



## ACF VERTICALI

THERMAL FLYWHEEL FOR AIR CONDITIONING / HEATING SYSTEMS

410 - 5.129 litres

### Installations

Use as a thermal flywheel in indoor installations of air conditioning and heating systems to optimize the thermal inertia and increase the volume of chilled/heated water.

### CHARACTERISTICS

MAX TEMPERATURE -10°C / +95°C

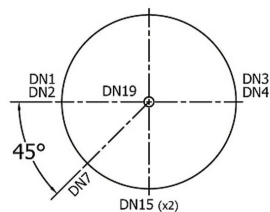
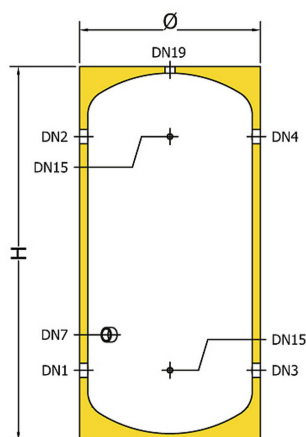
MAX PRESSURE (mod. 50 - 1000)

10 bar

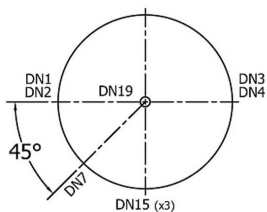
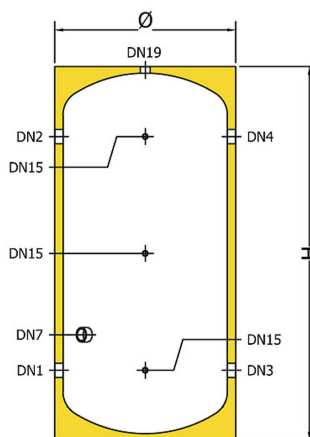
MAX PRESSURE (mod. 1500 - 5000)

6 bar

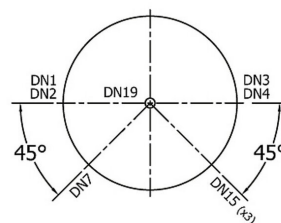
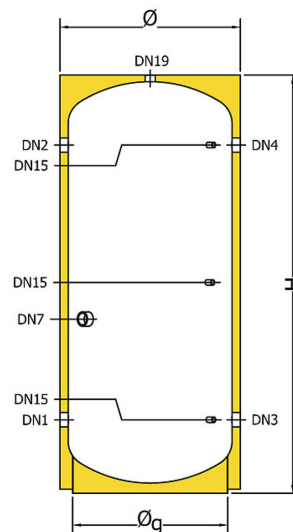
ACF 50



