



Albany Pumps

FOAM PUMPS FOR FIRE FIGHTING VEHICLES



'Where reliability is crucial'

www.albany-pumps.co.uk

The Albany Engineering Co. Ltd.,
Church Road,
Lydney,
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FOAM PUMPS FOR FIRE FIGHTING VEHICLES

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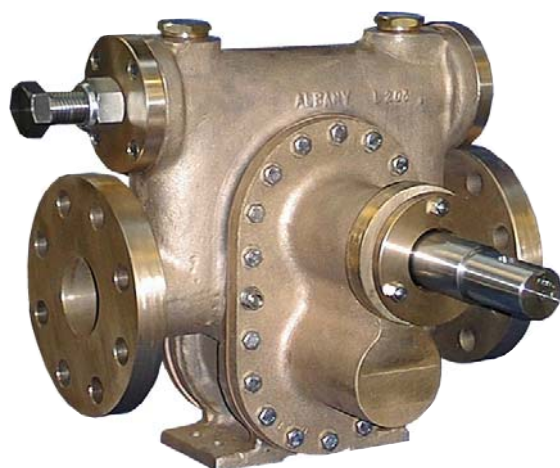
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Other curves and drawings (including pumps without in-built relief valves) available on request.



Albany Pumps

Foam Pumps for the Fire Industry



- 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

Quality Assurance to
BS EN ISO 9001:2008



Certificate No. **FM 20986**

ALBANY ENGINEERING COMPANY LIMITED, CHURCH ROAD, LYDNEY, GLOS GL15 5EQ U.K.

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PUMP SIZE	STANDARD BRANCH SIZE & TYPE	RPM	Example at 16 bar				Example at 20 bar			
			Lit/M	USGPM	kW	HP	Lit/M	USGPM	kW	HP
AP5N2	3/4" BSP 'F'	1420	24	6.4	1.2	1.6	22	5.8	1.5	2
AP5	3/4" BSP	1420	36	9.5	1.4	1.9	30	8	1.8	2.4
AP7N2	1" BSP F	1420	52	13.7	2.3	3.1	42	11	3	4.1
AP7 *	1" BSP F	1420	86	23	5	6.6	81	21.6	5.8	7.8
AP8	1 1/4" BSP F	1420	154	41	7.7	9.6	151	40	9	12
AP9 *	1 1/2" BSP F	1420	190	50	11.2	15	185	49	12.5	16.8
AP10	1 1/2" Flanged	1420	250	67	13.4	18	240	63	16	21
AP11	2" Flanged	1420	315	83	13.5	18	285	75	17	23
HD3	1 1/2" Flanged	1420	350	93	11	15	335	88	13	17.5
AP11.5	2 1/2" Flanged	1420	380	100	18	24	350	92	22.5	30
HD4	2" Flanged	1420	460	122	20	27	440	116	30	40
HD5 *	2 1/2" or 3" flanged	1420	510	134	26	35	500	132	34	46
AP12	3" Flanged	1420	560	148	25	34	520	138	31	42
AP13	3" Flanged	1420	870	228	36	48	800	210	47	63
HD7	3" flanged	1420	1070	282	41	55	1000	262	45	60
HD8	4" Flanged	1420	1340	350	52	70	1300	340	67	89
HD10	4" Flanged	1420	1580	417	62	83	1500	396	70	94
SH2 170	8" Flanged	1450	2000	529	100	134	1666	440	130	174
SH2 196	8" Flanged	1450	3000	790	150	201	2500	660	200	268

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

VdS

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.

• 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.

• 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.

• 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.

Quality Assurance to
BS EN ISO 9001:2008

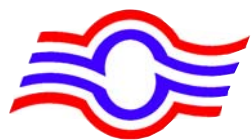


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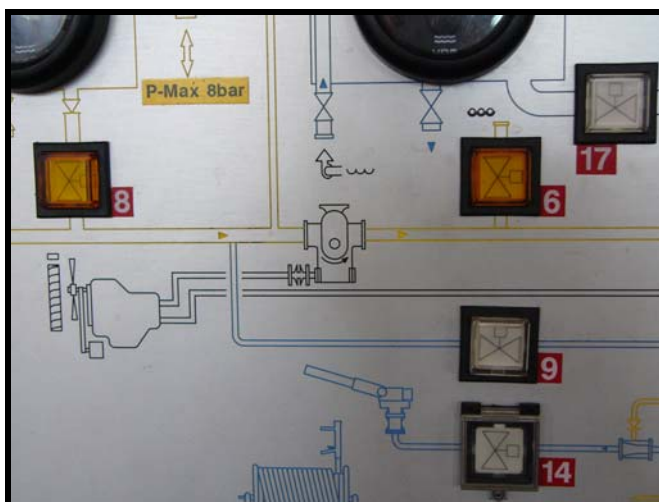


Albany Pumps

Foam Concentrate Pump photographs



Dow fire truck fitted with Albany AP12 pump



BP fire truck fitted with Albany AP11.5 pump

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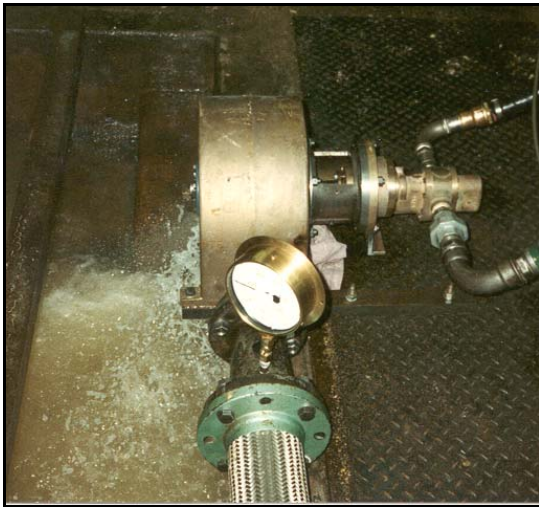
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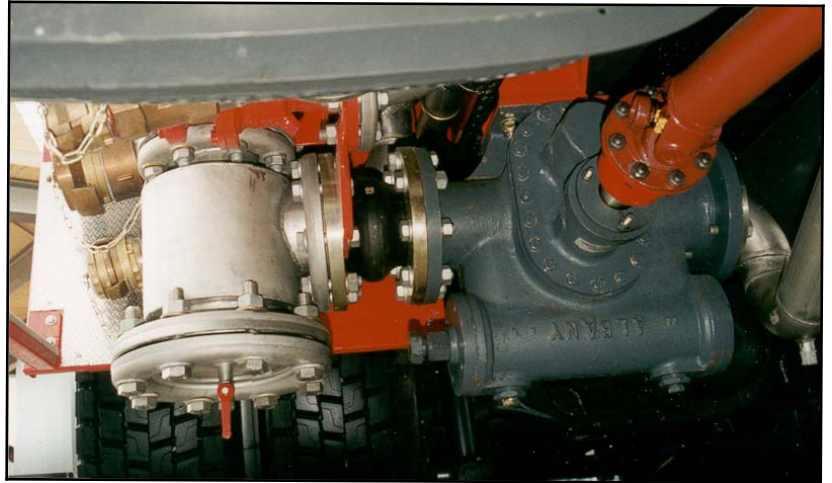
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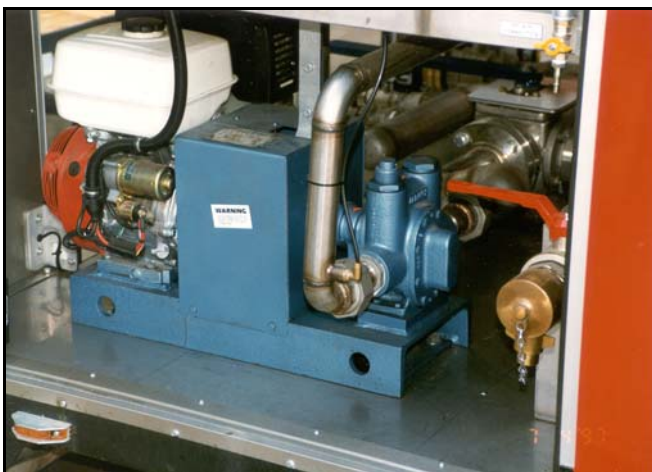
Albany Pumps



Water powered pump in action



3" vehicle mounted foam pump for 18 bars pressure. Used on airport crash tenders.



1" foam pump installed in a fire engine locker.



Petrol engine driven lightweight foam transfer pump for 64 l/m.

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Pump Options



FOAM PUMPING EXPERTISE FROM ALBANY PUMPS

WATER POWERED FOAM PUMP RANGE GROWS

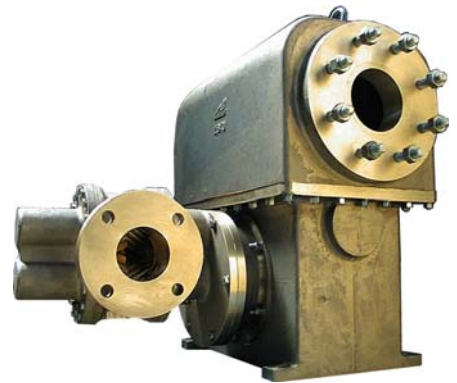
Used offshore and on big storage and loading areas in the oil & gas industry Albany's newly developed 3" foam concentrate pump is a real winner.

The water powered pump offers economy and greatly reduced space requirements. This is critical for off-shore fire protection.

The unit supplies 600l/m at up to 18 bars pressure with complete spark-proof safety.

The smallest water powered pumps are portable and used offshore. Medium sized units of 100 – 200 l/m protect helidecks on platforms and ships and Naval vessels.

Albany's foam pump range extends to 1400l/m with our gear pumps and above 3000 l/m with our ranges of twin screw pumps.



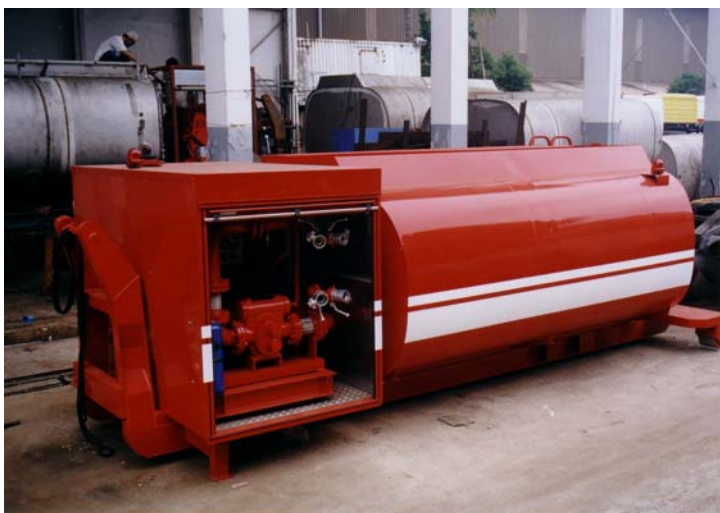
ALBANY "FIGHT" TO SECURE ORDER FOR SINGAPORE CIVIL DEFENCE

After fierce competition Albany secured an order from a major Singapore fire fighting & protection equipment specialist. The requirement was for pumps to handle 1400 litres/minute of fire fighting foam concentrate.

Eight model HD8 relief valve extended bearing pattern Albany pumps with 4-inch flanged connections and bare drive shafts were supplied for building into skids out in

Singapore, (photographs show the units under construction).

The roll-on/roll-off skids incorporated the Albany pump coupled to a diesel engine, foam tank, pipe work and control gear. This enables the Singapore Civil Defence to place the unit at any strategic point to facilitate the fighting of fires.



VEHICLE FOAM LOADING AND TRANSFER PUMPS

Right: the Unipower Rapid Intervention Vehicle (RIV) is a first response airfield crash, fire and rescue vehicle. It has exceptional performance and can operate in extremes of climate. Unipower of Coventry (formerly Alvis Motors) chose a DC motor-driven Albany FL5 to pump foam concentrate into the water stream. Albany make a range of DC or AC driven and air or hydraulic powered foam transfer pumps for use on all types of fire vehicles.



ALBANY THINK – 'FIRE PROTECTION'



Millions of people pass through airports and never give a thought to the fire fighting equipment. The good news is that Albany have given a lot of thought to the design, manufacture and performance of their pumps used on foam concentrate used in fighting aviation fuel fires.

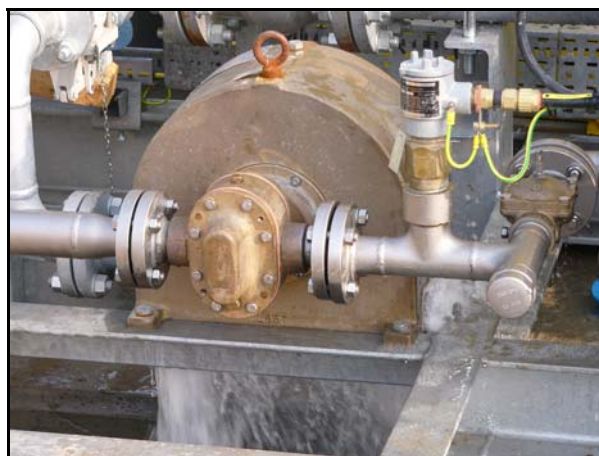
When the fuel storage facilities at a major European airport needed extending Angus Fire were contacted to supply the foam unit skid. This unit was designed to cover the requisite demand of foam for the base injection system on the new storage tanks. An integral and vital part of the unit was a water powered foam pump. Angus, working closely with Albany at the calculation and design stage, incorporated one of Albany's pump units knowing that it would meet the performance requirements specified.

Every foam pump Albany manufacture and supply is thoroughly tested. The water turbine units are fine tuned at the test stage to ensure the foam flow rate at the required discharge pressure is achieved at the stated water pressure. So everyone can rest assured that an Albany pump will perform if and when called upon.

This close up picture shows the Albany foam pump in action. Please note the water falling from the Pelton Wheel.

The Angus Fire skid sits on a concrete foundation with a tundish moulded into concrete to ferry the water away to a drain point.

In many applications the water is piped back to the main water pump suction or to the water storage tank.



ROTARY GEAR, TWIN-SCREW &
CENTRIFUGAL PUMPS

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Quality Assurance to
BS EN ISO 9001:2008

Certificate No. FM 20986

TECHNICAL INFORMATION SHEET FOR ALBANY FOAM PUMPS

FIRE FIGHTING VEHICLE MODELS

The Albany Engineering Co. Ltd.

PUMP

Model: AP10 with bare shaft drive

Rotor Type: Double Helical

Mounting: Foot

Option: Flange (see notes below)

Branches: Flanged 1 1/2" ASA 150 lb FF

Option: DIN

Integral RV: Yes

Option: Non RV version

Bearings: Extended DU

Shaft Sealing: Packed Gland pressure relieved

Option: Double Lip Seal, grease lubricated and pressure relieved

Materials of Construction

Body: Gunmetal

Front Cover: Gunmetal

Back Cover: Gunmetal

Rotors: Phosphor Bronze

Shafts: 316 Stainless Steel hard chrome plated in bearing and seal areas

Bearings: DU type, PTFE coated on sintered backing

Performance Details

Speed range: 1000 to 2200 rev/min

Output range: approx. 150 to 400 l/m

Note! See curve: AP10-RV-DH-1800-15CST-1

Discharge pressure range: 0 to 20 bar g

Foam Viscosity range: This is the viscosity of the foam when entering the pump and the range is dependant on speed and pressure, with a discharge pressure of 16 bar g the minimum viscosity at 1200 rev/min is 7 cst and at 1800 rev/min is 5 cst.

For foams with viscosities below these figures please contact Albany Sales Office.

Notes! Pumps for Fire Fighting Vehicles

Pumps can be mounted in the horizontal position and also inclined within 20 degrees of the horizontal with the foot in the 6, 9, 12 or 3 o'clock position.

If pumps are to be mounted vertically or at a greater angle than 20 degrees to the horizontal please contact the Albany Sales Office as this may necessitate a thrust bearing.

Pumps can be driven by hydraulic motor or power transmission shafts, if there is any thrust or side loads the pump can be fitted with an outrigger bearing.

Albany Foam Pumps are designed to pump foam concentrate. If they are to be tested on water it must be within Albany's recommended limits as running on water and low viscosity foams will reduce the life of the pump.

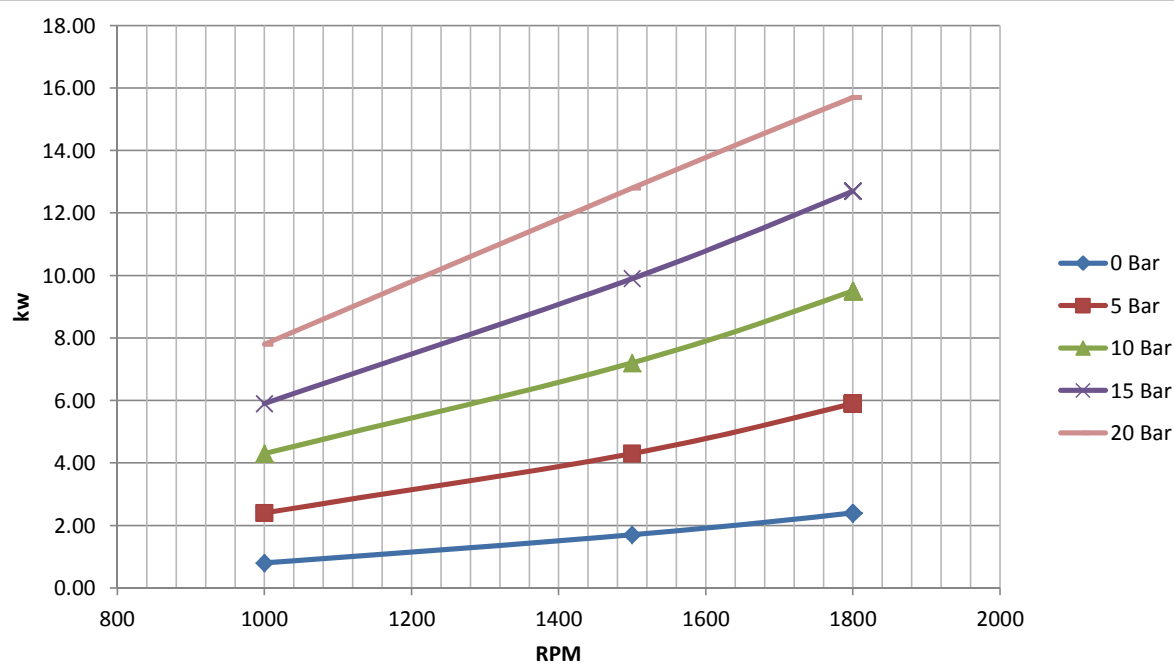
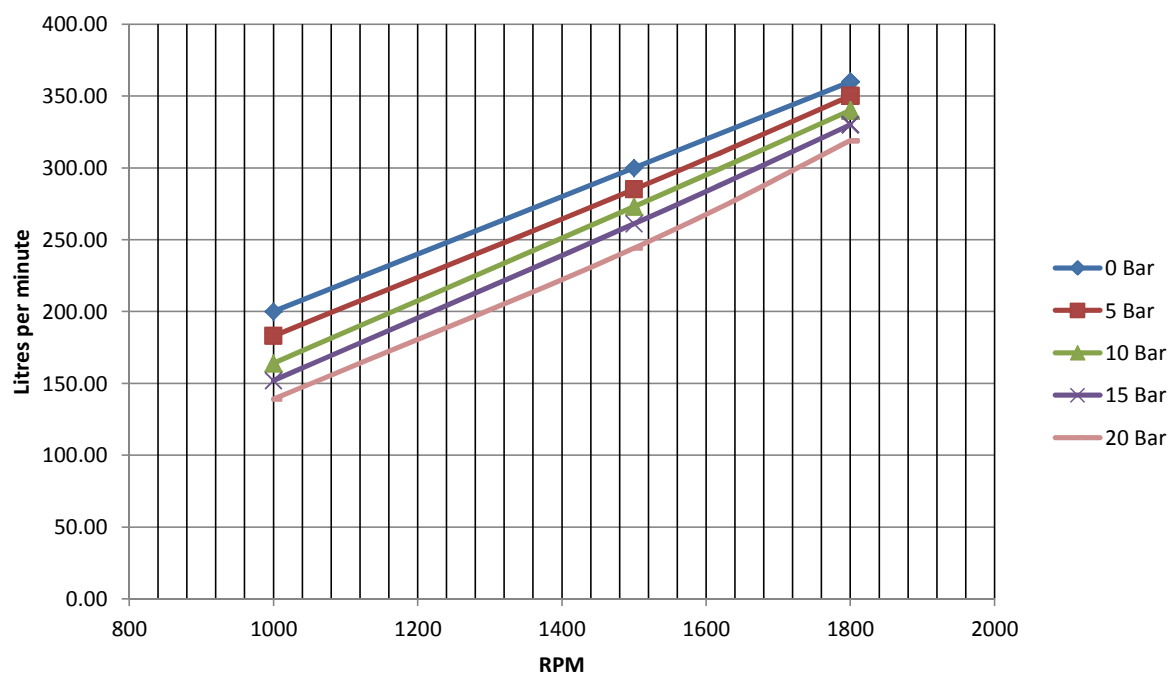


