | Type of liquid   | Clean water                                                                    |
|                                | Temperature [°C] | min. -5<br>max. +120<br>For full details see section "FLUID TEMPERATURE RANGE" |
| Maximum working pressure [MPa] |                  | 0.8                                                                            |
| Construction                   | Impeller         | Closed centrifugal type                                                        |
|                                | Shaft seal type  | Mechanical seal                                                                |
|                                | Bearing          | Sealed ball bearing                                                            |
| Pipe Connection                | Suction [inch]   | from G1"¼ to G1"½ UNI ISO 228-1                                                |
|                                | Discharge [inch] | G1" UNI ISO 228-1                                                              |
| Material                       | Casing           | EN 1.4301 (AISI 304) - (AISI 316L only for "L" version)                        |
|                                | Impeller         | EN 1.4301 (AISI 304) - (AISI 316L only for "L" version)                        |
|                                | Casing cover     | EN 1.4301 (AISI 304) - (AISI 316L only for "L" version)                        |
|                                | Shaft seal       | Ceramic / Carbon / NBR (for special versions see page 301)                     |
|                                | Shaft            | AISI 303 / AISI 316L (Wet extension)                                           |
|                                | Bracket          | Aluminium                                                                      |
| Applicable standard of test    |                  | ISO 9906:2012 - Grade 3B                                                       |

| MOTOR                               |                                                                        |                      |
|-------------------------------------|------------------------------------------------------------------------|----------------------|
| Type                                | Electric - TEFC                                                        |                      |
|                                     | Single Phase                                                           | Three Phase          |
| Efficiency level (Rif.1781/2019)    | IE2 **                                                                 | IE3 *                |
| No. of Poles                        | 2                                                                      |                      |
| Rotation speed [min <sup>-1</sup> ] | ≈ 3450                                                                 |                      |
| Insulation Class                    | F                                                                      |                      |
| Protection degree (CEI EN 60034-5)  | IP 55                                                                  |                      |
| Power rating                        | [kW]                                                                   | 0.55 ÷ 1.8           |
|                                     | [HP]                                                                   | 0.75 ÷ 2.4           |
| Frequency [Hz]                      | 60                                                                     |                      |
| Voltage [V]                         | 110-115 ±6%<br>220-230 ±6%                                             | 220/380-460 ±10%     |
| Capacitor                           | Built in                                                               | -                    |
| Over load protection                | Built in                                                               | Provided by the user |
| Casing material                     | Aluminium                                                              |                      |
| Base material / Motor support       | Aluminium                                                              |                      |
| Dimensions of cable entry           | PG 11 - PG 13.5 - M16x1.5 - M20x1.5<br>(see dimensions table page 400) |                      |

\* From 1.1kW up to 2.2kW at 220/380V efficiency level is IE2; IE3 only at 460V

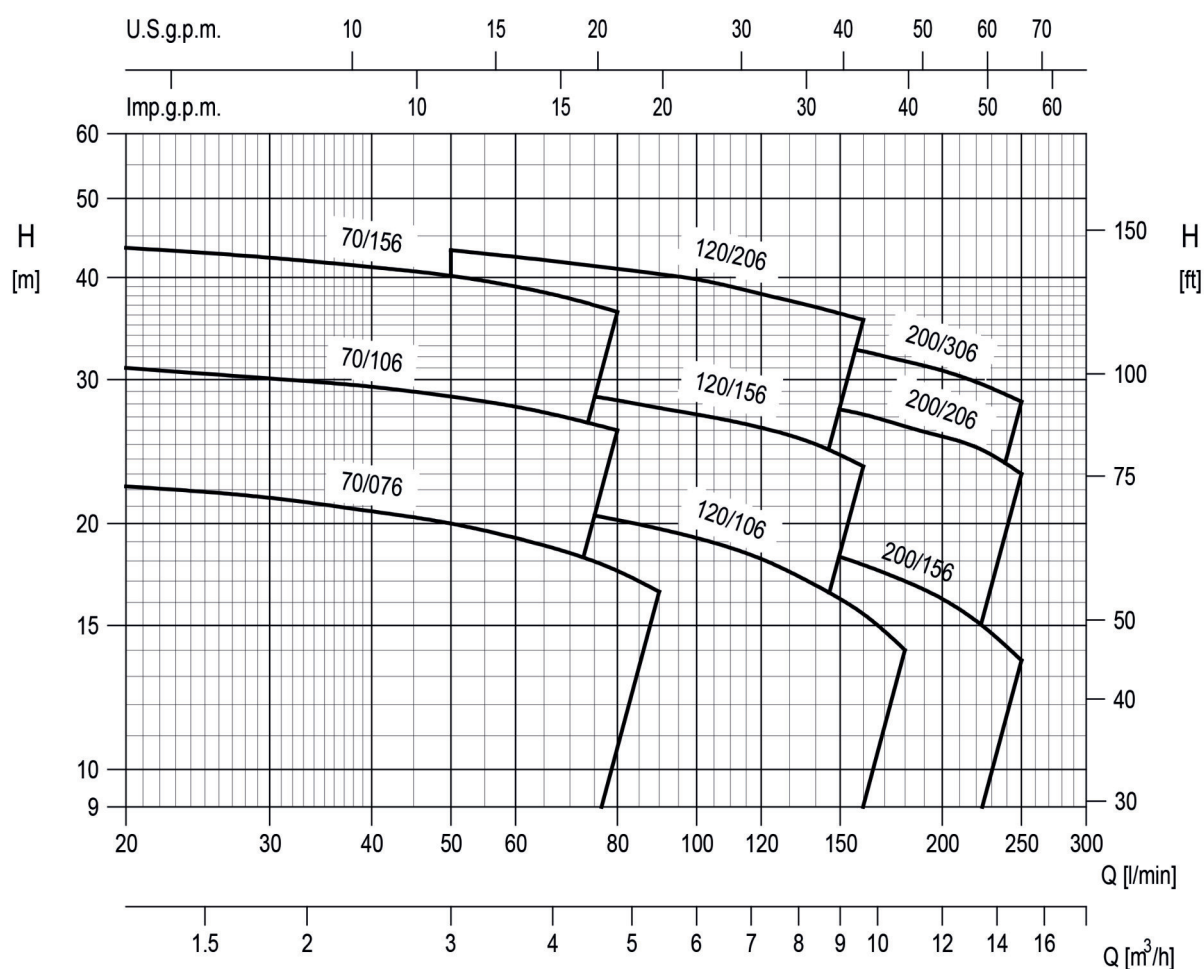
\*\* Only for CDXM 70/076, CDXM 70/106, CDXM 120/106, CDXM 200/156

