

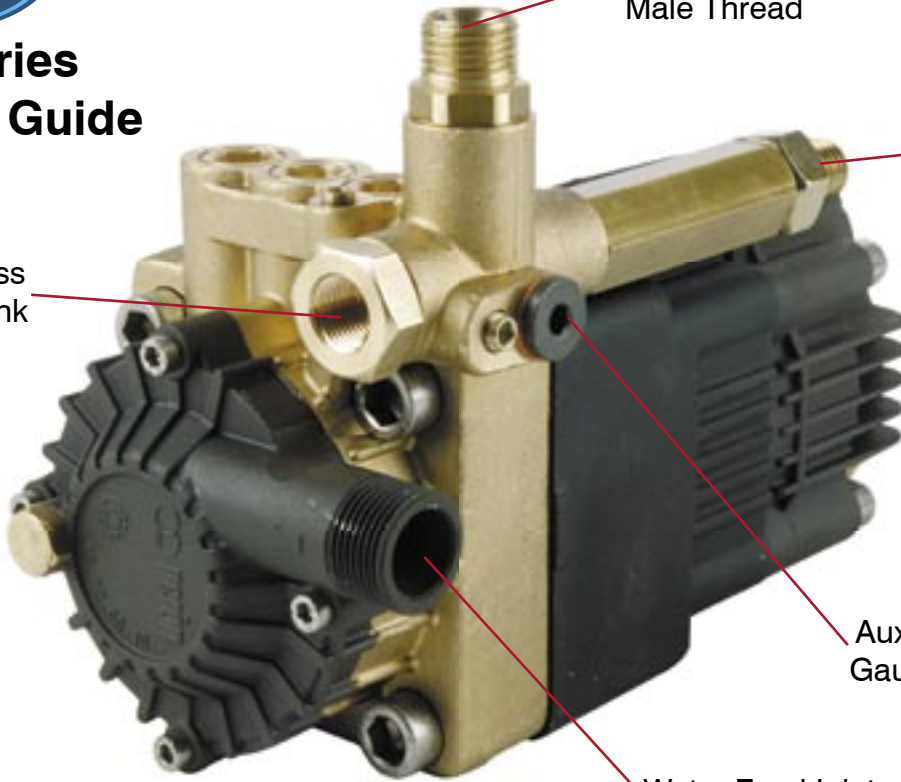


HWB Series Installation Guide

Water By Pass
Return To Tank

High Pressure
Water Outlet
Male Thread

Water Pressure
Regulating Valve
Adjustment



Auxiliary Port for Pressure
Gauge or Pressure Testing
Water System

Water Feed Inlet



Return Oil
Protection Valve

Hydraulic Oil
Return Port

High Pressure
Water Outlet
Female Thread

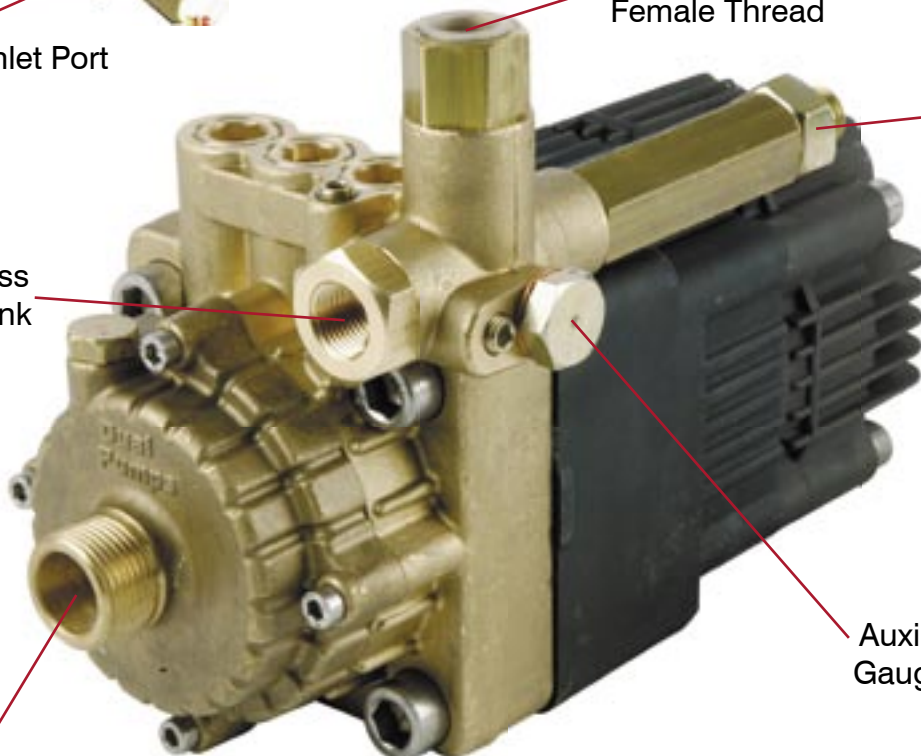
Hydraulic Oil Inlet Port

Water Pressure
Regulating Valve
Adjustment

Water By Pass
Return To Tank

Auxiliary Port for Pressure
Gauge or Pressure Testing
Water System

Water Feed Inlet



