

Pumps and pumping systems

PC cake pump



Main industries and applications

Sulzer's progressing cavity pump range offers reliable and efficient solutions for diverse industrial applications. Included in the series are the PC cake pump, the PC dosing pump, the PC transfer pump and the PC transfer perform pump.

The PC cake pump is designed for transfer and handling of thickened and blended sludge, supplied with a large auger inlet and screw conveyor. The screw conveyor extends to the compression area to help push the sludge cake into the cavities of the rotor and stator and provide consistent pumping. The range is available in cast iron, with a choice of rotor and stator materials and a variety of hopper sizes.

The PC cake pump is used in the following applications:

- Heavy sludge cake transfer, greater than 30% dry solids concentration
- Dewatered and thickened sludge transfer
- Sludge blending
- Imported and organic waste sludge transfer
- Industrial process sludge with high percentage dry solids concentration









Materials

Pump body

Cast iron

Rotor/rotating parts

Alloy steel with HCP Stainless steel AISI 316 Stainless steel AISI 316 + HCP Stator materials

Natural rubber EPDM High nitrile Nitrile NBR Fluoro-elastomer / Viton

Operating data

Inlet	hopper	size

Capacities

Differential pressures

Temperatures

50 Hz

up to 1'000 x 450 mm

up to 215 m³/h

up to 48 bar

-10 up to 100°C

60 Hz ______up to 39.4 x 17.7 in.

up to 946 USgpm

up to 700 psi

14 up to 212°F

Features and benefits

Maintenance-friendly design

- Maintain in place, without disconnecting suction flange or removing hopper
- Saves maintenance time and eliminate costs to dismantle

Detachable feed chamber

• For easy access and removal of the rotor and screw conveyor assembly

Consistent pumping

• Large auger inlet and screw conveyor ensures consistent pumping and facilitates sludge cake push

Custom solutions

 Available in cast iron with a choice of rotor and stator materials and a variety of hopper sizes

Easy addition of sludge

- Side inlet port allows for the addition of thin sludge for blending
- Can also be used for draining the pump

Reliable operation

• Engineered to pump thickened sludge cakes in municipal and industrial process applications

Flexible sealing options

- Choice of shaft sealing options, with single or double mechanical seals and packed glands
- Most applications require a mechanical seal as standard, we provide options for customer preferences and cost savings



The Sulzer Flow division keeps your processes flowing. Wherever fluids are treated, pumped, or mixed, we deliver highly innovative and reliable solutions for the most demanding applications.

The Flow division specializes in pumping solutions specifically engineered for the processes of our customers. We provide pumps, agitators, compressors, grinders, screens and filters developed through intensive research and development in fluid dynamics and advanced materials. We are a market leader in pumping solutions for water, oil and gas, power, chemicals and most industrial segments.

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