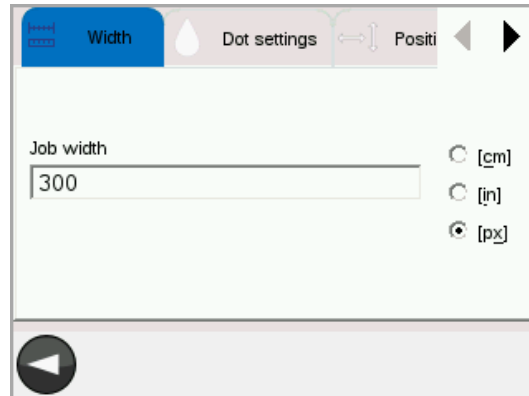


Editing



The above window allows not only modifying of printing parameters but also modifying the job width and selecting the unit of width (**cm**, **px**, **inch**).

The printing parameters are divided into three groups:



If the setting of a given parameter is incorrect, it is highlighted with a red background and must be corrected to be able to save the parameters.



*Some of the printing parameters cannot be edited by **Operator**-type users*



dot settings:

- **Dot size**: print intensity level (1 - 5), with this parameter you can adjust the print quality to the type of substrate to be printed on
- **Row multiply**: the number defining how many times every vertical row is repeated (1 - 10)



position:

- **Resolution [rows/m or rows/inch]**: number of dots per unit of length
- **Initial distance [mm or inch]**: space between the beginning of an object (a point detected by a photocell) and the beginning of the print



The unit of measurement (mm/inch) in the printer can be changed by pressing:



For more details see the section entitled "General settings".

- **Flip vertical**: printing in the vertical direction: normally or "upside down"
- **Flip horizontal**: printing in the horizontal direction: normally or "backwards"



other:

- **Impulse generator source:** determines whether printing speed is constant or determined by the traveling speed of objects on a conveyor:

Internal generator: printing speed is constant and determined by an internal generator; traveling speed of objects on the conveyor should be constant, with the speed being set with the **Product speed [m/min or inch/min]** parameter in

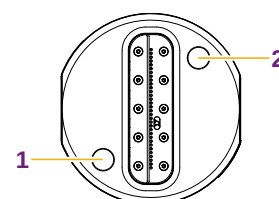


Auto generator: printing speed depends on the traveling speed of objects on the conveyor; this speed is measured by two photocells built into the printhead, which form the internal encoder

- **Photocell source:** determines which of the two photocells built into the printhead activates printing; the parameter is enabled only when **Impulse generator source = Internal generator**:

Bottom photocell: printing is activated by the lower photocell (1)

Top photocell: printing is activated by the higher photocell (2)



- **Trigger type:** the method by which a photocell signal activates printing:

Level: printing is activated when a photocell signal reaches high level

Edge: printing is activated by the rising edge of a photocell signal

- **Printout repetition:** determines whether a given print is to be reprinted on an object:

Yes: the job is printed a given number of times on every object. The number of reprints is defined by the **Printout repetition number** parameter. This setting requires that the **Print spacing** parameter also be set to an appropriate value

No: the job is printed once on every object

Continuous: the job is printed on an object repeatedly as long as the object is within the photocell reach. This setting requires that the **Print spacing** parameter also be set to an appropriate value

- **Printout repetition number:** number of prints repeated on an object (0 - 20); the parameter is enabled only when **Printout repetition = Yes**
- **Print spacing [mm or inch]:** distance between the beginnings of successive prints; the parameter is enabled only when **Printout repetition = Yes** or **Continuous**



The unit of measurement (mm/inch) in the printer can be changed by pressing: 

For more details see the section entitled "General settings".

Editing

▣ Adding/Editing a Text field

■ Common parameters of a Text field

Static text , Date/Time , Counter , Shiftcode , Text file  and Calendar  are all Text fields that use the following common parameters:

- **Font name:** a font to be used for generating a Text field



The most frequently used fonts can be marked with an asterisk  sign to display them at the beginning of the list of fonts.

Additional fonts can be imported to the printer by pressing:



For more details see the section entitled "Importing/exporting data".

For "matrix" fonts:

- **Row multiply:** the number defining how many times every vertical row should be repeated (1 - 10)
- **Letter spacing:** a number of empty vertical rows between characters (0 - 5000)

For TrueType fonts:

- **Font size:** if the **Constrain font proportions** parameter is active, the font size should be given, otherwise the width and the height of a font are given separately (4 - 32)

For all fonts:

- **Constrain font proportions:** to enable proportional scaling of characters
- **Line spacing:** space between two successive lines of text (0 - 32)

For **Static text** and **Counter** fields only:

- **Edit before printing:** allows the operator to enter data before a job starts printing



The parameter is available to **Operator-type** users  only for the fields enabled for editing.

