



When Higher Purity is the Issue

SolidC UltraPure Centrifugal Pump

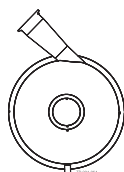
Applications

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".

As standard the SolidC UltraPure is delivered with a 45° outlet (counterclockwise).



45° outlet

The SolidC UltraPure pump is designed for CIP and SIP with emphasis on large internal roundings 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).

Product wetted seals: EPDM USP class 6.

Finish: Bright (Ra 0.5).

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.



SolidC UltraPure

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.

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.

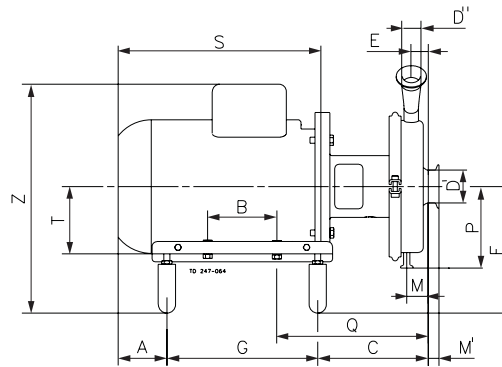
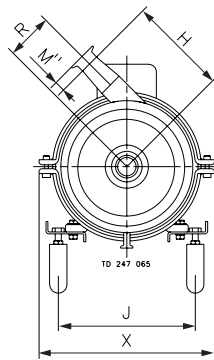
NOTE!

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

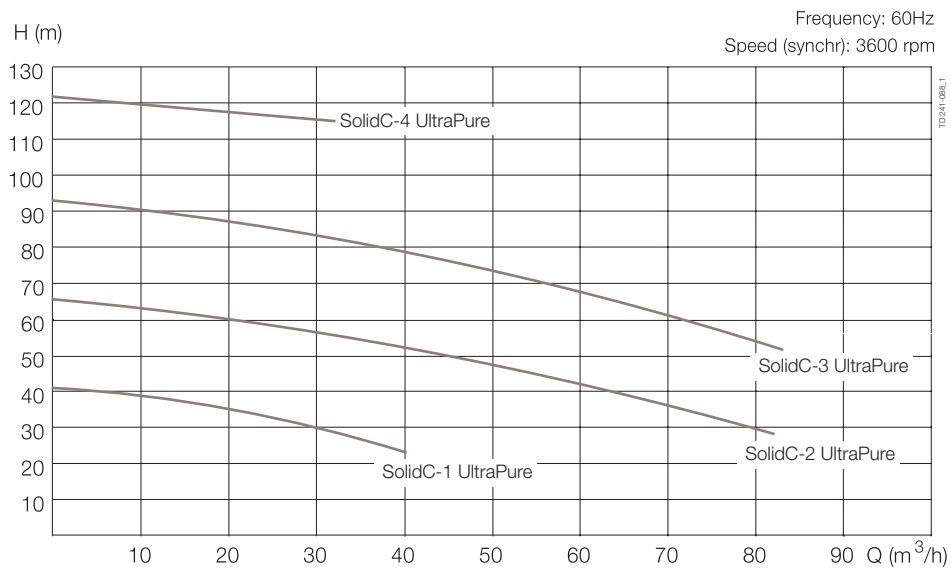
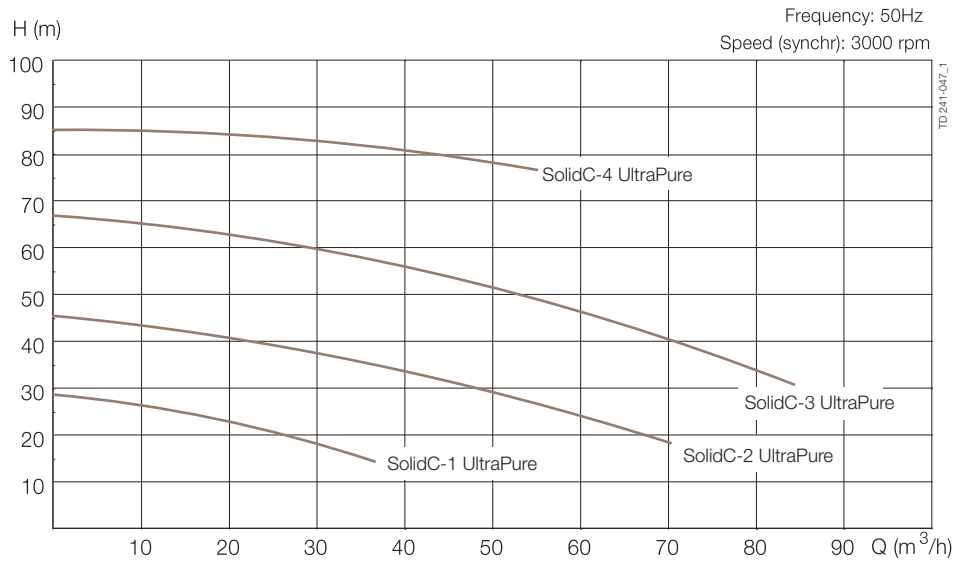
SolidC-3 UltraPure

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

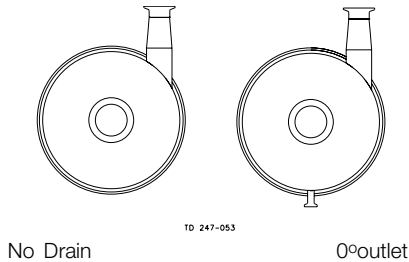
SolidC-4 UltraPure

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

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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. Pump without legs.
- H. 0° outlet, see drawing below.
- I. No Drain.
- J. Finish product wetted surface Ra 0.8 µm.
- K. Finish product wetted surface Ra 0.5 µm (electropolished).
 - The final surface value will change after electropolishing.
- L. Surface finish certificate.
- M. SIP to 140°C.



Standard documentation package:

- 3.1 certificate according to EN10204
- FDA certificate of conformity for product wetted elastomers.
- USP class 6 certificate of conformity - EPDM only
- Pump performance test certificate

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

ESE00678EN 1001

The information contained herein is correct at the time of issue,
but may be subject to change without prior notice.

motralec

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