

# Technical Manual



## Specifications/Reference

<b>PWP2SCH5050</b>	
Port Size	2" NPT M
Seal Material	Carbon Ceramic
Impeller Material	Cast Iron
Volute Material	Cast Iron
Pump Casing Material	Aluminum
Suction Lift ft (m)	26 (8)
Max Head ft (m)	167 (50)
Max Flow gpm (lt/min)	106 (400)
Solids Capacity in (mm)	N/A
Weight lbs (kg)	59(26)
size inches ( mm) LxWxH	21x15x17.7 (550x 390x450)
Engine	Honda GX160
Engine Spec #	K1WKT2
Engine type	4 stroke
oil Alert	Yes
Engine output hp(kw)	5.5(4.1)
Fuel Tank Capacity gal (l)	1(3.8)

### Centrifugal Pump Reference Information

#### Losses due to hose friction

Hose Friction losses					
Pressure Drop in psi per 100 ft of hose with typical flow rates					
Water Flow (gpm)	1"	1.5"	2"	3"	4"
10	7				
20	26				
30	56	8			
40	96	13			
50	144	20	5		
100		72	18		
150		153	38	5	
200			64	8.9	
250			97	14	
300				19	4
350				25	6
400				32	8
450					10
500					12
550					14

Losses are expressed in feet of head loss

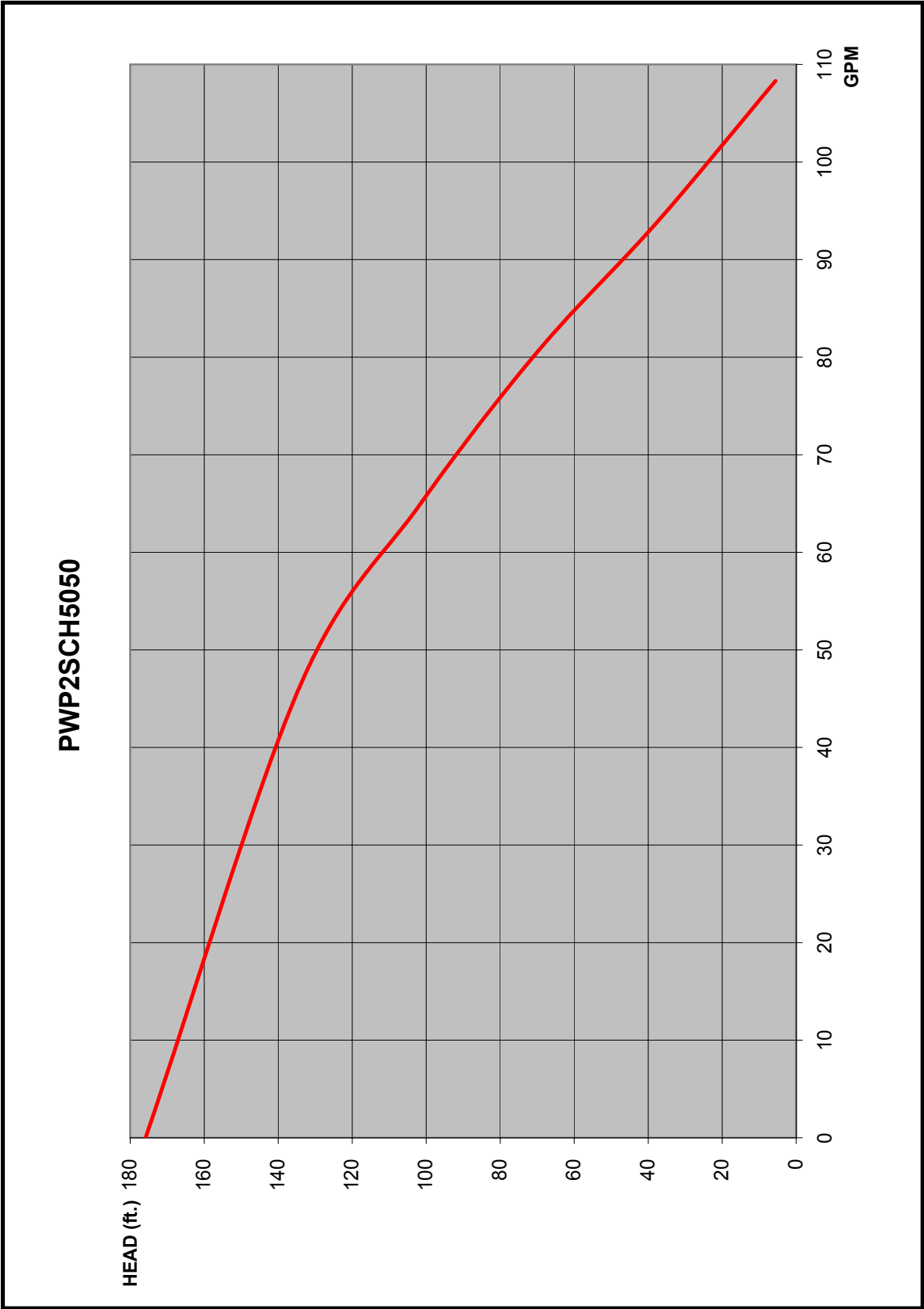
Values are based on the Hasen-Williams Equation and are close approximations

