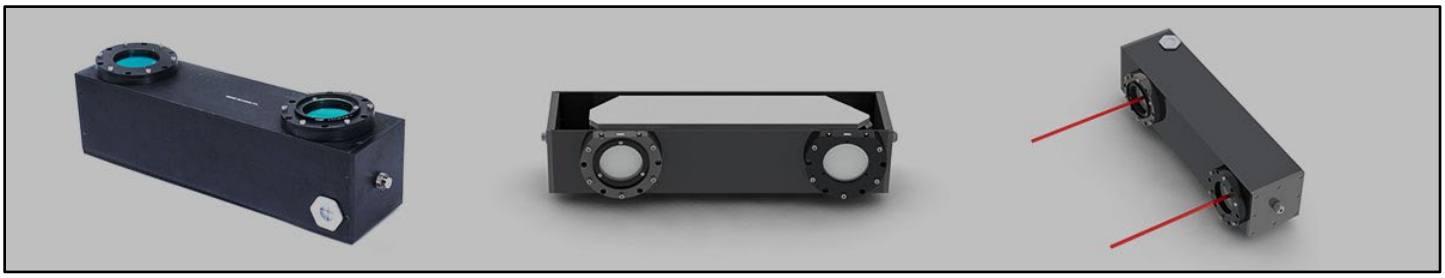
All-Weather Lateral Transfer Hollow Retroreflectors™ (LTHRAW)

PLX All-Weather Lateral Transfer Hollow Retroreflector™ (LTHRAW) is designed for applications required to work under the harshest environmental conditions without risking damage to the optics. PLX's ruggedized, vacuum compatible, hermetically sealed all-weather enclosures are perfect for applications that require environmental protection for optical surfaces.



These features greatly simplify field operations such as bore-sighting and validating electro-optical systems such as surveillance and targeting.

Key features

- Purge in connectors: Standard ¼ NPT connection
- Purge in tubing required: ¼ in OD firm tubing for air
- Purge relief valve: Release pressure: [0.35 kg/cm^2] 5psi
- Humidity Indicator measure level: 20% to 50%

Compare to Standard LTHR

PROPERTIES	LTHR	LTHRAW
Dust - Water/Humidity Proof	No	IP67
Vacuum-compatibility	Yes	Yes
Mechanical Stability	Excellent	Excellent
Thermal Stability	Excellent	Excellent
Vibration	Very Good	Very Good
Shock Resistance	Excellent	Excellent
Protective Housing	Yes	Yes

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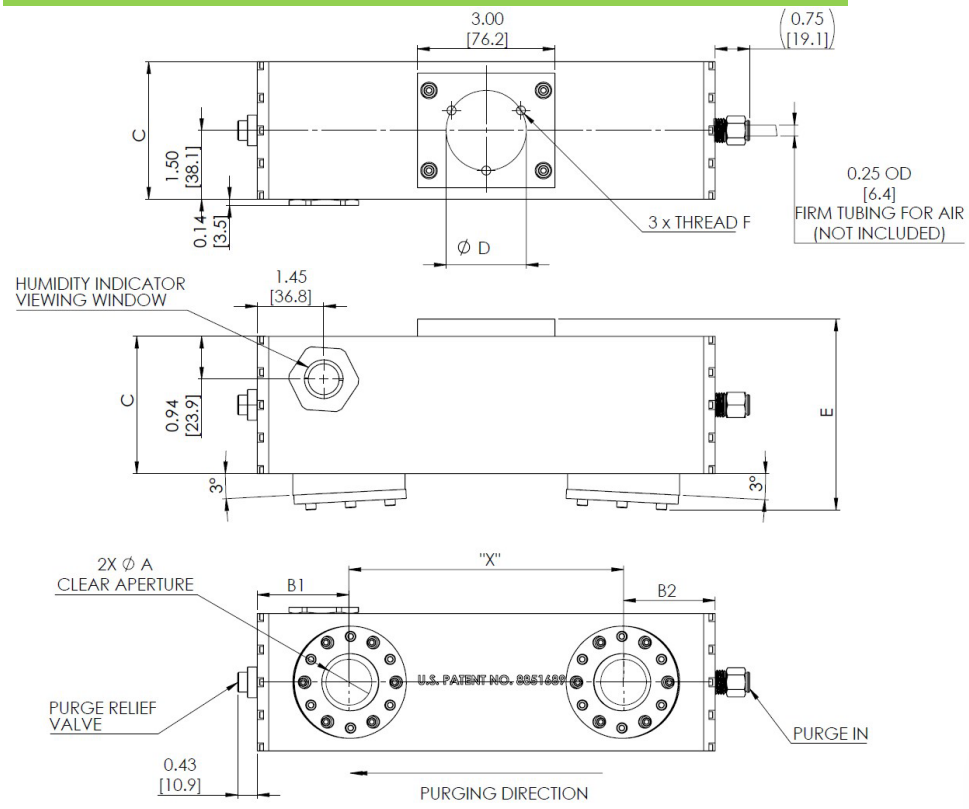
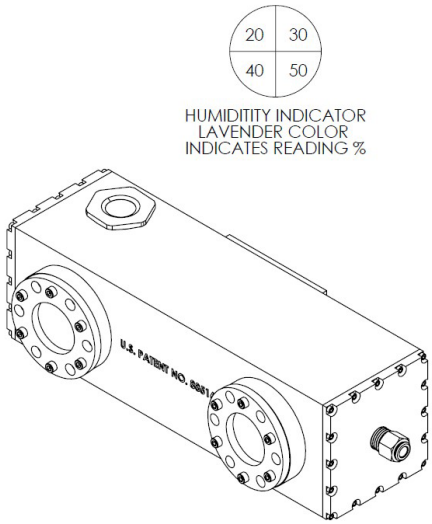
Outline Drawings





Item	X(in)	ΦA(in)	B1(in)	B2(in)	C(in)	D(in)	E(in)	THREAD F
L-10-AW	3.50-26.00	1.00	2	2	3.00	1.75	4.17	1/4 – 20 / M6
L-20-AW	4.50-26.00	2.00	2.5	2.5	5.00	1.75	6.17	1/4 – 20 / M6

Order Information

L-XX-AW-XX-XX.X Y

Clear Aperture (in/mm)		Exiting Beam Max Deviation (arc.sec.)	Beam separation (in)	Mirror Flatness (p.v.633nm)	Surface Quality (S-D)
10: 1.0/25	20: 2.0/51	1: 1.0	3.5/4.5-26.0	λ/10	80-50
10: 1.0/25	20: 2.0/51	2: 2.0	3.5/4.5-26.0	λ/10	80-50
10: 1.0/25	20: 2.0/51	5: 5.0	3.5/4.5-26.0	λ/8	80-50
10: 1.0/25	20: 2.0/51	10: 10.0	3.5/4.5-26.0	λ/4	80-50
10: 1.0/25	20: 2.0/51	30: 30.0	3.5/4.5-26.0	λ/2	80-50

Coating Type	WAVELENGTH RANGE (nm)	PER-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%