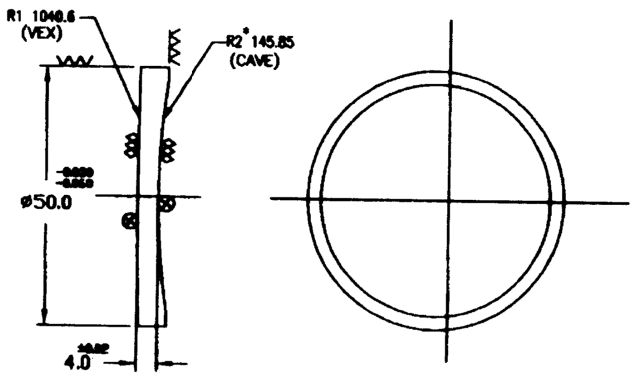
OPTICAL SPECIFICATIONS



MATERIAL	OPTICAL GRADE N TYPE MONO CRYSTALLINE GERMENIUM	
	SURFACE R1	SURFACE R2*
CLEAR APERTURE	47.3	44.9
POWER (RMS) at 632.8 nm	3	< 400nm(Pv)
IRREGULARITY (FRINGE at 632.8 nm	1	-
COSMETIC QUALITY	80-40	<15nm (Ra)
EDGE CHAMFER	NOMINAL CHAMFERING ON EDGES	
ECCENTRICITY	30 arc seconds	

Aspheric	K	A	B	C	D
R2*	8.748064	-0.346488E-06	-0.126501E-09	-0.199980E-14	-0.266628E-16

The sag(z) of the aspheric surface is given by the formula

$$Z = \frac{ch^2}{1+\sqrt{1-(1+k)c^2h^2}} + Ah^4 + Bh^6 + Ch^8 + Dh^{10} + \ldots\ldots\ldots$$

Where c is the curvature =(1/R), k denotes the conic coefficient & A,B,C,D are the 4th, 6th, 8th and 10th order coefficients respectively.

COATINGS : THE FOLLOWING SPECIFICATIONS APPLY TO BOTH SURFACES :

HIGH DURABILITY AR COATING FROM 3.6-4.9 µm.
SEVERE ABRASION AS PER MIL-C-48497A 4.5.5.1
SALT SOLUBILITY AS PER MIL-C-48497A 4.5.5.2.3
HUMIDITY AS PER MIL-C-48497A 4.5.3.2.(4)
TEMPERATURE AS PER MIL-C-48497A 4.5.4.1.(5)
SOLUBILITY AND CLEANABILITY AS PER MIL-C-48497A 4.5.4.2.(5)
ADHESION AS PER MIL-C-48497A 4.5.3.1

AVERAGE TRANSMISSION ≥ 95% AS MEASURED THROUGH 1 mm THICK WITNESS SAMPLE COATED IN THE SAME COATING RUN

VETTED
(A.K. GUPTA)
Sc E, IRDE

POLISHED FINE ◇◇◇ | GROUND FINE ⩛ | A.R. COATING ⊗

MATERIAL : AS ABOVE
FINISH : AS ABOVE

	NAME & SIG.	DATE
DRAWN BY	K S RANA	
CHECKED BY	KANCHAN CHANDRA	
CHECKED BY	RANBIR KANDAL	
APPROVED BY	P K SHARMA	
ISSUED BY		
USED ON		

SYMBOL	ZONE	ISSUE	AUTH.	DATE
⊛	COATINGS	1		

ALL DIMENSIONS ARE IN mm

TITLE:

LENS NO.2

INSTRUMENTS RESEARCH & DEVELOPMENT ESTABLISHMENT, DEHRA DUN

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