



StandardLine Ampoules - Always in line with evolving industry standard

- dimensional inaccuracies can lead to difficulties during filing or put container closure integrity at risk
- cosmetic properties are of high relevance for inspectability and might lead to high reject rates during fill-and-finish
- chemical resistance is crucial to keep the drug-container interactions at a minimum
- To deal with the high pharmaceutical standards, and to secure patient safety, SCHOTT StandardLine Ampoules offer cosmetic AQLs* at minimum according to current Defect Evaluation List as most relevant industry standard, also aligned with current PDA Technical Report





Type I Borosilicate Glass with high chemical resistance acc. to ISO- 9187-1



Manufactured acc. to cGMP



Unlimited shelf life for glass**



Compliant with all current standards (such as Ph. Eur, USP, CP)



Tight dimensional control



SCHOTT FIOLAX® clear or amber*** glass tubing



Formats according to current version of ISO 9187-1 (incl. form B, C and D



Tight cosmetic control



Break-systems: One-pointcust (OPC) or easyOPC, Score-ring (SCR) recommended

High chemical resistance

Made with FIOLAX® Type I
Borosilicate Glass to keep drug-container
interaction to a minimum.

Efficient fill-and-finish

Tight tolerances ensure an fill-and-finish process with high container closure integrity

Low reject rate

High cosmetic quality provides a low reject rate and high inspectability.



Release Tests:

Dimensions:

Defined parameters in drawing determine testing

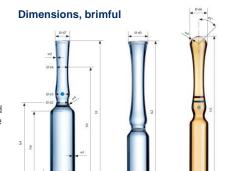
In-line inspection:

- 100% by camera/ sensor
- Defined standard parameters: total length, stem eccentricity bulb diameter, steam diameter, steam diameter at sealing point, constriction diameter
- Other parameters possible: bottom, OPC dot diameter, color break ring width, coding ring width

Statistical off-line inspection:

- Inspection level S-4 is minimum (according ISO 9178-1)
- Standardized global test methods based with different quality aspects e.g. off-line camera, profile projector, caliper
- Defined standard parameters (e.g. break-force, bottom radius, head wall thickness, constriction wall thickness)

ISO 9187-1





OPC and easyOPC - ISO 9187-2

1ml – 3ml	24 – 65N	24 – 45N
5ml	30 – 70N	30 – 60N
10ml – 30ml	30 – 80N	30 - 65N*







Chemical:



Hydrolytic resistance surface testing according Pharmacopeiae (USP, Ph.Eur) and ISO 4802-2

Verifications: A global manufacturing network paired with outstanding hot forming experience and continuous strive for innovation



Since 130 years we advance the world with groundbreaking glass innovations like Borosilicate Glass



We fuel science and inspire progress in hot forming with dedicated competence centers



We offer supply security along entire value chain due to vertical integration with the leading borosilicate tubing manufacturer



Our global manufacturing footprint with 16 production sites shares equivalent quality standards and ensures global supply chain resilience



More than 250 production patents prove continuous innovation and improvement



We provide our customers with state-of-the-art quality and inspection technologies

General ordering information

Quality level	Standar	StandardLine									
Form:	B, C and	B, C and D*									
Break-system:	OPC or easyOPC, SCO**										
Optional painting:	More than 10 colors available for ID rings, OPC dot, text or logos										
Packaging:	Tray, optionally ETO sterilized (for D-Ampoules out of Mexico)										
Palletizing*:	A standard Euro Pallet (1200 x 800 mm) contains 7 – 17 layers of 12 trays each										
Formats:	1 ml	2 ml	3 ml	5 ml	10 ml	20 ml	25 ml	30 ml			
Pieces per tray*:	525	525	377	275	189	144	116	224			

*Contact us for more information regarding ISO dimensions

CBR available upon request

Many Standard **Ampoules** configurations are available.

Contact your sales representative for more information.

FIND OUT MORE: www.schott-pharma.com/ampoules