#### Losses due to elevation

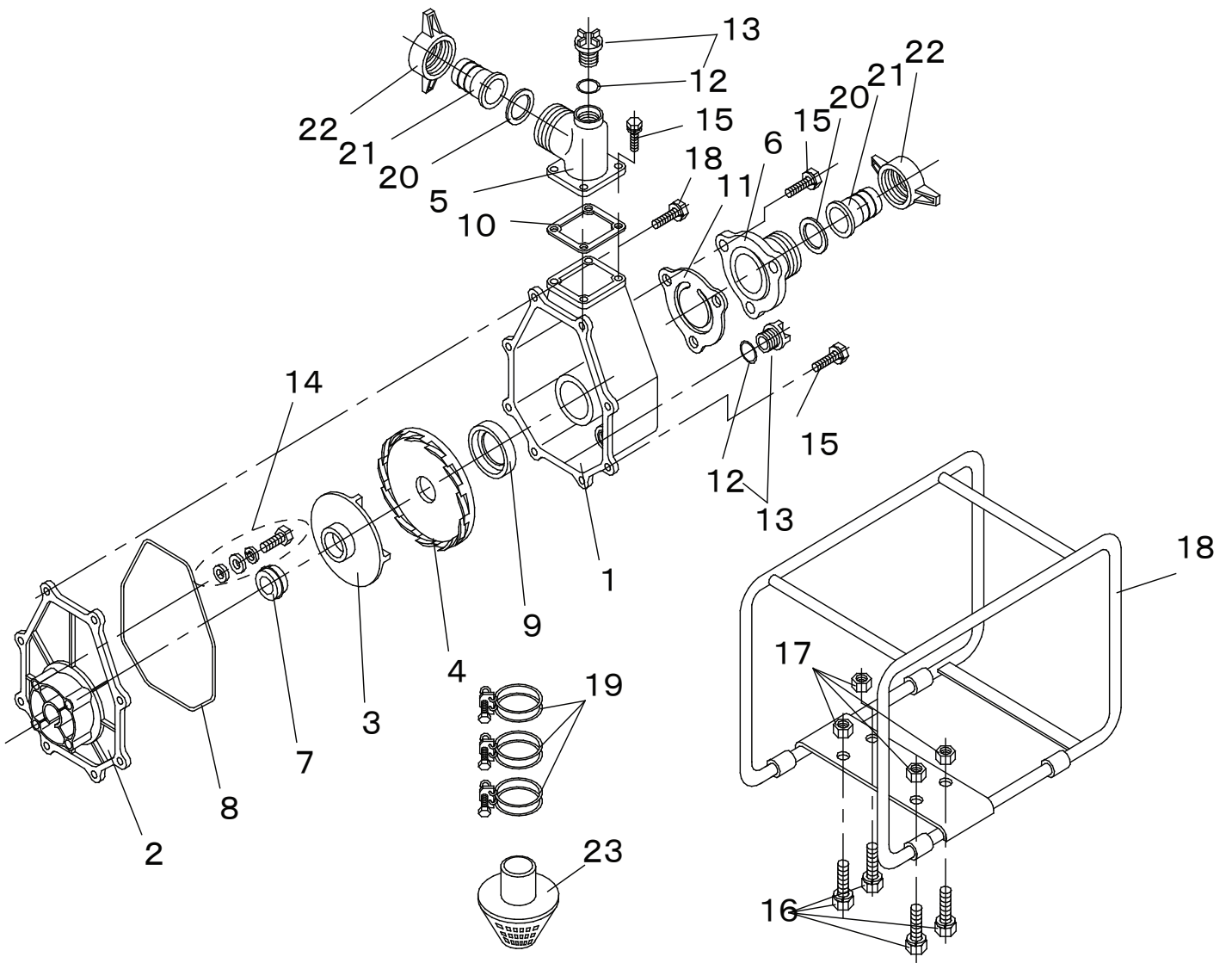
Pressure can be designated in many units from bar (si), psi (imperial) or also in high of a water column (feet or metres). In imperial units the weight of one foot of water is equal to .4328 psi. In other words for every foot of elevation change from the discharge of the pump to the point of discharge of the hose there is a pressure of .4328 psi applied to the pump.

**1 foot of water (head) = .4328 psi**

# Pump Curve PWP2SCH5050



# Parts Illustration PWP2SCH5050



## Parts Illustration PWP2SCH5050

REF No.	Parts No.	Parts name	Q'ty	Remarks
	-	HONDA GX160	1	
1	502-001	CASING	1	SCQ-50
2	511-004	CASING COVER	1	
3	511-009	IMPELLER	1	
4	511-011	DIFFUSER	1	
5	501-019A	BEND	1	EX-LOW-NPT2
6	501-013A	VALVE CASE	1	EX-NPT2
7	501-010	MECHANICAL SEAL	1	
8	502-002	PACKING,CASING	1	
9	501-012	PACKING, INNER CASING	1	
10	501-020	PACKING, BEND	1	
11	501-015	CHECK VALVE	1	
12	501-022	O-RING	2	P-24
13	200 500 040	PLUG ASSY	2	
14	203 000 100	CASING BOLT ASSY	4	M8 × 50
15	501-014	HEX.BOLT	15	M8 × 25 P=2
16	501-023	HEX.BOLT	4	M8 × 40 P=2
17	501-024	FLANGE NUT	4	M8
18	511-030	FRAME(WHITE)	1	
19	501-028	HOSE BAND	3	2"
20	501-017	PACKING,COUPLING	2	NBR
21	501-018P	HOSE COUPLING	2	ABS
22	501-016A	COUPLING HANDLE	2	NPSH2
23	505-029	STRAINER	1	2"J