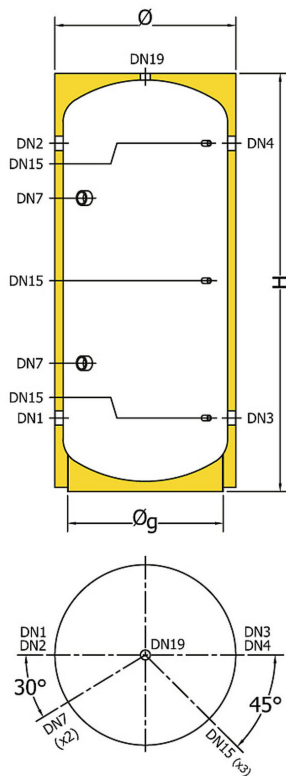
ACF 100



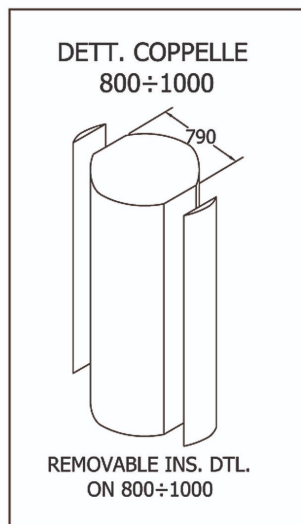
ACF 200 - 500



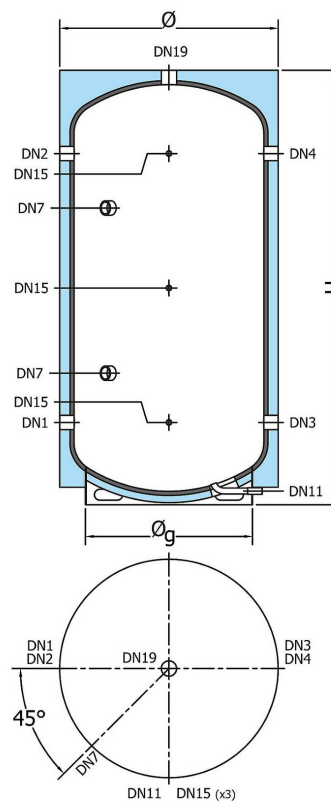
ACF 800 - 1000



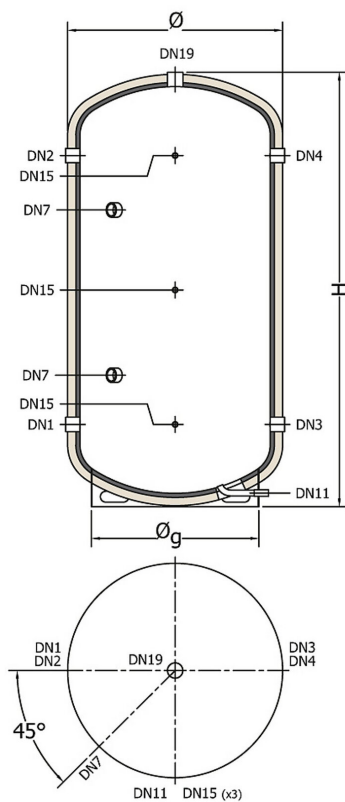
ACF 800 - 1000 CUPS



ACF 1500 - 2000



## ACF 3000 - 5000



### Keyword

| DN   | Description                         |
|------|-------------------------------------|
| DN1  | Flow to source                      |
| DN2  | Flow from source                    |
| DN3  | Flow from heating system            |
| DN4  | Flow to heating system              |
| DN7  | Predisposition for immersion heater |
| DN11 | Drain                               |
| DN15 | Probe                               |
| DN19 | Auxiliary connection                |

| Model    | Code          | Cl. Energ. | St. loss<br>W | Capacity<br>L | Tmin  | Tmax | H<br>mm | Ø skirt<br>mm | Ø<br>mm | Pm<br>mm |
|----------|---------------|------------|---------------|---------------|-------|------|---------|---------------|---------|----------|
| ACF-50   | A460L34 GGP50 | A          | 26            | 50            | -10°C | 95°C | 880     |               | 410     | 980      |
| ACF-100  | A480L38 PGP55 | A          | 35            | 99            | -10°C | 95°C | 960     |               | 510     | 1090     |
| ACF-200  | A480L47 PGP55 | B          | 57            | 195           | -10°C | 95°C | 1185    | 460           | 610     | 1350     |
| ACF-300  | A480L51 PGP75 | B          | 67            | 282           | -10°C | 95°C | 1655    | 460           | 650     | 1800     |
| ACF-500  | A480L55 PGP55 | C          | 91            | 494           | -10°C | 95°C | 1720    | 600           | 760     | 1900     |
| ACF-800  | A480L60 PGP75 | C          | 131           | 747           | -10°C | 95°C | 1790    | 760           | 940     | 2050     |
| ACF-1000 | A480L62 PGP75 | C          | 136           | 868           | -10°C | 95°C | 2040    | 760           | 940     | 2270     |
| ACF-1500 | A480H67 GB5A5 | C          | 163           | 1643          | -10°C | 95°C | 2495    | 850           | 1310    | 2850     |
| ACF-2000 | A480H70 GB5A5 | C          | 174           | 1952          | -10°C | 95°C | 2445    | 950           | 1410    | 2880     |
| ACF-3000 | A480H74 GB370 |            |               | 2986          | -10°C | 95°C | 2840    | 1100          | 1390    | 3170     |
| ACF-5000 | A480H80 GB370 |            |               | 5129          | -10°C | 95°C | 3025    | 1450          | 1740    | 3490     |

