



TECHNICAL DATA

- Connections:
 - Fluid 1/2"
 - Air 3/8"
- Max Flow-rates: 70 l/min
- Max air pressure: 8 Bar
- Max delivery head: 80 mt
- Max suction head:
 - Dry 6 mt
 - Wet 9.8 mt
- Max d. passing solids : 3.5 mm
- Noise level: 72 dB
- Displacement for cycle: 100 cc
- Pump casing materials:
 - PP
 - PVDF
 - ALUMINIUM
 - AISI 316
- Max viscosity: 25.000 cps

DUOTEK diaphragm pumps are characterized by exceptional performance, power and strength, making them ideal for pumping liquids with very high apparent viscosity up to 25.000 cps (at 20°C), even if containing suspended solids.

The stall-prevention pneumatic system assures a safe pump running and it does not need lubricated air. Self-priming dry capacity even with considerable suction head, fine tuning of speed without pressure loss and the possibility of dry operation without suffering damage mean that these pumps offer unrivalled versatility. In addition, the huge choice of construction materials allows selection of optimum chemical compatibility with the fluid and/or environment without neglecting the temperature range.

They are specifically designed for demanding applications with high humidity or in potentially explosive atmospheres (ATEX Certification):

- ATEX  Zone 2 in all versions: EX II 3/3 GD c IIB T135°C
- ATEX  Zone 1 in all versions: EX II 2/2 GD c IIB T135°C

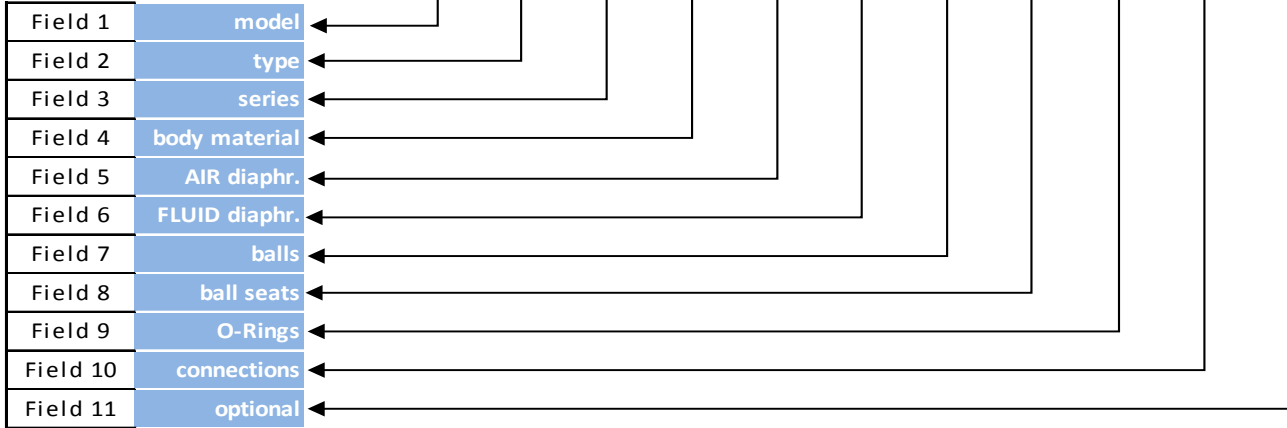
AODD PUMPS

AF_0065 DUOTEK Series –Pneumatic Diaphragm Pumps



PUMP KEY CODE

Field 1	Field 2	Field 3	Field 4	Field 5	Field 6	Field 7	Field 8	Field 9	Field 10	Field 11
AF	00	0065	P	N	T	T	P	N	1	-



Field 1	model	AF	Pneumatic Diaphragm Pumps
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Field 2	type	00	Zone 2 ATEX	EX II 3/3 GD c IIB T135°C
		X0	Zone 1 ATEX	EX II 2/2 GD c IIB T135°C

Field 3	series [l/m]	flow rate [l/1']	connection [BSP] fluid	air	for material	° suction lift max [m]	passin g solid [Ø mm]	max viscosity [Cps]	displac./ cycle [cc]
	0065	70	1/2" *	1/4"	ALL	6	3,5	25.000	100

* **FLANGED:** add the cost of the related KIT ** **THREADED:** on request
 ° With **DRY** pump. To **WET** pump: **9,38 m**

Field 4	body material	P	Polypropylene + glass fiber
		C	Polypropylene + carbon fiber <i>field 2 = X0</i>
		K	PVDF + carbon fiber
		A	Aluminium
		S	SS 316 <i>SS 316 polished if field 2 = 0F / XF</i>

Field 5	AIR diaphr.	H	HytreI
		M	Santoprene
		D	EPDM
		N	NBR

Field 6	FLUID diaphr.	T	PTFE
		X	without Diaphragm PTFE

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PUMP KEY CODE

Field 1	Field 2	Field 3	Field 4	Field 5	Field 6	Field 7	Field 8	Field 9	Field 10	Field 11
AF	00	0065	P	N	T	T	P	N	1	-