Albany Pumps

Pump Performance Graph

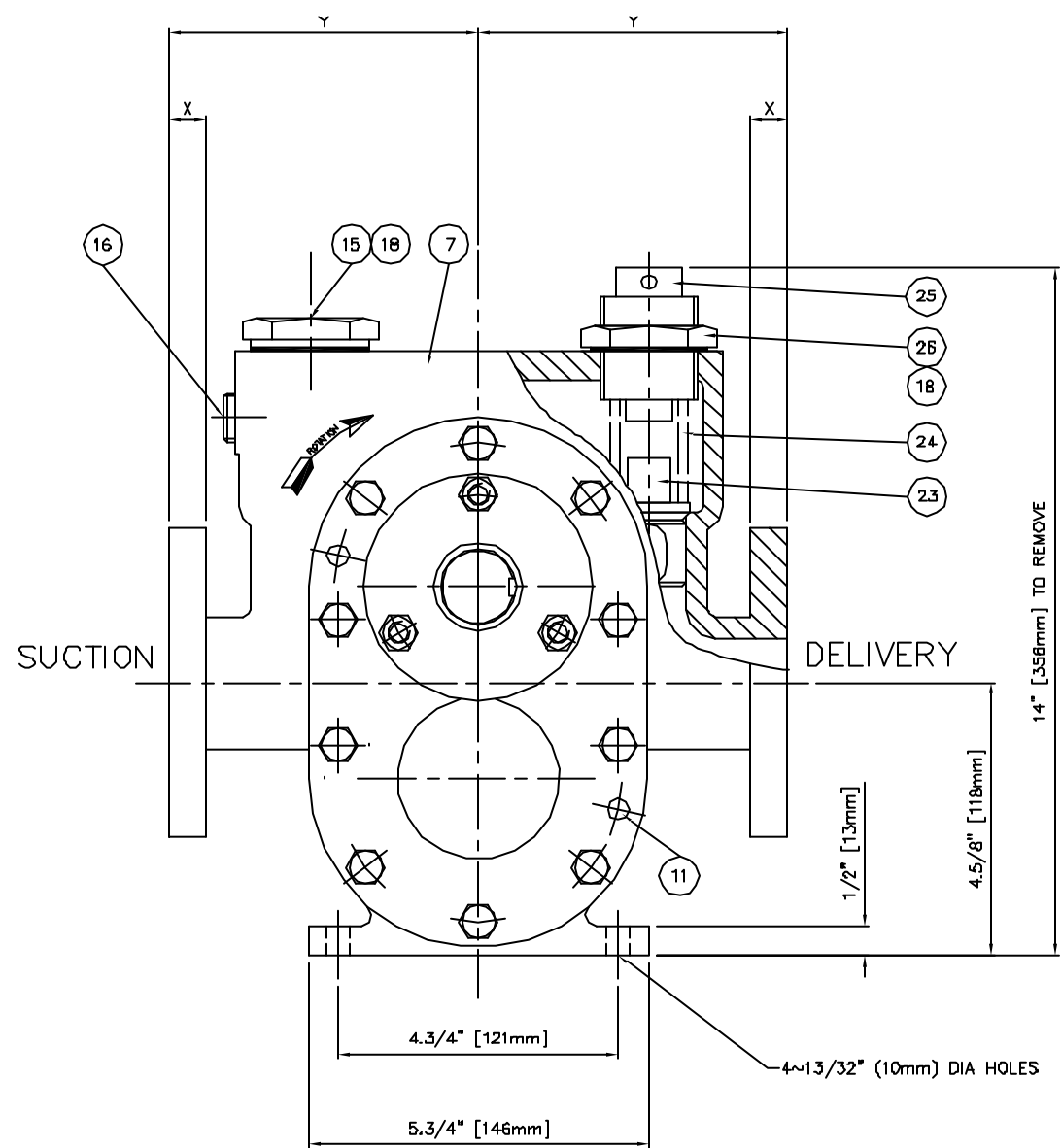
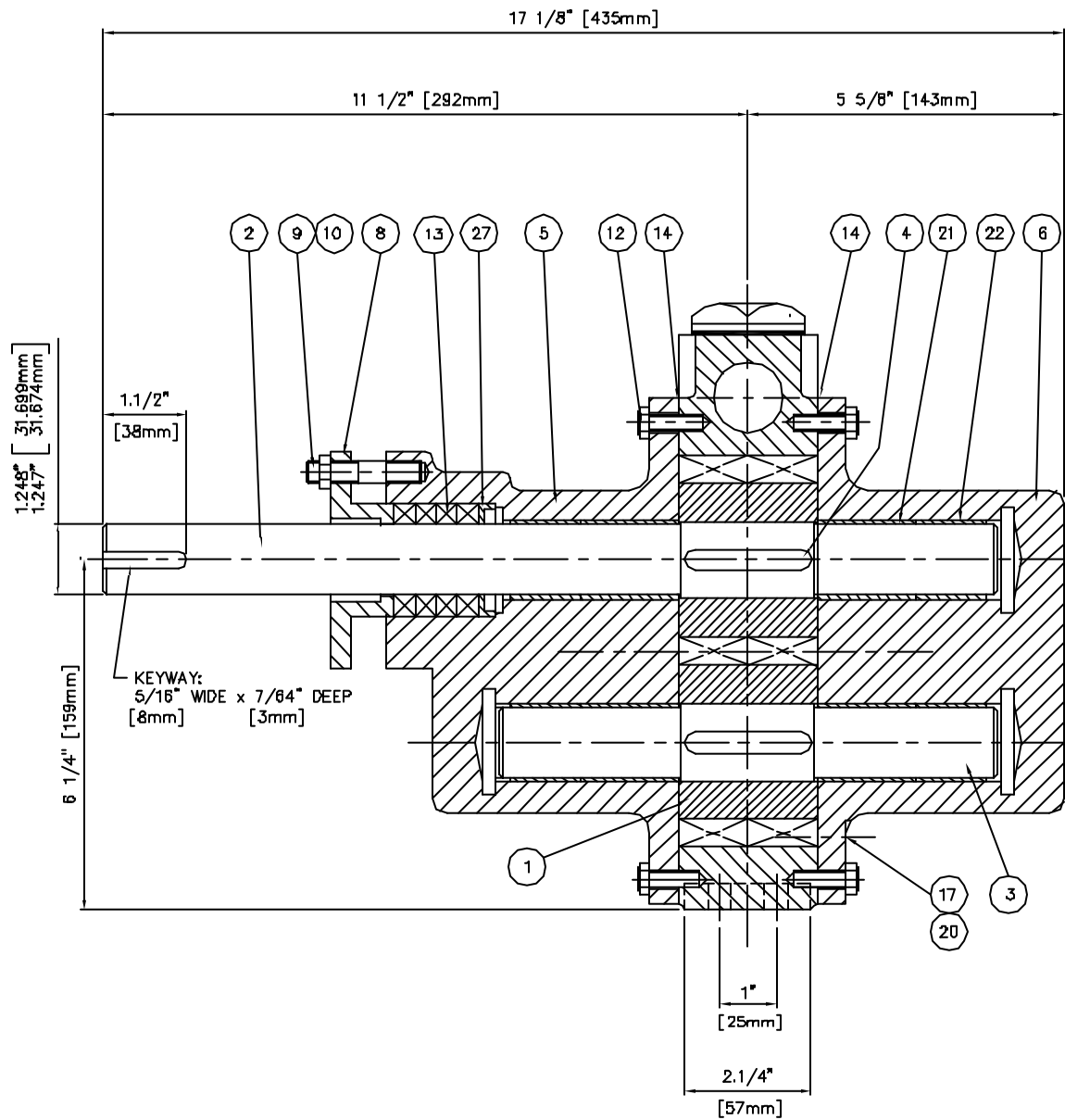
Graph No.

AP10-RV-DH-1800-15CST-1



Pump Type	AP10 DH	Viscosity	15 centistokes	Temperature	20°C
Fluid	Oil				

IF IN DOUBT ASK



FLANGE SIZE	OD	No OF HOLES	HOLE DIA	P.C.D	X	Y	RAISED FACE	
							DIA	HEIGHT
1.1/2" BST A,B,C,D,E	5.1/4" [133mm]	4	9/16" [14mm]	3.7/8" [98mm]	5/8" [18mm]	5.1/4" [133mm]	—	—
1.1/2" ANSI 125 LBS FF OR RF	5" [127mm]	4	5/8" [16mm]	3.7/8" [98mm]	11/16" [17mm]	5.5/16" [135mm]	2.7/8" [73mm]	1/16" [2mm]
1.1/2" ANSI 150 LBS FF OR RF	5" [127mm]	4	5/8" [16mm]	3.7/8" [98mm]	11/16" [17mm]	5.5/16" [135mm]	2.7/8" [73mm]	1/16" [2mm]
1.1/2" ANSI 300 LBS FF OR RF	6.1/8" [158mm]	4	7/8" [22mm]	4.1/2" [114mm]	13/16" [21mm]	5.7/16" [138mm]	2.7/8" [73mm]	1/16" [2mm]
2" BST A,B,C,D,E	6" [152mm]	4	11/16" [17mm]	4.1/2" [114mm]	3/4" [19mm]	5.3/8" [137mm]	—	—
2" ANSI 150 LBS FF OR RF	6" [152mm]	4	3/4" [19mm]	4.3/4" [121mm]	1" [25mm]	5.5/8" [143mm]	3.5/8" [92mm]	1/16" [2mm]

ROTATION
PUMP DRAWN TOP DRIVE / CLOCKWISE

ITEM No.	DESCRIPTION		No. OFF
1	ROTOR	27448	1
2	DRIVING SHAFT	27401	1
3	FOLLOWING SHAFT	27401	1
4	KEY	3/8" x 1/4" x 2 1/4"	2
5	FRONT COVER	30010	1
6	BACK COVER	30034	1
7	BODY	21785	1
8	GLAND	8906	1
9	NUT	3/8" UNC	3
10	STUD	3/8" UNC x 2"	3
11	DOWEL	3/8" DIA x 1"	4
12	SETSCREW	5/16" UNC x 7/8"	20
13	PACKING	3/8" SQ	1 SET
14	GASKET	27289	1 SET
15	PLUG	1 1/4" BSP	1
16	PLUG	1/2" BSP	1
17	DRAIN PLUG	1/8" BSP	1
18	FIBRE WASHER		2
19	FIBRE WASHER		1
20	FIBRE WASHER		1
21	BUSH	200U2B	4
22	BUSH	200U20	4
23	RELIEF VALVE	23033	1
24	SPRING		1
25	ADJUSTING SCREW	6351	1
26	LOCKNUT	23033	1
27	PACKING HEADER	21941	1
28			
29			
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33			
34			
35			
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46			
47	APPROX WEIGHT: 40KG		
48			
49			
PATTERN No	DRAWN: DC	DATE: - 20/4/99	
DIMENSIONS IN INCHES MILLIMETRES	SIZE A1	SCALE: - 3/4 FS	
	MACHINE	LIMITS ± UNLESS OTHER - ± WISE SPECIFIED	
ALBANY ENG. CO. LTD. LYDNEY GLOUCESTERSHIRE.			
DESCRIPTION :- SECTIONAL ARRANGEMENT AP10 RELIEF VALVE EXTENDED BEARING PUMP			
DRG No: 2 5 1 1 5			ISS' 2

ALTERATIONS: -	ISSI FRONT CVR WAS 22058 & BACK CVR WAS 22059
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JOB NO

DRG No: 2 5 1 1 5	ISS [*] 2
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TECHNICAL INFORMATION SHEET FOR ALBANY FOAM PUMPS

FIRE FIGHTING VEHICLE MODELS

The Albany Engineering Co. Ltd.

PUMP

Model: AP11 with bare shaft drive

Rotor Type: Double Helical

Mounting: Foot

Option: Flange (see notes below)

Branches: Flanged 2" ASA 150 lb FF

Option: DIN

Integral RV: Yes

Option: Non RV version

Bearings: Extended DU

Shaft Sealing: Packed Gland pressure relieved

Option: Double Lip Seal, grease lubricated and pressure relieved

Materials of Construction

Body: Gunmetal

Front Cover: Gunmetal

Back Cover: Gunmetal

Rotors: Phosphor Bronze

Shafts: 316 Stainless Steel hard chrome plated in bearing and seal areas

Bearings: DU type, PTFE coated on sintered backing

Performance Details

Speed range: 1000 to 2200 rev/min

Output range: approx. 175 to 540 l/m

Note! See curve: AP11-RV-DH-1800-15CST-1

Discharge pressure range: 0 to 20 bar g

Foam Viscosity range: This is the viscosity of the foam when entering the pump and the range is dependant on speed and pressure, with a discharge pressure of 16 bar g the minimum viscosity at 1200 rev/min is 9 cst and at 1800 rev/min is 6 cst.

For foams with viscosities below these figures please contact Albany Sales Office.

Notes! Pumps for Fire Fighting Vehicles

Pumps can be mounted in the horizontal position and also inclined within 20 degrees of the horizontal with the foot in the 6, 9, 12 or 3 o'clock position.

If pumps are to be mounted vertically or at a greater angle than 20 degrees to the horizontal please contact the Albany Sales Office as this may necessitate a thrust bearing.

Pumps can be driven by hydraulic motor or power transmission shafts, if there is any thrust or side loads the pump can be fitted with an outrigger bearing.

Albany Foam Pumps are designed to pump foam concentrate. If they are to be tested on water it must be within Albany's recommended limits as running on water and low viscosity foams will reduce the life of the pump.

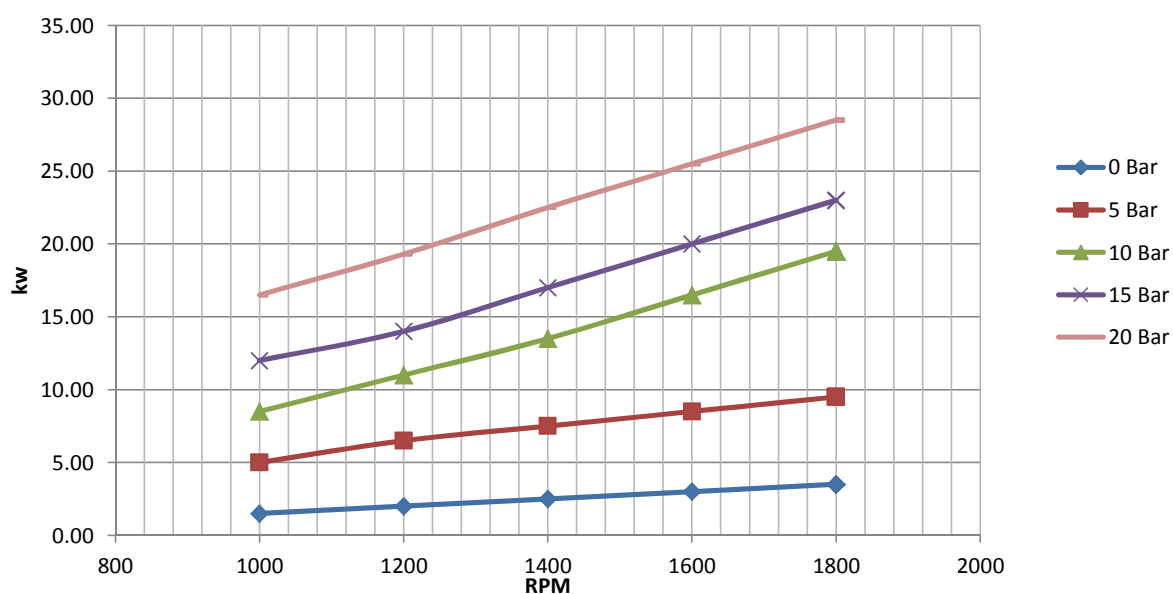
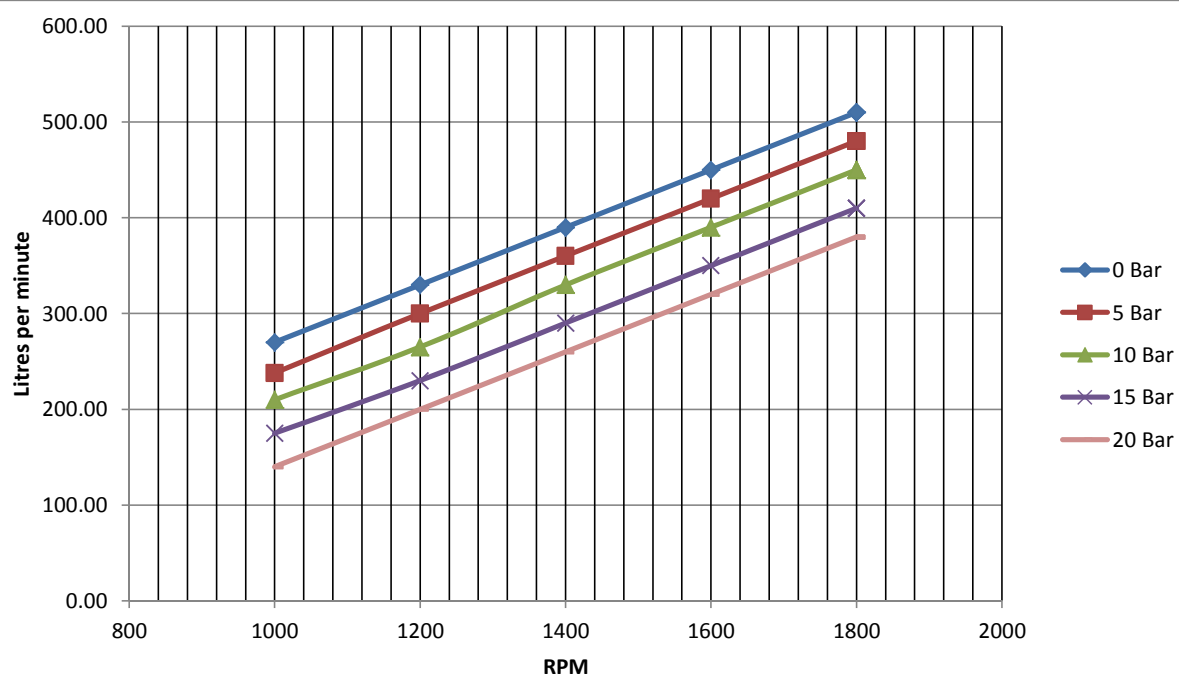


Albany Pumps

Pump Performance Graph

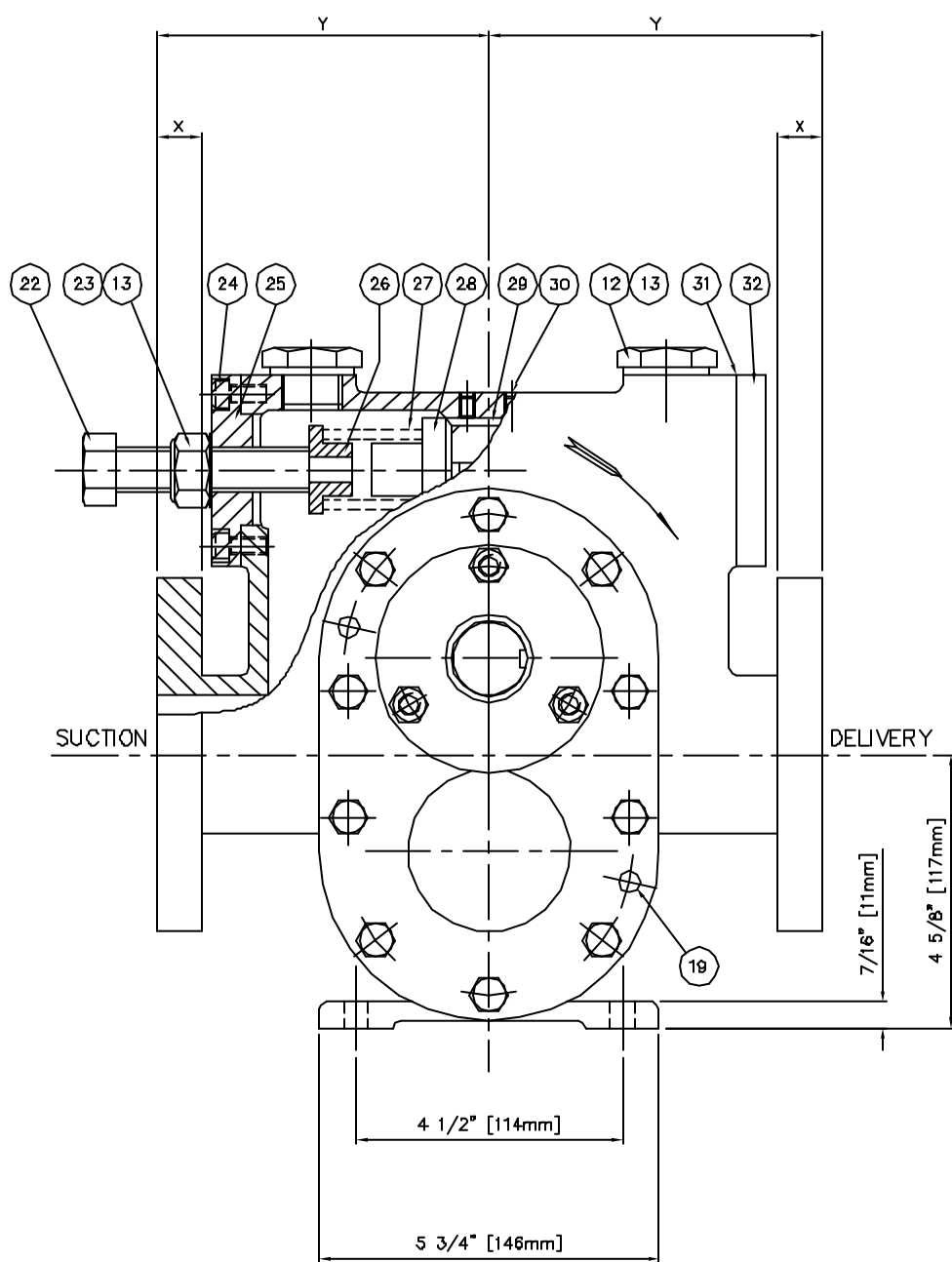
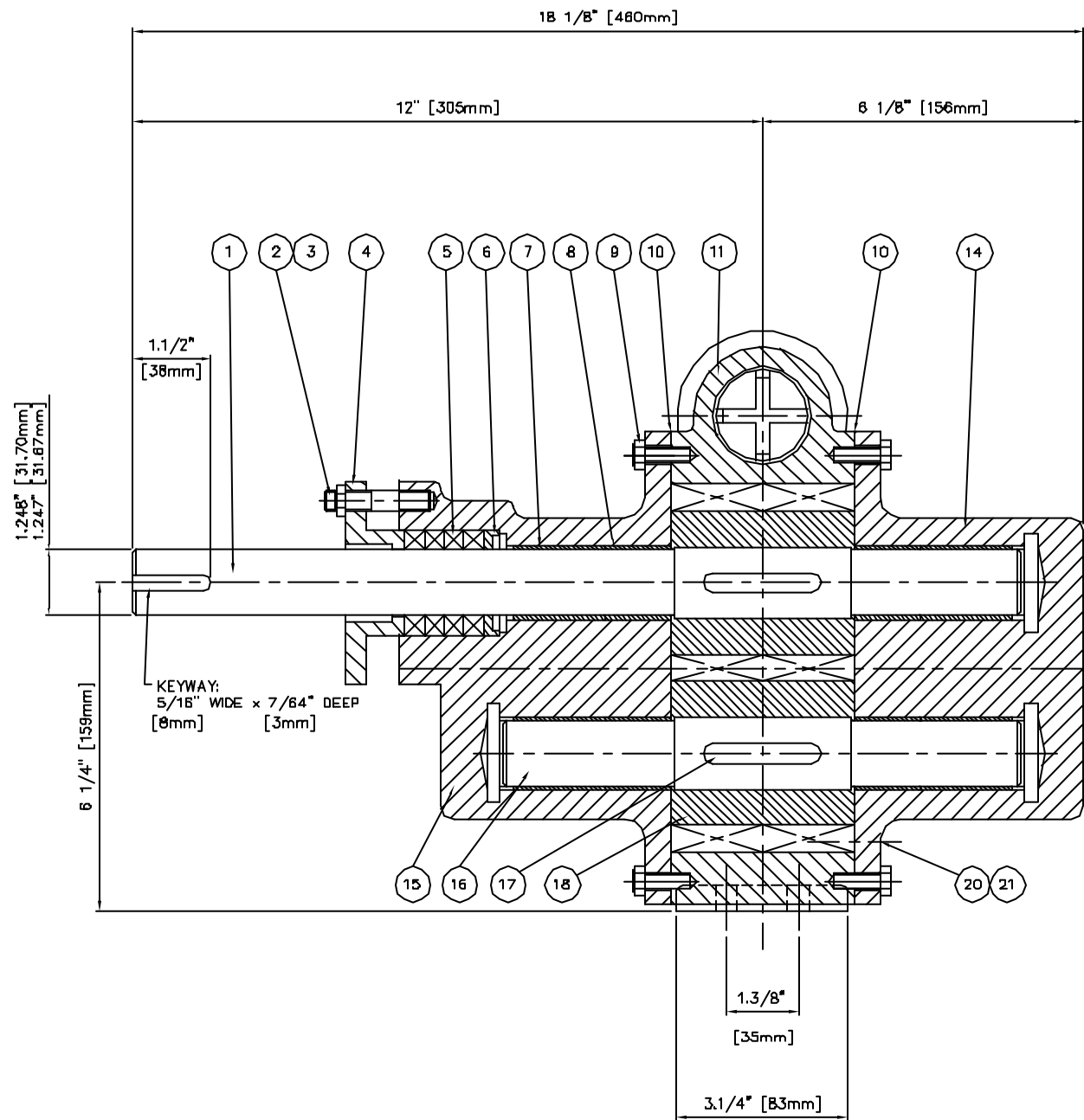
Graph No.