This innovative pump transforms hydraulic power into water power.

The compact one-piece design couples a powerful hydraulic drive to a professional grade plunger pump capable of pressures up to 300 Bar and flows to 30 Lpm.

The self-contained drive unit is continuously lubricated by the hydraulic system, requires no oil changes or regular maintenance and eliminates the need for an auxiliary hydraulic motor.

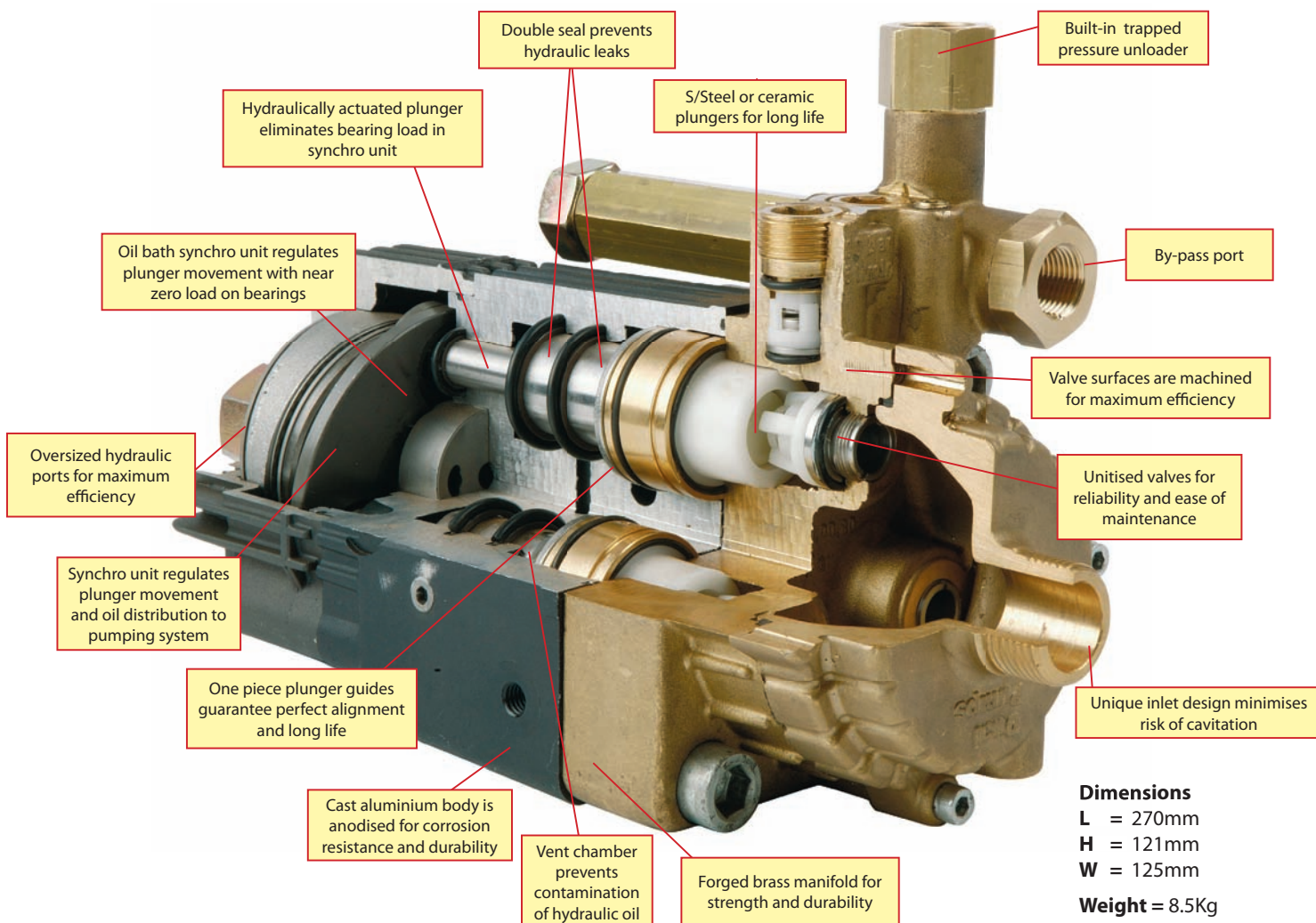
HWB are industrial pumps containing three axial plungers and unique synchro drive unit that directly and continuously transforms the available power in your hydraulic system into water power.

