



PCM Delasco



# DELASCO Series

Peristaltic pumps for corrosive,  
abrasive and fragile products  
DL, DSC, Z, PMA

- > Simplified maintenance
- > Low Life Cycle Costs
- > Only one wearing part



# Peristaltic pumps

## High and low pressure pumps

*The ideal choice to reduce your maintenance costs.*

*The PCM Delasco range offers a large choice of low pressure and high pressure peristaltic pumps.*

### ↘ The Peristaltic Principle

The peristaltic pumping principle is based on the capacity of a soft elastomer hose to accept a deformation and subsequently recover its initial shape.

### ↘ Technical advantages

- **Only one wearing part: the hose.**

It also is the only part in contact with the pumped product

- **Seal-less design**

- **Self-priming**

Self-priming is automatic on start-up and does not require any special equipment. A flooded suction is required for viscous products only.

- **Reversibility**

The symmetric design of the pump makes it perfectly reversible by acting simply on the direction of rotation.

- **Dry running**

Occasional dry running is possible without damage occurring.

- **Corrosive products**

Only the pump hose is in contact with the fluid. This eliminates all the corrosion problems associated with acidic (hydrochloric sulfuric, nitric..) or basic (detergents sodium hydroxide or hypochlorite) products.

- **Abrasive products**

The elastomer hose resists better to abrasion than a metallic surface. The low running speed further reduces the abrasion caused by slurries.

- **Delicate products**

Transfer is carried out inside the pump tube without agitating or frothing the product. This characteristic coupled with the low running speeds is essential for delicate products or emulsions (latex...).

- **Dry-matter**

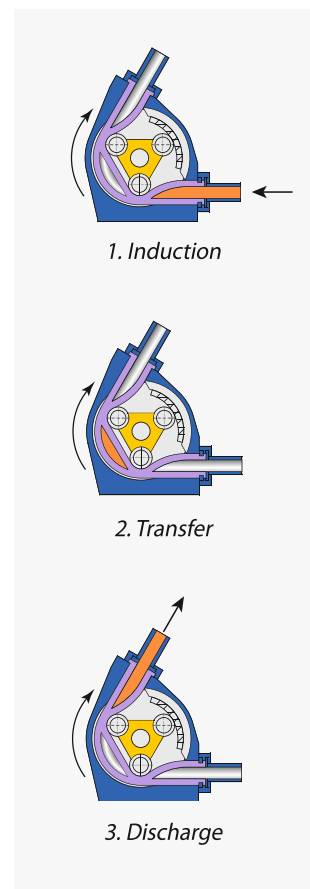
Dry-matter concentration can be up to 60% depending on the fluid density.

- **Solid Particles**

The maximum size allowed for solid particles is a 1/3 of the hose bore diameter. Soft particles (fruit, meat, fish...) can be the same size as that of the diameter of the hose.

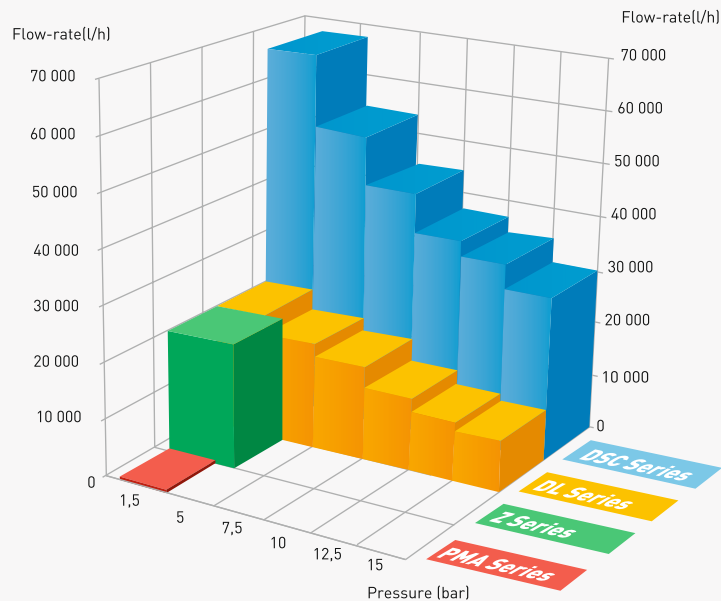
### ↘ Reduced LCC

The Life cycle costs have been optimized at every stage of the pump life: from its conception, operational time, and maintenance duties.



