

# Technical Data

# DIAPHRAGM PUMP RANGE



Applies to the following models only:

- DP12.5
- DP12/24.4
- DP12.12
- DP12/220.17
- DP110.17
- DP12.17KIT

Please read carefully before commencing installation

## **ENVIRONMENTAL INFORMATION**



European Directives 2002/96/EC and 2003/108/EC require that the equipment bearing this symbol on the product an/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product must be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities.

## **IMPORTANT WARNING NOTES**

1. The pump **MUST NOT** be used to dispense petrol or other flammable liquids.
2. Installation of this equipment and its associated tank, pipe work and fittings should only be carried out by qualified installation engineers.
3. The installation must conform to all relevant electrical and local authority regulations and standards.

## **DESCRIPTION**

The Hytek range of diaphragm pumps are self priming and suitable for pumping water or agricultural chemicals. All pumps are designed for intermittent duty and are fitted with pressure switches for on-demand operation.

## **INSTALLATION**

The pumps are mounted via the soft rubber noise reducing mounts fitted to the base of each pump unit. The pumps are to be connected to a suitable power supply as follows:

12V DC: Red = (+) Positive  
Black = (-) Negative

24V DC: Red = (+) Positive  
Black = (-) Negative

110V AC: Brown = Live  
Blue = Neutral  
Yellow/Green = Earth

230V AC: Brown = Live  
Blue = Neutral  
Yellow/Green = Earth

## **OPERATION**

1. Ensure the inlet and outlet fittings are securely connected.
2. Power up the pump and ensure that any nozzle or valve on the outlet is open. The pump will self prime and purge itself of any air.
3. Close the nozzle/valve on the outlet and the pump will now stop.
4. Check the pump and all connections for any leaks after first use.

**IMPORTANT:** All Hytek diaphragm pumps are intermittent duty pumps, which have a duty cycle of a maximum of 30 minutes. This means after 30 minutes of constant usage the pump must be turned off and left to cool down for 30 minutes before it can be restarted. Electrical load and ambient temperature may affect the duty cycle. Using the pump beyond it's recommended duty cycle may damage the pump unit, reduce the pumps lifespan, and could invalidate any warranty.

## **SPECIFICATIONS**

See label on the pump unit for further information.

## **E.C. DECLARATION OF CONFORMITY**

Date of Issue: 1<sup>st</sup> March 2010

Equipment Details: DP12.5, DP12/24.4, DP12.12, DP110.17,  
DP12/220.17,  
DP12.17KIT Diaphragm Pumps

Applicable standards: EMC EN61000-6-3:2001 (+A11) Emissions  
2006/95/EC Electrical Equipment  
(Low Voltage)  
Machinery Directive 2006/42/EC

The Pressure Equipment Regulations  
1999 S.I. 1999/2001  
Entry Into Force:- 29 November 1999  
Amended to S.I. 2002/1267  
Pressure Equipment Directive 97/23/EC

Waste Electrical and Electronic Equipment  
Regulations 2006  
2002/96/EC 2003/108/EC

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## Electric Diaphragm Pumps - Technical Details

Electric Diaphragm Pumps.xls

Not continuously rated. Duty cycle depends on operating conditions

	DP220.17	DP110.17	DP12.17	DP12.12	DP12.4	DP24.4
Format :	4 valve	4 valve	4 valve	4 valve	2 valve	2 valve
Pump head material :	Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Diaphragm material :	EPDM	EPDM	EPDM	EPDM	EPDM	EPDM
Max flow :	17 Litres per min	17 Litres per min	17 Litres per min	12 Litres per min	4 Litres per min	3.8 Litres per min
Max discharge pressure :	2.7 bar ( 40psi )	2.7 bar ( 40psi )	2.7 bar ( 40psi )	2.4 bar ( 35 psi )	2.4 bar ( 35 psi )	2.4 bar ( 35 psi )
Self priming to :	2.2 metres	2.2 metres	1.8 metres	1.0 metres	0.7 metres	0.7 metres
Temperature Range :	5 - 50 deg C	5 - 50 deg C	5 - 50 deg C	5 - 50 deg C	5 - 45 deg C	5 - 45 deg C
Suitable for :	Water	Water	Water	Water	Water	Water
Connections :	1 x 1/2" threaded elbow, 1 x barbed elbow to accept 3/4" ID hose, 1 x barbed straight connector to accept 3/4" ID hose	1 x 1/2" threaded elbow, 1 x barbed elbow to accept 3/4" ID hose, 1 x barbed straight connector to accept 3/4" ID hose	1 x 1/2" threaded elbow, 1 x barbed elbow to accept 3/4" ID hose, 1 x barbed straight connector to accept 3/4" ID hose	1 x 1/2" threaded elbow, 1 x barbed elbow to accept 1/2" ID hose, 1 x barbed straight connector to accept 1/2" ID hose	Fixed barbed inlet/outlet connections to accept 3/8" ID hose	Fixed barbed inlet/outlet connections to accept 3/8" ID hose
Inlet filter included :	No	No	Yes	Yes	No	No
Voltage :	230Vac	110Vac	12Vdc	12Vdc	12Vdc	24Vdc
Current :	0.4A	0.6A	6.0A	7.0A	4.0A	1.7A
Protection :	IP55	IP55	IP55	IP55	IP55	IP55
Net weight :	2.8 Kgs	2.7 Kgs	2.4 Kgs	1.8 Kgs	0.6 Kgs	0.6 Kgs
Length :	290mm	290mm	250mm	205mm	160mm	160mm
Width :	105mm	105mm	105mm	105mm	100mm	100mm
Height :	100mm	100mm	100mm	100mm	65mm	65mm
Cable :	1.3m cable with 13A plug	1.5m length of 3 core cable	Red and black leads approx 200mm to accept spade connectors.	Red and black leads approx 200mm to accept spade connectors.	280mm length of 2 core cable	280mm length of 2 core cable