



— Innovative, Elegant & Robust Solutions —

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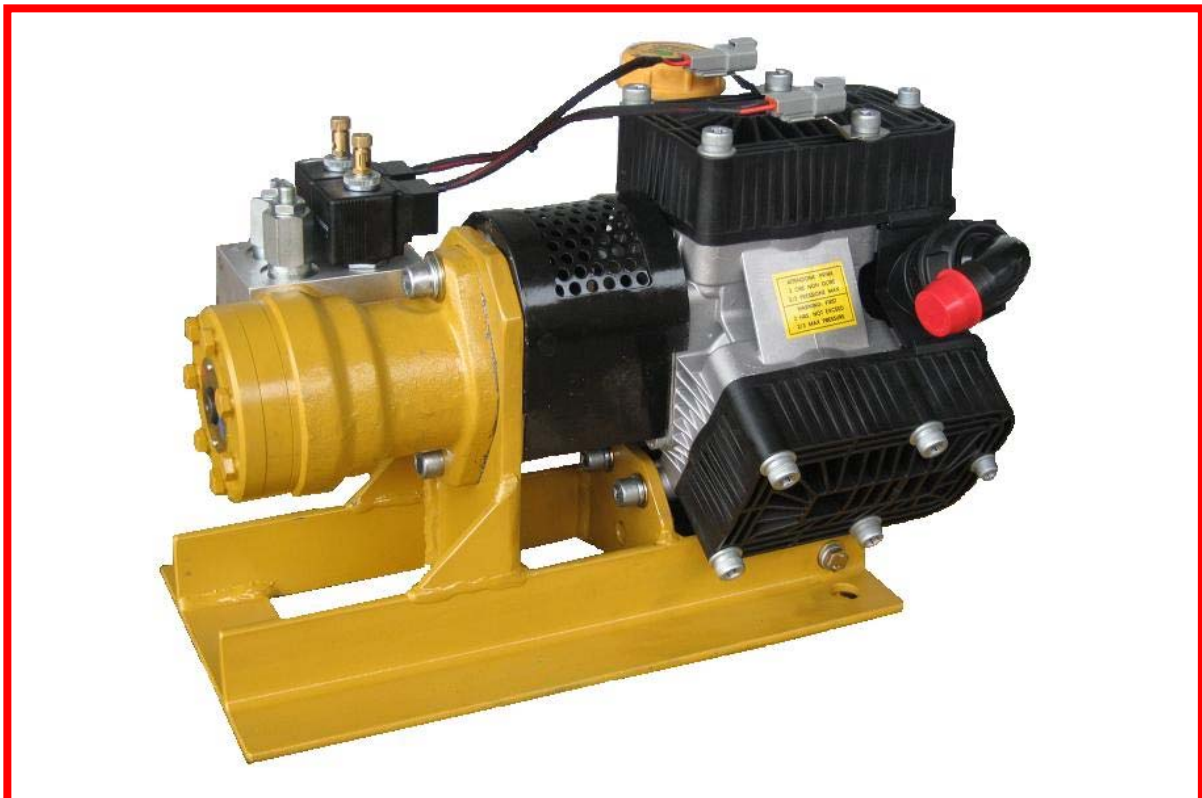
## ENVIROSPRAY Component Manual

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# ENVIROSPRAY®

## Foam Pump HYDEN424 and Foam Injector HYDEN428



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# 1 Foam Pump HYDEN424-AAA

## 1.1 Description

The Enviro-spray™ foam pump used in conjunction with the foam injector optimizes the foam effectiveness, while providing a reliable system for use with excavator backup and hose reel fire fighting.