# The PCM DELASCO range

*With various pump constructions and a wide choice of elastomer hoses, the PCM Delasco range allows to cover a wide variety of applications calling for heavy-duty and flexibility.*



## DL Series

The pump with the reinforced hose for high pressures.  
Flow-rate: up to 20 m³/h  
Pressure: up to 15 bar.



## DSC Series

The pump with the reinforced hose for high pressures.  
Flow-rate: up to 65 m³/h  
Pressure: up to 15 bar.



## Z Series

The peristaltic pump for low pressures.  
Flow-rate: up to 20 m³/h  
Pressure: up to 3 bar.



## PMA Series

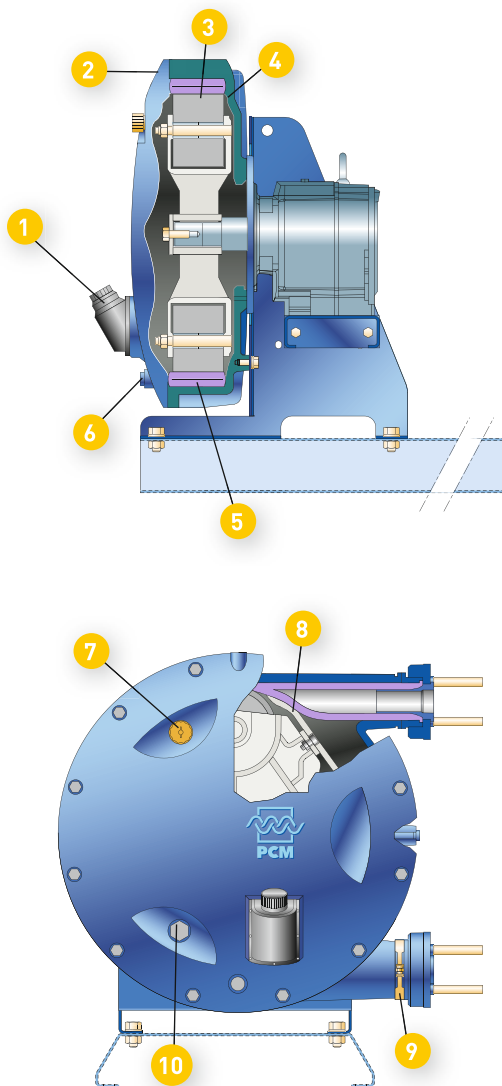
Special low flow-rate pump.  
Flow-rate: up to 200 l/h  
Pressure: up to 1.5 bar.

## Accessories

Hose-leak detector, Pulsation damping chamber, Vacuum pumping, Trolleys.