AP11-RV-DH-1800-15CST-1



Pump Type	AP11 DH	Viscosity	15 centistokes	Temperature	20°C
Fluid	Oil				

IF IN DOUBT ASK



FLANGE	OD	No. OF HOLES	HOLE DIA	P.C.D	X	Y	RAISED FACE DIA	HEIGHT
2" BST D, E	6" 152mm	4	11/16" 17mm	4.1/2" 114mm	3/4" 19mm	5.5/8" 143mm	-	-
2" BST F	6.1/2" 165mm	4	11/16" 17mm	5" 127mm	3/4" 19mm	5.5/8" 143mm	-	-
2" ANSI 125LBS FF OR RF	6" 152mm	4	3/4" 19mm	4.3/4" 121mm	3/4" 19mm	5.5/8" 124mm	3.5/8" 92mm	1/16" 2mm
2" ANSI 150LBS FF OR RF	6.1/2" 165mm	8	3/4" 19mm	5" 127mm	7/8" 22mm	5.3/4" 146mm	3.5/8" 92mm	1/16" 2mm
2" ANSI 300LBS FF OR RF	6.1/2" 165mm	8	3/4" 19mm	5" 127mm	7/8" 22mm	5.3/4" 146mm	3.5/8" 92mm	1/16" 2mm
2" DIN ND16 FF	165mm	4	18mm	125mm	22mm	145mm	-	-

RIGHT HAND PUMP: AS DRAWN
LEFT HAND PUMP: ROTATION REVERSED
SUCTION & DELIVERY OPPOSITE

ITEM No.	DESCRIPTION	No. OFF
1	DRIVING SHAFT 27401	1
2	STUD 3/8" UNC x 2"	3
3	NUT 3/8" UNC	3
4	GLAND 8906	1
5	PACKING 3/8" SQ	1 SET
6	PACKING HEADER 21941	1
7	BUSH 20DU28	4
8	BUSH 20DU20	4
9	SETSCREW 5/16" UNC x 7/8"	20
10	GASKET 27289	1 SET
11	BODY 21797	1
12	PLUG 3/4" BSP	2
13	WASHER	2
14	BACK COVER 30034	1
15	FRONT COVER 30010	1
16	FOLLOWING SHAFT 27401	1
17	ROTOR KEY 3/8" x 1/4" x 2.1/4"	2
18	ROTOR 27448	2
19	DOWEL 3/8" DIA x 1"	4
20	DRAIN PLUG 1/8" BSP	1
21	WASHER	1
22	ADJUSTING SCREW 21886	1
23	LOCKNUT 3/4" BSP	1
24	S.H.CAPSCREWS 5/16" UNC x 3/4"	2
25	ADJ SCREW FLG 21885	1
26	SPRING SEAT 21887	1
27	SPRING	1
28	RELIEF VALVE 6355	1
29	VALVE SEAT 21888	1
30	GRUBSCREWS 1/4"UNC x 3/8"	4
31	RV FLANGE 21889	1
32	GASKET 21889G	2
33		
34		
35		
36		
37		
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48		
49		

PATTERN No	DRAWN: DC	DATE: 15/10/99
	SIZE A1	SCALE: 3/4 FS
DIMENSIONS IN INCHES	MACHINE	LIMITS ± UNLESS OTHER ± WISE SPECIFIED

ALBANY ENG. CO. LTD.
LYDNEY GLOUCESTERSHIRE.

DESCRIPTION :-
SECTIONAL ARRANGEMENT AP11 RELIEF VALVE
EXTENDED BEARING PUMP

ALTERATIONS:- ISS 2 ROTOR KEYS NOW 2-OFF
GASKET 21889 NOW 21889G 2-OFF

APPROX WEIGHT 55KG DRG No: 3 2 0 6 7 ISS 2

TECHNICAL INFORMATION SHEET FOR ALBANY FOAM PUMPS

FIRE FIGHTING VEHICLE MODELS

The Albany Engineering Co. Ltd.

PUMP

Model: AP11.5 with bare shaft drive

Rotor Type: Double Helical

Mounting: Foot

Option: Flange (see notes below)

Branches: Flanged 2 1/2" ASA 150 lb FF

Option: DIN

Integral RV: Yes

Option: Non RV version

Bearings: Extended DU

Shaft Sealing: Packed Gland pressure relieved

Option: Double Lip Seal, grease lubricated and pressure relieved

Materials of Construction

Body: Gunmetal

Front Cover: Gunmetal

Back Cover: Gunmetal

Rotors: Phosphor Bronze

Shafts: 316 Stainless Steel hard chrome plated in bearing and seal areas

Bearings: DU type, PTFE coated on sintered backing

Performance Details

Speed range: 1000 to 2200 rev/min

Output range: approx. 250 to 680 l/m

Note! See curve: AP11.5-RV-DH-1800-15CST-1

Discharge pressure range: 0 to 20 bar g

Foam Viscosity range: This is the viscosity of the foam when entering the pump and the range is dependant on speed and pressure, with a discharge pressure of 16 bar g the minimum viscosity at 1200 rev/min is 12 cst and at 1800 rev/min is 8 cst.

For foams with viscosities below these figures please contact Albany Sales Office.

Notes! Pumps for Fire Fighting Vehicles

Pumps can be mounted in the horizontal position and also inclined within 20 degrees of the horizontal with the foot in the 6, 9, 12 or 3 o'clock position.

If pumps are to be mounted vertically or at a greater angle than 20 degrees to the horizontal please contact the Albany Sales Office as this may necessitate a thrust bearing.

Pumps can be driven by hydraulic motor or power transmission shafts, if there is any thrust or side loads the pump can be fitted with an outrigger bearing.

Albany Foam Pumps are designed to pump foam concentrate. If they are to be tested on water it must be within Albany's recommended limits as running on water and low viscosity foams will reduce the life of the pump.

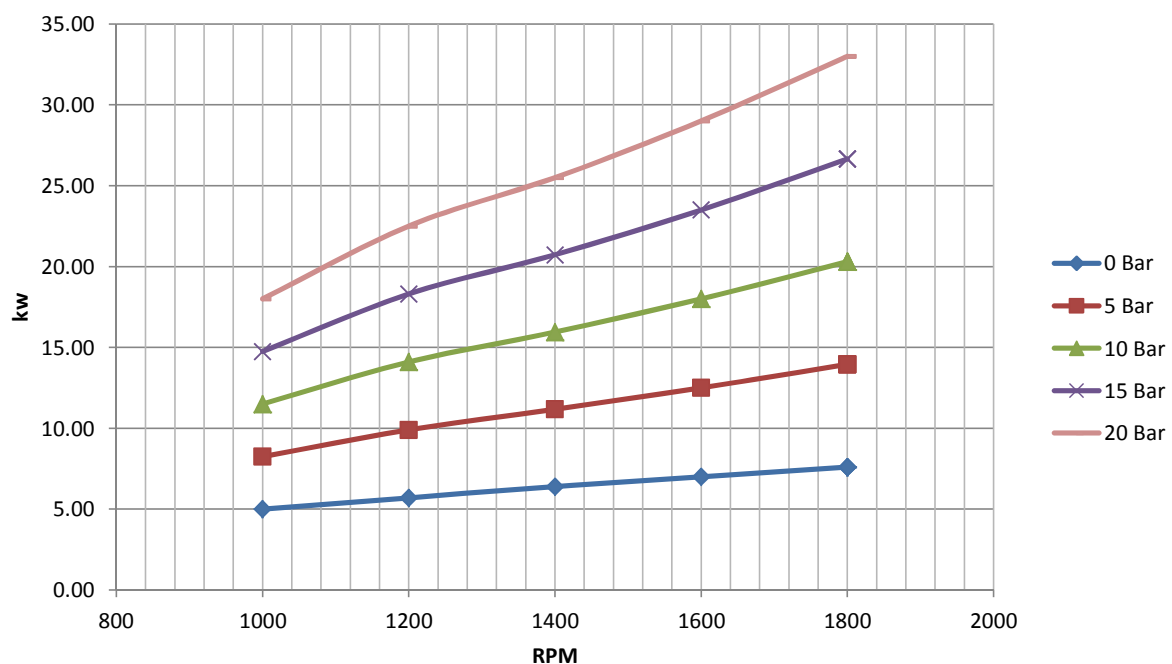
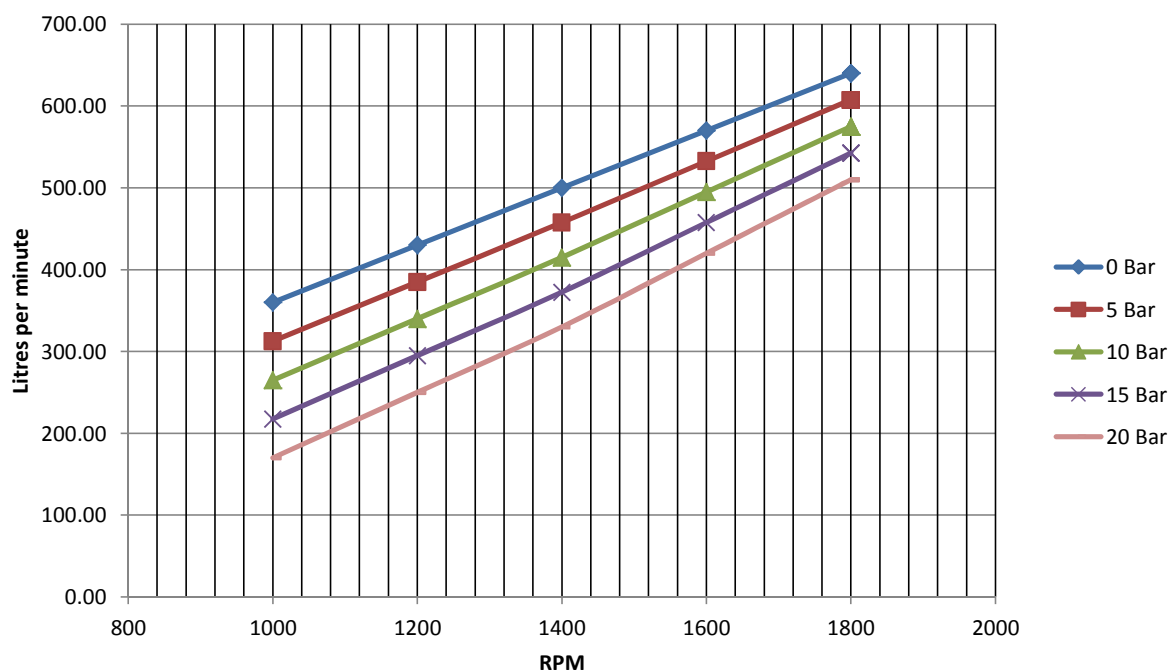


Albany Pumps

Pump Performance Graph

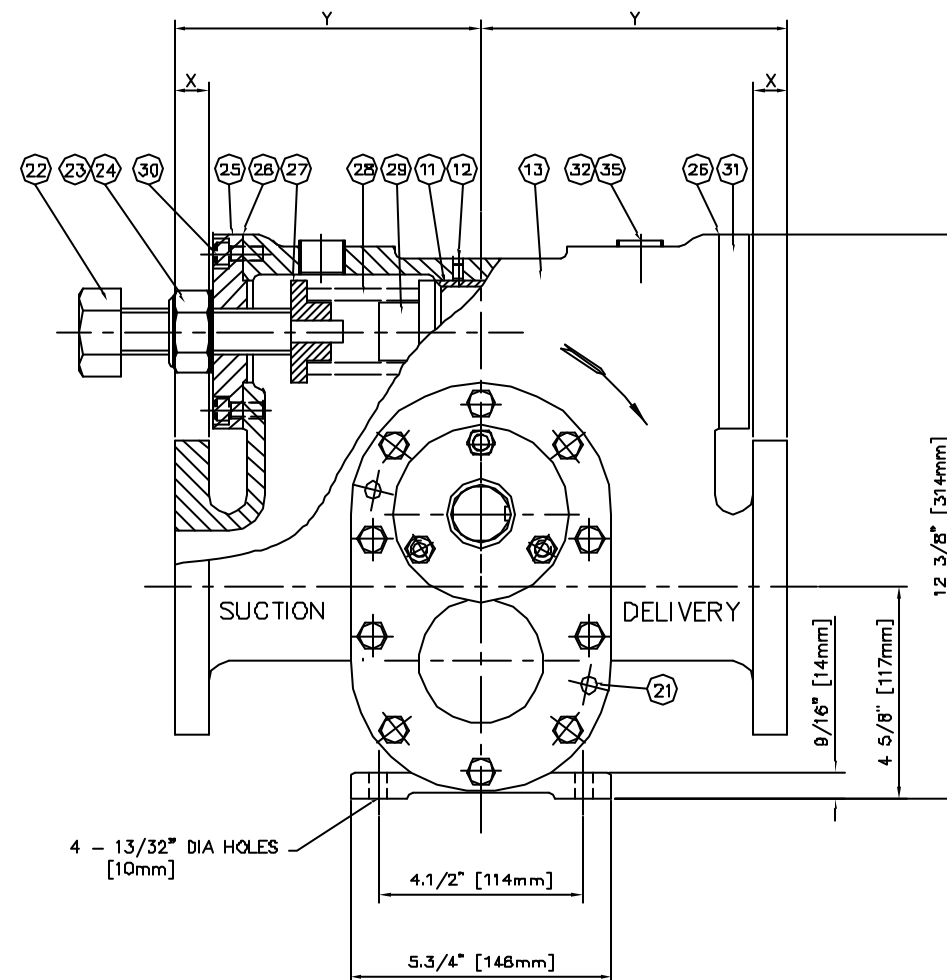
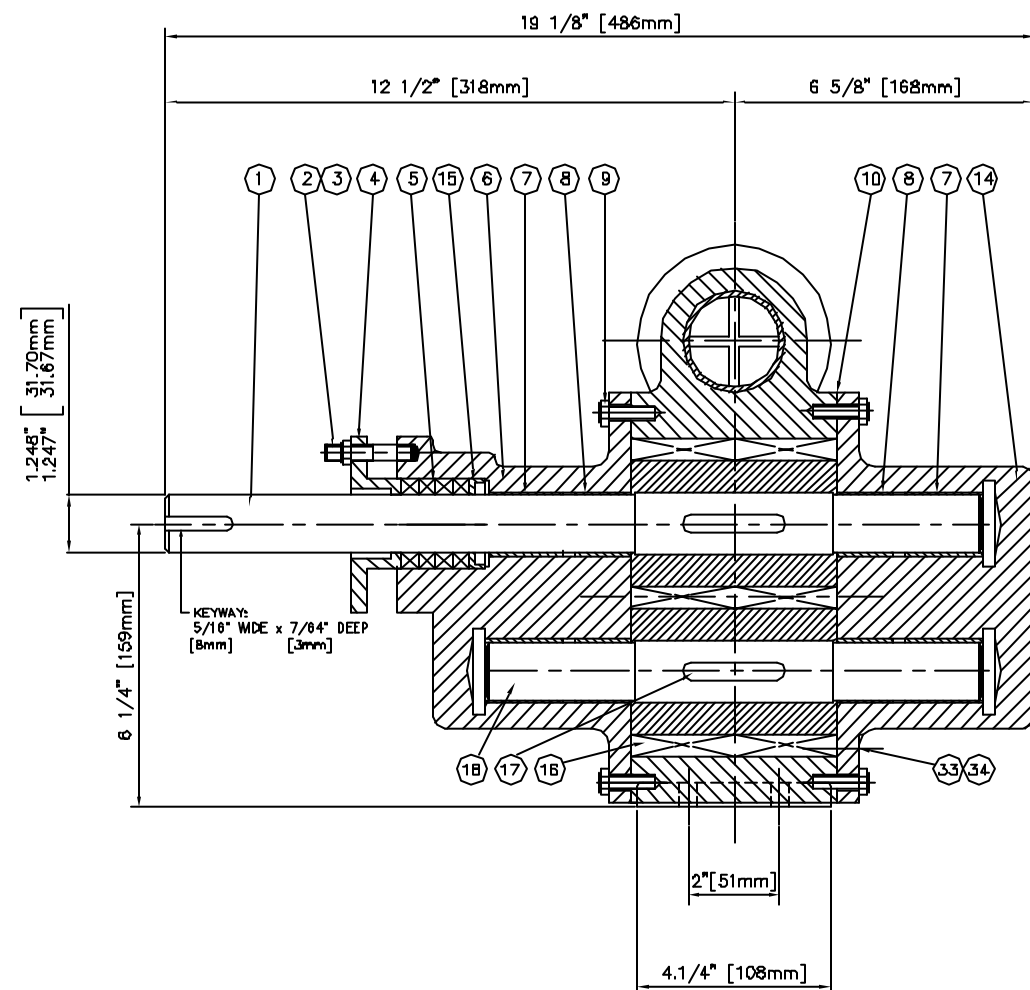
Graph No.

AP11.5-RV-DH-1800-15CST-1



Pump Type	AP11.5 DH	Viscosity	15 centistokes	Temperature	20°C
Fluid	Oil				

IF IN DOUBT ASK




ITEM NO	DESCRIPTION	No OFF
1	DRIVE SHAFT 27401	1
2	STUD 3/8" UNC x 2"	3
3	NUT 3/8" UNC	3
4	GLAND 8906	1
5	PACKING 3/8" SQ	1 SET
6	FRONT COVER 30010	1
7	BUSH 20DU20	4
8	BUSH 20DU28	4
9	SETSCREW 5/16" UNC x 7/8"	20
10	GASKET 27289	1 SET
11	VALVE SEAT 20965	1
12	GRUBSCREW 1/4" UNC x 3/8"	4
13	BODY 22498	1
14	BACK COVER 30034	1
15	PACKING HEADER 21941	1
16	ROTOR 27448	2
17	KEY 3/8" x 1/4" x 2 1/4"	2
18	FOLLOWING SHAFT 27401	1
19		
20		
21	DOWEL 3/8" DIA x 1"	4
22	ADJUSTING SCREW 20717	1
23	LOCKNUT 1" UNC NYLOC	1
24	FIBRE WASHER	1
25	FLANGE 20963	1
26	GASKET	2
27	SPRING SEAT 20966	1
28	SPRING	1
29	RELIEF VALVE 4528	1
30	S.H.CAPSCREW 3/8" UNC x 3/4"	8
31	RV FLANGE 20964	1
32	PLUGS 3/4" BSP	2
33	DRAIN PLUG 1/8" BSP	1
34	FIBRE WASHER	1
35	FIBRE WASHER	2

FLANGES	O.D	No OF HOLES	HOLE DIA	P.C.D	X	Y	RAISED FACE	
							DIA	HEIGHT
2.1/2" ANSI 125LBS FF OR RF	7"	4	3/4"	5.1/2"	3/4"	6.3/4"	4.1/8"	1/16"
2.1/2" ANSI 150LBS FF OR RF	7"	4	3/4"	5.1/2"	7/8"	6.7/8"	4.1/8"	1/16"
2.1/2" ANSI 300LBS FF OR RF	7.1/2"	8	7/8"	5.7/8"	7/8"	6.7/8"	4.1/8"	1/16"
2.1/2" BST 'D' & 'E'	6.1/2"	4	11/16"	5"	3/4"	6.3/4"	—	—
2.1/2" DIN PN16	185mm	4	18mm	145mm	3/4"	6.3/4"	—	—
2.1/2" DIN PN10								
65mm BS4504 PN16								

PUMP DRAWN: TOP DRIVE / CLOCKWISE ROTATION

ANTICLOCKWISE ROTATION SUCTION AND DISCHARGE BRANCHES
& ROTATION REVERSED.

Notes: JOB No.							Material:	Approx Weight: 70KG	 Albany pumps LYDNEY, GLOUCESTERSHIRE, ENGLAND WWW.ALBANY-PUMPS.CO.UK	Description			
							Machines:			SECTIONAL ARRANGEMENT AP11.5 RELIEF VALVE EXTENDED BEARING PUMP			
							Patterns:						
	3	30/D1/D2	APL			ANTICLOCKWISE NOTE ADDED	Limits $\pm 0.005"$ Dimensions in inches. Unless stated otherwise Drawn 1st angle projection.	RE Drawn by:					DC
	2	24/5/89	DC			FLANGES ADDED & REDRAWN ON CAD		Date:	24/5/89	Drg No.	2 4 5 2 3	Iss. No.	3
	1	27/8/71				FIRST DRAWN		Scale:	1/2 Full Size				
	Rev.	Rev. Date	Drawn	Approved	Sheet	Particulars of Alteration				A1			

TECHNICAL INFORMATION SHEET FOR ALBANY FOAM PUMPS

FIRE FIGHTING VEHICLE MODELS

The Albany Engineering Co. Ltd.

PUMP

Model: AP12 with bare shaft drive

Rotor Type: Double Helical

Mounting: Foot

Option: Flange (see notes below)

Branches: Flanged 3" ASA 150 lb FF

Option: DIN

Integral RV: Yes

Option: Non RV version

Bearings: Extended DU

Shaft Sealing: Packed Gland pressure relieved

Option: Double Lip Seal, grease lubricated and pressure relieved

Materials of Construction

Body: Gunmetal

Front Cover: Gunmetal

Back Cover: Gunmetal

Rotors: Phosphor Bronze

Shafts: 316 Stainless Steel hard chrome plated in bearing and seal areas

Bearings: DU type, PTFE coated on sintered backing

Performance Details

Speed range: 1000 to 1800 rev/min

Output range: approx. 320 to 720 l/m

Note! See curve: AP12-RV-DH-1800-15CST-1

Discharge pressure range: 0 to 20 bar g

Foam Viscosity range: This is the viscosity of the foam when entering the pump and the range is dependant on speed and pressure, with a discharge pressure of 16 bar g the minimum viscosity at 1200 rev/min is 6 cst and at 1800 rev/min is 4 cst.

For foams with viscosities below these figures please contact Albany Sales Office.

Notes! Pumps for Fire Fighting Vehicles

Pumps can be mounted in the horizontal position and also inclined within 20 degrees of the horizontal with the foot in the 6, 9, 12 or 3 o'clock position.

If pumps are to be mounted vertically or at a greater angle than 20 degrees to the horizontal please contact the Albany Sales Office as this may necessitate a thrust bearing.

Pumps can be driven by hydraulic motor or power transmission shafts, if there is any thrust or side loads the pump can be fitted with an outrigger bearing.

Albany Foam Pumps are designed to pump foam concentrate. If they are to be tested on water it must be within Albany's recommended limits as running on water and low viscosity foams will reduce the life of the pump.

