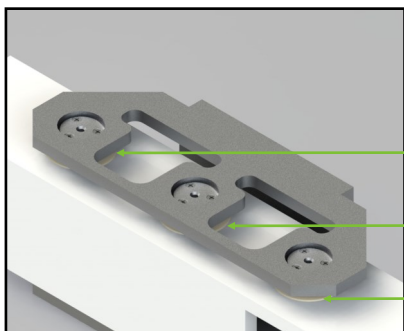
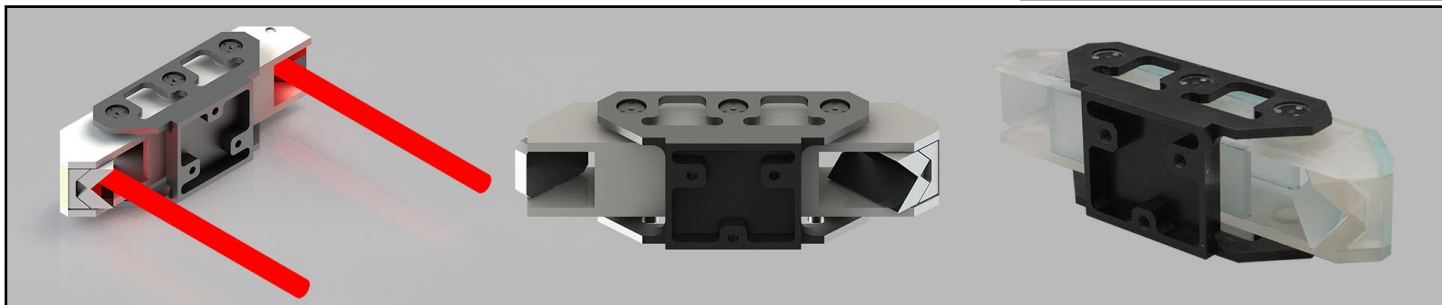


Exceptional Performance Lateral Hollow Transfer Retroreflectors™ (LTHRXP)

PLX Exceptional Performance Lateral Transfer Hollow Retroreflectors™ (LTHRXP) is designed to perform under the most extreme operating conditions. PLX's new patent pending ULTRA stable structural design provides a lightweight, stress-free structure for applications requiring a compact overall size while maintaining exceedingly high accuracy across an unprecedented temperature range, $\Delta T=140^{\circ}\text{C}$ (284°F).



Mounting pads' stiffness and placement are optimized for extreme shock and vibration.

The new Lateral Transfer Hollow Retroreflector™ mounting bracket can be customized for the desired clear aperture, offset, material requirements, and more. It is combined with innovative impact-damping mounting pads, which provide high resistance to shock and vibration.

It is vacuum-compatible, provides up to sub arc second accuracy, and is highly suited for space applications.

These features enable greater versatility, making the LTHRXP suitable for critical optical alignment applications such as boresighting, cameras, telescopes, and lasers.

Key features

- Compact, Lightweight design
- Sub arc second accuracy
- Large temperature range
- Free-float stress free mounting
- Highly shock and vibration resistant
- Vacuum-compatible

Compare to Standard LTHR

PROPERTIES	LTHR	LTHRXP
Package size	Standard	Compact
Overall weight	Standard	Lightweight
Vacuum-compatibility	Yes	Yes
Temperature range	Very Good	Excellent
Vibration	Very Good	Excellent
Shock resistance	Excellent	Excellent

