



## RotoStream Spray!

Progressive cavity spray valve  
with motion-synchronised  
volumetric flow control and  
integrated control system

**RSS**

### Highlights/ Benefit

- Precise surface wetting: Homogeneous, sharply defined spray application based on the progressive cavity principle and motion-synchronised volumetric flow control.
- Plug & Produce: Minimal integration effort due to fully integrated control – no external controller required.
- Wide media range: Suitable for processing low- to high-viscosity media, including reactive materials.

# Constant application at variable speeds – volumetric spraying perfected

Plug & Produce operation through integrated control and web-based configuration.

RotoStream Spray! is a volumetric spray valve designed for demanding coating processes requiring maximum film thickness consistency and reproducibility.

At its core is progressive cavity technology: a metallic rotor rotates eccentrically within an elastomeric stator, forming geometrically defined conveying cavities. These cavities transport the medium to the outlet with an exact volume per revolution. The result is a uniform, pulsation-free volumetric flow – independent of pressure or viscosity fluctuations. This provides the basis for reproducible atomisation and homogeneous surface wetting.

A key performance feature for automated applications is the speed-proportional control of the volumetric flow rate. Via analogue input signals, the rotor speed is directly synchronised with the traverse speed of robots or linear axes. The flow rate adjusts in real time to the motion of the handling system, ensuring a constant material quantity per unit length. Even along complex paths, this guarantees a consistently uniform film thickness without gaps or local over-application.

An active suck-back function ensures a precise spray stop. By briefly reversing the rotor direction, pressure in the material chamber is immediately relieved, effectively minimising nozzle dribble or post-run. The spray pattern therefore remains sharply defined up to the end of application.

RotoStream Spray! features fully integrated control, eliminating the need for an external controller. This reduces interface risks, lowers integration effort and simplifies commissioning. Parameterisation is carried out directly via a browser-based user interface. Application quantities can be defined either volumetrically or by weight; stored material densities are automatically considered by the system, eliminating manual conversion.

The spray valve is suitable for a wide range of low- to high-viscosity media, including reactive materials, and allows precise adaptation of the spray pattern to specific process requirements. Different nozzle and air cap geometries enable defined adjustment of spray width and atomisation characteristics – from narrow, focused spray patterns to wide-area applications. Nozzle extensions further expand the range of use and enable coating of hard-to-access component areas.

Follow the QR-Code for additional product info



## Technical Data

Available as ...

BG	cm <sup>3</sup>	cm <sup>3</sup> /min
1	0,003	0,003 – 00,36
2	0,010	0,010 – 01,20
3	0,050	0,050 – 06,00
4	0,140	0,140 – 16,00
5	0,530	0,530 – 60,00

BG = Size

cm<sup>3</sup> = min. dispensing volume

cm<sup>3</sup>/min = Flow rate range

Inlet pressure (medium)  
max. 6 [bar]

Temperature range  
Medium / operation up to 80 [°C]

Power supply  
24 [V DC]

Dimensions (L x B x H)  
241 × 30 × 57,5 [mm]

Weight  
approx. 0,58 [kg]

Materials (media-wetted parts):  
PEEK / FFKM / FKM / UHMWPE  
stainless steel (depending on variant)

Compatible with proven  
WALTHER spray technology,  
including nozzles, air caps and  
nozzle extensions.

*Also available as a dispensing  
version: RotoStream Dose!*