Pm: pivot measurement

## Connection heights (mm)

| MODEL    | DN1 | DN2  | DN3 | DN4  | DN7  | DN7 | DN11 | DN15 | DN15 | DN15 | DN19 |
|----------|-----|------|-----|------|------|-----|------|------|------|------|------|
| ACF-50   | 180 | 705  | 180 | 705  | -    | 230 | -    | 180  | 705  | -    | -    |
| ACF-100  | 235 | 715  | 235 | 715  | -    | 315 | -    | 235  | 715  | 475  | -    |
| ACF-200  | 255 | 915  | 255 | 915  | -    | 505 | -    | 255  | 915  | 585  | -    |
| ACF-300  | 260 | 1360 | 260 | 1360 | -    | 585 | -    | 260  | 1360 | 810  | -    |
| ACF-500  | 320 | 1390 | 320 | 1390 | -    | 730 | -    | 320  | 1390 | 855  | -    |
| ACF-800  | 340 | 1410 | 340 | 1410 | 1250 | 500 | -    | 340  | 1410 | 875  | -    |
| ACF-1000 | 340 | 1660 | 340 | 1660 | 1460 | 550 | -    | 340  | 1660 | 1000 | -    |
| ACF-1500 | 485 | 2005 | 485 | 2005 | 1755 | 735 | 80   | 485  | 2005 | 1245 | -    |
| ACF-2000 | 475 | 1995 | 475 | 1995 | 1745 | 725 | 80   | 475  | 1995 | 1235 | -    |
| ACF-3000 | 540 | 2320 | 540 | 2320 | 2030 | 830 | 80   | 540  | 2320 | 1430 | -    |
| ACF-5000 | 635 | 2415 | 635 | 2415 | 2125 | 925 | 80   | 635  | 2415 | 1525 | -    |

## Connection sizes

| MODEL    | DN1     | DN2     | DN3     | DN4     | DN7     | DN11 | DN15  | DN19    |
|----------|---------|---------|---------|---------|---------|------|-------|---------|
| ACF-50   | G1.1/4" | G1.1/4" | G1.1/4" | G1.1/4" | G1.1/2" | -    | G1/2" | G1.1/4" |
| ACF-100  | G1.1/2" | G1.1/2" | G1.1/2" | G1.1/2" | G1.1/2" | -    | G1/2" | G1.1/4" |
| ACF-200  | G1.1/2" | G1.1/2" | G1.1/2" | G1.1/2" | G1.1/2" | -    | G1/2" | G1.1/4" |
| ACF-300  | G2"     | G2"     | G2"     | G2"     | G1.1/2" | -    | G1/2" | G1.1/4" |
| ACF-500  | G3"     | G3"     | G3"     | G3"     | G1.1/2" | -    | G1/2" | G1.1/4" |
| ACF-800  | G3"     | G3"     | G3"     | G3"     | G1.1/2" | -    | G1/2" | G1.1/2" |
| ACF-1000 | G3"     | G3"     | G3"     | G3"     | G1.1/2" | -    | G1/2" | G1.1/2" |
| ACF-1500 | G3"     | G3"     | G3"     | G3"     | G1.1/2" | G1"  | G1/2" | G3"     |
| ACF-2000 | G3"     | G3"     | G3"     | G3"     | G1.1/2" | G1"  | G1/2" | G3"     |
| ACF-3000 | G4"     | G4"     | G4"     | G4"     | G1.1/2" | G1"  | G1/2" | G3"     |
| ACF-5000 | G4"     | G4"     | G4"     | G4"     | G1.1/2" | G1"  | G1/2" | G3"     |

## Insulation characteristics

| Model    | Insulation type                                                                                                                  | Insulation thickness (mm) | Int. Thickness (mm) | Finish                    |
|----------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------|---------------------------|
| ACF-50   | Rigid expanded polyurethane with 95% closed cells, CFC and HCFC free, fire resistance class B2 acc. to DIN 4102-1                | 50                        |                     | Grey polystyrene RAL 9006 |
| ACF-100  | Rigid expanded polyurethane with 95% closed cells, CFC and HCFC free, fire resistance class B2 acc. to DIN 4102-1                | 55                        |                     | Grey polystyrene RAL 9006 |
| ACF-200  | Rigid expanded polyurethane with 95% closed cells, CFC and HCFC free, fire resistance class B2 acc. to DIN 4102-1                | 55                        |                     | Grey polystyrene RAL 9006 |
| ACF-300  | Rigid expanded polyurethane with 95% closed cells, CFC and HCFC free, fire resistance class B2 acc. to DIN 4102-1                | 75                        |                     | Grey polystyrene RAL 9006 |
| ACF-500  | Rigid expanded polyurethane with 95% closed cells, CFC and HCFC free, fire resistance class B2 acc. to DIN 4102-1                | 55                        |                     | Grey polystyrene RAL 9006 |
| ACF-800  | Rigid expanded polyurethane with 95% closed cells, CFC and HCFC free, fire resistance class B2 acc. to DIN 4102-1                | 75                        |                     | Grey PVC RAL 9006         |
| ACF-1000 | Rigid expanded polyurethane with 95% closed cells, CFC and HCFC free, fire resistance class B2 acc. to DIN 4102-1                | 75                        |                     | Grey PVC RAL 9006         |
| ACF-1500 | Inner layer: closed cells polyethylene - Outer: 100% recyclable polyester fiber                                                  | 130                       | 20                  | Grey PVC RAL 9006         |
| ACF-2000 | Inner layer: closed cells polyethylene Outer layer: 100% recyclable polyester fiber, fire resistance class B1 acc. to DIN 4102-1 | 130                       | 20                  | Grey PVC RAL 9006         |
| ACF-3000 | Inner layer: closed cells polyethylene - Outer layer: open cells flexible expanded polyurethane                                  | 50                        | 20                  | White PVC RAL 9001        |
| ACF-5000 | Inner layer: closed cells polyethylene - Outer layer: open cells flexible expanded polyurethane                                  | 50                        | 20                  | White PVC RAL 9001        |

## Reference standards

CYLINDER: | Directive 2014/68/EU – ART. 4.3, with exemption from CE marking.

