






# Standard Keyboards

|   |                       |                   |
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#### Technical Data

All information contained herein is solely intended for product description and shall not be interpreted as warranted qualities in a legal sense. Any claims for damages against us – regardless for which legal basis – shall be excluded unless we should be liable for intent or gross negligence.

Subject to technical modification. Minor deviations in colour are possible for printing-technology reasons.

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Keyboard Type A Series  
 RAFI RF 15 short-travel keys  
 under an overlay

## Type A Series General Data

The RAFI flat data entry panels of the Type A series are protected against dirt, dust and splash water by a polyester foil and are easy to clean. They are therefore especially recommended for use in workshops and laboratories as well as for medical technology and food handling applications with high demands on hygiene.

### RAFI RF 15 short-travel keys

The RF 15 short-travel keys provide an excellent tactile feedback for the Type A keyboards. In combination with the embossed areas over the keys, high operating comfort and reliable data entry are achieved. The RF 15 short-travel keys are provided with gold/gold contacts and offer LED indicators to signalize a switch on/off status.

### CE Conformity

The Type A keyboards comply with the EC Directive 89/336, which includes:

- EN 61000-6-4/EN 55022-B (emitted interference)
- EN 61000-6-2/EN 55024-B (interference immunity)

### Resistance to Climate to IEC

The Type A keyboards are climate-proof according to the following standards:

- Static environment to IEC 600 68-2-3 and 2-30
- Dynamic environment to IEC 600 68-2-14 and 2-33

### Technical Data

|                     |   |
|---------------------|---|
| Keys                | RAFI RF15   |
| Actuating travel    | 0.5 <sup>+0.2</sup> mm  |
| Operating life      | ≥ 1 million actuations  |
| Ambient temperature | <ul style="list-style-type: none"> <li>• Operation 0°C ... + 55°C</li> <li>• Storage - 25°C ... + 65°C</li> </ul> |
| Input mode          | N-key roll-over   |

### Symbols Used



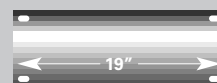
Degree of protection according to DIN 40050. For front panel versions, specified for front side when installed properly.

IP 68 = Protection against dust and continuous submersion in 1 m of water

IP 65 = Protection against dust and water-jets

IP 54 = Protection against dust and splash water

IP 40 = No protection against ingress of water



Suitable for installation in 19" racks or for placing in a 19" drawer with 1HU.

### Registered Trademarks

IBM is a registered trademark of IBM Corporation.

MouseSystems is a registered trademark of MouseSystems Corporation.

Microsoft is a registered trademark of Microsoft Corporation.



A9 with mouse button,  
USB

#### Type A9 Features

- Keyboard, mouse button and mini-joystick are water-jet proof IP 65 according to DIN 40050.
- Mouse button and mini-joystick are compatible with Microsoft mouse or PS/2 mouse.

#### Technical Characteristics of Pointing Device

- The pointing device unit consists of the left and right mouse keys and – depending on the version – the mouse button or mini-joystick in the middle.
- When the mouse button or mini-joystick is actuated, the force and direction are detected by a sensor and interpreted for cursor/mouse control by an electronic module.
- The higher the pressure, the faster the movement of the cursor/mouse pointer.
- The device/cursor relation can be configured with the driver software included.
- No moving parts, i.e. long service life and high reliability.
- Service life of mouse button > 10 million actuations
- Service life of left/right mouse key > 1 million actuations

#### INFO

#### USB interface

(USB = Universal Serial Bus)  
Standardised interface for periphery devices. The devices can be connected with the PC running and are automatically detected. Up to 127 periphery devices can be connected to a PC using hubs or devices with hub functionality. The RAFI USB low-speed device types do not have a hub functionality, i.e. it is not possible to connect additional devices to the keyboard.



A9 with mini-joystick,  
PS/2 mouse

A9 without pointing device, PS/2



| A9 Metal Housing Desktop Version | Keyboard interface | Mouse interface        | Cable                            | Dimensions (mm) | Layout | Order no.         |
|----------------------------------|--------------------|------------------------|----------------------------------|-----------------|--------|-------------------|
| Without pointing device          | USB                | –                      | Straight cable;<br>1 x USB plug  | 447 x 213 x 40  | German | 3.99.202.934/0100 |
|                                  |                    |                        |                                  |                 | US     | 3.99.202.934/0200 |
|                                  |                    |                        |                                  |                 | French | 3.99.202.934/0500 |
|                                  |                    |                        |                                  |                 | UK     | 3.99.202.934/0300 |
| Without pointing device          | PS/2               | –                      | Straight cable;<br>1 x PS/2 plug | 447 x 213 x 40  | German | 3.99.202.936/0100 |
|                                  |                    |                        |                                  |                 | US     | 3.99.202.936/0200 |
|                                  |                    |                        |                                  |                 | French | 3.99.202.936/0500 |
|                                  |                    |                        |                                  |                 | UK     | 3.99.202.936/0300 |
| With mouse button                | USB                | USB,<br>integrated hub | Straight cable;<br>1 x USB plug  | 447 x 213 x 40  | German | 3.99.202.935/0101 |
|                                  |                    |                        |                                  |                 | US     | 3.99.202.935/0201 |
|                                  |                    |                        |                                  |                 | French | 3.99.202.935/0501 |
|                                  |                    |                        |                                  |                 | UK     | 3.99.202.935/0301 |
| With mouse button                | PS/2               | PS/2 mouse             | Straight cable;<br>2 x PS/2 plug | 447 x 213 x 40  | German | 3.99.202.937/0101 |
|                                  |                    |                        |                                  |                 | US     | 3.99.202.937/0201 |
|                                  |                    |                        |                                  |                 | French | 3.99.202.937/0501 |
|                                  |                    |                        |                                  |                 | UK     | 3.99.202.937/0301 |
| With mini-joystick               | USB                | USB,<br>integrated hub | Straight cable;<br>1 x USB plug  | 447 x 213 x 40  | German | 3.99.202.935/0102 |
|                                  |                    |                        |                                  |                 | US     | 3.99.202.935/0202 |
|                                  |                    |                        |                                  |                 | French | 3.99.202.935/0502 |
|                                  |                    |                        |                                  |                 | UK     | 3.99.202.935/0302 |
| With mini-joystick               | PS/2               | PS/2 mouse             | Straight cable;<br>2 x PS/2 plug | 447 x 213 x 40  | German | 3.99.202.937/0102 |
|                                  |                    |                        |                                  |                 | US     | 3.99.202.937/0202 |
|                                  |                    |                        |                                  |                 | French | 3.99.202.937/0502 |
|                                  |                    |                        |                                  |                 | UK     | 3.99.202.937/0302 |

