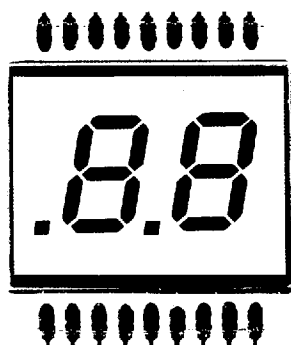




## STANDARD LCD GLASS

Offering ready-made design solutions for most display applications, the Anders range of standard liquid crystal displays includes numeric, alphanumeric and dot matrix displays in a variety of character formats and sizes.



Each display is available in a full range of polariser types, grades, colours and modes, with a choice of viewing angles, connection

formats, and working temperature ranges.

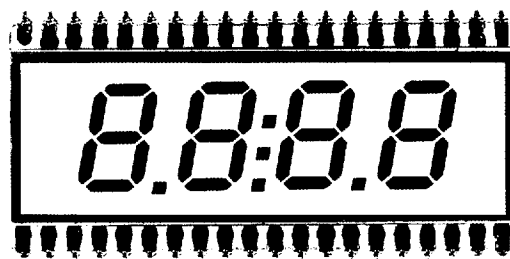
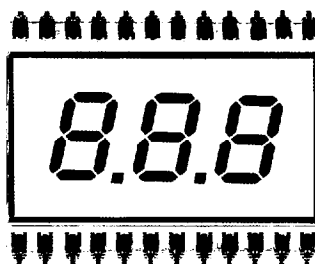
A wide range of accessories, including mounting bezels and backlighting, is also available.

To supplement the information in this catalogue, we can provide detailed drawings and technical specifications on request.

Manufactured to the highest standards under strict quality control, Anders displays in your equipment ensure trouble-free service and make the most of the flexibility offered by LCD

technology. You will find our prices very

competitive too, for that extra marketing edge in your products.



### FEATURES

- WIDE RANGE OF DIGIT FORMATS
- WIDE RANGE OF OPERATING TEMPERATURES
- VARIETY OF POLARISER OPTIONS AND COLOURS
- DIFFERENT INTERCONNECT FORMATS AVAILABLE

