Dispense Head QC2 *neo*

The functional evolution of the QC2 dispense head

The dispensing system you know and trust — improved through years of practical experience.

Our standard head has proven its reliability across multiple industries for more than 25 years. Based on the experience gained over time, we have developed an optimized version that enhances performance and usability when handling hazardous and ultra-pure chemicals.

A range of big and small, but always significant improvements contribute to enhanced safety, easier handling for the operator, and greater control during dispensing.

Recirculation Connection NEW

This dispense head can come with a third port that allows small amounts of chemical to be recirculated into the container, helping relieve downstream pressure and remove air during initial priming.
No second drum opening needed!

Optimized Check valve NEW

Our self-closing, all-plastic valve, now featuring improved performance, lower pressure loss, and better flow.

QR Code NEW (Coming soon)

For advanced traceability, scanning the QR code allows users to access the dispense head manufacturing certificate, including batch and order information, as well as instructions and supporting documentation.

Advanced Handling for the operator NEW

The new design makes it even easier for the operator to handle the dispense head, even when wearing the most bulky chemical gloves.

PFA Inliner NEW

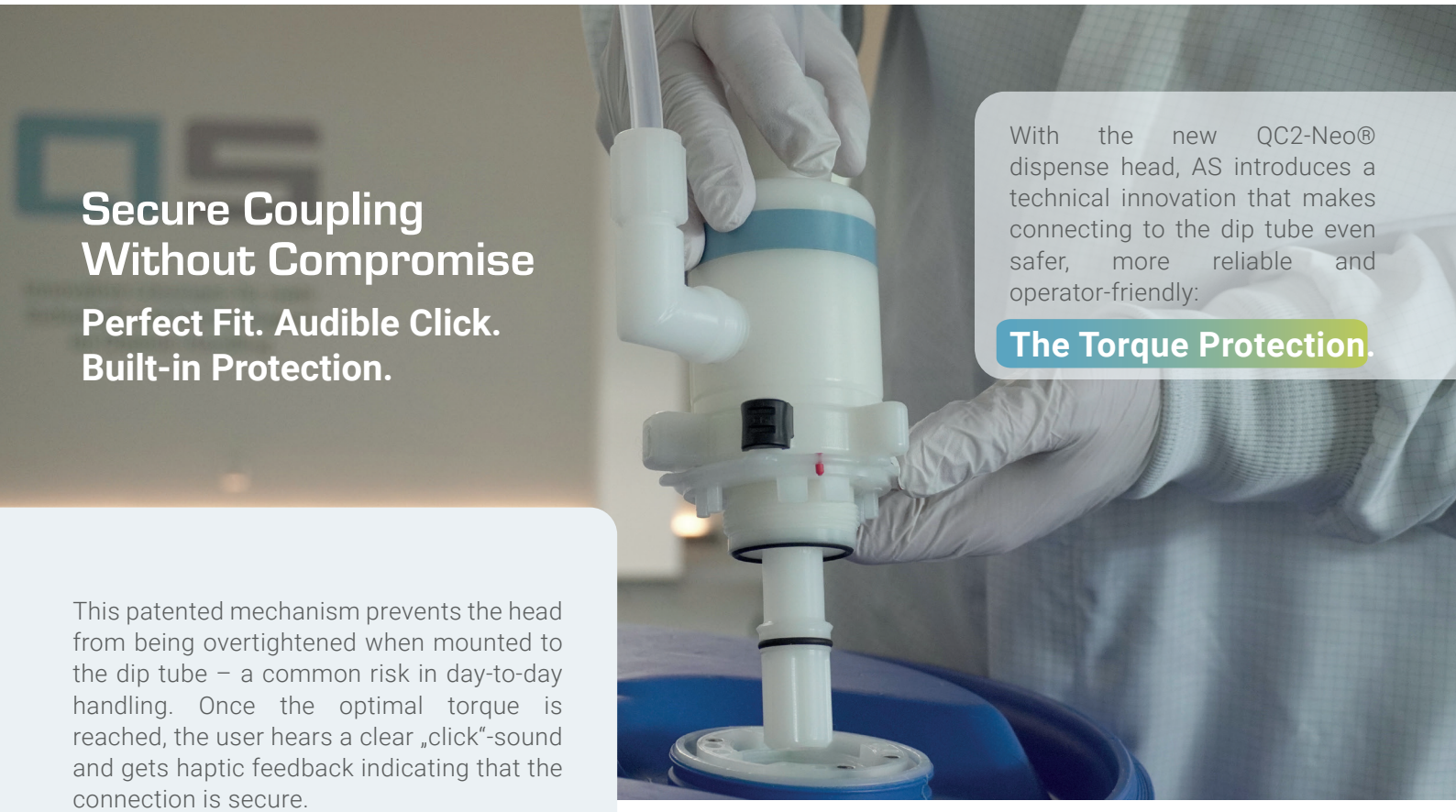
The QC2-Neo dispense head can be equipped with an Inliner made of PFA. For maximum purity and chemical resistance of the wetted components.

