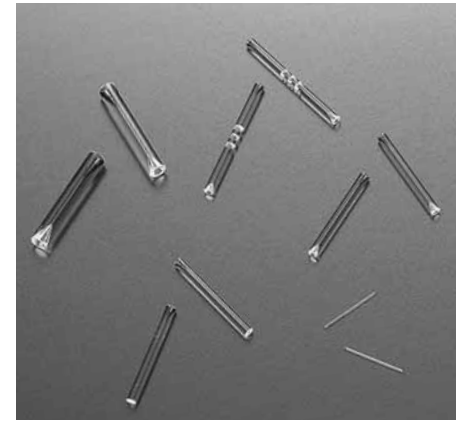


Micro Capillary

Micro Capillaries are borosilicate glass capillaries with an inner diameter accuracy of ± 0.5 microns. They are used for optical connectors, optical fiber splices and fiber supports in optical devices. Because Micro Capillaries have a polishing characteristic similar to silica optical glass fibers, the excellent polished face required for optical PC (physical contact) connection can be easily obtained by polishing. As a result, Micro Capillaries are suited for high-speed analog devices including CATV systems which require high return-loss properties. Micro Capillaries exhibit good elasticity that enhances the PC connection properties of the optical fiber. In addition, their high UV transmitting characteristic makes it possible to adhere capillaries and fibers, lenses or holders with UV-curable adhesive in a short time. Nozzle End type which allows firm insertion of the whole optical fibers with jackets and Precision glass tube type which can be used as outer tube are also available.



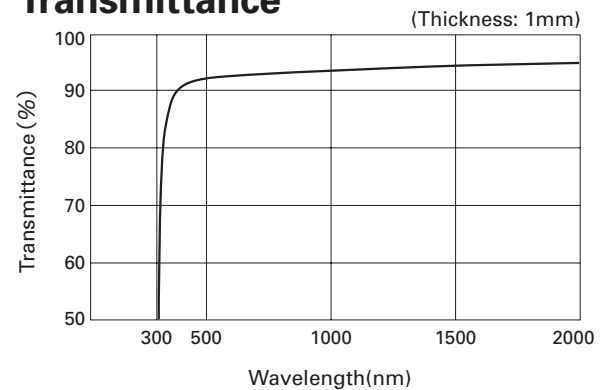
Features

- Excellent polishing characteristics
- Smooth cone end
- High UV transmittance
- High chemical durability

Properties

Properties/Glass			Borosilicate glass
Thermal expansion coeff.	30~380°C	$\times 10^{-7}/K$	51
Density		$\times 10^3 kg/m^3$	2.36
Refractive index (n _D)			1.49
Vickers hardness			680
Hydrolytic resistance	JIS R3502	R ₂ O mg	0.05
Dielectric constant	1MHz, 25°C		5.6
tan δ	1MHz, 25°C	$\times 10^{-4}$	85

Transmittance



Dimensional Specifications

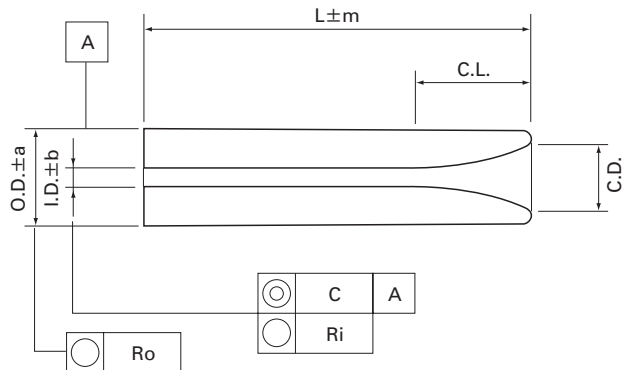
Nominal Dimensions O.D.×I.D.×L	Capillary Form	Outer Diameter		Inner Diameter		Concentricity	Length Tolerance
		Tolerance	Out of Roundness	Tolerance	Out of Roundness		
0.25×0.126×8.0	Dual-chamfered ends	±0.005	0.001	+0.001 -0	0.001	φ0.001	±0.2
0.99×0.127×7.0	Single-cone end	±0.005	0.001	+0.001 -0	0.001	φ0.001	±0.2
1.80×0.126×15.0	Dual-cone ends	±0.005	0.001	+0.001 -0	0.001	φ0.003	±0.2
1.80×1.010×8.0	Precision glass tube	±0.010	0.001	±0.005	0.001	φ0.005	±0.2
2.78×1.810×8.0	Precision glass tube	±0.030	0.002	+0.010 -0	0.002	φ0.005	±0.2

Part No.