A9



A9 in front panel with mini-joystick,  
USB



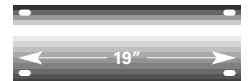
| A9 Front Panel Version  | Keyboard interface | Mouse interface        | Cable                            | Dimensions (mm)                                 | Layout | Order no.         |
|-------------------------|--------------------|------------------------|----------------------------------|---|--------|-------------------|
| Without pointing device | USB                | –                      | Straight cable;<br>1 x USB plug  | 433.4 x 177 x 15<br>For drawing,<br>see page 19 | German | 3.99.202.914/0100 |
|                         |                    |                        |                                  |   | US     | 3.99.202.914/0200 |
|                         |                    |                        |                                  |   | French | 3.99.202.914/0500 |
|                         |                    |                        |                                  |   | UK     | 3.99.202.914/0300 |
| Without pointing device | PS/2               | –                      | Straight cable;<br>1 x PS/2 plug | 433.4 x 177 x 15<br>For drawing,<br>see page 19 | German | 3.99.202.916/0100 |
|                         |                    |                        |                                  |   | US     | 3.99.202.916/0200 |
|                         |                    |                        |                                  |   | French | 3.99.202.916/0500 |
|                         |                    |                        |                                  |   | UK     | 3.99.202.916/0300 |
| With mouse button       | USB                | USB,<br>integrated hub | Straight cable;<br>1 x USB plug  | 433.4 x 177 x 15<br>For drawing,<br>see page 19 | German | 3.99.202.915/0101 |
|                         |                    |                        |                                  |   | US     | 3.99.202.915/0201 |
|                         |                    |                        |                                  |   | French | 3.99.202.915/0501 |
|                         |                    |                        |                                  |   | UK     | 3.99.202.915/0301 |
| With mouse button       | PS/2               | PS/2 mouse             | Straight cable;<br>2 x PS/2 plug | 433.4 x 177 x 15<br>For drawing,<br>see page 19 | German | 3.99.202.917/0101 |
|                         |                    |                        |                                  |   | US     | 3.99.202.917/0201 |
|                         |                    |                        |                                  |   | French | 3.99.202.917/0501 |
|                         |                    |                        |                                  |   | UK     | 3.99.202.917/0301 |
| With mini-joystick      | USB                | USB,<br>integrated hub | Straight cable;<br>1 x USB plug  | 447 x 213 x 40                                  | German | 3.99.202.915/0102 |
|                         |                    |                        |                                  |   | US     | 3.99.202.915/0202 |
|                         |                    |                        |                                  |   | French | 3.99.202.915/0502 |
|                         |                    |                        |                                  |   | UK     | 3.99.202.915/0302 |
| With mini-joystick      | PS/2               | PS/2 mouse             | Straight cable;<br>2 x PS/2 plug | 433.4 x 177 x 15<br>For drawing,<br>see page 19 | German | 3.99.202.917/0102 |
|                         |                    |                        |                                  |   | US     | 3.99.202.917/0202 |
|                         |                    |                        |                                  |   | French | 3.99.202.917/0502 |
|                         |                    |                        |                                  |   | UK     | 3.99.202.917/0302 |

# STANDARD KEYBOARDS

# A9



A9 in 19" front panel with mouse button,  
PS/2 mouse



| A9 Front Panel Version 19" 4HU | Keyboard interface | Mouse interface        | Cable                            | Dimensions (mm)                                  | Layout | Order no.         |
|--------------------------------|--------------------|------------------------|----------------------------------|--|--------|-------------------|
| Without pointing device A9     | USB                | –                      | Straight cable;<br>1 x USB plug  | 482.6 x 1778 x 35<br>For drawing,<br>see page 19 | German | 3.99.202.994/0100 |
|                                |                    |                        |                                  |  | US     | 3.99.202.994/0200 |
|                                |                    |                        |                                  |  | French | 3.99.202.994/0500 |
|                                |                    |                        |                                  |  | UK     | 3.99.202.994/0300 |
| Without pointing device        | PS/2               | –                      | Straight cable;<br>1 x PS/2 plug | 482.6 x 1778 x 35<br>For drawing,<br>see page 19 | German | 3.99.202.996/0100 |
|                                |                    |                        |                                  |  | US     | 3.99.202.996/0200 |
|                                |                    |                        |                                  |  | French | 3.99.202.996/0500 |
|                                |                    |                        |                                  |  | UK     | 3.99.202.996/0300 |
| With mouse button              | USB                | USB,<br>integrated hub | Straight cable;<br>1 x USB plug  | 482.6 x 1778 x 35<br>For drawing,<br>see page 19 | German | 3.99.202.995/0101 |
|                                |                    |                        |                                  |  | US     | 3.99.202.995/0201 |
|                                |                    |                        |                                  |  | French | 3.99.202.995/0501 |
|                                |                    |                        |                                  |  | UK     | 3.99.202.995/0301 |
| With mouse button              | PS/2               | PS/2 mouse             | Straight cable;<br>2 x PS/2 plug | 482.6 x 1778 x 35                                | German | 3.99.202.997/0101 |
|                                |                    |                        |                                  |  | US     | 3.99.202.997/0201 |
|                                |                    |                        |                                  |  | French | 3.99.202.997/0501 |
|                                |                    |                        |                                  |  | UK     | 3.99.202.997/0301 |
| With mini-joystick             | USB                | USB,<br>integrated hub | Straight cable;<br>1 x USB plug  | 447 x 213 x 40                                   | German | 3.99.202.995/0102 |
|                                |                    |                        |                                  |  | US     | 3.99.202.995/0202 |
|                                |                    |                        |                                  |  | French | 3.99.202.995/0502 |
|                                |                    |                        |                                  |  | UK     | 3.99.202.995/0302 |
| With mini-joystick             | PS/2               | PS/2 mouse             | Straight cable;<br>2 x PS/2 plug | 482.6 x 1778 x 35                                | German | 3.99.202.997/0102 |
|                                |                    |                        |                                  |  | US     | 3.99.202.997/0202 |
|                                |                    |                        |                                  |  | French | 3.99.202.997/0502 |
|                                |                    |                        |                                  |  | UK     | 3.99.202.997/0302 |