EN 12897:2020 standard.

Designed and built in accordance with the requirements of 2009/125/EC and Regulation 814/2013 (EU).

Labeling in accordance with the requirements of 2017/1369/EU and Delegated Regulation 812/2013 (EU).

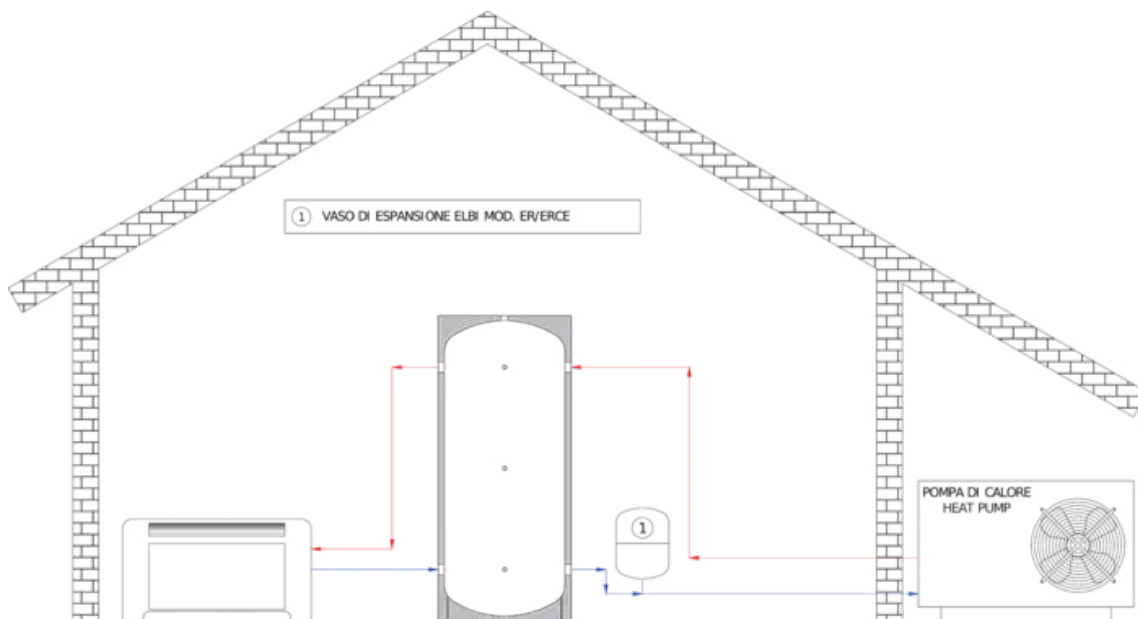
Warranty: 2 years

## Immersion heaters

| Code                                 | Power<br>Kw | Source<br>V | Connection | Length<br>mm | Applicable to |     |     |     |     |     |      |      |      |      |      |
|--------------------------------------|-------------|-------------|------------|--------------|---------------|-----|-----|-----|-----|-----|------|------|------|------|------|
|                                      |             |             |            |              | 50            | 100 | 200 | 300 | 500 | 800 | 1000 | 1500 | 2000 | 3000 | 5000 |
| IMMERSION HEATERS WITHOUT THERMOSTAT |             |             |            |              |               |     |     |     |     |     |      |      |      |      |      |
| 8601000                              | 1           | 230         | G1.1/4"    | 295          | 105           | 201 | ✓   | ✓   | ✓   | ✓   | ✓    | ✓    | ✓    | ✓    | ✓    |
| 8601650                              | 1.65        | 230         | G1.1/4"    | 450          | ✗             | ✗   | 248 | 358 | ✓   | ✓   | ✓    | ✓    | ✓    | ✓    | ✓    |
| 8602000                              | 2           | 230         | G1.1/4"    | 515          | ✗             | ✗   | ✗   | ✗   | ✓   | ✓   | ✓    | ✓    | ✓    | ✓    | ✓    |
| 8602600                              | 2.6         | 230         | G1.1/4"    | 675          | ✗             | ✗   | ✗   | ✗   | ✗   | ✓   | ✓    | ✓    | ✓    | ✓    | ✓    |
| 8602601                              | 2.6         | 230         | G1.1/4"    | 360          | 40            | 77  | 157 | 227 | ✓   | ✓   | ✓    | ✓    | ✓    | ✓    | ✓    |
| 8603300                              | 3.3         | 230         | G1.1/4"    | 825          | ✗             | ✗   | ✗   | ✗   | ✗   | ✗   | ✗    | ✓    | ✓    | ✓    | ✓    |
| 8603301                              | 3.3         | 230         | G1.1/4"    | 435          | ✗             | ✗   | 124 | 179 | 314 | ✓   | ✓    | ✓    | ✓    | ✓    | ✓    |
| 8604001                              | 4           | 230         | G1.1/4"    | 510          | ✗             | ✗   | ✗   | ✗   | 259 | ✓   | ✓    | ✓    | ✓    | ✓    | ✓    |
| 8705000                              | 5           | 400         | G1.1/2"    | 445          | ✗             | ✗   | 82  | 118 | 207 | 313 | ✓    | ✓    | ✓    | ✓    | ✓    |
| 8706000                              | 6           | 400         | G1.1/2"    | 510          | ✗             | ✗   | ✗   | ✗   | 173 | 261 | 303  | ✓    | ✓    | ✓    | ✓    |