Features

- Durable forged brass manifold
- Built-in by-pass port
- Long life low and high pressure seals
- No scheduled maintenance required
- Trapped pressure unloader valve

Technical data

- Water Inlet : 3/4 BSPM
- Water Outlet: 3/8 BSPF
- Hydraulic Ports: 1/2 BSPF
- Max Water Temp: 65°C
- Max Oil Temp: 80°C



Dimensions
L = 270mm
H = 121mm
W = 125mm
Weight = 8.5Kg

What is the maximum output of the HWB

Pump discharge performance is based on a combination of oil pressure & flow rate. This table gives the maximum achievable discharge flow & pressure based on the maximum oil input.

Model	HWB30150	HWB25200	HWB16250	HWB12300
Maximum oil input from hydraulic system				
Oil Press (Bar)	250	250	206	170
Oil Flow (Lpm)	23	25	25	25
Based on above data the max achievable water flow & pressure				
Water Press (Bar)	150	200	250	300
Water Flow (Lpm)	30	25	16	12
The minimum oil input for all pumps is 15 Lpm				

But my hydraulic system will not give this output

This is not a problem, by using the data in the following tables you can calculate the discharge of each pump on a wide range of oil pressures and flow rates, but you can only work to the maximum and minimum figures as stated in the table opposite.

Each pump has a unique **Pressure Ratio Factor & Flow Ratio Factor**. With this data you can calculate the achievable discharge at a known oil input.

Model	HWB30150	HWB25200	HWB16250	HWB12300
Press ratio factor	0.6	0.8	1.2	1.75
Flow ratio factor	1.3	1	0.67	0.5