- The backside of the keyboard is protected by a metal housing

### INFO

#### 19" standard

The 19" standard is a generic term referring to all standards and

dimensions specified in DIN 41494 Part 1–5. Front panel width: 19" = 482.6 mm. Front panel

height (= HU): 1 HU = 44.45 mm  
Standard inside dimensions of a 19" drawer: < 420 mm



A9 in 19" drawer, 1 HU  
without pointing device,  
PS/2



| A9 Drawer<br>Version 19" 1HU | Keyboard<br>interface | Mouse<br>interface     | Cable                            | Dimensions<br>(mm)                    | Layout | Order no.         |
|------------------------------|-----------------------|------------------------|----------------------------------|---------------------------------------|--------|-------------------|
| Without<br>pointing device   | USB                   | –                      | Straight cable;<br>1 x USB plug  | 482.2 (19") x<br>44.45 (1HU) x<br>310 | German | 3.99.202.944/0100 |
|                              |                       |                        |                                  |                                       | US     | 3.99.202.944/0200 |
|                              |                       |                        |                                  |                                       | French | 3.99.202.944/0500 |
|                              |                       |                        |                                  |                                       | UK     | 3.99.202.944/0300 |
| Without<br>pointing device   | PS/2                  | –                      | Straight cable;<br>1 x PS/2 plug | 482.6 (19") x<br>44.45 (1HU) x<br>310 | German | 3.99.202.946/0100 |
|                              |                       |                        |                                  |                                       | US     | 3.99.202.946/0200 |
|                              |                       |                        |                                  |                                       | French | 3.99.202.946/0500 |
|                              |                       |                        |                                  |                                       | UK     | 3.99.202.946/0300 |
| With<br>mouse button         | USB                   | USB,<br>integrated hub | Straight cable;<br>1 x USB plug  | 482.2 (19") x<br>44.45 (1HU) x<br>310 | German | 3.99.202.945/0101 |
|                              |                       |                        |                                  |                                       | US     | 3.99.202.945/0201 |
|                              |                       |                        |                                  |                                       | French | 3.99.202.945/0501 |
|                              |                       |                        |                                  |                                       | UK     | 3.99.202.945/0301 |
| With<br>mouse button         | PS/2                  | PS/2 mouse             | Straight cable;<br>2 x PS/2 plug | 482.6 (19") x<br>44.45 (1HU) x<br>310 | German | 3.99.202.947/0101 |
|                              |                       |                        |                                  |                                       | US     | 3.99.202.947/0201 |
|                              |                       |                        |                                  |                                       | French | 3.99.202.947/0501 |
|                              |                       |                        |                                  |                                       | UK     | 3.99.202.947/0301 |
| With<br>mini-joystick        | USB                   | USB,<br>integrated hub | Straight cable;<br>1 x USB plug  | 447 x 213 x 40                        | German | 3.99.202.945/0102 |
|                              |                       |                        |                                  |                                       | US     | 3.99.202.945/0202 |
|                              |                       |                        |                                  |                                       | French | 3.99.202.945/0502 |
|                              |                       |                        |                                  |                                       | UK     | 3.99.202.945/0302 |
| With<br>mini-joystick        | PS/2                  | PS/2 mouse             | Straight cable;<br>2 x PS/2 plug | 482.6 (19") x<br>44.45 (1HU) x<br>310 | German | 3.99.202.947/0102 |
|                              |                       |                        |                                  |                                       | US     | 3.99.202.947/0202 |
|                              |                       |                        |                                  |                                       | French | 3.99.202.947/0502 |
|                              |                       |                        |                                  |                                       | UK     | 3.99.202.947/0302 |

