



When Higher Purity is the Issue

SolidC UltraPure

Applications

The SolidC UltraPure pump is an efficient and economical centrifugal pump, which meets the requirements of the pharmaceutical industries. It provides gentle product treatment and is chemically resistant. SolidC UltraPure is available in four sizes, SolidC-1 UltraPure, SolidC-2 UltraPure, SolidC-3 UltraPure and SolidC-4 UltraPure.

Standard design

The SolidC UltraPure pump consists of a standard motor, stub shaft, mechanical compression coupling, adaptor, back plate, impeller, pump casing and shaft seal and 45° turned pump casing with standard vertical casing drain 1/2".

The SolidC UltraPure pump is designed for CIP with emphasis on large internal radii and cleanable seals.

SolidC UltraPure is supported on four adjustable legs.

Shaft seals

The SolidC UltraPure pump is equipped with either an external single or a flushed shaft seal. Both have stationary seal rings in acid-resistant steel AISI 329 with sealing surface in silicon carbide and rotating seal rings in silicon carbide. The secondary seal of the flushed seal is a long lasting lip seal.

Materials

Product wetted steel parts: Acid-resistant steel 1.4404 (316L) with material traceability EN.10204.3.1
 Other steel parts: Stainless steel 1.4301 (304).
 Finish: Bright (Ra 0.5).
 Product wetted seals: EPDM USP class VI.

Technical data

Max. inlet pressure: 400 kPa (4 bar).
 Temperature range: -10°C to +120°C (EPDM).

Flushed shaft seal (FSS):

Water pressure inlet: max. 100 kpa (1 bar).
 Water consumption: 0.25 -0.5 l/min.

Connections for FSS:

R 1/8" (BSP) external thread.

Motor

Foot-flanged motor according to the IEC metric standard (EFF II), 2 poles = 3000/3600 rpm. at 50/60 Hz, IP 55 (with drain hole with labyrinth plug), insulation class F.



SolidC UltraPure

Voltage and frequency

| | |
|----------------------------------|----------|
| 3 ~, 50 Hz, 220-240V Δ/380-420VY | ≤ 4 kW |
| 3 ~, 60 Hz, 250-280V Δ/440-480VY | ≤ 4.6 kW |
| 3 ~, 50 Hz, 380-420V Δ/660-690VY | ≥ 5.5 kW |
| 3 ~, 60 Hz, 440-480V Δ | ≥ 6.4 kW |

Motor sizes

50 Hz: 1.1, 1.5, 2.2, 3, 4, 5.5, 7.5, 11, 15, 18.5, 22 kW
60 Hz: 1.3, 1.75, 2.5, 3.5, 4.6, 6.4, 8.6, 12.5, 17, 21, 25 kW.

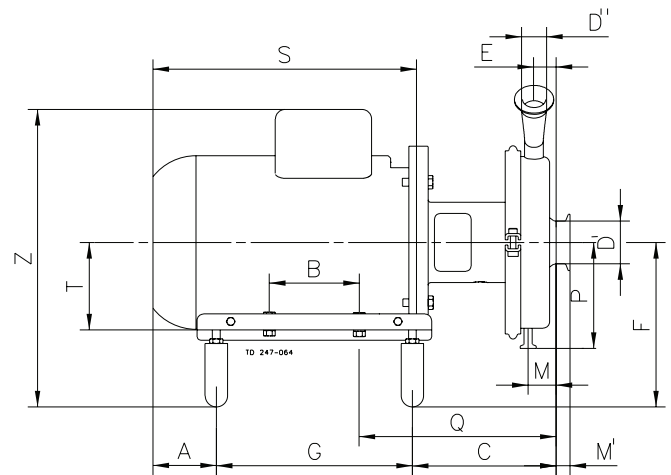
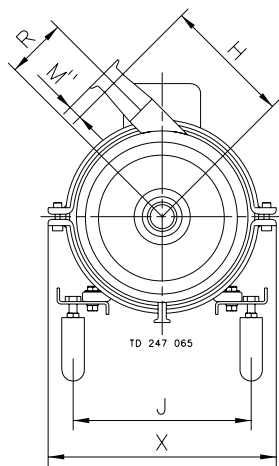
NOTE!

When used with frequency converter the 22 kW motor only has 20 kW effect.

Warranty

Extended 3-years warranty on the SolidC UltraPure Centrifugal Pump range. The warranty covers all non wear parts on the condition that genuine Alfa Laval Spare Parts are used.

