Double-Concave Lenses

A transparent optical component consisting of one or more pieces of optical lenses that they serve to converge or diverge the transmitted rays for the designed application.

Double-Concave lenses have two inward curved surfaces and a negative focal length. They are used for image reduction and to spread light.
It is often used to expand light beams ot to increase focal length in exiting system, and is normally used in combination with other lenses. In a single lens application you should consider using them in a preference to a single plano-convex lens. They are also useful in a variety of applications involving telescopes, radiometers, optical transceivers, projection systems, optical display systems and magnifiers etc..

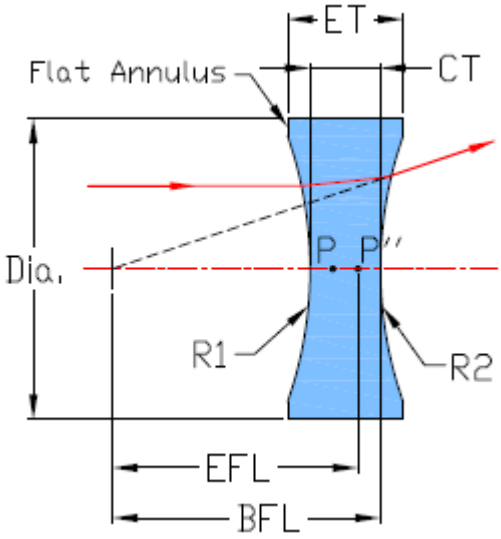
Except the standard specification as the list below, Egismos is willing to provide any kind special specification, optic designed lenses modules, optional coating or material substrate for optimum light transmission or customer's requirement in order to fit different applications.

Key features

- **High Precision Dimension:** Can be ordered as customer's requirement.
- **Optional Substrate Material:** BK7, fused silica, sapphire, CaF 2 and K9 as standard.Other materials lenses are available upon requirement.
- **Optional Coatings:** Can be ordered as an option or special designed coating.
- **High Reliability:** Glass lenses can sustain higher temperature and extreme enviroment conditions.
- **Special Designed Requirements or ODM:** Can be modified the specification or accuracy. Egismos also can design the new lenses for special requirements as ODM case.
- **Master Standard Test Plates(Lenses):** Egismos also can supply the extremely precision spherical lenses as the master test plates for measuring or high precision applications.

Standard Specifications (Can be specified by customer)

- Diameter Tolerance: +0.0/-0.1mm
- Thickness Tolerance:+/-0.1mm
- Centration:3 arc minutes
- Clear Aperture: >90% central area
- Paraxial Focal Length Tolerance: ±1%
- Surface Quality: 60/40 (scratch-dig) for standard
- Surface Figure:λ/4@633nm
- Cahamfer: <0.25mm x 45deg
- Standard Material and Coating: BK7 with uncoated
- Optional Material: Fused Silica, B270, CaF_2, F2, K5, K9, MgF_2, Sapphire, SF5, SF11
- Optional Coating: AR,IR,NI-AR,UV-AR, Visible Bandpass



Part No.	D(mm)	EFL(mm)	BFL(mm)	R1=R2(mm)	CT(mm)	ET(mm)	Material
O1-DV-6-08-G	6.0	-8.0	-8.62	-8.60	2.00	3.30	BK7
O1-DV-6-12-G	6.0	-12.0	-12.60	-12.77	2.00	2.70	BK7
O1-DV-6-18-G	6.0	-18.0	-18.60	-18.99	2.00	2.50	BK7
O1-DV-10-10-G	10.0	-10.0	-10.60	-10.70	2.00	4.50	BK7
O1-DV-12.7-20-G	12.7	-20.0	-20.60	-21.00	2.00	4.00	BK7
O1-DV-12.7-25-G	12.7	-25.0	-25.70	-26.25	2.00	3.60	BK7
O1-DV-12.7-30-G	12.7	-30.0	-30.70	-31.44	2.00	3.30	BK7
O1-DV-12.7-40-G	12.7	-40.0	-40.70	-41.80	2.00	3.00	BK7
O1-DV-12.7-50-G	12.7	-50.0	-50.70	-52.17	2.00	2.80	BK7
O1-DV-25.4-25-G	25.4	-25.0	-25.70	-26.25	2.00	3.60	BK7
O1-DV-25.4-35-G	25.4	-35.0	-35.70	-36.62	2.00	7.20	BK7
O1-DV-25.4-50-G	25.4	-50.0	-50.70	-52.17	2.00	5.10	BK7
O1-DV-25.4-75-G	25.4	-75.0	-75.70	-78.09	2.00	4.10	BK7
O1-DV-25.4-100-G	25.4	-100.0	-100.70	-104.00	2.00	3.60	BK7
O1-DV-25.4-125-G	25.4	-125.0	-125.70	-129.92	2.00	3.20	BK7
O1-DV-25.4-150-G	25.4	-150.0	-150.70	-155.83	2.00	3.00	BK7
O1-DV-25.4-200-G	25.4	-200.0	-200.70	-207.66	2.00	2.80	BK7
O1-DV-25.4-250-G	25.4	-250.0	-250.70	-259.49	2.00	2.60	BK7
O1-DV-25.4-300-G	25.4	-300.0	-300.70	-311.32	2.00	2.50	BK7
O1-DV-25.4-500-G	25.4	-500.0	-500.70	-518.64	2.00	2.30	BK7
O1-DV-25.4-1000-G	25.4	-1000.0	-1000.70	-1036.94	2.00	2.20	BK7