NEW Patented Torque Protection

The patented torque protection indicates to the operator that the dispense head is fully connected and automatically prevents over-tightening.

NEW Clean Release™ Technology

Even safer disconnection due to our propietary design.



Secure Coupling Without Compromise

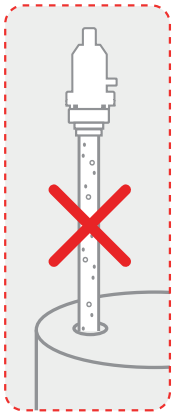
Perfect Fit. Audible Click. Built-in Protection.

With the new QC2-Neo® dispense head, AS introduces a technical innovation that makes connecting to the dip tube even safer, more reliable and operator-friendly:

The Torque Protection.

This patented mechanism prevents the head from being overtightened when mounted to the dip tube – a common risk in day-to-day handling. Once the optimal torque is reached, the user hears a clear „click"-sound and gets haptic feedback indicating that the connection is secure.

What makes it even more unique: Even if the operator applies additional force, the mechanism prevents over-tightening – protecting the plastic threads and ensuring a long service life for all components.



More Safety for the Entire System

The Torque Protection not only protects the dispense head – it also prevents an even more critical scenario:

If the head is screwed on too tightly, the entire dip tube could twist loose or be pulled out of the container during disconnection. This would interrupt the process and, in the worst case, **release hazardous chemicals.**

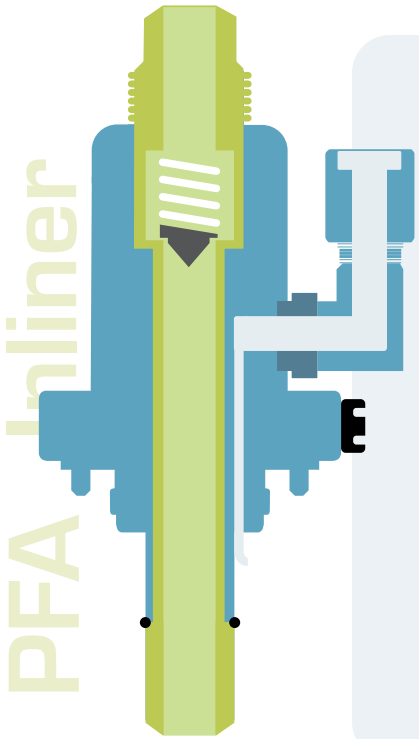
Thanks to the integrated stop mechanism, this risk is now reliably eliminated.

Double protection, built-in:

- No overtightening.
- No risk of loosening the dip tube from the container.

Innovative Dispense Head with PFA Inliner

Perfluoroalkoxy (PFA) is a fully fluorinated high-performance plastic with universal chemical resistance similar to PTFE. Unlike PTFE, PFA is thermoplastically processable and weldable, enabling extremely pure, stress-free components.



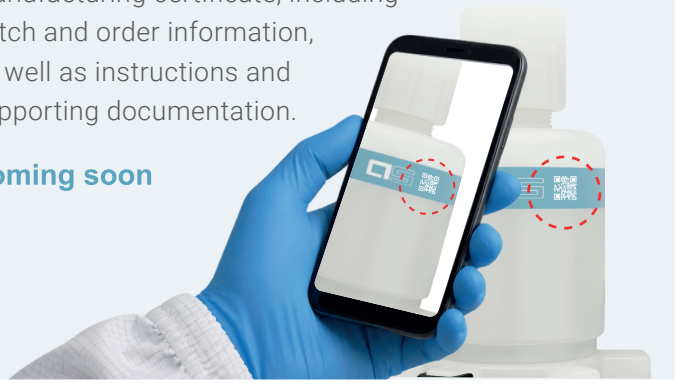
This dispense head is designed with an integrated PFA inliner, ensuring that the chemical only comes into contact with ultra-pure, highly resistant PFA. The solid base body, precision-machined from thick-walled HDPE or PVDF, provides maximum robustness and long service life. The result: a cost-efficient alternative to dispense heads made entirely of PFA – combining durability with the highest level of chemical purity and resistence.

