

## **Gear type pump range**

**G:** E Style:



Materials: CI | GM | SS





# 3.1 Certified 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





Maximum working pressure 22 barg

Pump size range 1/2" - 4"

Maximum temperature 180°C

Flow rate 25-1600 L/min

General and Chemical Bitumen Fire Dispenser Machines Food Industry Lubrication Marine Oil & Gas Refrigeration Sugar

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

## www.albany-pumps.co.uk +44 (0) 1594 842 275

#### **Head Office and Manufacturing Centre**

Albany Engineering Company Ltd Church Road, Lydney Gloucestershire, GL15 5EQ United Kingdom

- t: +44 (0) 1594 842 275 Head Office Option 1
- e: salesdept@albany-pumps.co.uk







#### Service and Repair Centre

Albany Engineering Company Ltd Richter Works, Garnett Street Bradford BD3 9HB United Kingdom

- t: +44 (0) 1594 842 275 Service and Repair (Option 2).
- e: servicedept@albany-pumps.co.uk

## **Albany Pumps**

## **G:** E Style:

## 3.1 Certified 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 22 barg

#### CONSTRUCTION:

PUMP CASING: Gunmetal with cast iron and stainless steel 316 options. Flanges to ASA

or DIN standards, Screwed BSP (Female) branches: NPT available to

ROTORS: choice up to 1 1/2" size. 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. For 30-hour water testing before foam use, use our GF style pump or external bearing pumps (Edwards' equivalent style) use GD style pumps.

꾦

## **G:** E Style:

## 3.1 Certified fire/foam pumps (VdS)

| PUMP<br>FRAME<br>SIZE | STANDARD<br>BRANCH<br>SIZE & TYPE | RPM  | Example at 16 bar |       |      |     | Example at 20 bar |       |      |      |
|-----------------------|-----------------------------------|------|-------------------|-------|------|-----|-------------------|-------|------|------|
|                       |                                   |      | Lit/M             | USGPM | kW   | HP  | Lit/M             | USGPM | kW   | HP   |
| AP040                 | 3/4" BSP 'F'                      | 1420 | 24                | 6.4   | 1.2  | 1.6 | 22                | 5.8   | 1.5  | 2    |
| AP050                 | 3/4" BSP                          | 1420 | 36                | 9.5   | 1.4  | 1.9 | 30                | 8     | 1.8  | 2.4  |
| AP060                 | 1" 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               | 1¼ BSP F                          | 1420 | 154               | 41    | 7.7  | 9.6 | 151               | 40    | 9    | 12   |
| AP090                 | 11/2" BSP F                       | 1420 | 190               | 50    | 11.2 | 15  | 185               | 49    | 12.5 | 16.8 |
| * AP100               | 1 1/2" Flanged 2"                 | 1420 | 250               | 67    | 13.4 | 18  | 240               | 63    | 16   | 21   |
| AP110                 | 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 2"                 | 1420 | 380               | 100   | 18   | 24  | 350               | 92    | 22.5 | 30   |
| HD040                 | Flanged                           | 1420 | 460               | 122   | 20   | 27  | 440               | 116   | 30   | 40   |
| HD050 *               | 2½" 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.

#### \* AP070, AP090 & HD050 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 and 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 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 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 AP070, AP090 and HD050 families of pumps used on fixed installations.

#### **TESTING**

Maximum working pressure 22 barg

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 temperature 180°C

Flow rate 25-1600 L/min

Pump size range 1/2" - 4"

몵

## **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 parmount

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 avaiable as VdS approved versions.

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

# OIL & GAS

## G: E Style:

## 3.1 Certified 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

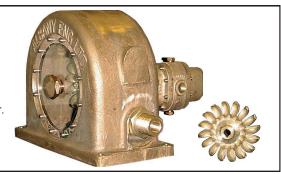
1

## CLOSE COUPLED FOAM LIQUID PUMPS

Flows 17 - 216 I/min (1 to 13 m<sup>3</sup>/hr)

Albany pump sizes AP05N to AP090 with 3/4" to 11/2" connections. Compact pumpsets are supplied in bronze. The maximum water requirement is 45m³/hr.

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





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.