Dimensions (mm)



SolidC-1 UltraPure

| Size | Weg-motor | | | |
|-------------|-----------|-------|-----|-----|
| | 1.5kW | 2.2kW | 3kW | 4kW |
| A | 40 | 40 | 38 | 43 |
| B | 125 | 125 | 140 | 140 |
| C | 173 | 173 | 161 | 165 |
| E | 28 | 28 | 28 | 28 |
| F min | 195 | 195 | 205 | 217 |
| F max | 210 | 210 | 220 | 232 |
| G | 242 | 242 | 290 | 300 |
| H | 180 | 180 | 180 | 180 |
| J | 177 | 177 | 228 | 227 |
| P | 145 | 145 | 145 | 145 |
| M | 22 | 22 | 22 | 22 |
| Q | 231 | 231 | 236 | 245 |
| R | 67 | 67 | 67 | 67 |
| S | 254 | 279 | 316 | 333 |
| T | 90 | 90 | 100 | 112 |
| Z min | 345 | 345 | 365 | 397 |
| Z max | 360 | 360 | 380 | 412 |
| X | 305 | 305 | 305 | 305 |
| Weight (kg) | 38 | 40 | 52 | 63 |

SolidC-2 UltraPure

| Size | Weg-motor | | | |
|-------------|-----------|-----|-----------|------|
| | 3kW | 4kW | 5.5/7.5kW | 11kW |
| A | 38 | 43 | 100 | 54 |
| B | 140 | 140 | 178 | 254 |
| C | 168 | 172 | 229 | 227 |
| E | 35 | 35 | 35 | 35 |
| F min | 205 | 217 | 237 | 265 |
| F max | 220 | 232 | 252 | 280 |
| G | 290 | 300 | 305 | 419 |
| H | 200 | 200 | 200 | 200 |
| J | 228 | 227 | 277 | 327 |
| P | 167 | 167 | 167 | 167 |
| M | 31 | 31 | 31 | 31 |
| Q | 243 | 252 | 311 | 331 |
| R | 94 | 94 | 94 | 94 |
| S | 316 | 333 | 410 | 488 |
| T | 100 | 112 | 132 | 160 |
| Z min | 365 | 397 | 444 | 515 |
| Z max | 380 | 412 | 459 | 530 |
| X | 349 | 349 | 349 | 349 |
| Weight (kg) | 55 | 65 | 94/96 | 140 |

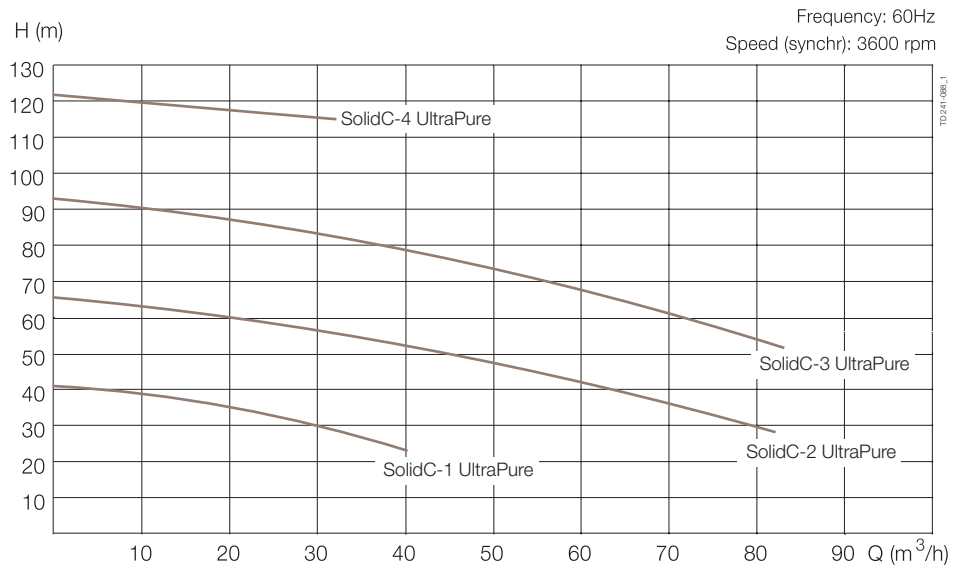
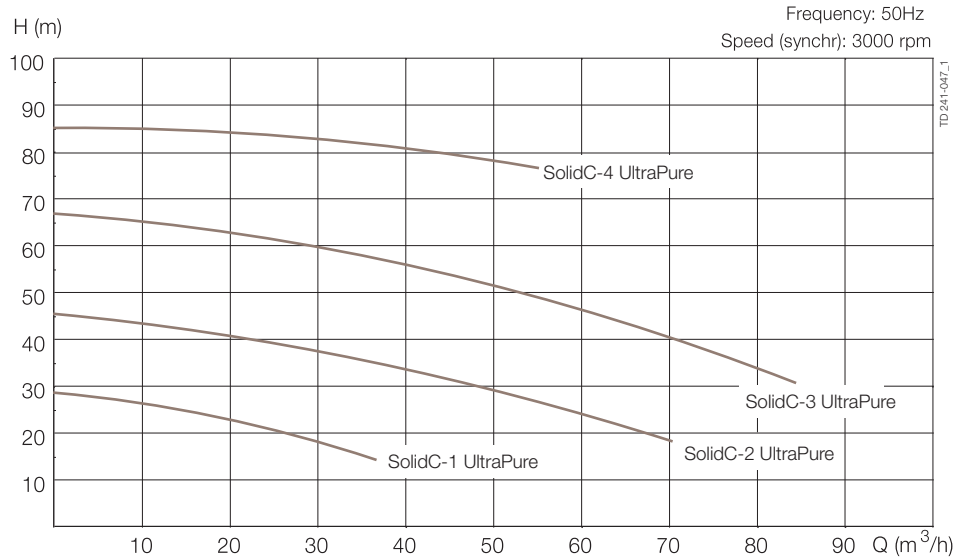
SolidC-3 UltraPure