* In the electrically conductive version, the Inliner is also composed of electrically conductive PFA, ensuring electrical dissipation.

QR Code

For advanced traceability, scanning the QR code allows users to access the dispense head manufacturing certificate, including batch and order information, as well as instructions and supporting documentation.

Coming soon



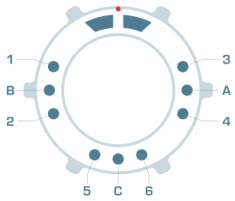
SPECIFICATION

DH-DK-PE-XXX-F3/4"-VF1/2"-NEO

GENERAL

AS item no. DH-DK-PE-XXX-F3/4"-VF1/2"-NEO	Serial no. C7920
AS order no. 366407	Batch no. 2218903
Date of manufacture 03/23/2026	

FIGURE



Code XXX	Code name Uncoded

DETAILS

Product line QC2-Neo	Gasket FFKM (Kalrez® 6375)
Material HD - PE	Valve Check valve
Function Dispensing	Liquid port 1 Flare 3/4" vertical
Vent port 1 Flare 1/2" elbow 90°	Leakage test Within tolerance

Advanced Traceability

Automatic Check Valve
Safe, Simple, Maintenance-Free

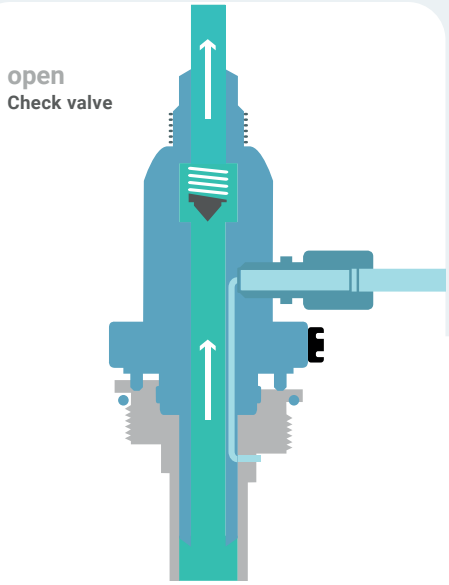
With an **optimized** internal flow geometry, **the QC2-Neo** check valve delivers improved performance and reduced pressure loss.

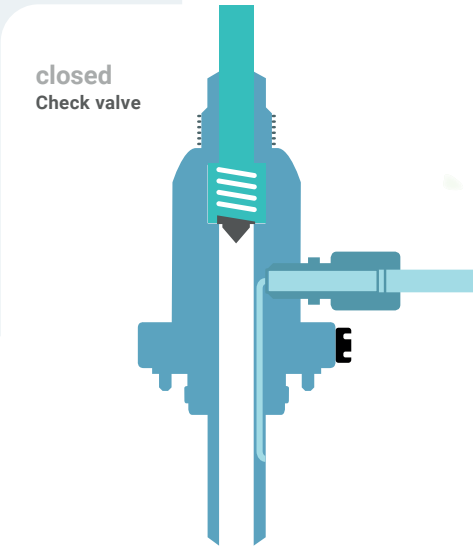
The valve opens when the pump starts and closes when it stops, preventing chemical backflow and minimizing waste.