### Performance:

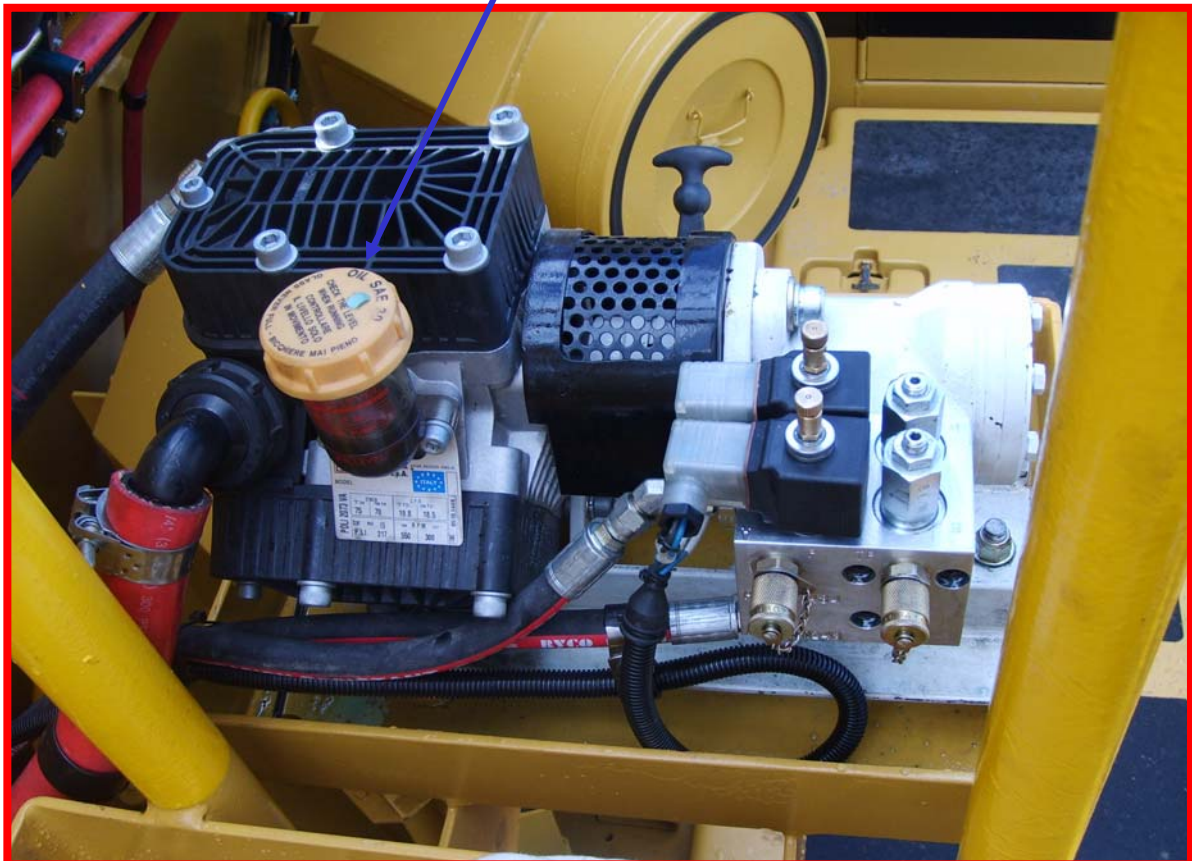
- Automatic adjustment of foam injection rate to match water rate.
- Positive injection allowing foam to be used at maximum water pressure and can be used via high back-pressure outlets such as hose reels and auxiliary outlets.
- Single foam inlet point can provide foam to multiple outlets simultaneously

## 1.2 Oil Level Check

It is important that the oil level in the foam pump oil reservoir is routinely checked. The level should be checked whilst the pump is running. Refer to markings on reservoir for levels.

