



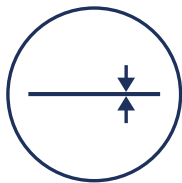
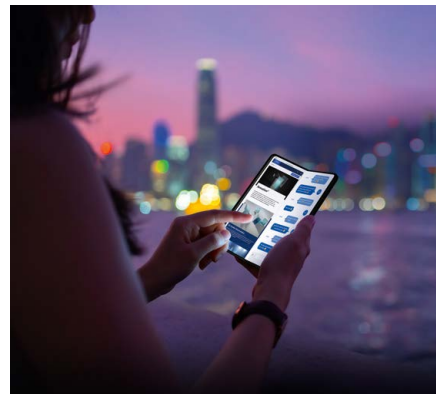
# SCHOTT Xensation® Flex

## The flexible glass revolution

SCHOTT Xensation® Flex redefines the directly hot-formed ultra-thin glass family SCHOTT UTG® with its excellent ion-exchange performance.

Xensation® Flex is produced using SCHOTT's proprietary down-draw process. The process was first used in the 1960s for thin glass and has been continuously improved. Through this process, SCHOTT became the first company in the world to mass-produce ultra-thin glass with the ability to be chemically strengthened.

After processing, Xensation® Flex offers a bending radius down to 1 mm. This makes the material perfect for the constantly evolving consumer electronics market and allows customers to create innovative free-form display designs for bendable watches or foldable smartphones.



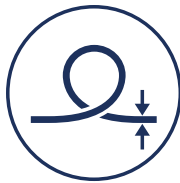
### Ultra thin

Xensation® Flex is part of our SCHOTT UTG® product family.



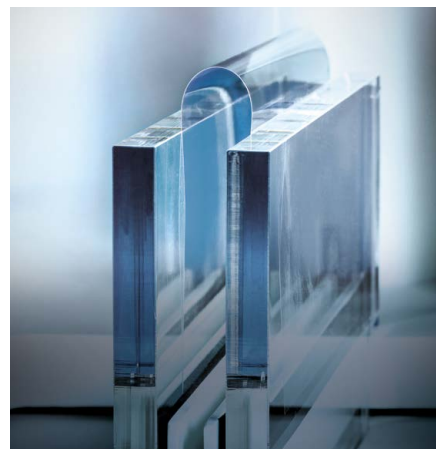
### Ultra tough

The ability to be chemically strengthenable enable a high bending strength.



### Ultra flexible

Xensation® Flex can reach a bending radius of less than 1 mm after processing.



**SCHOTT**  
glass made of ideas

# SCHOTT Xensation® Flex

## Technical specifications

	Property		Unit	Value
Thermal properties	Coefficient of thermal expansion	CTE $\alpha_{(20-300^{\circ}\text{C})}$	$10^{-6}/\text{K}$	8.7
	Transformation point	$T_g$	$^{\circ}\text{C}$	621
Optical properties	Refractive index	$n_D$	—	1.5040
	Transmission	$\tau_{\text{vD65}}$	%	92.2
	Abbe value	$V_e$	—	59.5
Mechanical properties	Density	$\rho$	$\text{g/cm}^3$	2.46
	Young's modulus	E	$\text{kN/mm}^2$	73.3
	Poisson's ratio	$\mu$	—	0.22
Electrical properties	Dielectric constant (1 GHz)	$\epsilon_r$	—	7.3
	Dissipation factor (1 GHz)	$\tan \delta$	—	$133 \cdot 10^{-4}$
Chemical properties	Hydrolytic resistance class	DIN ISO 719	—	HGB 2
	Acid resistance class	DIN 12116	—	S 4
	Alkali resistance class	DIN ISO 695	—	A 1
Chemical strengthening*	Capability of compressive stress	CS	MPa	> 750
	Capability of depth of layer	DoL	$\mu\text{m}$	> 5

\* Chemical strengthening parameters depend on applications and glass thickness; for more professional advice, please consult SCHOTT