# STANDARD KEYBOARDS

# A9

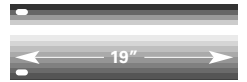




A6 in metal housing, PS/2



DIN-Layout

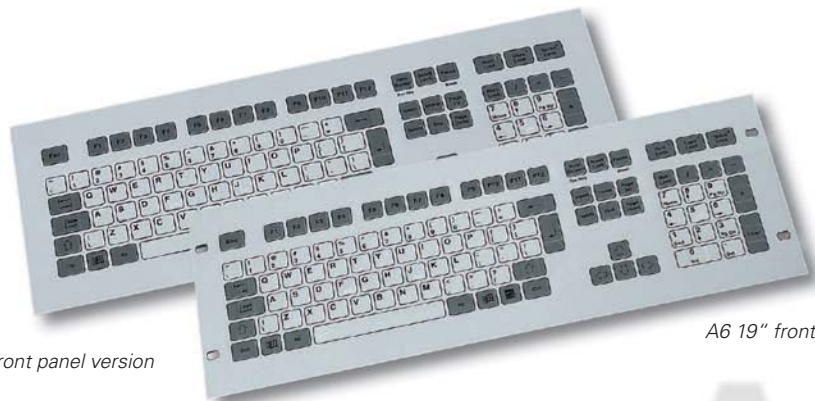


19" front panel

| Type A6                 | Keyboard interface | Cable                            | Dimensions (mm)   | Layout       | Order no.                              |
|-------------------------|--------------------|----------------------------------|---|--------------|--|
| Metal housing version   | USB                | Straight cable;<br>1 x USB plug  | 475 x 213 x 42  | German<br>US | 3.99.202.687/0100<br>3.99.202.687/0200 |
|                         | PS/2               | Straight cable;<br>1 x PS/2 plug | 475 x 213 x 42  | German<br>US | 3.99.202.686/0100<br>3.99.202.686/0200 |
| Front panel version     | USB                | Straight cable;<br>1 x USB plug  | 459.6 x 165.6 x 30<br><small>For drawing, see page 19</small> | German<br>US | 3.99.202.677/0100<br>3.99.202.677/0200 |
|                         | PS/2               | Straight cable;<br>1 x PS/2 plug | 459.6 x 165.6 x 30<br><small>For drawing, see page 19</small> | German<br>US | 3.99.202.676/0100<br>3.99.202.676/0200 |
| 19" front panel<br>4 HU | USB                | Straight cable;<br>1 x USB plug  | 482.6 x 177.8 x 35  | German<br>US | 3.99.202.697/0100<br>3.99.202.697/0200 |
|                         | PS/2               | Straight cable;<br>1 x PS/2 plug | 482.6 x 177.8 x 35  | German<br>US | 3.99.202.696/0100<br>3.99.202.696/0200 |

**Type A6 Features**

- Keyboard in DIN layout, key grid 19.05 mm



A6 front panel version

A6 19" front panel version

A6



A5 in housing with touch pad, USB



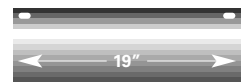
Touch Pad



Key field



Mechanical tracker ball



Metal housing

| A5 Metal Housing Desktop Versions | Keyboard interface | Mouse interface     | Cable                         | Dimensions (mm) | Layout                       | Order no.  |
|-----------------------------------|--------------------|---------------------|-------------------------------|-----------------|------------------------------|--|
| Mechanical tracker ball           | USB                | USB, integrated hub | Straight cable; 1 x USB plug  | 410 x 213 x 42  | German<br>US<br>French<br>UK | 3.99.202.538/0100<br>3.99.202.538/0200<br>3.99.202.538/0500<br>3.99.202.538/0300 |
|                                   | PS/2               | PS/2 mouse          | Straight cable; 2 x PS/2 plug | 410 x 213 x 42  | German<br>US<br>French<br>UK | 3.99.202.537/0100<br>3.99.202.537/0200<br>3.99.202.537/0500<br>3.99.202.537/0300 |
| Touch pad                         | USB                | USB, integrated hub | Straight cable; 1 x USB plug  | 410 x 213 x 42  | German<br>US<br>French<br>UK | 3.99.202.534/0100<br>3.99.202.534/0200<br>3.99.202.534/0500<br>3.99.202.534/0300 |
|                                   | PS/2               | PS/2 mouse          | Straight cable; 2 x PS/2 plug | 410 x 213 x 42  | German<br>US<br>French<br>UK | 3.99.202.533/0100<br>3.99.202.533/0200<br>3.99.202.533/0500<br>3.99.202.533/0300 |