■ Adding/Editing a Static text field

1. Press  ►  ► .
2. Enter the contents of the Text field (**Text**).
3. Decide whether field editing is to be disabled  or enabled  for **Operator**-type users .
4. Press  to confirm.
The editor window for setting a field position is displayed.
5. Set an appropriate position of the field in the job.
6. Press  to confirm the position of the field.



*The **Static text** parameters that are common to all fields and to Text fields are described in the corresponding sections.*

■ Adding/Editing a Date or Time field

The **Date/Time** field is used for inserting the current date/time or the date/time that is set forward by a certain offset into the job. The date set forward by a certain offset is an expiration date.

1. Press  ►  ► .
2. Decide whether the date, the time, or both are to be inserted into a job and in what order (**Date/Time order**).
3. Decide whether field editing is to be disabled  or enabled  for **Operator**-type users .
4. Choose the type of calendar you wish to use:
 - **Calendar type:** the type of calendar to be used for data calculation
 Gregorian
 Julian
 Hijri
5. Set the Date offset or Time offset parameters:
 - **Date offset [days]:** can be inserted into the job as an expiration date, a required offset, or if set to 0, the current date
 - **Time offset [hours]:** a set number of hours (up to 24) used for changing the date at a time other than 00:00, a required offset, or if set to 0, the current time is inserted into the job

Editing

6. Set a required format and select the date and time separators.



The default date and time format or separator for a new **Date/Time** field can be changed by pressing:  ►  ►  ► .

Date separator, **Date format**, **Time separator** and **Time format** can be used to make basic changes to date and time formats. Customized changes can be made using the **Formatting string** which is described in detail below.

7. Press  to confirm.

The editor window for setting a field position is displayed.

8. Set an appropriate position of the field in the job.

9. Press  to confirm the position of the field.



The **Date/Time** parameters that are common to all fields and to Text fields are described in the corresponding sections.

■ Editing a formatting string

A **Formatting string** is used to customize the date and time format to your requirements.



A **Formatting string** can be edited only when the **Edit formatting string** parameter is set to **Yes**.

The formatting string can consist of the following components:

- **%a** - abbr. for the name of a day of the week (Mon, ..., Sun)
- **%A** - full name of a day of the week (Monday, ..., Sunday)
- **%b** - abbr. for the name of a month (Jan, ..., Dec)
- **%B** - full name of a month (January, ..., December)
- **%c** - date and time in the format: abbr. for the name of a day of the week, abbr. for the name of a month, day of the month, hours, minutes, seconds, a year
- **%C** - number of a century
- **%d** - day of the month (01, ..., 31)
- **%D** - date in mm/dd/yy format
- **%e** - day of the month (1, ..., 31)
- **%F** - date in yyyy-mm-dd format

- **%g** - 2-digit number of the year
- **%G** - 4-digit number of the year
- **%h** - abbr. for the name of a month (Jan, ..., Dec)
- **%H** - hour in 24-hour system (00 - 23)
- **%I** - hour in 12-hour system (01 - 12)
- **%j** - day of the year (001, ..., 366)
- **%k** - hour in 24-hour system (0 - 23)
- **%l** - hour in 12-hour system (1 - 12)
- **%m** - number of the month (01, ..., 12)
- **%M** - minute (00, ..., 59)
- **%p** - local equivalent to AM or PM (empty in many locations)
- **%P** - local equivalent to am or pm (empty in many locations)
- **%r** - time in 12-hour system in the format of hh:mm:ss [AM] or [PM]
- **%R** - time in 24-hour system in hh:mm format
- **%s** - the "so called" Unix timestamp, *i.e.* the number of seconds counted since 1970
- **%S** - second (00, ..., 60), where 60 means a leap second
- **%T** - time in 24-hour system in hh:mm:ss format
- **%u** - number of a day of the week (1, ..., 7); 1 means Monday
- **%U** - number of a week in the year (00, ..., 53), Sunday begins the week
- **%V** - number of a week in the year (01, ..., 53), Monday begins the week
- **%w** - number of a day of the week (0, ..., 6), 0 means Sunday
- **%W** - number of a week in the year (00, ..., 53), Monday begins the week
- **%x** - local representation of the date
- **%X** - local representation of the time
- **%y** - last two digits of the year (=%g)
- **%Y** - year in yyyy (=%G) format
- **%z** - time zone in numerical format (*e.g.* +0100)
- **%Z** - name of the time zone (*e.g.* EDT)

Editing

■ Adding/Editing a Counter field

A **Counter** field, which is automatic numbering with characteristics defined by the user, can be inserted into a job.

