

## G: Gear type pump range

### G: E Style:



Materials: CI\* | GM | SS



## Fire/foam pumps (VdS)

Albany is a market leader in the field of foam concentrate pumps and the GE range is our standard foam concentrate pump: a popular choice for many years in the fire industry. All models are NFPA20 compliant and certain models are VdS certified. The pumps can be run on water for 10 minutes at duty point or for 1 hour total at minimum 1000 rpm, 10 barg maximum.

Designed for fixed and vehicle applications, GE style pumps can be supplied as a pump only unit, or mounted on a baseplate and driven by a prime mover such as an electric motor or a diesel engine. For the ultimate in safety, we offer pumps directly coupled to a Pelton (water) wheel. The latter are popular in offshore and refinery applications.



Albany's 24-page brochure is available as a download at [www.albany-pumps.co.uk](http://www.albany-pumps.co.uk)



\* Cast Iron is 2.1 certified

Maximum working pressure <b>22 barg</b>	Pump size range <b>1/2" - 4"</b>	Maximum temperature <b>180°C</b>	Flow rate <b>25-1600 L/min</b>
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AL Aluminium | CS Cast Steel | CI Cast Iron | GM Gunmetal | HY Hastelloy | NR Ni-resist | NY Nylon | PP Polypropylene | SD Super Duplex | SS Stainless Steel  
 General and Chemical | Bitumen | Fire | Dispenser Machines | Food Industry | Lubrication | Marine | Oil & Gas | Refrigeration | Sugar

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### Head Office and Manufacturing Centre

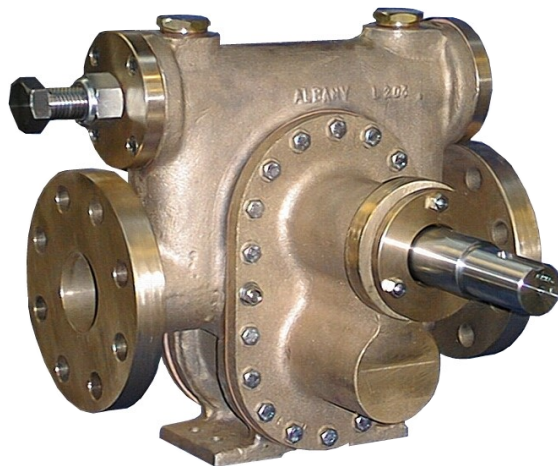
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# Albany Pumps

## G: E Style: Fire/foam pumps (VdS)



- Foam concentrate injection pumps
- Foam transfer pumps
- VdS approved models

**Albany** specialises in manufacturing foam concentrate pumps for the Fire industry. A wide range of models of gear pumps are available, with many drive and mounting options. Albany's engineering expertise includes a high level of customisation, ensuring that pumps can be supplied to meet the exacting needs of the fire fighting market.

### FOAM PUMPS FOR FIRE TRUCKS & FIXED INSTALLATIONS FOR PRESSURES UP TO 20 BARS

#### CONSTRUCTION:

PUMP CASING:	Gunmetal, cast iron and stainless steel 316 option. Flanges to ASA or DIN standards, Screwed BSP (Female) branches: NPT available to choice.
ROTORS:	Phosphor bronze or stainless steel.
SHAFTS:	Stainless steel 316 with hard coatings.
BEARINGS:	Product lubricated bush bearings.
RELIEF VALVE:	If required mounted in the pump body for internal circulation.
SHAFT SEALING:	Lip seals, mechanical seals and Packed glands available. An internal pressure relief system reduces pressure in the seal area.
REVERSIBLE:	Flow can be reversed.

- NFPA 20: Albany pumps can be supplied to comply with the latest edition (2013)
- Pumps can run dry for 10 minutes

## where reliability is crucial

Maximum working pressure <b>22 barg</b>	Pump size range 1/2" - 4"	Maximum temperature <b>180°C</b>	Flow rate <b>25-1600 L/min</b>
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## G: E Style: Fire/foam pumps (VdS)