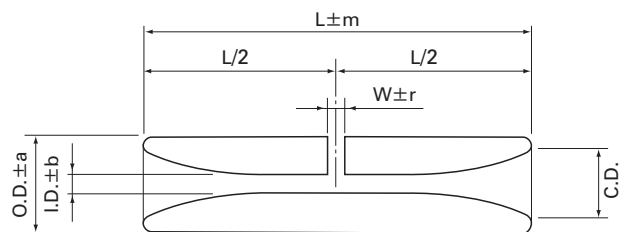
1.8 — **0.127** — **10.5** — **SC** — **HC-Type** — **C.D. = 1.0** (**W = 0.3**)
 Outer Dia. Inner Dia. Length End form Grade Cone Dia. Slot width

Dimensions

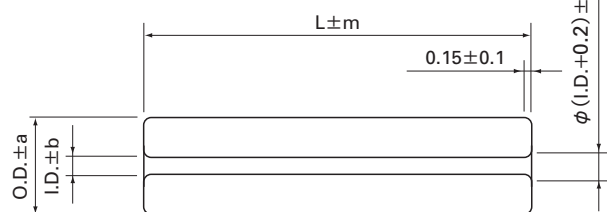
1) Single-cone End Capillary (HC Type, CC Type)



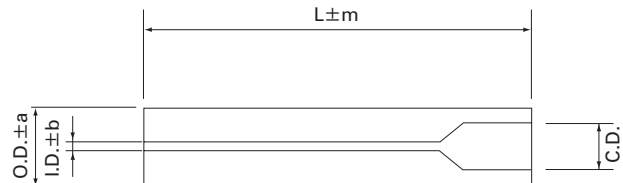
2) Dual-cone Ends Capillary (HC Type, CC Type)



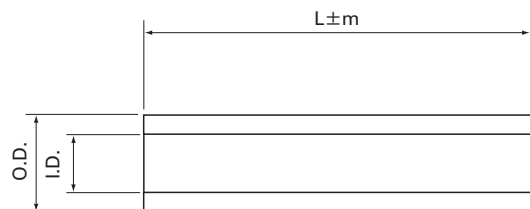
3) Single/Dual-chamfered Ends Capillary (HC type, CC Type)



4) Nozzle End Capillary



5) Precision Glass Tube



Dimensional Specifications

Subjects	Dimensions	Tolerance	(mm)	
			HC Type	CC Type
Outer diameter (O.D.)	0.25 1.80	a	±0.005	±0.01
	0.99 2.00			
	1.25 2.50			
O.D. roundness (Ro)	O.D. ≤ 2.5	—	0.001	0.002
Inner diameter (I.D.)	0.086 0.128	b	+0.001	+0.003
	0.126 0.130			
	0.127			
I.D. roundness (Ri)	I.D. ≤ 0.2	—	0.001	0.003
Concentricity (C)	O.D. < 1.0	—	φ0.001	φ0.003
	1.0 ≤ O.D. ≤ 2.5	—	φ0.003	
Length (L)	50 max.	m	±0.2	
Slot width (W)	0.3~1.0	r	+0.05/—0	

Cone Dimensions — example

Form	Inner Diameter (I.D.)	(mm)	
		Cone Diameter (C.D.)	Cone Depth (C.L.)
Single-cone End	≤ 0.145	0.75±0.2	1.5±1.0
		1.1±0.2	2.0±1.0
Dual-cone Ends	≤ 0.145	0.75±0.2	1.5±1.0
	> 0.145		3.0±1.5
Nozzle End	—	1.0±0.1	—

Other combinations of dimensions are available upon request.

*Refer to the dimensional specifications on the left side page regarding sizes.