**Oil:** use SAE 30 GRADE mineral based oil ONLY.

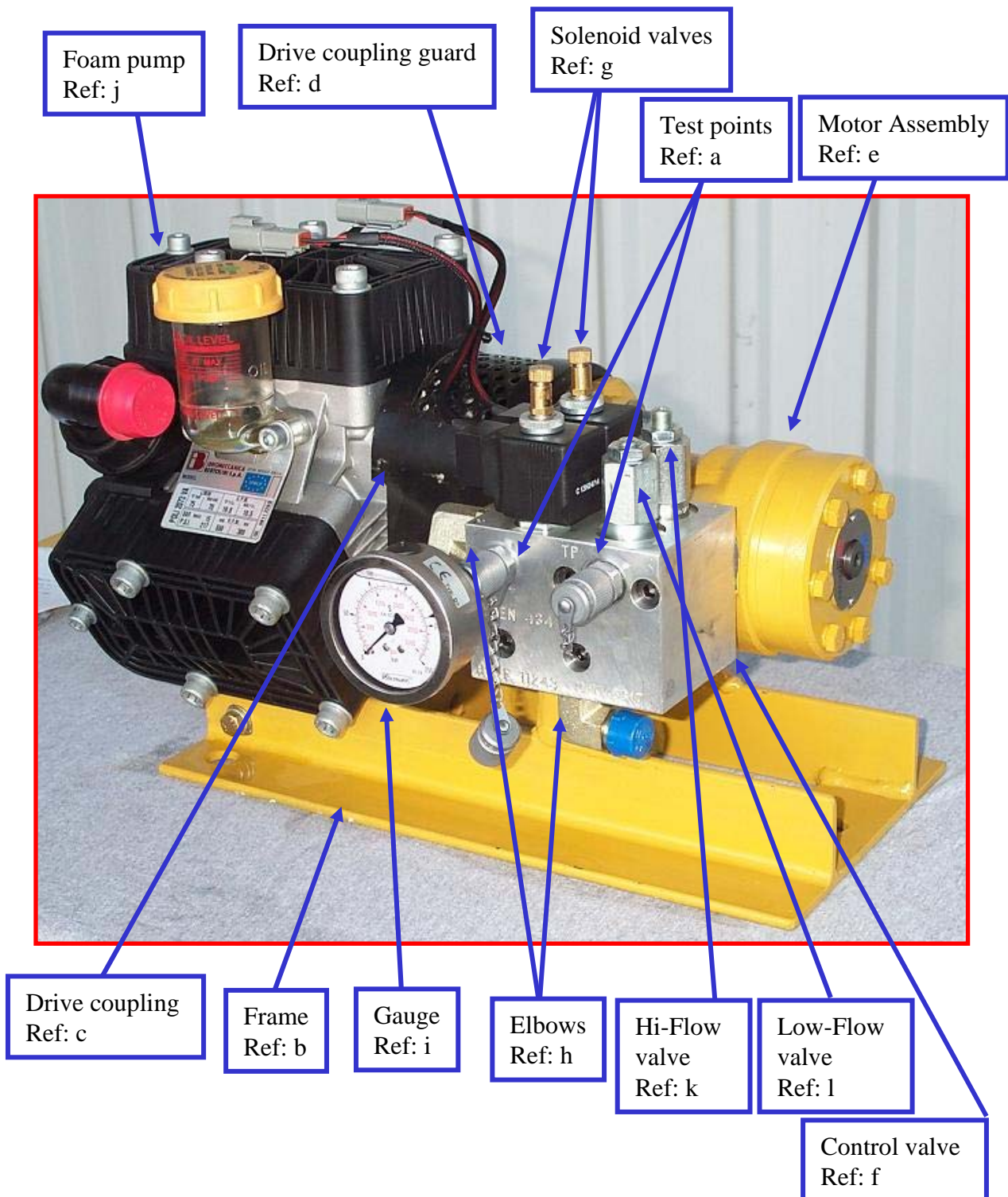
Oil Reservoir Location



### 1.3 Components

#### 1.3.1 Component Identification

The following picture identifies the replacement assemblies and valves. Part numbers can be found in section 1.3.2 using the references noted below.