**CDXM 70/156 and CDXM 120/156, CDXM 120/206, CDXM 200/206 not available for the European market**

## PERFORMANCE RANGE and SELECTION CHART

60Hz

Rev. R



## PERFORMANCE RANGE

## SELECTION CHART

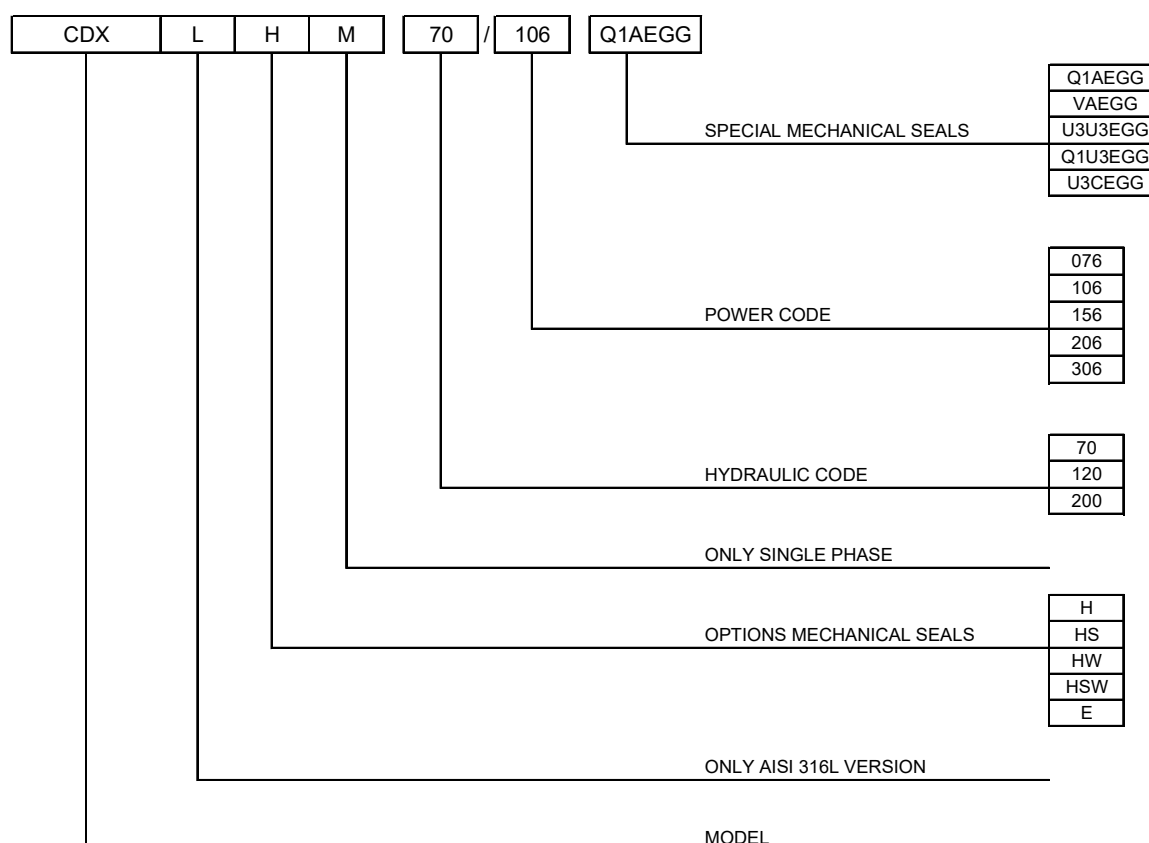
| Pump type                         |             | Q=Capacity |      |      |      |      |      |      |      |      |      |      |     |
|-----------------------------------|-------------|------------|------|------|------|------|------|------|------|------|------|------|-----|
|                                   |             | l/min      | 0    | 20   | 50   | 80   | 90   | 120  | 140  | 160  | 180  | 220  | 250 |
| Single Phase                      | Three Phase | m³/h       | 0    | 1,2  | 3    | 4,8  | 5,4  | 7,2  | 8,4  | 9,6  | 10,8 | 13,2 | 15  |
| H=Total manometric head in meters |             |            |      |      |      |      |      |      |      |      |      |      |     |
| CDXM 70/076                       | CDX 70/076  | 23,3       | 22,4 | 20,4 | 18,2 | 17,4 | -    | -    | -    | -    | -    | -    | -   |
| CDXM 70/106                       | CDX 70/106  | 30,3       | 29,3 | 27,2 | 24,8 | -    | -    | -    | -    | -    | -    | -    | -   |
| CDXM 70/156                       | CDX 70/156  | 44,1       | 42,2 | 39,5 | 36,4 | -    | -    | -    | -    | -    | -    | -    | -   |
| CDXM 120/106                      | CDX 120/106 | 24,6       | -    | 22,4 | 21,0 | 20,6 | 19,1 | 18,0 | 16,8 | 15,4 | -    | -    | -   |
| CDXM 120/156                      | CDX 120/156 | 33,0       | -    | 30,4 | 29,1 | 28,6 | 27,0 | 25,8 | 24,5 | -    | -    | -    | -   |
| CDXM 120/206                      | CDX 120/206 | 48,0       | -    | 45,5 | 44,0 | 43,5 | 41,5 | 40,0 | 38,7 | -    | -    | -    | -   |
| CDXM 200/156                      | CDX 200/156 | 24,8       | -    | -    | 22,4 | 22,0 | 20,9 | 20,0 | 19,2 | 18,3 | 16,4 | 14,8 | -   |
| CDXM 200/206                      | CDX 200/206 | 34,6       | -    | -    | 32,3 | 32,0 | 31,0 | 30,4 | 29,6 | 28,9 | 27,2 | 25,7 | -   |
| -                                 | CDX 200/306 | 40,0       | -    | -    | 38,5 | 38,3 | 37,5 | 36,9 | 36,2 | 35,5 | 33,8 | 32,5 | -   |

## TYPE KEY and CURVE SPECIFICATIONS

60Hz

Rev. R

## TYPE KEY



## PERFORMANCE CURVE SPECIFICATIONS

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

Tolerances according to ISO 9906:2012 - Grade 3B

The curves refer to effective speed of asynchronous motors at 60 Hz, 2 poles.

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)

The NPSH curve is an average curve obtained in the same conditions of performance curves.

The continuous curves indicate the recommended working range. The dotted curve is only a guide.

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.

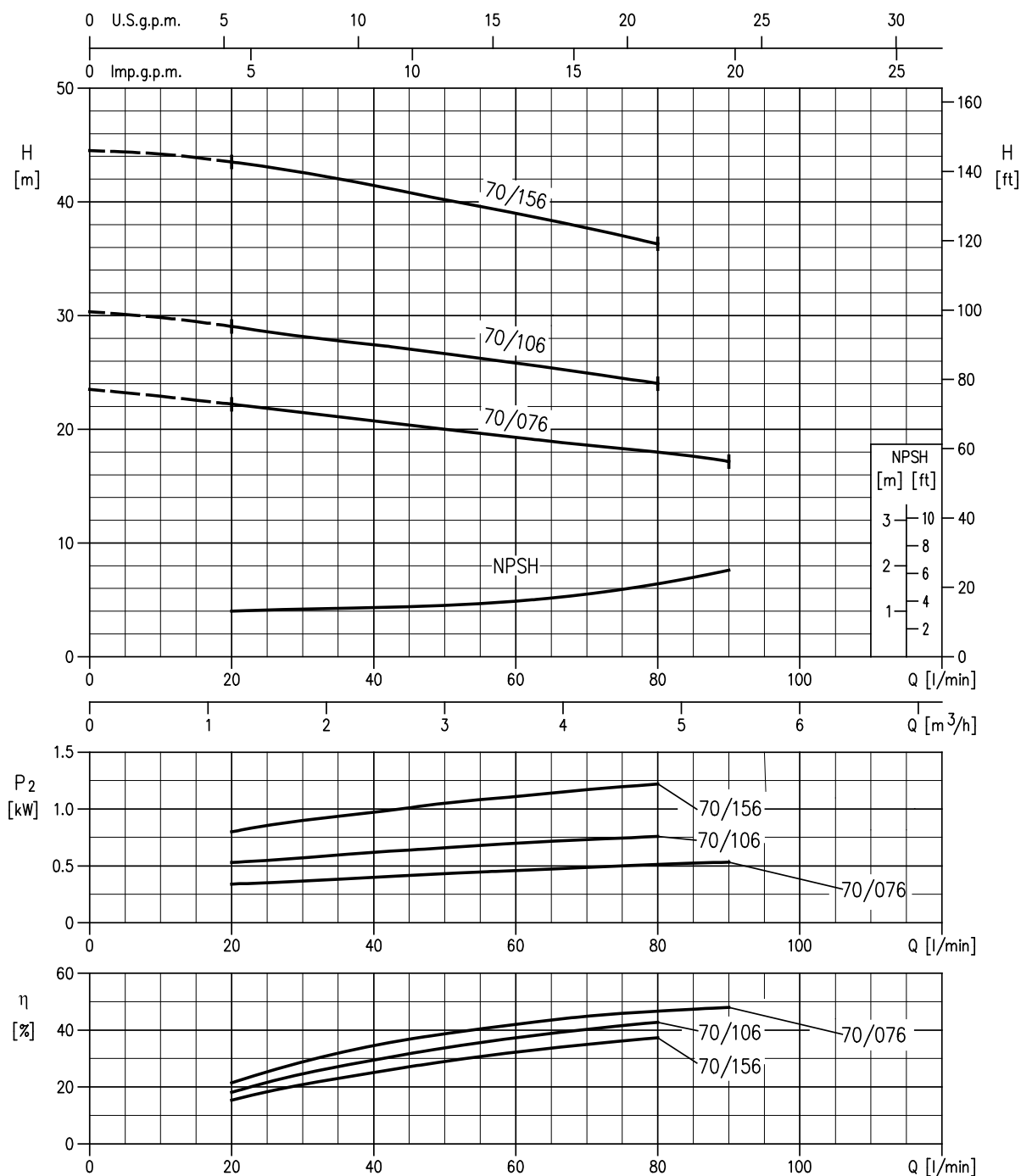
Symbols explanation:

- Q = volume flow rate
- H = total head
- $P_2$  = pump power input (shaft power)
- $\eta$  = pump efficiency
- NPSH = net positive suction head required by the pump

CDX 70/076 - Impeller diameter = 115 mm

CDX 70/106 - Impeller diameter = 132 mm

CDX 70/156 - Impeller diameter = 157 mm

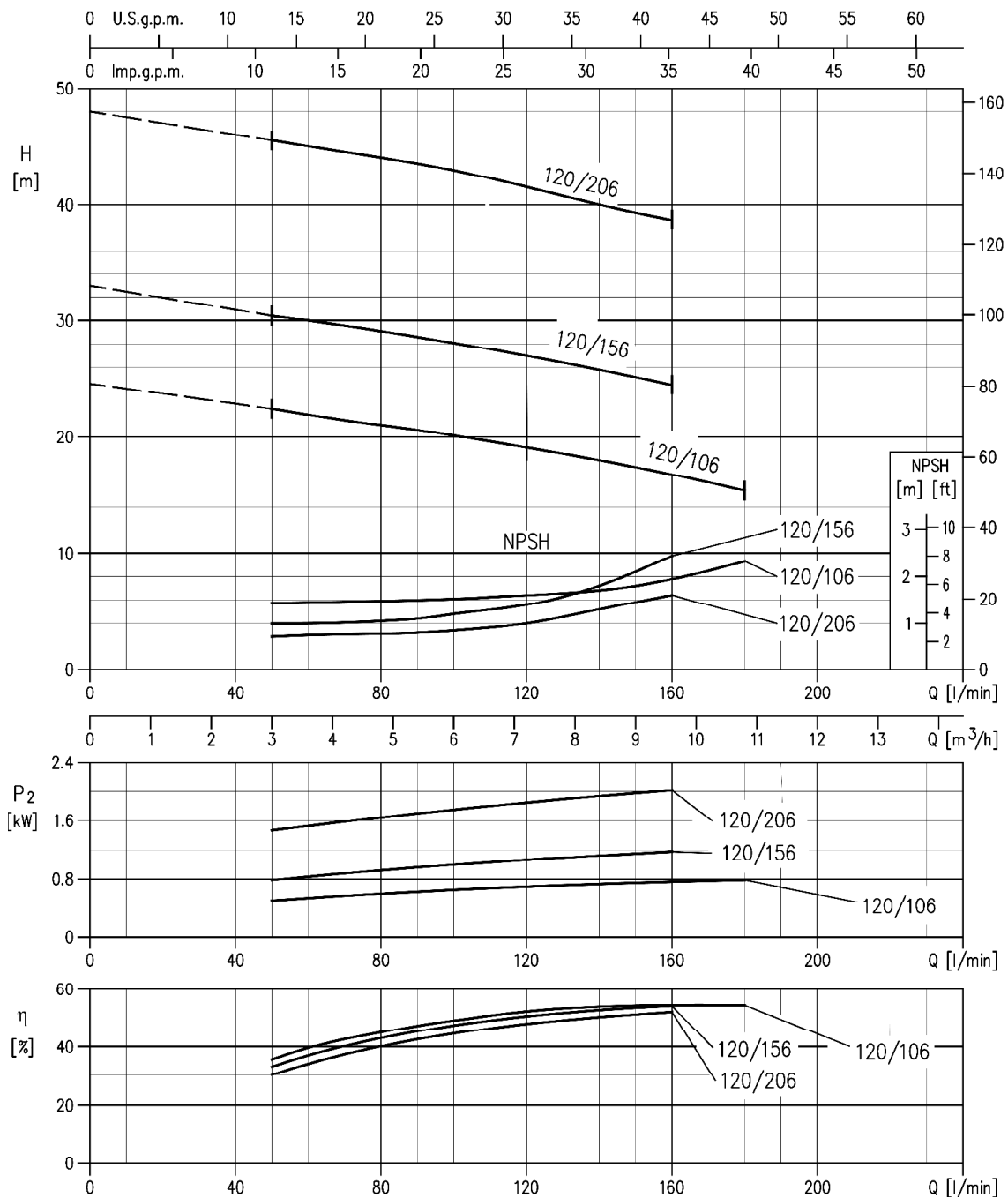
Rotation speed  $\approx 3450 \text{ min}^{-1}$ 

