

Appendix D: Equipment specification sheets.

Centrifugal Pump
Pedrollo CPm130, 0.5 HP

CP Centrifugal Pump Range General Product Description

PERFORMANCE RANGE

Flow rate up to 160 L/min (59.6 m³/hr)
Dynamic head up to 58 m

PUMP INSTALLATION AND APPLICATIONS

These pumps are suitable for handling clean water not containing abrasive particles and fluids which are not chemically aggressive to the pump components.

THEY ARE EXTREMELY RELIABLE, SIMPLE TO USE, QUIET AND VIRTUALLY MAINTENANCE FREE, FINDING MANY USES IN DOMESTIC & INDUSTRIAL APPLICATIONS, e.g. AUTOMATIC DISTRIBUTION OF WATER FROM TANKS, PRESSURIZATION, TRANSFERRING WATER, WATERING GARDENS, ETC.

These pumps should be installed in a covered area, protected against the weather.

PERFORMANCE

The range of pumps in the CP series has been designed to suit a wide variety of applications, with features such as:

- **Steady performance even under varying conditions**
- **flat absorption curves at high delivery rates, preventing motor overloading even during prolonged use;**
- **good suction capacities both at low and high delivery rates**

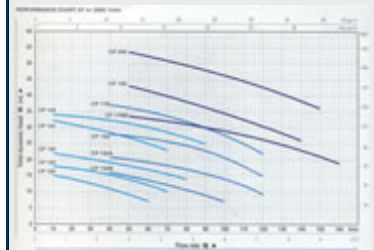
Curve tolerance according to ISO 2548.

STRUCTURAL CHARACTERISTICS

- Cast iron **PUMP BODY**, with UNI ISO 228/1 gas threaded suction and delivery ports
- **AISI 304 stainless steel backplate**, cast iron on more powerful models.
- **BRASS IMPELLER**, centrifugal radial flow type (technopolymer impeller on request).



Further Product Info



**CP Pump
Performance Curve
CP Pump
Performance Data
CP Pump
Dimensions
Get the bigger
picture
Download PDF file**

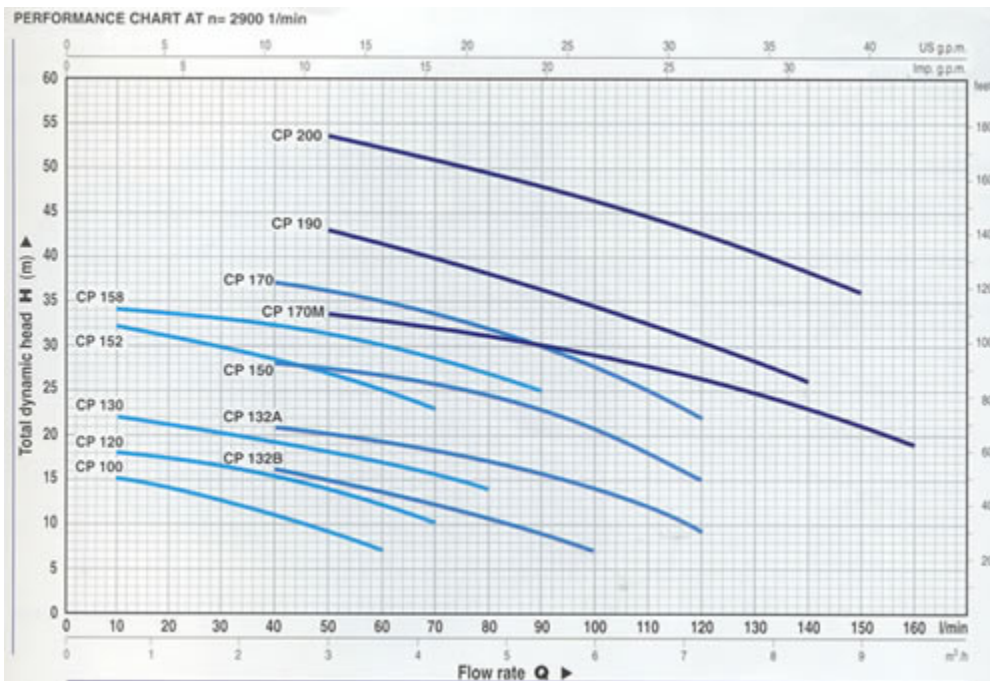
- **AISI 316 stainless steel MOTOR SHAFT.** (AISI 416 up to 0.75 kW).
- Ceramic and graphite **MECHANICAL SEAL** (other options available)
- **MOTOR:** pumps are coupled directly to an asynchronous, high efficiency PEDROLLO induction motor of suitable size, which is quiet running, closed and externally ventilated, suitable for continuous duty. **INSULATION** class F (B up to 0.75 kW). **A thermal cutout device (motor protector) is incorporated in single phase motors.**

Three phase motors require an adequate external motor protector connected in compliance with current standards

- **PROTECTION** IP 44.
- **CONSTRUCTION AND SAFETY STANDARDS** in compliance with EN 60 335 -1, CEI 61-150), EN 60034-1), (IEC 34-1, CEI 2-3)
- **REGISTERED MODEL**

*Installations must comply to Water Bye-laws in the UK.