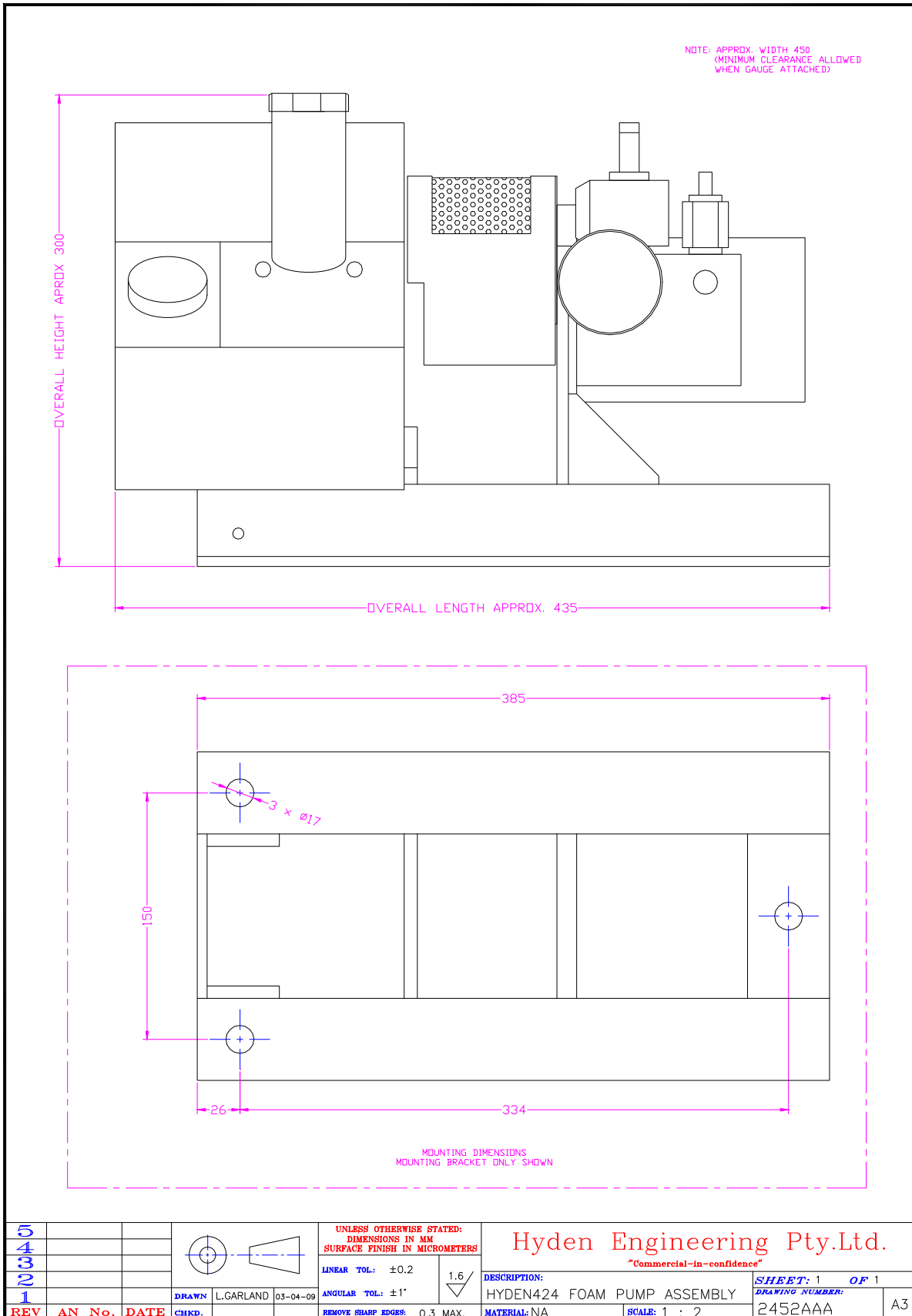


### 1.3.2 Component Breakdown

The following table lists the major components with their part numbers. The list only includes major components and components typically required for maintenance. If required, further component details can be provided by contacting Hyden Engineering.