PUMP FRAME SIZE	STANDARD BRANCH SIZE & TYPE	RPM	Example at 16 bar				Example at 20 bar			
			Lit/M	USGPM	kW	HP	Lit/M	USGPM	kW	HP
AP040	1/2" BSP 'F'	1420	24	6.4	1.2	1.6	22	5.8	1.5	2
AP050	3/4" BSP 'F'	1420	36	9.5	1.4	1.9	30	8	1.8	2.4
AP060	3/4" BSP 'F'	1420	52	13.7	2.3	3.1	42	11	3	4.1
AP070	1" BSP 'F'	1420	86	23	5	6.6	81	21.6	5.8	7.8
AP080 *	1 1/2" BSP 'F'	1420	154	41	7.7	9.6	151	40	9	12
AP090	1 1/2" BSP 'F'	1420	190	50	11.2	15	185	49	12.5	16.8
AP100 *	1 1/2" Flanged	1420	250	67	13.4	18	240	63	16	21
AP110	2" Flanged	1420	315	83	13.5	18	285	75	17	23
HD030	1 1/2" Flanged	1420	350	93	11	15	335	88	13	17.5
AP115	2 1/2" Flanged	1420	380	100	18	24	350	92	22.5	30
HD040	2" Flanged	1420	460	122	20	27	440	116	30	40
HD050 *	2 1/2" or 3" flanged	1420	510	134	26	35	500	132	34	46
AP120	3" Flanged	1420	560	148	25	34	520	138	31	42
AP130	3" Flanged	1420	870	228	36	48	800	210	47	63
HD070	3" flanged	1420	1070	282	41	55	1000	262	45	60
HD080	4" Flanged	1420	1340	350	52	70	1300	340	67	89
HD100	4" Flanged	1420	1580	417	62	83	1500	396	70	94

For larger flow rates use our SA style screw pump.

**\* AP7, AP9 & HD5 models that are approved by VdS can be supplied for use in stationary water extinguishing systems.**



Above flows based on foams of 12-14 cst & S.G: 1.2. Viscosity range 3 cps to 2000 cps can be accommodated, please supply details of foam and viscosity with enquiry.

Flows of 1600 l/m and above can be met from the Albany twin screw pump range.

### • DRIVES

When pumps are fitted to fire tender vehicles, drive is normally from PTO but may be via hydraulic motor or a separate engine. Fixed installations normally employ electric motors or diesel engine drives. However, there is an increasing preference for water turbine drives for foam concentrate pumps, which Albany cover with their Pelton units.

### • APPROVALS – QA

Albany holds BS EN ISO 9001:2008 approval. World-wide, many installations of its pumps fulfil rigorous test and service conditions. We meet the QA and documentation requirements of the oil and gas industry.

**VdS approval is held for the AP7, AP9 & HD5 families of pumps used on fixed installations.**

### • TESTING

All Albany pumps are performance tested to ensure they meet the specification.

### • THIXOTROPIC FOAM CONCENTRATES

Albany pumps will handle thixotropic foam liquids. Pumps may be run at normal speeds, as the shear rate within the inlet pipe and pump is sufficient to reduce viscosities. Suction lines should be as short as possible and of generous diameter since some of these liquids have a high resistance to flow.

### • DOCUMENTATION

Customised documentation can be provided for customers when required.

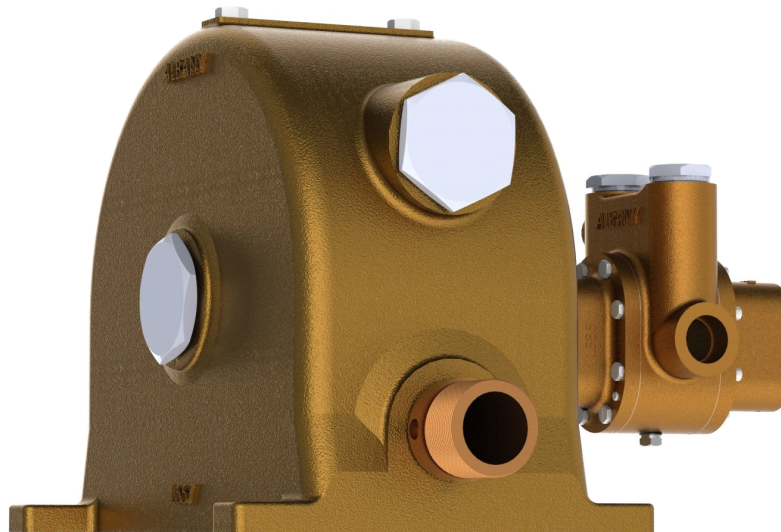
### • SPARES

Spares are held for all standard pumps. Please contact for details and prices, quoting the serial number stamped on the pump body.

