



# Technical data

|           |           |
|-----------|-----------|
| Date      | 9/21/2025 |
| Offer N.  | ---       |
| Pump Type | MN80-160E |
|           |           |

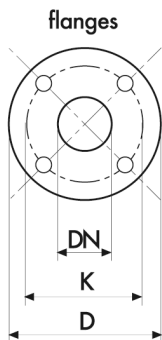
|        |          |           |     |
|--------|----------|-----------|-----|
| Client | EES GmbH | Reference | --- |
|--------|----------|-----------|-----|

## Pump data

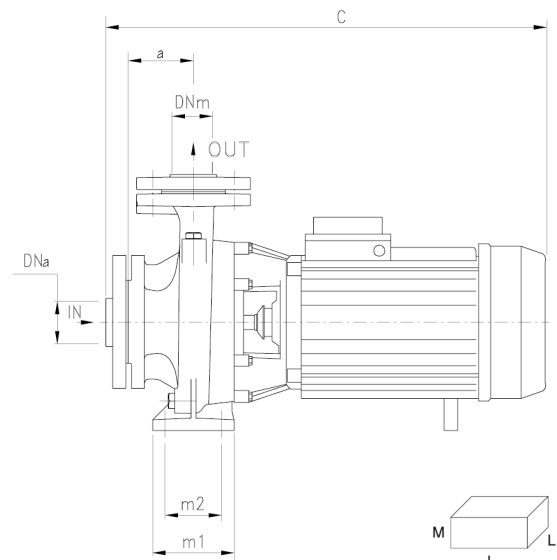
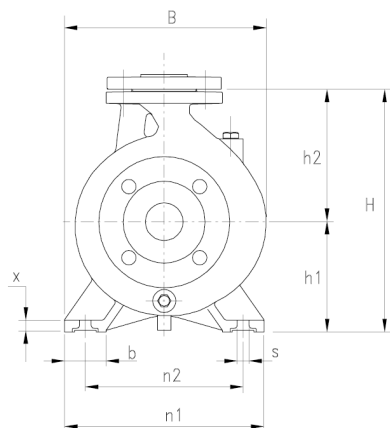
|                    |                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pump body          | Cast iron GJL-250                                                  | Monobloc horizontal centrifugal pumps, constructed to EN 733 standards; widely used in water supplies, pressurisation and fire-fighting systems, cooling, heating, irrigation, industrial and agricultural applications. The pumps are equipped with cast iron impeller in standard configuration; on request, they are available with bronze or AISI 316 stainless steel impeller. Pumps are supplied with counter-flange. |
| Motor bracket      | Cast iron GJL-250                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Impeller           | Cast iron GJL-250<br>On request bronze or stainless steel AISI 316 |                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Mechanical seal    | Ceramic-Graphite                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Motor shaft        | Stainless steel AISI 304 EN X5CrNi18-10                            |                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Liquid temperature | -10°C +90°C                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Operating pressure | Max 10 bar                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                    |                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                    |                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                    |                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                    |                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                             |

| P2    |      | P1 (kW) |     | A      |        | Q (m3/h - l/min) |      |      |      |      |      |      |      |      |      |      |      |      |
|-------|------|---------|-----|--------|--------|------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| (HP)  | (kW) | 1~      | 3~  | 1x230V | 3x400V | 0                | 66   | 72   | 78   | 84   | 96   | 108  | 120  | 132  | 138  | 144  | 156  | 168  |
|       |      |         |     |        |        | 0                | 1100 | 1200 | 1300 | 1400 | 1600 | 1800 | 2000 | 2200 | 2300 | 2400 | 2600 | 2800 |
| H (m) |      |         |     |        |        |                  |      |      |      |      |      |      |      |      |      |      |      |      |
| 12,5  | 9,2  | ---     | 9,8 | ---    | 16,3   | 21,5             | 22,9 | 22,5 | 22,1 | 21,6 | 20,8 | 19,9 | 18,9 | 17,7 | 17,2 | 16,6 | 15,3 | 13,7 |

## Technical Sheet



| DIMENSIONS (mm) |     |     |       |    |
|-----------------|-----|-----|-------|----|
| DN              | D   | K   | holes |    |
|                 |     |     | n°    | Ø  |
| 32              | 140 | 100 | 4     | 18 |
| 40              | 150 | 110 | 4     | 18 |
| 50              | 165 | 125 | 4     | 18 |
| 65              | 185 | 145 | 4     | 18 |
| 80              | 200 | 160 | 8     | 18 |
| 100             | 220 | 180 | 8     | 18 |
| 125             | 250 | 210 | 8     | 18 |



| DNA | DNM | DIMENSIONS (mm) |     |     |     |    |     |     |    |    |    |     |     |     |     |     |     | Kg   |
|-----|-----|-----------------|-----|-----|-----|----|-----|-----|----|----|----|-----|-----|-----|-----|-----|-----|------|
|     |     | a               | h1  | h2  | m1  | m2 | n1  | n2  | b  | x  | s  | C   | B   | H   | I   | L   | M   |      |
| 100 | 80  | 125             | 180 | 225 | 125 | 95 | 320 | 250 | 65 | 14 | 14 | 621 | 330 | 405 | 810 | 354 | 480 | 98,5 |