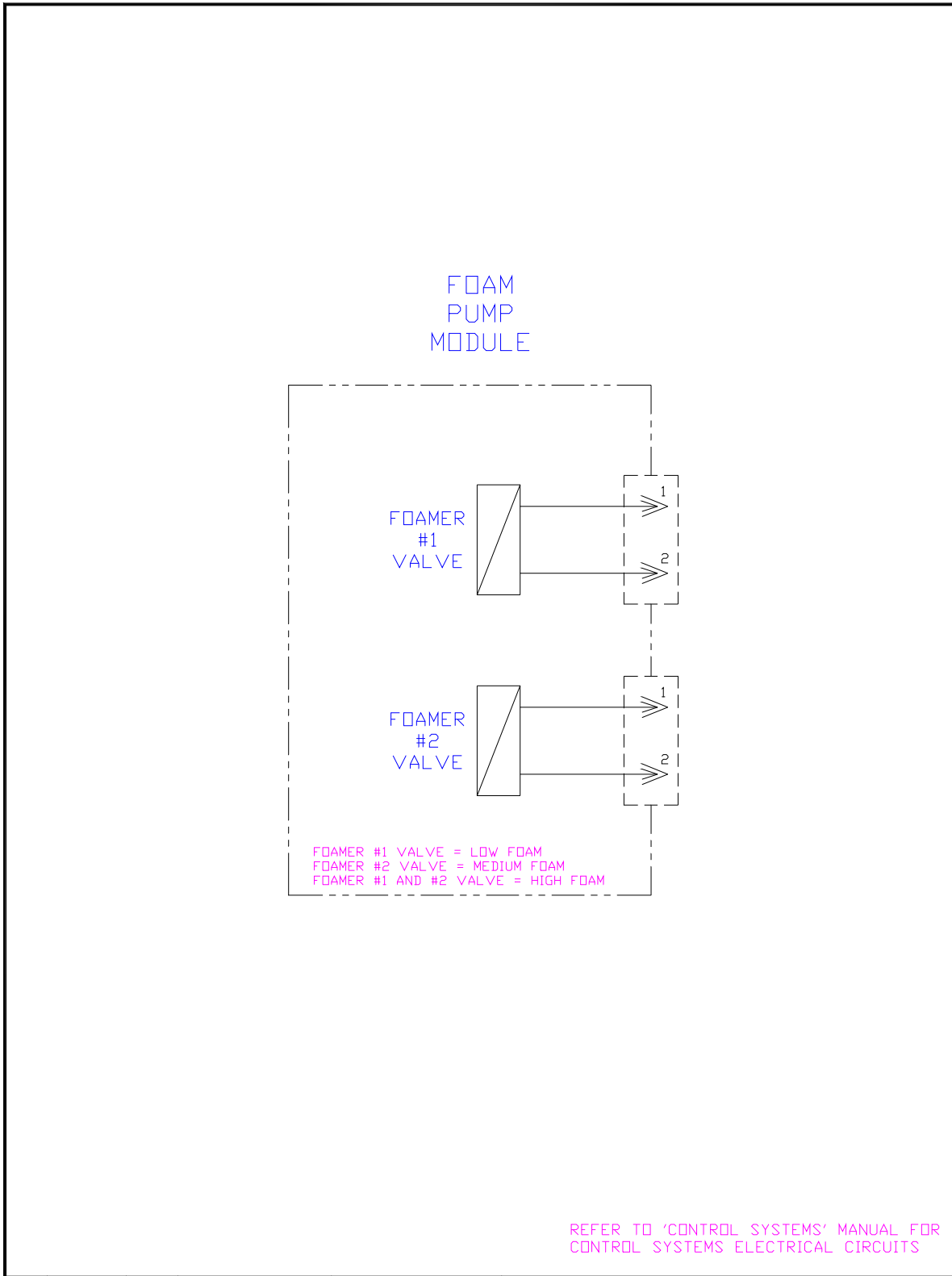
Ref.	Description	Qty	Part / Assembly	Sub Assembly
a	Test Point	2	HY-1269AAA	
b	Mounting Bracket	1	HY-2055AAA	
c	Drive Coupling	1	KIT-HYD-002	
d	Drive Coupling Guard	1	HY-2155AAA	
e	Motor Assembly	1	HYDEN265-B000	
f	Control Valve C/W valves excluding coils	1	HYDEN434-0	
g	Coil/Solenoid Assembly	2	HYDEN460-I	
-	Coil only	1		HYDEN494-A
-	Solenoid only	1		HYDEN498-G
h	Elbow Fitting	2	S76-0812	
-	Gauge Adaptor	1	SMD20G1-4-P-OR	
i	Gauge	1	SPG063-250-1-RBU	
j	Diaphragm Pump	1	STAP42-KEY	
k	High-flow valve	1	HYDEN499-B0	
l	Low-flow valve	1	HYDEN499-A0	

1.4 Assembly Drawing and Mounting Details



### 1.5 Electrical Schematic

The following schematic shows the wiring used for the HYDEN424 Foam Pump. It includes wire labelling and plug groupings for easy identification.



5							UNLESS OTHERWISE STATED: DIMENSIONS IN MM SURFACE FINISH IN MICROMETERS		Hyden Engineering Pty.Ltd. "Commercial-in-confidence"		
4					LINEAR TOL: -			DESCRIPTION:	HYDEN424 FOAM PUMP ELEC CCT		SHEET: 1 OF 1
3					ANGULAR TOL: -						DRAWING NUMBER:
2					REMOVE SHARP EDGES: -			MATERIAL: -	SCALE: -		2734AAB
1					DRAWN		L.GARLAND	31/07/17			A3
REV	AN No.	DATE	CHKD.								

