

## GBE 220H-20 (E3,E4) / 16BAR | BPHE

### OPZIONI E ACCESSORI

All prices shall be deemed to be indicative unless otherwise stated. Subject to modifications.

We cannot take any longer the responsibility for delay in delivery due to shortage in raw material or sub supplies. As a consequence thereof the mentioned delivery dates only have an indicative character and are non binding.

Any data or other information in this selection software shall be deemed to be a general description of product properties and shall not be binding upon Kelvion. Binding product specifications may be agreed by Kelvion in bids, proposals, tenders or other offers issued in response to inquiries or calls for tenders or other invitations to bid.

(\*) In addition to the sales price stated in the order confirmation, the material surcharge (MS) valid on the confirmed delivery date will be charged upon delivery. The current material surcharge (MS) can be found under the following link <http://pages.kelvion.com/material-surcharge-brazed-phe/>.

### THERMAL DATA

|                                  | LATO CALDO      | LATO FREDDO     |                   |
|----------------------------------|-----------------|-----------------|-------------------|
| <b>Fluido</b>                    | Acqua (liquido) | Acqua (liquido) |                   |
| <b>Potenza Termica Scambiata</b> |                 | 49,0            | kW                |
| <b>Portata massica</b>           | 1405            | 1206            | kg/h              |
| <b>Portata Volumetrica</b>       | 1,429           | 1,21            | m <sup>3</sup> /h |
| <b>Temperatura di ingresso</b>   | 75,0            | 10,0            | °C                |
| <b>Temperatura di uscita</b>     | 45,0            | 45,0            | °C                |
| <b>Perdite di carico</b>         | 101,0           | 50,8            | mbar              |
| <b>Volume</b>                    | 0,414           | 0,46            | l                 |
| <b>Pressione in ingresso</b>     | 5,00            | 5,00            | bar (g)           |

### VELOCITIES (HOT)

|                   |          |
|-------------------|----------|
| <b>v con in</b>   | 0,96 m/s |
| <b>v con out</b>  | 0,95 m/s |
| <b>v dist in</b>  | 1,05 m/s |
| <b>v dist out</b> | 1,03 m/s |
| <b>v gap in</b>   | 0,28 m/s |

### PRESSURE DROPS (HOT)

|                       |            |
|-----------------------|------------|
| <b>dp total</b>       | 101,0 mbar |
| <b>dp fr dist in</b>  | 1,1 mbar   |
| <b>dp fr gap</b>      | 98,7 mbar  |
| <b>dp fr dist out</b> | 1,1 mbar   |
| <b>dp dist</b>        | 2,2 mbar   |

### HEAT TRANSFER (HOT)

|                  |          |
|------------------|----------|
| <b>Reynolds</b>  | 2.326,28 |
| <b>TWall max</b> | 36,2 °C  |
| <b>TWall min</b> | 75,0 °C  |

**VELOCITIES (COLD)**

|            |          |
|------------|----------|
| v con in   | 0,81 m/s |
| v con out  | 0,82 m/s |
| v dist in  | 0,88 m/s |
| v dist out | 0,89 m/s |
| v gap in   | 0,21 m/s |

**PRESSURE DROPS (COLD)**

|                |           |
|----------------|-----------|
| dp total       | 50,8 mbar |
| dp fr dist in  | 0,8 mbar  |
| dp fr gap      | 49,1 mbar |
| dp fr dist out | 0,8 mbar  |
| dp dist        | 1,7 mbar  |

**HEAT TRANSFER (COLD)**

|           |         |
|-----------|---------|
| Reynolds  | 994,68  |
| TWall max | 55,3 °C |
| TWall min | 10,0 °C |