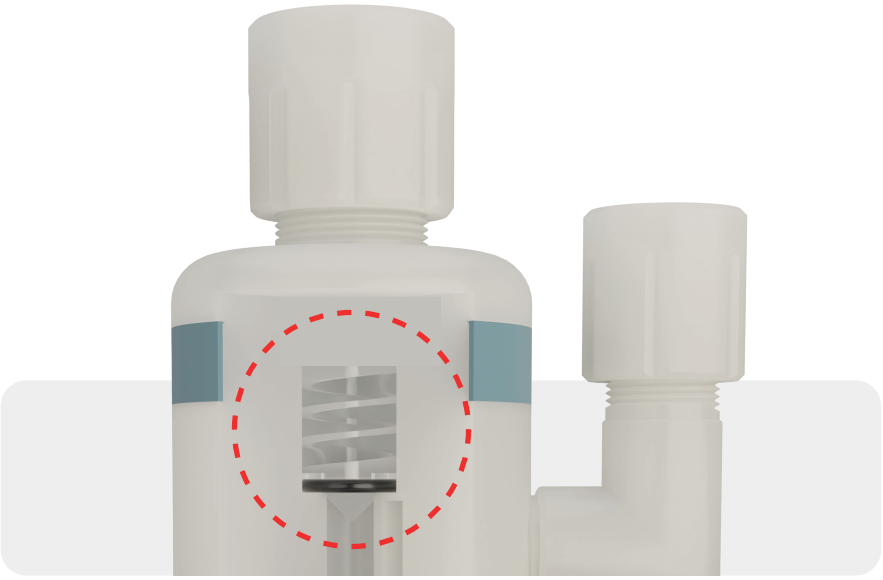
Manufactured from 100% ultra-pure fluoropolymer, it provides:

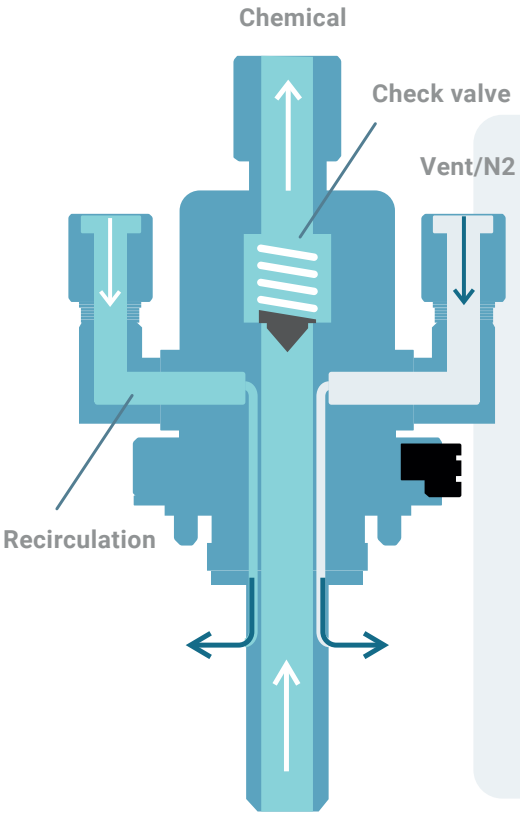
Optimized Check Valve

- Excellent chemical resistance
- Long life
- Low pressure drop









Recirculation Connection

The **QC2-Neo** can be equipped with an additional third port that enables small volumes of liquid to be recirculated back into the container. This function is particularly useful when, for example, a pressure-side relief valve is installed downstream of the pump, or when air needs to be evacuated from the system during initial priming.

Max. flow rate during recirculation: 2 l/min

The advantage: a separate recirculation head and dip tube are not required for small return flows – everything is managed within a single head. On the system side, it must be ensured that only small amounts can flow back slowly.

Inside the head, the recirculation channel is separated from the venting channel, and both lines are only combined in the dip tube. As an option, a non-return valve can be installed on the recirculation port for added safety.

For large-volume recirculation, we recommend using either a dedicated QC2 recirculation head and dip tube or a QC3 dispense head.

Suitable for / Key advantages at a glance

- Small return flows, e.g. pressure relief or air evacuation during priming
- Eliminates the need for a second recirculation head and dip tube
- Separate channel design for recirculation and venting – combined only inside the dip tube
- Optional non-return valve for added process safety
- Cost-efficient and space-saving solution for system integration

