

Accurate alignment of optical components is a crucial point to consider when designing measurement systems.

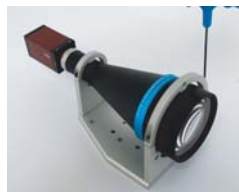
Besides optical components stability, the mechanical system layout should assure that the optical axis is orthonormal to the measurement plane. For this purpose, Opto Engineering® supplies CMHO Series Clamping Mechanics, suitable for most of OE Telecentric Lenses and Collimated Illuminators.

Three-point mounting grants a very good and stable alignment of the optical components, also making the assembling procedure quick and simple.

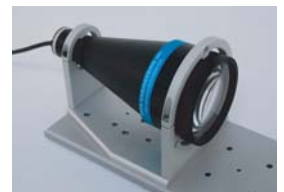


CMHO Series: clamping holders

Part Number	Compatible Telecentric Lenses and Illuminators				Mechanical Specifications				
	Matrix Camera Telecentric	Large Detector Telecentric	UV Telecentric	LT CL illuminators	Length (mm)	Width (mm)	Height (mm)	Optical axis height (mm)	Weight (g)
CMHO23	TC2304, TC2307, TC2309	TC4M04, TC4M07, TC4M09		LTCL23/x	20,0	53,0	66,5	40,0	114
CMHO16	TC1216, TC2316	TC4M16, TC2M16		LTCL16/x	20,0	62,5	71,2	40,0	123
CMHO24	TC1224, TC2324	TC4M24, TC2M24		LTCL24/x	20,0	62,5	71,2	40,0	115
CMHO36	TC1336, TC1236, TC2336	TC4M36, TC2M36	TCUV1236, TCUV2336	LTCL36/x, LTCLUV36	110,0	97,0	125,5	80,0	520
CMHO48	TC1248, TC2348	TC4M48, TC2M48	TCUV1248, TCUV2348	LTCL48/x, LTCLUV48	140,0	111,0	132,5	80,0	640
CMHO56	TC1256, TC2356	TC4M56, TC2M56	TCUV1256, TCUV2356	LTCL56/x, LTCLUV56	162,0	116,0	135,0	80,0	720
CMHO64	TC1364, TC1264, TC2364	TC4M64, TC2M64	TCUV1264, TCUV2364	LTCL64/x, LTCLUV64	175,0	137,0	145,0	80,0	810
CMHO80	TC2372, TC1380, TC1280, TC2380	TC4M72, TC4M80, TC2M80	TCUV1280, TCUV2380	LTCL80/x, LTCLUV80	230,0	153,0	152,0	80,0	1060
CMHO96	TC2385, TC1396, TC1296, TC2396	TC4M85, TC4M96, TC2M96		LTCL96/x	265,0	179,0	186,5	100,0	1400



Assembling of a Telecentric Lens on a CMHO holder



LTCL Illuminator mounting

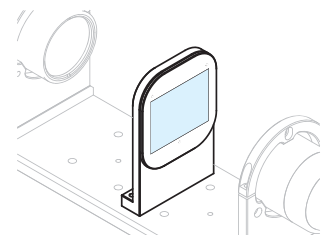
CMPT Series: mounting plates

CMPT plates are mounting units designed to build up dimensional measurement optical benches. Telecentric Lenses and Collimated sources of different types can be held by means of the related CMHO clamping holders. For very accurate measurement applications, precision patterns can be precisely positioned in front of the lens through CMPH Pattern Holders allowing for perfect optical system



TC2336+LTCL36 optical bench

Part Number	Compatible CMHO Clamping Mechanics	Compatible Pattern Mounts	Mechanical Specifications			
			length (mm)	width (mm)	thickness (mm)	Weight (g)
CMPT04-09	CMHO23	CMPH004-024	199,6	56,0	10,0	286
CMPT16-24	CMHO16, CMHO24	CMPH004-024	226,8	66,5	10,0	385
CMPT36	CMHO36	CMPH036-056	477,0	103,0	15,0	1950
CMPT48	CMHO48	CMPH036-056	596,0	117,0	15,0	2770
CMPT56	CMHO56	CMPH036-056	631,0	122,0	15,0	3060
CMPT64	CMHO64	CMPH064-096	783,0	143,0	15,0	4460
CMPT80	CMHO80	CMPH064-096	868,0	158,0	15,0	5470
CMPT96	CMHO96	CMPH064-096	1005,0	185,0	20,0	9940



Calibration Pattern mount