# Single-stage Pumps with Horizontal Shaft

*Pompes Mono-etagées à Axe Horizontal*

**Pompe Monostadio ad Asse Orizzontale**

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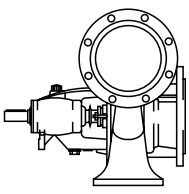
pumping power



BHR

# BHR

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pumping power

BHR series are single-stage centrifugal pumps, horizontal shaft, single suction, with a tough and monolithic structure sized to ensure a high degree of rigidity, an essential feature when these pumps are coupled to combustion engines. Thanks to their particular features, these pumps offer optimum solutions when it comes to reliability and energy saving, while long lasting performance are guaranteed.

*Les BHR sont des pompes centrifuges mono-etagées, à axe horizontal, à aspiration axiale, dotées d'une structure monolithique et robuste garantissant une grande rigidité, indispensable pour l'accouplement aux moteurs à combustion interne.*
*Les caractéristiques particulières de ces pompes offrent des solutions optimales de fiabilité et d'économie d'énergie, avec la garantie de performances constantes dans le temps.*

**Le BHR sono pompe centrifughe monostadio ad asse orizzontale, a semplice aspirazione, dotate di una monolitica e robusta struttura dimensionata per assicurare una grande rigidità, indispensabile nel caso di accoppiamento a motori termici.**
**Le particolari caratteristiche di queste pompe offrono soluzioni ottimali in affidabilità ed economia d'esercizio, con la garanzia di prestazioni costanti nel tempo.**

CERTIFICATION FOR USE WITH DRINKING WATER: DM174, WRAS, ACS
*CERTIFICATION POUR L'EMPLOI EN EAU POTABLE: DM174, WRAS, ACS*
**CERTIFICAZIONE PER L'IMPIEGO IN ACQUA POTABILE: DM174, WRAS, ACS**

- Machines conform to Directive 2009/125/EC (EcoDesign - ErP).
  *Machines conformes à la Directive 2009/125/CE (EcoDesign - ErP).*
  **Macchine conformi alla Direttiva 2009/125/CE (EcoDesign - ErP).**

- Pump casing volute type with axial flanged suction inlet and flanged delivery outlet in radial position, normally horizontally oriented; and, on request, rotated: simplify installation.
  *Corps de pompe du type à volute, avec orifice axiale d'aspiration bride et orifice de refoulement à bride en position axiale, normalement orienté horizontalement et, sur demande, mis en rotation : simplifie la installation.*
  **Corpo pompa del tipo a voluta con bocca di aspirazione assiale flangiata e bocca di mandata posta in posizione radiale, orientata normalmente in orizzontale e, a richiesta, ruotata: flessibilità di installazione.**

- Impeller dynamically-balanced, mixed flow design: reliability.
  *Roue hélico-centrifuge, équilibrée dynamiquement : fiabilité.*
  **Girante elico-centrifuga equilibrata dinamicamente: affidabilità.**

- Shaft protected by a bush at the gland and lined by two double-row oil-lubricated ball-bearings: ensure long life.
  *Arbre protégé par une chemise d'arbre au droit de la garniture à tresse, il est guidé par deux roulements à double rangées de billes, lubrifié à l'huile : garantit une longue vie.*
  **Albero protetto da una bussola in corrispondenza della tenuta e guidato da due cuscinetti a doppia corona di sfere, lubrificati a olio: garanzia di durata.**

- Seal adjustable, easily replaceable: simplify maintenance.
  *Garniture à tresse facilement remplaçable : simplify maintenance.*
  **Tenuta a baderna registrabile, facilmente sostituibile: facilità di manutenzione.**

- Safe connection to either electric motor or internal combustion engine thanks to large construction tolerances in shaft, bearings and pedestal: sturdiness.
  *La très grande marge de sécurité tenue pour les dimensions du support, de l'arbre et des roulements permet l'accouplement aux moteurs électrique ou thermiques : résistance.*
  **L'ampio margine di sicurezza tenuto nel dimensionare il supporto, l'albero ed i cuscinetti consente l'accoppiamento a motori sia elettrici che endotermici: robustezza.**

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## APPLICATIONS
*APPLICATIONS*
**APPLICAZIONI**

aqueducts
*adduction d'eau*
**acquedottistica**

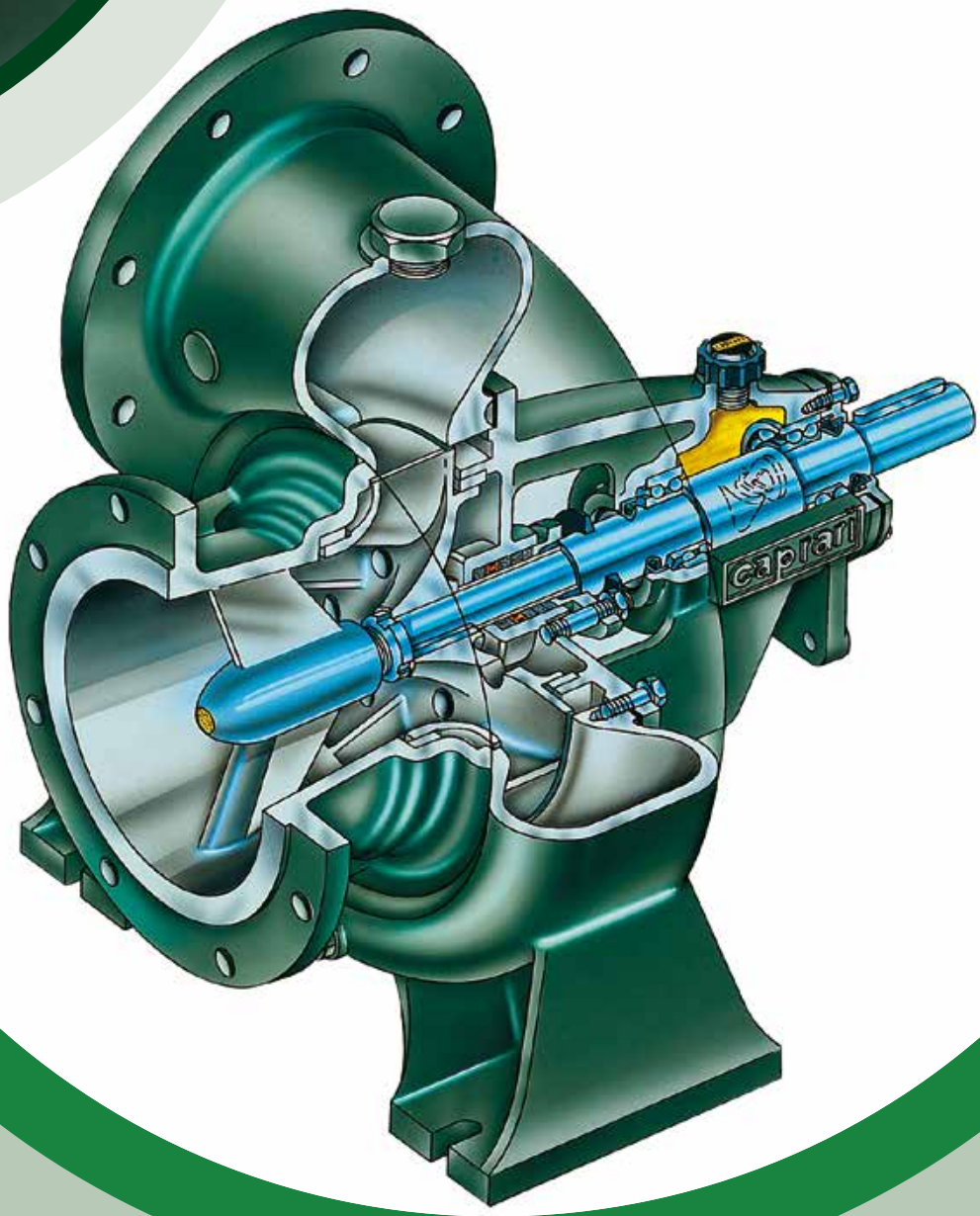
water supply
*alimentation d'eau potable*
**alimentazione idrica ad uso civile**

fish farming
*pisciculture*
**itticoltura**

industrial applications
*installations industrielles*
**applicazioni industriali**