Test standard: ISO 9906:2012 - Grade 3B

CDX 120/106 - Impeller diameter = 115 mm

CDX 120/156 - Impeller diameter = 132 mm

CDX 120/206 - Impeller diameter = 157 mm

Rotation speed ≈ 3450 min<sup>-1</sup>

Test standard: ISO 9906:2012 - Grade 3B

## PERFORMANCE CURVE

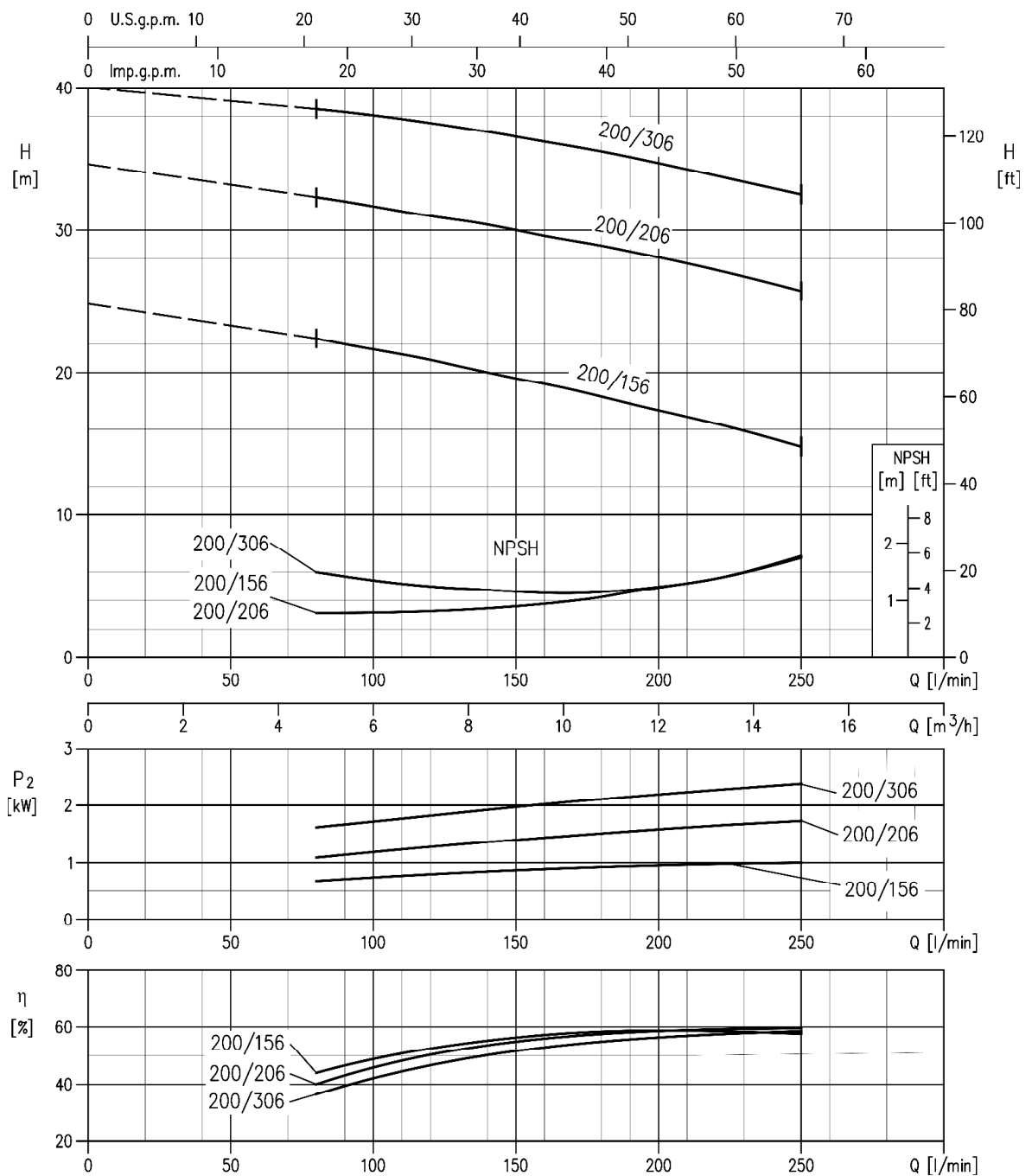
60Hz

Rev. R

CDX 200/156 - Impeller diameter = 115 mm

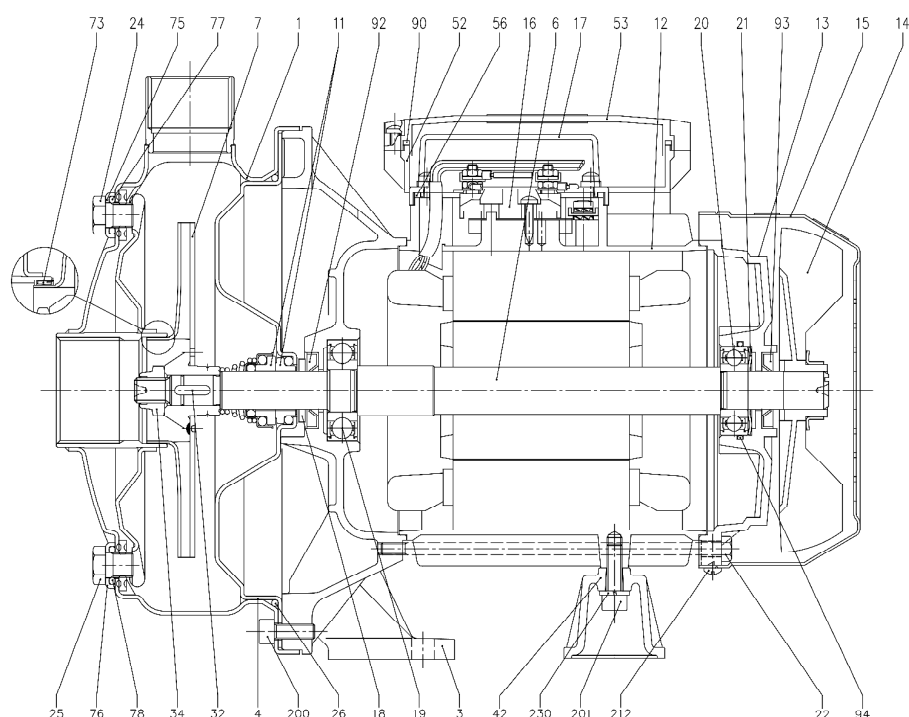
CDX 200/206 - Impeller diameter = 132 mm

CDX 200/306 - Impeller diameter = 144 mm

Rotation speed  $\approx 3450 \text{ min}^{-1}$ 

Test standard: ISO 9906:2012 - Grade 3B

## SECTIONAL VIEW



| N° | PART NAME               | MATERIAL                                 | Q.TY |
|----|-------------------------|------------------------------------------|------|
| 1  | Casing                  | AISI 304 / AISI 316L [7]                 | 1    |
| 3  | Motor bracket           | Aluminium                                | 1    |
| 4  | Casing cover            | AISI 304 / AISI 316L [7]                 | 1    |
| 6  | Shaft with rotor        | AISI 303 / AISI 316L [7] (Wet extension) | 1    |
| 7  | Impeller                | AISI 304 / AISI 316L [7]                 | 1    |
| 11 | Mechanical seal [8]     | Carbon/Ceramic/NBR                       | 1    |
| 12 | Motor frame with stator | -                                        | 1    |
| 13 | Motor cover             | Aluminium                                | 1    |
| 14 | Fan                     | PA                                       | 1    |
| 15 | Fan cover               | Fe P04 Zincate                           | 1    |
| 16 | Terminal board          | -                                        | 1    |
| 17 | Terminal box cover [2]  | Aluminium                                | 1    |
| 18 | Splash ring             | NBR                                      | 1    |
| 19 | Pump side ball bearing  | -                                        | 1    |
| 20 | Fan side ball bearing   | -                                        | 1    |
| 21 | Adjusting ring          | Steel C70                                | 1    |
| 22 | Tie rod                 | Fe 420 Zincate                           | 4    |
| 23 | Capacitor [1]           | -                                        | 1    |
| 24 | Priming plug            | AISI 303 / AISI 316 [7]                  | 1    |

| N°  | PART NAME                     | MATERIAL                   |
|-----|-------------------------------|----------------------------|
| 26  | O-Ring [3]                    | NBR                        |
| 32  | Key                           | AISI 316                   |
| 34  | Impeller nut                  | AISI 304 / AISI 316 [7]    |
| 42  | Motor support                 | Aluminium                  |
| 52  | Terminal box [1]              | ABS class V0               |
| 53  | Terminal box cover [5]        | ABS class V0               |
| 56  | Box gasket                    | NBR                        |
| 73  | Casing ring [4]               | EPDM                       |
| 75  | Washer                        | AISI 304                   |
| 76  | Washer                        | AISI 304                   |
| 77  | O-Ring [3]                    | NBR                        |
| 78  | O-Ring [3]                    | NBR                        |
| 90  | Terminal box cover gasket [6] | NBR                        |
| 92  | Lip seal                      | -                          |
| 93  | Lip seal                      | -                          |
| 94  | O-Ring [9]                    | NBR                        |
| 110 | Protector [1]                 | -                          |
| 200 | Screw                         | Stainless steel A2 UNI7323 |
| 201 | Screw                         | Zincate Steel              |
| 212 | Screw                         | Zincate Steel              |