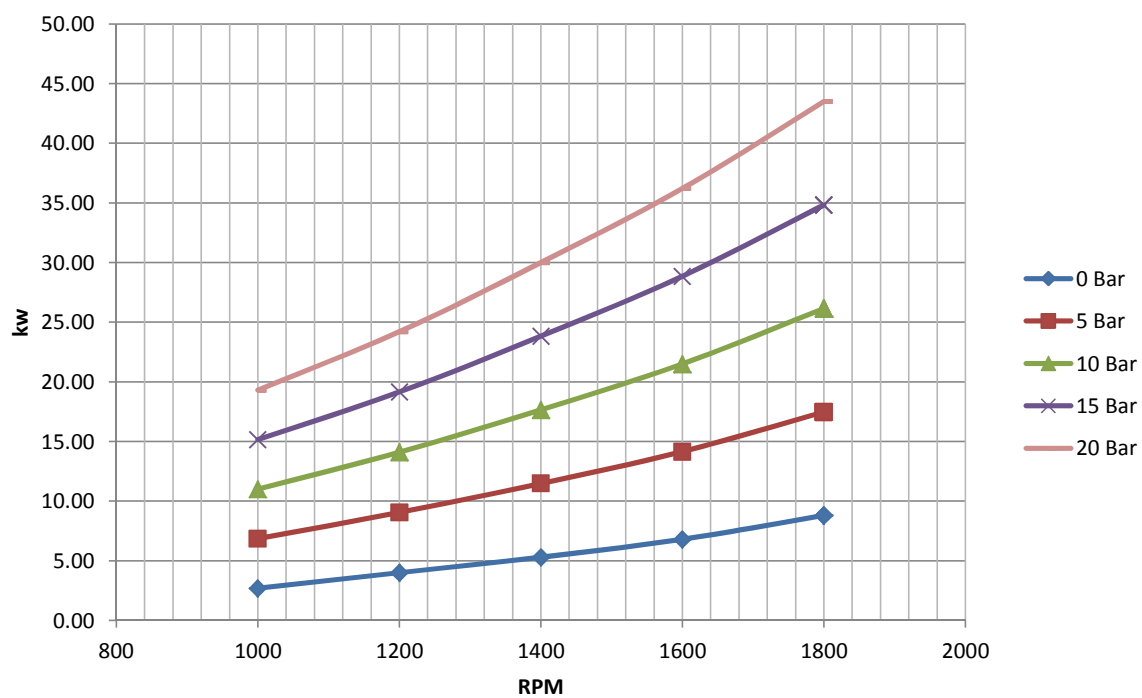
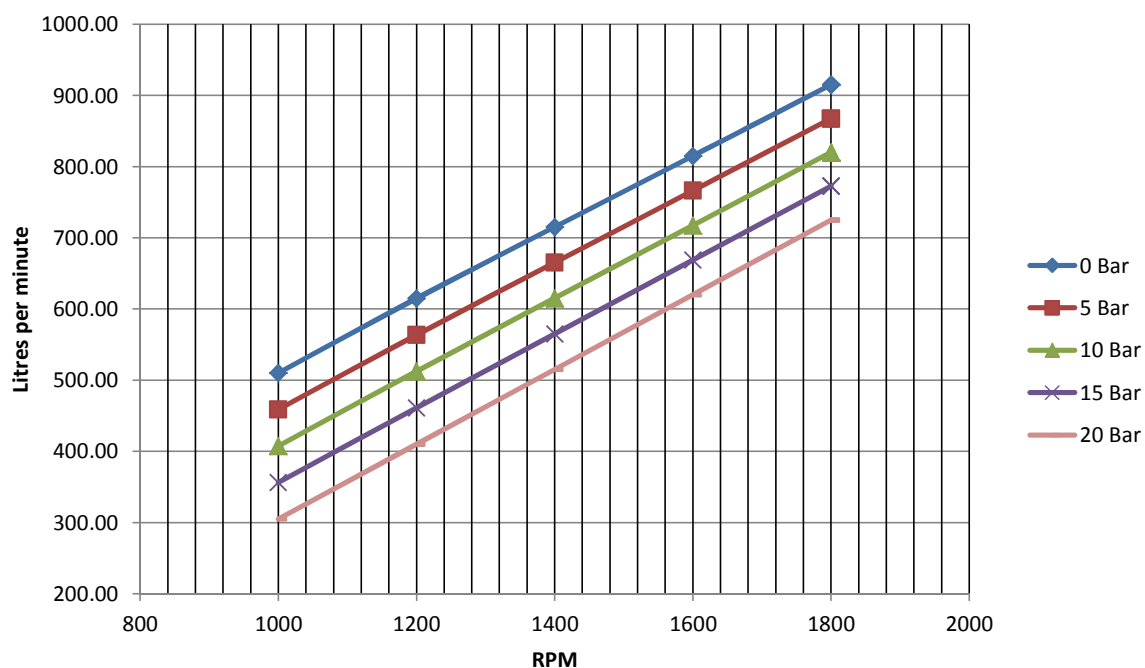


Albany Pumps

Pump Performance Graph

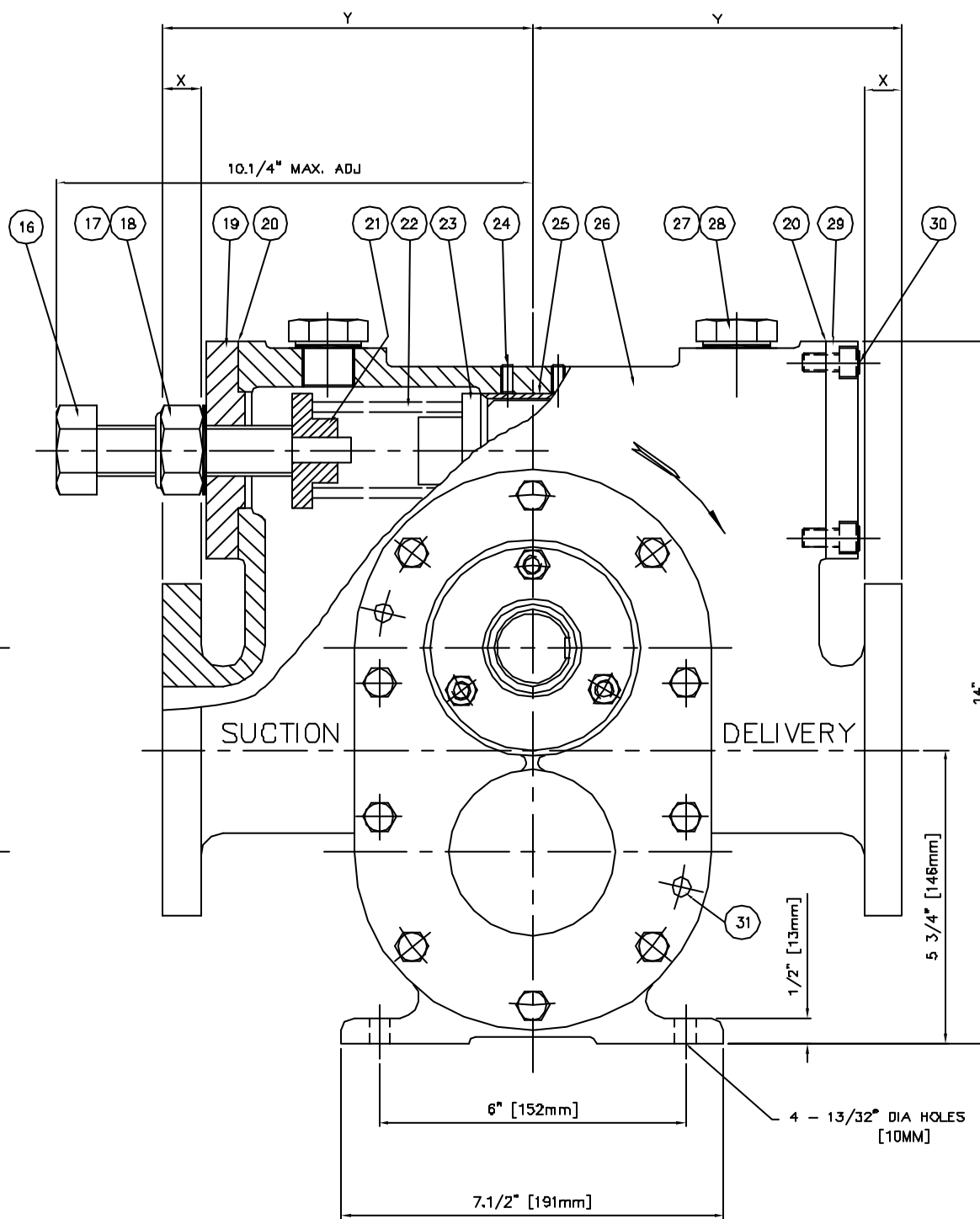
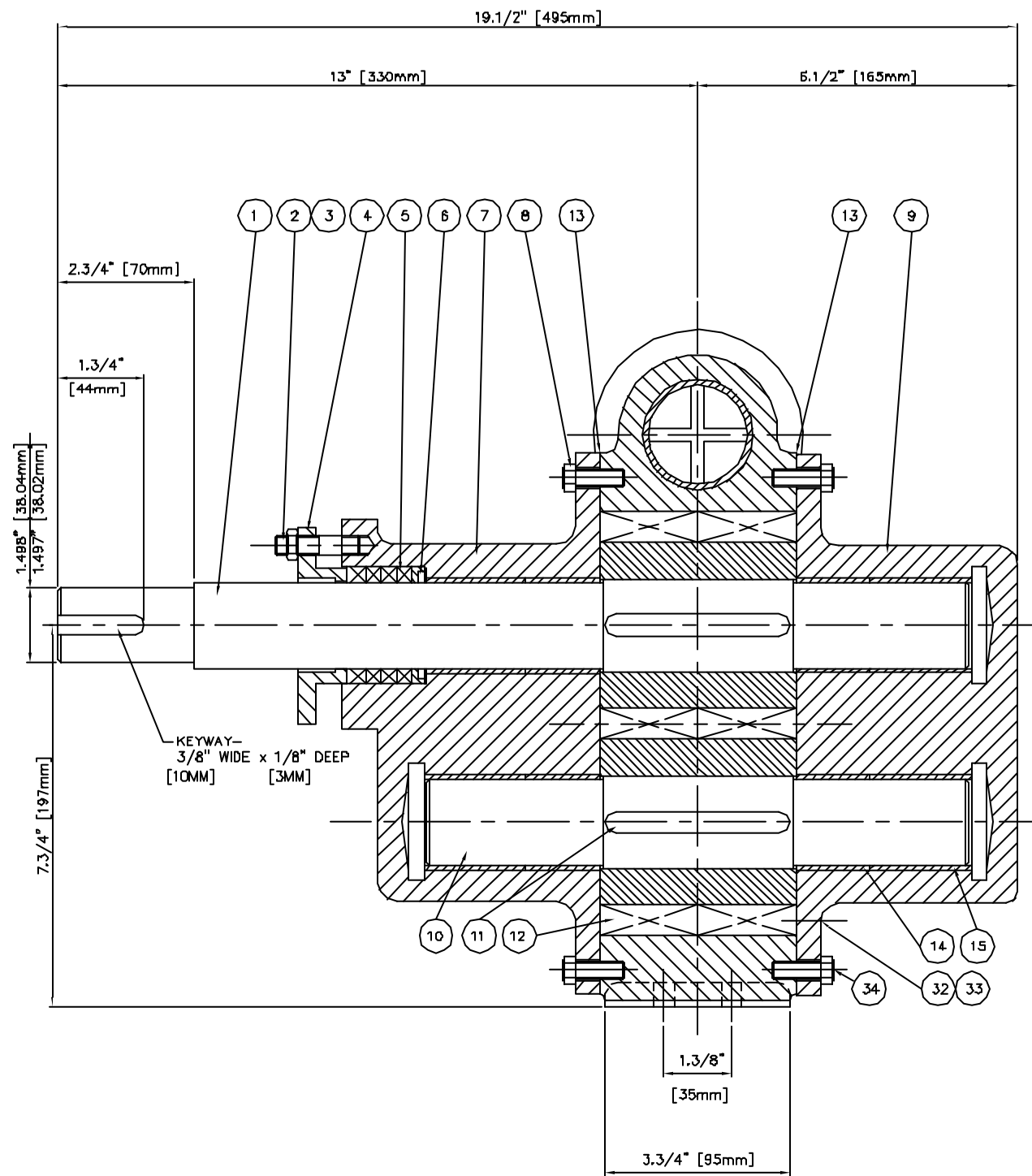
Graph No.

AP12-RV-DH-1800-15CST-1



Pump Type	AP12 DH	Viscosity	15 centistokes	Temperature	20°C
Fluid	Oil				

IF IN DOUBT ASK



FLANGE	O.D	No. OF HOLES	HOLE DIA	P.C.D	X	Y	RAISED FACE	
							DIA	HEIGHT
2.1/2" BST'D	6.1/2" [165mm]	4	11/16" [17mm]	5" [127mm]	3/4" [19mm]	7.1/4" [184mm]	-	-
2.1/2" BST'F	7.1/4" [184mm]	8	11/16" [17mm]	5.3/4" [148mm]	3/4" [19mm]	7.1/4" [184mm]	-	-
2.1/2" ANSI 150LBS FF OR RF	7" [178mm]	4	3/4" [19mm]	5.1/2" [140mm]	7/8" [22mm]	7.3/8" [187mm]	4.1/8" [105mm]	1/16" [2mm]
2.1/2" ANSI 300LBS FF OR RF	7.1/2" [191mm]	8	7/8" [22mm]	5.7/8" [149mm]	1" [25mm]	7.1/2" [191mm]	4.1/8" [105mm]	1/16" [2mm]
2.1/2" (85mm) PN10 OR 16	7.28" [185mm]	4	0.71" [18mm]	5.71" [145mm]	0.94" [24mm]	7.1/2" [191mm]	-	-
2.1/2" (85mm) PN25 FF OR RF	7.28" [185mm]	8	0.71" [18mm]	5.71" [145mm]	0.94" [24mm]	7.1/2" [191mm]	4.80" [122mm]	1/16" [2mm]

PUMP DRAWN TOP DRIVE / CLOCKWISE ROTATION
FOR ANTI CLOCKWISE ROTATION SEE DRG: 31382

APPROX WEIGHT OF PUMP: 90KG

ALTERATIONS:- Iss 2 PN25 OPTION ADDED
28/01/02

JOB No

ITEM No.	DESCRIPTION	No. OFF
1	DRIVING SHAFT 29372	1
2	STUD 5/16" UNC x 2"	3
3	NUT 5/16" UNC	3
4	GLAND 25321	1
5	PACKING 5/16" SQ	1 SET
6	PACKING HEADER 25320	1
7	FRONT COVER 30011	1
8	SETSCREW 3/8" UNC x 1"	1
9	BACK COVER 30035	1
10	FOLLOWING SHAFT 28376	1
11	KEY 1/2" x 3/8" x 3.3/4"	2
12	ROTOR 27449	2
13	GASKET 27290	1 SET
14	BUSH 28DU32	4
15	BUSH 28DU24	4
16	ADJUSTING SCREW 20717	1
17	LOCKNUT 1" UNC 'NYLOC'	1
18	FIBRE WASHER	1
19	ADJ. SCW. FLANGE 20963	1
20	GASKET 20963	2
21	SPRING SEAT 20966	2
22	SPRING	1
23	RELIEF VALVE 4528	1
24	GRUBSCREW 1/4" UNC x 3/8"	4
25	R.VALVE SEAT 20965	1
26	BODY 20942	1
27	PLUG 2227	2
28	FIBRE WASHER	2
29	R.V.FLANGE 20964	1
30	S.H.CAPSCREWS 3/8" UNC x 3/4"	8
31	DOWEL 3/8" DIA x 1"	2
32	DRAIN PLUG 2227	1
33	FIBRE WASHER	1
34	SETSCREW 3/8" UNC x 1"	28
35		
36		
37		
38		
39		
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41		
42		
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50		

DIMENSIONS IN INCHES MILLIMETRES	RE DRAWN: DC	DATE: 27/10/88
	SIZE A1	SCALE: 3/4
	NACHINE	UNITS: ± UNLESS OTHERWISE SPECIFIED
Albany pumps		
LYDNEY, GLOUCESTERSHIRE, ENGLAND		
DESCRIPTION :- SECTIONAL ARRANGEMENT AP12 RV EXTENDED BEARING PUMP		

DRG No: 2 9 3 7 3 ISS 2

TECHNICAL INFORMATION SHEET FOR ALBANY FOAM PUMPS

FIRE FIGHTING VEHICLE MODELS

The Albany Engineering Co. Ltd.

PUMP

Model: AP13 with bare shaft drive

Rotor Type: Double Helical

Mounting: Foot

Option: Flange (see notes below)

Branches: Flanged 3" ASA 150 lb FF

Option: DIN

Integral RV: Yes

Option: Non RV version

Bearings: Extended DU

Shaft Sealing: Packed Gland pressure relieved

Option: Double Lip Seal, grease lubricated and pressure relieved

Materials of Construction

Body: Gunmetal

Front Cover: Gunmetal

Back Cover: Gunmetal

Rotors: Phosphor Bronze

Shafts: 316 Stainless Steel hard chrome plated in bearing and seal areas

Bearings: DU type, PTFE coated on sintered backing

Performance Details

Speed range: 1000 to 1800 rev/min

Output range: approx. 480 to 1120 l/m

Note! See curve: AP13-RV-DH-1800-15CST-1

Discharge pressure range: 0 to 20 bar g

Foam Viscosity range: This is the viscosity of the foam when entering the pump and the range is dependant on speed and pressure, with a discharge pressure of 16 bar g the minimum viscosity at 1200 rev/min is 9 cst and at 1800 rev/min is 6 cst.

For foams with viscosities below these figures please contact Albany Sales Office.

Notes! Pumps for Fire Fighting Vehicles

Pumps can be mounted in the horizontal position and also inclined within 20 degrees of the horizontal with the foot in the 6, 9, 12 or 3 o'clock position.

If pumps are to be mounted vertically or at a greater angle than 20 degrees to the horizontal please contact the Albany Sales Office as this may necessitate a thrust bearing.

Pumps can be driven by hydraulic motor or power transmission shafts, if there is any thrust or side loads the pump can be fitted with an outrigger bearing.

Albany Foam Pumps are designed to pump foam concentrate. If they are to be tested on water it must be within Albany's recommended limits as running on water and low viscosity foams will reduce the life of the pump.

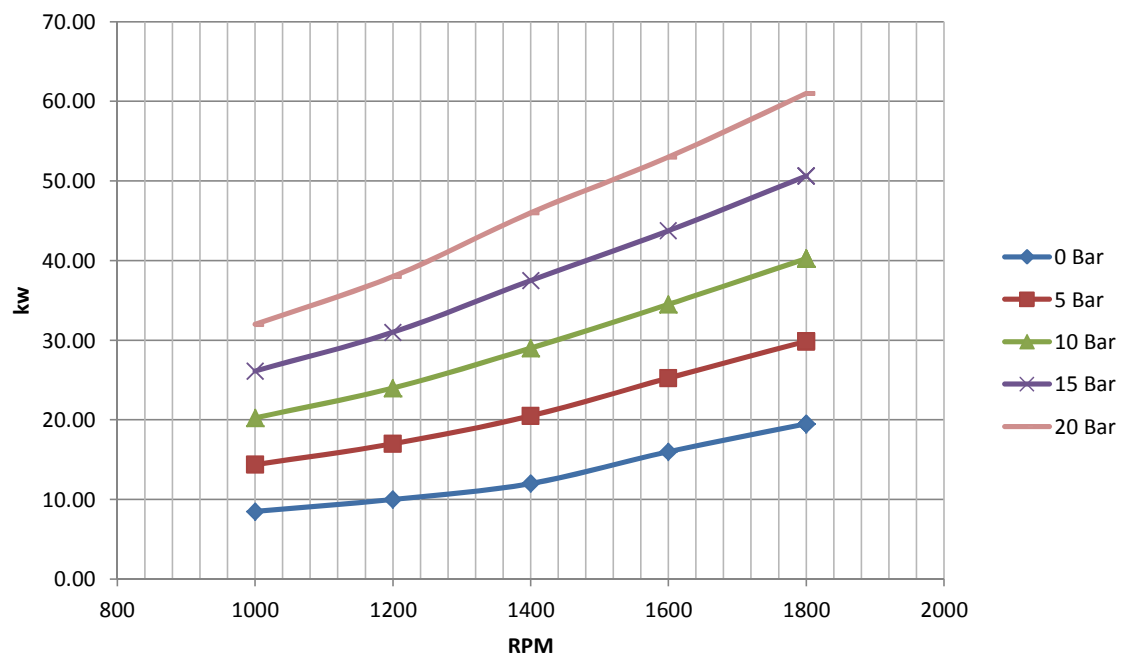
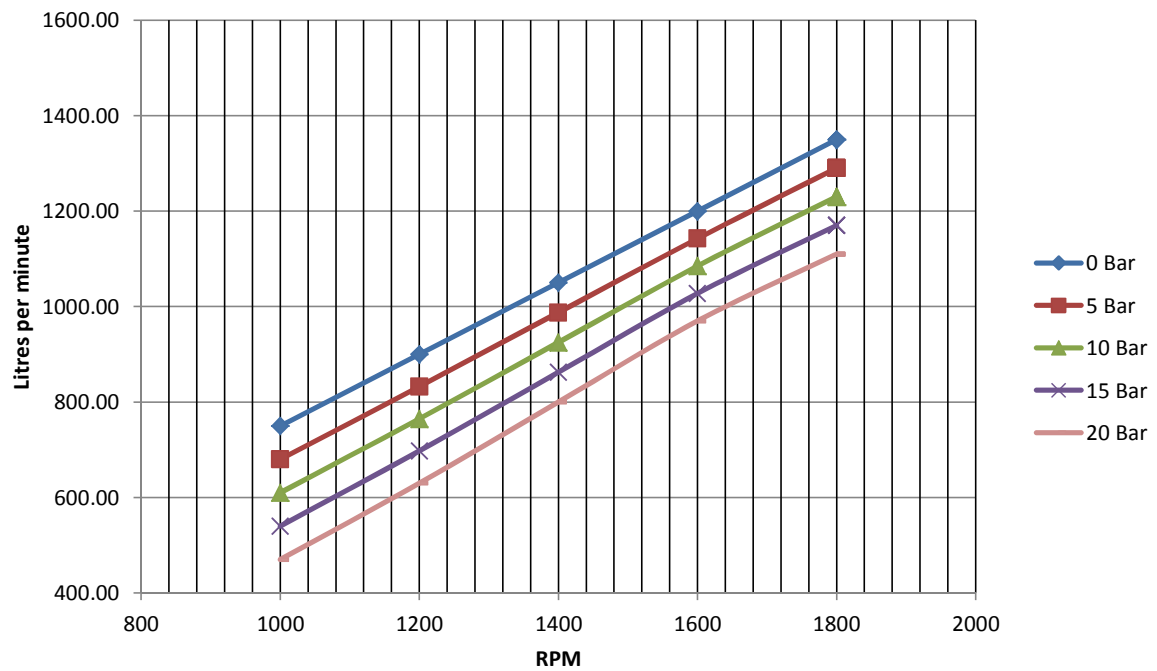