leisure parks
*equipements pour les loisirs*
**impianti per il tempo libero**

irrigation
*irrigation*
**irrigazione**

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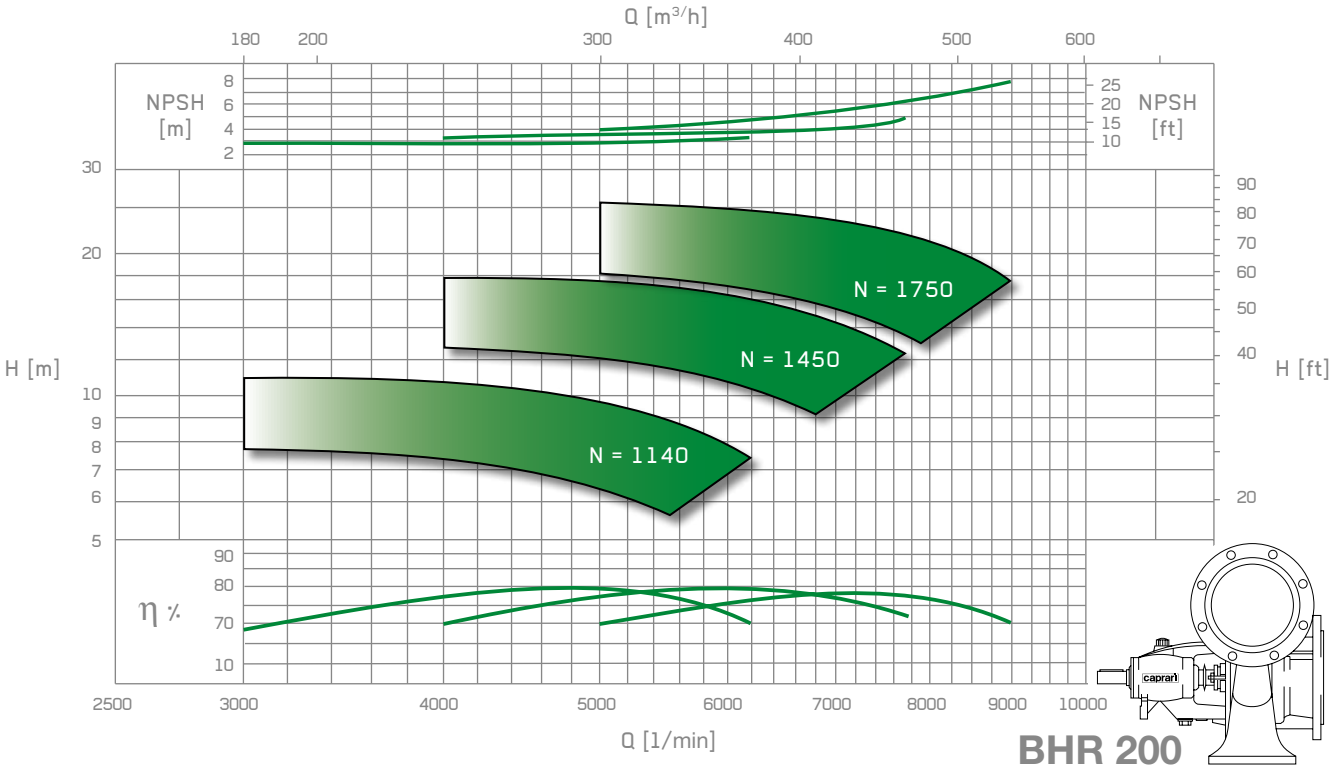
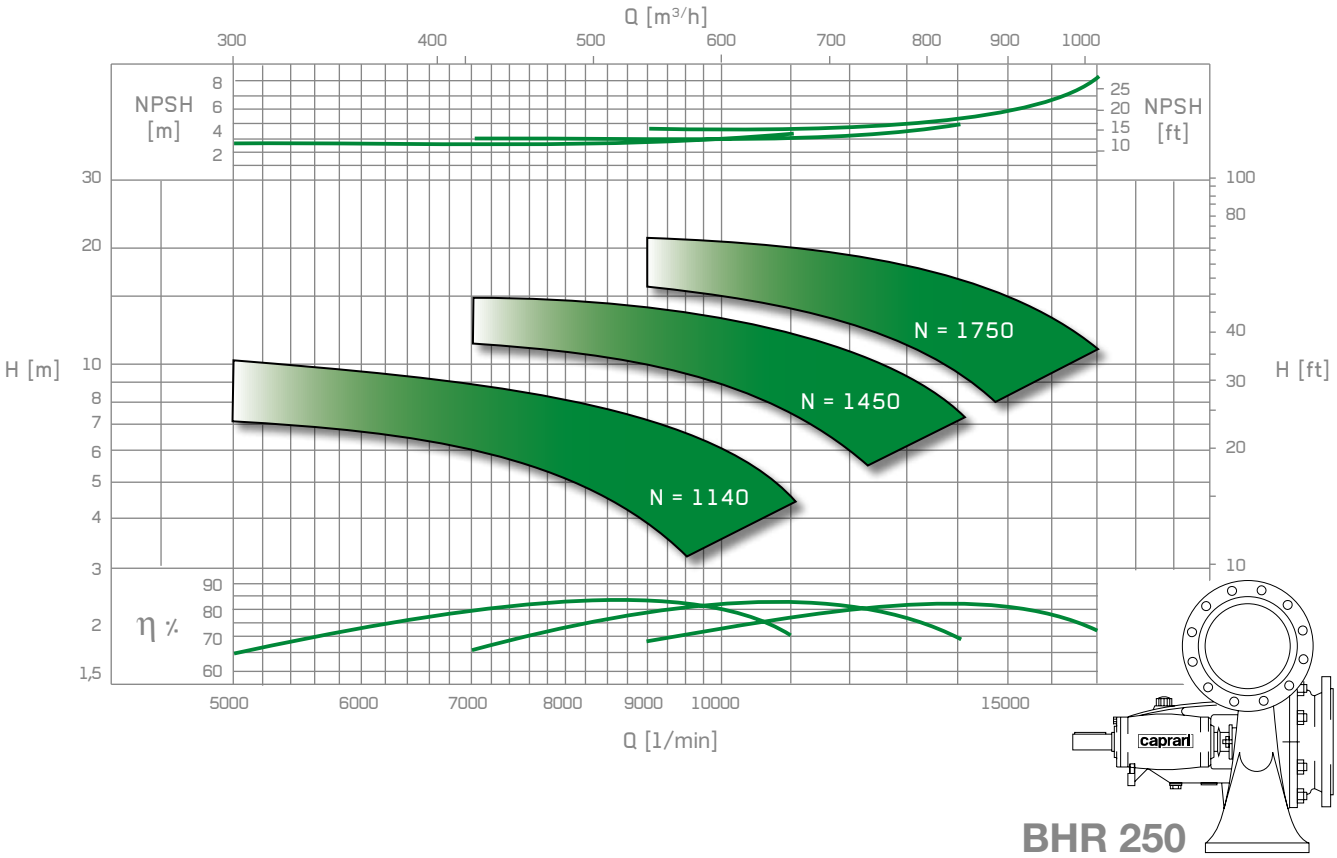

Q [m³/h]
180 200 300 400 500 600
NPSH [m]
8 6 4 2
NPSH [ft]
25 20 15 10
H [m]
30 20 10 9 8 7 6 5
H [ft]
90 80 70 60 50 40 20
N = 1750
N = 1450
N = 1140
η %
90 80 70 10
2500 3000 4000 5000 6000 7000 8000 9000 10000
Q [1/min]
caprari
BHR 200


Q [m³/h]
300 400 500 600 700 800 900 1000
NPSH [m]
8 6 4 2
NPSH [ft]
25 20 15 10
H [m]
30 20 10 8 7 6 5 4 3 2 1,5
H [ft]
100 80 40 30 20 10
N = 1750
N = 1450
N = 1140
η %
90 80 70 60
5000 6000 7000 8000 9000 10000 15000
Q [1/min]
caprari
BHR 250

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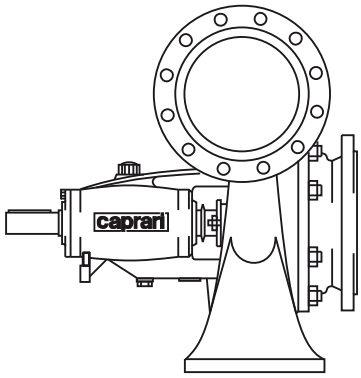
SINGLE-STAGE PUMPS
WITH HORIZONTAL SHAFT
*POMPES MONO-ETAGÉES*
*À AXE HORIZONTAL*

**POMPE MONOSTADIO**
**AD ASSE ORIZZONTALE**

# BHR




TIFQ
prodotto conforme
D.M.174/2004

WRAS
WATER REGULATIONS ADVISORY SCHEME

Attestation de Conformité Sanitaire ACS

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MANAGEMENT SYSTEM CERTIFICATION
DNV·GL
ISO 9001 = ISO 14001
OHSAS 18001

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Technical data standardized enclosed electric motors (Indicatives values according to the type of motor installed)
*Donnees tecniques moteurs electriques fermés normalisés (Valeurs indicatives en fonction de la marque du moteur utilisé)*
**Dati tecnici motore elettrico chiuso normalizzato (Valori indicativi in funzione della marca di motore utilizzato)**

| Motor power *Puiss. moteur* **Potenza motore** | 4 Poles 50 Hz *4 Pôles 50 Hz* **4 Poli 50 Hz** | | | 6 Poles 50 Hz *6 Pôles 50 Hz* **6 Poli 50 Hz** | | |
|---|---|---|---|---|---|---|
| | Max. number starts/hour* *Nombre maxi. de démarrages/heure** **Numero massimo di avviamenti/ora*** | Voltage variation *Variation de tension* **Variazione di tensione** | Dinamic momentum J *Momentum dynamique J* **Momento dinamico J** | Max. number starts/hour* *Nombre maxi. de démarrages/heure** **Numero massimo di avviamenti/ora*** | Voltage variation *Variation de tension* **Variazione di tensione** | Dinamic momentum J *Momentum dynamique J* **Momento dinamico J** |
| **[kW]** | | **[%]** | **[kg m²]** | | **[%]** | **[kg m²]** |
| 4 | | | | 3 | ± 10 (400V) | 0,03716 |
| 5,5 | | | | 3 | ± 10 (400V) | 0,04889 |
| 7,5 | | | | 3 | ± 10 (400V) | 0,11698 |
| 11 | | | | 3 | ± 10 (400V) | 0,17749 |
| 15 | 3 | ± 10 (400V) | 0,12866 | 3 | ± 10 (400V) | 0,31578 |
| 18,5 | 3 | ± 10 (400V) | 0,19014 | | | |
| 22 | 3 | ± 10 (400V) | 0,22635 | | | |
| 30 | 3 | ± 10 (400V) | 0,36124 | | | |
| 37 | 3 | ± 10 (400V) | 0,62999 | | | |

- Axial drive only, by flexible coupling.
- Electric motor operating limits in compliance with IEC 34-1

* Equally distribuded.