## 2 Foam Injector HYDEN428

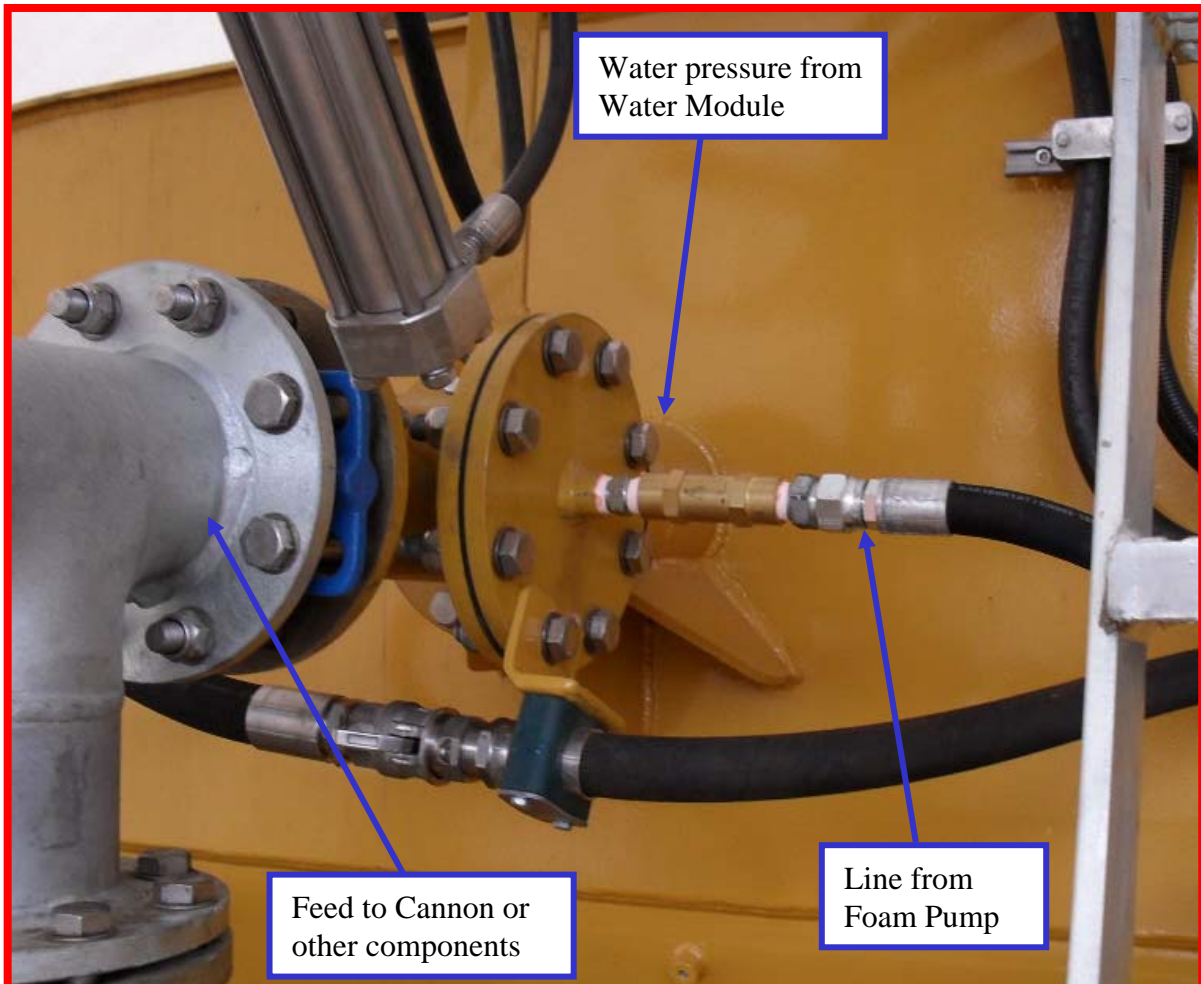
### 2.1 Description

The Enviro-spray™ foam injector when used in conjunction with the foam pump is designed to optimize the foam use, while providing a reliable system for excavator backup and hose reel fire fighting.

The foam injector is available in 2 sizes to suit different systems:

- 4” – HYDEN428-A
- 3” – HYDEN428-B

The following picture illustrates a typical location for a 4” (HYDEN428-A) injector, in line between the Water Module and a Cannon or other components in a spray system.

