

### **ISO 5199 CHEMICAL PUMPS**

Amarinth C Series pumps are designed to ISO 5199 and are fully UKEx, ATEX, EACEx, ISO 80079-36 compliant when requested 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 ISO 5199:2002

ATEX EC-Directive 2014/34/EU

Design pressure rating 20 bar g @ 20°C

Suction pressure rating 16 bar g (long coupled) 3.5 bar g (close coupled)

-40°C to 200°C (long coupled) Temperature rating

-40°C to 250°C (long coupled with heat sink & fan)

-5°C to 120°C (close coupled)

Performance envelope

Up to 1100m<sup>3</sup>/h Flow rate Differential head Up to 225m

Up to 3600 rpm Speed

Configurations Long coupled pump Close coupled pump

Bareshaft pump Rotating assembly

040x025x145 to 250x0200x510 Frame sizes

Design life 20 years (2 years uninterrupted operation) ISO 5199 CHEMICAL PUMPS

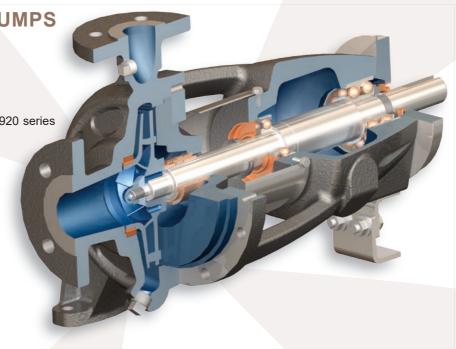
## key features

• 20 bar pumps to ISO 5199:2000

· Fully ATEX compliant

Interchangeable with Girdlestone 910 & 920 series pumps

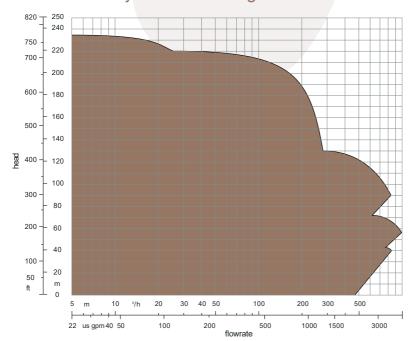
- · Many units available on short lead-times
- · Semi open or shrouded impellers
- Back pullout face to face fits for easy maintenance & accurate alignment
- · Major spare parts available off the shelf
- · Long & close coupled models
- A range of alloys available on request including NACE compliant materials
- -40°C to 250°C temperature applications



#### materials

Materials	Casina	Impoller
ivialeriais	Casing	Impeller
SS316 / SS316	ASTM A744 CF-8M	ASTM A744 CF-8M
Castiron / Castiron	BS EN 1561 Gr EN-GJL-250	BS EN 1561 Gr EN-GJL-250
Cast iron / SS316	BS EN 1561 Gr EN-GJL-250	ASTM A744 CF-8M
SGiron / SS316	BS EN 1563 Gr EN-GJS-400-18-LT	ASTM A744 CF-8M
Carbon Steel / SS316	ASTM A216 WCB	ASTM A744 CF-8M
Carbon steel / 12% Cr SS	ASTM A216 WCB	ASTM A217 Gr CA 15
Duplex SS/ Duplex SS	ASTMA890 Gr 1B CD-4MCuN	ASTMA890 Gr 1B CD-4MCuN
Super Duplex SS/ Super Duplex SS	ASTMA890 Gr 5A (UNS J93404)	ASTMA890 Gr 5A (UNS J93404)
Hastelloy B / Hastelloy B	ASTMA949 Gr N-7M	ASTMA949 Gr N-7M
Hastelloy C/ Hastelloy C	ASTMA494 GrCW-12MW	ASTMA494 GrCW-12MW
Monel / Monel	ASTMA494 GrM35-1	ASTMA494 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
- 0 " ' '
- Caustic transferChemical processing
- Condensate
- extraction
- Fuel transfer
- Latex
- · Low NPSH capabilities

- LPG
- Produced water
- · Seawater duties
- · Starch / glucose
- Sugar processing
- Zinc slurry



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