*- Entraînement seulement coaxial par accouplement élastique.*
*- Limites de fonctionnement pour le moteur electriques suivant les IEC 34-1*

** Conseillés uniformement repartis.*

**- Azionamento solo coassiale tramite giunto elastico.**
**- Limiti d'utilizzo motore elettrico secondo IEC 34-1.**

*** Consigliati equamente ripartiti.**

SPECIFICATIONS
Efficiency class: IE3

*CARACTÉRISTIQUE*
*Classe de rendement: IE3*

**CARATTERISTICHE**
**Classe di efficienza: IE3**

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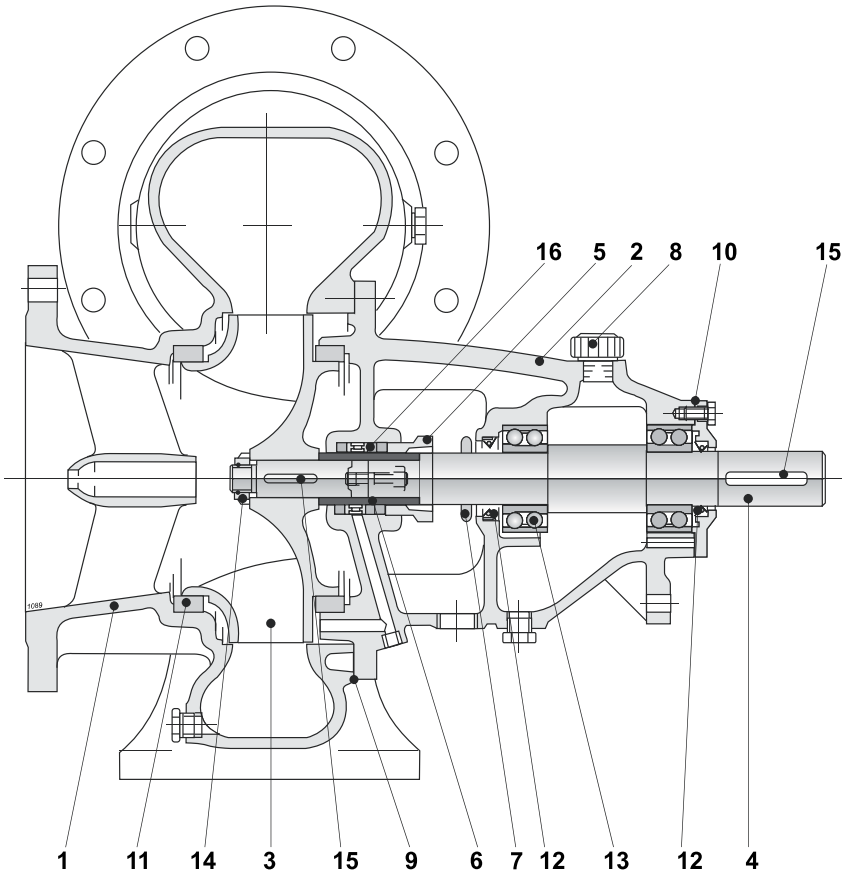
Pump construction and materials
*Construction de la pompe et matériaux*
**Costruzione pompa e materiali**




| Pos. | Parts | Materials | *Nomenclature* | *Matériaux* | **Nomenclatura** | **Materiale** |
|---|---|---|---|---|---|---|
| 1 | Delivery casing | Cast iron | *Corps de refoulement* | *Fonte grise* | **Corpo mandata** | **Ghisa grigia** |
| 2 | Bearing support | Cast iron | *Support de roulement* | *Fonte grise* | **Supporto cuscinetto** | **Ghisa grigia** |
| 3 | Impeller | Cast iron | *Roue* | *Fonte grise* | **Girante** | **Ghisa grigia** |
| 4 | Pump shaft | Treated steel | *Arbre de pompe* | *Acier traité* | **Albero pompa** | **Acciaio** |
| 5 | Stuffing box | Cast iron | *Presse-étoupe* | *Fonte grise* | **Premitreccia** | **Ghisa grigia** |
| 6 | Shaft sleeve | Steel | *Entretoise d'arbre* | *Acier* | **Bussola albero** | **Acciaio** |
| 7 | Water retainer | Rubber | *Bague déflecteur* | *Caoutchouc* | **Para acqua** | **Gomma** |
| 8 | Oil plug | Aluminium/rubber | *Bouchon d'huile* | *Aluminium/caoutchouc* | **Tappo olio** | **Alluminio/gomma** |
| 9 | Gasket for suction cover | Impregnated plastic material | *Joint de la piece d'aspiration* | *Mat. plastique imprégnée* | **Guarnizione corpo pompa** | **Mat. plastico impregnato** |
| 10 | Gasket for flange | Impregnated plastic material | *Joint de la bride* | *Mat. plastique imprégnée* | **Guarnizione flangia** | **Mat. plastico impregnato** |
| 11 | Wear ring | Cast iron | *Bague d'usure* | *Fonte grise* | **Anello sede girante** | **Ghisa grigia** |
| 12 | Seal ring | Rubber | *Bague d'étanchéité* | *Caoutchouc* | **Anello di tenuta** | **Gomma** |
| 13 | Ball bearing | - | *Roulement* | - | **Cuscinetto** | **-** |
| 14 | Threaded locking ring | Steel | *Collier de serrage* | *Acier* | **Ghiera** | **Acciaio** |
| 15 | Feather key | Steel | *Languette* | *Acier* | **Linguetta** | **Acciaio** |
| 16 | Packing | Graphited cord | *Garniture à tresse* | *Tresse graphitée* | **Baderna** | **Treccia grafitata** |

Screws and nuts in stainless steel. *Vis et écrous en acier inox.* **Viti e dadi in acciaio inox.**

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# BHR 200

Operating data
*Caracteristiques de fonctionnement*
**Caratteristiche di funzionamento**

