



DMX MECHANICAL DIAPHRAGM DOSING PUMPS

from 0.4 l/h up to 2 x 4000 l/h (10 to 3 bar)

General

The Grundfos DMX range has proven its worth in dosing applications worldwide. With their robust diaphragm-based design and their high-quality motors, DMX pumps require minimum maintenance and are best choice for many dosing applications. The DMX range is highly versatile: it covers a wide flow range and offers a variety of dosing head sizes, materials and accessories.

Accurate dosing - all the time

The diaphragm design makes sure, that the dosing flow fluctuation is $\pm 1.5\%$ (DMX 227: $\pm 2\%$) and the linearity deviation is $\pm 4\%$ at all times. This allows very precise dosing of chemicals – as much as necessary, as little as possible.

Smooth and low-pulsation dosing

The DMX range combines sophisticated drive technology and gear kinematics to ensure smooth and low-pulsation dosing without pressure peaks. This means less stress to all system components, such as tubes and valves, and leads to longer service intervals for the entire system.

Compact design saves money and space

DMX pumps are available in 12 different dosing head sizes. The compact design allows placing several pumps right next to each other in confined spaces. Double-head versions (DMX models 226 and 227) offer a very cost-efficient way to save space or to dose two different chemicals. The extra capacity offered by double-head versions can also be used to gain higher flow rates for a single chemical.

Perfect material selection for housing and liquid-wetted parts

The smaller DMX models have plastic housings offering chemical resistance and all the protection necessary for many applications. The larger models have a robust cast-aluminium housing with epoxy coating to meet all application needs. Investment costs and running costs

for spare parts are kept low over the years: A wide choice of materials for dosing head, valves and accessories allow selecting exactly the degree of chemical resistance required. All liquid-wetted parts need to be resistant to the chemicals used. The diaphragm is made of NBR and PTFE-coated.

Motors and VFD to match application needs

For applications with specific motor requirements, the versatile DMX range offers Ex-classified or ATEX-certified high-quality motors. The VFD (Variable Frequency Drive) has inputs and outputs for analog and digital signals, and an interface for field bus communication (Profibus, Profinet).

Accessories ensure perfect operation of the entire system

A wide range of accessories specially designed for the DMX range helps optimise performance: AR control electronics, integrated relief valve, dosing controller, diaphragm leakage detection, servomotor for automatic stroke-length adjustment, PTC motors with Variable Frequency Drive (VFD), pressure-loading valves and pulsation dampers.

Applications

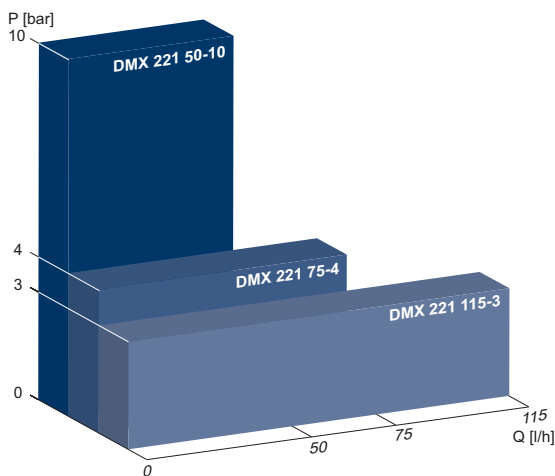
Disinfection, coagulation, flocculation, precipitation, etc. in:

- Drinking water treatment
- Waste water treatment
- Pulp and paper industry
- Textile industry
- Cleaning water treatment
- Food and beverage industry, dairies
- Cooling tower water treatment
- Low-pressure boiler feed water treatment
- Agriculture
- Irrigation
- Fertigation

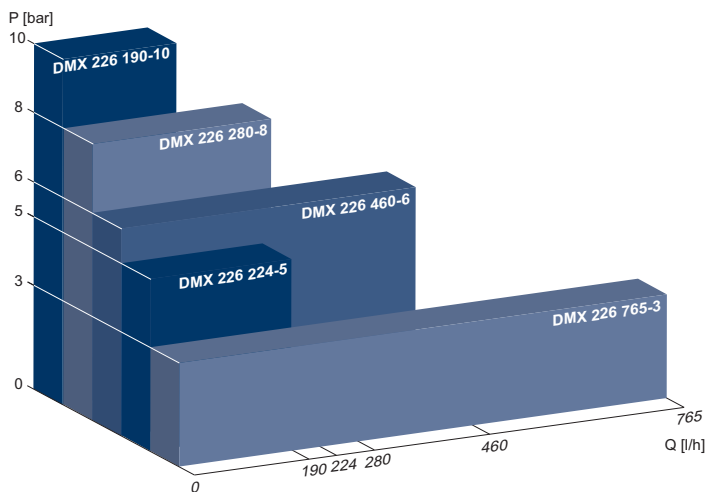
Variants

Pump type	DMX 221	DMX 226	DMX 227
Dosing head material	<ul style="list-style-type: none"> • PP • PVDF • PVC • Stainless steel 1.4571 (EN 10027-2), 316Ti (AISI) <p>All dosing head material variants are also available with diaphragm leakage detection. PVDF and PVC variants are available with integrated relief valve on request.</p>	<ul style="list-style-type: none"> • PP • PVDF • PVC • Stainless steel 1.4571 (EN 10027-2), 316Ti (AISI) <p>All dosing head material variants are also available with diaphragm leakage detection. PVDF and PVC variants are available with integrated relief valve on request.</p>	<ul style="list-style-type: none"> • PP • PVC • Stainless steel 1.4571 (EN 10027-2), 316Ti (AISI) <p>All dosing head material variants are also available with diaphragm leakage detection.</p>
Gasket material	EPDM, FKM, PTFE	EPDM, FKM, PTFE	EPDM, FKM
Valve ball material	Glass, PTFE, Ceramic Stainless steel 1.4401 (EN 10027-2)	Glass, PTFE, Ceramic Stainless steel 1.4401 (EN 10027-2)	PVC, PP, Stainless steel 1.4401 (EN 10027-2)
Valve type	<ul style="list-style-type: none"> • Standard, not spring-loaded (suction/discharge side) • Spring-loaded, 0.8 bar (discharge side); Standard (suction side) 	<ul style="list-style-type: none"> • Standard, not spring-loaded (suction/discharge side) • Spring-loaded, 0.8 bar (discharge side); Standard (suction side) 	<ul style="list-style-type: none"> • Spring-loaded, (spring loaded both sides 0.1 bar)

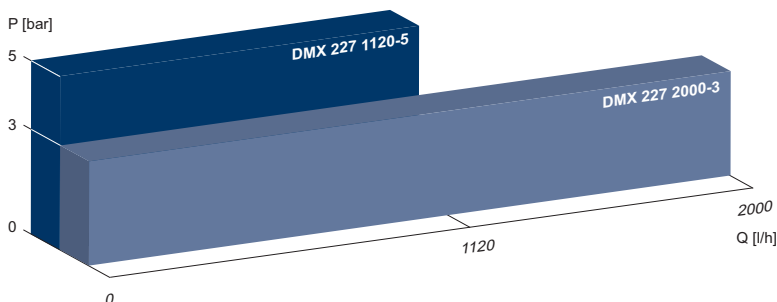
Performance range DMX 221 (50 Hz)



Performance range DMX 226 (50 Hz)



Performance range DMX 227 (50 Hz)



Some pump types are available in duplex version with double flow capacity.
For performance ranges 60 Hz and 100 Hz, please see DMX data booklet.