PERFORMANCE CURVE



PERFORMANCE DATA

PERFORMANCE DATA AT=2900 1/min

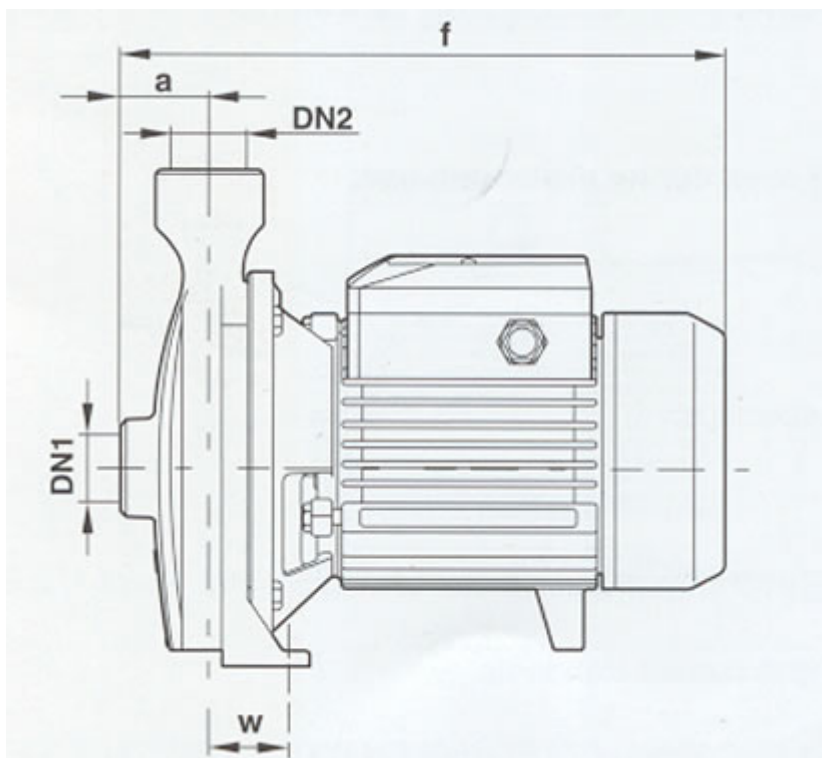
PUMP MODEL	POWER	Flow rate Q																										
		0	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2	7.8	8.4	9.0	9.6										
Single Phase	Three Phase	KW	HP	l/min	Hm															80	90	100	110	120	130	140	150	160
CPm100	CP100	0.25	0.33		16	15	14	12.5	11	9	7																	
CPm120	CP120	0.30	0.40		19	18	17.5	16.5	15.5	14	12	10																

