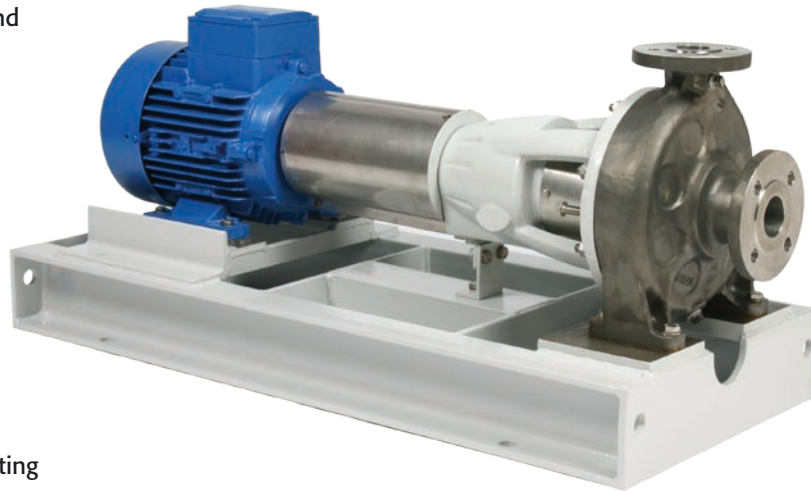


## ISO 5199 CHEMICAL PUMPS

Amarinth C Series pumps are designed to both ISO 5199 and ATEX specifications for the Chemical and Pharmaceutical markets, though they can be easily modified for Petrochemical applications. A full range of material options are available as standard to match your application, including NACE compliant materials.

Standard Documentation, Testing and NDT packs are offered. Alternatively bespoke packages can be tailored to fit your exact requirements.



### General description

A range of single stage centrifugal end suction pumps with centreline discharge manufactured in a variety of alloys and interchangeable with Girdlestone 900 series pumps.

### Construction

Back pullout design with metal to metal fits

### Design methodology

Advanced computer techniques including 3D modelling, FEA & CFD

### Design standards

ISO5199 : 2002  
ATEX EC-Directive 94/9/EC

### Design pressure rating

20 bar g @ 20°C

### Suction pressure rating

16 bar g (long coupled)  
3.5 bar g (close coupled)

### Temperature rating

-40°C to 200°C (long coupled)  
-40°C to 250°C (long coupled with heat sink & fan)  
-5°C to 120°C (close coupled)

### Performance envelope

#### Flow rate

Up to 1100m<sup>3</sup>/h

#### Differential head

Up to 225m

#### Speed

Up to 3600 rpm

### Configurations

Long coupled pump  
Close coupled pump  
Bareshaft pump  
Rotating assembly

### Frame sizes

040x025x145 to 250x0200x510

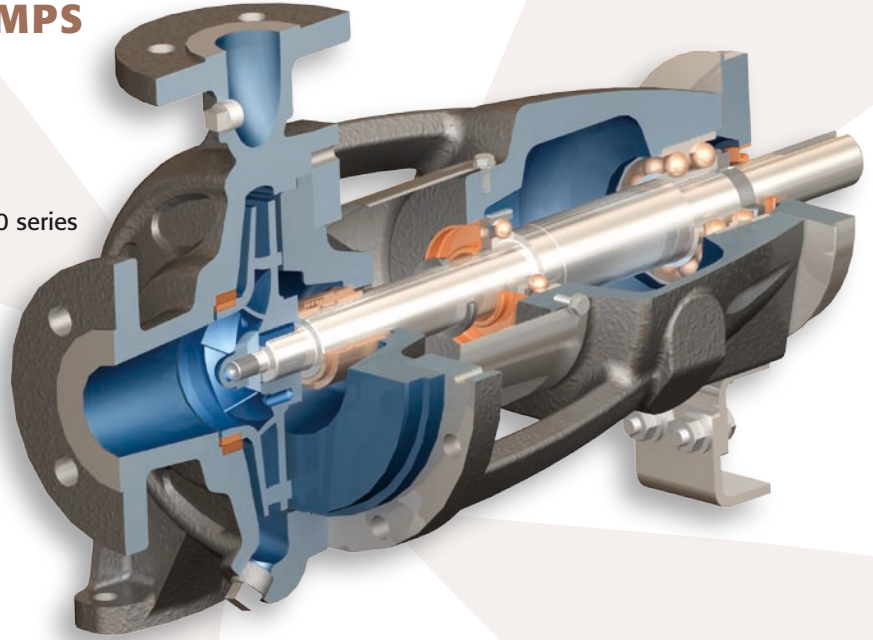
### Design life

20 years (2 years uninterrupted operation)