[1] Only for single phase

[2] Only for three phase

[3] FPM for H-HS-HW-HSW  
EPDM for E and Special Mechanical Seal

[4] FPM for H-HS-HW-HSW version

[5] With gasket in NBR only for version single phase CDXM 70/076, 70/106, 70/156, 120/106, 120/156, 200/156

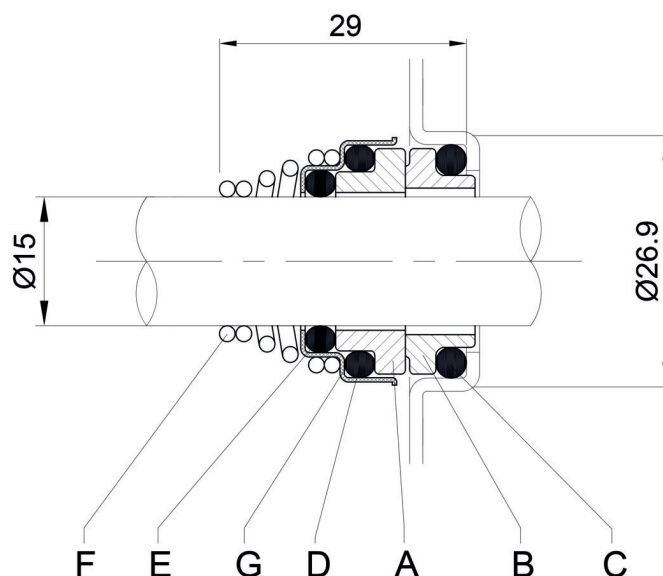
[6] Only for version single phase CDXM 120/206, 200/206

[7] Only for "L" version

[8] See **MECHANICAL SEAL** pages 301-302

[9] Only for CDX 70/156, CDX 120/156, CDX 200/156, CDXM 200/156 models

## MECHANICAL SEAL



STANDARD  
+  
"L" version

| REF | PART NAME            | MATERIAL        |
|-----|----------------------|-----------------|
| A   | Rotary seal ring     | Ceramic         |
| B   | Stationary seal ring | Carbon graphite |
| C   | O-Ring               | NBR             |
| D   | O-Ring               | NBR             |
| E   | O-Ring               | NBR             |
| F   | Self-driving spring  | AISI 316        |
| G   | Frame                | AISI 304        |

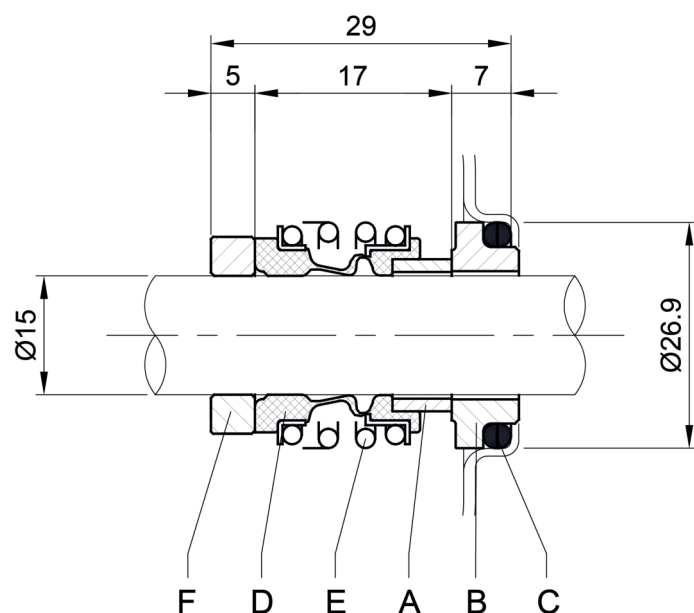
| REF | PART NAME            | MATERIAL        |                  |                  |                 |
|-----|----------------------|-----------------|------------------|------------------|-----------------|
|     |                      | H               | HW               | HSW              | E               |
| A   | Rotary seal ring     | Ceramic         | Tungsten carbide | Silicon carbide  | Ceramic         |
| B   | Stationary seal ring | Carbon graphite | Tungsten carbide | Tungsten carbide | Carbon graphite |
| C   | O-Ring               | FPM             | FPM              | FPM              | EPDM            |
| D   | O-Ring               | FPM             | FPM              | FPM              | EPDM            |
| E   | O-Ring               | FPM             | FPM              | FPM              | EPDM            |
| F   | Self-driving spring  | AISI 316        | AISI 316         | AISI 316         | AISI 316        |
| G   | Frame                | AISI 304        | AISI 316         | AISI 316         | AISI 316        |

OPTIONAL

SPECIAL

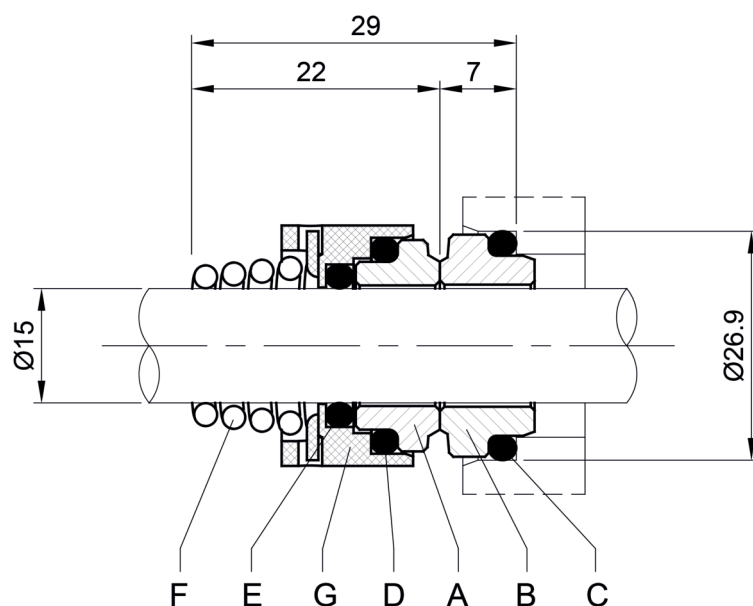
| REF | PART NAME            | MATERIAL          |                  |                  |                  |
|-----|----------------------|-------------------|------------------|------------------|------------------|
|     |                      | VAEGG             | U3U3EGG          | Q1U3EGG          | U3CEGG           |
| A   | Rotary seal ring     | Ceramic           | Tungsten carbide | Silicon carbide  | Tungsten carbide |
| B   | Stationary seal ring | Metallised carbon | Tungsten carbide | Tungsten carbide | special Carbon   |
| C   | O-Ring               | EPDM              | EPDM             | EPDM             | EPDM             |
| D   | O-Ring               | EPDM              | EPDM             | EPDM             | EPDM             |
| E   | O-Ring               | EPDM              | EPDM             | EPDM             | EPDM             |
| F   | Self-driving spring  | AISI 316          | AISI 316         | AISI 316         | AISI 316         |
| G   | Frame                | AISI 316          | AISI 316         | AISI 316         | AISI 316         |

