

# GAS PERMEABLE LENSES

A wide range of Gas Permeable materials with a choice of oxygen permeability in a variety of standard and specialist designs.

**DAVID THOMAS**  
*"an eye for excellence"*

## Introduction

David Thomas Contact Lenses only use Gas Permeable materials produced by the leading polymer laboratories and manufactured to exacting standards.

A wide choice of designs and materials allows the practitioner to select the best combination for a successful fitting.

DTCL have been manufacturing Gas Permeable Lenses for over thirty years and have built up a justifiable reputation for quality and service. We continue to invest in the latest automatic equipment to enable us to produce the highest quality contact lenses and to offer an efficient and reliable service.

Our highly experienced staff are always available to give you advice and information over the telephone on our wide range of lenses.

Gas Permeable Lenses are supplied with the option to have a comprehensive exchange and credit facility if required. We also offer a Gas Permeable Lens repolish and adjustment service.

## Lens Design

DTCL can manufacture and supply gas permeable lenses in a wide range of lens designs. However, based on experience over many years we have also developed our own successful standard lens designs.

Technologically advanced computerised lathes and checking equipment ensure consistently accurate lens parameters.

### Standard Ledaperm

Our Ledaperm design is a very well blended multicurve, developed to give a constant axial edge lift of 0.12mm. We have been supplying lenses in this spherical form for many years and it has become the most popular design ordered.

A large number of patients using gas permeable lenses in this country are successfully wearing lenses manufactured in the Ledaperm parameters. Ledaperm lenses are available in a wide range of base curves and powers. There is a choice of either 9.00mm or 9.60mm total diameter. The 9.00mm has an optic zone of 7.40mm and the 9.60mm has an optic zone of 7.80mm. Other diameters can be supplied on request.

To help determine the optimum lens parameters a computer program download is available from our website which has many useful features including suggested best fit for Ledaperm lenses and simulated fluorescein patterns displayed on screen.

Movement over the cornea should be smooth with no lateral slide. A steep fit is indicated by a dark peripheral fluorescein pattern and central pooling with the lens exhibiting a tendency to adhere to the cornea and have limited movement. A flat fitting lens will exhibit extreme fluorescein staining peripherally, apical touch and excessive lag upon blinking.

### Standard Profile Aspheric

The Profile Aspheric design incorporates a spherical optic zone, an innovative progressively flattening aspheric periphery and a uniform edge thickness design generated by advanced computerised lathes. The Profile design is a result of two years of clinical research and development in the United Kingdom and America. This has resulted in a lens that is easy to fit and closely follows the natural curvature of the cornea. The lenticular design maintains a thin overall lens profile with a uniform edge thickness throughout the power range reducing lens mass and increasing oxygen transmission.

The Profile Aspheric lens contour with its spherical optical zone and its progressively flattening aspheric periphery makes fitting easy and reduces chair time for the practitioner whilst increasing lens comfort and wearing times for the patient.

Experience has shown a high degree of first fit success when following the empirical fitting guide.

### Other Designs

Our wide range of materials are also available in other designs. We can manufacture gas permeable lenses with base curves between 4.80mm and 9.00mm, powers between plus and minus 30.00 dioptres and diameters from 7.50mm to 12.00mm. We are the exclusive U.K. manufacturer of the Rose K2 design for keratoconus patients. The Rose K system is now the most successful keratoconus lens worldwide. We are also the only British manufacturer producing lenses in Comfort O<sub>2</sub> material the world's first rigid gas permeable silicone hydrogel material.

### Fitting Guide

All of the materials we produce can be supplied in our standard designs or to practitioner's own specifications. A wide range of trial sets are available either for purchase or loan. Lenses can also be fitted empirically by quoting keratometry readings, HVID and spectacle Rx details including BVD, at the time of placing an order.

Alternatively, use the fitting table opposite or our computer program which can be downloaded from our website to compute the lens specification required.

When reducing the total diameter of a Ledaperm lens by 0.50mm steepen the BOZR by 0.05mm and compensate the power by adding minus 0.25D. When increasing the diameter by 0.50mm flatten the BOZR by 0.05mm and adjust the power by adding plus 0.25D.

An alteration in diameter of the Profile Aspheric design does not require any adjustment to the BOZR or power. Lenses ordered with exchange can be returned for two free exchanges for a period of ninety days from original order if the fit needs to be modified or alternatively they can be returned for a 75% credit within the ninety days.