A **Counter** field can be applied to one job only (local) or to every job that uses it (global variable).

Before a global **Counter** variable can be inserted into a job, the variable must be imported to the printer or created using the global variables feature in the  menu.

*A global **Counter** variable can be created or modified by pressing:*



For details, see “Configuring global variables”.



*A global **Counter** variable can be imported by pressing:*



For more details see the section entitled “Importing/exporting data”.

1. Press  ►  ► .
2. Decide whether the field is to be local or global (**Global counter**: Yes/No).
If you select a global variable, select the desired variable name from those listed in the printer (**Global counter name**).



The parameters of each of the counter sections can be edited for a local counter only. When a global counter is used, no section parameters can be edited.

3. Select the number of counter sections and the sequence of incrementation:
 - **Counter section visible**: enable/disable each counter section (each counter section must be set separately)
 - **Section order**: sequence of incrementation of successive counter sections
4. Decide whether field editing is to be disabled  or enabled  for **Operator**-type users .
5. Set the parameters for operation of each of the counter sections:



The same group of parameters needs settings for each of the counter sections.

Each of the sections can be set independently.

- **Min**: the parameter has the following meanings:
 - the value from which an incremental counter starts recounting after an overflow of the counter has occurred
 - the value at which a decremental counter ends counting and overflows
 - the value from which counting starts if **Start mode** = **Min**
- **Max**: the parameter has the following meanings:
 - the value from which a decremental counter starts recounting after an overflow of the counter has occurred
 - the value at which an incremental counter ends counting and overflows
 - the value from which counting starts if **Start mode** = **Max**
- **Start mode**: to choose the value from which to start counting:
 - Min**: when printing starts for a first time and when it resumes, counting starts from the value given by the **Min** parameter
 - Max**: when printing starts for a first time and when it resumes, counting starts from the value given by the **Max** parameter
 - Start value**: when printing starts for a first time and when it resumes, counting starts from the value given by the **Start value** parameter
 - Last value**: when printing is resumed, counting is continued: or, it starts from the sum of the settings of two parameters: **Last value** and **Step**; when printing of a job starts for a first time, counting starts from the value given by the **Start value** parameter
- **Start value**: the parameter is enabled only when **Start mode** = **Start value** or **Last value**; it has the following meanings:
 - the initial value of a counter if **Start mode** = **Start value**
 - the value from which counting starts when the job is printed for a first time if **Start mode**: **Last value**
- **Last value**: this parameter is for information only and cannot be edited; it shows the last printed value of the counter; the parameter can be reset with the  in the job editor window
- **Step**: a counter increment; when a positive number is set, counting is done in ascending order (an ascending counter), when a negative number is set counting is done in descending order (a descending counter)
- **Length**: the number of counter digit positions in a range required by a user (1 - 9)
- **Fill in**: a character to replace insignificant digits of the counter (0, space)
- **Suffix**: any character string to be printed after the counter (up to 41 characters)

Editing

6. Press  to confirm.

The editor window for setting a field position is displayed.

7. Set an appropriate position of the field in the job.

8. Press  to confirm the position of the field.



The **Counter** parameters that are common to all fields and to Text fields are described in the corresponding sections.

The original settings of a selected counter can be restored by pressing  in the editor window.

■ Adding/Editing a Text file field

A **Text file** can be inserted into a job.

Before a **Text file** can be inserted into a job, it must be imported to the printer using the transfer data feature in the  menu.



A **Text file** can be imported by pressing:



For details, see "Importing/exporting data".

1. Press  ►  ► .

2. Select a text file by defining the access path (**File path**).



The line lengths of the text file can vary which can cause some lines not to fit entirely within the job area.