Albany Pumps

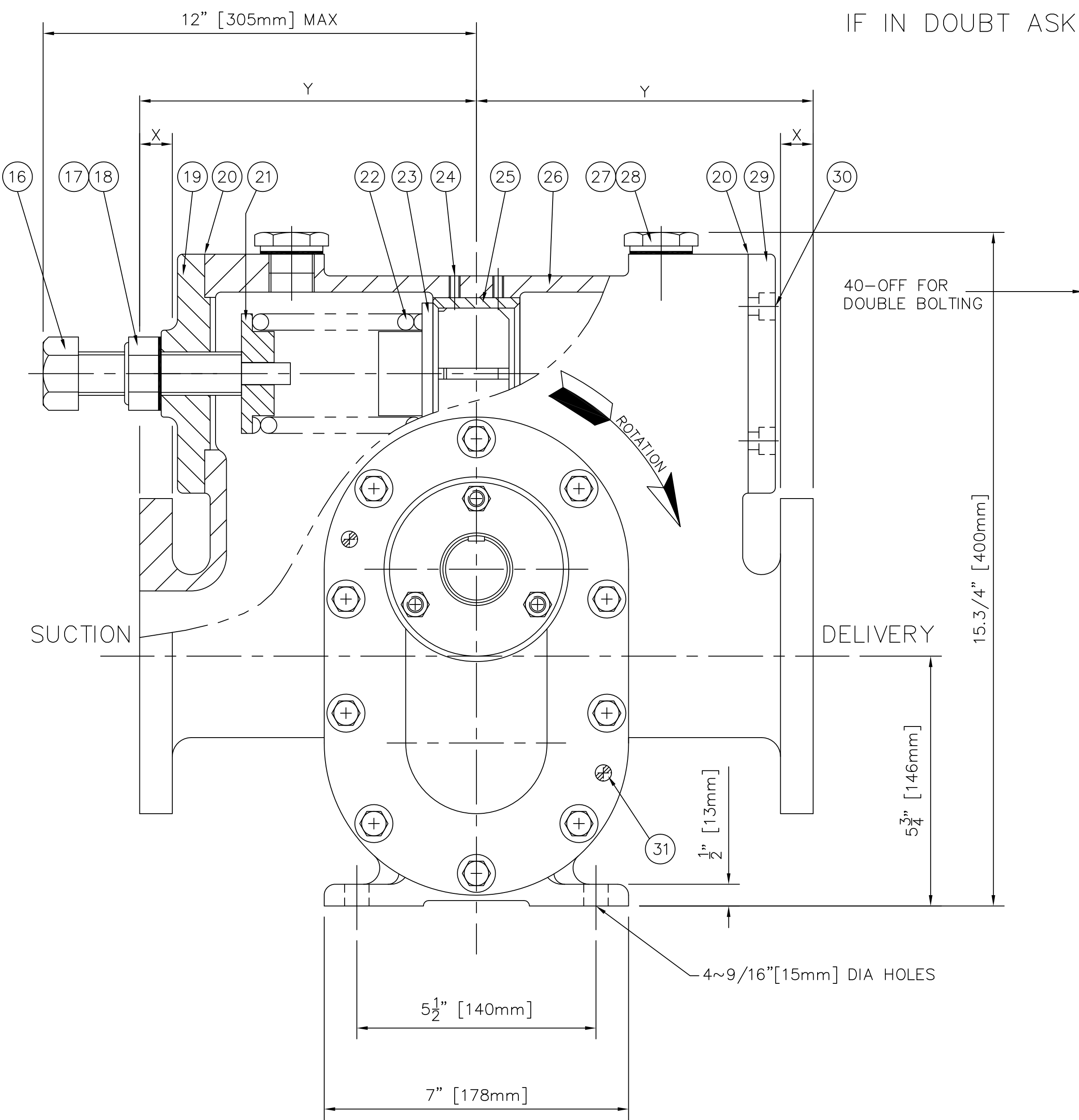
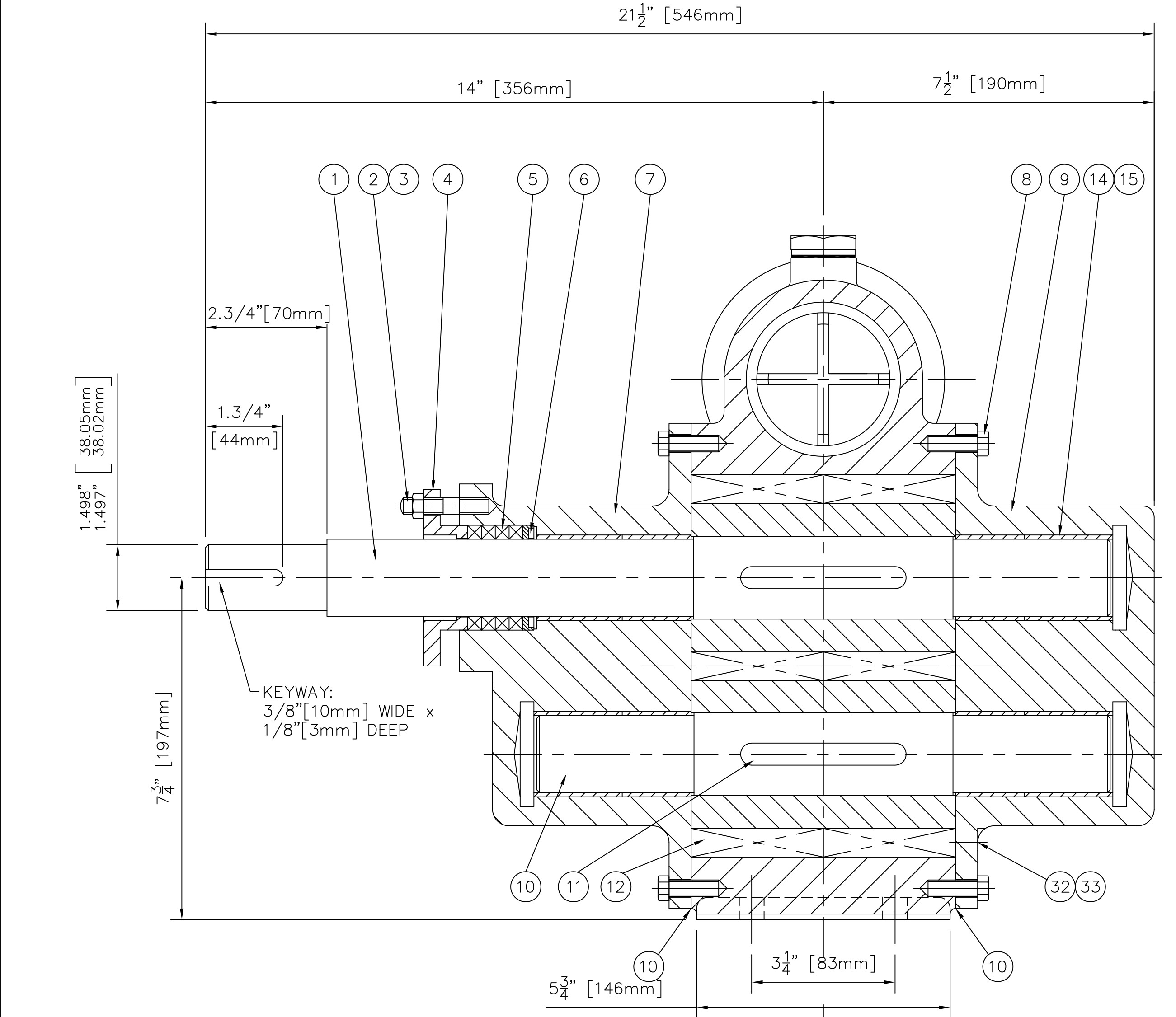
Pump Performance Graph

Graph No.

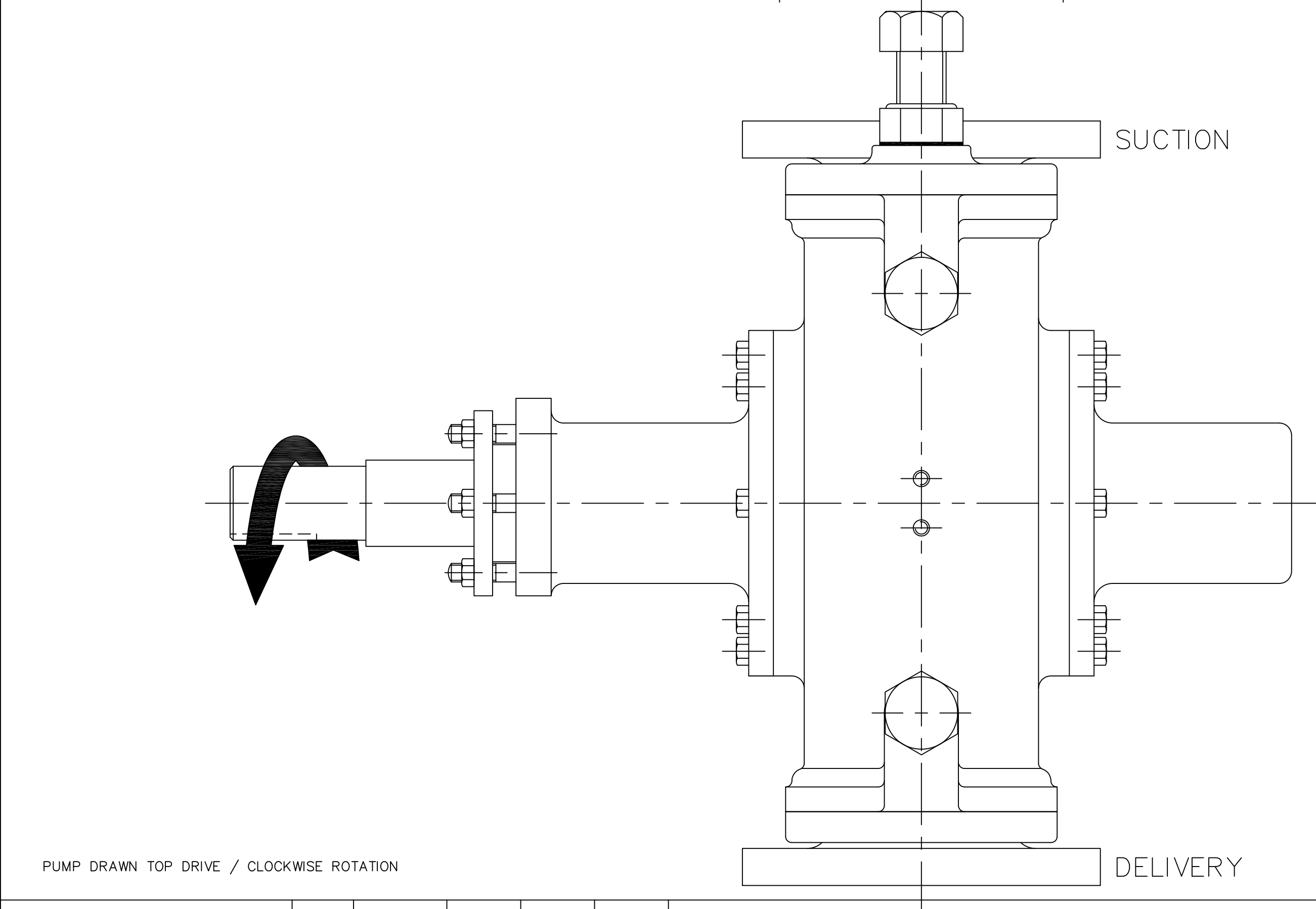
AP13-RV-DH-1800-15CST-1




Pump Type	AP13 DH	Viscosity	15 centistokes	Temperature	20°C
Fluid	Oil				



ITEM No	DESCRIPTION		OFF
1	DRIVING SHAFT	29375	1
2	STUD	5/16" UNC x 2"	3
3	NUT	5/16" UNC	3
4	GLAND	25321	1
5	PACKING	5/16" SQ	1 SET
6	PACKING HEADER	25320	1
7	FRONT COVER	30011	1
8	SETSCREW	3/8" UNC x 1"	20
9	BACKCOVER	30035	1
10	FOLLOWING SHAFT	25323	1
11	KEY	1/2" x 3/8" x 3.3/4"	2
12	ROTOR	27449	2
13	GASKET	27290	1 SET
14	BUSH	28DU32	4
15	BUSH	28DU24	4
16	ADJUSTING SCREW	20717	1
17	LOCKNUT	1" UNC NYLOC	1
18	FIBRE WASHER	1" UNC	1
19	ADJ SCREW FLANGE	20709	1
20	GASKET	20709	2
21	SPRING SEAT	8862	1
22	SPRING		1
23	RELIEF VALVE	20707	1
24	GRUBSCREW	1/4" UNC x 3/8"	4
25	VALVE SEAT	20708	1
26	BODY	20570	1
27	PLUG	3/4" BSP	2
28	FIBRE WASHER	3/4" BSP	2
29	RV FLANGE	20621	1
30	S.H.CAPSCREWS	3/8" UNC x 3/4"	8
31	DOWEL	3/8" DIA x 1"	4
32	DRAIN PLUG	1/8" BSP	1
33	FIBRE WASHER	1/8" BSP	1



FLANGE	OD	No. OF HOLES	HOLE DIA	PCD	X	Y	RAISED FACE	
							DIA	HEIGHT
3" BST 'D' & 'E'	7.1/4"	4	11/16"	5.3/4"	3/4"	7.3/4"	—	—
3" ANSI 150LBS FF OR RF	7.1/2"	4	3/4"	6"	15/16"	7.15/16"	5"	1/16"
3" ANSI 300LBS FF OR RF	8.1/4"	8	7/8"	6.5/8"	15/16"	7.15/16"	5"	1/16"
3" DIN PN10 OR PN16	200mm	8	18mm	160mm	15/16"	7.15/16"	—	—

Notes:							Material:	Approx Weight: 80KG	 LYDNEY, GLOUCESTERSHIRE, ENGLAND WWW.ALBANY-PUMPS.CO.UK	Description SECTIONAL ARRANGEMENT OF AP13 RELIEF VALVE EXTENDED BEARING PUMP			
							Machine:						
							Pattern:						
	3	03/09/03	APL	C.A	114/03	DOUBLE BOLTING OPTION ADDED							
	2					FRONT COVER WAS: 24679 & BACK COVER WAS: 24680	Limits ± 0.005" Dimensions in inches. Unless stated otherwise Drawn 1st angle projection.	ReDrawn by:	DC	Drg No.	2 9 3 7 7	Iss. No.	3
	1	16/7/91				FIRST DRAWN		Date:	2/2/99				
	Rev.	Rev. Date	Drawn	Approved	Sheet	Particulars of Alteration	Scale:	1/2 Full Size	A1				

TECHNICAL INFORMATION SHEET FOR ALBANY FOAM PUMPS

FIRE FIGHTING VEHICLE MODELS

The Albany Engineering Co. Ltd.

PUMP

Model: HD3 with bare shaft drive

Rotor Type: Double Helical

Mounting: Foot

Option: Flange (see notes below)

Branches: Flanged 1 1/2" ASA 150 lb FF

Option: DIN

Integral RV: Yes

Option: Non RV version

Bearings: Extended DU

Shaft Sealing: Packed Gland pressure relieved

Option: Double Lip Seal, grease lubricated and pressure relieved

Materials of Construction

Body: Gunmetal

Front Cover: Gunmetal

Back Cover: Gunmetal

Rotors: Phosphor Bronze

Shafts: 316 Stainless Steel hard chrome plated in bearing and seal areas

Bearings: DU type, PTFE coated on sintered backing

Performance Details

Speed range: 1000 to 2200 rev/min

Output range: approx. 200 to 590 l/m

Note! See curve: HD3-RV-DH-1800-15CST-1

Discharge pressure range: 0 to 20 bar g

Foam Viscosity range: This is the viscosity of the foam when entering the pump and the range is dependant on speed and pressure, with a discharge pressure of 16 bar g the minimum viscosity at 1200 rev/min is 6 cst and at 1800 rev/min is 4 cst.

For foams with viscosities below these figures please contact Albany Sales Office.

Notes! Pumps for Fire Fighting Vehicles

Pumps can be mounted in the horizontal position and also inclined within 20 degrees of the horizontal with the foot in the 6, 9, 12 or 3 o'clock position.

If pumps are to be mounted vertically or at a greater angle than 20 degrees to the horizontal please contact the Albany Sales Office as this may necessitate a thrust bearing.

Pumps can be driven by hydraulic motor or power transmission shafts, if there is any thrust or side loads the pump can be fitted with an outrigger bearing.

Albany Foam Pumps are designed to pump foam concentrate. If they are to be tested on water it must be within Albany's recommended limits as running on water and low viscosity foams will reduce the life of the pump.

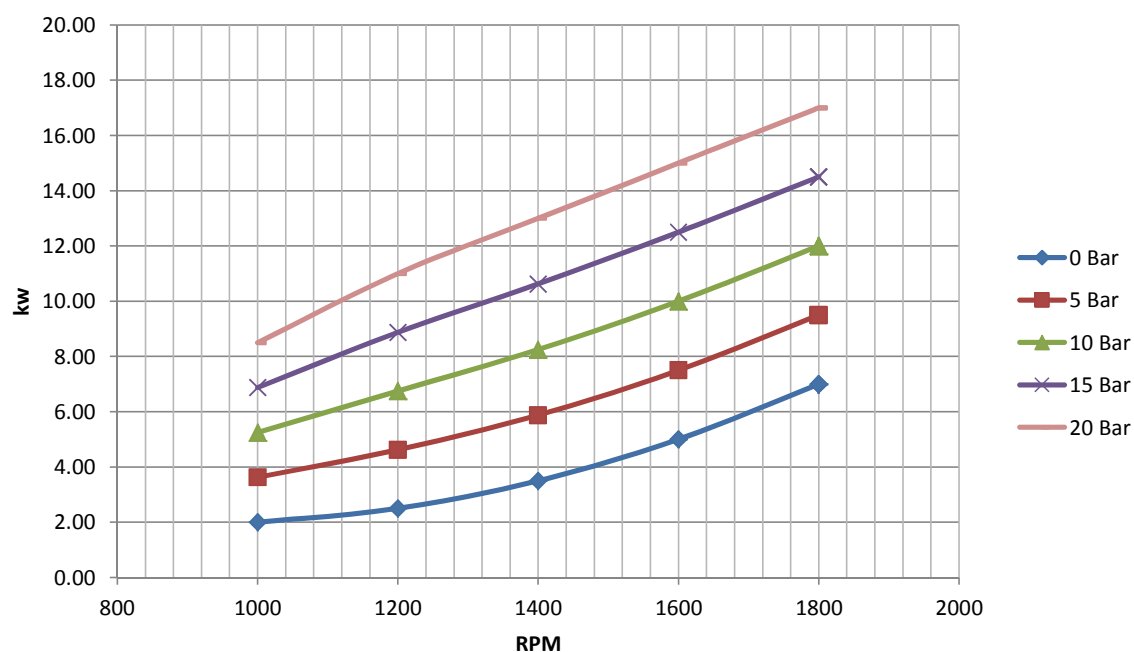
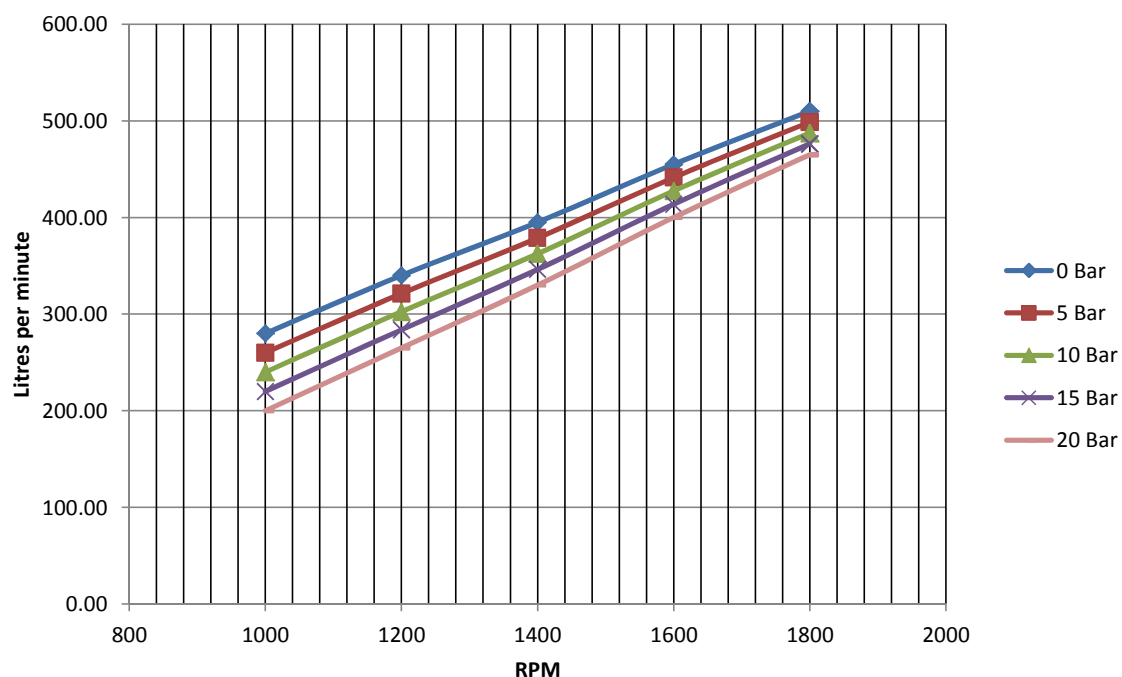


Albany Pumps

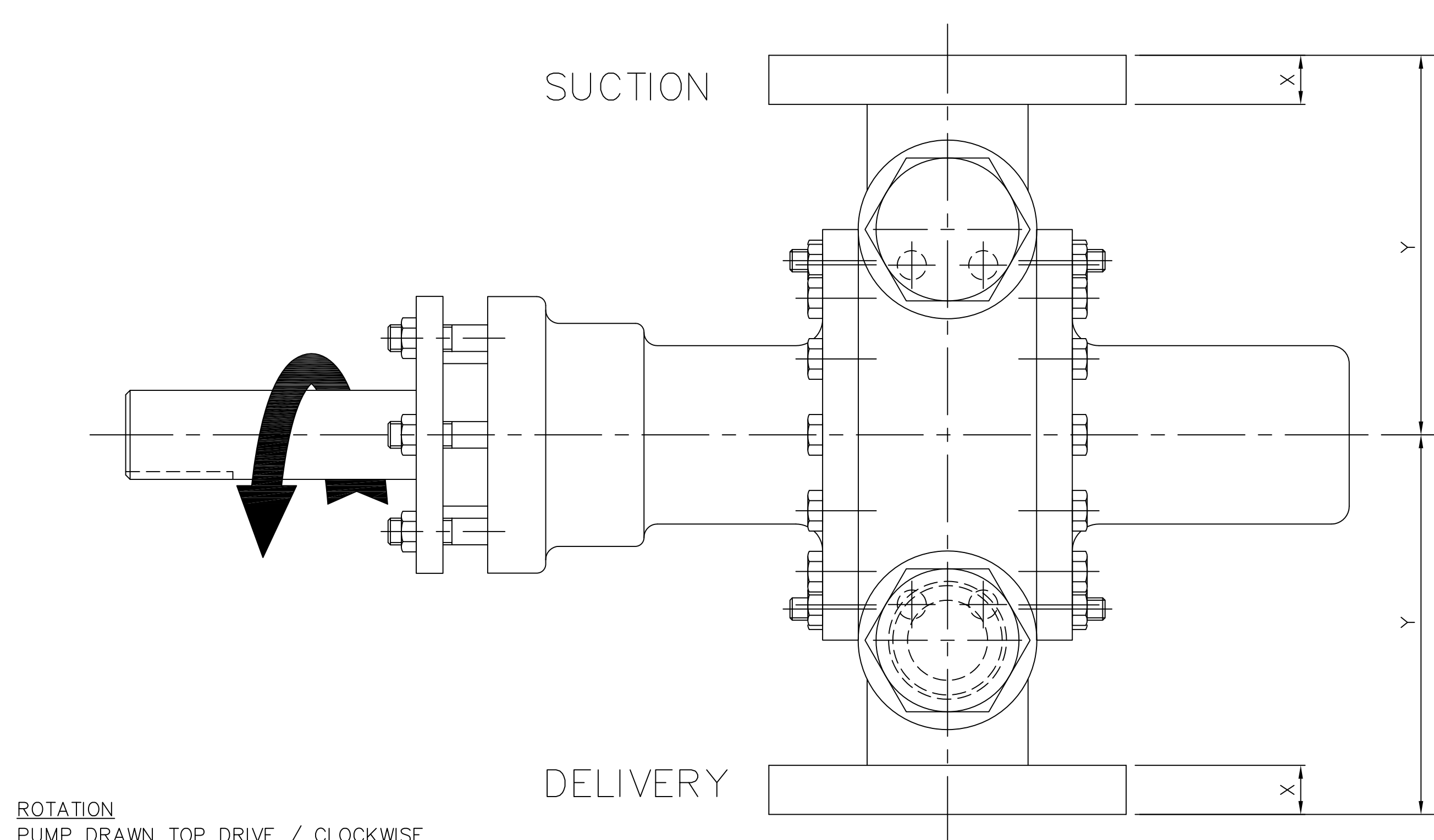
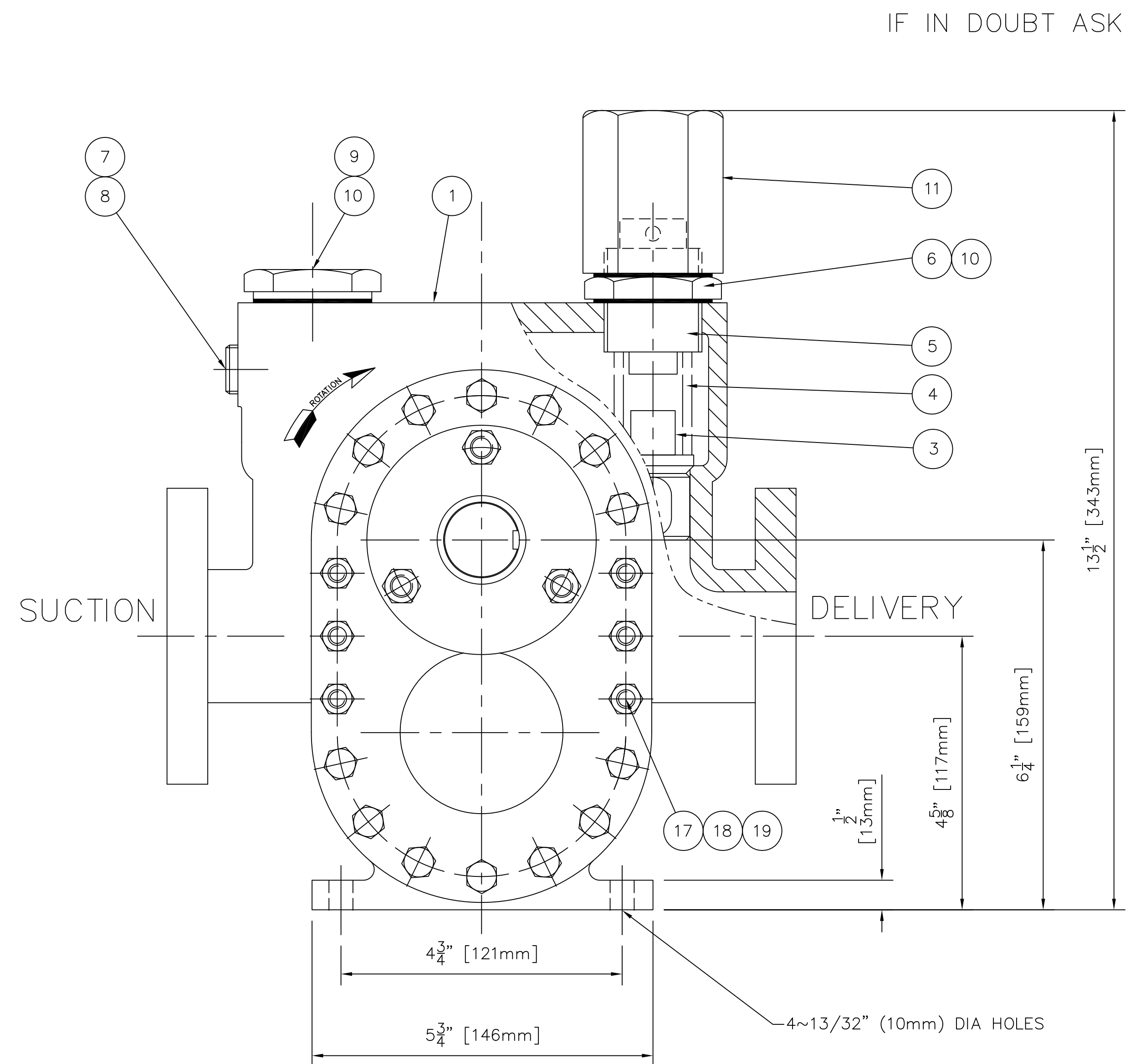
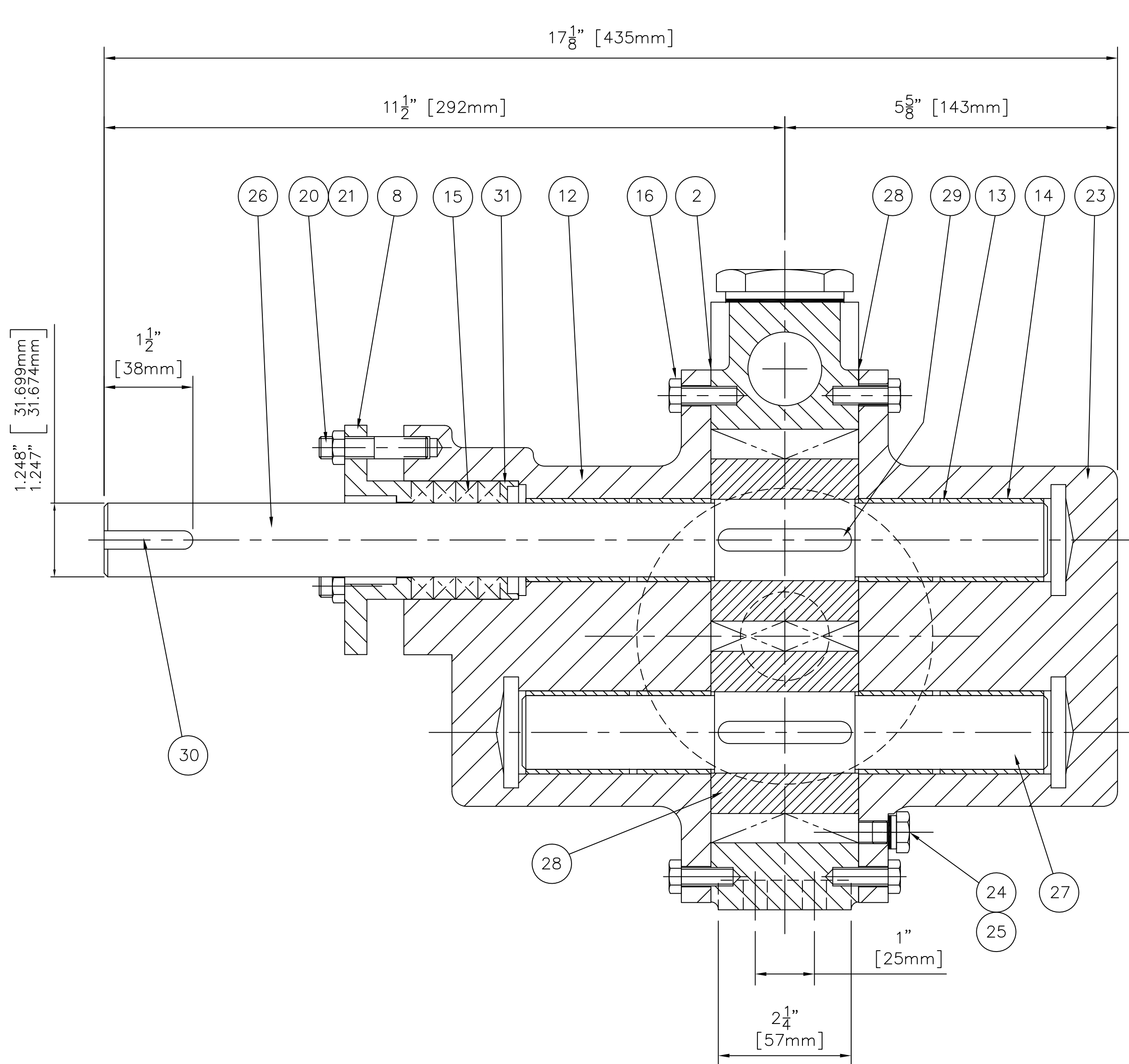
Pump Performance Graph