| Type *Type* **Tipo** | DNa x DNm **[mm]** | Impeller trimming *Rognane roue* **Riduzione giranti** | Capacity *Debit* **Portata** | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **[l/m]** | 0 | 1800 | 2100 | 2400 | 2700 | 3000 | 3600 | 4200 | 4800 | 5400 | 6000 | 6600 | 7200 | 7800 | 8400 | 9000 |
| | | | **[m³/h]** | 0 | 108 | 126 | 144 | 162 | 180 | 216 | 252 | 288 | 324 | 360 | 396 | 432 | 468 | 504 | 540 |
| | | | **[l/s]** | 0 | 30 | 35 | 40 | 45 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 |
| Operating data at 950 r.p.m. - *Caractéristiques à 950 t/min* - **Prestazioni a 950 giri/minuto** | | | | | | | | | | | | | | | | | | | |
| **BHR200** | 200x200 | D | **H** | **6** | **5,5** | **5,4** | **5,4** | **5,3** | **5,2** | **4,9** | **4,3** | **3,4** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| | | | P | - | 2,6 | 2,8 | 3 | 3,2 | 3,4 | 3,7 | 3,9 | 4 | - | - | - | - | - | - | - |
| **BHR200** | 200x200 | C | **H** | **6,5** | **6,1** | **6** | **6** | **5,9** | **5,8** | **5,5** | **4,9** | **3,9** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| | | | P | - | 2,9 | 3,1 | 3,3 | 3,5 | 3,7 | 4,1 | 4,3 | 4,4 | - | - | - | - | - | - | - |
| **BHR200** | 200x200 | B | **H** | **7,4** | **6,9** | **6,9** | **6,9** | **6,8** | **6,7** | **6,4** | **5,9** | **5,1** | **4** | **-** | **-** | **-** | **-** | **-** | **-** |
| | | | P | - | 3,4 | 3,6 | 3,9 | 4,1 | 4,4 | 4,8 | 5,2 | 5,4 | 5,5 | - | - | - | - | - | - |
| **BHR200** | 200x200 | A | **H** | **8** | **7,6** | **7,6** | **7,7** | **7,6** | **7,5** | **7,2** | **6,7** | **5,8** | **4,6** | **-** | **-** | **-** | **-** | **-** | **-** |
| | | | P | - | 4 | 4,2 | 4,5 | 4,7 | 5 | 5,4 | 5,8 | 6,1 | 6,2 | - | - | - | - | - | - |
| NPSH | | | **[m]** | - | 3,1 | 3,1 | 3,1 | 3,1 | 3,1 | 3,1 | 3,2 | 3,2 | 3,4 | - | - | - | - | - | - |
| M.E.I. ≥ 0.40 | | | | | | | | | | | | | | | | | | | |
| Operating data at 1140 r.p.m. - *Caractéristiques à 1140 t/min* - **Prestazioni a 1140 giri/minuto** | | | | | | | | | | | | | | | | | | | |
| **BHR200** | 200x200 | D | **H** | **8,6** | **-** | **8** | **7,9** | **7,8** | **7,8** | **7,5** | **7,1** | **6,5** | **5,6** | **4,2** | **-** | **-** | **-** | **-** | **-** |
| | | | P | - | - | 4,5 | 4,8 | 5 | 5,3 | 5,8 | 6,3 | 6,7 | 6,9 | 6,9 | - | - | - | - | - |
| **BHR200** | 200x200 | C | **H** | **9,4** | **-** | **8,7** | **8,7** | **8,6** | **8,6** | **8,3** | **8** | **7,4** | **6,4** | **5,2** | **-** | **-** | **-** | **-** | **-** |
| | | | P | - | - | 4,9 | 5,2 | 5,5 | 5,8 | 6,4 | 6,9 | 7,4 | 7,6 | 7,7 | - | - | - | - | - |
| **BHR200** | 200x200 | B | **H** | **10,6** | **-** | **10** | **10** | **9,9** | **9,9** | **9,8** | **9,4** | **8,9** | **8,1** | **6,9** | **5,5** | **-** | **-** | **-** | **-** |
| | | | P | - | - | 5,7 | 6,1 | 6,4 | 6,8 | 7,6 | 8,2 | 8,8 | 9,2 | 9,4 | 9,5 | - | - | - | - |
| **BHR200** | 200x200 | A | **H** | **11,5** | **-** | **11** | **11** | **11** | **11** | **10,8** | **10,5** | **9,9** | **9,1** | **7,8** | **6,4** | **-** | **-** | **-** | **-** |
| | | | P | - | - | 6,7 | 7,1 | 7,4 | 7,8 | 8,6 | 9,3 | 9,8 | 10,3 | 10,6 | 10,7 | - | - | - | - |
| NPSH | | | **[m]** | - | - | 2,9 | 2,9 | 2,9 | 2,9 | 2,9 | 2,9 | 3 | 3,1 | 3,2 | 3,4 | - | - | - | - |
| M.E.I. ≥ 0.40 | | | | | | | | | | | | | | | | | | | |
| Operating data at 1450 r.p.m. - *Caractéristiques à 1450 t/min* - **Prestazioni a 1450 giri/minuto** | | | | | | | | | | | | | | | | | | | |
| **BHR200** | 200x200 | D | **H** | **13,8** | **-** | **-** | **-** | **-** | **-** | **12,7** | **12,5** | **12,1** | **11,5** | **10,6** | **9,5** | **8,2** | **-** | **-** | **-** |
| | | | P | - | - | - | - | - | - | 11,2 | 12,1 | 12,9 | 13,5 | 14,1 | 14,4 | 14,8 | - | - | - |
| **BHR200** | 200x200 | C | **H** | **15,1** | **-** | **-** | **-** | **-** | **-** | **13,9** | **13,7** | **13,2** | **12,6** | **11,7** | **10,5** | **9,2** | **-** | **-** | **-** |
| | | | P | - | - | - | - | - | - | 12,1 | 12,9 | 13,7 | 14,4 | 14,9 | 15,3 | 15,6 | - | - | - |
| **BHR200** | 200x200 | B | **H** | **16,9** | **-** | **-** | **-** | **-** | **-** | **15,9** | **15,8** | **15,5** | **15** | **14,1** | **13** | **11,8** | **10,3** | **-** | **-** |
| | | | P | - | - | - | - | - | - | 13,8 | 14,9 | 15,9 | 16,7 | 17,5 | 18 | 18,5 | 18,8 | - | - |
| **BHR200** | 200x200 | A | **H** | **18,7** | **-** | **-** | **-** | **-** | **-** | **17,6** | **17,7** | **17,5** | **17** | **16,2** | **15** | **13,6** | **12** | **-** | **-** |
| | | | P | - | - | - | - | - | - | 15,4 | 16,7 | 18 | 19,1 | 20 | 20,6 | 21,1 | 21,5 | - | - |
| NPSH | | | **[m]** | - | - | - | - | - | - | 2,8 | 3 | 3,2 | 3,4 | 3,7 | 4,1 | 4,6 | 5,5 | - | - |
| M.E.I. ≥ 0.40 | | | | | | | | | | | | | | | | | | | |
| Operating data at 1600 r.p.m. - *Caractéristiques à 1600 t/min* - **Prestazioni a 1600 giri/minuto** | | | | | | | | | | | | | | | | | | | |
| **BHR200** | 200x200 | D | **H** | **16,8** | **-** | **-** | **-** | **-** | **-** | **15,6** | **15,5** | **15,3** | **14,8** | **14,1** | **13,1** | **11,8** | **10,3** | **-** | **-** |
| | | | P | - | - | - | - | - | - | 13,9 | 15,2 | 16,4 | 17,4 | 18,2 | 18,8 | 19,3 | 19,6 | - | - |
| **BHR200** | 200x200 | C | **H** | **18,5** | **-** | **-** | **-** | **-** | **-** | **17** | **16,9** | **16,6** | **16,1** | **15,2** | **14,2** | **12,9** | **11,5** | **-** | **-** |
| | | | P | - | - | - | - | - | - | 15,3 | 16,5 | 17,7 | 18,7 | 19,5 | 20,1 | 20,5 | 20,8 | - | - |
| **BHR200** | 200x200 | B | **H** | **20,7** | **-** | **-** | **-** | **-** | **-** | **-** | **19,3** | **19,1** | **18,8** | **18,2** | **17,2** | **16,1** | **14,7** | **13,1** | **11,3** |
| | | | P | - | - | - | - | - | - | - | 19,2 | 20,5 | 21,7 | 22,9 | 23,9 | 24,7 | 25,2 | 25,4 | 25,4 |
| **BHR200** | 200x200 | A | **H** | **22,7** | **-** | **-** | **-** | **-** | **-** | **-** | **21,6** | **21,5** | **21,2** | **20,6** | **19,7** | **18,5** | **17,1** | **15,4** | **13,4** |
| | | | P | - | - | - | - | - | - | - | 22 | 23,4 | 24,7 | 26 | 27,2 | 28,2 | 28,8 | 29,1 | 29 |
| NPSH | | | **[m]** | - | - | - | - | - | - | 3,6 | 3,7 | 3,9 | 4,2 | 4,4 | 4,7 | 5,1 | 5,5 | 6,1 | 6,8 |
| M.E.I. ≥ 0.40 | | | | | | | | | | | | | | | | | | | |
| Operating data at 1750 r.p.m. - *Caractéristiques à 1750 t/min* - **Prestazioni a 1750 giri/minuto** | | | | | | | | | | | | | | | | | | | |
| **BHR200** | 200x200 | D | **H** | **19,9** | **-** | **-** | **-** | **-** | **-** | **-** | **18,4** | **18,2** | **17,7** | **17** | **16** | **14,8** | **13,3** | **-** | **-** |
| | | | P | - | - | - | - | - | - | - | 18,7 | 20,2 | 21,4 | 22,5 | 23,5 | 24,2 | 24,6 | - | - |
| **BHR200** | 200x200 | C | **H** | **22** | **-** | **-** | **-** | **-** | **-** | **-** | **20,1** | **19,9** | **19,5** | **18,8** | **17,8** | **16,6** | **14,9** | **12,9** | **-** |
| | | | P | - | - | - | - | - | - | - | 20,4 | 22 | 23,4 | 24,6 | 25,5 | 26,1 | 26,5 | 26,6 | - |
| **BHR200** | 200x200 | B | **H** | **24,5** | **-** | **-** | **-** | **-** | **-** | **-** | **22,7** | **22,5** | **22,3** | **21,8** | **21,1** | **20,1** | **18,7** | **16,8** | **14,5** |
| | | | P | - | - | - | - | - | - | - | 23,3 | 25,1 | 26,8 | 28,3 | 29,6 | 30,7 | 31,5 | 31,9 | 32 |
| **BHR200** | 200x200 | A | **H** | **27,1** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **25,4** | **25,1** | **24,7** | **24,1** | **23,1** | **21,8** | **19,9** | **17,4** |
| | | | P | - | - | - | - | - | - | - | - | 28,9 | 30,7 | 32,3 | 33,7 | 34,9 | 35,8 | 36,4 | 36,6 |
| NPSH | | | **[m]** | - | - | - | - | - | - | - | 3 | 3,5 | 4 | 4,4 | 4,9 | 5,5 | 6 | 6,7 | 7,4 |
| M.E.I. ≥ 0.40 | | | | | | | | | | | | | | | | | | | |

H = Total manometric head at the bowl assembly in [m]
P = Power absorbed by the bowl assembly in [kW]

*H = Hauteur manométrique totale au corps de pompe en [m]}*
*P = Puissance absorbée par le corps de pompe en [kW]*

**H = Prevalenza manometrica totale al corpo pompa in [m]}**
**P = Potenza assorbita dal corpo pompa in [kW]**

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# BHR 250

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**Operating data**
*Caracteristiques de fonctionnement*
Caratteristiche di funzionamento

