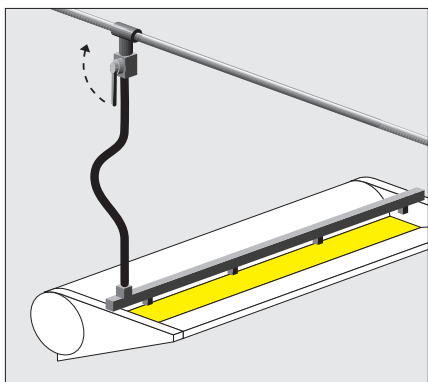


## Ink fountain filling options

The ink fountains in the press can be filled in different ways.

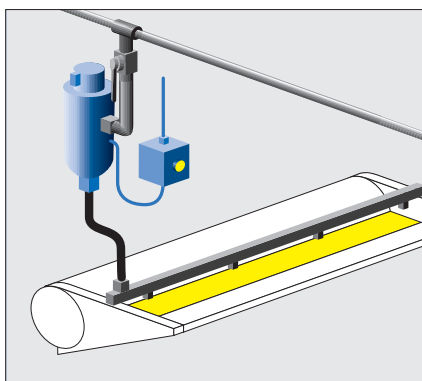
### Manual systems



Manual ink fountain filling

The ink fountains can be filled manually. For example, for this purpose a system using a hose reel is available. The operator takes the hose and outlet tap directly to the ink fountain and carries out the filling operation. The simplified version would be a hose of a fixed length and shut-off tap with antidrip valve at the end.

Another variation is filling via an ink filling tube that is integrated into the ink fountain. The operator opens the ink feed via a ball valve and the ink flows directly into the ink fountain. In this case, the filling process is monitored by the operator.



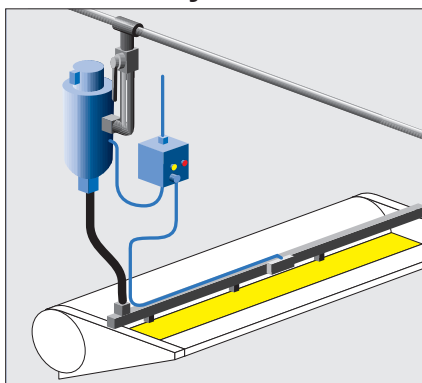
Semi-automatic ink fountain filling

### Semi-automatic system

Here the filling is also performed by the printer. By pressing a button at the printing unit, the operator opens the ink valve and keeps it open until the desired level in the ink fountain has been reached.

The filling is done via an ink filling tube with an upstream ink valve that is integrated into the ink fountain. In this case, the operator also monitors the filling process.

### Automatic system



Automatic ink fountain filling

The automatic version is certainly the most comfortable and best solution. A sensor monitors the ink level in the fountain. If the level drops below the set standard, the ink valve is opened and ink flows into the fountain.

An ink filling tube installed across the ink fountain with separately controllable outlet nozzles ensures the even distribution of the ink across the full width of the fountain. The operator can fill the ink fountain by hand at all times, but that is usually not necessary. In the event of a fault, e.g. minimum level

alarm or overflow alarm, the system control emits an acoustic alarm signal.

### Cartridge systems

The 2 kg ink cartridge is firmly established as an innovative system especially for sheet-fed printing operations with low ink consumption and frequent colour change.



Cartridge system

Whether pneumatic hand-held control handles or automatic compressing devices for dispensing: both systems offer a high degree of user-friendliness, working comfort and last but not least ink economies due to very small amounts of ink residue in the cartridge.

When emptying via the simple hand-held control handle, the compressed air is opened via a pushbutton and the ink squeezed out of the cartridge by the pressure. The operator distributes the ink directly during the dispensing process across the entire ink fountain. The other alternative is a dispensing system integrated into the printing unit. The emptying of the cartridge is also performed either at the push of a button or can be continuous. For continuous dispensing, the compressed air pressure is set such that a small amount of ink constantly runs into the ink fountain while the valve is open. Ink distribution is done via the rotating fountain roller.

