Parking and Traffic

⇒ **LCD or LED technique**
⇒ **Display of arrows, free/full, stop**
⇒ **with or without housing**

GENERAL

The displays concerning parking and traffic include on the one hand the complete range of our alphanumerical displays. On the other hand we deliver special displays with symbols like arrows in several sizes, stop symbols, graphical pictures and free/full-displays.

The parking and traffic displays can be used for indoor as well as outdoor purposes. The free/full-displays and those with the arrows are also available as assembly modules without housings.

Thanks to the mature control and the special production technology by Brandmaier our displays are able to stand extreme environmental conditions, e.g.the enormous temperature variations of partly more than 100°C.

APPLICATION FIELDS

These displays are used in places where the stationary and the moving traffic has to be guided and has to be informed as fast as possible. By doing so the necessary information can be provided earlier and much faster and the flow of traffic can be maintained.

Typical applications are:

- Parking garages
- Access roads to parking garages
- Information for pedestrians
- Information for the moving traffic
- Number of free parking spaces
- Direction indicator
- Departure displays
- Schedule information

TECHNIQUE

You can get the displays in LED and in LCD technique. Both variants are available in single- and double-sided construction with different mounting possibilities.

Concerning LCD technique we use high-quality glasses which have a temperature range of
-25°C up to +85°C. Even at extreme temperatures these glasses show optimal reading characteristics.The backlighting can be realized with conventional neon lamps as well as with bright white LEDs.

Concerning LED displays for the outdoor application we use very bright and oval LEDs, which have a very wide viewing angle. These LEDs are perfectly readable even if the sun is shining directly into the display.

All displays operate standardly with 230 VAC or 24 VDC. Other mains supplies can be delivered on request.

The housings are powder-coated with the standard colour RAL 5007. But of course they also can be delivered in all other RAL colours according to customers' wishes.

<u>LED technique</u>

- Readable in direct sunshine
- Automatic brightness control of the LEDs according to the daylight
- Very wide viewing angle of the LED's (110° horizontal, 55° vertical)
- Single- and double-coloured displays are possible
- absolutely noiseless
- service-friendly construction
- front panel made of polycarbonate antireflex (optional also ESG glass)

Standard character height:100, 120, 240, 365, 480, 730 mm
If you are interested in other character heights please have a look at our brochure 'alphanumerical displays'

Character colours: red, yellow, green, blue, white

LCD technique

Liquid crystal displays are passive displays. With controlled voltage in defined segments the translucence can be switched.

The LCD displays are also excellently readable in direct sunshine and from wide viewing angles. The characters can be displayed in the 7-segment font, in the 38-segment font, in the 88-segment font and also in the graphical matrix representation.

When using the matrix cells you can show graphic symbols up to a certain degree. LCD displays are generally single-coloured.

The LCD glasses exist in two variants, transflective as well as reflective. With the transflective variant the LCD glasses are backlighted by a conventional neon lamp so that the characters can be read also by night without any problems.
Concerning the reflective variant the light which is shining into the display is reflected so that backlighting is not necessary. In this case it is possible to get very small housing depths. However if you would like to read these displays also by night they have to be spotlighted from outside.

- readable in direct sunshine
- absolutely noiseless
- high-contrast display of the characters in yellow colour on a dark background or in white colour on a blue background
- very wide viewing angle (approx. 140°)
- transflective und reflective variant
- service-friendly construction

7-segment font

The 7-segment font is used for numerical purposes. All numbers, some letters and special characters can be displayed.

Standard character height:	100, 150, 250 mm
Character colours:	yellow font on dark background white font on blue background
Module technique:	transflective (with backlighting of the LCD glasses) reflective (without backlighting, because of utilisation of the surrounding light)
Character set:	all numbers 0-9, some letters and special characters
Viewing angle:	140°

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38-segment font

The 38-segment font is used for alphanumerical purposes. All numbers, all capital letters and some special characters are represented.