Graph No.

HD3-RV-DH-1800-15CST-1



Pump Type	HD3 DH	Viscosity	15 centistokes	Temperature	20°C
Fluid	Oil				



ROTATION
PUMP DRAWN TOP DRIVE / CLOCKWISE

ITEM No.	DESCRIPTION		No. OFF
1	BODY	25972	1
2	GASKET	32542	1 SET
3	RELIEF VALVE	33326	1
4	SPRING		1
5	ADJUSTING SCREW	6351	1
6	LOCKNUT	6353	1
7	PLUG	2227 – 1/2" BSP	1
8	WASHER		1
9	PLUG	2227 – 1.1/4" BSP	1
10	WASHER		3
11	DOMECAP	21041	1
12	FRONT COVER	30010	1
13	BUSH	20DU28	4
14	BUSH	20DU20	4
15	PACKING	3/8" SQ	4
16	SETSCREW	5/16" UNC x 1"	28
17	STUD	5/16" UNC x 1.1/4"	12
18	NUT	5/16" UNC	12
19	WASHER	5/16" DIA	12
20	STUD	3/8" UNC x 2"	3
21	NUT	3/8" UNC	3
22	GLAND	8906	1
23	BACK COVER	30034	1
24	DRAIN PLUG	2227 – 1/8" BSP	1
25	WASHER		1
26	DRIVING SHAFT	27401	1
27	FOLLOWING SHAFT	27401	1
28	ROTOR	25968	2
29	KEY	3/8" x 1/4" x 2.1/4"	2
30	KEY	5/16" x 1/4" x 1.1/2"	2
31	PACKING HEADER	21941	1
32			
33			
34			
35			

FLANGE SIZE	OD	No OF HOLES	HOLE DIA	P.C.D	X	Y	RAISED FACE	
							DIA	HEIGHT
1.1/2" BST A,B,C,D,E	5.1/4" [133mm]	4	9/16" [14mm]	3.7/8" [98mm]	5/8" [16mm]	5.1/4" [133mm]	–	–
40mm (1.1/2") DIN PN10/PN16	150mm [5.7/8"]	4	18mm [11/16"]	110mm [4.5/16"]	3/4" [19mm]	5.3/8" [137mm]	–	–
1.1/2" ANSI 150 LBS FF OR RF	5" [127mm]	4	5/8" [16mm]	3.7/8" [98mm]	11/16" [17mm]	5.5/16" [135mm]	2.7/8" [73mm]	1/16" [2mm]
1.1/2" ANSI 300 LBS FF OR RF	6.1/8" [156mm]	4	7/8" [22mm]	4.1/2" [114mm]	13/16" [21mm]	5.7/16" [138mm]	2.7/8" [73mm]	1/16" [2mm]

Notes:

1	31/3/14					FIRST DRAWN
Rev.	Rev. Date	Drawn	Approved	Sheet	Particulars of Alteration	

Material:

Approx Weight:

Machine:

Pattern:

Limits±0.005"
Dimensions in inches.
Unless stated otherwise
Drawn 1st angle projection.

Albany pumps

LYDNEY, GLOUCESTERSHIRE, ENGLAND

WWW.ALBANY-PUMPS.CO.UK

Drawn by:

Date:

Scale:

DC

31/3/14

3/4 F.S

Description

SECTIONAL ARRANGEMENT
HD3 PACKED GLAND EXTENDED BEARING PUMP
WITH RELIEF VALVE

Drg No.

3 5 7 3 9

Iss. No.

1

TECHNICAL INFORMATION SHEET FOR ALBANY FOAM PUMPS

FIRE FIGHTING VEHICLE MODELS

The Albany Engineering Co. Ltd.

PUMP

Model: HD4 with bare shaft drive

Rotor Type: Double Helical

Mounting: Foot

Option: Flange (see notes below)

Branches: Flanged 2" ASA 150 lb FF

Option: DIN

Integral RV: Yes

Option: Non RV version

Bearings: Extended DU

Shaft Sealing: Packed Gland pressure relieved

Option: Double Lip Seal, grease lubricated and pressure relieved

Materials of Construction

Body: Gunmetal

Front Cover: Gunmetal

Back Cover: Gunmetal

Rotors: Phosphor Bronze

Shafts: 316 Stainless Steel hard chrome plated in bearing and seal areas

Bearings: DU type, PTFE coated on sintered backing

Performance Details

Speed range: 1000 to 2200 rev/min

Output range: approx. 280 to 750 l/m

Note! See curve: HD4-RV-DH-1800-15CST-1

Discharge pressure range: 0 to 20 bar g

Foam Viscosity range: This is the viscosity of the foam when entering the pump and the range is dependant on speed and pressure, with a discharge pressure of 16 bar g the minimum viscosity at 1200 rev/min is 8 cst and at 1800 rev/min is 6 cst.

For foams with viscosities below these figures please contact Albany Sales Office.

Notes! Pumps for Fire Fighting Vehicles

Pumps can be mounted in the horizontal position and also inclined within 20 degrees of the horizontal with the foot in the 6, 9, 12 or 3 o'clock position.

If pumps are to be mounted vertically or at a greater angle than 20 degrees to the horizontal please contact the Albany Sales Office as this may necessitate a thrust bearing.

Pumps can be driven by hydraulic motor or power transmission shafts, if there is any thrust or side loads the pump can be fitted with an outrigger bearing.

Albany Foam Pumps are designed to pump foam concentrate. If they are to be tested on water it must be within Albany's recommended limits as running on water and low viscosity foams will reduce the life of the pump.

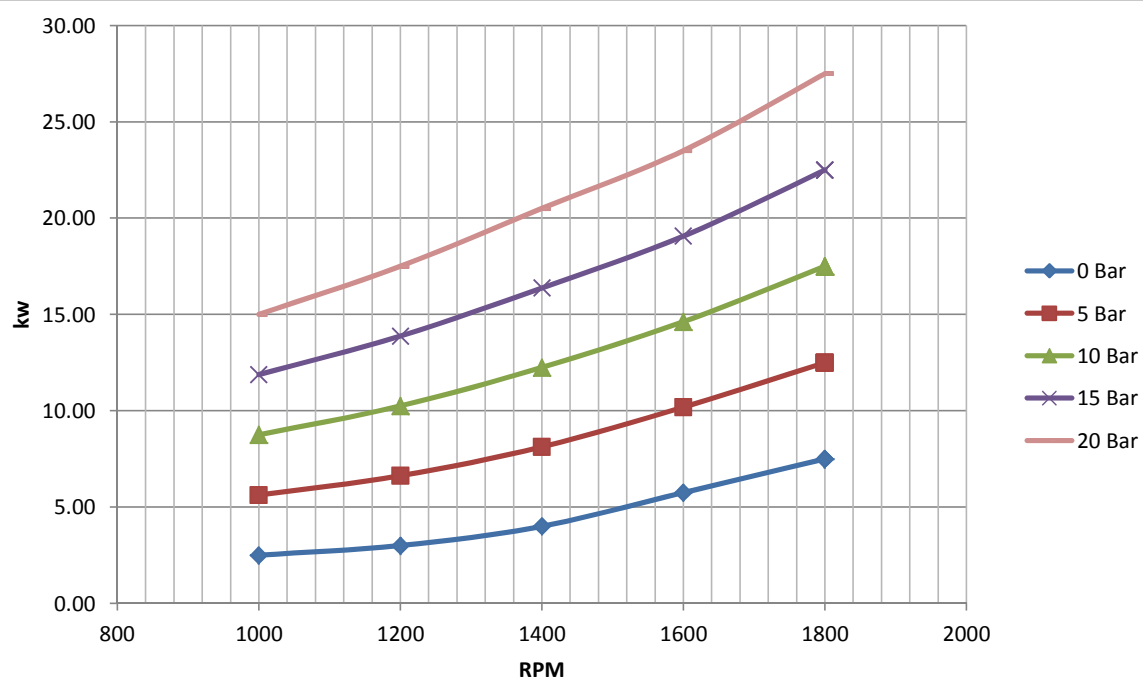
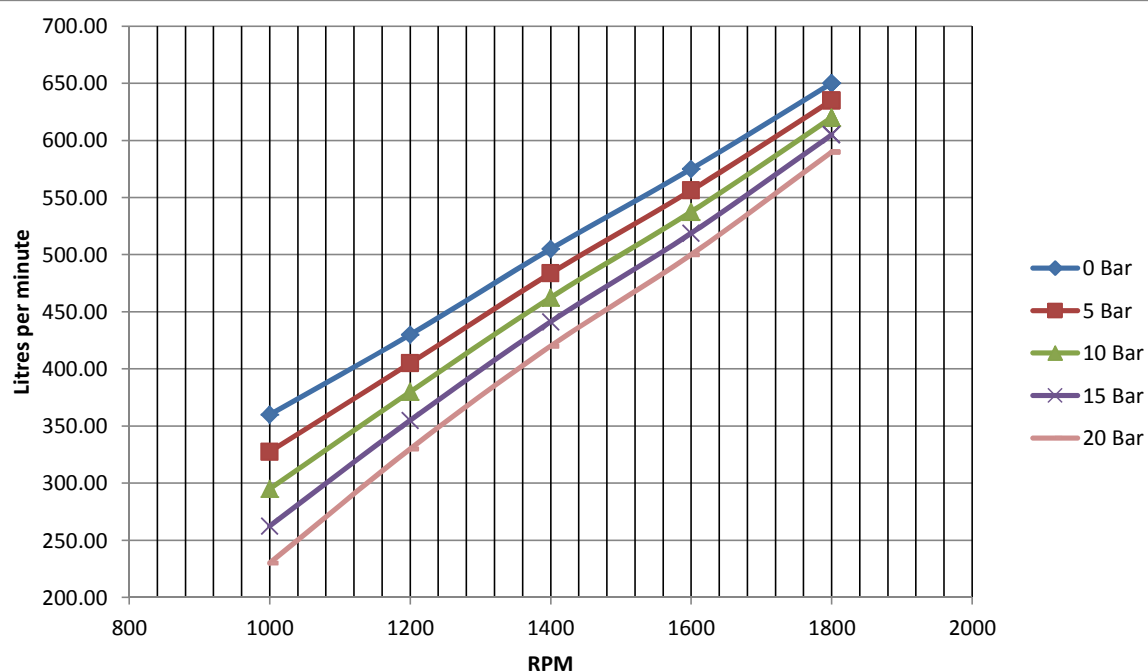


Albany Pumps

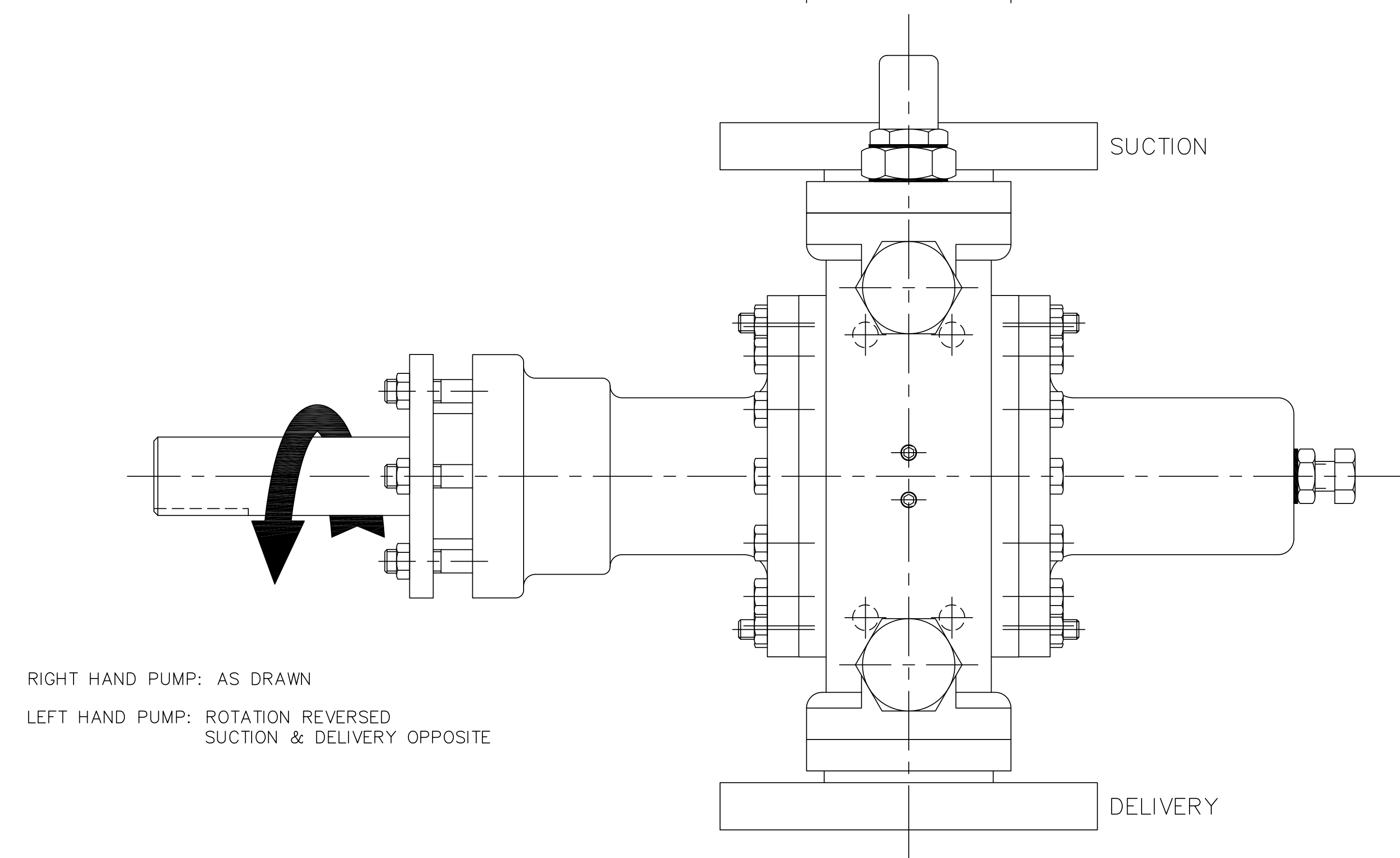
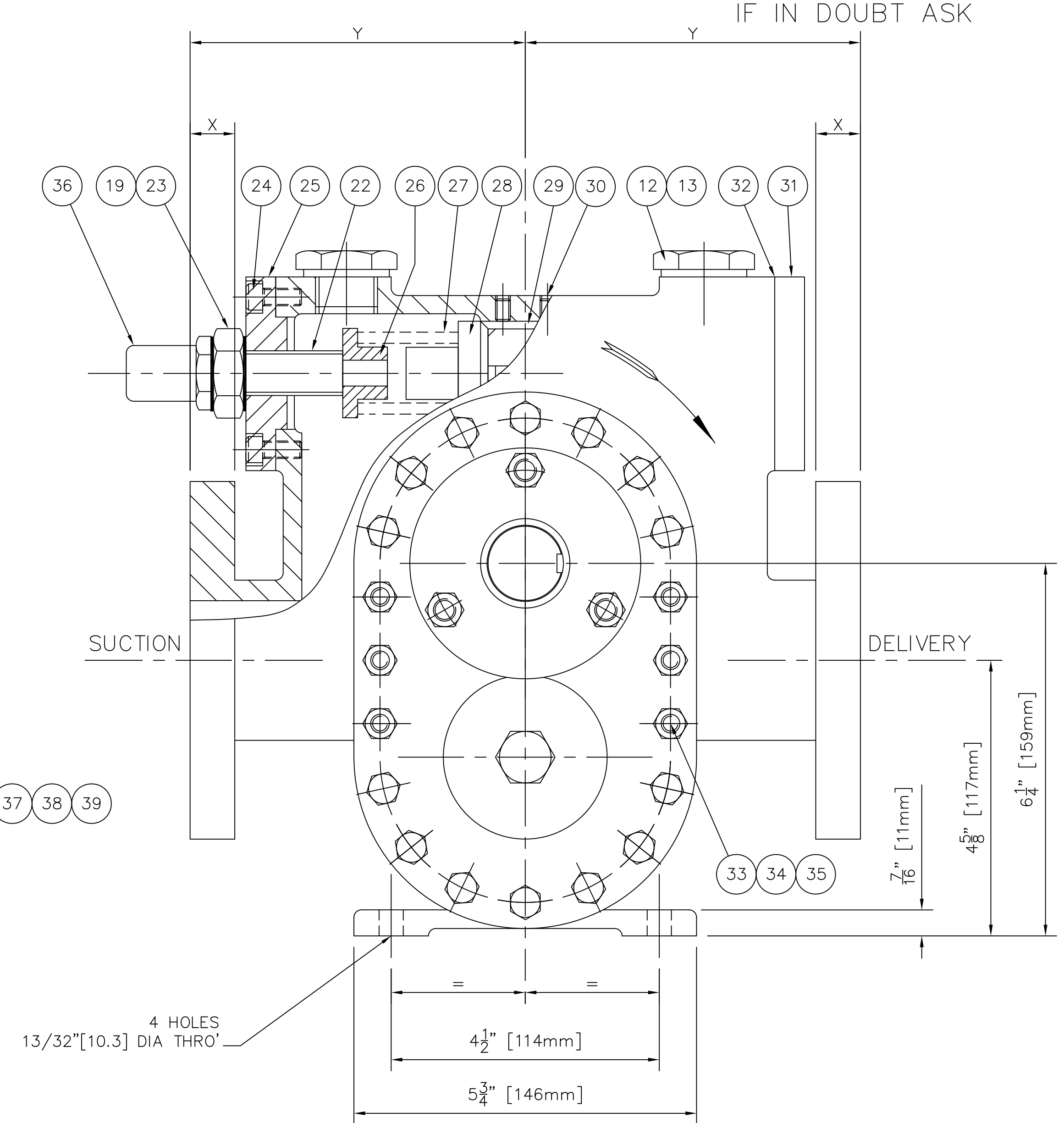
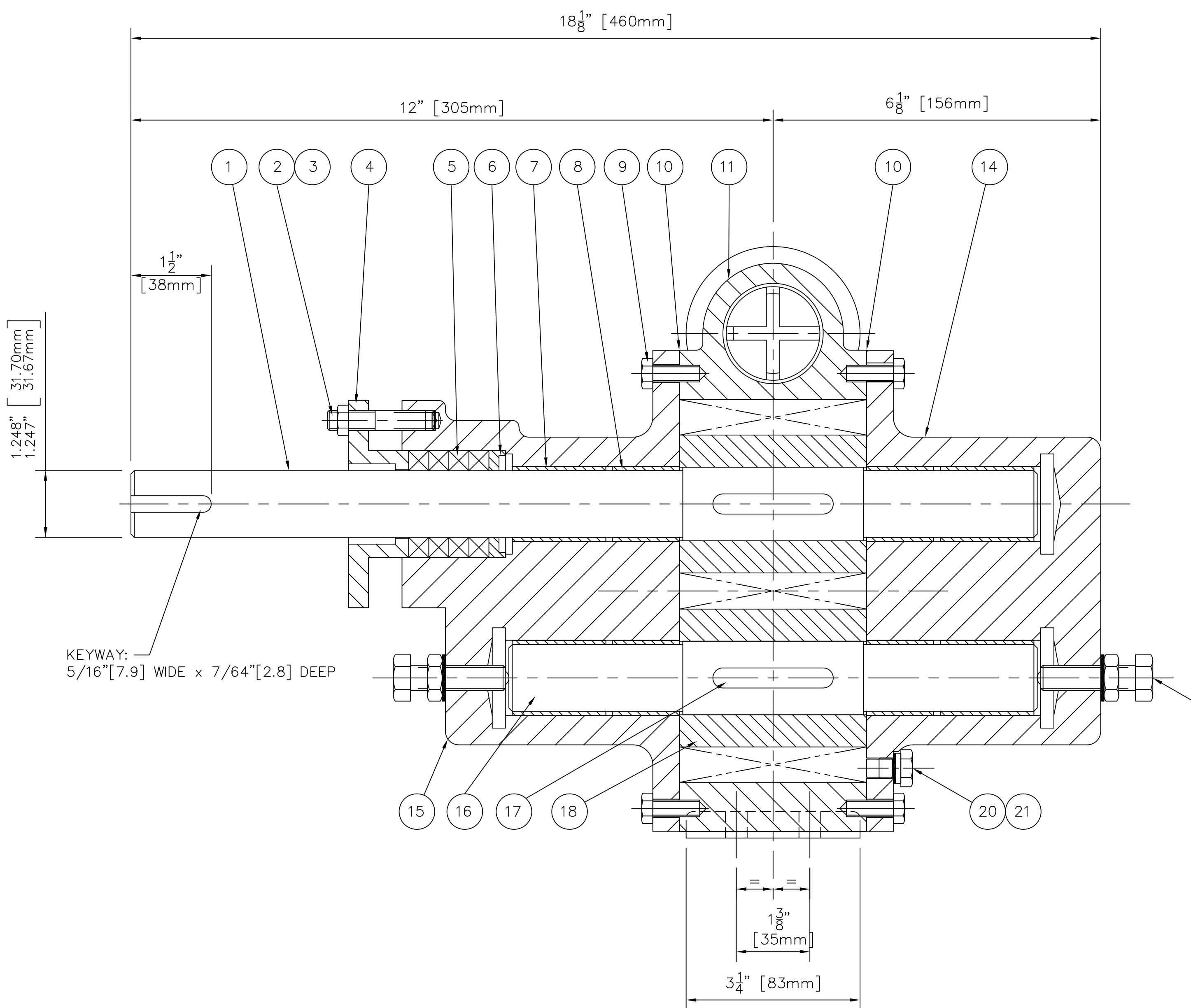
Pump Performance Graph

Graph No.