| Type *Type* **Tipo** | DNa x DNm **[mm]** | Impeller trimming *Rognane roue* **Riduzione giranti** | Capacity *Debit* **Portata** | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **[l/m]** | 0 | 4200 | 4800 | 5400 | 6000 | 6600 | 7200 | 7800 | 8400 | 9000 | 9600 | 10200 | 10800 | 11400 | 12000 | 13500 | 15000 | 16500 | 18000 |
| | | | **[m³/h]** | 0 | 252 | 288 | 324 | 360 | 396 | 432 | 468 | 504 | 540 | 576 | 612 | 648 | 684 | 720 | 810 | 900 | 990 | 1080 |
| | | | **[l/s]** | 0 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 | 225 | 250 | 275 | 300 |
| Operating data at 950 r.p.m. - *Caractéristiques à 950 t/min* - **Prestazioni a 950 giri/minuto** | | | | | | | | | | | | | | | | | | | | | | | |
| **BHR250** | 250x250 | D | **H** | **6,7** | **4,9** | **4,7** | **4,4** | **4** | **3,6** | **3** | **2,4** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| | | | P | - | 5,1 | 5,2 | 5,2 | 5,1 | 5 | 4,8 | 4,5 | - | - | - | - | - | - | - | - | - | - | - |
| **BHR250** | 250x250 | C | **H** | **7,2** | **5,5** | **5,4** | **5,2** | **4,9** | **4,4** | **3,9** | **3,2** | **2,5** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| | | | P | - | 5,7 | 5,9 | 6 | 6 | 5,9 | 5,8 | 5,5 | 5 | - | - | - | - | - | - | - | - | - | - |
| **BHR250** | 250x250 | B | **H** | **7,5** | **6,1** | **5,9** | **5,8** | **5,5** | **5** | **4,5** | **3,9** | **3,2** | **2,4** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| | | | P | - | 6,2 | 6,5 | 6,6 | 6,7 | 6,6 | 6,5 | 6,2 | 5,9 | 5,4 | - | - | - | - | - | - | - | - | - |
| **BHR250** | 250x250 | A | **H** | **7,7** | **6,5** | **6,4** | **6,3** | **6** | **5,7** | **5,3** | **4,7** | **4,1** | **3,3** | **2,4** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| | | | P | - | 6,7 | 7 | 7,3 | 6 | 7,5 | 7,5 | 7,3 | 7,1 | 6,6 | 6 | - | - | - | - | - | - | - | - |
| | NPSH | | **[m]** | - | 3,6 | 3,6 | 3,6 | 3,6 | 3,7 | 3,7 | 3,8 | 3,8 | 3,9 | 4,1 | - | - | - | - | - | - | - | - |
| M.E.I. ≥ 0.40 | | | | | | | | | | | | | | | | | | | | | | |
| Operating data at 1140 r.p.m. - *Caractéristiques à 1140 t/min* - **Prestazioni a 1140 giri/minuto** | | | | | | | | | | | | | | | | | | | | | | | |
| **BHR250** | 250x250 | D | **H** | **9,6** | **-** | **7** | **6,9** | **6,7** | **6,3** | **5,9** | **5,3** | **4,6** | **3,9** | **3,1** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| | | | P | - | - | 8,6 | 8,9 | 9,1 | 9,1 | 8,9 | 8,7 | 8,3 | 7,9 | 7,5 | - | - | - | - | - | - | - | - |
| **BHR250** | 250x250 | C | **H** | **10,4** | **-** | **8,1** | **8** | **7,8** | **7,5** | **7,1** | **6,6** | **5,9** | **5,2** | **4,4** | **3,5** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| | | | P | - | - | 9,8 | 10,1 | 10,4 | 10,5 | 10,5 | 10,4 | 10,1 | 9,7 | 9,3 | 8,7 | - | - | - | - | - | - | - |
| **BHR250** | 250x250 | B | **H** | **10,7** | **-** | **8,7** | **8,7** | **8,5** | **8,2** | **7,8** | **7,4** | **6,8** | **6,2** | **5,4** | **4,6** | **3,7** | **-** | **-** | **-** | **-** | **-** | **-** |
| | | | P | - | - | 10,7 | 11 | 11,3 | 11,5 | 11,6 | 11,5 | 11,4 | 11,1 | 10,8 | 10,4 | 9,7 | - | - | - | - | - | - |
| **BHR250** | 250x250 | A | **H** | **11,3** | **-** | **9,4** | **9,4** | **9,3** | **9,1** | **8,8** | **8,3** | **7,8** | **7,2** | **6,5** | **5,7** | **4,9** | **4** | **-** | **-** | **-** | **-** | **-** |
| | | | P | - | - | 11,8 | 12,2 | 12,5 | 12,8 | 12,9 | 13 | 13 | 12,8 | 12,6 | 12,3 | 11,8 | 11,2 | - | - | - | - | - |
| | NPSH | | **[m]** | - | - | 3,6 | 3,6 | 3,6 | 3,6 | 3,6 | 3,6 | 3,6 | 3,7 | 3,7 | 3,8 | 3,9 | - | - | - | - | - | - |
| M.E.I. ≥ 0.40 | | | | | | | | | | | | | | | | | | | | | | |
| Operating data at 1450 r.p.m. - *Caractéristiques à 1450 t/min* - **Prestazioni a 1450 giri/minuto** | | | | | | | | | | | | | | | | | | | | | | | |
| **BHR250** | 250x250 | D | **H** | **15,7** | **-** | **-** | **-** | **-** | **-** | **11,1** | **10,9** | **10,5** | **10** | **9,4** | **8,6** | **7,8** | **6,9** | **5,9** | **-** | **-** | **-** | **-** |
| | | | P | - | - | - | - | - | - | 19 | 19 | 18,9 | 18,8 | 18,6 | 18,3 | 17,9 | 17,2 | 16,4 | - | - | - | - |
| **BHR250** | 250x250 | C | **H** | **16,1** | **-** | **-** | **-** | **-** | **-** | **12,7** | **12,6** | **12,3** | **11,7** | **11** | **10,3** | **9,5** | **8,6** | **7,7** | **-** | **-** | **-** | **-** |
| | | | P | - | - | - | - | - | - | 21,8 | 21,7 | 21,7 | 21,6 | 21,5 | 21,3 | 21 | 20,5 | 19,9 | - | - | - | - |
| **BHR250** | 250x250 | B | **H** | **16,8** | **-** | **-** | **-** | **-** | **-** | **13,8** | **13,7** | **13,4** | **13** | **12,5** | **11,8** | **11,1** | **10,2** | **9,3** | **6,5** | **-** | **-** | **-** |
| | | | P | - | - | - | - | - | - | 23,8 | 23,8 | 23,8 | 23,9 | 23,9 | 23,9 | 23,8 | 23,6 | 23,1 | 21 | - | - | - |
| **BHR250** | 250x250 | A | **H** | **17,9** | **-** | **-** | **-** | **-** | **-** | **14,8** | **14,6** | **14,4** | **14** | **13,6** | **13** | **12,4** | **11,6** | **10,8** | **8,2** | **-** | **-** | **-** |
| | | | P | - | - | - | - | - | - | 25,7 | 25,9 | 26 | 26,1 | 26,2 | 26,2 | 26,2 | 26,1 | 25,9 | 24,7 | - | - | - |
| | NPSH | | **[m]** | - | - | - | - | - | - | 3,7 | 3,7 | 3,7 | 3,7 | 3,7 | 3,8 | 3,9 | 4 | 4,2 | 4,8 | - | - | - |
| M.E.I. ≥ 0.40 | | | | | | | | | | | | | | | | | | | | | | |
| Operating data at 1600 r.p.m. - *Caractéristiques à 1600 t/min* - **Prestazioni a 1600 giri/minuto** | | | | | | | | | | | | | | | | | | | | | | | |
| **BHR250** | 250x250 | D | **H** | **19** | **-** | **-** | **-** | **-** | **-** | **13,8** | **13,7** | **13,4** | **13** | **12,5** | **11,9** | **11,1** | **10,2** | **9,3** | **6,7** | **-** | **-** | **-** |
| | | | P | - | - | - | - | - | - | 25,6 | 25,7 | 25,7 | 25,6 | 25,5 | 25,2 | 24,8 | 24,3 | 23,7 | 21,7 | - | - | - |
| **BHR250** | 250x250 | C | **H** | **19,6** | **-** | **-** | **-** | **-** | **-** | **15,6** | **15,6** | **15,4** | **15,1** | **14,6** | **14** | **13,3** | **12,4** | **11,5** | **8,9** | **-** | **-** | **-** |
| | | | P | - | - | - | - | - | - | 29 | 29,2 | 29,3 | 29,4 | 29,3 | 29,2 | 28,9 | 28,6 | 28,1 | 26,3 | - | - | - |
| **BHR250** | 250x250 | B | **H** | **20,6** | **-** | **-** | **-** | **-** | **-** | **16,8** | **16,8** | **16,7** | **16,4** | **16** | **15,5** | **14,9** | **14,2** | **13,4** | **10,9** | **7,8** | **-** | **-** |
| | | | P | - | - | - | - | - | - | 31,7 | 31,9 | 32 | 32,1 | 32,2 | 32,2 | 32,3 | 32,2 | 32 | 30,6 | 28,4 | - | - |
| **BHR250** | 250x250 | A | **H** | **21,7** | **-** | **-** | **-** | **-** | **-** | **18** | **17,9** | **17,8** | **17,6** | **17,3** | **16,9** | **16,4** | **15,8** | **15** | **12,8** | **9,9** | **-** | **-** |
| | | | P | - | - | - | - | - | - | 33,9 | 34,2 | 34,5 | 34,9 | 35,2 | 35,4 | 35,6 | 35,7 | 35,6 | 35 | 33,3 | - | - |
| | NPSH | | **[m]** | - | - | - | - | - | - | 4,5 | 4,4 | 4,3 | 4,3 | 4,3 | 4,3 | 4,4 | 4,5 | 4,7 | 5,3 | 6,2 | - | - |
| M.E.I. ≥ 0.40 | | | | | | | | | | | | | | | | | | | | | | |
| Operating data at 1750 r.p.m. - *Caractéristiques à 1750 t/min* - **Prestazioni a 1750 giri/minuto** | | | | | | | | | | | | | | | | | | | | | | | |
| **BHR250** | 250x250 | D | **H** | **22** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **15,8** | **15,7** | **15,4** | **14,9** | **14,2** | **13,5** | **12,6** | **10,2** | **7,3** | **-** | **-** |
| | | | P | - | - | - | - | - | - | - | - | 32,5 | 32,6 | 32,7 | 32,6 | 32,4 | 32 | 31,6 | 29,8 | 27,1 | - | - |
| **BHR250** | 250x250 | C | **H** | **23,3** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **18** | **17,9** | **17,6** | **17,1** | **16,5** | **15,8** | **15,1** | **12,8** | **9,9** | **-** | **-** |
| | | | P | - | - | - | - | - | - | - | - | 37,2 | 37,4 | 37,5 | 37,6 | 37,6 | 37,5 | 37,3 | 35,9 | 33 | - | - |
| **BHR250** | 250x250 | B | **H** | **24,6** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **19,8** | **19,6** | **19,3** | **18,9** | **18,4** | **17,8** | **17,1** | **15** | **12,3** | **9,1** | **-** |
| | | | P | - | - | - | - | - | - | - | - | 41,3 | 41,6 | 41,8 | 42 | 42,2 | 42,2 | 42,1 | 41,2 | 38,9 | 35,2 | - |
| **BHR250** | 250x250 | A | **H** | **26,7** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **21,2** | **21,1** | **20,9** | **20,5** | **20,1** | **19,6** | **19** | **17,3** | **14,8** | **11,8** | **8,5** |
| | | | P | - | - | - | - | - | - | - | - | 45 | 45,4 | 45,7 | 46,1 | 46,3 | 46,5 | 46,6 | 46,4 | 45,1 | 42,6 | 38,3 |
| | NPSH | | **[m]** | - | - | - | - | - | - | - | - | 4,9 | 4,8 | 4,8 | 4,8 | 4,8 | 4,9 | 5,1 | 5,6 | 6,5 | 7,8 | 9,5 |
| M.E.I. ≥ 0.40 | | | | | | | | | | | | | | | | | | | | | | |