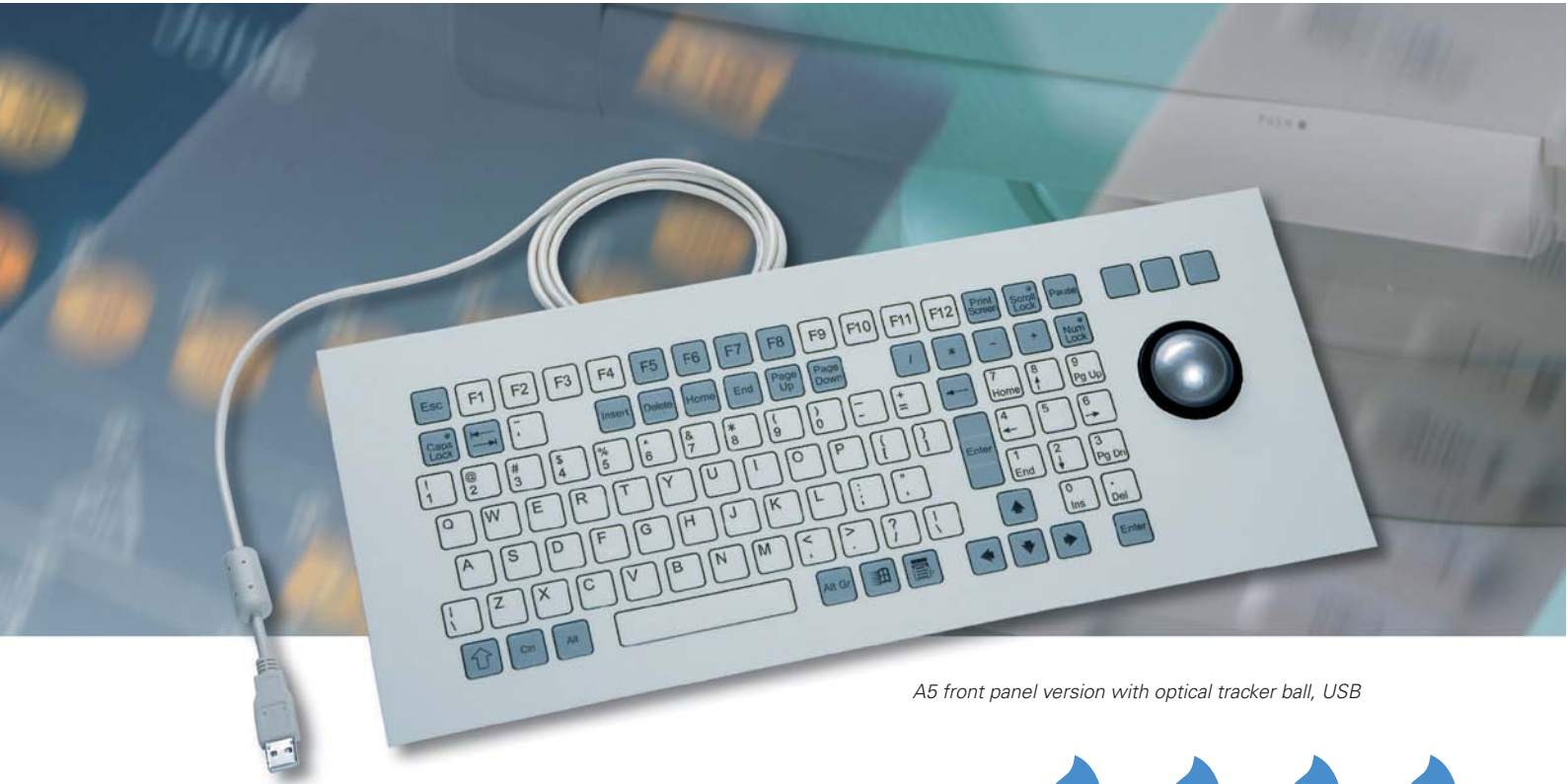
### Type A5 Features

- Key-field is water-jet proof IP 65 according to DIN 40050
- Mechanical tracker ball is protected acc. to IP 65, the optical version acc. to IP 68
- MF II tracker ball compatible with Microsoft mouse or PS/2 mouse
- USB tracker ball and touch pad with integrated hub
- Housing fits into a 19" drawer

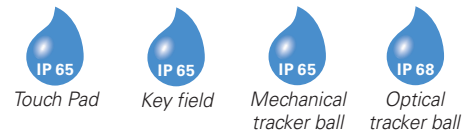


A5 in metal housing with mechanical tracker ball, PS/2

A5



A5 front panel version with optical tracker ball, USB



| A5 Front Panel Versions | Keyboard interface | Mouse interface     | Cable                         | Dimensions (mm) | Layout                       | Order no.  |
|-------------------------|--------------------|---------------------|-------------------------------|-----------------|------------------------------|--|
| Mechanical tracker ball | USB                | USB, integrated hub | Straight cable; 1 x USB plug  | 433 x 177 x 25  | German<br>US<br>French<br>UK | 3.99.202.518/0100<br>3.99.202.518/0200<br>3.99.202.518/0500<br>3.99.202.518/0300 |
|                         | PS/2               | PS/2 mouse          | Straight cable; 2 x PS/2 plug | 433 x 177 x 25  | German<br>US<br>French<br>UK | 3.99.202.517/0100<br>3.99.202.517/0200<br>3.99.202.517/0500<br>3.99.202.517/0300 |
| Optical tracker ball    | USB                | USB, integrated hub | Straight cable; 1 x USB plug  | 433 x 177 x 25  | German<br>US<br>French<br>UK | 3.99.202.516/010x<br>3.99.202.516/020x<br>3.99.202.516/050x<br>3.99.202.516/030x |
|                         | PS/2               | PS/2 mouse          | Straight cable; 2 x PS/2 plug | 433 x 177 x 25  | German<br>US<br>French<br>UK | 3.99.202.515/010x<br>3.99.202.515/020x<br>3.99.202.515/050x<br>3.99.202.515/030x |
| Touch pad               | USB                | USB, integrated hub | Straight cable; 1 x USB plug  | 433 x 177 x 25  | German<br>US<br>French<br>UK | 3.99.202.514/0100<br>3.99.202.514/0200<br>3.99.202.514/0500<br>3.99.202.514/0300 |
|                         | PS/2               | PS/2 mouse          | Straight cable; 2 x PS/2 plug | 433 x 177 x 25  | German<br>US<br>French<br>UK | 3.99.202.513/0100<br>3.99.202.513/0200<br>3.99.202.513/0500<br>3.99.202.513/0300 |

x = 1: removable tracker ball, x = 2: fixed ball sealing



A5 front panel version with mechanical tracker ball, PS/2

## INFO

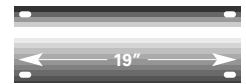
### Optical tracker ball

The optical tracker ball used in the A5 keyboard has long service life and high reliability. It is protected against dust and continuous submersion in 1 m

of water (IP 68), and can be removed for cleaning purposes. Optical tracker balls can be used in different mounting positions, so this keyboard versions can for example be mounted vertically.



A8 in metal housing, PS/2



Metal housing

| Type A8               | Keyboard interface | Cable                            | Dimensions (mm)                                  | Layout       | Order no.                              |
|-----------------------|--------------------|----------------------------------|--|--------------|--|
| Metal housing version | USB                | Straight cable;<br>1 x USB plug  | 410 x 213 x 42                                   | German<br>US | 3.99.202.887/0100<br>3.99.202.887/0200 |
|                       | PS/2               | Straight cable;<br>1 x PS/2 plug | 410 x 213 x 42                                   | German<br>US | 3.99.202.886/0100<br>3.99.202.886/0200 |
| Front panel version   | USB                | Straight cable;<br>1 x USB plug  | 395.85 x 159.85 x 30<br>For drawing, see page 19 | German<br>US | 3.99.202.877/0100<br>3.99.202.877/0200 |
|                       | PS/2               | Straight cable;<br>1 x PS/2 plug | 395.85 x 159.85 x 30<br>For drawing, see page 19 | German<br>US | 3.99.202.876/0100<br>3.99.202.876/0200 |