3. Decide whether field editing is to be disabled  or enabled  for **Operator**-type users .
4. Set the parameters for reading in data from a text file:
 - **Line count**: a number of lines to be inserted into the field from a text file (1 - 10)
 - **Line step**: a number of lines by which the text file data moves after every successive printout; if the setting of the **Line count** parameter is greater than the setting of the **Line step** parameter, the data moves by the number of lines defined by **Line count**
 - **Line maximum value**: the number of the last line to be printed

- **Start mode:** defines which line of the text file is to be read in after printing has been resumed:

Start value: printing starts from the beginning: or the line whose number equals the setting of the **Line start value** parameter is read in

Last value: printing continues: or it resumes from the line whose number equals the sum of the **Line last value** and **Line step** parameters is read in

- **Line start value:** the parameter has the following meanings:

the number of the line to be read in when the job is printed for a first time; regardless of what the setting of the **Start mode** parameter is

the number of the line to be read in when the end of a text file is reached or when the setting of the **Line maximum value** parameter is reached, if that setting is smaller than the amount of lines in the text file

the number of the line to be read in after printing has been resumed, if **Start mode: Start value**

- **Line last value:** this parameter is for information only and cannot be edited; the number of the last printed line; the parameter is used when printing is resumed if **Start mode = Last value**; the parameter can be reset with the  in the job editor window

5. Press  to confirm.

The editor window for setting a field position is displayed.

6. Set an appropriate position of the field in the job.

7. Press  to confirm the position of the field.



*The **Text file** parameters that are common to all fields and to Text fields are described in the corresponding sections.*

*The original settings of a selected **Text file** field counter can be restored by pressing  in the editor window.*

Editing

■ Adding/Editing a Shiftcode field

A **Shiftcode** field is a work shift that recurs each day with a defined starting time and content (code) to be printed during the work shift. The work shift is set to automatically end one minute before the beginning of the next work shift.

A **Shiftcode** field can be inserted into one job only (local) or to every job that uses it (global variable).

Before a global Shiftcode variable can be inserted into a job, the variable must be imported to the printer or created using the global variables feature in the  menu.



A global **Shiftcode** variable can be created or modified by pressing:



For details, see “Configuring global variables”.

A global **Shiftcode** variable can be imported by pressing:



For more details see the section entitled “Importing/exporting data”.

1. Press  ►  ► .
2. Decide whether the field is to be local or global (**Global shiftcode**: Yes/No). If you select a global variable, select the desired variable name from those listed in the printer (**Global shiftcode name**).



All local Shiftcode field parameters can be edited. Some global Shiftcode field parameters can be edited.

3. Decide whether field editing is to be disabled  or enabled  for **Operator**-type users .
4. In the work shift setting window, define successive work shifts and codes:
 - set the time (**Shift start hour**) when the shift begins
 - define the code (**Content**) to be printed during the shift
 - define additional work shifts

The following functions are available in the work shift setting window:



add a work shift



edit a selected work shift



delete a selected work shift

5. Press  to confirm.

The editor window for setting a field position is displayed.

6. Set an appropriate position of the field in the job.

7. Press  to confirm the position of the field.



The **Shiftcode** parameters that are common to all fields and to Text fields are described in the corresponding sections.

■ Adding/Editing a Calendar field

A **Calendar** field defines specified days or periods and what is to be printed on those days or in those periods. **Calendar** can consist of static entries as well as of a date in a selected format and with an offset against the current date, varying at a user-settable frequency.

A **Calendar** field can be inserted into one job only (local) or to every job that uses it (global variable).

Before a global **Calendar** variable can be inserted into a job, the variable must be imported to the printer or created using the global variables feature in the  menu.

A global **Calendar** variable can be created or modified by pressing:



For details, see "Configuring global variables".



A global **Calendar** variable can be imported by pressing:



For more details see the section entitled "Importing/exporting data".

1. Press  ►  ► .

2. Decide whether the field is to be local or global (**Global calendar**: Yes/No).
If you select a global variable, select the desired variable name from those listed in the printer (**Global calendar name**).

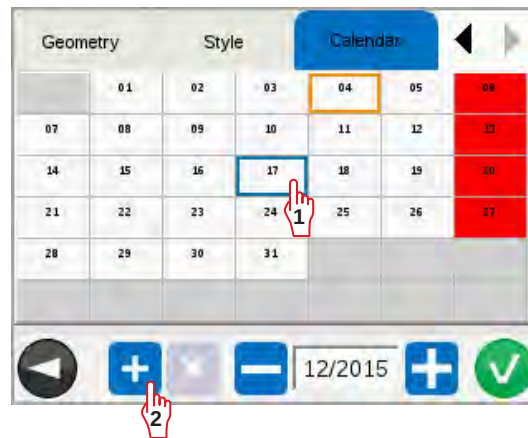


Every parameter of a local Calendar field can be edited. Some parameters of a global Calendar field are not editable.