## Notes

The information may be subject to change without notice. It is always advisable to contact our commercial department in order to get further information about the products, their technical specifications and warranty conditions. The Company is expressly relieved of any liability for the purchasing of a product not in line with the customer's needs, if not consulted beforehand for a specific consultancy.



## Working Curves

Pump type: MN80-160E

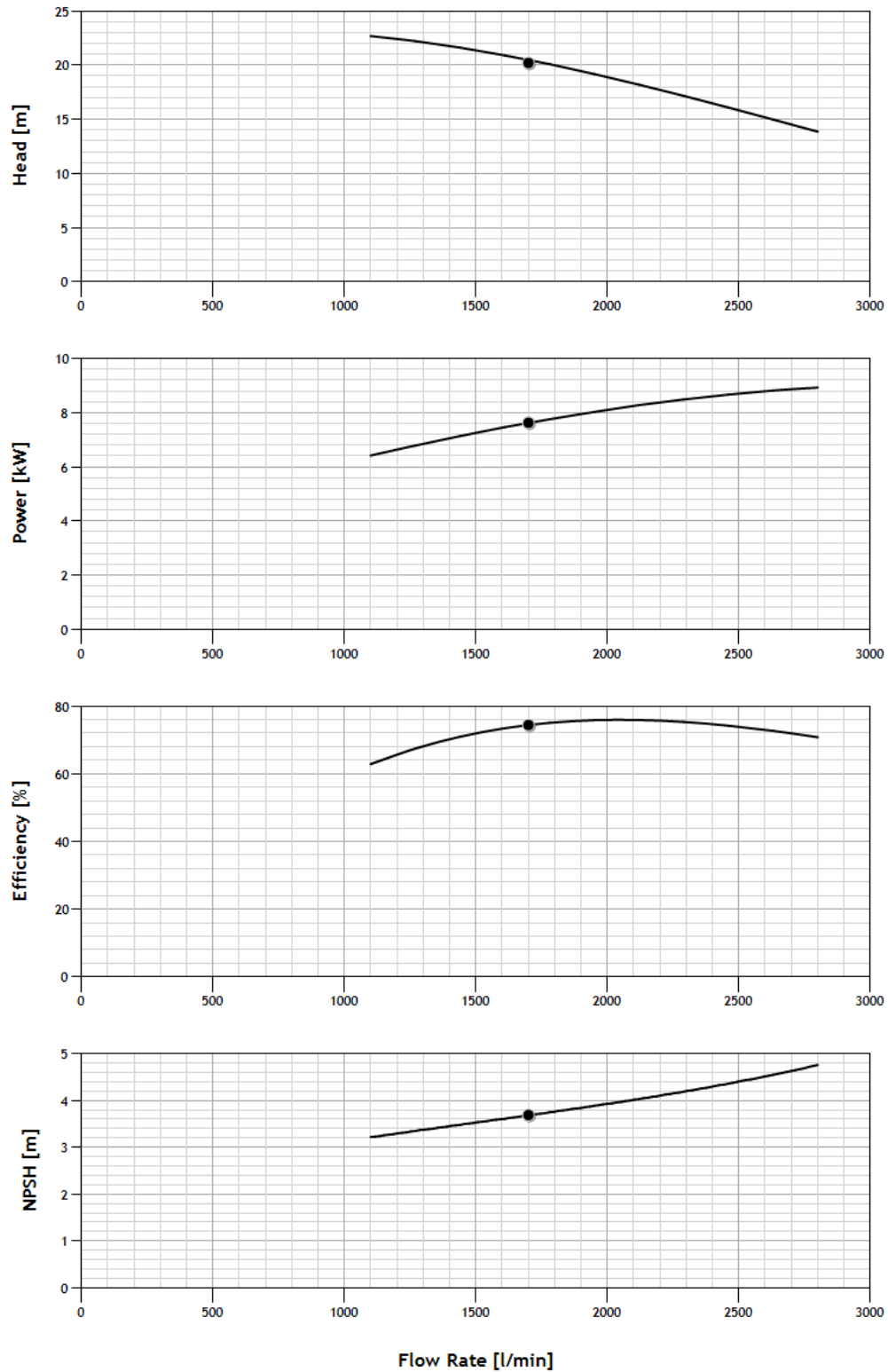
Curv n°:

MN80-160E

Date:

9/21/2025

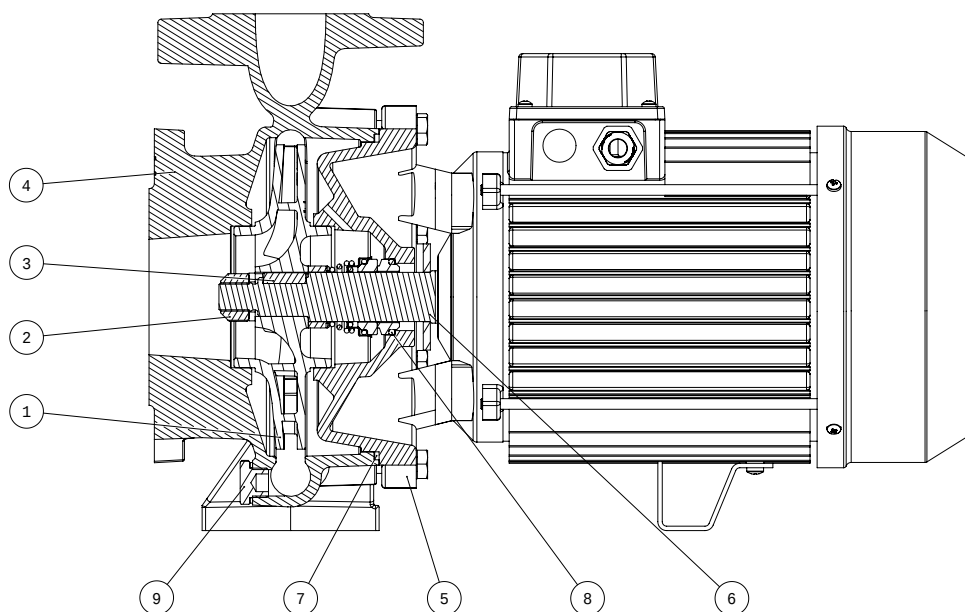
Q (l/min) 1700 | H (m) 20.2 | Power [kW] 7.63 | Efficiency % 74.43 | NPSH (m) 3.69



MEI  $\geq 0.4$  (regulation EU N. 547/2012)  
Tolerances according to UNI ISO 9906 grade 3B

# MN Series

## Models list and materials



| POS:<br>N. | DENOMINATION                        | VERSION                                                        | MATERIAL                                               | REFERENCE STANDARDS                                              |                                         |
|------------|-------------------------------------|----------------------------------------------------------------|--------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------|
|            |                                     |                                                                |                                                        | EUROPE                                                           | USA                                     |
| 1          | <b>Impeller</b>                     | Standard<br>B<br>X                                             | Cast iron G20<br>Bronze<br>Stainless steel             | GJL-200 (JL1030)<br>CuSn10-C (CC480K)<br>X5CrNiMo17-12-2/ 1.4401 | ASTM Class 30<br>UNS C90700<br>AISI 316 |
| 2          | <b>Impeller lock nut and washer</b> |                                                                | Stainless steel                                        | X5CrNiMo17-12-2/ 1.4401                                          | AISI 316                                |
| 3          | <b>Impeller key</b>                 |                                                                | Stainless steel                                        | X5CrNiMo17-12-2/ 1.4401                                          | AISI 316                                |
| 4          | <b>Volute casing</b>                | Standard for models up to 80-200<br>Standard from model 80-250 | Cast iron G20<br>Cast iron G25                         | GJL-200 (JL1030)<br>GJL-250 (JL1040)                             | ASTM Class 30<br>ASTM Class 35          |
| 5          | <b>Motor bracket</b>                |                                                                | Cast iron G20                                          | GJL-200 (JL1030)                                                 | ASTM Class 30                           |
| 6          | <b>Shaft extension</b>              |                                                                | Stainless steel                                        | X5CrNi18-10/ 1.4301                                              | AISI 304                                |
| 7          | <b>O-ring</b>                       | Standard<br>E<br>V                                             | NBR<br>EPDM<br>FKM                                     |                                                                  |                                         |
| 8          | <b>Mechanical seal</b>              |                                                                | (Search for the material in the mechanical seal table) |                                                                  |                                         |
| 9          | <b>Fill and drain plugs</b>         |                                                                | Brass                                                  | CU ZN 40 PB2 UNI 5705/65                                         | C37700                                  |