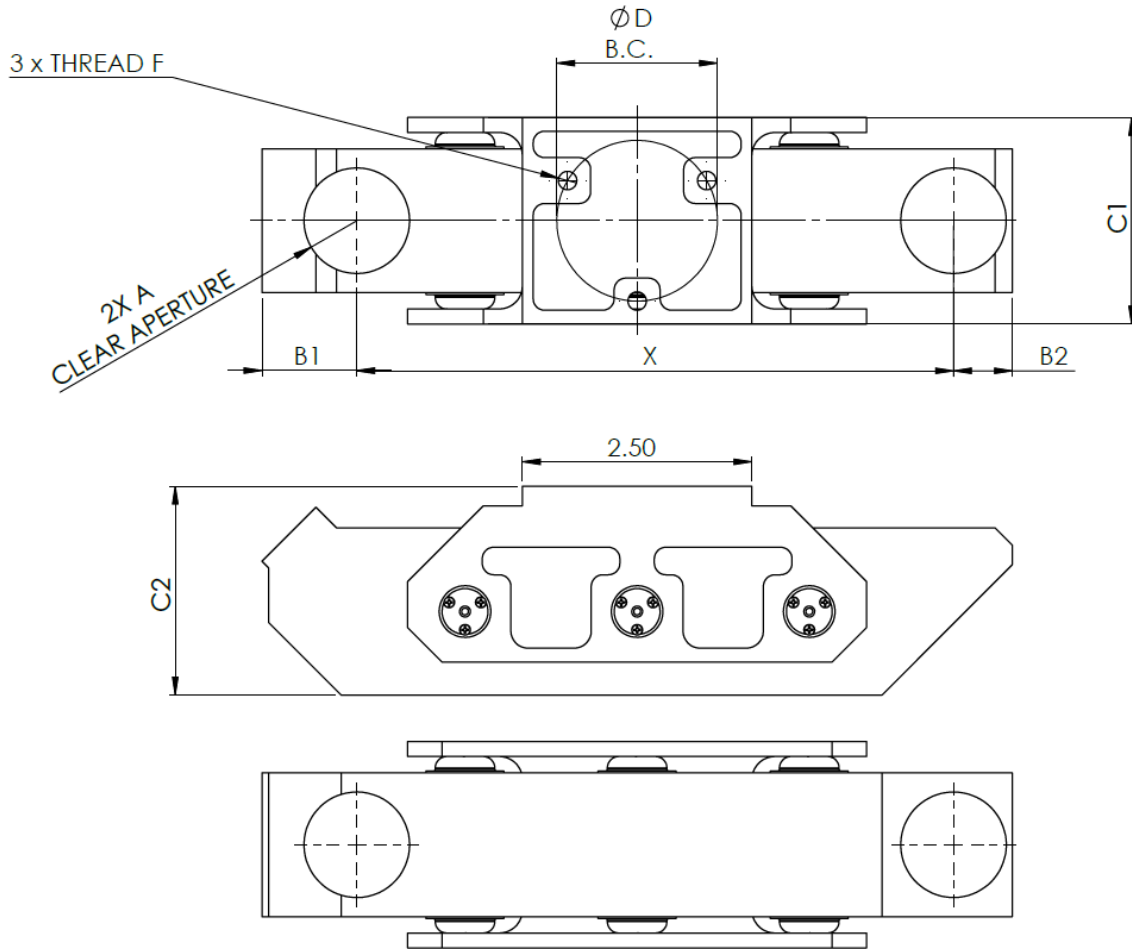
Custom configurations for specialized applications

Standard Clear Apertures are 1 and 2 inches, but PLX engineers can create a custom configuration for your application. Potential variations include: the flat mirrors can be replaced with beamsplitters or filters; smaller and larger apertures; modified housing and mounting; Can also be combined with 1 or more LTHR/LTHPs within a M.O.S.T assembly to create a fully customizable solution for applications such as bore-sighting

Important Notice

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Outline Drawings



Item	X(in)	ΦA(in)	B1(in)	B2(in)	C1(in)	C2(in)	D(in)	THREAD F
L-10-XP	4.50-26.00	1.13	1.03	0.64	2.25	2.28	1.75	1/4-20 / M6
L-20-XP	4.50-26.00	2.13	1.56	1.43	3.60	3.48	1.75	1/4-20 / M6

Order Information

L-XX-XP-XX.XX-X Y

Clear Aperture (in/mm)		Beam separation (in)	Exiting Beam Max Deviation (arc.sec.)
10: 1.0/25	20: 2.0/51	4.50-26.00	0.5:0.5
			1: 1.0
			2: 2.0
			5: 5.0

Coating Type	WAVE-LENGTH RANGE (nm)	SURFACE REFLECTANCE (AVG)
A	400 - 700	93%
B	600 - 1,600	89%
C	225 - 10,000	90%
D	225 - 700	89%
E	450 - 10,000	96%
G	650 - 16,000	97%
H	650 - 20,000	97%
I	400 - 750	87%