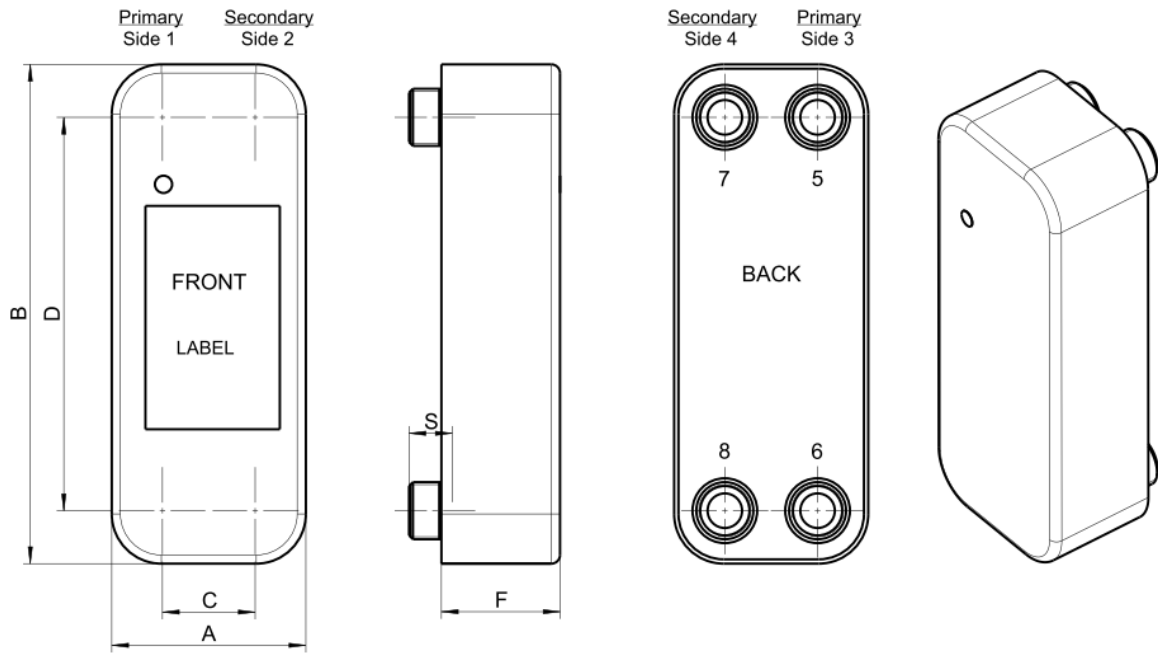
**FLUID PROPERTIES**

|                      | LATO CALDO | LATO FREDDO |                   |
|----------------------|------------|-------------|-------------------|
| Densità              | 983,16     | 996,33      | kg/m <sup>3</sup> |
| Capacità termica     | 4185       | 4181        | J/kgK             |
| Conduktività termica | 0,651      | 0,6105      | W/mK              |
| Viscosità In         | 0,377      | 1,306       | cP                |
| Viscosità Out        | 0,596      | 0,596       | cP                |

**UNIT DATA**

|                                      | LATO CALDO        | LATO FREDDO |                |
|--------------------------------------|-------------------|-------------|----------------|
| Area di scambio                      | 0,47              |             | m <sup>2</sup> |
| Numero di piastre (total / per unit) | 20 / 20           |             |                |
| Margine di superficie                | 84,39             |             | %              |
| Materiale piastre                    | AISI316L          |             |                |
| Soldering material                   | Copper            |             |                |
| Tipologia di flusso                  | controcorrente    |             |                |
| Configurazione (passaggi x canali)   | 1 x 9             | 1 x 10      |                |
| N. unità (par. / ser. / total):      | 1 / 1 / 1         |             |                |
| Material Front- and endplate         | AISI304           |             |                |
| LMTD                                 | 32,4              |             | K              |
| Design code                          | PED BPHE Standard |             |                |

## DIMENSIONI



A: 90 mm  
B: 328 mm

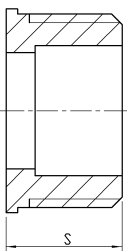
C: 43 mm  
D: 279 mm

F: 58 mm  
S: see connections

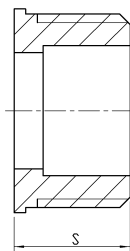
Net weight : 3 kg  
Total weight : 4 kg

## CONNECTIONS

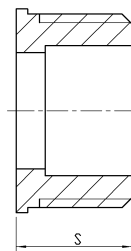
| SIDE/FLOW | POS. | SIZE | TYPE                                      | NAME | MEDIA           | S     |
|-----------|------|------|---|------|-----------------|-------|
| Hot in    | 5    | G1   | filett. est. DINISO228-1 G1 AISI304 0.020 | E    | Acqua (liquido) | 12 mm |
| Hot out   | 6    | G1   | filett. est. DINISO228-1 G1 AISI304 0.020 | E    | Acqua (liquido) | 12 mm |
| Cold in   | 8    | G1   | filett. est. DINISO228-1 G1 AISI304 0.020 | E    | Acqua (liquido) | 12 mm |
| Cold out  | 7    | G1   | filett. est. DINISO228-1 G1 AISI304 0.020 | E    | Acqua (liquido) | 12 mm |



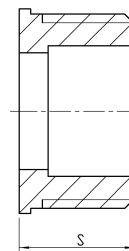
outside thread  
DIN ISO 228-1



outside thread  
DIN ISO 228-1



outside thread  
DIN ISO 228-1



outside thread  
DIN ISO 228-1

Please check physical properties.

Dimensional values provided from Kelvion Select PHE are to be used for reference only. For exact values, please contact your Kelvion Representative. Kelvion reserves the right to change specifications without prior notification.

Kelvion Select PHE software and the generated calculations provided herein are provided "as is" and any express or implied warranties, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose are disclaimed.

Kelvion does not guarantee compatibility of heat exchanger materials with process fluids / gases

In no event shall Kelvion be liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, but not limited to, procurement of substitute goods or services; loss of use, data, or profits; or business interruption) however caused and on any theory of liability, whether in contract, strict liability, or tort (including negligence or otherwise) arising in any way out of the use of Kelvion Select PHE Software, even if advised of the possibility of such damage.

Special requirements such as special documentation, calculations, coating, approvals, and accessories are not included within the scope of the offer price. If required, additional price can be discussed with your Kelvion Representative.

**KELVION CODE: GBE 220H-20 (E3,E4) / 16BAR**

You can return to your current configuration with the following link:

<https://selectphe.kelvion.com/code/d7ef5385-84fd-4fa8-98eb-ae4111a>

---

Creation date: Mar 11, 2026

Version: 26.0311.1131

Software version: master (MyPWT 57.1.230)