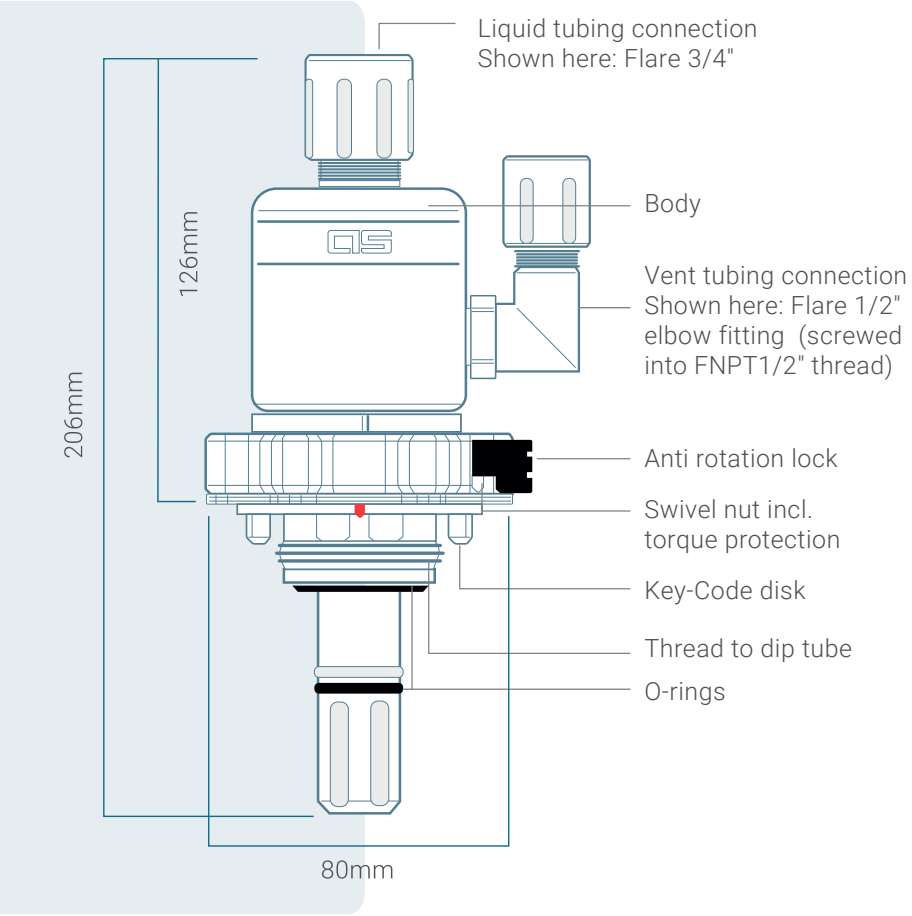
Not suitable for

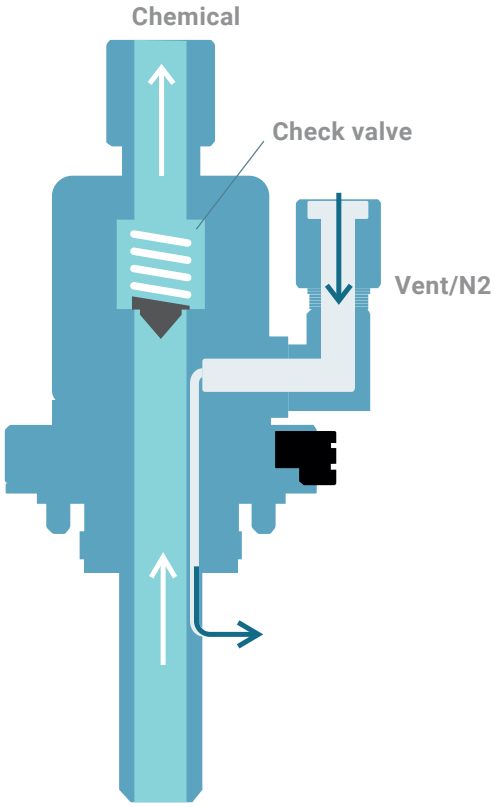
- Large-volume recirculation
- Applications where the same flow rate should be recirculated as dispensed
- Handling of slurries or particle-loaded media

