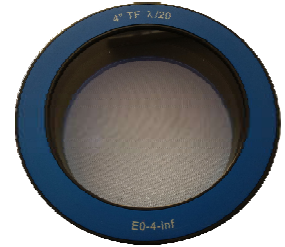


# Interferometer Objectives

EssentOptics develops and manufactures customized industrial interferometers by request. As accessories we offer standard interferometer objectives that are compatible also with Zygo-Bayonet. The objectives are available with the surface quality of  $\lambda/10$ ,  $\lambda/20$ , and  $\lambda/50$  and can be arranged vertical as well as horizontal. The typical characteristics of the objectives are given in the tables below. Adaptors, mountings, and beam expanders are available by request.

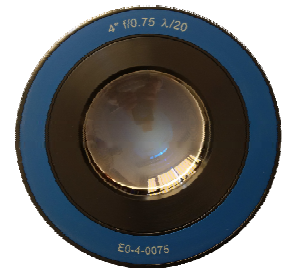
## plan interferometer objectives

	EO-35-INF	EO-40-INF	EO-60-INF
max. sample dia for ref. radius, mm	90.0	101.6	150.0
dia x length, mm	140x45	140x45	190x60
weight, kg	1.00	1.00	2.50
single pass wavefront deformation, PV	<0.5	<0.5	<1.0



## 6" interferometer objectives

	EO-6-0110	EO-6-0220	EO-6-0500	EO-6-0110s
numerical aperture	0.45	0.228	0.09	0.45
F-number	<b>1.1</b>	<b>2.2</b>	<b>5.0</b>	<b>1.1</b>
angular aperture	53.49°	26.36°	10°	55.6°
radius of reference surface, mm	-109.00	-284.90	-715.60	-165.00
max. sample dia for ref. radius, mm	102.0	138.0	150.0	150.0
min. sample radius w/o dia limits, mm	107	280	710	163.0
dia x length, mm	190x109	190x109	190x109	210x240
weight, kg	7.00	4.50	3.50	12.50
single pass wavefront deformation, PV	<2.5	<2.0	<1.5	<2.5



## 4" interferometer objectives

	EO-4-0075	EO-4-0110	EO-4-0150	EO-4-0190	EO-4-0330	EO-4-0480	EO-4-0720
numerical aperture	0.67	0.46	0.33	0.26	0.15	0.1	0.07
F-number	<b>0.75</b>	<b>1.1</b>	<b>1.5</b>	<b>1.9</b>	<b>3.3</b>	<b>4.8</b>	<b>7.2</b>
angular aperture	82.30°	55.60°	38.90°	30.30°	17.30°	12.10°	8.00°
radius of reference surface, mm	-48.17	-65.50	-121.44	-163.12	-300.69	-449.00	-700.35
max. sample dia for ref. radius, mm	63.4	61.0	80.9	85.3	90.2	94.5	97.4
min. sample radius w/o dia limits, mm	47	65	120	162	299	447	698
dia x length, mm	140x72	140x72	140x72	140x72	140x72	140x72	140x72
weight, kg	2.50	2.50	2.00	2.00	2.30	2.00	1.80
single pass wavefront deformation, PV	<1.5	<1.5	<1.5	<1.5	<1.0	<1.0	<0.5

	OE-4-1100	EO-4-1500cv	EO-4-1500dv	EO-4-2500cv	EO-4-2500dv	EO-4-3500cv	EO-4-3500dv
numerical aperture	0.05	0.02	-0.02	0.02	-0.02	0.01	-0.01
F-number	<b>11</b>	<b>15</b>	<b>-15</b>	<b>24.3</b>	<b>-23.9</b>	<b>34.9</b>	<b>-34.9</b>
angular aperture	5.40°	2.36°	3.99°	2.36°	3.99°	1.50°	1.50°
radius of reference surface, mm	-1051.70	-1517.00	+1517.00	-2449.40	2449.40	-3520.00	3500.00
max. sample dia for ref. radius, mm	98.5	100.0	100.0	100.8	102.5	101.6	101.6
min. sample radius w/o dia limits, mm	1049	1515	-1515	2440	-2440	3500	3490
dia x length, mm	140x72	140x45	140x45	140x45	140x45	140x45	140x45
weight, kg	1.60	1.00	1.00	1.00	1.00	1.00	1.00
single pass wavefront deformation, PV	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5