# Empirical Fitting Guide

Flattest K Readings	LEDAPERM 9.60 Ø & PROFILE ASPHERIC				LEDAPERM 9.00 Ø			
	Initial Base Curve Selection Difference in K readings				Initial Base Curve Selection Difference in K Readings			
	Upto 0.05mm	Upto 0.10mm	Upto 0.20mm	Upto 0.30mm	Upto 0.05mm	Upto 0.10mm	Upto 0.20mm	Upto 0.30mm
7.20	7.25	7.20	7.15	7.10	7.20	7.15	7.10	7.05
7.25	7.30	7.25	7.20	7.15	7.25	7.20	7.15	7.10
7.30	7.35	7.30	7.25	7.20	7.30	7.25	7.20	7.15
7.35	7.40	7.35	7.30	7.25	7.35	7.30	7.25	7.20
7.40	7.45	7.40	7.35	7.30	7.40	7.35	7.30	7.25
7.45	7.50	7.45	7.40	7.35	7.45	7.40	7.35	7.30
7.50	7.55	7.50	7.45	7.40	7.50	7.45	7.40	7.35
7.55	7.60	7.55	7.50	7.45	7.55	7.50	7.45	7.40
7.60	7.65	7.60	7.55	7.50	7.60	7.55	7.50	7.45
7.65	7.70	7.65	7.60	7.55	7.65	7.60	7.55	7.50
7.70	7.75	7.70	7.65	7.60	7.70	7.65	7.60	7.55
7.75	7.80	7.75	7.70	7.65	7.75	7.70	7.65	7.60
7.80	7.85	7.80	7.75	7.70	7.80	7.75	7.70	7.65
7.85	7.90	7.85	7.80	7.75	7.85	7.80	7.75	7.70
7.90	7.95	7.90	7.85	7.80	7.90	7.85	7.80	7.75
7.95	8.00	7.95	7.90	7.85	7.95	7.90	7.85	7.80
8.00	8.05	8.00	7.95	7.90	8.00	7.95	7.90	7.85
8.05	8.10	8.05	8.00	7.95	8.05	8.00	7.95	7.90
8.10	8.15	8.10	8.05	8.00	8.10	8.05	8.00	7.95
8.15	8.20	8.15	8.10	8.05	8.15	8.10	8.05	8.00
8.20	8.25	8.20	8.15	8.10	8.20	8.15	8.10	8.05
8.25	8.30	8.25	8.20	8.15	8.25	8.20	8.15	8.10
8.30	8.35	8.30	8.25	8.20	8.30	8.25	8.20	8.15
8.35	8.40	8.35	8.30	8.25	8.35	8.30	8.25	8.20
8.40	8.45	8.40	8.35	8.30	8.40	8.35	8.30	8.25

## Trial Sets and Trial Lenses

Trial sets and trial lenses are available if required to assist you in the fitting of gas permeable lenses. All of our trial lenses are made in an appropriate gas permeable material as we strongly believe that patients being assessed for gas permeable wear should be fitted with a lens that exhibits the same fitting characteristics as the one that will eventually be supplied to the patient.

Standard Ledaperm, Profile Aspheric and Rose K system trial sets can be supplied. These sets together with a wide range of trial sets in different spherical, toric and high powers are also available from our extensive library of loan sets, free of charge for two weeks.

If you wish to purchase a non standard set then this can be supplied at our normal lens price less 50%.

Individual replacement lenses for the sets can be supplied for a small charge (see separate price list) if you wish to dispose of your trial lenses after use.



## Gas Permeable Lens Frequent Replacement Scheme

It is clinically accepted that frequent replacement of both soft and gas permeable lenses provides the healthiest option for patients. In view of this we operate a computerised frequent replacement scheme which enables us to send out new lenses automatically approximately one week before the due date.

Practitioners who register their patients on our frequent replacement scheme can elect to receive new lenses on a six monthly or yearly basis.

Lenses supplied on a six monthly basis are subject to a 30% reduction off list price and on a yearly basis 25% reduction off list price.

Patients will benefit and should be encouraged to replace their gas permeable lenses on a regular basis.

# Gas Permeable Material Choice

We offer a wide range of materials from the major polymer suppliers. All of the materials we use are tested for stability and suitability for contact lens manufacture.

Our aim is to make available to practitioners and patients a comprehensive choice of versatile materials that result in successful gas permeable lens wear.

We are always available to discuss specific patient requirements with you and recommend a suitable material or design.

Material Name	DK (Fatt)	Blue	Tints Available 0 = With UV filter 1 = No UV Filter						
			Grey	Light Green	Medium Green	Brown	Ice Blue	Violet	Clear
Boston II	12	1		1					1
Fluorolens 15	18	1	1	1	1				1
Boston ES	18	0	0	0			0		
Boston IV	19	1							1
Hybrid FS	23	1	1	1					1
Boston RXD	24						0		
Optimum Classic	26	0	0	0					0
Fluorolens 25	26	1	1						1
Fluoroperm 30	30	0	0	0					
Boston Equalens	47	0							0
Comfort O2	56	0	0						
Fluorolens 50	56	1	1						1
Paragon HDS	58	0,1		0					
Boston EO	58	0	0	0			0		
Fluoroperm 60	60	0		0					
Optimum Comfort	65	0	0	0					0
Fluorolens 70	75	1	1						1
Boston Equalens II	85	0							
Fluoroperm 90	92	0		0					
Optimum Extra	100	0	0	0					0
Boston XO	100	0		0			0	0	
Fluorolens 90	102	1	1						1
Optimum Extreme	125	0	0	0					0
Paragon HDS 100	145	1		1					
Fluoroperm 151	151	0							

## Gas Permeable Lens Adjustment Service

BOZR	No alteration possible
Intermediate and Edge Curves	Can be flattened to increase edge lift where edge substance is adequate and blending can be increased
Total Diameter	Can be reduced
Optical and Intermediate Curve Diameters	Can be reduced
Edge Profile	Can be reshaped and modified usually causing no significant reduction in overall diameter
Power	Where centre substance is adequate the following power adjustments can be undertaken on gas permeable materials: Maximum minus power addition -0.75D Maximum plus power addition +0.50D Due to complex polymer construction some materials cannot be adjusted by the maximum amount.
Centre Substance	No alteration possible
Edge Substance	Can be reduced

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