# MN Serie-Mechanical seal and bearings

| MECHANICAL SEAL                                                                   | PUMP MODEL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | SHAFT Ø |                                                                    | STANDARD MATERIAL             | OPTIONAL                       |                               |                    |                   |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------------------------------------------------------------|-------------------------------|--------------------------------|-------------------------------|--------------------|-------------------|
|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |                                                                    |                               | E                              | V                             | 2E                 | 2V                |
|  | MN32-160C, MN32-160B, MN32-160A, MN40-125C, MN40-125B, MN40-125A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 20mm    | <b>Rotating face</b><br><b>Stationary face</b><br><b>Elastomer</b> | Ceramic<br>Graphite<br>NBR    | Ceramic<br>Graphite<br>EPDM    | -<br>-<br>-                   | SiC<br>SiC<br>EPDM | SiC<br>SiC<br>FKM |
|                                                                                   | MN40-250BM, MN40-250AM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 28mm    | <b>Rotating face</b><br><b>Stationary face</b><br><b>Elastomer</b> | Ceramic<br>Graphite<br>EPDM   | -<br>-<br>-                    | -<br>-<br>-                   | SiC<br>SiC<br>EPDM | SiC<br>SiC<br>FKM |
|                                                                                   | MN32-200C, MN32-200B1, MN32-200B, MN32-200A1, MN32-200A, MN32-250C, MN32-250B, MN32-250A1, MN32-250A, MN40-160B, MN40-160A, MN40-160AP, MN40-200B1, MN40-200B, MN40-200A1, MN40-200A, MN40-200AP, MN40-250C, MN40-250B, MN40-250A1, MN40-250A, MN50-125B, MN50-125A, MN50-160B1, MN50-160B, MN50-160A1, MN50-160A, MN50-200C, MN50-200B, MN50-200A1, MN50-200A, MN50-250C1, MN50-250C, MN50-250B, MN50-250A, MN65-125B1, MN65-125B, MN65-125A1, MN65-125A, MN65-160C, MN65-160B, MN65-160A1, MN65-160A, MN65-200C1, MN65-200C, MN65-200B, MN65-200A, MN80-160E, MN80-160D, MN80-160C, MN80-160B, MN80-160A1, MN80-160A | 28mm    | <b>Rotating face</b><br><b>Stationary face</b><br><b>Elastomer</b> | Ceramic<br>Graphite<br>NBR    | Ceramic<br>Graphite<br>EPDM    | Ceramic<br>Graphite<br>FKM    | SiC<br>SiC<br>EPDM | SiC<br>SiC<br>FKM |
|                                                                                   | MN65-250B, MN65-250A, MN80-200B, MN80-200A, MN100-160B, MN100-160A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 40mm    | <b>Rotating face</b><br><b>Stationary face</b><br><b>Elastomer</b> | CrNi-steel<br>Graphite<br>NBR | CrNi-steel<br>Graphite<br>EPDM | CrNi-steel<br>Graphite<br>FKM | SiC<br>SiC<br>EPDM | SiC<br>SiC<br>FKM |

| BEARINGS                                                                            | PUMP MODEL                                                                                                                                                                                                                                                                                                                                                          | TYPE       |            |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|
|  | 3-MN32-200C, MN40-160B, 3-MN40-160A, MN50-125B, 3-MN50-125A                                                                                                                                                                                                                                                                                                         | 6204-ZZ    | 6206-ZZ C3 |
|                                                                                     | MN32-160C, MN32-160B, MN32-160A, MN40-125C, MN40-125B, MN40-125A                                                                                                                                                                                                                                                                                                    | 6205-ZZ C3 | 6203-ZZ    |
|                                                                                     | 1-MN32-200C, MN32-200B1, MN32-200B, MN32-200A1, MN32-200A, MN32-250C, MN32-250B, 1-MN40-160A, MN40-160AP, MN40-200B1, MN40-200B, MN40-200A1, MN40-200A, MN40-200AP, MN40-250C, MN40-250B, 1-MN50-125A, MN50-160B1, MN50-160B, MN50-160A1, MN50-160A, MN50-200C, MN50-200B, MN65-125B1, MN65-125B, MN65-125A1, MN65-125A, MN65-160C, MN65-160B, MN80-160E, MN80-160D | 6206-ZZ C3 | 6306-ZZ C3 |
|                                                                                     | MN32-250A1, MN40-250A1, NM50-200A1, NM50-250C1, MN65-160A1, MN65-200C1, MN80-160C1                                                                                                                                                                                                                                                                                  | 6308-ZZ C3 | 6306-ZZ C3 |
|                                                                                     | MN32-250A, MN40-250A, MN40-250BM, MN40-250AM, MN50-200A, MN50-250C, MN50-250B, MN50-250A, MN65-160A, MN65-200C, MN65-200B, MN65-200A, MN80-160C, MN80-160B, MN80-160A                                                                                                                                                                                               | 6308-ZZ C3 | 6309-ZZ C3 |
|                                                                                     | MN65-250B, MN65-250A, MN80-200B, MN80-200A, MN100-160B, MN100-160A                                                                                                                                                                                                                                                                                                  | 6309-ZZ C3 | 6310-ZZ C3 |