Dispense Head QC2 *neo*

Product Line	QC2 Classic version	QC2 *neo*
Material Options	PE PVDF - - -	PE PVDF PTFE NEW PE with PFA Inliner NEW PVDF with PFA Inliner NEW
	PP Conductive PVDF Conductive -	PP Conductive PTFE Conductive NEW PP Conductive with PFA Inliner NEW
Torque Protection (to prevent damage due to overtightened)	✗	✓ NEW
Traceability	Engraved serial No.	Engraved serial No. and QR Code to access to the dispense head manufacturing certificate, batch and order information and instructions. NEW
Recirculation	Only with 2nd fill head	For small volumes through 3rd port NEW
Check valve	✓	Optimized design for advanced flow NEW
Clean Disconnection	✓	CleanRelease™ Technology NEW
Key codes	84	84
Compatibility to AS QC2 dip tubes	✓	✓
Valve options	Check valve Manual turncock valve -	Check valve Manual turncock valve Pneumatic diaphragm valve NEW
Liquid port tubing connection options	Flare, Pillar, Nexus, Sanitary Tri- Clamp, various threads etc.	Flare, Pillar, Nexus, Sanitary Tri- Clamp, various threads etc.
Vent port	FNPT 3/8“ with many fittings an elbows available from 1/4“ to 1/2“	FNPT 1/2“ NEW with many fittings an elbows available from 1/4“ to 1/2“

Standard configuration with vertical flare connection





Materials of Construction		PE	PVDF	PTFE	CD	CDPTFE	PE/PFA	PVDF/PFA	CD/PFA
Wetted parts	Body	HDPE	PVDF	PTFE Modified	PP elec. conductive	PTFE elec. conductive	HDPE (non-wetted)	PVDF (non-wetted)	PP elec. (non-wetted)
	Inliner	-	-	-	-	-	PFA	PFA	PFA elec.
	Check valve	Fluoropolymer							
	O-rings	Standard: FFKM (Kalrez® 6375) Alternatives: - FFKM (Kalrez®) with FDA compliance - EPDM - FKM							
Non-wetted parts	Flare nuts on liquid and vent connections	Standard: PVDF Alternative: PFA		PFA	Standard: PVDF elec. conductive Alternative: PTFE elec. conductive	PTFE elec. conductive	PFA	PFA	PTFE elec. conductive
	Others	PP, HDPE, ECTFE, FFKM, FEP encapsulated FKM CD versions: PVDF elec. conductive							
	Grounding wire	N/A			1 meter wire with clamp (not displayed on drawing)		N/A	N/A	1 meter wire with clamp (not displayed on drawing)

Dispense Head QC2 neo

Options:

Limit Switch	The built-in limit switch signals the correct coupling of the dispense head with the dip tube.
Bubble Sensor*	Report empty status easily and fully automtically. Dispense Heads with integrated bubble sensor enable automatic operation.
PFA Inliner	Ideal when maximum durability is needed with ultra-pure, highly aggressive, or temperature-sensitive media.
3rd Port for Recirculation	Evacuation during priming or connection verification.
Mixing Nozzles*	Fill Heads with mixing nozzles allow an homogeneous mixing of chemical without additional mechanical stirrers.
N2-Blanketing Port	Fill Heads with additional gas connection allow nitrogen blanketing and subsequent filling of the container in a closed system.
Hand Pump	Dispense Heads with hand pump are particularly suitable for easily and safely dispensing small quantities.
Foot Pump	Dispense Heads with foot pump are particularly suitable for easily and safely dispensing small quantities.
RFID*	Integrated RFID antenna for connection to a SupplyLine. Gateway. Enables automatic reading of the RFID chip installed in the Dip Tube and its matching in the database.
Overfilling Sensor	Fill Heads with integrated overfill sensor in the venting channel for automatic switch-off in case of overfilling.
Membrane Pump*	The QC-M Dispense Heads with integrated air driven membrane pump are the perfect solution if it is not possible to install a stationary pump or if you have to dispense at different stations.
Turbine Flow Meter*	Offers identical features as our QC2 Dispense Heads with the addition of dosing and flow metering capabilities.
Sampling Port	Fill Heads with additional sampling port allow sampling from the container right after filling.

* Available in only in non-conductive dispense heads

Dispense Head QC2 neo

6 good reasons for the QC-System®:

- Clean delivery with preinstalled dip tube
- Safe connection with easy to use key code system that prevents chemical mix-ups
- Emission-free dispensing with integrated ventilation
- Drip-free disconnection
- High purity and chemically resistant materials
- Worldwide in use, well-known references

Chemical companies and end customers from a wide range of industries already rely on the AS products worldwide

Electronics	Semiconductors Solar technology and photovoltaics Flat screens
Industry	Electroplating Chemicals Printing/Paper Water treatment Automotive / mechanical engineering Adhesives Glass Agriculture

Pharmacy / Biotechnology / Cosmetics /Foods

Laboratories / Research facilities / Institutes

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