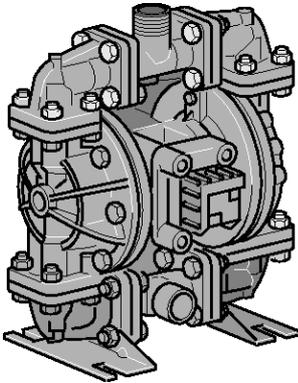


2.6 Air-operated Diaphragm Pump Duodos

2.6.1

Air-operated Diaphragm Pump Duodos



pk_2_062

Duodos pumps are air-driven double diaphragm transfer pumps. No electrical components are required because the pumps are air-driven. Duodos pumps are run-dry safe and self-priming. The pump capacity of the pump can be controlled by changing the pressure in the air supply. The air control is designed for oil-free operation. Duodos pumps are ideally suited for the transport of liquid chemicals. Duodos pumps transport media at up to 6,700 l/h and up to a discharge lift of 70 m. As the pump capacity is highly dependent on the back pressure, the performance curve must always be observed. At the same time, the differential pressure between the hydraulic and pneumatic sides should not exceed 2 bar. Higher values reduce the service life of the pump. When selecting pumps, check the material compatibility. In addition, consider the density, viscosity and temperature of the transported medium.

The following materials are available:

- PP pump chambers with Santoprene® diaphragms and valves
- PVDF pump chambers with PTFE diaphragms and valves

Duodos PP

	Housing material	Diaphragms/ valves	Delivery rate (2 bar differential pressure) l/h	Order no.
Duodos 10 PP	PP	Santoprene®	0...650*	1010793
Duodos 15 PP	PP	Santoprene®	0...2,000*	1010794
Duodos 20 PP	PP	Santoprene®	0...3,000*	1010795
Duodos 25 PP	PP	Santoprene®	0...6,700*	1010796

* Delivery rate at a differential pressure of 2 bar (0.5 bar back pressure, 2.5 bar air pressure).

Santoprene® is a registered trademark of the Monsanto Corporation.

Duodos PVDF

	Housing material	Diaphragms/ valves	Delivery rate (2 bar differential pressure) l/h	Order no.
Duodos 10 PVDF	PVDF	Teflon	0...650*	1010797
Duodos 15 PVDF	PVDF	Teflon	0...2,000*	1010798
Duodos 20 PVDF	PVDF	Teflon	0...3,000*	1010799
Duodos 25 PVDF	PVDF	Teflon	0...6,700*	1010800

* Delivery rate at a differential pressure of 2 bar (0.5 bar back pressure, 2.5 bar air pressure).