HD4-RV-DH-1800-15CST-1



Pump Type	HD4 DH	Viscosity	15 centistokes	Temperature	20°C
Fluid	Oil				



FLANGE	OD	No. OF HOLES	HOLE DIA	P.C.D	X	Y	RAISED FACE	
							DIA	HEIGHT
2" BST D, E	6" 152mm	4	11/16" 17mm	4.1/2" 114mm	3/4" 19mm	5.5/8" 143mm	-	-
2" BST F	6.1/2" 165mm	4	11/16" 17mm	5" 127mm	3/4" 19mm	5.5/8" 143mm	-	-
2" ANSI 125LBS FF OR RF	6" 152mm	4	3/4" 19mm	4.3/4" 121mm	3/4" 19mm	5.5/8" 143mm	3.5/8" 92mm	1/16" 2mm
2" ANSI 150LBS FF OR RF	6.1/2" 165mm	8	3/4" 19mm	5" 127mm	7/8" 22mm	5.3/4" 146mm	3.5/8" 92mm	1/16" 2mm
2" ANSI 300LBS FF OR RF	6.1/2" 165mm	8	3/4" 19mm	5" 127mm	7/8" 22mm	5.3/4" 146mm	3.5/8" 92mm	1/16" 2mm
2" DIN ND16 FF	165mm	4	18mm	125mm	22mm	146mm	-	-

ITEM No.	DESCRIPTION		No. OFF
1	DRIVING SHAFT	27401	1
2	STUD	3/8" UNC x 2"	3
3	NUT	3/8" UNC	3
4	GLAND	8906	1
5	PACKING	3/8" SQ	4
6	PACKING HEADER	21941	1
7	BUSH	20DU28	4
8	BUSH	20DU20	4
9	SETSCREW	5/16" UNC x 7/8"	28
10	GASKET	32542	2
11	BODY	25974	1
12	PLUG	2227 3/4" BSP	2
13	WASHER	FIBRE 3/4" BSP	2
14	BACK COVER	30034	1
15	FRONT COVER	30010	1
16	FOLLOWING SHAFT	27401	1
17	ROTOR KEY	3/8" x 1/4" x 2.1/4"	2
18	ROTOR	12283	2
19	WASHER	FIBRE 3/4"UNC	2
20	DRAIN PLUG	2227 1/8" BSP	1
21	WASHER	FIBRE 1/8" BSP	1
22	ADJUSTING SCREW	27789	1
23	LOCKNUT	27793 3/4" UNC	1
24	S.H.CAPSCREWS	5/16" UNC x 3/4"	8
25	ADJ SCREW FLG	21885	1
26	SPRING SEAT	21887	1
27	SPRING		1
28	RELIEF VALVE	6355	1
29	VALVE SEAT	21888	1
30	GRUBSCREWS	1/4"UNC x 3/8"	4
31	RV FLANGE	21889	1
32	GASKET	21889G	2
33	STUD	5/16" UNC x 1.1/4"	12
34	NUT	5/16" UNC	12
35	WASHER	5/16" UNC	12
36	DOMECAP	21090	1
37	FIBRE WASHER	1/4" BSP	2
38	ADJ SCREW M12	20081	2
39	LOCKNUT	M12	2

WHEN REQUIRED

Notes:

JOB No.

219/01/11BW

23/10/07BW

Rev. Rev. Date Drawn Approved Sheet

Material:Approx Weight: 55KG

Machine:Pattern:

Limits±0.005" Dimensions in inches. Unless stated otherwise Drawn 1st angle projection.

Drawn by: BW
Date: 23/10/07
Scale: 3/4 F.S

Albany pumps

LYDNEY, GLOUCESTERSHIRE, ENGLAND

WWW.ALBANY-PUMPS.CO.UK

Description

SECTIONAL ARRANGEMENT
HD4 EXTENDED BEARING PUMP WITH RELIEF VALVE

Drg No.

1 4 7 9 6

Iss. No. 2

TECHNICAL INFORMATION SHEET FOR ALBANY FOAM PUMPS FIRE FIGHTING VEHICLE MODELS

The Albany Engineering Co. Ltd.

PUMP

Model: HD5 with bare shaft drive

Rotor Type: Double Helical

Mounting: Foot

Option: Flange (see notes below)

Branches: Flanged 2 1/2" ASA 150 lb FF

Option: 3" ASA and DIN

Integral RV: Yes

Option: Non RV version

Bearings: Extended DU

Shaft Sealing: Packed Gland pressure relieved

Option: Double Lip Seal, grease lubricated and pressure relieved

Materials of Construction

Body: Gunmetal

Front Cover: Gunmetal

Back Cover: Gunmetal

Rotors: Phosphor Bronze

Shafts: 316 Stainless Steel hard chrome plated in bearing and seal areas

Bearings: DU type, PTFE coated on sintered backing

Performance Details

Speed range: 1000 to 2200 rev/min

Output range: approx. 315 to 900 l/m

Note! See curve: HD5-RV-DH-1800-15CST-1

Discharge pressure range: 0 to 20 bar g

Foam Viscosity range: This is the viscosity of the foam when entering the pump and the range is dependant on speed and pressure, with a discharge pressure of 16 bar g the minimum viscosity at 1200 rev/min is 11 cst and at 1800 rev/min is 7 cst.

For foams with viscosities below these figures please contact Albany Sales Office.

Notes! Pumps for Fire Fighting Vehicles

Pumps can be mounted in the horizontal position and also inclined within 20 degrees of the horizontal with the foot in the 6, 9, 12 or 3 o'clock position.

If pumps are to be mounted vertically or at a greater angle than 20 degrees to the horizontal please contact the Albany Sales Office as this may necessitate a thrust bearing.

Pumps can be driven by hydraulic motor or power transmission shafts, if there is any thrust or side loads the pump can be fitted with an outrigger bearing.

Albany Foam Pumps are designed to pump foam concentrate. If they are to be tested on water it must be within Albany's recommended limits as running on water and low viscosity foams will reduce the life of the pump.

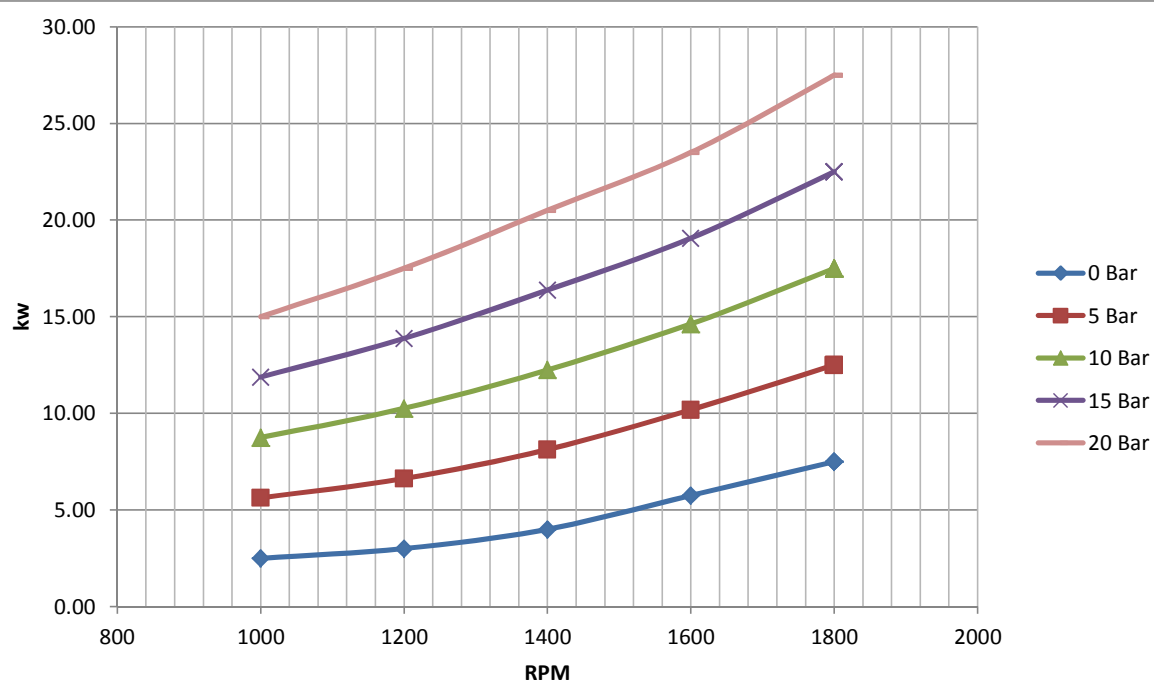
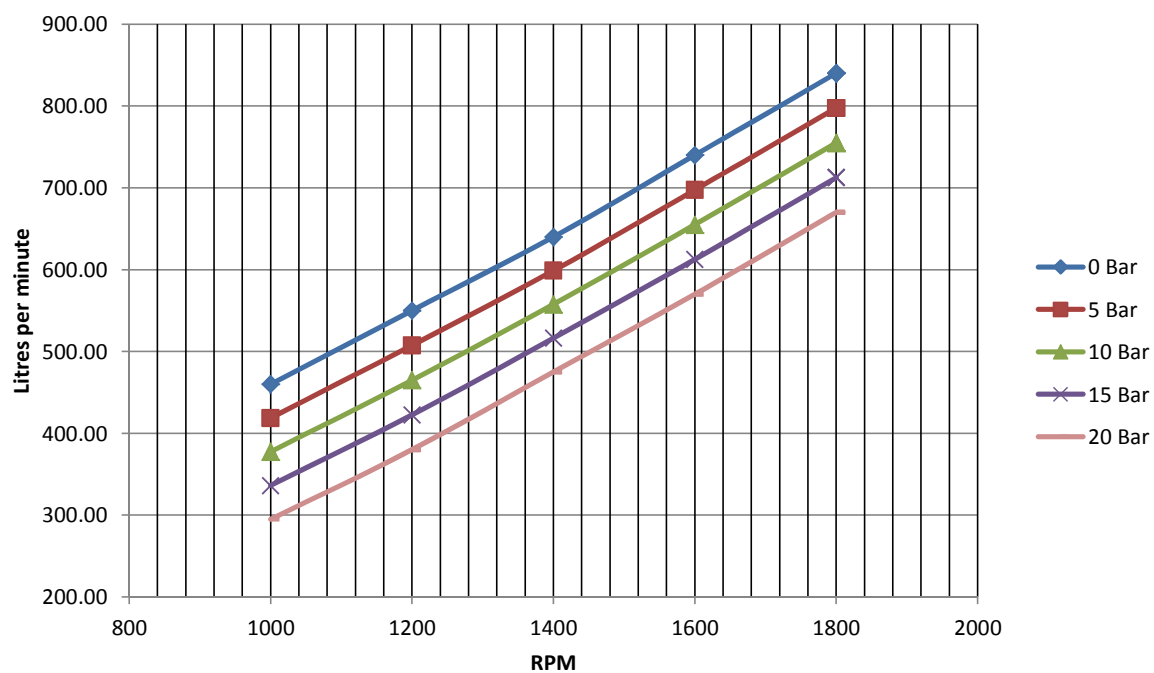


Albany Pumps

Pump Performance Graph

Graph No.

HD5-RV-DH-1800-15CST-1



Pump Type	HD5 DH	Viscosity	15 centistokes	Temperature	20°C
Fluid	Oil				

TECHNICAL INFORMATION SHEET FOR ALBANY FOAM PUMPS

FIRE FIGHTING VEHICLE MODELS

The Albany Engineering Co. Ltd.

PUMP

Model: HD7 with bare shaft drive

Rotor Type: Double Helical

Mounting: Foot

Option: Flange (see notes below)

Branches: Flanged 3" ASA 150 lb FF

Option: DIN

Integral RV: Yes

Option: Non RV version

Bearings: Extended DU

Shaft Sealing: Packed Gland pressure relieved

Option: Double Lip Seal, grease lubricated and pressure relieved

Materials of Construction

Body: Gunmetal

Front Cover: Gunmetal

Back Cover: Gunmetal

Rotors: Phosphor Bronze

Shafts: 316 Stainless Steel hard chrome plated in bearing and seal areas

Bearings: DU type, PTFE coated on sintered backing

Performance Details

Speed range: 1000 to 1800 rev/min

Output range: approx. 660 to 1360 l/m

Note! See curve: HD7-RV-DH-1800-15CST-1

Discharge pressure range: 0 to 20 bar g

Foam Viscosity range: This is the viscosity of the foam when entering the pump and the range is dependant on speed and pressure, with a discharge pressure of 16 bar g the minimum viscosity at 1200 rev/min is 7 cst and at 1800 rev/min is 5 cst.

For foams with viscosities below these figures please contact Albany Sales Office.

Notes! Pumps for Fire Fighting Vehicles

Pumps can be mounted in the horizontal position and also inclined within 20 degrees of the horizontal with the foot in the 6, 9, 12 or 3 o'clock position.

If pumps are to be mounted vertically or at a greater angle than 20 degrees to the horizontal please contact the Albany Sales Office as this may necessitate a thrust bearing.

Pumps can be driven by hydraulic motor or power transmission shafts, if there is any thrust or side loads the pump can be fitted with an outrigger bearing.

Albany Foam Pumps are designed to pump foam concentrate. If they are to be tested on water it must be within Albany's recommended limits as running on water and low viscosity foams will reduce the life of the pump.

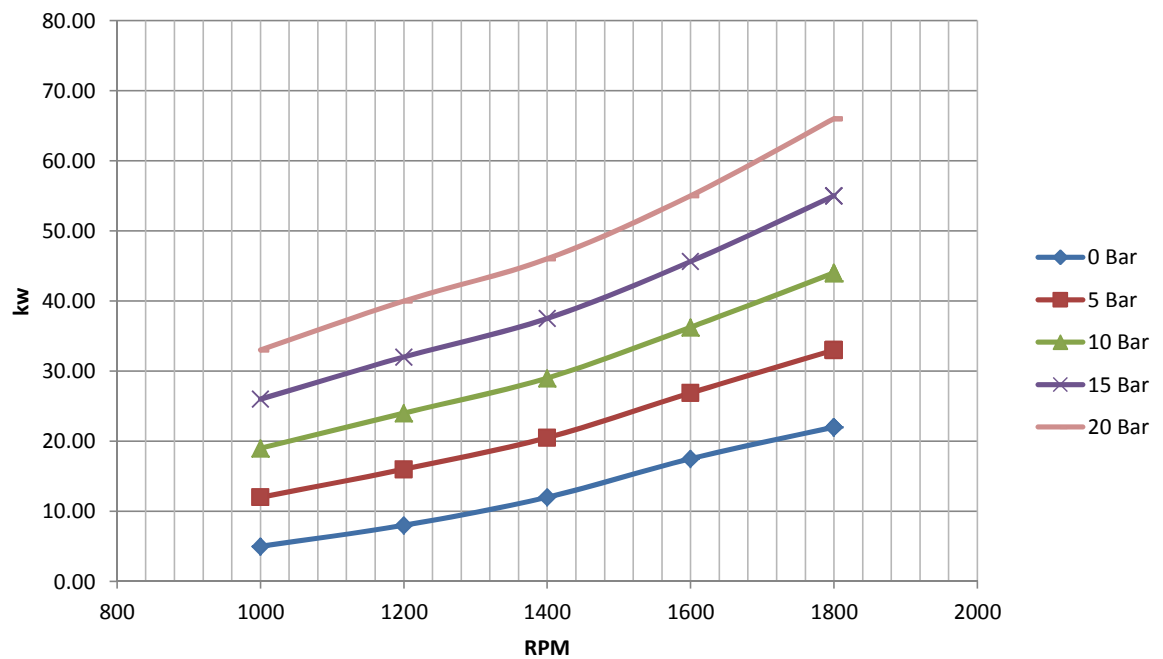
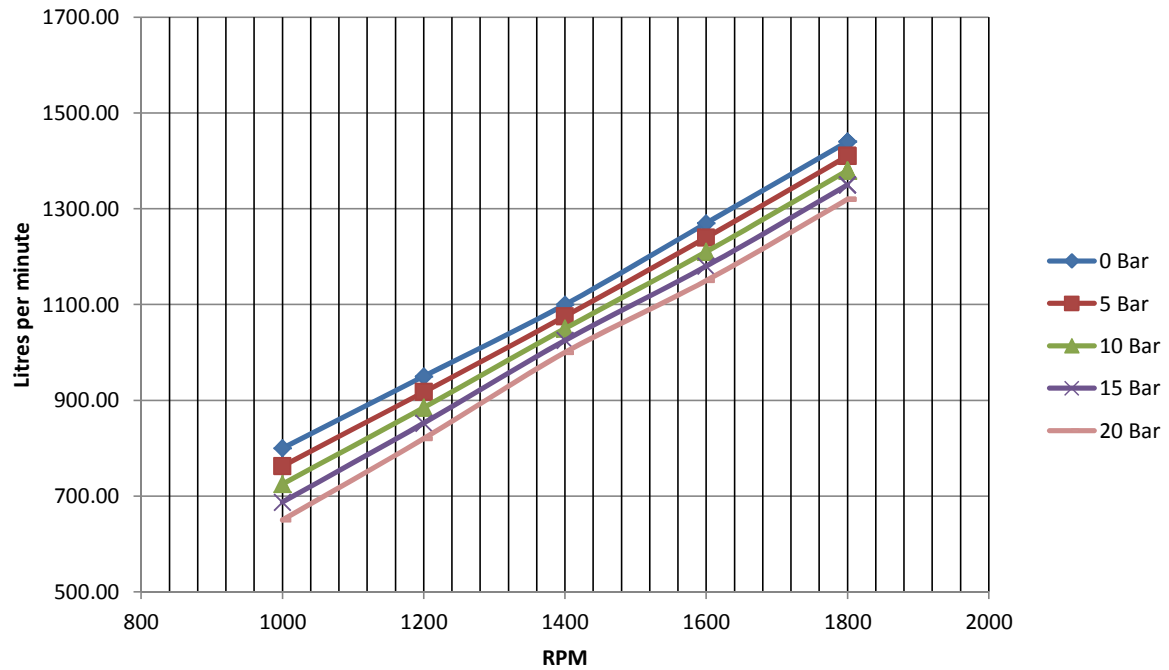


Albany Pumps

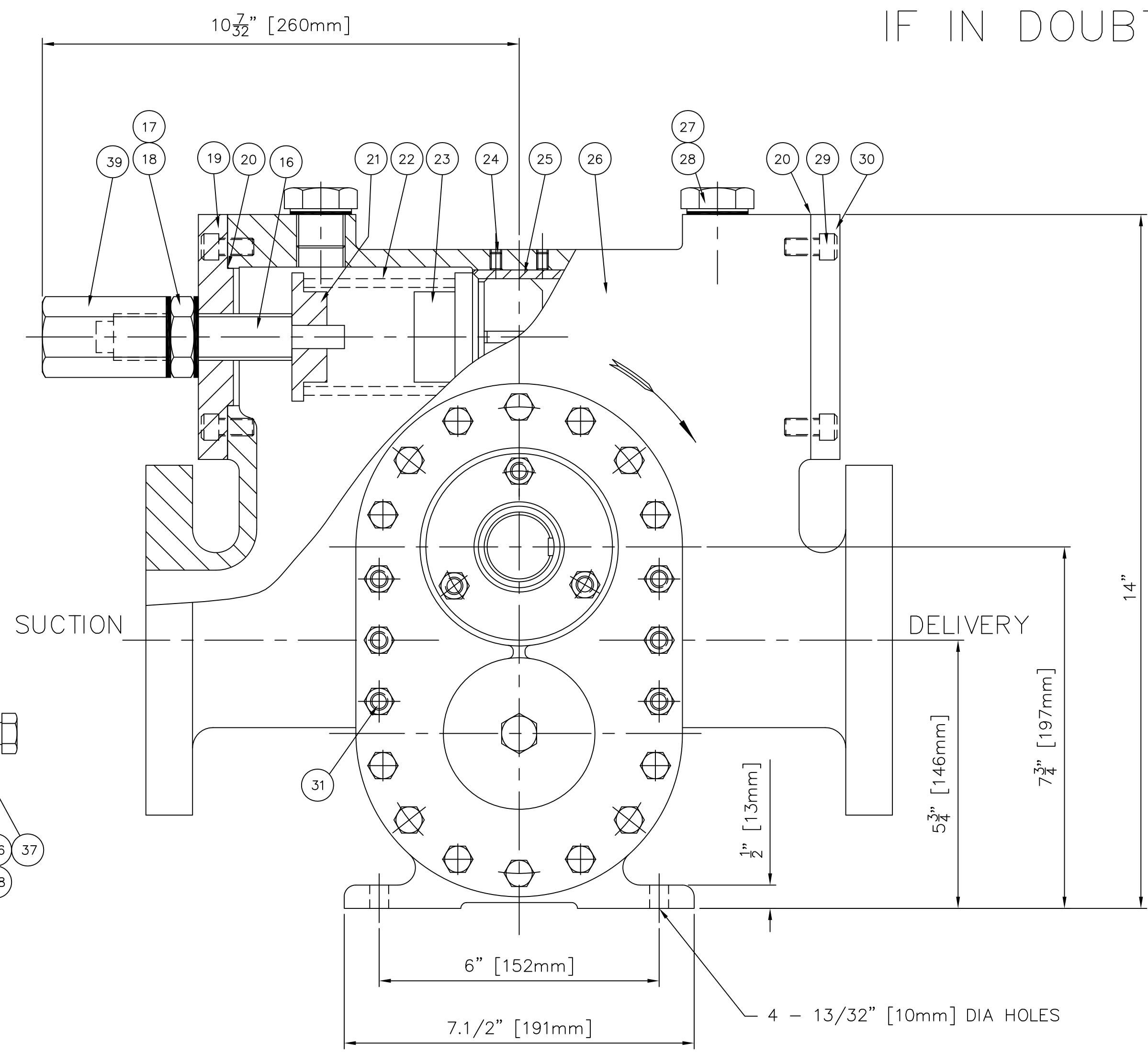
Pump Performance Graph

Graph No.