# DL Series

THE PERFECT COMBINATION OF ROLLERS AND HOSE GUIDES



## ■ Characteristics

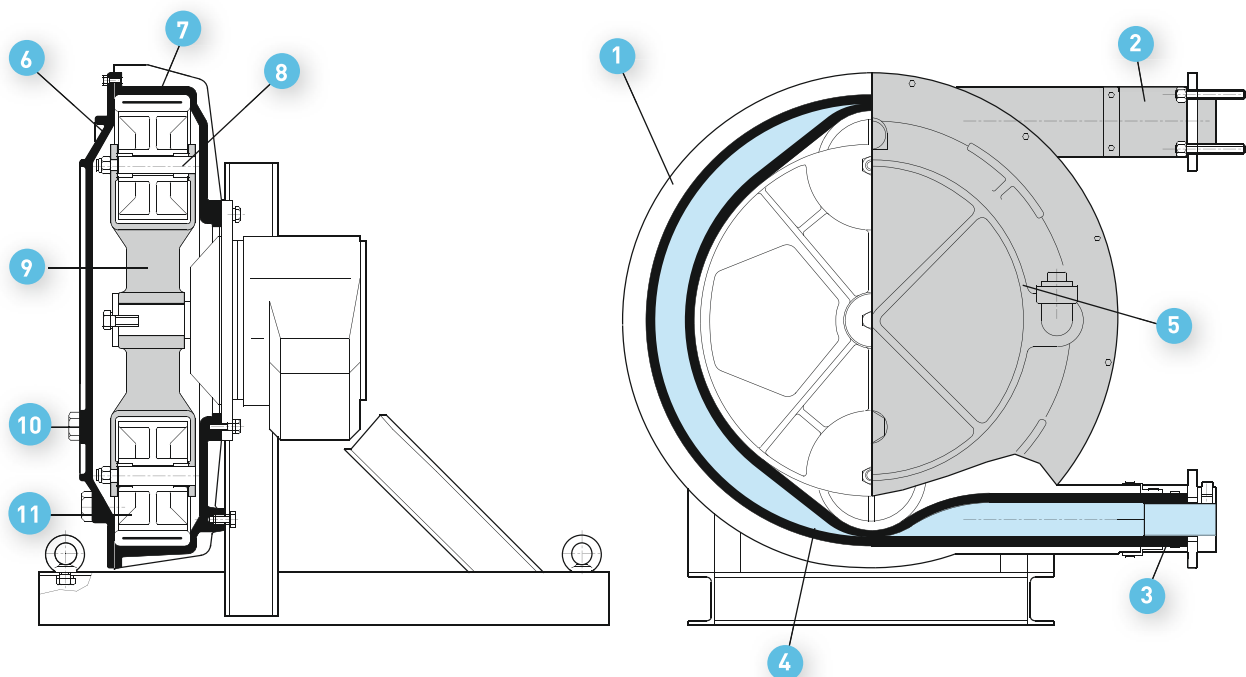
- Minimum flow-rate: 44 l/h
- Maximum flow-rate: 20 m³/h
- Maximum pressure: 15 bar
- Maximum temperature in continuous operation: 110 °C
- Self-priming: 9 mCE
- Density higher than 2
- Maximum viscosity: 40 000 cP

## ■ Construction

- 1- **Oil filling port.** Technopolymer. Easier filling, avoids splashing. Can also be used as an inspection port. Also used as a vacuum pumping port for DL series.
- 2- **Cover.** FGL 250 cast iron. Simplified servicing and handling: the cover has a lifting ring.
- 3- **Roller.** FGL 250 cast iron. The roller is mounted on a self-lubricating ring of composite material. This assembly ensures that the roller will turn freely throughout the pump's working life. 3 roller sizes depending on the pressure which in turn increases hose life expectancy.
- 4- **Leak-tight, oil-filled housing.** FGL 250 cast iron. Permanently lubricates the hose, and disperses the heat generated by friction against the hose. Design minimises the volume of oil and therefore reduces LCC.
- 5- **Hose.** NR EPDM and NBR rubber. Performs transfer or dosing up to 15 bar while limiting the discharge flow-rate.
- 6- **Lubricant drain plug.**
- 7- **Relief-valve plug.** Technopolymer. Overpressure safety inside pump housing.
- 8- **Steel hose-guide.** E 24 steel. This design increases the squeezed surface area of the hose, so lengthening hose working life.
- 9- **Clamped collar.** Zinc or stainless steel. Clamp type, ensures perfect leak-tightness while facilitating rapid removal.
- 10- **Oil-level sight glass.** Technopolymer. Magnifying effect, for easy oil-level checking.

# DSC Series

HIGH PRESSURE AND HIGH FLOW RATE



## ■ Construction

- 1- Hose: Rubber NR, EPDM, NBR.
- 2- Flange: Stainless steel.
- 3- Insert: Stainless steel (304L) or Polypropylene insert or Insert steel (A37).
- 4- Rollers: FGL 250 cast iron.
- 5- Lubricant filling.
- 6- Cover: FGL 250 cast iron.
- 7- Stator: FGL 250 cast iron.
- 8- Roller axis.
- 9- Rotor: FGL 250 cast iron.
- 10- Lubricant level.
- 11- Lubricant drain plug.

