

# Alfa Laval AXP10

## Brazed plate heat exchanger for extreme high-pressure requirements

### Introduction

Alfa Laval AXP is specifically designed to work in air conditioning and other refrigeration applications, where the pressure requirements are extremely high.

### Applications

Because of their high-pressure performance, they are particularly well-suited to CO<sub>2</sub> applications, such as transcritical gas cooling.

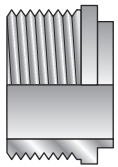
### Benefits

- Tolerates extremely high operating pressures
- Compact
- Easy to install
- Self-cleaning
- Low level of service and maintenance is required
- All units are pressure and leak tested
- Gasket free

### Design

The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service life.

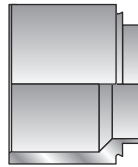
### Examples of connections



External thread



Soldering



Welding



## Technical Data

### Standard materials

|                |                 |
|----------------|-----------------|
| Cover plates   | Stainless steel |
| Connections    | Stainless steel |
| Plates         | Stainless steel |
| Brazing filler | Copper          |

### Dimensions and weight <sup>1</sup>

|                          |                      |
|--------------------------|----------------------|
| A measure (mm)           | $8 + (1.12 * n)$     |
| A measure (inches)       | $0.31 + (0.04 * n)$  |
| Weight (kg) <sup>2</sup> | $0.323 + (0.04 * n)$ |
| Weight (lb) <sup>2</sup> | $0.71 + (0.09 * n)$  |

<sup>1</sup> n = number of plates

<sup>2</sup> Excluding connections

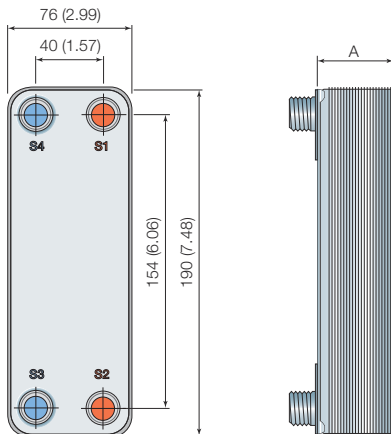
### Standard data

|  |               |
|--|---------------|
| Volume per channel, litres (gal)                   | 0.01 (0.0026) |
| Max. particle size, mm (inch)                      | 0.4 (0.016)   |
| Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm) | 1.4 (6.2)     |
| Flow direction                                     | Parallel      |
| Min. number of plates                              | 10            |
| Max. number of plates                              | 150           |

<sup>1</sup> Water at 5 m/s (16.4 ft/s) (connection velocity)

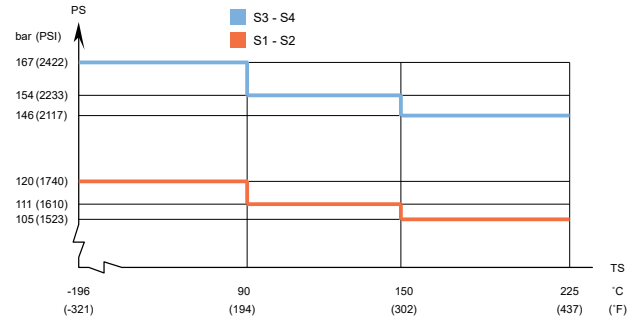
## Dimensional drawing

Measurements in mm (inches)

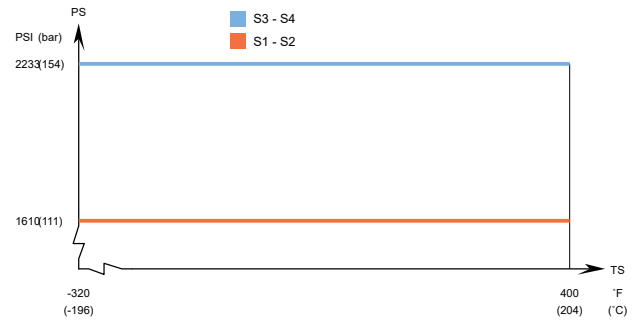


## Design pressure and temperature

### AXP10 – PED approval pressure/temperature graph



### AXP10 – UL approval pressure/temperature graph



Designed for full vacuum.

Alfa Laval plate heat exchangers are available with a wide range of pressure vessel approvals. Please contact your Alfa Laval representative for more information.

**NOTE:** Values above are to be used as an indication. For exact values, please use the drawing generated by the Alfa Laval configurator or contact your local Alfa Laval representative.

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