- NEGATIVE MODE CAPABILITY

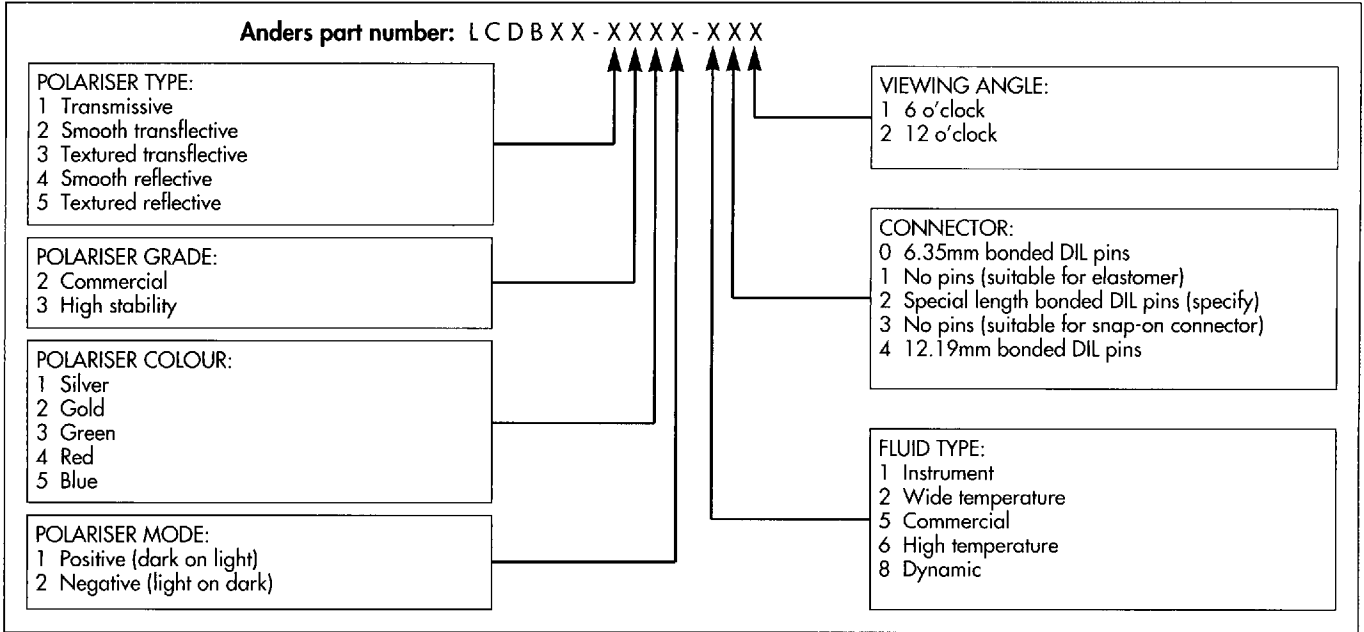
## TYPICAL PERFORMANCE SPECIFICATIONS

|                                 | Instrument Grade | Wide Temperature | Commercial & Dynamic Grade             | High Temperature |
|---------------------------------|------------------|------------------|--|------------------|
| Operating voltage:              | 3V               | 5V               | 3.0V                                   | 5V               |
| Allowable DC drive component:   |                  |                  | 50mV                                   |                  |
| Operating frequency range:      |                  |                  | 60.0Hz                                 |                  |
| Total operating current:        |                  |                  | 5.0µA                                  |                  |
| DC resistance:                  |                  |                  | 50.0MΩ                                 |                  |
| Contrast ratio:                 |                  |                  | 20:1                                   |                  |
| Rise/decay time (tr/td) @ 25°C: | 30/100ms         | 10/45ms          | 75/150ms                               | 45/75ms          |
| Rise/decay times (tr/td) @ 0°C: | 250/400ms        | 120/200ms        | 350/500ms                              | 150/250ms        |
| Viewing angle (horizontal):     |                  |                  | ±45°                                   |                  |
| Viewing angle (vertical):       |                  |                  | +50 to -35°                            |                  |
| Operating temperature range:    | -20/+60°C        | -20/+85°C        | -10/+55°C<br>-10/+65°C (dynamic grade) | -10/+90°C        |
| Maximum storage temperature:    |                  |                  | -55°C                                  |                  |
| Expected life:                  | 50kh             | 100kh            | 50kh                                   | 100kh            |

Note: these are typical specifications for general reference only. Please confirm specification for individual displays with Anders before proceeding with design.



## SPECIFICATION GUIDE



## SELECTION GUIDE

| Part No | Digits | Annunciators, DM etc | Width x Height | Char Height | No of Pins |
|---------|--------|----------------------|----------------|-------------|------------|
| LCDB01  | 3      |                      | 30.48 x 22.86  | 8.89        | 24         |
| LCDB02  | 2      |                      | 28.0 x 30.48   | 12.70       | 18         |
| LCDB03  | 4      |                      | 50.8 x 22.86   | 8.89        | 40         |
| LCDB04  | 4      |                      | 50.8 x 30.48   | 12.70       | 40         |
| LCDB05  | 4      |                      | 69.85 x 38.10  | 17.78       | 40         |
| LCDB06  | 3.5    | + ←                  | 50.80 x 22.86  | 8.89        | 40         |
| LCDB07  | 4.5    | + ←                  | 50.80 x 30.48  | 10.16       | 40         |
| LCDB08  | 3.5    | + LOBAT              | 50.80 x 30.48  | 12.70       | 40         |
| LCDB09  | 4.5    | + ←                  | 50.80 x 22.86  | 8.89        | 40         |
| LCDB10  | 3.5    | + ←                  | 50.80 x 30.48  | 12.70       | 40         |
| LCDB11  | 1      | 5 x 7 DM             | 45.72 x 63.50  | 48.16       | 36         |
| LCDB12  | 3.5    | + ←                  | 69.85 x 38.10  | 17.78       | 40         |
| LCDB13  | 5      |                      | 50.80 x 30.48  | 10.16       | 40         |
| LCDB14  | 6      |                      | 69.85 x 30.48  | 12.70       | 50         |
| LCDB15  | 1      | 5 x 7 DM             | 31.29 x 50.24  | 35.00       | 39         |
| LCDB16  | 8      |                      | 93.85 x 30.48  | 12.70       | 68         |
| LCDB17  | 6      |                      | 93.85 x 38.10  | 17.78       | 50         |
| LCDB18  | 4      |                      | 23.90 x 14.00  | 6.80        | 32         |
| LCDB19  | 1      | 5 x 7 DM             | 57.15 x 82.55  | 69.85       | 38         |
| LCDB20  | 4      |                      | 93.98 x 45.72  | 25.40       | 40         |
| LCDB24  | 4.5    | + LOBAT              | 50.80 x 30.48  | 10.16       | 40         |
| LCDB25  | 3.75   | ) AM PM              | 50.80 x 22.86  | 8.89        | 29         |
| LCDB26  | 3.5    | + BAT                | 50.70 x 30.40  | 12.70       | 40         |
| LCDB28  | 5      |                      | 81.28 x 38.10  | 17.78       | 50         |
| LCDB29  | 6      |                      | 137.16 x 45.72 | 25.40       | 70         |
| LCDB31  | 12     | STARBURST            | 80.20 x 21.90  | 7.00        |            |
| LCDB32  | 4.5    | + ←                  | 93.85 x 45.72  | 20.32       | 40         |
| LCDB33  | 5      |                      | 114.30 x 45.72 | 25.40       | 50         |

DM and Graphics formats are also available.