## MECHANICAL SEAL



OPTIONAL

| REF | PART NAME            | MATERIAL<br>HS  |
|-----|----------------------|-----------------|
| A   | Rotary seal ring     | Silicon carbide |
| B   | Stationary seal ring | Silicon carbide |
| C   | O-Ring               | FPM             |
| D   | Bellows              | FPM             |
| E   | Frame + Spring       | AISI 316        |
| F   | Spacer ring          | AISI 316        |



SPECIAL

| REF | PART NAME            | MATERIAL<br>Q1AEGG |
|-----|----------------------|--------------------|
| A   | Rotary seal ring     | Silicon carbide    |
| B   | Stationary seal ring | Metallised carbon  |
| C   | O-Ring               | EPDM               |
| D   | O-Ring               | EPDM               |
| E   | O-Ring               | EPDM               |
| F   | Self-driving spring  | AISI 316           |
| G   | Frame                | AISI 316           |

## FLUID TEMPERATURE RANGE

The maximum allowable temperature for the pumped fluid is a determining factor for the operational life of the pump. A primary role in this limitation is played by the materials of the mechanical seals (rings and elastomers), whose thermal resistance often defines the upper limit. The general construction materials of the pump (casing, impeller) and the lubricant used also contribute to defining the maximum temperature. Although the fluid properties and operating conditions have an impact, the choice of suitable seal materials for the operating temperature is crucial to prevent leaks and ensure the reliability of the pumping system.

To preserve optimal performance and prevent failures, we recommend to operate within the following limits:

| STANDARD<br>mechanical seal | TEMPERATURE |       |
|-----------------------------|-------------|-------|
|                             | MIN         | MAX   |
| STANDARD                    | -5 °C       | 90 °C |

| OPTIONAL<br>mechanical seal | TEMPERATURE |        |
|-----------------------------|-------------|--------|
|                             | MIN         | MAX    |
| H *                         | -5 °C       | 110 °C |
| HS *                        | -5 °C       | 110 °C |
| HW *                        | -5 °C       | 110 °C |
| HSW *                       | -5 °C       | 110 °C |
| E                           | -5 °C       | 120 °C |

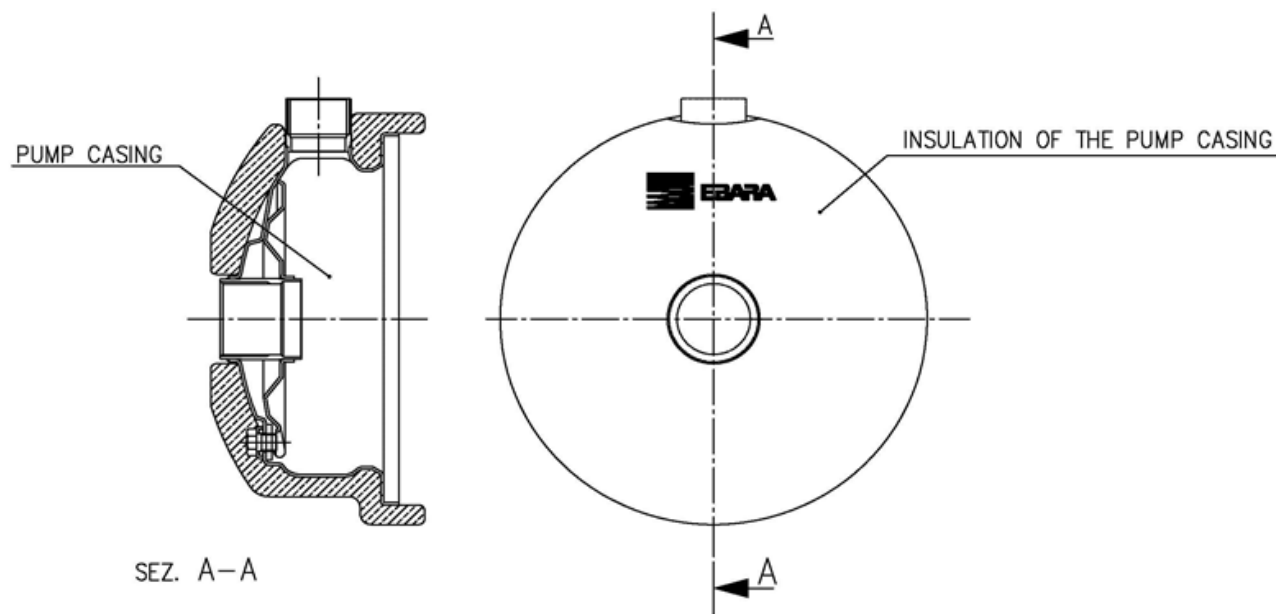
| SPECIAL<br>mechanical seal | TEMPERATURE |        |
|----------------------------|-------------|--------|
|                            | MIN         | MAX    |
| Q1AEGG                     | -5 °C       | 120 °C |
| VAEGG                      | -5 °C       | 90 °C  |
| U3U3EGG                    | -5 °C       | 120 °C |
| Q1U3EGG                    | -5 °C       | 120 °C |
| U3CEGG                     | -5 °C       | 120 °C |

\* in case the pumped fluid is water in combination to FPM elastomers, a maximum temperature fluid of 75°C is recommended in order to guarantee a longer life of the sealing parts

## BEARINGS

| Pump type    |             | Ball Bearing |      |          |      |
|--------------|-------------|--------------|------|----------|------|
| Single Phase | Three Phase | Pump side    |      | Fan side |      |
|              |             | [1~]         | [3~] | [1~]     | [3~] |
| CDXM 70/076  | CDX 70/076  | 6203         | 6203 | 6202     | 6202 |
| CDXM 70/106  | CDX 70/106  | 6203         | 6203 | 6202     | 6202 |
| CDXM 70/156  | CDX 70/156  | 6203         | 6203 | 6202     | 6202 |
| CDXM 120/106 | CDX 120/106 | 6203         | 6203 | 6202     | 6202 |
| CDXM 120/156 | CDX 120/156 | 6203         | 6203 | 6202     | 6202 |
| CDXM 120/206 | CDX 120/206 | 6204         | 6204 | 6203     | 6203 |
| CDXM 200/156 | CDX 200/156 | 6203         | 6203 | 6202     | 6202 |
| CDXM 200/206 | CDX 200/206 | 6204         | 6204 | 6203     | 6203 |
| -            | CDX 200/306 | -            | 6204 | -        | 6203 |

