

Akion reference Lens Lineup

We have a wide variety of reference lenses that are compatible with various companies' interferometers, and can evaluate the surface accuracy of lenses to be measured with a wide range of curvature radii and apertures.

- ✓ Curvature radius: -4,000 (concave) to +5,000 (convex)
- ✓ Reference surface accuracy: $\lambda/20$
- ✓ Lens mount: Can be attached to laser interferometer mounts from various companies.
- ✓ Also available for custom design.



4-inch TS



Φ60 TS

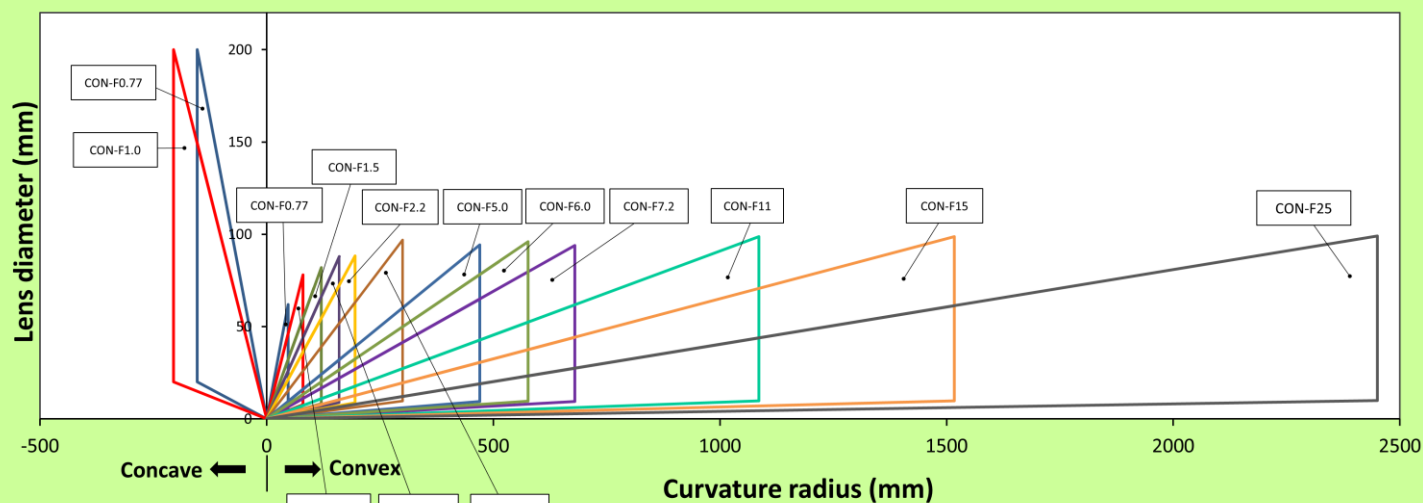
◆ reference Lens Lineup : TS • TF

Aperture diameter	Model	F number	Out of the beam	Reference radius (mm)	Exit aperture diameter (mm)	Convex measuring range		Concave measuring range	
						curvature radius (mm)	Maximum diameter (mm)	curvature radius (mm)	Maximum diameter (mm)
4 inches (100mm)	TF	—	Parallel	∞	100.0	∞	100	∞	100
	TS-CON-F0.77	0.77	Convergence	47.56	62.0	0-47	62	20-150	200
	TS-CON-F1.0	1	Convergence	80	78.0	0-80	78	20-200	200
	TS-CON-F1.3	1.3	Convergence	104	80.0	0-104	80	—	—
	TS-CON-F1.5	1.5	Convergence	120.35	82.0	0-120	82	—	—
	TS-CON-F1.8	1.8	Convergence	160	89.0	0-160	89	—	—
	TS-CON-F2.2	2.2	Convergence	195	88.3	0-195	55	—	—
	TS-CON-F3.3	3.3	Convergence	299.9	97.0	0-299	97	—	—
	TS-CON-F4.4	4.4	Convergence	440	99.0	0-440	99	—	—
	TS-CON-F5.0	5.0	Convergence	470	94.0	0-470	94	—	—
	TS-CON-F6.0	6.0	Convergence	577	96.0	0-577	96	—	—
	TS-CON-F7.2	7.2	Convergence	680	94.0	0-680	94	—	—
	TS-CON-F11	11	Convergence	1086	98.8	0-1086	98	—	—
	TS-CON-F15	15	Convergence	1517	98.8	0-1517	98	—	—
	TS-CON-F25	25	Convergence	2450	99.1	0-2450	99	—	—
60mm	TF	—	Parallel	∞	60.0	∞	60	∞	60
	TF (Attenuation coat)	—	Parallel	∞	60.0	∞	60	∞	60
	TS-CON-R400	6.7	Convergence	400	60.0	0-400	60	0-90	150
	TS-CON-R500	8.3	Convergence	500	60.0	0-500	60	0-105	150
	TS-CON-R700	12	Convergence	700	58.0	0-700	58	0-150	150
	TS-CON-R1000	17	Convergence	1000	58.0	0-1000	58	0-210	150
	TS-CON-R1200	20	Convergence	1200	60.0	0-1200	60	0-300	150
	TS-CON-R1414	23.5	Convergence	1414	60.0	0-1414	60	—	—
	TS-CON-R1700	28.7	Convergence	1700	59.0	0-1700	59	—	—
	TS-CON-R1900	31	Convergence	1900	60.0	0-1900	60	—	—
	TS-CON-R3000	50	Convergence	3000	60.0	0-3000	60	—	—
	TS-CON-R4050	67.5	Convergence	4050	60.0	0-4050	60	—	—
	TS-CON-R5100	85	Convergence	5100	60.0	0-5100	60	—	—
	TS-DIV-R200	3.3	Divergence	200	65.0	—	—	200-457	150
	TS-DIV-R300	4.7	Divergence	300	63.6	—	—	300-708	150
	TS-DIV-R400	6.4	Divergence	400	62.7	—	—	400-957	150
	TS-DIV-R700	12	Divergence	700	60.4	—	—	700-1150	99
	TS-DIV-R900	15	Divergence	900	61.2	—	—	900-1350	91
	TS-DIV-R1200	20	Divergence	1200	61.2	—	—	1200-1650	84
	TS-DIV-R1580	26	Divergence	1580	60.8	—	—	1580-2030	78
	TS-DIV-R1800	30	Divergence	1800	61.3	—	—	1800-2250	76
	TS-DIV-R2200	37	Divergence	2200	60.0	—	—	2200-2650	72
	TS-DIV-R2600	43	Divergence	2600	60.4	—	—	2600-3050	70
	TS-DIV-R3000	50	Divergence	3000	61.2	—	—	3000-3450	70
	TS-DIV-R3400	57	Divergence	3400	60.4	—	—	3400-3850	68

