ICS 610 Inline Carbonation System …

…for reliable and efficient small scale inline carbonation

Especially for production of small batches, carbonation systems can be the major expense factor. The ICS 610 with its perfect price to performances ratio is an optimal solution for this application. The carbonation system is built directly into the beverage line and driven by the beverage flow automatically injecting the carbon dioxide to the beverage. The ICS 610 is designed especially for spritzers, sparkling wines, table waters, beer and mixed beverages. The most remarkable feature of the device is the automatic, extremely accurate and reliable injection of the carbon dioxide in the beverages.

BENEFITS:
- Customer-specific rated diameter and pipe connectors of device and mixing stage
- Perfect price/performances ratio
- Reliable precise carbonation
- Designed for CIP
- Carbonation driven by the product flow
- Easy, automatic operation
- Carbonation, De-carbonation and oxygen removal
- No electric energy supply necessary

OPERATION:
A feed pump (not included) presses the beverage through a built-in Venturi pipe where the desired amount of CO₂ is injected. The CO₂ gas dissolves smoothly in the downstream mixing stage. Within operating range, CO₂ dosing is largely independent of the product flow rate.

TECHNICAL DATA:
Flow rate: 1,000 – 16,000 l/h (depending on injector size) (265 – 4225 gal/h)
CO₂ concentration: 0 - 6 g/l / 0 – 3 vol (continuously variable, temperature-dependent)
Required feed pump pressure: ≥ 6 bar / 87 PSI
Maximum operating pressure: 10 bar / 145 PSI
CO₂ supply pressure: 10 bar / 145 PSI
Dimensions (HxWxD) in mm: 150 x 295 x 100 / 5.9 x 11.6 x 3.9
Dimension of mixing stage [mm]: Ø 80 x 210 / Ø 3.2 x 8.3
Rated diameter: DN 40 or DN 50
Pressure loss: approx. 3 – 3.5 bar (43 – 50 psi)
Minimum flow rate: approx. 2/3 x rated flow

Each ICS 610 is designed customized for the user specifications. It can be placed directly before the filler (requiring a small buffer tank) or, better, between two tanks. (The target tank must be pressurized for the CO₂ to stay dissolved.) The rated diameter can be chosen individually, as well as the pipe connections. The device works purely pneumatically and don’t require any additional electric energy supply. The desired carbon dioxide concentration is set directly at the device itself. If product flow falls below a minimum flow rate, the carbonation is automatically deactivated. When the product flow increases to the minimum flow rate, the carbonation starts again. The ICS 610 is made of high-grade materials which are approved by food and beverage industry standards. The device is designed for CIP.