THERMAL INSULATION



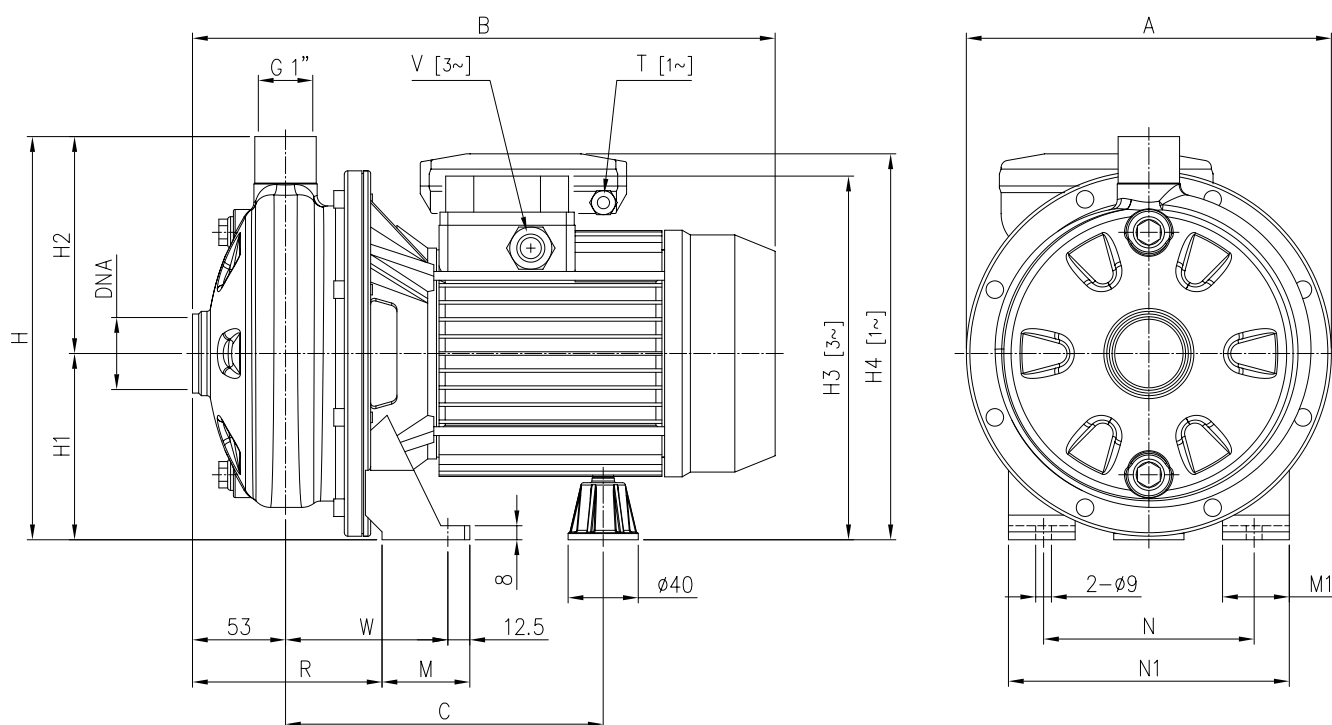
| Pump type   | INSULATION OF THE PUMP CASING |
|-------------|-------------------------------|
| CDX 70/076  | ON REQUEST                    |
| CDX 70/106  |                               |
| CDX 70/156  |                               |
| CDX 120/106 |                               |
| CDX 120/156 |                               |
| CDX 120/206 |                               |
| CDX 200/156 |                               |
| CDX 200/206 |                               |
| CDX 200/306 |                               |

## DIMENSIONS and WEIGHT

60Hz

Rev. R

## PUMP

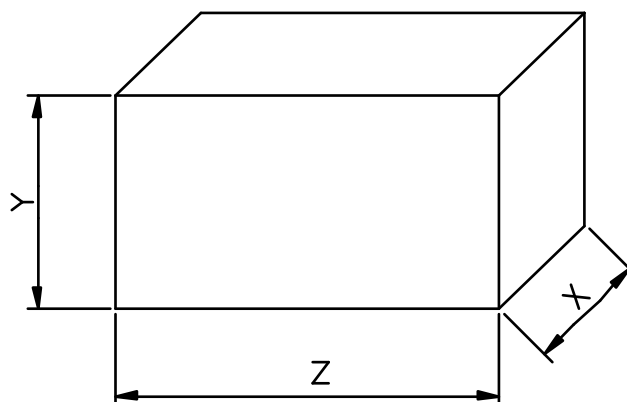


| Pump type    |             | Dimensions [mm] |      |       |       |       |     |       |      |      |    |    |     |     |       |         |         |      |       | Weight [kgf] |      |
|--------------|-------------|-----------------|------|-------|-------|-------|-----|-------|------|------|----|----|-----|-----|-------|---------|---------|------|-------|--------------|------|
|              |             | A               | B    |       | C     | H     | H1  | H2    | H3   | H4   | M  | M1 | N   | N1  | R     | T       | V       | W    | DNA   | [1~]         | [3~] |
| Single Phase | Three Phase |                 | [1~] | [3~]  |       |       |     |       | [3~] | [1~] |    |    |     |     |       | [1~]    | [3~]    |      |       | [1~]         | [3~] |
| CDXM 70/076  | CDX 70/076  | 208             | 321  | 320   | 181   | 229.5 | 106 | 123.5 | 207  | 216  | 50 | 38 | 120 | 160 | 108   | PG 11   | PG 11   | 92.5 | G 1¼" | 9            | 9.6  |
| CDXM 70/106  | CDX 70/106  | 208             | 333  | 320   | 181   | 229.5 | 106 | 123.5 | 207  | 216  | 50 | 38 | 120 | 160 | 108   | PG 11   | M16x1.5 | 92.5 | G 1¼" | 11           | 11.5 |
| CDXM 70/156  | CDX 70/156  | 208             | 321  | 332   | 181   | 229.5 | 106 | 123.5 | 207  | 216  | 50 | 38 | 120 | 160 | 108   | PG 11   | M16x1.5 | 92.5 | G 1¼" | 11.7         | 13   |
| CDXM 120/106 | CDX 120/106 | 208             | 321  | 320   | 181   | 229.5 | 106 | 123.5 | 207  | 216  | 50 | 38 | 120 | 160 | 108   | PG 11   | M16x1.5 | 92.5 | G 1¼" | 11           | 11.5 |
| CDXM 120/156 | CDX 120/156 | 208             | 321  | 332   | 181   | 229.5 | 106 | 123.5 | 207  | 216  | 50 | 38 | 120 | 160 | 108   | PG 11   | M16x1.5 | 92.5 | G 1¼" | 11.7         | 12   |
| CDXM 120/206 | CDX 120/206 | 208             | 347  | 371.5 | 198.5 | 229.5 | 106 | 123.5 | 225  | 249  | 55 | 40 | 140 | 180 | 105.5 | PG 13.5 | M20x1.5 | 95   | G 1¼" | 15.3         | 15.4 |
| CDXM 200/156 | CDX 200/156 | 208             | 333  | 320   | 181   | 229.5 | 106 | 123.5 | 207  | 216  | 50 | 38 | 120 | 160 | 108   | PG 11   | M16x1.5 | 92.5 | G 1½" | 12           | 11   |
| CDXM 200/206 | CDX 200/206 | 208             | 347  | 371.5 | 198.5 | 229.5 | 106 | 123.5 | 225  | 237  | 55 | 40 | 140 | 180 | 105.5 | PG 13.5 | M20x1.5 | 95   | G 1½" | 15           | 16.6 |
| -            | CDX 200/306 | 232             | -    | 371.5 | 198.5 | 250   | 118 | 132   | 237  | -    | 55 | 40 | 140 | 180 | 105.5 | -       | M20x1.5 | 95   | G 1½" | -            | 17.8 |

