

**Generalities**

The horizontal close coupled magnetic drive pumps HMP-M come from the HMP-N/S range and are mounted with their hydraulic parts.

They can be proposed with self-priming volute of HMP-A pumps range.

HMP-M range pumps offer flow rates up to 80 m<sup>3</sup>/h (352 US gpm) and a discharge head up to 40 mcl (131 ft).

**Construction**

The hydraulic part is entirely realized of thick walled plastic material.

There is no metallic component in contact with the pumped liquid.

> Polypropylene PP or PP-EL

> PVC

> PVDF or PVDF-EL



**Conformité ATEX**

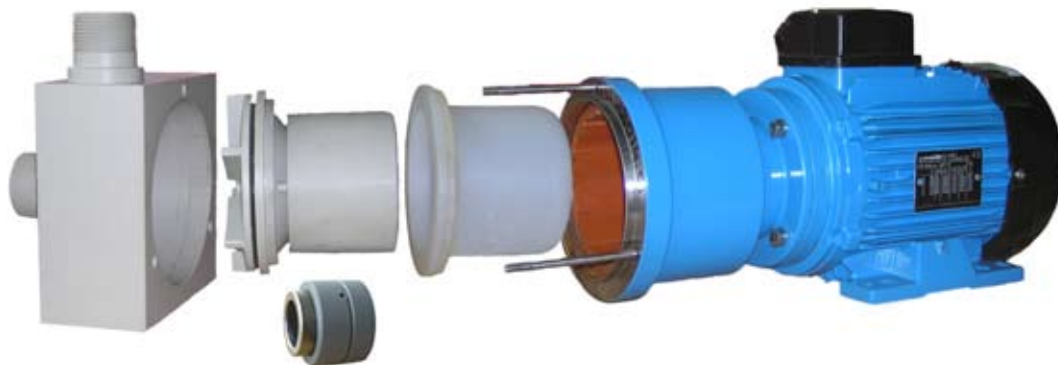
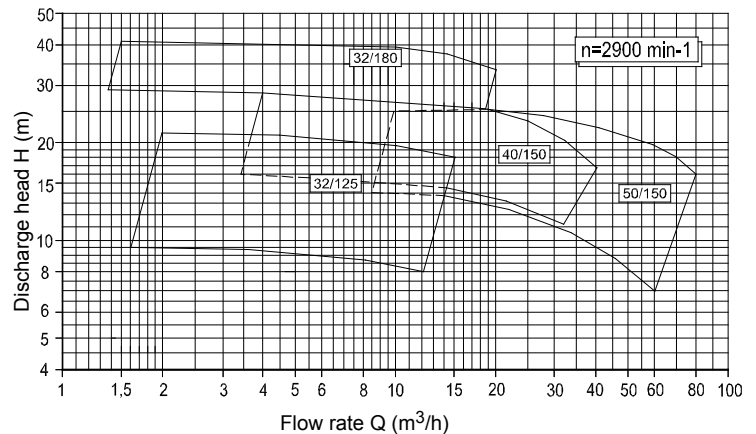
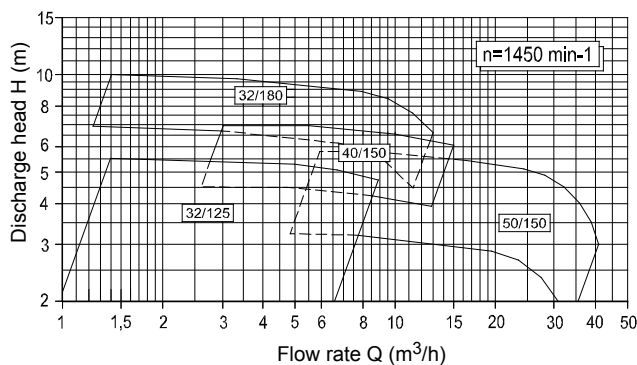


For the EC zone, HMP-M pumps are available certified as per ATEX 94/9/CE.