3. Decide whether field editing is to be disabled  or enabled  for **Operator**-type users .

Editing

4. Define the **Calendar** field:



- select a day (1) from which a calendar entry is to begin; the selected day is framed in blue
- press **+** (2) to create the following in the calendar:
 - a static entry (A)OR
 - a variable date entry (B)

A Creating a static entry:

- enter static data (**Text**), which will form the entry (1)
- press **✓** to confirm

The calendar with the defined entry is generated.

OR

B Creating a variable date entry:

- press ******* to start the variable date wizard

The following variable date parameters can be set with the wizard:

Date format: a required format of the date; with this parameter you can also set:

- **Date separator:** a character that separates successive date components from each other (":", ".", "-")

- **Date offset:** an offset of the date set on a given day, by a required number of days, months or years against the current date

Date change frequency: a period by which the date is to change:

Day: the date changes on a daily basis or by the number of days settable with the **Change after [days]** parameter

Week: the date changes every week on the week day settable with the **Change date** parameter

Month: the date changes every month on the month day settable with the **Change date** parameter

Year: the date changes every year on the first day of the month settable with the **Change date** parameter

Date rounding: to set the date of another (selected) week day on the day defined as the change date; the parameter is active only when **Date change frequency** is different from **Day**:

None: the current date is set on the change date; an offset, if defined, is taken into account

Previous: the date to be set on the change date is the previous, user-selected week day as against the current date (e.g. the previous Monday)

Closest: the date to be set on the change date is the closest, user-selected week day as against the current date (e.g. the closest Monday)

Next: the date to be set on the change date is the following, user-selected week day as against the current date (e.g. the following Monday)

- press  to confirm

The calendar with the defined entry is generated.

The current date is framed in orange.

The change dates and the start date of the entry are shown on a yellow background.



To finish the entry, create an empty, static entry for the date to which the given entry shall not apply yet.

The defined entry finishes on the last date before a successive defined entry.

-
5. Press  to confirm.

The editor window for setting a field position is displayed.

6. Set an appropriate position of the field in the job.

7. Press  to confirm the position of the field.



*The **Calendar** parameters that are common to all fields and to Text fields are described in the corresponding sections.*

Editing

In the calendar window you can also:

-  edit an entry (the icon is enabled only for the change dates and the start date)
-  delete an entry (the icon is enabled only for the change dates and the start date)



Editing/deleting with the a/m functions applies only to the period till the closest change date.

An example of how to create a variable date entry, when the date rounding option is not used

Start date: 17.12.2015

The following settings are made with the wizard:

Date format: DD.MM.YYYY

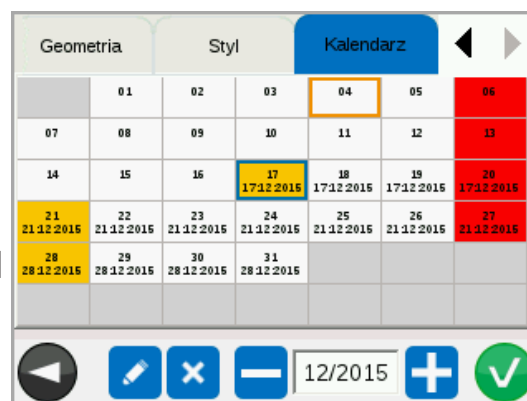
Date separator: ":"

Date offset: 0 [Days], 0 [Months], 0 [Years]

Date change frequency: Week

Change date: Monday

Date rounding: None



The current date is framed in orange.



The entry start date and the change dates (in the example given above, every Monday from the start date on) are shown on a yellow background.

In the above-given example the date rounding option is not used, therefore the current date is set on every Monday and on the start date.

Start date 17.12.2015

Date format: DD.MM.YYYY

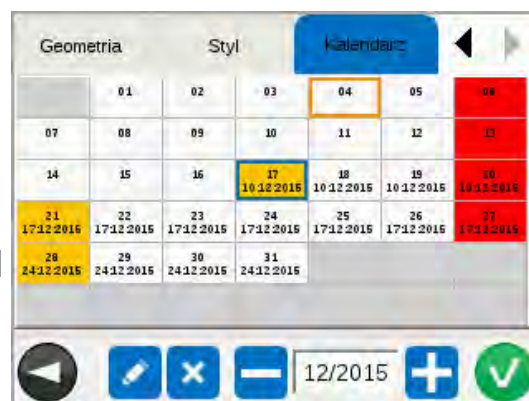
Date separator: ":"

Date offset: 0 [Days], 0 [Months], 0 [Years]

Date change frequency: Week

Change date: Monday

Date rounding: Previous [Thursday]



The current date is framed in orange.



