



PERFECT FINISH – PAINTED BY THE SPECIALIST.

ZRP1-UV

Gear pump without packing for UV painting systems



To allow the users of UV coatings the advantages of volume dosing in automatic systems – precisely repeatable application rates and high dynamics in changing this, even with fluctuating viscosities – Reiter developed his UV-DOS technology.

UV materials are extremely sensitive to temperature and creep. This allows them with conventional paint gear pumps with packs (sealed drive shafts) to penetrate the sealing gaps and crystallize by the frictional heat.

Enters the flaky powder into the paint flow, painting flaws threaten. To eliminate this risk, Reiter presented a gear pump driven by magnetic coupling. Thus, an infiltration of the packing by strong creep materials is excluded and the high dynamics of a gear pump is nevertheless available.

The customized gear geometry also prevents the entry of energy and a reaction of the UV coating.

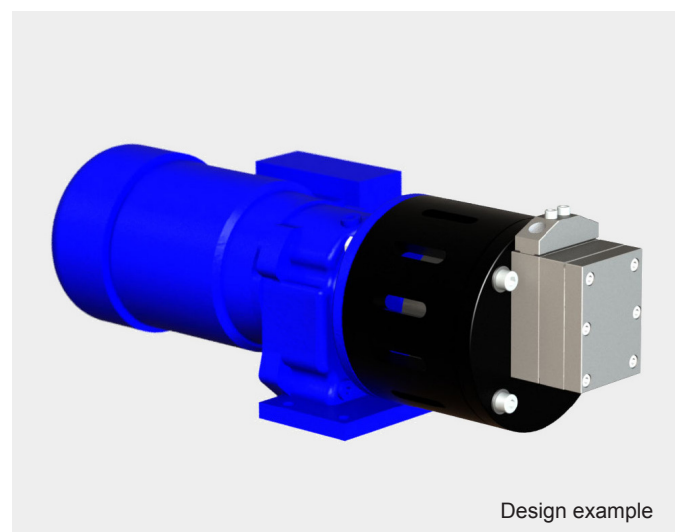
The metering gear pump ZRP1-UV succeeds where all other gear pumps had failed so far. It is now finally possible to meter UV based paints continuously and pulsation free. The ZRP1-UV is designed in order to eliminate all big friction spots inside the pump which generated issues due to UV transformation. No sealing maintenance required thanks to its magnetic coupling. This pump is available in different outputs, with or without the driving motor.

Application area

- 1K or 2K UV paints and other shear sensitive products

Included accessories

- Connecting block with 2 threaded holes for pressure sensors
- Mounting bell
- Electrical motor
- Connection fittings

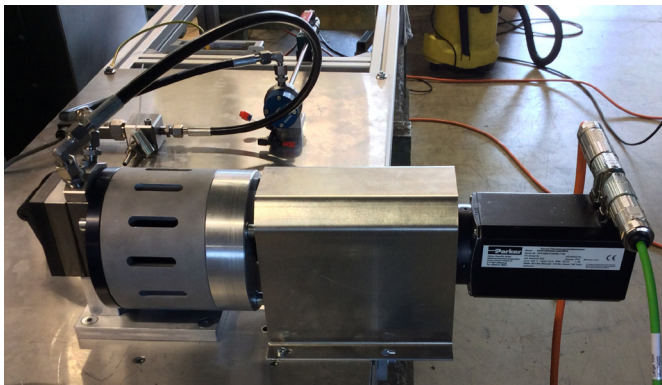


Design example

Technical data

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Drive shaft sealing:	magnetic coupling
Revolution speed:	up to 120 rpm (depending on product involved)
Metering accuracy:	± 3 % of nominal value
Metering repeatability:	< 0.2 % of previous value
Input/feeding pressure:	max. 5 bar
Output pressure:	max. 5 bar
Max. differential pressure:	2 bar
Admissible viscosity:	from 20 s to 100 secDIN4
Direction of rotation:	clockwise or counter-clockwise rotation
Pump material:	heart tempered stainless steel
Surface treatment:	ADLC (amorphous diamond-like carbon)
Available outputs:	3 / 6 / 10 cc/rev
I/O port:	connecting block with I/O G1/4" on the pump body



Gear pump ZRP1-UV with servomotor