[1~] = Single phase

[3~] = Three phase

## PACKING



| Type pumps   |             | Packing [mm] |      |      |      |      |      | Weight [kgf] |      |
|--------------|-------------|--------------|------|------|------|------|------|--------------|------|
| Single Phase | Three Phase | X            |      | Y    |      | Z    |      |              |      |
|              |             | [1~]         | [3~] | [1~] | [3~] | [1~] | [3~] | [1~]         | [3~] |
| CDXM 70/076  | CDX 70/076  | 245          | 245  | 310  | 310  | 450  | 450  | 10,5         | 9.8  |
| CDXM 70/106  | CDX 70/106  | 245          | 245  | 310  | 310  | 450  | 450  | 12           | 11.5 |
| CDXM 70/156  | CDX 70/156  | 245          | 245  | 315  | 315  | 510  | 510  | 12           | 13   |
| CDXM 120/106 | CDX 120/106 | 245          | 245  | 310  | 310  | 450  | 450  | 12,5         | 11.5 |
| CDXM 120/156 | CDX 120/156 | 245          | 245  | 315  | 315  | 510  | 510  | 12           | 13   |
| CDXM 120/206 | CDX 120/206 | 245          | 245  | 315  | 315  | 510  | 510  | 16           | 15   |
| CDXM 200/156 | CDX 200/156 | 245          | 245  | 310  | 310  | 450  | 450  | 13,5         | 11   |
| CDXM 200/206 | CDX 200/206 | 245          | 245  | 315  | 315  | 510  | 510  | 16           | 17   |
| -            | CDX 200/306 | -            | 245  | -    | 315  | -    | 510  | -            | 19   |

[1~] Single phase

[3~] Three phase

## MOTOR DATA

| Pump type    | Power |      | Efficiency | Capacitor |     | Efficiency (% load) and power factor |      |      |       | Input | Full load current |       | Locked rotor current |       |
|--------------|-------|------|------------|-----------|-----|--------------------------------------|------|------|-------|-------|-------------------|-------|----------------------|-------|
| Single Phase | [kW]  | [HP] | [IE]       | [μF]      | [V] | η %                                  |      |      | cos-φ | [kW]  | [A]               |       | [A]                  |       |
|              |       |      |            |           |     | 50%                                  | 75%  | 100% |       |       | 110 V             | 220 V | 110 V                | 220 V |
| CDXM 70/076  | 0,55  | 0,75 | IE2        | 50        | 250 | 65,3                                 | 72,7 | 75,3 | 0,91  | 0,73  | 7,2               | -     | 36,1                 | -     |
|              |       |      |            | 14        | 450 | 64,1                                 | 72,7 | 77,4 | 0,94  | 0,72  | -                 | 3,5   | -                    | 17,6  |
| CDXM 70/106  | 0,75  | 1,0  | IE2        | 60        | 250 | 63,0                                 | 71,5 | 75,5 | 0,86  | 0,99  | 10,4              | -     | 66,5                 | -     |
|              |       |      |            | 25        | 450 | 63,1                                 | 69,8 | 78,3 | 0,94  | 0,96  | -                 | 4,7   | -                    | 32,3  |
| CDXM 70/156  | 1,1   | 1,5  | - *        | 25        | 450 | -                                    | -    | -    | 0,97  | 1,54  | -                 | 7,3   | -                    | 35,0  |
| CDXM 120/106 | 0,75  | 1,0  | IE2        | 60        | 250 | 63,0                                 | 71,5 | 75,5 | 0,86  | 0,99  | 10,4              | -     | 66,5                 | -     |
|              |       |      |            | 25        | 450 | 63,1                                 | 69,8 | 78,3 | 0,94  | 0,96  | -                 | 4,7   | -                    | 32,3  |
| CDXM 120/156 | 1,1   | 1,5  | - *        | 25        | 450 | -                                    | -    | -    | 0,97  | 1,54  | -                 | 7,3   | -                    | 35,0  |
| CDXM 120/206 | 1,8   | 2,4  | - *        | 40        | 450 | -                                    | -    | -    | 0,95  | 2,29  | -                 | 10,5  | -                    | 69,0  |
| CDXM 200/156 | 1,1   | 1,5  | IE2        | 31,5      | 450 | 68,8                                 | 77,2 | 82,5 | 0,94  | 1,37  | -                 | 6,8   | -                    | 45,3  |
| CDXM 200/206 | 1,8   | 2,4  | - *        | 40        | 450 | -                                    | -    | -    | 0,95  | 2,29  | -                 | 10,5  | -                    | 69,0  |

| Pump type   | Power |      | Efficiency | Efficiency (% load) |      |      | Efficiency (% load)    |      |      | Input<br>[kW] | Full load current<br>[A] |             |          | Locked rotor<br>current<br>[A] |             |          |          |
|-------------|-------|------|------------|---------------------|------|------|------------------------|------|------|---------------|--------------------------|-------------|----------|--------------------------------|-------------|----------|----------|
|             | [kW]  | [HP] |            | Three phase (380 V) |      |      | Three phase<br>(460 V) |      |      |               | Three<br>Phase           | Three Phase |          |                                | Three Phase |          |          |
|             |       |      |            | 50%                 | 75%  | 100% | 50%                    | 75%  | 100% |               |                          | 220<br>V    | 380<br>V | 460<br>V                       | 220<br>V    | 380<br>V | 460<br>V |
| CDX 70/076  | 0.55  | 0.75 | IE3        | 76.9                | 78.1 | 77.8 | 74.0                   | 76.8 | 79.8 | 0.70          | 2.3                      | 1.9         | 1.3      | 11.0                           | 6.4         | 7.8      |          |
| CDX 70/106  | 0.75  | 1    | IE3        | 82.3                | 83.5 | 83.2 | 80.5                   | 83.1 | 84.6 | 0.90          | 2.8                      | 1.6         | 1.5      | 17.9                           | 10.3        | 12.5     |          |
| CDX 70/156  | 1.1   | 1.5  | IE3        | 84.8                | 84.5 | 82.7 | 82.0                   | 84.4 | 84.5 | 1.30          | 4.0                      | 2.3         | 2.2      | 24.6                           | 14.2        | 17.2     |          |
| CDX 120/106 | 0.75  | 1    | IE3        | 82.3                | 83.5 | 83.2 | 80.5                   | 83.1 | 84.6 | 0.90          | 2.8                      | 1.6         | 1.5      | 17.9                           | 10.3        | 12.5     |          |
| CDX 120/156 | 1.1   | 1.5  | IE3        | 84.8                | 84.5 | 82.7 | 82.0                   | 84.4 | 84.5 | 1.30          | 4.0                      | 2.3         | 2.2      | 24.6                           | 14.2        | 17.2     |          |
| CDX 120/206 | 2.2   | 3    | IE3        | 86.5                | 86.8 | 86.2 | 86.9                   | 87.8 | 87.4 | 2.48          | 7.5                      | 4.3         | 4.1      | 55.7                           | 32.2        | 38.93    |          |
| CDX 200/156 | 1.1   | 1.5  | IE3        | 84.8                | 84.5 | 82.7 | 82.0                   | 84.4 | 84.5 | 1.30          | 4.0                      | 2.3         | 2.2      | 24.6                           | 14.2        | 17.2     |          |
| CDX 200/206 | 2.2   | 3    | IE3        | 86.5                | 86.8 | 86.2 | 86.9                   | 87.8 | 87.4 | 2.48          | 7.5                      | 4.3         | 4.1      | 55.7                           | 32.2        | 38.93    |          |
| CDX 200/306 | 2.2   | 3    | IE3        | 86.5                | 86.8 | 86.2 | 86.9                   | 87.8 | 87.4 | 2.48          | 7.5                      | 4.3         | 4.1      | 55.7                           | 32.2        | 38.93    |          |

\* Not available for the European market



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