Standard character height:	22, 60, 120, 160, 250 mm
Character colours:	yellow font on a dark background white font on a blue background
Module technique:	transflective (with backlighting of the LCD glasses) reflective (without backlighting, because of utilisation of the surrounding light)
Character set: characters	all numbers 0-9, all capital letters, some special
Viewing angle:	140 °

We can produce as long lines as required and any number of lines one after the other. The number of characters per line depends on the number of characters per LCD glass. This differs according to the character height.

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88-segment font

The 88-segment font is used for alphanumerical purposes. All numbers, all capital and small letters, all special characters as well as all umlauts are represented.

Standard character height:	60, 120, 160 mm
Character colours:	yellow font on a dark background white font on a blue background
Module technique:	transflective (with backlighting of the LCD glasses) reflective (without backlighting, because of utilisation of the surrounding light)
Character Set:	all numbers 0-9, all capital and small letters, all special characters, all umlauts
Viewing angle:	140 °

We can produce as long lines as required and any number of lines one after the other. The number of characters per line depends on the number of characters per LCD glass. This differs according to the character height.

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Matrix standard

With the matrix standard the complete ASCII-code can be displayed excellently. It is particularly well suited to create graphics of all kinds. The matrix standard shows a very good resolution when displaying information.

Application fields: -   bus- and railway displays
                                   -   sports displays
                                   -   industrial displays
                                   -   information displays
                                   -   display of pictograms and logos

These modules have a height of 16 pixel rows. That means, you can display 1 big line with 16 pixel rows or 2 smaller lines with only 8 pixel rows each.

Standard character height:	60, 120, 160 mm other character heights on request
Font types:	standard font (each character has the same width) proportional font
Character colours:	yellow font on a dark background white font on a blue background
Module technique:	transflective (with backlighting of the LCD glasses) reflective (without backlighting, because of utilisation of the surrounding light)
Character set:	ASCII-code
Viewing angle:	readability up to 140 °
Temperature range:	operation and storage of the LCD glasses: -25°C to +85°C

We can produce long lines as required by setting several LCD glasses side by side. However a seamless line-up of the glasses is not possible because there is always a gap of some millimetres that remains free between two pixel rows.
Of course for a pure display of lines you can line up any number of glasses one under the other.

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Matrix high-resolution

The matrix high-resolution can be used for the complete ASCII-code. It is also possible to display graphics with a high resolution. This font is very well suited for writing double-spaced information.

Application fields: -   bus- and railway displays
                      -   sports displays
                      -   industrial displays
                      -   information displays
                      -   display of pictograms and logos

These modules have a height of 26 pixel rows. That means, you can display 1 big line with 26 pixel rows or 2 smaller lines with only 13 pixel rows each. With the help of this resolution also one ascender and one descender each can be included.

Standard character height: 100, 240 mm
                                    other character heights on request

Font types: standard font (each character has the same width)
                                    proportional font

Character colours: yellow font on a dark background
                                    white font on a blue background

Module technique: transflective (with backlighting of the LCD glasses)
                                    reflective (without backlighting, because of utilisation of
                                    the surrounding light)

Character set: ASCII-code

Viewing angle: readability up to 140 °

Temperature range: operation and storage of the LCD glasses: -25°C to
+85°C

We can produce long lines as required by setting several LCD glasses side by side.
However a seamless line-up of the glasses is not possible because there is always a gap of some millimetres that remains free between two pixel rows.
Of course for a pure display of lines you can line up any number of glasses one under the other.

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Matrix ultra-high-resolution

The matrix ultra-high-resolution can be used to display fonts, graphic characters, numbers and graphics with a very high resolution. This font is particularly well suited for the display of multi-line information. You can clearly display up to 6 lines.

Application fields: -   bus- and railway displays
                        -   sports displays
                        -   industrial displays
                        -   general information and communication displays
                        -   display of pictograms and logos

These modules have a height of 52 pixel rows. That means, you can display 1 big line with 52 pixel rows or 2 smaller lines with only 26 pixel rows each. Also is it possible to create 4 smaller lines with 13 pixel rows each or even the smallest font of 6 small lines with only 8 pixel rows each.