The entry start date and the change dates (in the example given above, every Monday from the start date on) are shown on a yellow background.

In the above-given example, the date settable on every Monday and on the start date is the date of the previous Thursday because the date rounding option has been used; for example, on 21 December the date of 17.12.2015, or the date of the previous Thursday, is set.

❑ Adding/Editing Shape fields

■ Adding/Editing a Line field

1. Press  ►  ► .
2. Set field parameters. In addition to the parameters that are common to all fields, you can set:
 - **Line thickness** parameter (1 - 30 pixels)
3. Decide whether field editing is to be disabled  or enabled  for **Operator**-type users .
4. Press  to confirm.

The editor window for setting a field position is displayed.
5. Set an appropriate position of the field in the job.

Editing

6. Press  to confirm the position of the field.



The **Line** parameters that are common to all fields are described in the corresponding section.

■ Adding/Editing a Rectangle field

1. Press  ►  ► .
2. Set field parameters. In addition to the parameters that are common to all fields, you can set:
 - **Filled:** to print the rectangle outline only or filled
 - **Invert:** to print or not the common parts of the rectangle and other fields in the job, which are beneath the rectangle

Invert = No

Chocolate
23.06.2015 13:53

Invert = Yes

Chocolate
23.06.2015 13:53

- **Line thickness** (1 - 30 pixels): the thickness of the rectangle outline; the parameter is enabled only when **Filled: No**
3. Decide whether field editing is to be disabled  or enabled  for **Operator**-type users .
 4. Press  to confirm.
The editor window for setting a field position is displayed.
 5. Set an appropriate position of the field in the job.
 6. Press  to confirm the position of the field.



The **Rectangle** field parameters that are common to all fields are described in the corresponding section.

The **Transparent** parameter is enabled only when **Filled: No**.

■ Adding/Editing an Ellipse field

1. Press   .

2. Set field parameters. In addition to the parameters that are common to all fields, you can set:

- **Filled:** to print the ellipse outline only or filled
- **Invert:** to print or not the common parts of the ellipse and other fields in the job, which are beneath the ellipse

Invert = No

Chocolate
23.06.2014 13:53

Invert = Yes

Chocolate
23.06.2014 13:53

- **Line thickness** (1 - 30 pixels): the thickness of the ellipse outline; the parameter is enabled only when **Filled: No**

3. Decide whether field editing is to be disabled  or enabled  for **Operator-** type users .

4. Press  to confirm.

The editor window for setting a field position is displayed.

5. Set an appropriate position of the field in the job.

6. Press  to confirm the position of the field.



*The **Ellipse** field parameters that are common to all fields field are described in the corresponding section.*

▣ Adding/Editing an Image field

An **Image** field, which can be any graphic, drawing, or logo, can be inserted into a job.

Before an **Image** field can be inserted into a job, it must be imported to the printer using the transfer data feature in the  menu.



An **Image** field can be imported by pressing:



For details, see “Importing/exporting data”.

1. Press  ►  ► .
2. Select an image by defining the access path (**Image path**).
A preview of the selected image is displayed.
3. Decide whether field editing is to be disabled  or enabled  for **Operator**-type users .
4. Press  to confirm.
The editor window for setting a field position is displayed.
5. Set an appropriate position of the field in the job.
6. Press  to confirm the position of the field.



The **Image** field parameters that are common to all fields are described in the corresponding section.

■ Saving a job

The job that is being edited can be saved in the editor in two ways:

-  the job can be saved with a different name; the job editor is not exited
-  the job can be saved with its existing name and the job editor is exited at the same time



The save function is available only when modifications have been made to the job or printing parameters.

To save the job with a different name:

1. From the job editor window, press .
A virtual keyboard is displayed, allowing job name changes to be entered.
2. Use the keyboard to enter a new job name or leave the name unchanged if the job is to be saved with its existing name.
3. Press  to confirm.
The job is saved in printer memory with the name entered.
The job editor window returns, allowing further editing.

To save the job with its existing name and exit the editor:

1. From the job editor window, press .
The job is saved in printer memory with its existing name.
The job manager window is displayed.



If printing parameters for the job have also been edited, the parameters are saved when the job is saved.