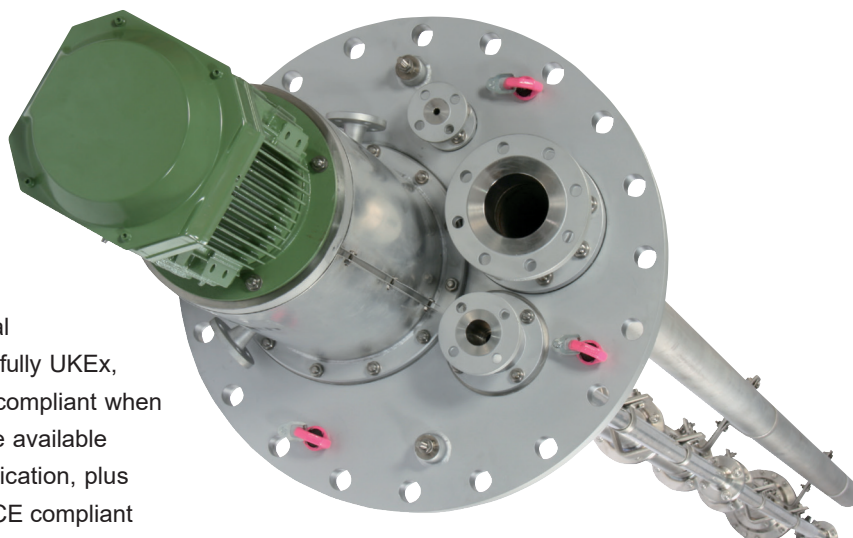


API 610 VS4 SUMP PUMPS

Amarinth V Series pumps are designed to API 610 latest edition specifications for the Petrochemical, Chemical and Oil & Gas markets and are fully UKEx, ATEX, EACEx, ISO 80079-36 compliant when requested. All API materials are available as standard to match your application, plus bespoke options including NACE compliant materials. Standard documentation, testing and NDT packs are offered. Alternatively bespoke packages can be tailored to fit your exact requirements.

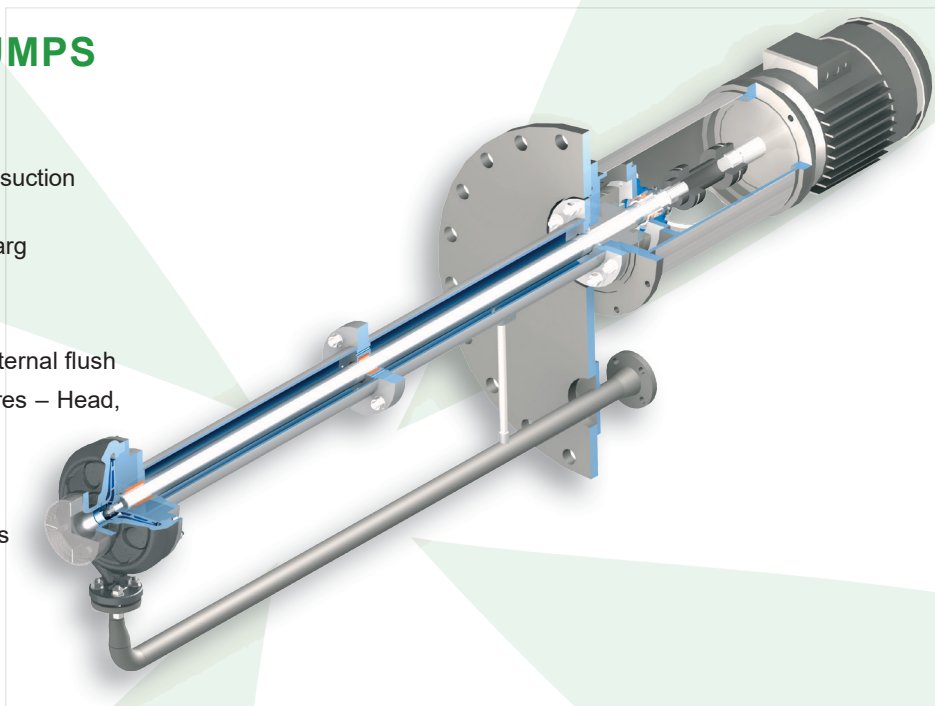


General description	A range of vertical long shaft single stage centrifugal end suction sump pumps manufactured in a variety of alloys. Designed to suit customer requirements with lengths available up to 6m sump depth
Construction	Heavy duty modular design maximising flexibility to suit customer's application.
Design methodology	Advanced computer techniques, 3D modelling, FEA & CFD
Design standards	API 610 / ISO 13709 latest editions ATEX EC-Directive 2014/34/EU
Design pressure rating	20 bar g at 38°C (pressure containing parts)
Operating temperature rating	-40°C to 100°C (standard construction)
Performance envelope	
Flowrate	Up to 500 m ³ /h
Differential head	Up to 225 m
Speed	Up to 3600 rpm
Configurations	Flange mount Plate mount (circular / rectangular)
Frame sizes	040x025x145 to 200x150x410
Design life	30 years (3 years uninterrupted operation)