| 8708000                              | 8           | 400         | G1.1/2"    | 670          | ✗             | ✗   | ✗   | ✗   | ✗   | 196 | 228  | ✓    | ✓    | ✓    | ✓    |
| 8710000                              | 10          | 400         | G1.1/2"    | 820          | ✗             | ✗   | ✗   | ✗   | ✗   | ✗   | ✗    | 345  | ✓    | ✓    | ✓    |
| 8712000                              | 12          | 400         | G1.1/2"    | 970          | ✗             | ✗   | ✗   | ✗   | ✗   | ✗   | ✗    | 287  | 341  | ✓    | ✓    |
| 8717000                              | 17          | 400         | G2"        | 1200         | ✗             | ✗   | ✗   | ✗   | ✗   | ✗   | ✗    | ✗    | ✗    | ✓    | ✓    |
| IMMERSION HEATERS WITH THERMOSTAT    |             |             |            |              |               |     |     |     |     |     |      |      |      |      |      |
| 8T01500                              | 1.5         | 230         | G1.1/2"    | 320          | 70            | 134 | 273 | ✓   | ✓   | ✓   | ✓    | ✓    | ✓    | ✓    | ✓    |
| 8T02000                              | 2           | 230         | G1.1/2"    | 320          | 52            | 101 | 204 | 296 | ✓   | ✓   | ✓    | ✓    | ✓    | ✓    | ✓    |
| 8T02200                              | 2.2         | 230         | G1.1/2"    | 320          | 48            | 92  | 186 | 269 | ✓   | ✓   | ✓    | ✓    | ✓    | ✓    | ✓    |
| 8T02500                              | 2.5         | 230         | G1.1/2"    | 320          | 42            | 81  | 164 | 237 | ✓   | ✓   | ✓    | ✓    | ✓    | ✓    | ✓    |
| 8T03000                              | 3           | 230         | G1.1/2"    | 320          | 35            | 67  | 136 | 197 | 345 | ✓   | ✓    | ✓    | ✓    | ✓    | ✓    |
| 8T04000                              | 4           | 400         | G1.1/2"    | 400          | ✗             | ✗   | 102 | 148 | 259 | ✓   | ✓    | ✓    | ✓    | ✓    | ✓    |
| 8T05000                              | 5           | 400         | G1.1/2"    | 500          | ✗             | ✗   | ✗   | ✗   | 207 | 313 | ✓    | ✓    | ✓    | ✓    | ✓    |
| 8T06000                              | 6           | 400         | G1.1/2"    | 600          | ✗             | ✗   | ✗   | ✗   | 173 | 261 | 303  | ✓    | ✓    | ✓    | ✓    |
| 8T09000                              | 9           | 400         | G1.1/2"    | 700          | ✗             | ✗   | ✗   | ✗   | ✗   | 174 | 202  | ✓    | ✓    | ✓    | ✓    |
| 8T12000                              | 12          | 400         | G1.1/2"    | 850          | ✗             | ✗   | ✗   | ✗   | ✗   | ✗   | ✗    | 287  | 341  | ✓    | ✓    |

## Example of installation

### ACF



Illustrative diagram; always refer to a qualified technician for the realization of the systems.

Ver. date 15/11/2024