## ISO 5199 CHEMICAL PUMPS

### key features

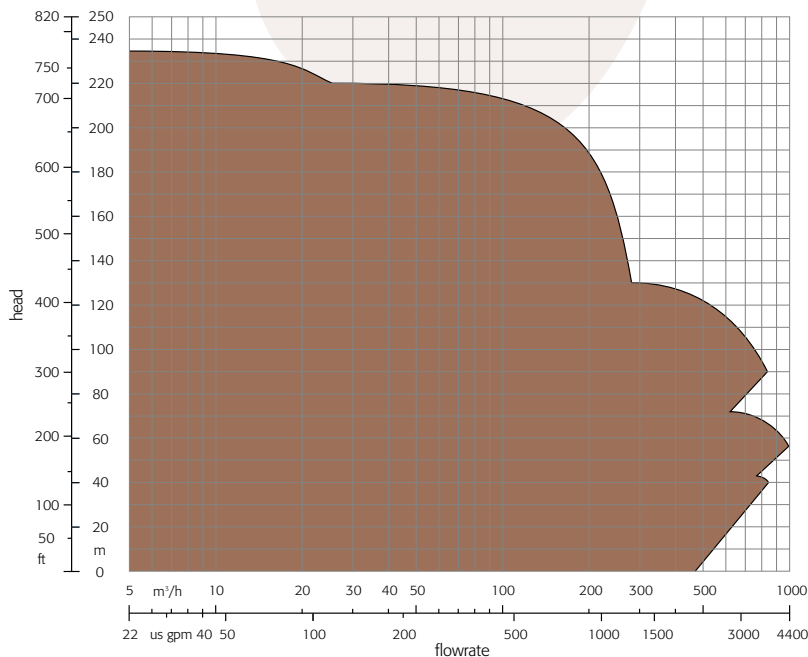
- 20 bar pumps to ISO5199 : 2000
- Full ATEX compliance
- Interchangeable with Girdlestone 910 & 920 series pumps
- Many units available on short lead-times
- Semi open or shrouded impellers
- Back pullout face to face fits for easy maintenance & accurate alignment
- Major spare parts available off the shelf
- Long & close coupled models
- A range of alloys available on request including NACE compliant materials
- -40°C to 250°C temperature applications



### materials

Materials	Casing	Impeller
SS 316 / SS 316	ASTM A744 CF-8M	ASTM A744 CF-8M
Cast Iron / Cast Iron	BS EN 1561 Gr EN-GJL-250	BS EN 1561 Gr EN-GJL-250
Cast Iron / SS 316	BS EN 1561 Gr EN-GJL-250	ASTM A744 CF-8M
SG Iron / SS 316	BS EN 1563 Gr EN-GJS-400-18-LT	ASTM A744 CF-8M
Carbon Steel / SS 316	ASTM A216 WCB	ASTM A744 CF-8M
Carbon steel / 12% Cr SS	ASTM A216 WCB	ASTM A217 Gr CA 15
Duplex SS / Duplex SS	ASTM A890 Gr 1B CD-4MCuN	ASTM A890 Gr 1B CD-4MCuN
Super Duplex SS / Super Duplex SS	ASTM A890 Gr 5A (UNS J93404)	ASTM A890 Gr 5A (UNS J93404)
Hastelloy B / Hastelloy B	ASTM A949 Gr N-7M	ASTM A949 Gr N-7M
Hastelloy C / Hastelloy C	ASTM A494 GrCW-12MW	ASTM A494 GrCW-12MW
Monel / Monel	ASTM A494 GrM35-1	ASTM A494 GrM35-1
Customer specified	Other alloys available on request including NACE compliant materials	Other alloys available on request including NACE compliant materials

### C Series hydraulic coverage



### typical applications

- Acetic acids
- Caustic transfer
- Chemical processing
- Condensate extraction
- Fuel transfer
- Latex
- Low NPSH capabilities
- LPG
- Produced water
- Seawater duties
- Starch / glucose
- Sugar processing
- Zinc slurry



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