Following is an example based on the HWB25200

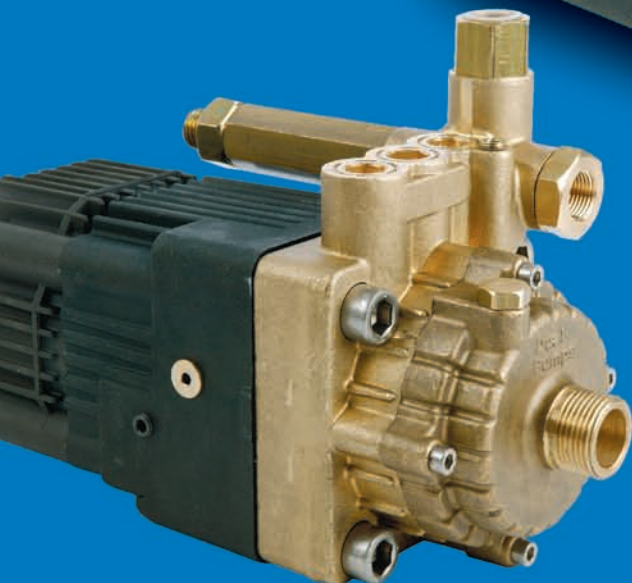
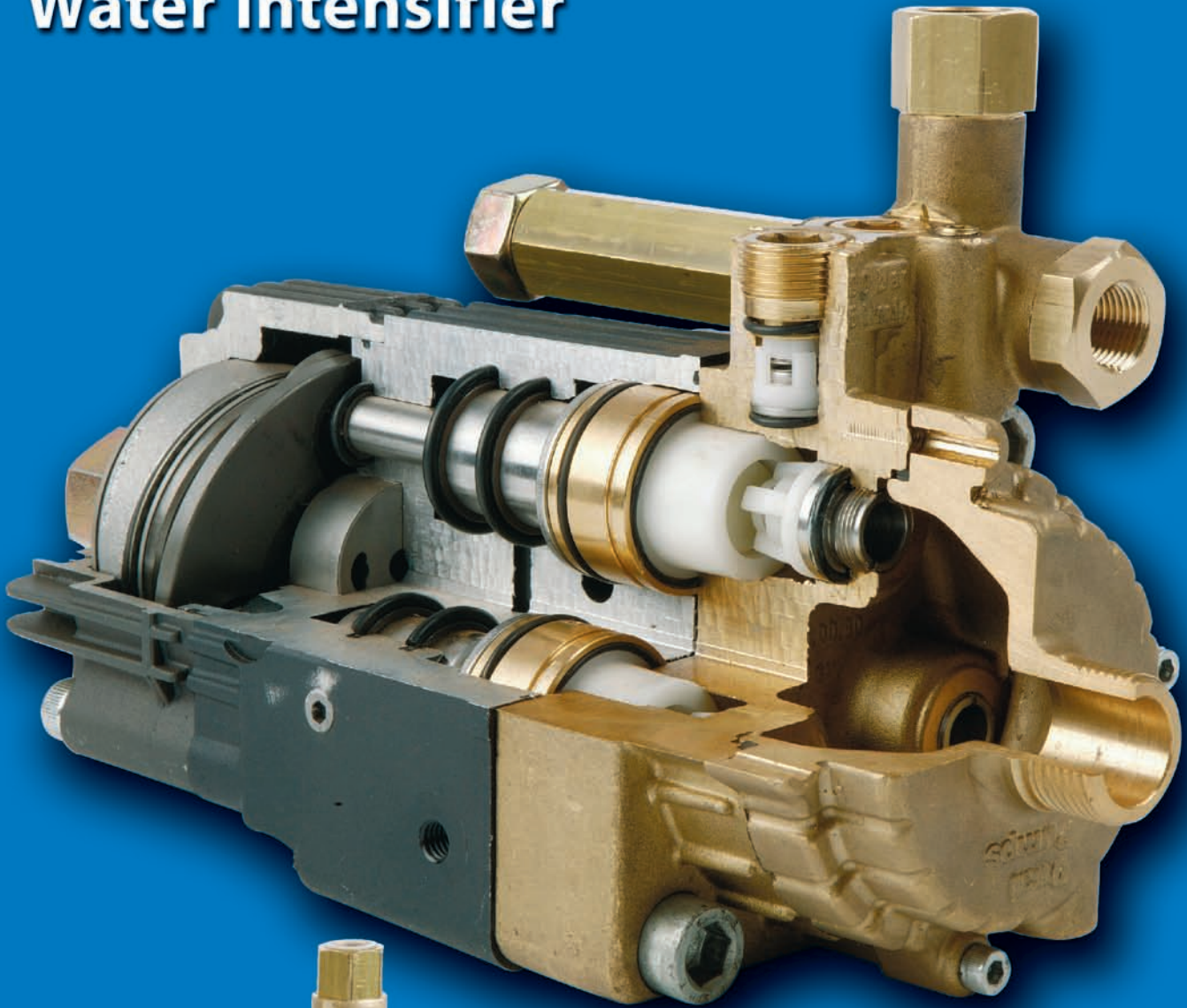
Multiply your systems oil pressure by the Pressure Ratio Factor to determine the pump discharge pressure	Oil input pressure (Bar)*	125
	Pressure ratio factor	0.8
	Pump discharge press (Bar) = 100	
	Max for HWB25200 = 250 Bar*	

Multiply your systems oil flow by the Flow Ratio Factor to determine the pump discharge flow rate	Oil input flow rate (Lpm)*	17
	Flow ratio factor	1
	Pump discharge flow (Lpm) = 17	
	Max for HWB25200 = 25 Lpm*	

HWB
Series



Hydraulic Powered Water Intensifier



This innovative pump
transforms hydraulic
power into water power

www.dualpumps.co.uk