**II 2/3 GcT4 (others on demand)**

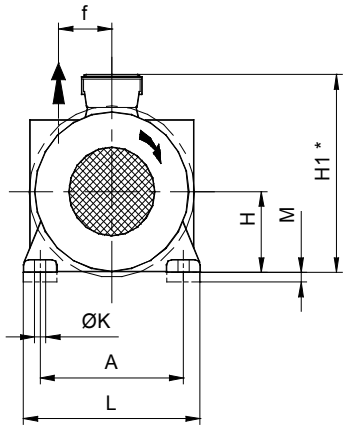
**Voluntary certification INERIS 04 ATEX 3008X**

**Diagrams**

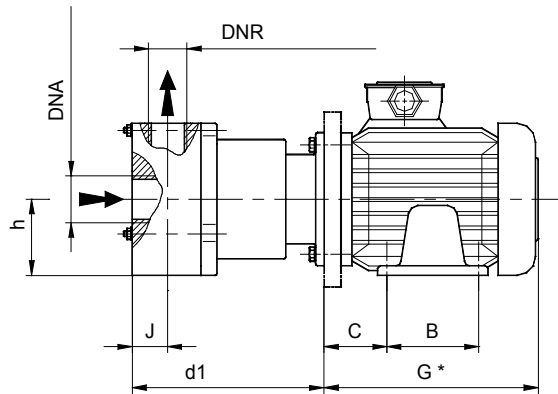


**Main advantages**

- Total tightness due to magnetic drive.
- Reliability and robustness due to massive manufacture design.
- Characteristics and dimensions that allow to substitute a HMP-N/S by a HMP-M without modification of pipes.
- Conversion kits availables.
- Containment shroud without metal reinforcement or carbon eliminating all risks of heating by eddy current losses.
- Largely dimensioned magnets to eliminate risks of drop out of synchronization.
- Bearings issued from PROCESS construction relieving the containment shroud from all mechanical stresses.
- SiC sleeve bearing with anti-friction treatment ensuring a better behaviour in case of bad lubrication.
- Motors normalized as per IEC standards.

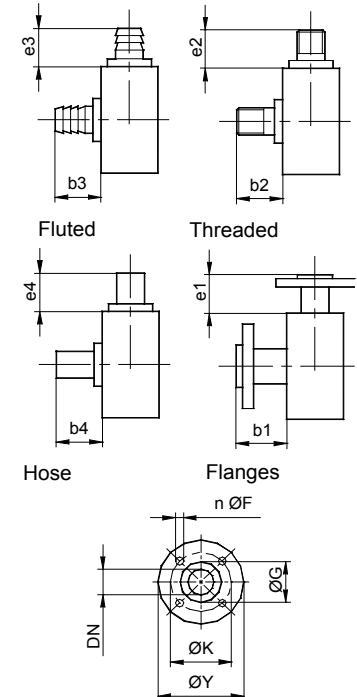


Pump installation is made by the motor's fastening



Attention: If  $h < H$ , install shims under motor foot

**Connections**



**n = 2900 min<sup>-1</sup>**

| Types  | Flanges |      | P<br>kW | Motors 3 phases - IP55 |     |    |     |     |     |    |     |       |     | Pumps dimensions |     |    |    |    |    |    |    |      |      |       |
|--------|---------|------|---------|------------------------|-----|----|-----|-----|-----|----|-----|-------|-----|------------------|-----|----|----|----|----|----|----|------|------|-------|
|        | DN A    | DN R |         | Motors dimensions      |     |    |     |     |     |    |     |       |     |                  |     |    |    |    |    |    |    |      |      |       |
|        |         |      |         | A                      | B   | C  | G*  | H   | H1* | K  | L   | Masse | b1  | b2               | b3  | b4 | e1 | e2 | e3 | e4 | f  | j    | h    | d1    |
| 32/125 | 40      | 32   | 1,1     | 125                    | 100 | 60 | 215 | 80  | 203 | 9  | 157 | 9,7   | 60  | 50               | 60  | 40 | 55 | 45 | 55 | 34 | 52 | 38,5 | 80   | 215,5 |
|        | -       | -    | 2,2     | 140                    | 125 | 66 | 245 | 90  | 223 | 10 | 172 | 16    | -   | -                | -   | -  | -  | -  | -  | -  | -  | -    | -    | 230,5 |
|        | 40      | 32   | 2,2     | -                      | -   | -  | -   | -   | -   | -  | -   | -     | 60  | 50               | 60  | 40 | 55 | 45 | 55 | 34 | 80 | 48   | 115  | 242   |
|        | -       | -    | 4       | 160                    | 140 | 63 | 290 | 100 | 238 | 12 | 196 | 20    | -   | -                | -   | -  | -  | -  | -  | -  | -  | -    | -    | 255   |
|        | -       | -    | 5,5     | 216                    | 140 | 89 | 350 | 132 | 280 | 12 | 250 | 34,4  | -   | -                | -   | -  | -  | -  | -  | -  | -  | -    | -    | 283   |
| 40/150 | 50      | 40   | 2,2     | 140                    | 125 | 66 | 245 | 90  | 223 | 10 | 172 | 16    | 60  | 60               | 100 | 47 | 60 | 50 | 60 | 40 | 60 | 39   | 97,5 | 235   |
|        | -       | -    | 3       | 160                    | 140 | 63 | 290 | 100 | 238 | 12 | 196 | 20    | -   | -                | -   | -  | -  | -  | -  | -  | -  | -    | -    | 248   |
|        | -       | -    | 4       | 190                    | 140 | 70 | 290 | 112 | 250 | 12 | 220 | 24,4  | -   | -                | -   | -  | -  | -  | -  | -  | -  | -    | -    | 255   |
|        | -       | -    | 5,5     | 216                    | 140 | 89 | 350 | 132 | 280 | 12 | 250 | 34,4  | -   | -                | -   | -  | -  | -  | -  | -  | -  | -    | -    | 276   |
| 50/150 | 65      | 50   | 3       | 160                    | 140 | 63 | 290 | 100 | 238 | 12 | 196 | 20    | 100 | -                | -   | -  | 60 | -  | -  | 55 | 50 | 97,5 | 268  |       |
|        | -       | -    | 4       | 190                    | 140 | 70 | 290 | 112 | 250 | -  | 220 | 24,4  | -   | -                | -   | -  | -  | -  | -  | -  | -  | -    | -    | 283   |
|        | -       | -    | 5,5     | 216                    | -   | 89 | 350 | 132 | 280 | -  | 250 | 34,4  | -   | -                | -   | -  | -  | -  | -  | -  | -  | -    | -    | 298   |
|        | -       | -    | 7,5     | -                      | -   | -  | -   | -   | -   | -  | -   | -     | 39  | -                | -   | -  | -  | -  | -  | -  | -  | -    | -    | 313   |