## ■ Characteristics

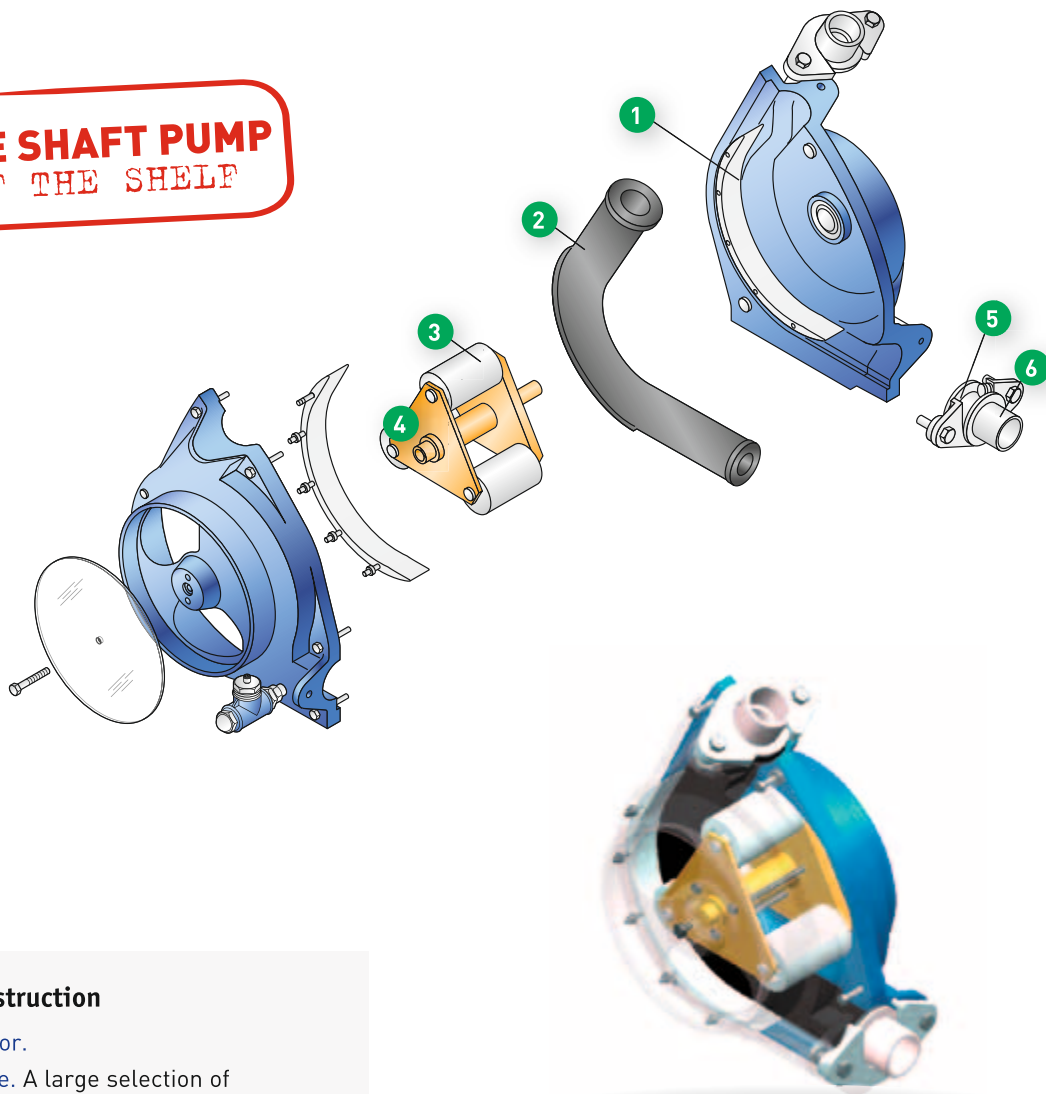
- Minimum flow-rate: 3,1 m<sup>3</sup>/h
- Maximum flow-rate: 65 m<sup>3</sup>/h
- Maximum pressure: 15 bar
- Maximum temperature: 110°C
- Self-priming: 9 mCE
- Density higher than 2
- Maximum viscosity: 40 000 cP



# Z Series

REDUCE YOUR MAINTENANCE COSTS

**BARE SHAFT PUMP  
OFF THE SHELF**



## ■ Construction

1- Stator.

2- Hose. A large selection of materials for a wide range of applications. Depending on the pump size. Polychloroprene (CR). Chlorosulfonated polyethylene (CSM). Ethylene-Propylene-Diene-Monomer (EPDM). Natural rubber (NR). Silicone (SIL). Thermoplastic (TPA).