#### Type A8 Features

- Housing fits into 19" drawer 1 HU



Built in  
A8 front panel version  
with customer-specific layout

# STANDARD KEYBOARDS A8



A4 housing version



Housing



Front panel

| Type A4 (plus)          | Keyboard interface | Cable                            | Dimensions (mm)                                 | Layout       | Order no.                              |
|-------------------------|--------------------|----------------------------------|---|--------------|--|
| Plastic housing version | USB                | Straight cable;<br>1 x USB plug  | 125 x 150 x 30                                  | German<br>US | 3.99.202.467/0100<br>3.99.202.467/0200 |
|                         | PS/2               | Straight cable;<br>1 x PS/2 plug | 125 x 150 x 30                                  | German<br>US | 3.99.202.466/0100<br>3.99.202.466/0200 |
| Front panel version     | USB                | Straight cable;<br>1 x USB plug  | 137.3 x 154 x 24.25<br>For drawing, see page 19 | German<br>US | 3.99.202.457/0100<br>3.99.202.457/0200 |
|                         | PS/2               | Straight cable;<br>1 x PS/2 plug | 137.3 x 154 x 24.25<br>For drawing, see page 19 | German<br>US | 3.99.202.456/0100<br>3.99.202.456/0200 |

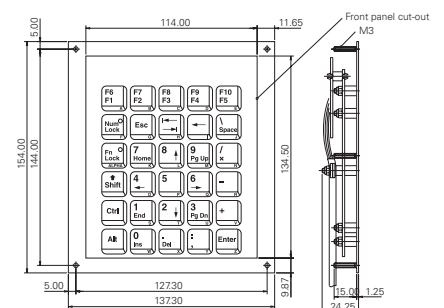
### Type A4 Features

- Provides entry of all alphanumerical characters and control codes
- Auto-repeat can be switched off
- N-key roll-over, can be set to 2-key roll-over
- Housing version protection: IP 54 Front panel version protection: IP 65

### Accessories:

- Adapter box for connecting 2 keyboards to a PC: 3.60.100.195/0000, details see page 20
- Adapter cable, PS/2 - USB: 5.03.771.761/0000, details see page 20

### Type A4 Front Panel Version





Front panel

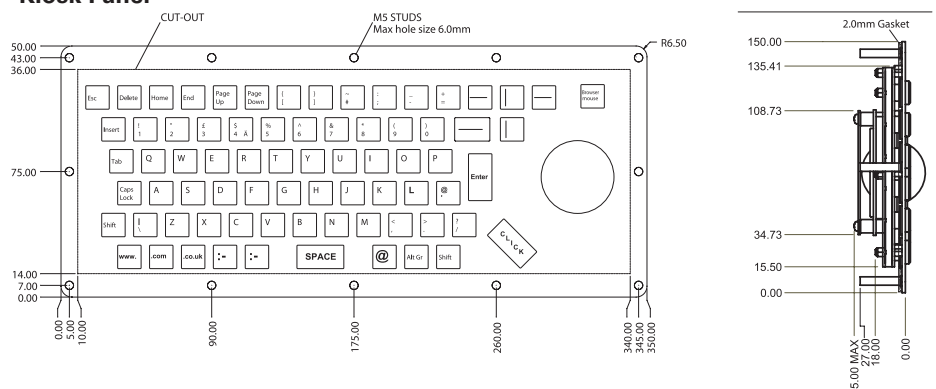
| Kiosk Keyboard Front Panel Versions | Keyboard interface | Mouse interface     | Cable                         | Dimensions (mm)  | Layout | Order no.         |
|-------------------------------------|--------------------|---------------------|-------------------------------|------------------|--------|-------------------|
| With tracker ball                   | USB                | USB, integrated hub | Straight cable; 1 x USB plug  | 250 x 150 x 30.5 | US     | 3.60.100.932/0000 |
|                                     | PS/2               | PS/2 mouse          | Straight cable; 2 x PS/2 plug | 250 x 150 x 30.5 | US     | 3.60.100.933/0000 |

### Kiosk Keyboard Features

- Vandal resistant for public access terminals
- Stainless steel frontpanel, key caps and tracker ball
- Sealed to IP 65
- Switches: RAFI RACON 12 with 2.5N operating force
- Switch operating life > 1 million operations
- Front plate 2 mm Mild Steel
- Keytops: stainless steel keytops with laser engraved legends
- Ambient Temperature: Operating 0°C to + 70°C Storage -25°C to + 80°C
- Robustness 750N load on front face (EN 45001). 10 Joules impact on front face. Sealed to IP 65 on front face
- Supply Voltage + 5Vdc +/- 5%
- Supply Current approx 100mA
- Dimensions 350 mm x 150 mm x 35 mm, Panel cut-out 330 mm x 122 mm
- Standards: CE approved. This product conforms to the following standards. EN55022 Class B Part 2 (full compliance is conditioned by the adequate integration into the complete machine system by the user). All major components are to UL specification
- Other language variants and customer specific options available upon request

This keyboard has been designed for use by the public. Its purpose is to be durable yet still provide a good quality user interface. However, sustained attacks from screwdrivers, hammers, glue etc. may cause damage to the unit.

### Kiosk Panel





## Type B Series General Data

RAFI Type B full-travel keyboards are top-quality products. Specifically the B6-C keyboard offers highly comfortable data entry for continuous-duty professional use.

### Full-Travel Keys RS 76 M and RS 76 C

The Type B series keyboards are based on the RS 76 M full-travel keys (mechanical contacts) or the RS 76 C keys (solid state switch with Hall-IC).