**n = 1450 min<sup>-1</sup>**

| Types  | Flanges |      | P<br>kW | Motors 3 phases - IP55 |     |    |     |     |     |    |     |       |     | Pumps dimensions |     |    |    |    |    |    |    |      |      |       |
|--------|---------|------|---------|------------------------|-----|----|-----|-----|-----|----|-----|-------|-----|------------------|-----|----|----|----|----|----|----|------|------|-------|
|        | DN A    | DN R |         | Motors dimensions      |     |    |     |     |     |    |     |       |     |                  |     |    |    |    |    |    |    |      |      |       |
|        |         |      |         | A                      | B   | C  | G*  | H   | H1* | K  | L   | Masse | b1  | b2               | b3  | b4 | e1 | e2 | e3 | e4 | f  | j    | h    | d1    |
| 32/125 | 40      | 32   | 0,75    | 125                    | 100 | 60 | 215 | 80  | 203 | 9  | 157 | 9,3   | 60  | 50               | 60  | 40 | 55 | 45 | 55 | 34 | 52 | 38,5 | 80   | 215,5 |
| 32/180 | 40      | 32   | 1,1     | 140                    | 100 | 66 | 218 | 90  | 223 | 10 | 172 | 11,5  | 60  | 50               | 60  | 40 | 55 | 45 | 55 | 34 | 80 | 48   | 115  | 242   |
| 40/150 | 50      | 40   | 1,1     | -                      | -   | -  | -   | -   | -   | -  | -   | -     | 60  | 60               | 100 | 47 | 60 | 50 | 60 | 40 | 60 | 39   | 97,5 | 235   |
| 50/150 | 65      | 50   | 2,2     | 160                    | 140 | 63 | 290 | 100 | 238 | 12 | 196 | 20    | 100 | -                | -   | -  | 60 | -  | -  | 55 | 50 | 97,5 | 268  |       |

| Flanges ISO PN16 |      |     |     | Connection   |                                |                              |
|------------------|------|-----|-----|--------------|--------------------------------|------------------------------|
| DN               | nØF  | ØK  | ØY  | BSP threaded | Fluted diameter for soft pipes | Hose diameters for PVC pipes |
| 32               | 4Ø14 | 100 | 140 | 1"1/4        | 30                             | 40                           |
| 40               | 4Ø18 | 110 | 150 | 1"1/2        | -                              | 50                           |
| 50               | 4Ø18 | 125 | 165 | 2"           | -                              | 63                           |
| 65               | 4Ø18 | 145 | 185 | 2"1/2        | -                              | 75                           |

Dimensions in mm ( subject to change )  
\*ATTENTION: subject to change depending on manufacturers. Weight pump+motor

**Application fields**

- Pumping of any clear and corrosive liquid without suspended matters, diluted or concentrated (H2SO4, HCl, NaOH)
- Unloading of trucks, tanks and containers.
- Installations of clear water treatment and chemicals process waste water.
- Surface treatment units, electroplating baths.
- Scrubbers.

**Cross section drawing**

