



**HORSEPOWER REQUIRED TO DRIVE
WILDEN AIR OPERATED DIAPHRAGM PUMPS**

To determine HP required, consumption in CFM and input pressure must first be known. This is read from the pump performance on the M-8 or M-15 curve.

Using the example on the M-8 curves, a flow of 22 gpm against a head of 70 psig required 20 CFM @ 70 psig air supply pressure.

From the following table, HP required is:

<u>AIR SUPPLY PRESSURE</u>	<u>HORSEPOWER PER CFM</u>
20	.071
25	.085
30	.096
35	.108
40	.118
45	.127
50	.136
55	.145
60	.153
65	.161
70	.168
75	.175
80	.182
85	.189
90	.195
95	.201
100	.207

$$20 \text{ CFM} \times .168/\text{CFM} = 3.36 \text{ or } 4 \text{ HP required}$$

Γενικά υπολογίζουμε 1HP ισχύ αεροσυμπιεστή ανά 4,5 CFM αέρα