### Keycaps

The keycaps of the B6-C and B8-C keyboards are twoshot moulded. The symbols form an integral component of the keycap, thereby excluding any abrasion.

The keycaps of the other keyboards are laser engraved. In this process, a laser is used for burning the symbols into the keycaps after keyboard assembly. In this way, customer-specific layout variants can be produced without any problem.

| Technical Data         | B4                            | B6-C/B8-C         |
|------------------------|-------------------------------|-------------------|
| Contact system         | Gold/gold contacts mechanical | Solid state       |
| Operating force        | ≤ 0.9 N                       | ≤ 0.7 N           |
| Actuating travel       | 4 mm                          | 4 mm              |
| Switching travel       | 2 ±0.5 mm                     | 1,5...2,8 mm      |
| Robustness of actuator | ≥ 100 N                       | ≥ 100 N           |
| Bouncing time          | ≤ 5 ms                        | –                 |
| Operating life         | ≥ 10 million                  | ≥ 100 million     |
| Operating temperature  | – 0°C ... + 55°C              | – 0°C ... + 55°C  |
| Storage temperature    | – 25°C ... + 70°C             | – 25°C ... + 70°C |
| Degree of protection   | IP 40                         | IP 40             |

### CE Conformity

The Type B keyboards comply with the EC Directive 89/336, which includes:

- EN 61000-6-4/EN 55022-B (emitted interference)
- EN 61000-6-2/EN 55024-B (interference immunity)

### Resistance to climate to IEC

The Type B keyboards are climate-proof according to the following standards:

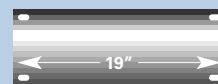
- Static environment to IEC 600 68-2-3 and 2-30
- Dynamic environment to IEC 600 68-2-14 and 2-33

### Symbols Used



Degree of protection according to DIN 40050. For front panel versions, specified for front side when installed properly.

- IP 65 = Protection against dust and water-jets
- IP 54 = Protection against dust and splash water
- IP 40 = No protection against ingress of water



Suitable for installation in 19" racks or for placing in a 19" drawer with 1HU.



B8-C, PS/2



| Type B8-C               | Keyboard interface | Mouse Interface    | Cable                         | Dimensions (mm) | Layout                       | Order no.  |
|-------------------------|--------------------|--------------------|-------------------------------|-----------------|------------------------------|--|
| Mechanical tracker ball | USB                | USB integrated hub | Straight cable; 1 x USB plug  | 410 x 225 x 43  | German<br>US<br>French<br>UK | 3.93.105.859/0100<br>3.93.105.859/0200<br>3.93.105.859/0500<br>3.93.105.859/0300 |
|                         | PS/2               | PS/2 mouse         | Straight cable; 1 x PS/2 plug | 410 x 225 x 43  | German<br>US<br>French<br>UK | 3.93.105.855/0100<br>3.93.105.855/0200<br>3.93.105.855/0500<br>3.93.105.855/0300 |

#### Type B8 Features

- RS 76 C keyswitches
- Tracker ball built in
- Auto-repeat can be switched off
- N-key roll-over
- Degree of protection IP 40
- The tracker ball can be used as USB or PS/2 mouse
- Housing fits into a 19" drawer 1HU

This keyboard is designed to operate in hostile dirty environments with an operating life of more than 100 million operations and a sealed tracker ball.

#### INFO

##### N-key roll-over

All key codes of all simultaneously pressed keys are sent to the PC.

B8-C





B6-C, PS/2



| Type B6-C                    | Keyboard interface | Cable                            | Dimensions (mm) | Layout                 | Order no.   |
|------------------------------|--------------------|----------------------------------|-----------------|------------------------|---|
| Plastic housing version B6-C | USB                | Straight cable;<br>1 x USB plug  | 496 x 255 x 43  | German<br>US<br>French | 3.93.105.637/0100<br>3.93.105.637/0200<br>3.93.105.637/0500 |
|                              | PS/2               | Straight cable;<br>1 x PS/2 plug | 496 x 255 x 43  | German<br>US<br>French | 3.93.105.636/0100<br>3.93.105.636/0200<br>3.93.105.636/0500 |

### INFO

#### Contact design of the RS 76 C full-travel keys with Hall-IC

The solid state Hall-IC integrated circuit technology guarantees bounce-free and wear-free switching and an extremely long service life. Function: When the key is pressed, a permanent magnet changes its position relative to the Hall-IC and thereby produces an output signal. Advantages: Withstands hostile environments (dust etc.) and provides smooth typing for continuous-duty professional applications.

#### Type B6-C Features

- RS 76 C keyswitches
- Top-quality keyboard for professional data entry requirements
- Solid state Hall effect keys
- Soft typing
- Keycaps two-shot moulded (abrasion-proof and glare-free)
- N-key roll-over
- Operating life > 100 million actuations

STANDARD KEYBOARDS **B6-C**



B4 in housing



| Type B4                 | Keyboard interface | Cable                            | Dimensions (mm)       | Layout       | Order no.                              |
|-------------------------|--------------------|----------------------------------|-----------------------|--------------|--|
| Plastic housing version | USB                | Straight cable;<br>1 x USB plug  | 125 x 150 x 33        | German<br>US | 3.93.105.437/0100<br>3.93.105.437/0200 |
|                         | PS/2               | Straight cable;<br>1 x PS/2 plug | 125 x 150 x 33        | German<br>US | 3.93.105.436/0100<br>3.93.105.436/0200 |
| Front panel version     | USB                | Straight cable;<br>1 x USB plug  | 137.3 x 154.0 x 24.25 | German<br>US | 3.93.105.417/0100<br>3.93.105.417/0200 |
|                         | PS/2               | Straight cable;<br>1 x PS/2 plug | 137.3 x 154.0 x 24.25 | German<br>US | 3.93.105.416/0100<br>3.93.105.416/0200 |