H = Total manometric head at the bowl assembly in [m]
P = Power absorbed by the bowl assembly in [kW]

*H = Hauteur manométrique totale au corps de pompe en [m]}*
*P = Puissance absorbée par le corps de pompe en [kW]*

**H = Prevalenza manometrica totale al corpo pompa in [m]}**
**P = Potenza assorbita dal corpo pompa in [kW]**

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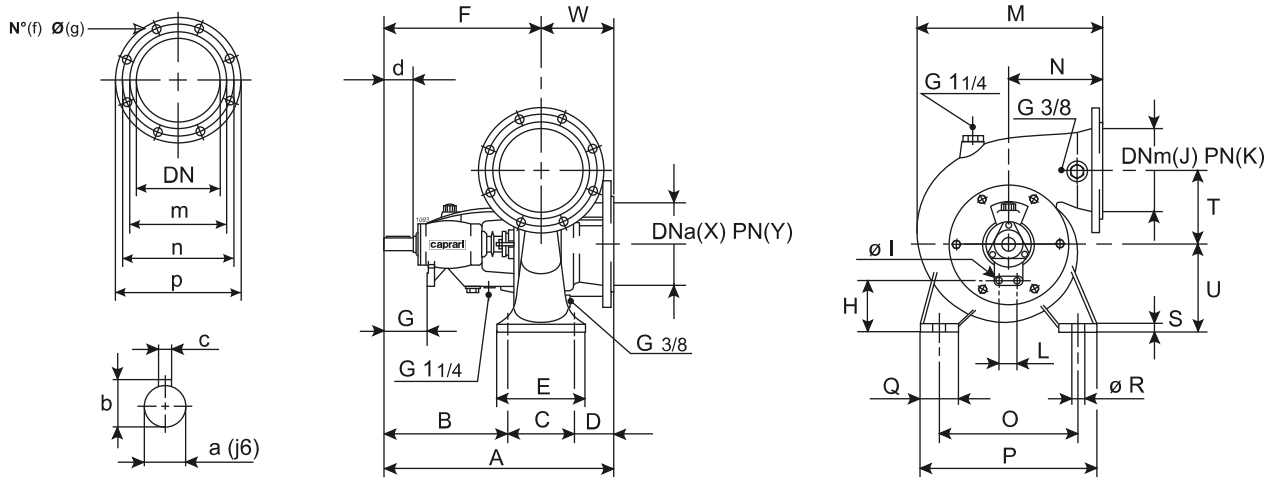
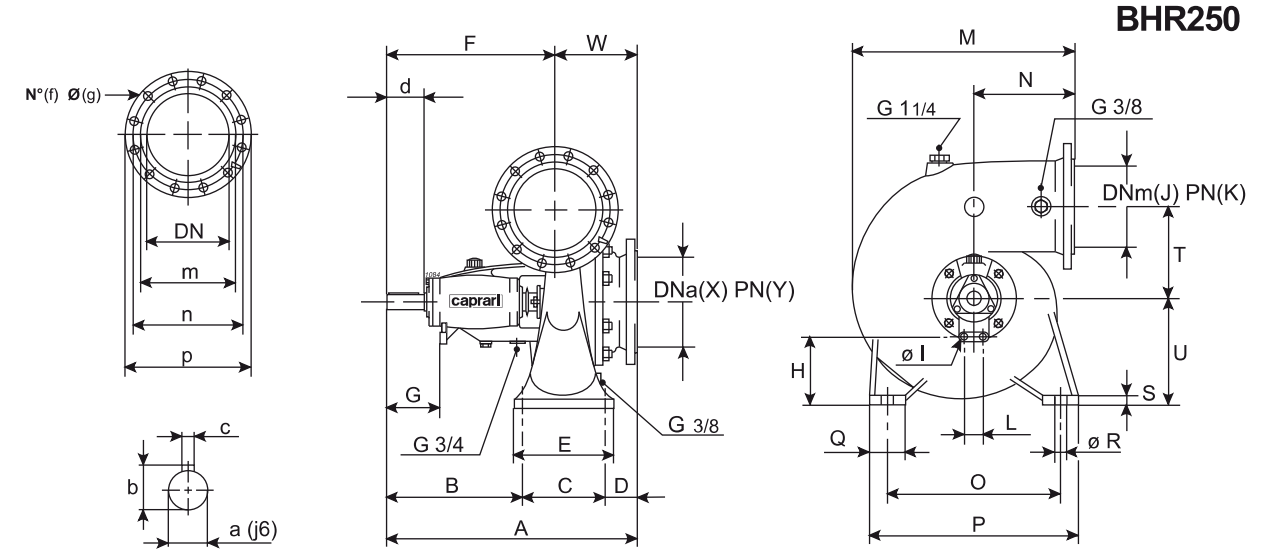
# BHR

Overall dimensions and weights
*Dimensions d'encombrement et poids*
**Dimensioni di ingombro e pesi**

## BHR200




## BHR250




| Type *Type* **Tipo** | Weight *Poids* **Peso** | DN | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | W | X | Y | f | g | m | n | p |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [kg] | [mm] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BHR200 | 117 | 200 | 590 | 320 | 180 | 90 | 220 | 410 | 115 | 135 | 11,5 | 200 | 6 | 70 | 465 | 230 | 350 | 450 | 100 | 19 | 20 | 190 | 225 | 180 | 200 | 6 | 8 | 18 | 250 | 280 | 320 |
| BHR250 | 230 | 250 | 735 | 395 | 250 | 90 | 300 | 500 | 155 | 210 | 11,5 | 250 | 6 | 70 | 657 | 300 | 500 | 608 | 100 | 25 | 25 | 270 | 320 | 235 | 250 | 6 | 12 | 18 | 300 | 335 | 375 |

Shaft projection
*Saille d'arbre*
**Sporgenza d'albero**

| Type *Type* **Tipo** | a | b | c | d |
|---|---|---|---|---|
| | [mm] | | | |
| BHR200 | 38 | 41 | 10 | 80 |
| BHR250 | 48 | 51,5 | 14 | 110 |

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# BHR

## 4 ÷ 6 Poles

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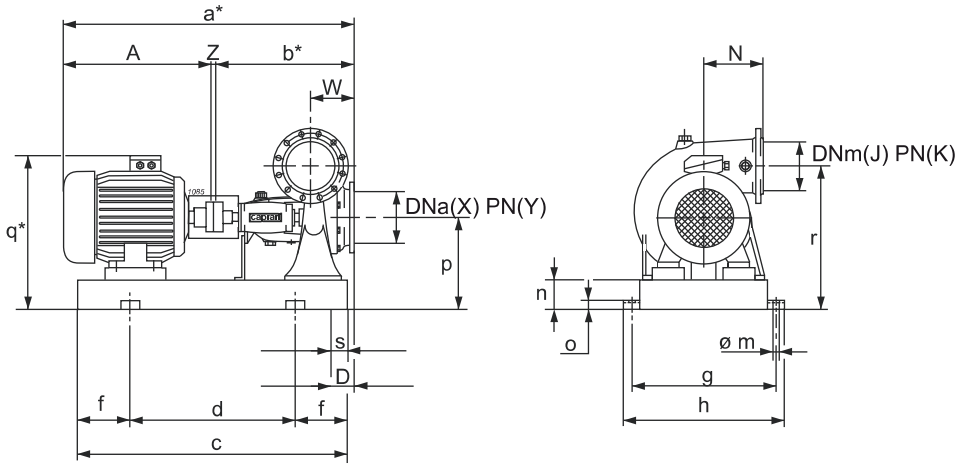
**Selection - dimensions and weights for base mounted electric pumps**
*Sélection - dimensions et poids des électropompes sur socle*
Selezione - dimensioni e pesi elettropompe su base

COUPLINGS WITH STANDARDIZED ENCLOSED ELECTRIC MOTORS
*ACCOUPLEMENTS AVEC MOTEURS ÉLECTRIQUES FERMÉS NORMALISÉS*
**ACCOPPIAMENTI CON MOTORI ELETTRICI CHIUSI NORMALIZZATI**




*** Valori indicativi in funzione della marca di motore utilizzato**
*Indicatives values according to the type of motor installed*