Standard character height:	150, 240 mm other character heights on request
Font types:	standard font (each character has the same width) proportional font
Character colours:	yellow font on a dark background white font on a blue background
Module technique:	transflective (with backlighting of the LCD glasses) reflective (without backlighting, because of utilisation of the surrounding light)
Character set:	ASCII-code
Viewing angle:	readability up to 140 °
Temperature range:	operation and storage of the LCD glasses: -25°C to +85°C

We can produce long lines as required by setting several LCD glasses side by side.
However a seamless line-up of the glasses is not possible because there is always a gap of some millimetres that remains free between two pixel rows.
Of course for a pure display of lines you can line up any number of glasses one under the other.

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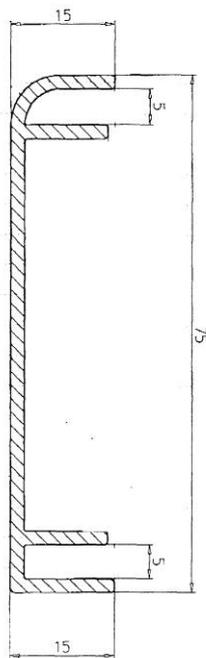INFORMATIVE LEUCHTANZEIGEN

INTERFACES

- 0/4..20 mA
- 0..10 V

- RS 232 or RS 485
- Current Loop 20 mA

- Binary code
- BCD code
- Pulse input (potential-free or active)
- Counting input

- Profibus
- Ethernet (TCP/IP)

- Radio frequency with 433,70 MHz
- GSM

Adjustment to other protocols is always possible.

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THE HOUSINGS

Housing of the Series AL075

construction	1-or 2-sided
application field	only indoor
depth:	75 mm
housing material:	aluminium profile
housing colour:	standard: powder-coated in RAL 5007; other RAL-colours also deliverable
open the housing:	at the left or right side

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Housing of the Series D120

construction: 1- or 2-sided
application field: indoor and outdoor
                       weatherproof and especially suitable for outdoor purposes.
                       As the housing has a forced ventilation, under normal
                       conditions there is no condensation inside the housing.
depth   120 mm
housing materiall: double section aluminium profile
housing colour: standard: silver anodized, seawater-resistant aluminium alloy
                       option: all RAL-colours deliverable
open the housing: from the front: Please unlock the front door and turn it up. The
                       front door will be kept open by gas-pressurized springs.
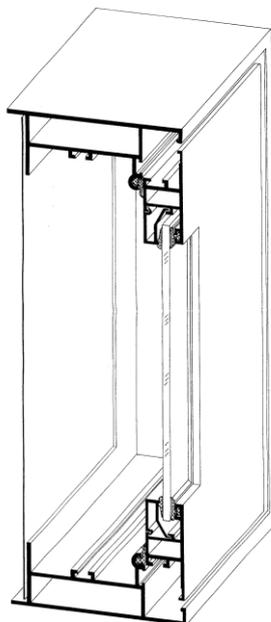
Open the housing by gas-pressurized springs.
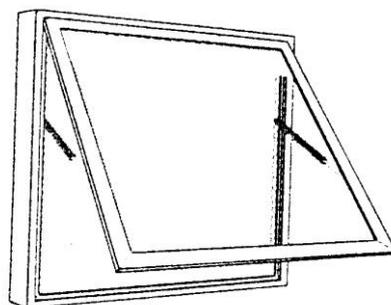
Arrow Displays

Arrow length	designation
75 mm	AR 75
150 mm	AR 150

Colours: red, yellow, green, blue, white

Designation for ordering:

AR XX – SY
That means:

 XX: character height 75 or 150 mm
 S: brightness of LED's: S: for direct sunlight, without S: standard
 Y: colour of LED's:
   R = red
   Y = yellow
   G = green
   B = blue
   W = white

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