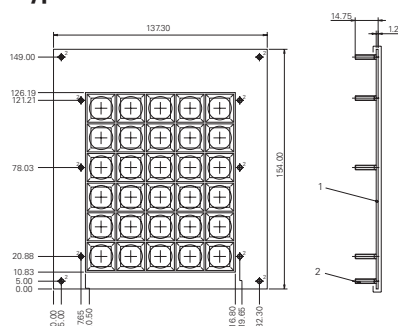
#### Type B4 Features

- Provides entry of all alphanumerical characters and control codes
- Auto-repeat can be switched off
- N-key roll-over, can be set to 2-key roll-over
- Degree of protection: IP 40

#### Accessories:

- Adapter box for connecting 2 keyboards to a PC:  
3.60.100.195/0000, details see page 20
- Adapter cable, PS/2 - USB:  
5.03.771.761/0000, details see page 22

#### Type B4 Front Panel Version



#### INFO

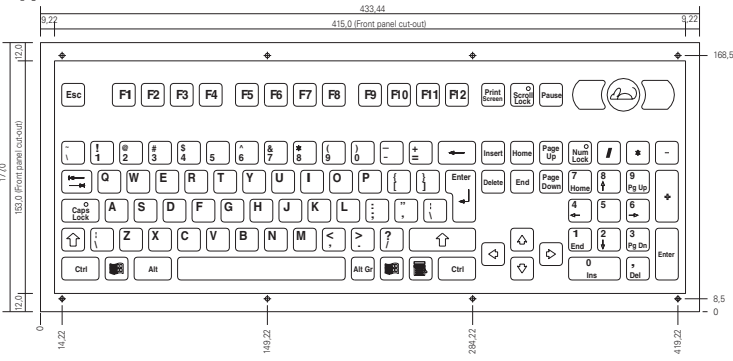
##### Auto-repeat

In the default setting, the keyboard after a delay repeats a character as long as the finger keeps pressing the key.

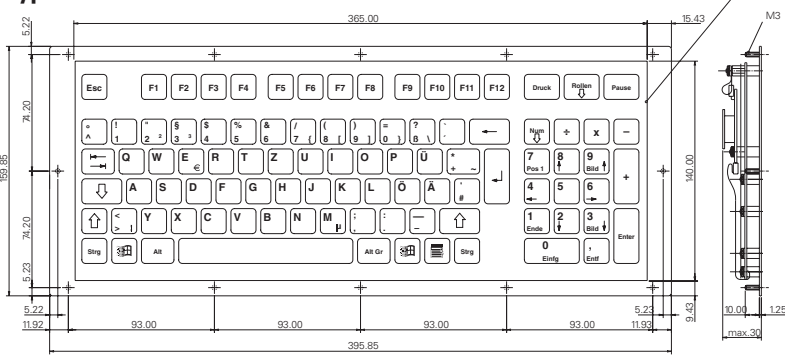
# B4

# Drawings for Front Panel Versions

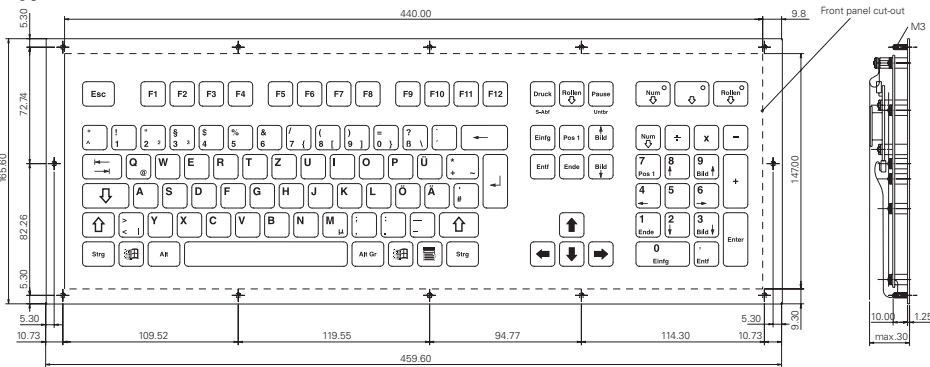
## Type A9 Front Panel Version



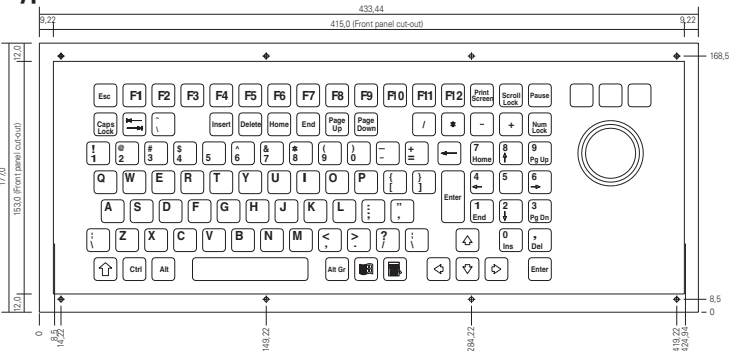
## Type A8 Front Panel Version



## Type A6 Front Panel Version

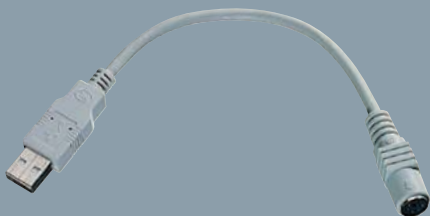


## Type A5 Front Panel Version



DRAWINGS

# Accessories



Mini-DIN/USB connector adapter.

**Order no. 5.03.771.761/0000**



The RAFI adapter box for connecting two keyboards to a PC makes it possible to supplement an existing keyboard with a second one. The box switches automatically

to the currently used keyboard. Cable with PS/2 plug, 2 x PS/2 socket

**Order no. 3.60.100.195/0000**

Your RAFI Partner

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