API 610 VS4 SUMP PUMPS

key features

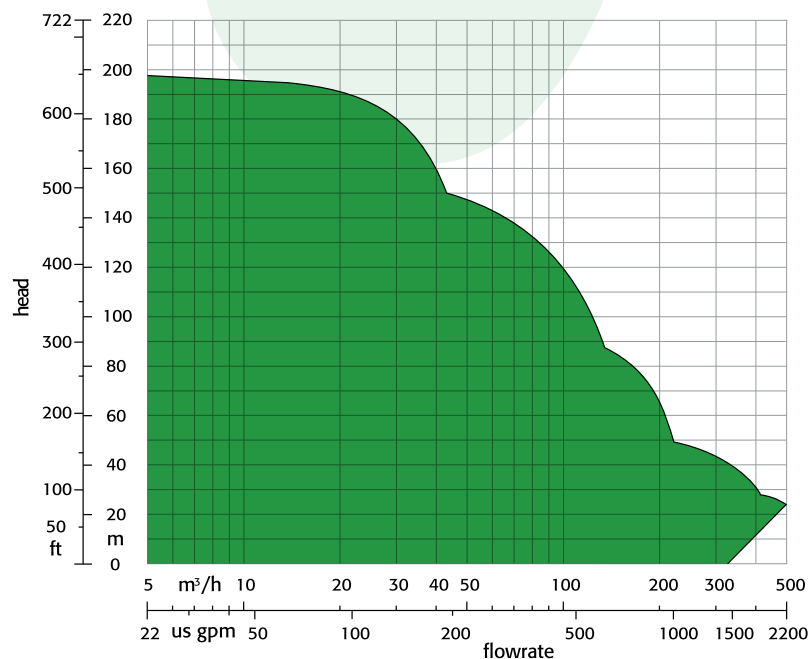
- VS4 vertical long shaft single stage end suction centrifugal pumps
- Pressure containing parts rated to 20 barg
- ATEX compliance, on application
- Shrouded or Semi open impellers
- Lubrication options using product or external flush
- Tested to API 610 / ISO 13709 procedures – Head, Flow, NPSH, Noise & Vibration
- A range of alloys available on request including NACE compliant materials
- -40°C to 100°C temperature applications
- Up to 6m sump depth



materials

Materials	Casing	Impeller
A8 SS316L / SS316L	ASTMA351 CF3M	ASTMA351 CF3M
I1 Castiron / Castiron	ASTMA278 Class 30	ASTMA278 Class 30
S8 Carbon Steel / SS316L	ASTMA216 WCB	ASTMA351 CF3M
S6 Carbon steel / 12% Cr SS	ASTMA216 WCB	ASTMA217 Gr CA 15
D1 Duplex SS/ Duplex SS	ASTMA890 Gr 4A (UNS J92205)	ASTMA890 Gr 4A (UNS J92205)
D2 Super Duplex SS/ Super Duplex SS	ASTMA890 Gr 5A (UNS J93404)	ASTMA890 Gr 5A (UNS J93404)
Hastelloy B / Hastelloy B	ASTMA494 Gr N 7M	ASTMA494 Gr N 7M
Hastelloy C/ Hastelloy C	ASTMA494 Gr CW 12MW	ASTMA494 Gr CW 12MW
Monel / Monel	ASTMA494 Gr M35 1	ASTMA494 Gr M35 1
Titanium / Titanium	ASTMB367 Gr C2	ASTMB367 Gr C2
Customer specified	Other alloys available on request including NACE compliant materials	Other alloys available on request including NACE compliant materials

V Series hydraulic coverage



typical applications

- Biocide / rain
- Condensate return
- Flare knock out drum
- MEG 75% with H₂O
- Oily water separator
- Sour water sump
- Storm water
- Utilities
- Wash down sumps



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Certificate Number 3720
ISO 9001, ISO 14001,
OHSAS 18001