HD7-RV-DH-1800-15CST-1



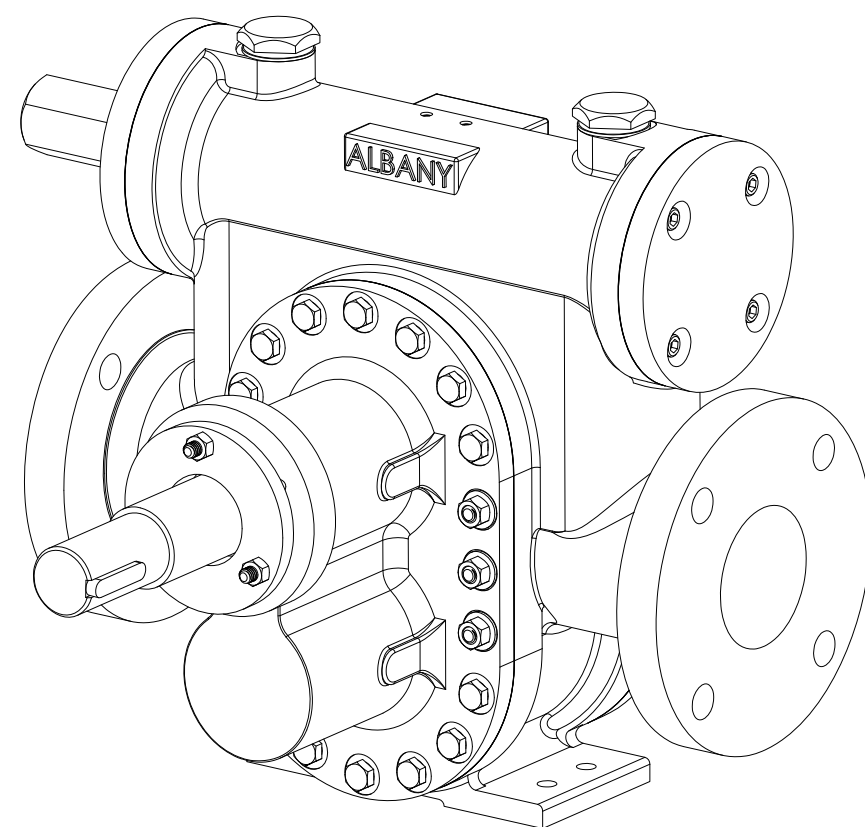
Pump Type	HD7 DH	Viscosity	15 centistokes	Temperature	20°C
Fluid	Oil				





FLANGE	O.D	No. OF HOLES	HOLE DIA	P.C.D	X	Y	RAISED	FACE
							DIA	HEIGHT
3" BST 'D' & 'E'	7.1/4"	4	11/16"	5.3/4"	3/4"	7.755" 7.745"	—	—
3" ANSI 125LBS FF OR RF 3" ANSI 150LBS FF OR RF	7.1/2"	4	3/4"	6"	1"	8.005" 7.995"	5"	1/16"
3" ANSI 300LBS FF OR RF	8.1/4"	8	7/8"	6.5/8"	1.1/8"	8.130" 8.120"	5"	1/16"
80mm PN10 / PN16	200mm	8	18mm	160mm	1"	8.005" 7.995"	—	—

ITEM No.	DESCRIPTION		No. OFF
1	DRIVING SHAFT	14285	1
2	STUD	5/16" UNC x 2"	3
3	NUT	5/16" UNC	3
4	GLAND	25321	1
5	PACKING	5/16" SQ	1 SET
6	PACKING HEADER	25320	1
7	FRONT COVER	30011	1
8	SETSCREW	3/8" UNC x 1"	28
9	BACK COVER	30035	1
10	FOLLOWING SHAFT	14285	1
11	KEY	1/2" x 3/8" x 3.3/4"	2
12	ROTOR	14286	2
13	GASKET	32843	1 SET
14	BUSH	28DU32	4
15	BUSH	28DU24	4
16	ADJUSTING SCREW	34177	1
17	LOCKNUT	27793	1
18	FIBRE WASHER		2
19	ADJ. SCW. FLANGE	8860	1
20	GASKET	8860G	2
21	SPRING SEAT	8862	2
22	SPRING		1
23	RELIEF VALVE	14804	1
24	GRUBSCREW	1/4" UNC x 3/8"	4
25	R.VALVE SEAT	8857	1
26	BODY	25083	1
27	PLUG	2227 3/4" BSP	2
28	FIBRE WASHER		2
29	R.V.FLANGE	8860	1
30	S.H.CAPSCREWS	3/8" UNC x 3/4"	8
31	STUD	3/8" UNC x 1.1/2"	6
32	DRAIN PLUG	2227 1/8" BSP	1
33	FIBRE WASHER		1
34			
35	NUT	3/8" UNC	6
36	FIBRE WASHER		2
37	ADJUSTMENT SCREW	20081 – M12	2
38	LOCKNUT	M12	2
39	DOME CAP	21090	1

* WHEN REQUIRED



Notes:							Material:		Approx Weight: 95kg		 LYDNEY, GLOUCESTERSHIRE, ENGLAND WWW.ALBANY-PUMPS.CO.UK		Description											
							Machine:		SECTIONAL ARRANGEMENT HD7 EXTENDED BEARING PUMP WITH RELIEF VALVE															
							Pattern:																	
							JOB No:							Limits ± 0.005"				Drawn by: DC		Drg No. 3 5 1 3 4		Iss. No. 1		
Dimensions in inches. Unless stated otherwise Drawn 1st angle projection.		Date: 16/5/11																						
Scale: 1:2		A1																						
							1		16/5/11		DC		Rev.		Rev. Date		Drawn		Approved		Sheet		FIRST DRAWN	
																							Particulars of Alteration	

TECHNICAL INFORMATION SHEET FOR ALBANY FOAM PUMPS

FIRE FIGHTING VEHICLE MODELS

The Albany Engineering Co. Ltd.

PUMP

Model: HD8 with bare shaft drive

Rotor Type: Double Helical

Mounting: Foot

Option: Flange (see notes below)

Branches: Flanged 4" ASA 150 lb FF

Option: DIN

Integral RV: Yes

Option: Non RV version

Bearings: Extended DU

Shaft Sealing: Packed Gland pressure relieved

Option: Double Lip Seal, grease lubricated and pressure relieved

Materials of Construction

Body: Gunmetal

Front Cover: Gunmetal

Back Cover: Gunmetal

Rotors: Phosphor Bronze

Shafts: 316 Stainless Steel hard chrome plated in bearing and seal areas

Bearings: DU type, PTFE coated on sintered backing

Performance Details

Speed range: 1000 to 1800 rev/min

Output range: approx. 850 to 1720 l/m

Note! See curve: HD8-RV-DH-1800-15CST-1

Discharge pressure range: 0 to 20 bar g

Foam Viscosity range: This is the viscosity of the foam when entering the pump and the range is dependant on speed and pressure, with a discharge pressure of 16 bar g the minimum viscosity at 1200 rev/min is 9 cst and at 1800 rev/min is 6 cst.

For foams with viscosities below these figures please contact Albany Sales Office.

Notes! Pumps for Fire Fighting Vehicles

Pumps can be mounted in the horizontal position and also inclined within 20 degrees of the horizontal with the foot in the 6, 9, 12 or 3 o'clock position.

If pumps are to be mounted vertically or at a greater angle than 20 degrees to the horizontal please contact the Albany Sales Office as this may necessitate a thrust bearing.

Pumps can be driven by hydraulic motor or power transmission shafts, if there is any thrust or side loads the pump can be fitted with an outrigger bearing.

Albany Foam Pumps are designed to pump foam concentrate. If they are to be tested on water it must be within Albany's recommended limits as running on water and low viscosity foams will reduce the life of the pump.

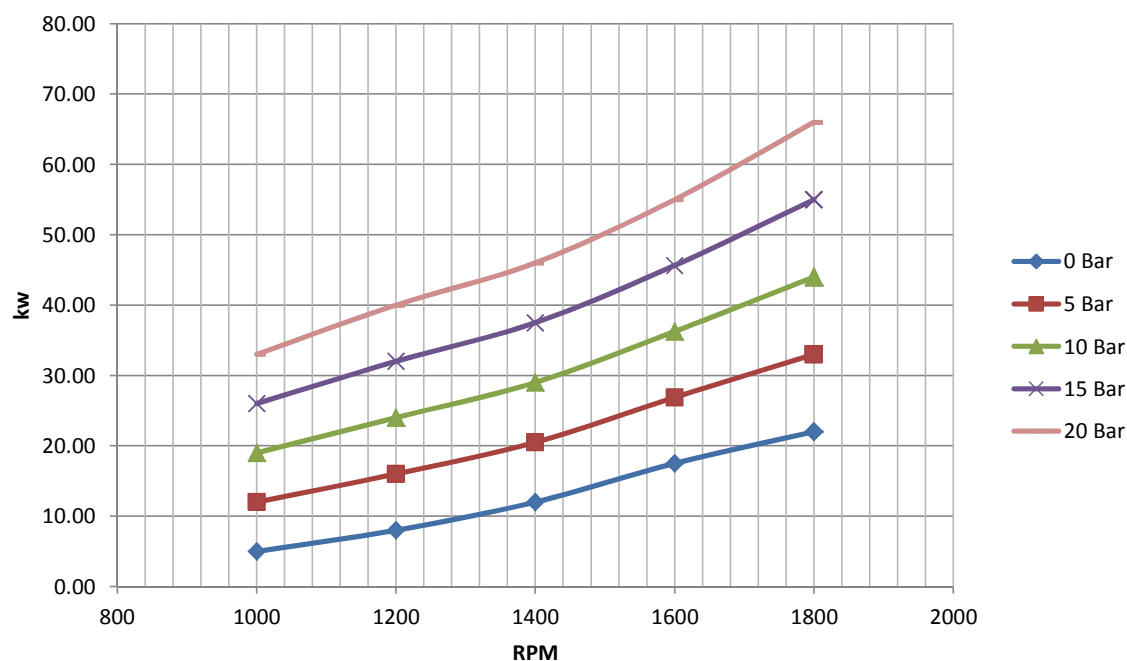
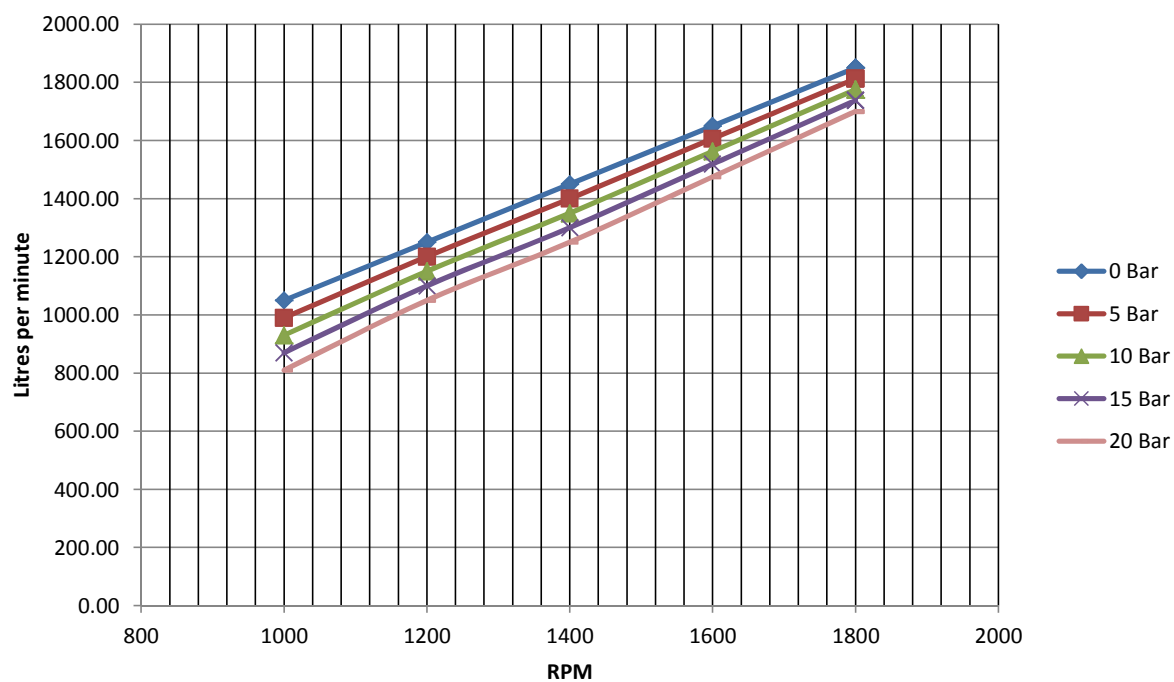


Albany Pumps

Pump Performance Graph

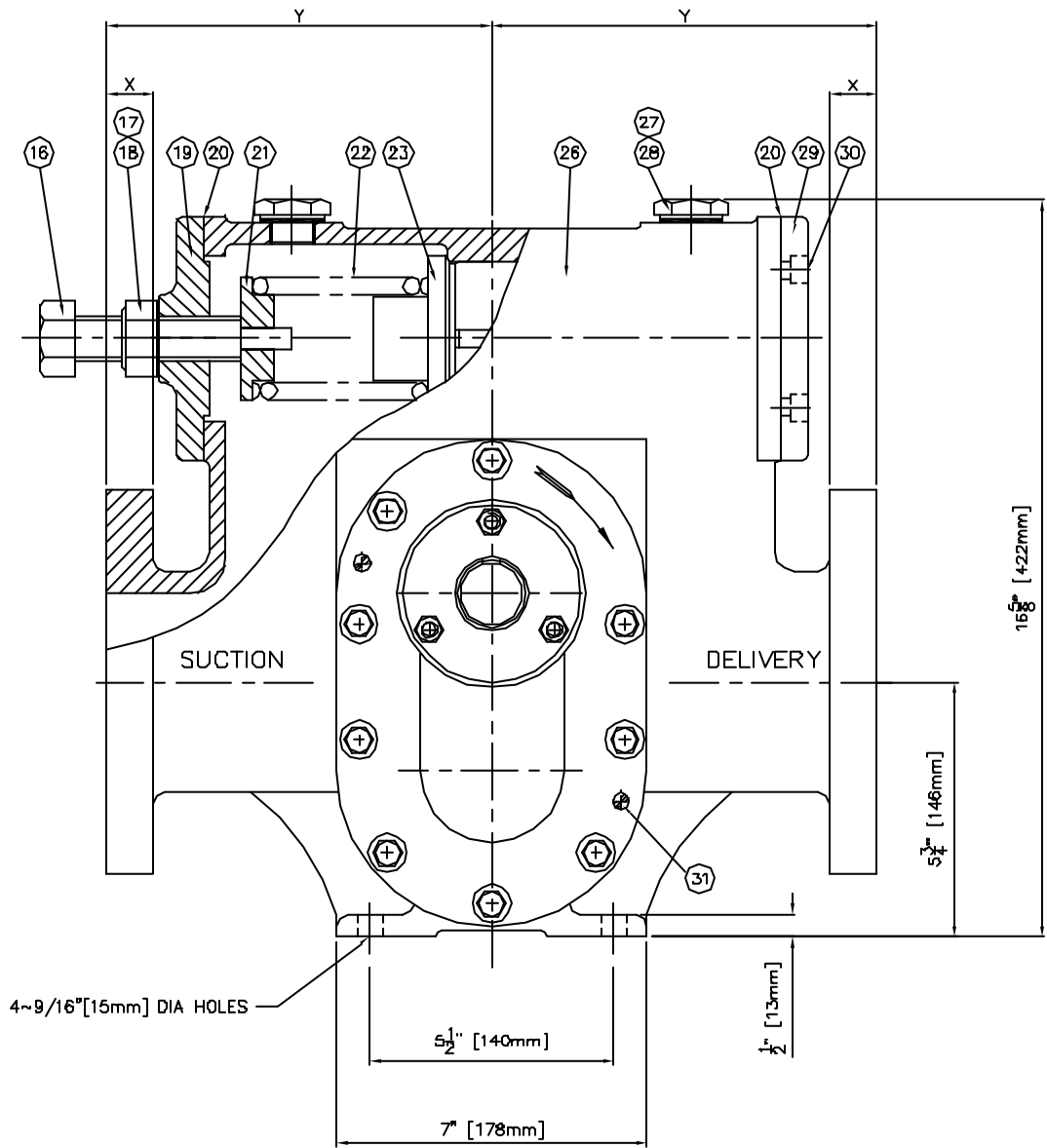
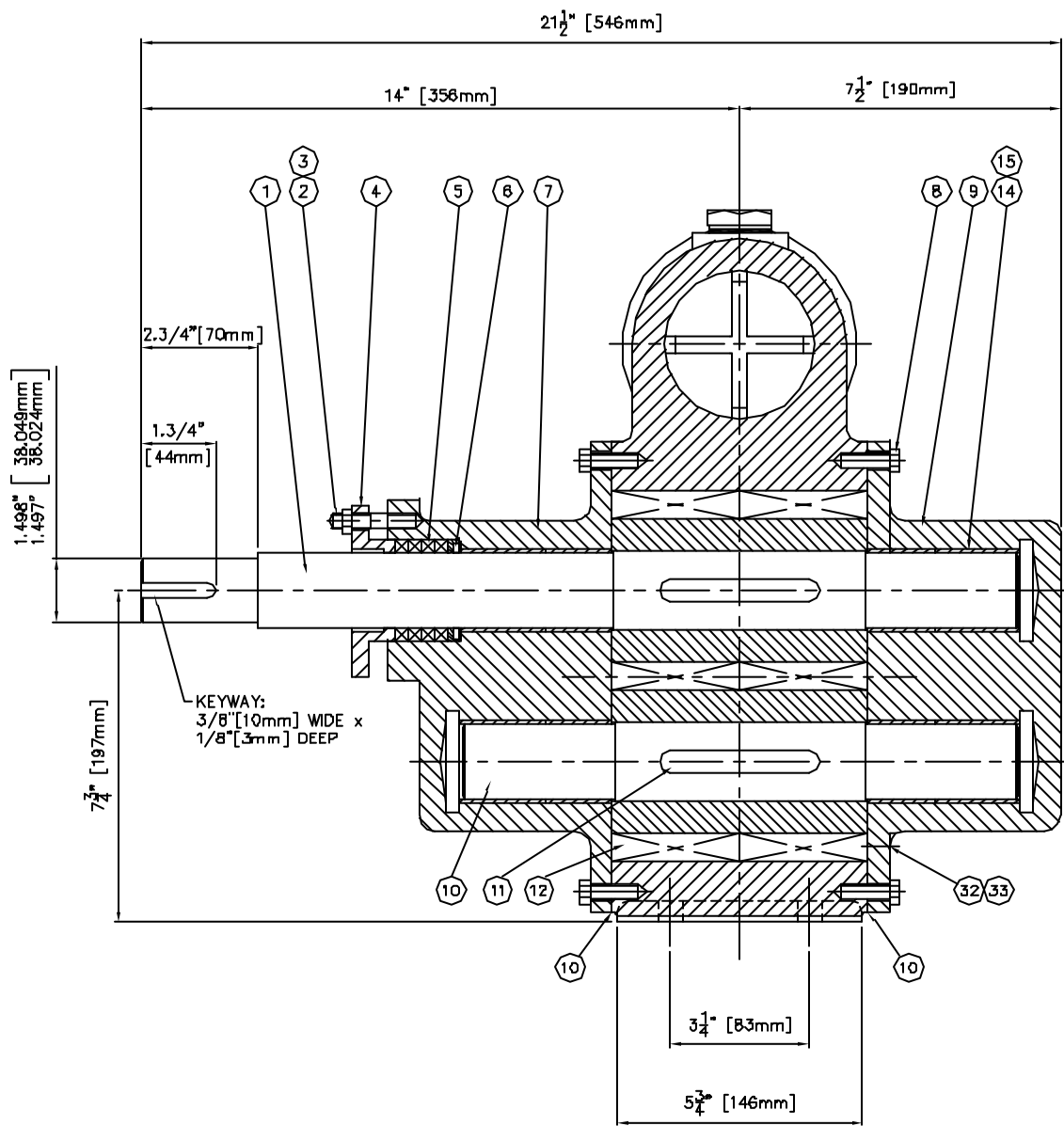
Graph No.

HD8-RV-DH-1800-15CST-1



Pump Type	HD8 DH	Viscosity	15 centistokes	Temperature	20°C
Fluid	Oil				

IF IN DOUBT ASK



FLANGE	OD	No. OF HOLES	HOLE DIA	PCD	X	Y	RAISED FACE DIA	HEIGHT
4" ANSI 150LBS FF OR RF	9"	8	11/16"	7.1/2"	15/16"	8.8/16"	6.3/16"	1/16"
4" ANSI 300LBS FF	10"	8	7/8"	7.7/8"	1.1/16"	8.11/16"	-	-
4" DIN PN 10 & 16	9"	8	18mm	180mm	7/8"	8.1/2"	-	-

ITEM No	DESCRIPTION	No OFF
1	DRIVING SHAFT 28375	1
2	STUD 5/16" UNC x 2"	3
3	NUT 5/16" UNC	3
4	GLAND 25321	1
5	PACKING 5/16" SQ	1 SET
6	PACKING HEADER 25320	1
7	FRONT COVER 30011	1
8	SETSCREW 3/8" UNC x 1"	40
9	BACK COVER 30035	1
10	FOLLOWING SHAFT 25323	1
11	KEY 1/2" x 3/8" x 3.3/4"	2
12	ROTOR 13526	2
13	GASKET 32543	1 SET
14	BUSH 280U32	4
15	BUSH 280U24	4
16	ADJUSTING SCREW 20717	1
17	LOCKNUT 1" UNC NYLOC	1
18	FIBRE WASHER 1" UNC	1
19	ADJ SCREW FLANGE 20709	1
20	GASKET 20709	2
21	SPRING SEAT 8862	1
22	SPRING	1
23	RELIEF VALVE 8974	1
24		
25		
26	BODY 14263	1
27	PLUG 3/4" BSP	2
28	FIBRE WASHER 3/4" BSP	2
29	RV FLANGE 20621	1
30	S.H.CAPSCREWS 3/8" UNC x 3/4"	8
31	DOWEL 3/8" DIA x 1"	4
32	DRAIN PLUG 1/8" BSP	1
33	FIBRE WASHER 1/8" BSP	1

PUMP DRAWN TOP DRIVE / CLOCKWISE ROTATION

Notes:

JOB No. 18/888

Material:

Approx Weight:
80KG

Machine:

Pattern:

Limits $\pm 0.005"$
Dimensions in inches,
Unless stated otherwise
Drawn 1st angle projection.

 **Albany pumps**
LYDNEY, GLOUCESTERSHIRE, ENGLAND
WWW.ALBANY-PUMPS.CO.UK

Drawn by: DC

Date: 22/3/04

Scale: 1/2 Full Size

Description

SECTIONAL ARRANGEMENT
HDB / AP13 RELIEF VALVE EXTENDED BEARING PUMP

Drg No. 1 4 3 8 5

Iss. No. 1

Rev.	Rev. Date	Drawn	Approved	Sheet
1	22/3/04	DC		

FIRST DRAWN

Particulars of Alteration