4 POLES
*4 PôLES*
**4 POLI**

| Pump *Pompe* **Pompa** | Motor *Moteur* **Motore** | | BGA | Weight *Poids* **Peso** | A | D | J | K | N | W | X | Y | Z | a* | b* | c | d | f | g | h | m | n | o | p | q* | r | s |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type *Type* **Tipo** | **[kW]** | Size *Taille* **Grand.** | Type *Type* **Tipo** | **[kg]** | **[mm]** | | | | | | | | | | | | | | | | | | | | | | |
| BHR200 | 15 | 160L | 328/4G | 325 | 652 | 90 | 200 | 6 | 230 | 180 | 200 | 6 | 4 | 1246 | 590 | 1081 | 731 | 175 | 530 | 580 | 20 | 100 | 42 | 325 | 590 | 515 | 35 |
| BHR200 | 18,5 | 180M | 317/4G | 362 | 650 | 90 | 200 | 6 | 230 | 180 | 200 | 6 | 4 | 1244 | 590 | 1071 | 671 | 200 | 530 | 580 | 20 | 100 | 42 | 325 | 605 | 515 | 35 |
| BHR200 | 22 | 180L | 320/4G | 378 | 710 | 90 | 200 | 6 | 230 | 180 | 200 | 6 | 4 | 1304 | 590 | 1109 | 709 | 200 | 530 | 580 | 20 | 100 | 42 | 325 | 605 | 515 | 35 |
| BHR200 | 30 | 200L | 327/5G | 454 | 738 | 90 | 200 | 6 | 230 | 180 | 200 | 6 | 4 | 1332 | 590 | 1147 | 747 | 200 | 530 | 580 | 20 | 100 | 42 | 325 | 635 | 515 | 35 |
| BHR250 | 18,5 | 180M | 329/5K | 508 | 650 | 90 | 250 | 6 | 300 | 235 | 250 | 6 | 4 | 1389 | 735 | 1261 | 761 | 250 | 680 | 730 | 20 | 120 | 42 | 440 | 720 | 710 | 45 |
| BHR250 | 22 | 180L | 316/5K | 527 | 710 | 90 | 250 | 6 | 300 | 235 | 250 | 6 | 4 | 1449 | 735 | 1274 | 774 | 250 | 680 | 730 | 20 | 120 | 42 | 440 | 720 | 710 | 45 |
| BHR250 | 30 | 200L | 315/5K | 585 | 738 | 90 | 250 | 6 | 300 | 235 | 250 | 6 | 4 | 1477 | 735 | 1312 | 812 | 250 | 680 | 730 | 20 | 120 | 42 | 440 | 750 | 710 | 45 |
| BHR250 | 37 | 225S | 319/5K | 639 | 792 | 90 | 250 | 6 | 300 | 235 | 250 | 6 | 4 | 1531 | 735 | 1354 | 854 | 250 | 680 | 730 | 20 | 120 | 42 | 440 | 770 | 710 | 45 |

6 POLES
*6 PôLES*
**6 POLI**

| Pump *Pompe* **Pompa** | Motor *Moteur* **Motore** | | BGA | Weight *Poids* **Peso** | A | D | J | K | N | W | X | Y | Z | a* | b* | c | d | f | g | h | m | n | o | p | q* | r | s |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type *Type* **Tipo** | **[kW]** | Size *Taille* **Grand.** | Type *Type* **Tipo** | **[kg]** | **[mm]** | | | | | | | | | | | | | | | | | | | | | | |
| BHR200 | 4 | 132M | 326/3E | 241 | 516 | 90 | 200 | 6 | 230 | 180 | 200 | 6 | 4 | 1110 | 590 | 946 | 646 | 150 | 530 | 580 | 20 | 100 | 42 | 325 | 548 | 515 | 35 |
| BHR200 | 5,5 | 132M | 326/3E | 245 | 516 | 90 | 200 | 6 | 230 | 180 | 200 | 6 | 4 | 1110 | 590 | 946 | 646 | 150 | 530 | 580 | 20 | 100 | 42 | 325 | 548 | 515 | 35 |
| BHR200 | 7,5 | 160M | 322/3G | 307 | 608 | 90 | 200 | 6 | 230 | 180 | 200 | 6 | 4 | 1202 | 590 | 1027 | 677 | 175 | 530 | 580 | 20 | 100 | 42 | 325 | 590 | 515 | 35 |
| BHR200 | 11 | 160L | 328/4G | 316 | 652 | 90 | 200 | 6 | 230 | 180 | 200 | 6 | 4 | 1246 | 590 | 1081 | 731 | 175 | 530 | 580 | 20 | 100 | 42 | 325 | 590 | 515 | 35 |
| BHR200 | 15 | 180L | 320/4G | 368 | 710 | 90 | 200 | 6 | 230 | 180 | 200 | 6 | 4 | 1304 | 590 | 1109 | 709 | 200 | 530 | 580 | 20 | 100 | 42 | 325 | 605 | 515 | 35 |
| BHR250 | 5,5 | 132M | 330/3I | 386 | 516 | 90 | 250 | 6 | 300 | 235 | 250 | 6 | 4 | 1255 | 735 | 1101 | 701 | 200 | 680 | 730 | 20 | 120 | 42 | 440 | 663 | 710 | 45 |
| BHR250 | 7,5 | 160M | 321/4K | 446 | 608 | 90 | 250 | 6 | 300 | 235 | 250 | 6 | 4 | 1347 | 735 | 1187 | 687 | 250 | 680 | 730 | 20 | 120 | 42 | 440 | 705 | 710 | 45 |
| BHR250 | 11 | 160L | 314/4K | 452 | 652 | 90 | 250 | 6 | 300 | 235 | 250 | 6 | 4 | 1391 | 735 | 1231 | 731 | 250 | 680 | 730 | 20 | 120 | 42 | 440 | 705 | 710 | 45 |
| BHR250 | 15 | 180L | 316/5K | 517 | 710 | 90 | 250 | 6 | 300 | 235 | 250 | 6 | 4 | 1449 | 735 | 1274 | 774 | 250 | 680 | 730 | 20 | 120 | 42 | 440 | 720 | 710 | 45 |

BGA = Base and coupling
* = Indicatives values according to the type of motor installed.

*BGA = Socle et accouplement*
** = Valeurs indicatives en fonction de la marque du moteur utilisé.*

**BGA = Base e giunto**
*** = Valori indicativi in funzione della marca di motore utilizzato.**

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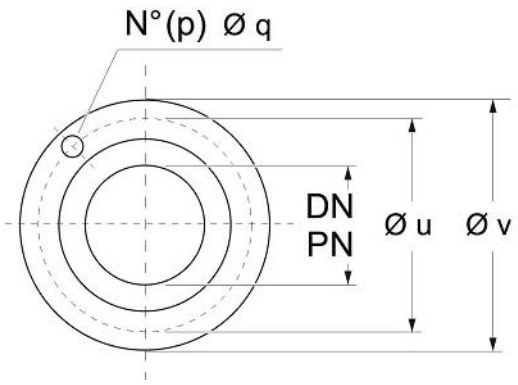
BHR

Flanges (UNI EN 1092-2)
*Brides (UNI EN 1092-2)*
**Flange (UNI EN 1092-2)**




| Port ø<br>*ø Orifice*<br>**ø Bocca** | | Holes<br>*Trous*<br>**Fori** | | **ø u** | **ø v** |
|---|---|---|---|---|---|
| | | **p** | **q** | | |
| **DN**<br>**[mm]** | **PN**<br>**[bar]** | **No** | **ø**<br>**[mm]** | **[mm]** | |
| 200 | 6 | 8 | 18 | 280 | 320 |
| 250 | 6 | 12 | 18 | 335 | 375 |

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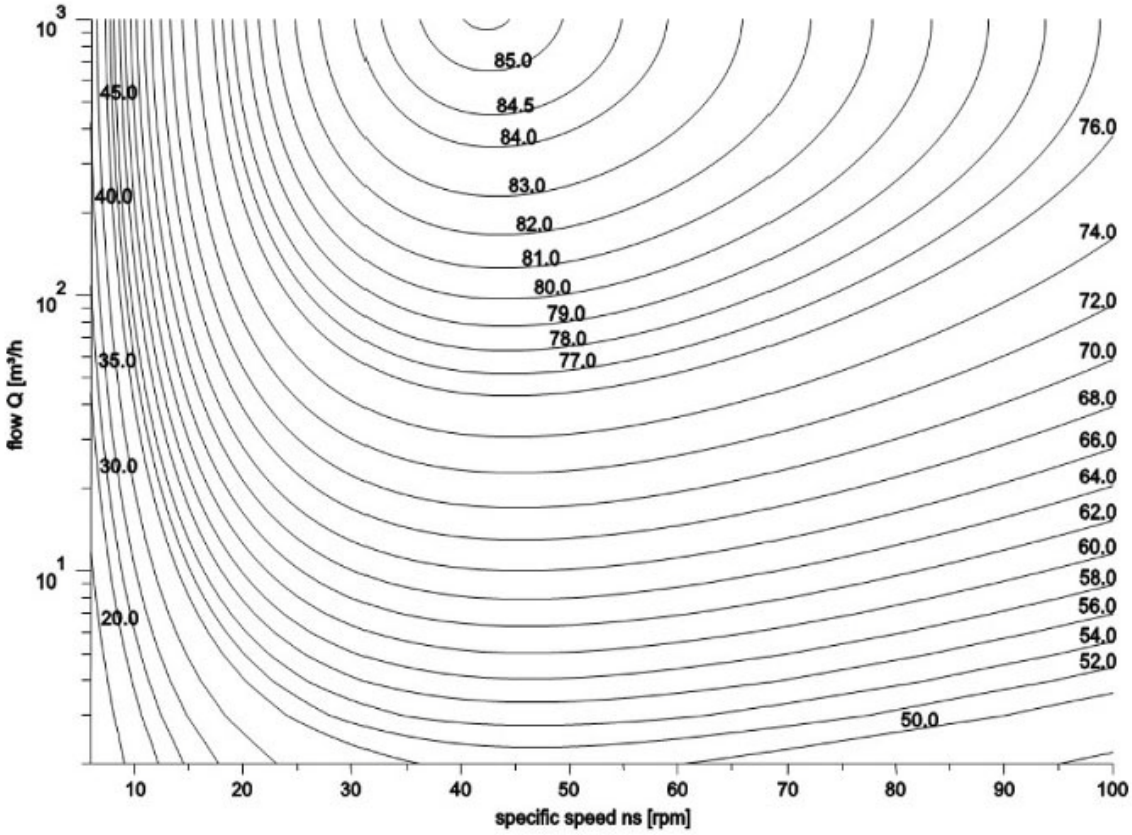
Caprari pumps are coated with WRAS approved paint