Field 7	balls
T	PTFE
S	SS 316
D	EPDM
N	NBR

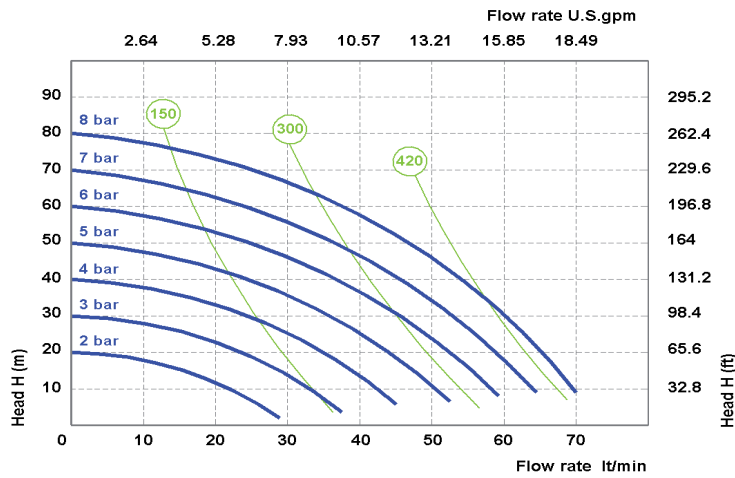
Field 8	ball seats
P	Polypropylene
K	PVDF pure
S	AISI 316
A	Aluminium
Z	PE-UHMW

Field 9	O-Rings
D	EPDM
V	FPM
T	PTFE
N	NBR

Field 10	connections
1	BSP Threaded
2	Flanged
5	NPT Threaded

Field 11	optional
-	NONE

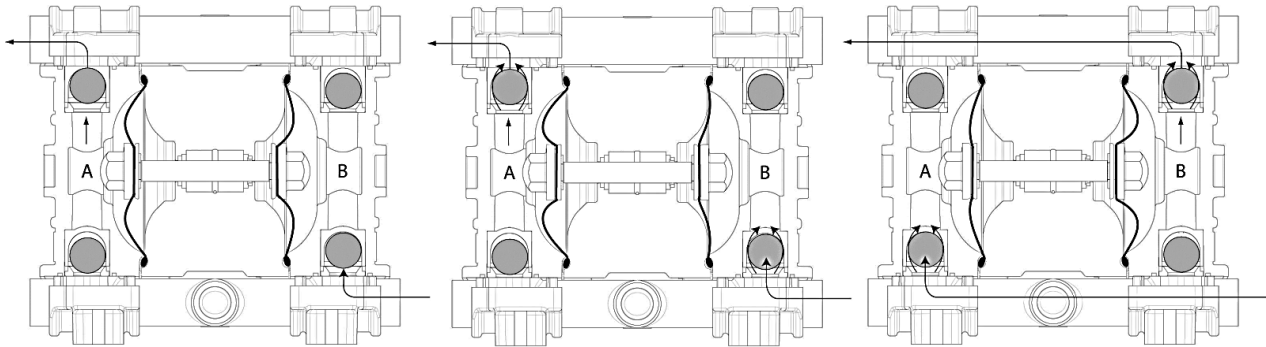
HYDRAULIC CHARACTERISTICS



* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C, and vary according to the construction material.

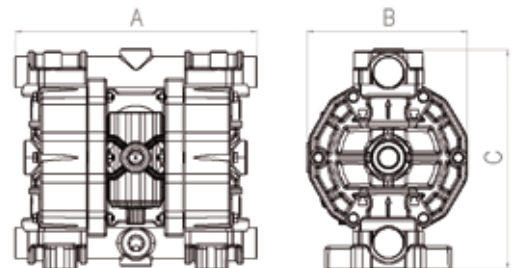
OPERATING PRINCIPLE

The pneumatic distribution system sends compressed air behind one of the two diaphragms (A), which pushes the fluid towards the delivery circuit. Simultaneously, the opposing diaphragm (B) is located, creating a vacuum in the chamber B, in the suction phase, moved from the shaft that connect the diaphragm to the other (A). In this way the product is sucked from the intake manifold, thanks to de-pressure created in the fluid chamber. When the diaphragm (A), under pressure, reaches the limit of the stroke the distributor switches the two inputs, and the cycle starts again. At the same time, the balls open and close, alternating the chamber A and B, in the closed situation for suction and open delivery in the situation.



DIMENSIONS (ALL materials)

	PP	PVDF	ALU	AISI
A (mm)	265	265	265	250
B (mm)	175	175	175	175
C (mm)	245	245	245	250
Weight kg	6,5	7	7	9
MAX Temperature	65°C	95°C	95°C	95°C



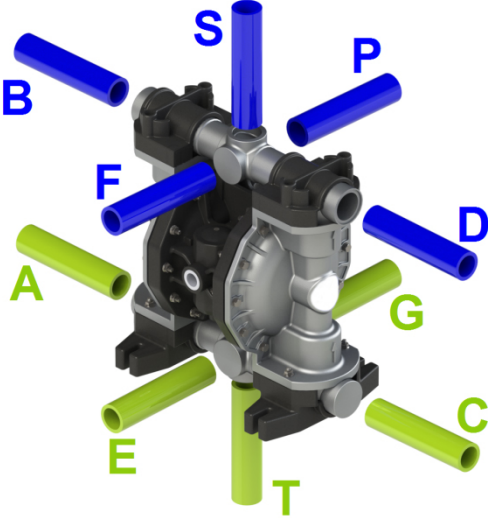
AODD PUMPS

AF_0065 DUOTEK Series –Pneumatic Diaphragm Pumps



AVAILABLE CONNECTIONS

Standard = A B
IN = A-E-T-C-G
OUT =B-S-D-F-P



(ATEX)
Standard = A B
IN = A-E-T-C-G
OUT =B-S-D-F-P