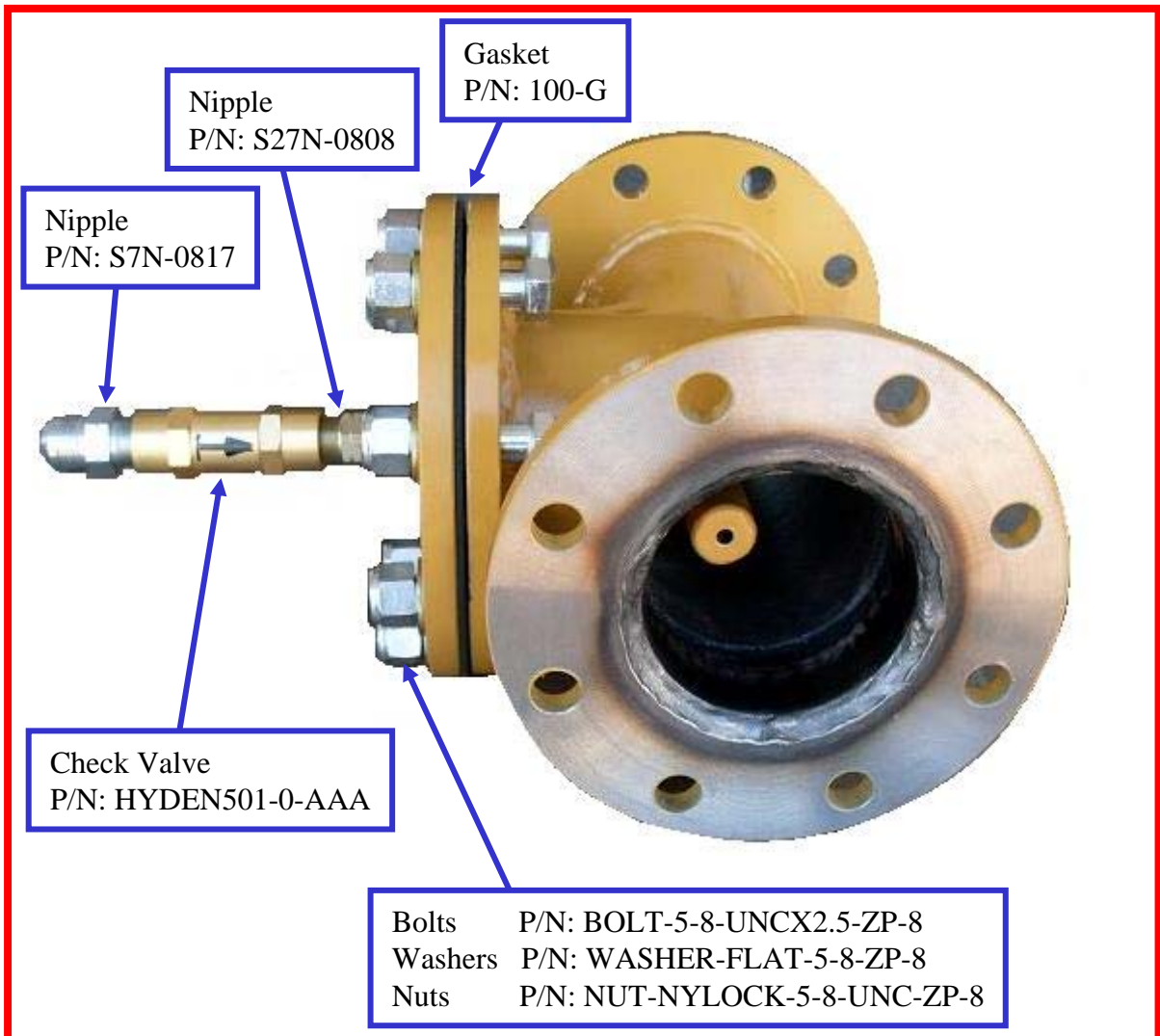




## 2.2 Component Identification

### 2.2.1 HYDEN428-A (4")

The following picture identifies typical service components for the HYDEN428-A foam injector with their part numbers. If required, further component details can be provided by contacting Hyden Engineering.



### 2.2.1 HYDEN428-B (3")

The HYDEN428-B foam injector shares the same service components as the HYDEN428-A as illustrated in section 2.2.1 besides the gasket. If required, further component details can be provided by contacting Hyden Engineering.

**Gasket P/N: 75-G**