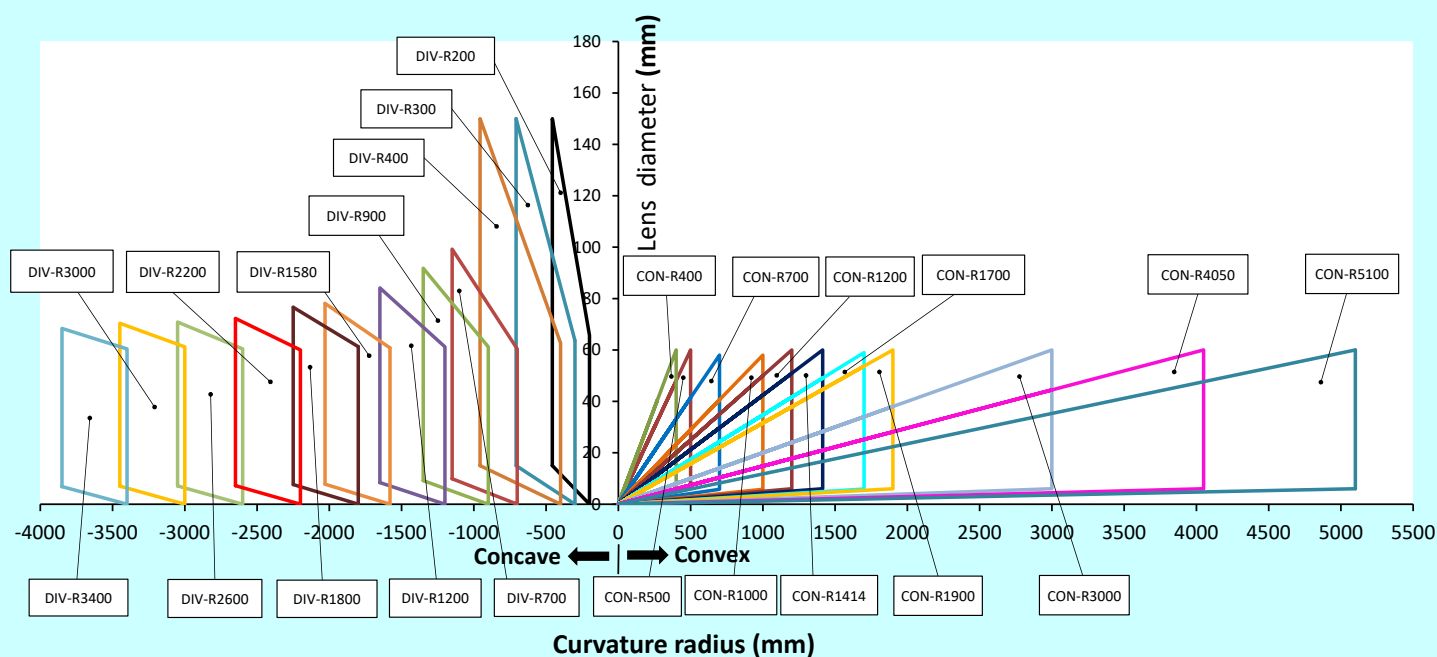
- (※) TS-CON-F1.3, TS-CON-F4.4, TS-CON-F6.0 and TS-DIV-R2200 are made to order.
- (※) The measurement range is a guide when using the Akion laser interferometer AK-100ZF system.
- (※) Please contact us if you require standard lenses (TS, TF) that are not in the lineup above.
- (※) When using a Φ60 reference lens (TS, TF), please use the separately sold "4 inch → Φ60 conversion adapter".
- (※) Explanation of abbreviations
 - TS : Transmission Spherical surface
 - TF : Transmission Flat surface
 - CON: Convergence , DIV : Divergence

◆ TS selection graph

4 inch ($\Phi 100$ mm) TS selection graph



$\Phi 60$ mm TS selection graph



(※) The TS selection graph is a rough guide when using the Akion interferometer AK-100ZF spherical system (stroke: 600mm).

We will select the optimal reference lens if you provide us with information on the laser interferometer you are using, the curvature radius of the lens to be measured, and the effective diameter.

(※) When using a $\Phi 60$ reference lens (TS, TF), please use the separately sold "4 inch $\rightarrow$ $\Phi 60$ conversion adapter".