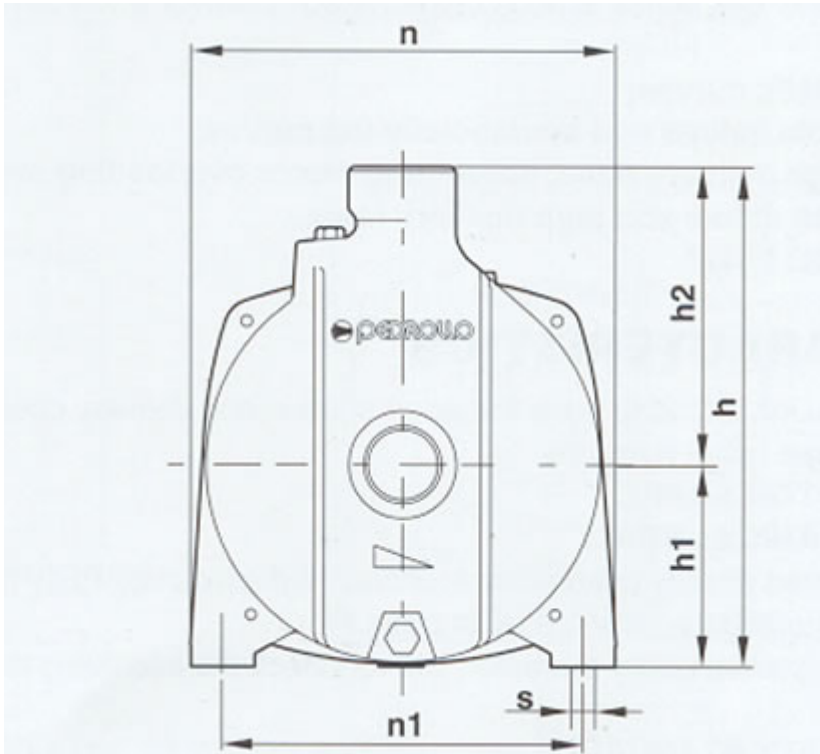
CPm130	CP130	0.37	0.50		23	22	21	20	19	18	17	15.5	14								
CPm132B	CP132B	0.45	0.60		20	-	18	17	16	15	13.5	12	10.5	9	7						
CPm132A	CP132A	0.60	0.85		23	-	22	21.5	21	20	19	18	17	16	14	12	9				
CPm150	CP150	0.75	1		29.5	-	29	28.5	28	27.5	26.5	26	24.5	23	21	18	15				
CPm152	CP152	0.55	0.75		33	32	31	29.5	28.5	27	25	23									
CPm158	CP158	0.75	1		36	34	33.5	33	32.5	31.5	30	28.5	27	25							
CPm170	CP170	1.1	1.5		41	-	-	38	37	36	35	33.5	32	30	27.5	25	22				
CPm170 M	CP170M	1.1	1.5		36	-	-	35	34.5	33.5	33	32	31	30	29	28	26.5	25	23	21	19
CPm190	CP190	1.5	2		50	-	-	46	44.5	43	41.5	40	38	36	34.5	32.5	30.5	28	26		
	CP200	2.2	3		58	-	-	55	54.5	53.5	52	51	49.5	48	46	44.5	42.5	40.5	38.5		

H = TOTAL DYNAMIC HEAD IN METRES

Q = FLOW RATE

PRODUCT DIMENSIONS





PUMP MODEL		DN1	DN2	Dimensions mm									
Single Phase	Three Phase			a	f	h	h1	h2	n	n1	w	s	
CPm100	CP100	1"	1"	34	247	187	77	110	148	118	45	10	
CPm120-130	CP120-130	1"	1"	42	259	211	82	129	165	135	41	10	
CPm132B	CP132B	1"	1"	42	259	211	82	129	165	135	41	10	
CPm132A		1"	1"	42	266	211	82	129	165	135	41	10	
	CP132A	1"	1"	42	259	211	82	129	165	135	41	10	
CPm150-152-158	CP150-152-158	1"	1"	42	285	240	92	148	190	160	38	10	
CPm170	CP170	1 1/4"	1"	51	341	260	110	150	206	165	44.5	11	
CPm170M	CP170M	1 1/4"	1"	51	341	260	110	150	206	165	44.5	11	
CPm190		1 1/4"	1"	51.5	358	290	115	175	242	206	32.5	11	
	CP190	1 1/4"	1"	51.5	358	290	115	175	242	206	32.5	11	
	CP200	1 1/4"	1"	51.5	358	290	115	175	242	206	32.5	11	

Home | Peripheral | Centrifugal | Multi-Stage
 | Stainless-Steel | Self-Priming | Submersible
 Borehole | Bronze | Hydrofresh | Accessories
 | Contact Us

© 2005 Pedrollo Distribution Ltd. -



Piping accessories

Fluid in line Water with diluted H₂O₂ Temperature (°C) 30Pressure (kPa) 101.325L/s (calc) 1 L/s(design) 1 kg/s (calc) 0.995Specific gravity 0.998 Specific volume (m³/kg) 0.001Recommended velocity (m/s) 1.97 Viscosity (cP) 1

Fitting description.				
Item	No.	Inside diameter (cm/in)	Material	
3-way valve	19	2.54/1	CPVC	Inlet Pressure (kPa) <u>101.325</u>
Ball valve	2	2.54/1	PVC	Friction Loss (Nm/kg) <u>389.86</u>
Sampling valve	19	2.54/1	CPVC	
Coupling	60	2.54/1	PVC	
90° elbow	22	2.54/1	PVC	
PVC pipe	1	2.54/1	PVC	
Hose	1	2.54/1	HPDE	
O-Ring	240	2.54/1	Viton	

Estimated line size (m) 135 Actual velocity (m³/s)
0.01Total head loss in meters of liquid 39Total pressure drop in (kPa) 459.993Selected pipe size (cm/in) 2.54/1 Material Borosilicate glassLudwig E. (1977). "Applied process design for chemical and petrochemical plants. Volume I" 2nd Ed. Gulf Publishing Company. U.S.A. 371 pgs.