Maximum working pressure 22 barg	Pump size range 1/2" - 4"	Maximum temperature 180°C	Flow rate 25-1600 L/min
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## Albany Pumps

### G: E Style: Prime mover options



Pump shown is  
GE style fitted to  
pelton wheel

There is an increasing preference for water turbine drives for foam concentrate pumps. These offer the ultimate solution for reliability and safety. A small proportion of the main water flow is used to power the Pelton wheel, which in turn powers the foam injection pump. Albany pumps will handle thixotropic foam liquids. The shear rate within the pump is sufficient to reduce the viscosity. Suction lines should be as short as possible and of generous diameter since these liquids have a high resistance to flow.

In hazardous areas why install a pump with a hazardous area electric motor when you have to provide a back-up pump with a diesel engine? The more simple and cost effective answer is to install just one pump with a water powered Pelton wheel drive.

### **WATER POWERED FOAM LIQUID PUMPS – where safety is paramount**

**FOR USE:** Offshore, Jetties  
The oil and gas industry

Fixed installations in tank farms and refineries  
Shipboard fire protection

- Foam concentrate pressures from 8 to 19 bars
- Using water supply pressure 7 to 18 bars
- AP070, AP090 and HD050 Pelton wheel units available as VdS approved versions.

**Other prime mover options include: electric or geared motors or diesel engines – please ask us for details.**



# Albany Pumps

## G: E Style: Fire/foam pumps (VdS)

### CONSTRUCTION:

PUMP CASING:	Gunmetal. Flanges to ASA or DIN standards, Screwed branches: NPT available to choice.
ROTORS	Phosphor bronze or stainless steel A304
SHAFTS:	Stainless steel 316 with options of hard coatings.
BEARINGS:	Self-lubricated based on PTFE or Carbon.
RELIEF VALVE:	If required mounted in the pump body for internal circulation. Valve with external relief can be supplied.
SEALS:	Lip seals are fitted as standard on all Pelton pumps. An internal pressure relief system reduces pressure in the seal area.
REVERSIBLE:	Water driven Pelton wheel pump sets are built for one direction of rotation only. However, either direction can be specified.

NFPA 20: Albany pumps comply with the latest edition

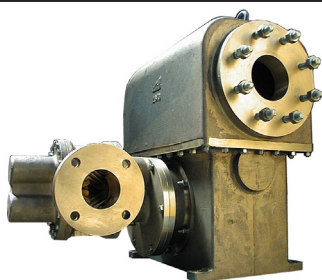
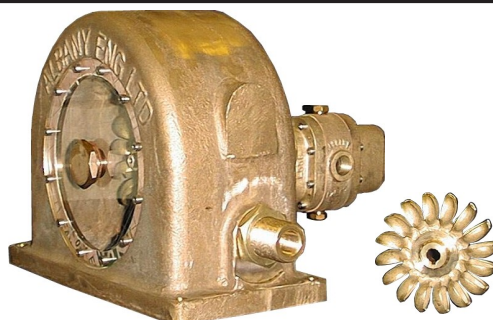
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### CLOSE COUPLED FOAM LIQUID PUMPS

Flows 17 – 216 l/min (1 to 13 m³/hr)

Albany pump sizes AP05N to AP090 with ¾" to 1½" connections. Compact pumpsets are supplied in bronze. The maximum water requirement is 45m³/hr.

**VdS approved models:**  
**AP070 & AP090 on GE style pump only**



2

### CLOSE COUPLED FOAM LIQUID PUMPS

Flows 250 – 600 l/m (15 – 36 m³/hr)

Albany pump sizes AP090, AP115 & HD050.  
Albany's 3" Model HD050 foam concentrate pump uses a newly developed Pelton Wheel turbine. The water inlet is flanged 4" ASA, maximum water requirement is 115 m³/hr.

**VdS approved model: HD050 on GE style pump only**

**Note: Water supply pressure must be measured at the inlet to the Pelton wheel**

Albany can also supply electric motor or diesel engine driven pumps.

### • APPROVALS

VdS approval is held for the AP070, AP090 and HD050 GE style pumps with Pelton wheel drives when used on fixed installations.