3- Roller.

4- Rotor.

5- Counterflange.

6- Connecting sleeve.

## ■ Characteristics

- Density: 1,8 max

- Minimum flow-rate: 40 l/h

- Maximum flow-rate: 20 m<sup>3</sup> /h

- Maximum pressure: 3 bar

- Maximum temperature:  
120 °C

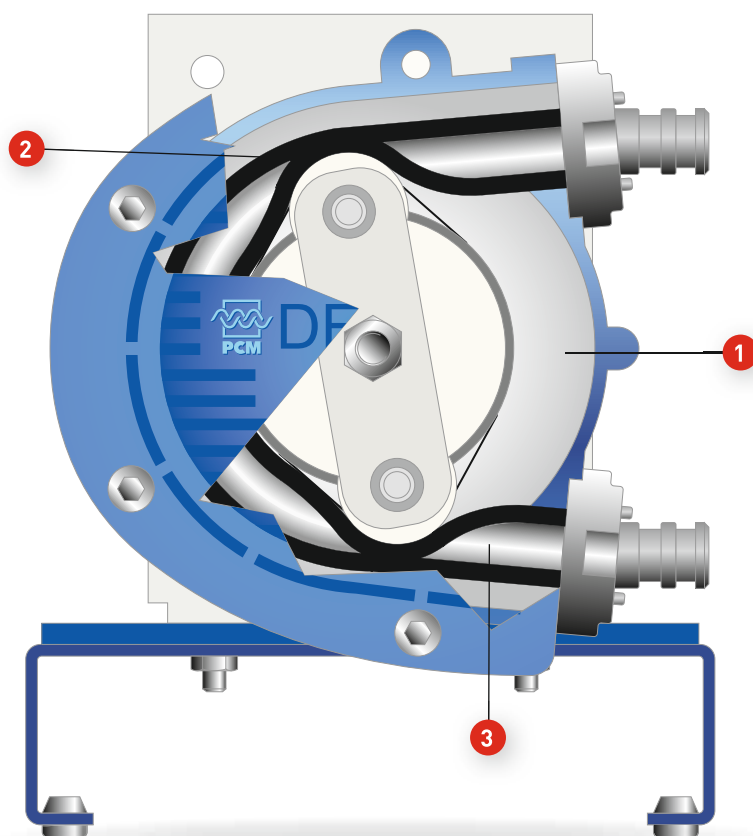
- Self-priming: 5 mCE

- Maximum viscosity: 15 000 cP

# | PMA Series

THE RIGHT SOLUTION FOR DOSING AND TRANSFERRING

**BARE SHAFT PUMP**  
OFF THE SHELF



## ■ Construction

- 1- Plastic Stator (PFV) for a better resistance to corrosion.
- 2- Hose. Neoprene and thermoplastic.
- 3- Flexible hose, easy to change.

## ■ Characteristics

- Minimum flow-rate: 14 l/h
- Maximum flow-rate: 200 l/h
- Maximum pressure: 1,5 bar
- Maximum temperature: 120°C
- Self-priming: maximum 5 mCE
- Density higher than 2
- Maximum viscosity: 1800 cP

## ↘ Industries and applications



### Environment

Liquid sludges, lime milk, polymer, ferric chloride, scums, greases.



### Mechanical Engineering

Oil water mixtures, laminoire wastes, cutting oil, engine lubricants, engine lubricant wastes, latex.



### Chemicals

Glues, paints, varnishes, polymer, flue gas desulphurization, fiber production, colloidal silica, detergents.



### New Energies

Oil, biodiesel, musts, vinasses, coal water mixtures, uranium pulps.



### Minerals

Mineral slurries, explosive preparation, polymer, pulp, grouts, mortars, refuse derived fuels, chrome VI reduction, coloring agent, sludge, liquid enamel transfer, shotcrete preparation.



### Food

Slaughterhouse wastes, cheeses, fruits purée, syrups, dressings, creams.



### Paper

Mineral slurries (kaolin, talc, bentonite, calcium carbonate, titanium dioxide), binders (starch, casein, AKD, PVA, CMC, latex), additives (retention agents, dispersants, optical brighteners), coating color, polymer.



### Oil and gas

Drilling mud.