| Size | Weg-motor | | |
|-------------|-----------|---------|--------|
| | 5.5/7.5kW | 11/15kW | 18.5kW |
| A | 100 | 54 | 46 |
| B | 178 | 210 | 254 |
| C | 226 | 221 | 205 |
| E | 31 | 31 | 31 |
| F min | 237 | 265 | 265 |
| F max | 252 | 280 | 280 |
| G | 305 | 419 | 503 |
| H | 210 | 210 | 210 |
| J | 277 | 327 | 327 |
| P | 179 | 179 | 179 |
| M | 33 | 33 | 33 |
| Q | 308 | 328 | 328 |
| R | 121 | 121 | 121 |
| S | 410 | 488 | 532 |
| T | 132 | 160 | 160 |
| Z min | 444 | 515 | 515 |
| Z max | 459 | 530 | 530 |
| X | 390 | 390 | 390 |
| Weight (kg) | 99/102 | 146/153 | 171 |

SolidC-4 UltraPure

| Size | Weg-motor | | |
|-------------|-----------|---------|-----------|
| | 5.5/7.5kW | 11/15kW | 18.5/22kW |
| A | 100 | 54 | 46 |
| B | 178 | 210 | 254 |
| C | 225 | 219 | 204 |
| E | 27 | 27 | 27 |
| F min | 237 | 265 | 265 |
| F max | 252 | 280 | 280 |
| G | 305 | 419 | 503 |
| H | 230 | 230 | 230 |
| J | 277 | 327 | 327 |
| P | 190 | 190 | 190 |
| M | 30 | 30 | 30 |
| Q | 308 | 328 | 328 |
| R | 121 | 121 | 121 |
| S | 410 | 488 | 532 |
| T | 132 | 160 | 160 |
| Z min | 444 | 515 | 515 |
| Z max | 459 | 530 | 530 |
| X | 410 | 410 | 410 |
| Weight (kg) | 101/103 | 147/154 | 170 |

Flow chart



Connections (mm) Sanitary version

SolidC-1 UltraPure

| | | | |
|-----------------|----|-------|-------|
| D ^I | 51 | ISO | TRI |
| D ^{II} | 38 | Clamp | Clamp |
| M ^I | | 13 | 13 |
| M ^{II} | | 13 | 13 |

SolidC-3 UltraPure

| | | | |
|-----------------|------|-------|-------|
| D ^I | 76.1 | ISO | TRI |
| D ^{II} | 38 | Clamp | Clamp |
| M ^I | | 13 | 13 |
| M ^{II} | | 13 | 13 |

SolidC-2 UltraPure

| | | | |
|-----------------|------|-------|-------|
| D ^I | 63.5 | ISO | TRI |
| D ^{II} | 38 | Clamp | Clamp |
| M ^I | | 13 | 13 |
| M ^{II} | | 13 | 13 |

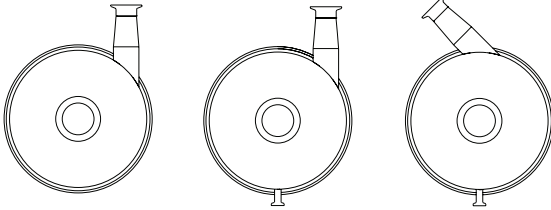
SolidC-4 UltraPure

| | | | |
|-----------------|------|-------|-------|
| D ^I | 76.1 | ISO | TRI |
| D ^{II} | 51 | Clamp | Clamp |
| M ^I | | 29 | 29 |
| M ^{II} | | 13 | 13 |

900533/0

Options

- A. Impeller with reduced diameter.
- B. Motor for other voltage and/or frequency.
- C. 1500 rpm. motor.
- D. Flushed shaft seal.
- E. Product wetted seals of Fluorinated rubber (FPM) or FEP.
- F. Pump with shroud.
- G. 0° outlet, see drawing below.
- H. No Drain.
- I. Finish product wetted surface Ra 0.8.
- J. Finish product wetted surface Ra 0.4 (electropolished).



No Drain

0° outlet

45° outlet

Ordering

Please state the following when ordering:

- Pump size.
- Connections.
- Impeller diameter.
- Motor size.
- Voltage and frequency.
- Flow, pressure and temperature.
- Density and viscosity of the product.
- Options.

Note!

For further details, see also IM 70821.

This product has EHEDG certification

How to contact Alfa Laval

Contact details for all countries
are continually updated on our website.
Please visit www.alfalaval.com to
access the information direct.