

# **Original Directflo® Technology**

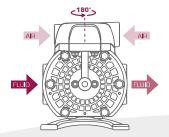
## **DF30 & DF30T PLASTIC PUMPS**

Air operated double diaphragm pumps for dosing, spraying, transferring and distributing a wide variety of fluids in small flow rates applications.

Pump wetted parts are compatible even with the most aggressive fluids and are suitable for use in corrosive environments. Air motor (directional air valve and air chamber covers) is made of polypropylene.

DF30T are dual inlet pumps for 1:1 ratio mixing of fluids with similar viscosity. Both, the initial fluids and the resulting mixture, must be compatible with the pump's wetted materials.

Fully groundable ATEX certified pumps are available for use in potentially explosive atmospheres (Ex II2 GD IIB/IIC 95  $^{\circ}$ C).



Orientable air inlet, increased installation flexibility.







## **RECOMMENDED MODELS**

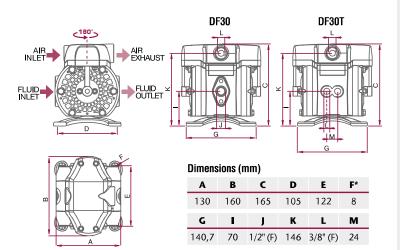
MODEL	PUMP BODY	DIAPHRAGMS	BALLS	SEATS	OTHER WETTED MATERIALS	RECOMMENDED APPLICATIONS		
DF30PPSESTMBAS	Polypropylene	Santoprene®	PTFE	Stainless Steel	EPDM	Water based fluids, coatings and adhesives, diluted mild alkalis and acids, alcohols.		
DF30PPSVSTHBAS	Polypropylene	TPE	PTFE	Stainless Steel	FKM	Water and some aqueous chemicals. General application pump for lubricants.		
DF30PPYTWTTBAS	Polypropylene	PTFE	PTFE	PVDF	Hastelloy® C	Wide compatibility, including acids and alkalis for water treatment and CIPs chlorinated cleaning agents for home & industrial cleaning processes.		
DF30PPSTSTTBAS	Polypropylene	PTFE	PTFE	Stainless Steel	-	Wide chemical compatibility.		
DF30PKYTWTTBAS	Conductive PVDF	PTFE	PTFE	PVDF	Hastelloy® C	ATEX pump. Strong acids (some above room temperature) and alkalis, Not recommended for some strong alkalis or concentrated nitric acid.		
DF30PDSTSTTBAS	Conductive Acetal	PTFE	PTFE	Stainless Steel	-	ATEX pump. Solvents (most ketones, acetates, aldehydes, aromatic and chlorinated hydrocarbons, toluene) and solvents based inks, paints and varnishes.		



## **DF30 & DF30T PLASTIC PUMPS**

TECHNICAL DATA				
Pressure ratio	1:1			
Maximum free delivery (1)	38 l/min (10 US gal/min)			
Delivery per stroke approx. (1)	0,07 litres (0.02 US gal)			
Delivery per cycle (2 x strokes) (1)	0,14 litres (0.04 US gal)			
Air pressure operating range	1,5 to 8 bar (22 to 115 psi)			
Solids in suspension max. size	3 mm (1/8")			
Maximum dry suction lift (1)	4 m (13')			
Maximum wet suction lift (1)	8 m (26')			
Weight	1,9 kg (4.19 lb)			
Fluid inlet connection	1/2" BSP/NPT (F) 2 x 3/8" BSP/NPT (F) (DF30T)			
Fluid outlet connection	1/2" BSP/NPT (F)			
Air inlet connection	3/8" NPSM (F)			
Wetted part materials	See recommended models			

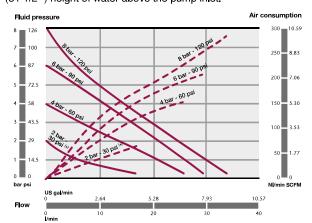
(1) Data measured with water, air inlet pressure 7 bar (100 psi), 20 °C (68 °F).



<sup>\*</sup> Diameter of the holes for fasteners in each of the four pump feet.

## **PERFORMANCE CURVES**

Tested at room temperature, with water and flooded pump with 800 mm (31 1/2") height of water above the pump inlet.



Outlet pressure ---- Air consumption

### **DF30 & DF30T PLASTIC PUMP CODING SYSTEM**

1	2	3	4	5	6	7	8	9	10
DF30	Р	Р	S	E	S	Т	М	В	AS

### 1 PUMP SIZE

DF30

DF30T (Dual inlet)

## C = Acetal

S = Stainless Steel AISI 316

### 2 AIR MOTOR: DIRECTIONAL VALVE & **AIR CHAMBER COVERS**

P = Polypropylene

## **3 WETTED PUMP BODY**

P = Polypropylene

B = Conductive Polypropylene (ATEX pump)

D = Conductive Acetal (ATEX pump)

W = PVDF \*

K = Conductive PVDF (ATEX pump) \*

#### 4 PUSH ROD

S = Stainless Steel AISI 420 Y = Hastelloy® C \*

#### 5 SEALS

V = FKM (Viton®)

E = EPDM

T = PTFE (Teflon®)

## **6 CHECK VALVE SEATS**

S = Stainless Steel AISI 316 W = PVDF \*

# **7** CHECK VALVE BALLS

T = PTFE (Teflon®)

### 8 DIAPHRAGMS

T = PTFE (Teflon®)

M = Santoprene®

H = TPE (Hytrel®)

### **9 FLUID CONNECTION THREADS**

B = BSP

N = NPT

### **10 OPTIONS**

AS = Standard pump

BS = Remote air exhaust

ES = Externally driven

FS = Extra muffler

US = Special UV Ink pump

GS = NPN inductive external pump control sensor

IS = ATEX inductive external pump control sensor

JS = PNP inductive external pump control sensor

(\*) Not for DF30T pumps



<sup>(\*) 2</sup> bar test with a PTFE (Teflon®) diaphragms pump.