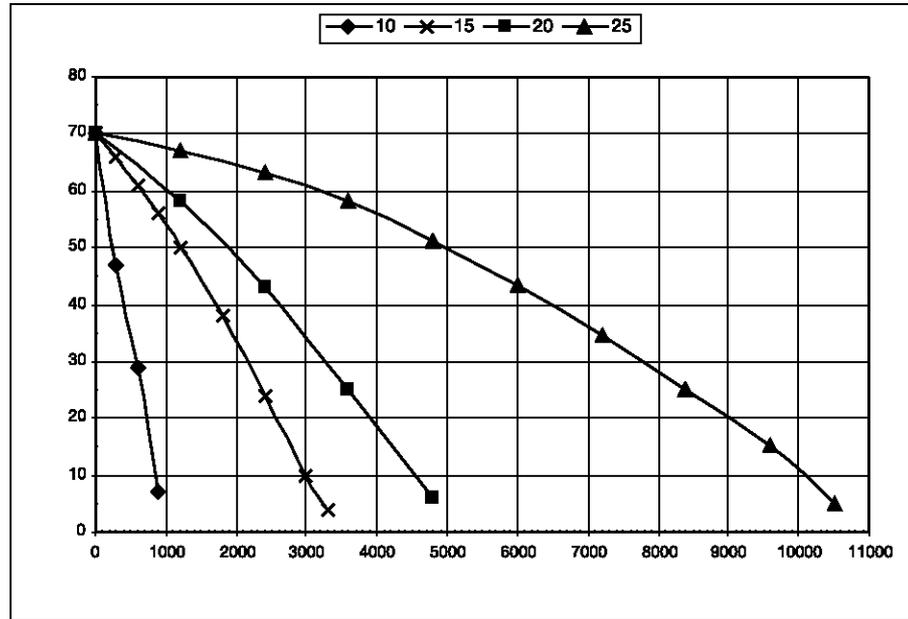
Parameters For Use

	Min. temperature °C	Max. temperature °C	Max. viscosity mPas
Duodos 10 PP	5	65	200
Duodos 10 PVDF	-13	93	200
Duodos 15 PP	5	65	200
Duodos 15 PVDF	-13	93	200
Duodos 20 PP	5	65	200
Duodos 20 PVDF	-13	93	200
Duodos 25 PP	5	65	200
Duodos 25 PVDF	-13	93	200



2.6 Air-operated Diaphragm Pump Duodos

Characteristic Curves



pk_2_114

Feed lift [m WC] over feed rate [l/h] at 7 bar air supply

2.6.2 Spare Parts Kits

Spare part kits for pneumatics comprising

- Seals
- O-rings
- Clamp collars
- Air control valve

	Order no.
Spare parts kit, pneumatics for Duodos 10 PP/PVDF	1010810
Spare parts kit, pneumatics for Duodos 15/20 PP/PVDF	1010811
Spare parts kit, pneumatics for Duodos 25 PP/PVDF	1010813

Spare part kits for the liquid end comprising

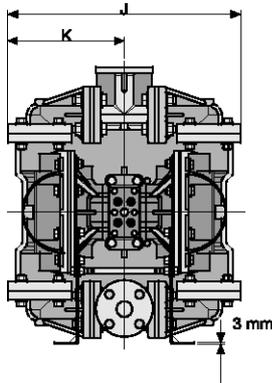
- Diaphragms
- Valve balls
- Seals

	Order no.
Spare parts kit, liquid end for Duodos 10 PP	1010801
Spare parts kit, liquid end for Duodos 15 PP	1010802
Spare parts kit, liquid end for Duodos 20 PP	1010803
Spare parts kit, liquid end for Duodos 25 PP	1010804
Spare parts kit, liquid end for Duodos 10 PVDF	1010806
Spare parts kit, liquid end for Duodos 15 PVDF	1010807
Spare parts kit, liquid end for Duodos 20 PVDF	1010808
Spare parts kit, liquid end for Duodos 25 PVDF	1010809

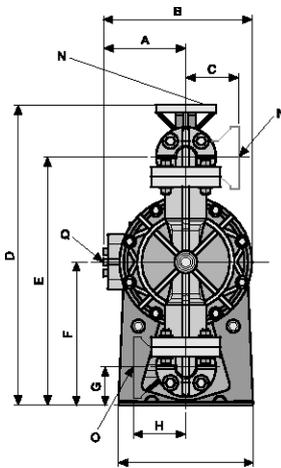


2.6 Air-operated Diaphragm Pump Duodos

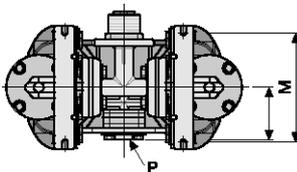
Dimensions



pk_2_072



pk_2_106



pk_2_107

		Duodos 10	Duodos 15	Duodos 20	Duodos 25
A	mm	79	103	103	172
B	mm	140	179	179	296
C	mm	32	44	60	92
D	mm	198	287	339	527
E	mm	167	243	279	435
F	mm	87	140	163	249
G	mm	19	35	46	64
H	mm	32	44	60	92
I	mm	78	143	143	130
J	mm	178	258	300	433
K	mm	89	129	150	216
L	mm	33	46	57	123
M	mm	66	143	143	102
Discharge connector		1/2"NPT	1" BSP	1 1/2"BSP	1"ANSI flange
Suction connector		1/2"NPT	1" BSP	1 1/2"BSP	1"ANSI flange
Air consumption	m ³ /h	0.5...11	3.5...27	7.0...34	8.5...77
Differential pressure	bar	2	2	2	2
Air connection		1/4"NPT	1/4"NPT	1/4"NPT	1/2"NPT
Weight (PP)	kg	2	8	9	24
Weight (PVDF)	kg	2.5	9.0	9.5	29.0