## 10.1 Manual, without ink filling tube

Model	Type	Description	Part number
LIL RMS	Manual, with hose and ball valve	Level control, consisting of:	
		Fitting ST RED28/22-L A3C	223-13799-2
		Hose LFR DN20X3200DKOL /DKOL	280-10189-1
		Hose HY200 DN20X1500DKOL /DKOL	225-10130-2
		Ink dispensing pipe with ball valve and nozzle	595-32799-1

## 10.2 Manual, with ink filling tube

Model	Type	Description	Part number
		Level control, consisting of: ink filling tube with adjustable dispensing ball valves, shut-off ball valve and ink hose	
LIL RMF1	Manual, with ball valve + filling tube	Ink fountain up to 800 mm	595-33194-1
LIL RMF2	Manual, with ball valve + filling tube	Ink fountain up to 1100 mm	595-33195-1
LIL RMF3	Manual, with ball valve + filling tube	Ink fountain up to 1500 mm	595-33196-1
LIL RMF4	Manual, with ball valve + filling tube	Ink fountain up to 1900 mm	595-33197-1
LIL RMF5	Manual, with ball valve + filling tube	Ink fountain from 1901 mm	595-33198-1

## 10.3 Semi-automatic, with ink filling tube

Model	Type	Description	Part number
		Level control, consisting of: ink filling tube with adjustable dispensing ball valves, ink valve, manual pushbutton, shut-off ball valve, ink hose with quick connector and small material	
LIL RS1	Semi-autom with filling tube + ink valve	Ink fountain up to 800 mm	595-33189-1
LIL RS2	Semi-autom with filling tube + ink valve	Ink fountain up to 1100 mm	595-33190-1
LIL RS3	Semi-autom with filling tube + ink valve	Ink fountain up to 1500 mm	595-33191-1
LIL RS4	Semi-autom with filling tube + ink valve	Ink fountain up to 1900 mm	595-33192-1
LIL RS5	Semi-autom with filling tube + ink valve	Ink fountain from 1901 mm	595-33193-1

## 10.4 Fully-automatic, with ink filling tube

Model	Type	Description	Part number
		Level control, consisting of: ink filling tube with adjustable outlet ball valves and ultrasonic sensor, ink valve, manual/automatic switch, shut-off ball valve, ink hose with quick connector, connection lead and small material	
LIL RA1	Fully auto with ink fill tube + ink valve	Ink fountain up to 800 mm	595-33184-1
LIL RA2	Fully auto with ink fill tube + ink valve	Ink fountain up to 1100 mm	595-33185-1
LIL RA3	Fully auto with ink fill tube + ink valve	Ink fountain up to 1500 mm	595-33186-1
LIL RA4	Fully auto with ink fill tube + ink valve	Ink fountain up to 1900 mm	595-33187-1
LIL RA5	Fully auto with ink fill tube + ink valve	Ink fountain from 1901 mm	595-33188-1

## 10.5 Accessories

Model	Type	Description	Part number
LIFVE	Electric	Ink valve electric 24 V DC	295-10737-3
LIFVP	Pneumatic	Ball valve BKH15L 101165 DN10 PN160, without valve	235-10353-2
LIFWK	Electric/pneum.	Change kit, feed valve for ink fountain filling	595-32720-1
LFLS1	Analogue	Ultrasonic sensor 30–300 mm UB1000-18GM analogue	237-10266-9
LFLS2	Frequence	Ultrasonic sensor 30–300 mm UB1000-18GM freq.	237-13464-9
LFLS3	3 switch points	Ultrasonic sensor 30–300 mm UB300-18GM 3 SA	237-10266-6
LSH	Polyamide	Holder for ink sensor M18	295-10426-9
LFLB	Operating element at print unit	Control for ink fountain filling	295-10426-6
LFFR1	400 – 800 mm	Ink filling tube, complete for ink fountain up to 800 mm	595-32950-1
LFFR2	801 – 1100 mm	Ink filling tube, complete for ink fountain up to 1100 mm	595-32951-1
LFFR3	1101 – 1500 mm	Ink filling tube, complete for ink fountain up to 1500 mm	595-32952-1
LFFR4	1501 – 1900 mm	Ink filling tube, complete for ink fountain up to 1900 mm	595-32953-1
LFFR5	from 1901 mm	Ink filling tube, complete for ink fountain from 1901 mm	595-33177-1
LIIM	Module	Programming cable UB-PROG1 M.LC-Logo for LFLS3	236-10487-3



Interface module



Pressure pick-up



Level sensor



Ultrasonic sensor



Sensor holder



Sensor with holder



Ink valve



Overflow stop



Ink filling tube