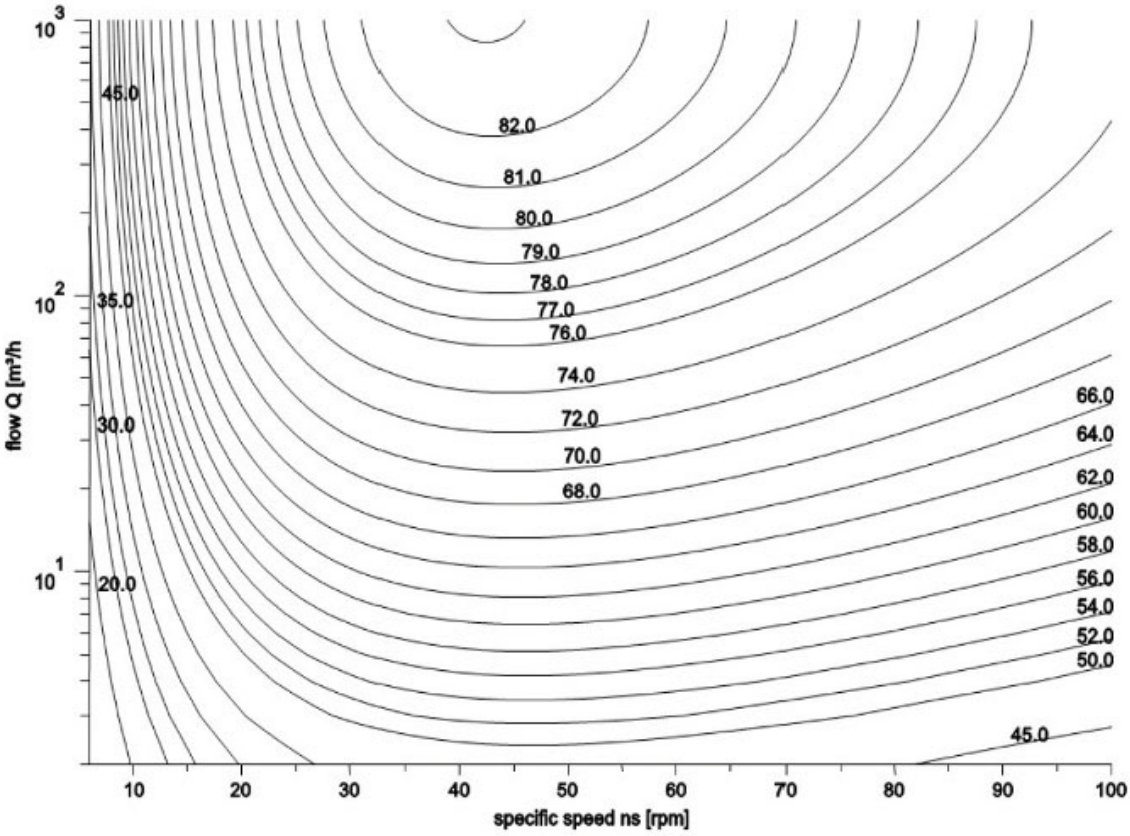
*Les pompes Caprari utilisent des peintures certifiées WRAS.*

**Le pompe Caprari utilizzano vernici certificate WRAS.**

## MEI = 0.4 for ESOB 1450




## MEI = 0.4 for ESOB 2900 rpm

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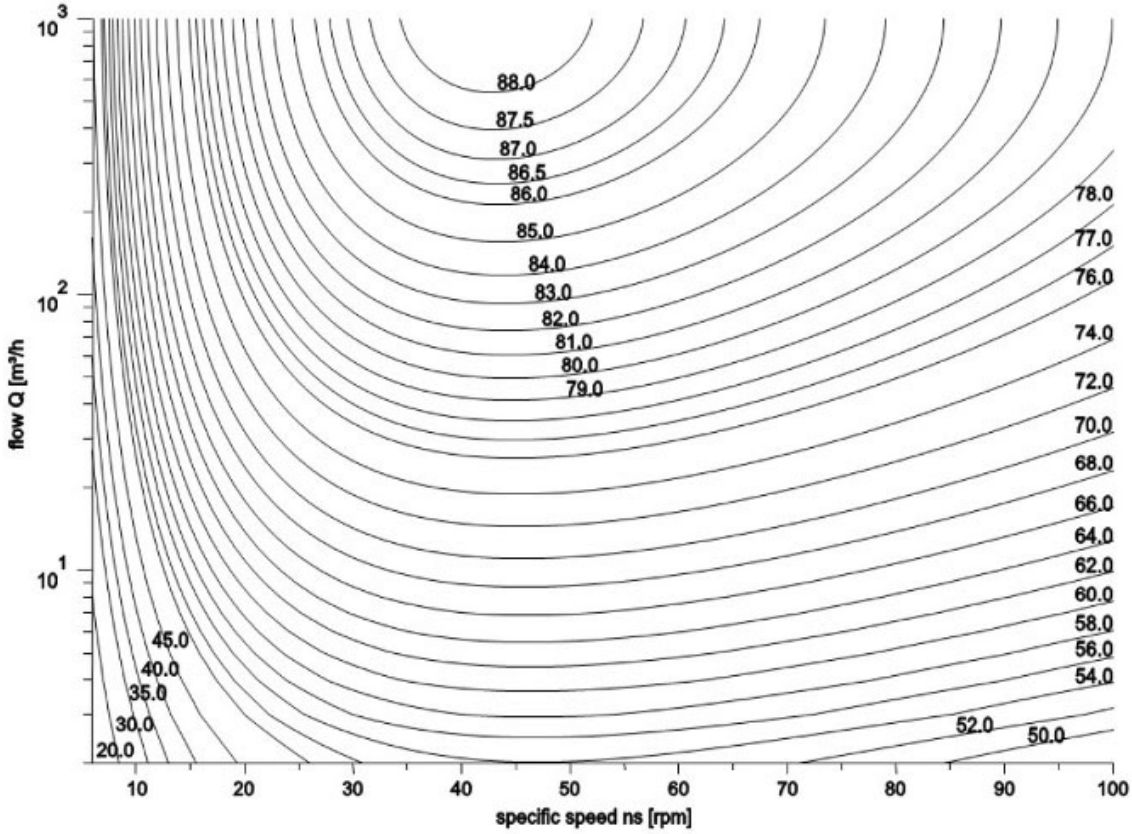
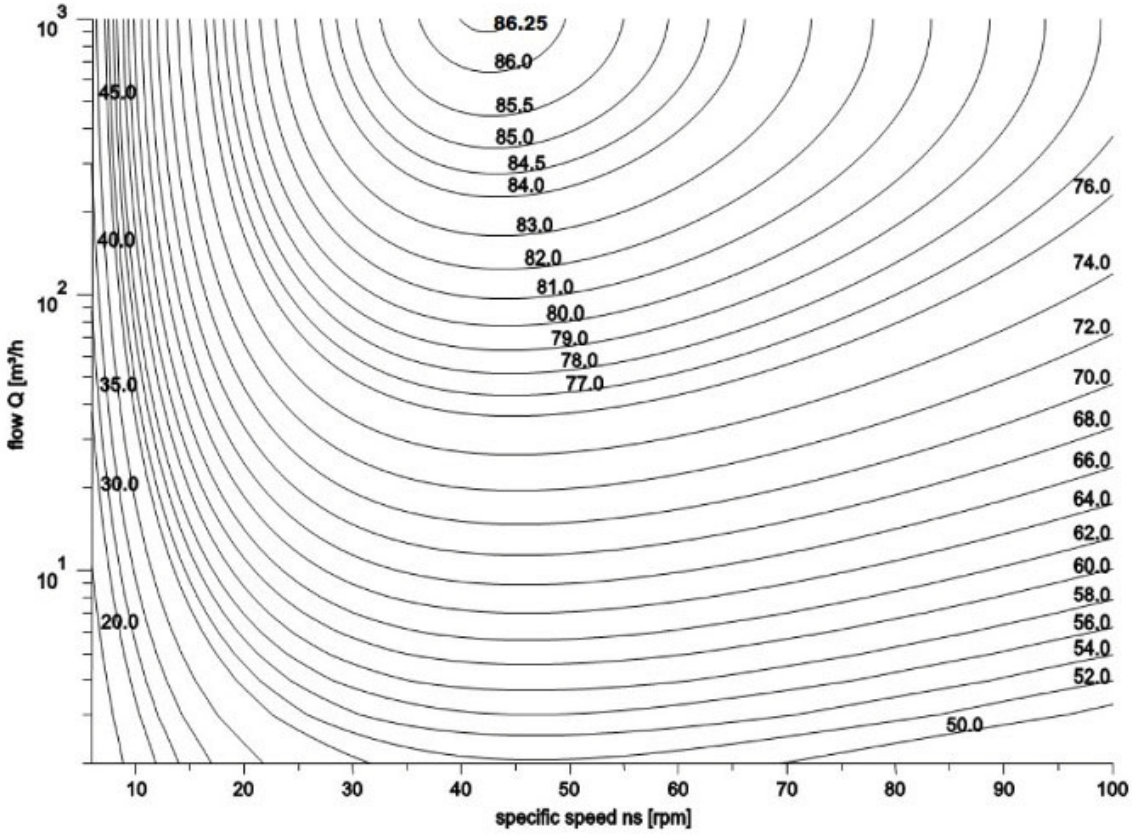
## MEI = 0.7 for ESOB 1450 rpm




## MEI = 0.7 for ESOB 2900rpm

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