

Ink Supply Systems for the Graphics Industry



Lincoln GmbH – Synergy and Competence



Lincoln has decades of experience in the manufacture of proven and reliable ink pumps and ink supply systems for the graphics industry.

At the heart of the ink supply programme are pumping systems for high-viscosity printing inks. Complemented by innovative system components, such as special ink valves or system controls, they are the ideal systems for supplying ink to printing presses. All levels of automation are covered, from the simple feeding system in the sheet-fed area to container systems for heatset presses, up to tank systems for the newspaper area.

Lincoln's main locations and production facilities on three continents as well as Lincoln offices and official dealers in more than one hundred countries are available as contact partners worldwide.

They provide support not only in the design and commissioning of new systems, but are available also for rapid replacement parts supply and troubleshooting.



Our products:

- Ink supply systems for sheet-fed applications
- Ink supply systems for UV inks
- Ink supply systems for heatset rotary and newspaper presses
 also for waterless coldset
- Ink tank systems
- Ink mixing and metering systems
- Service, maintenance and replacement parts for Lincoln ink pumps and existing ink supply systems

Lincoln – Automated lubrication systems for presses

Lincoln is the worldwide leading manufacturer of centralised lubrication systems. Consequently, Lincoln naturally also offers high-quality lubrication systems for printing operations to reduce friction, wear and tear, and therefore repairs.

Our products in the area of central lubrication cover systems consulting and development, manufacture of standard components, such as pumps, lubricant distributors and controls, but also planning of customized lubrication systems for special applications.

Installation and commissioning of Lincoln lubrication systems, product training, maintenance and service are carried out on-site at the customer's operation – worldwide.

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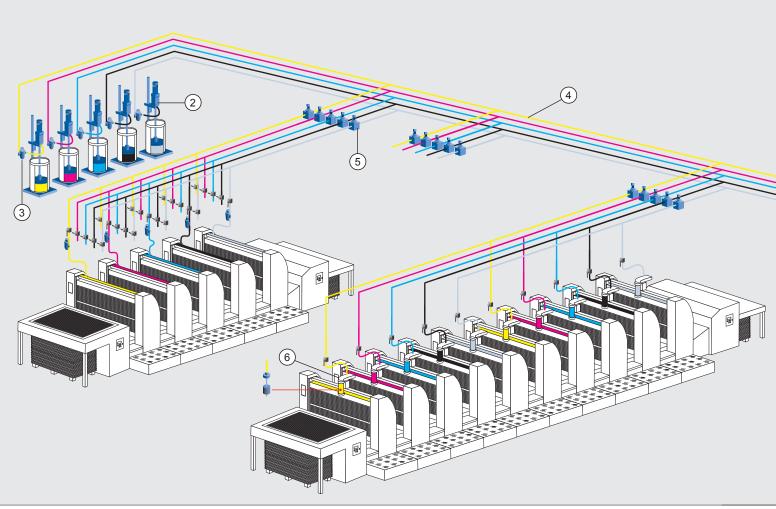
Ink Supply Systems



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Ink Supply During the Printing Process

Tailored system solutions for supplying ink to your press increase the productivity of both your presses and your company



Sheet-fed offset

Perfect concepts for ink supply – the summation of many years' experience Experience is an essential precondition for developing and realising perfect concepts for ink supply in an offset printing plant.

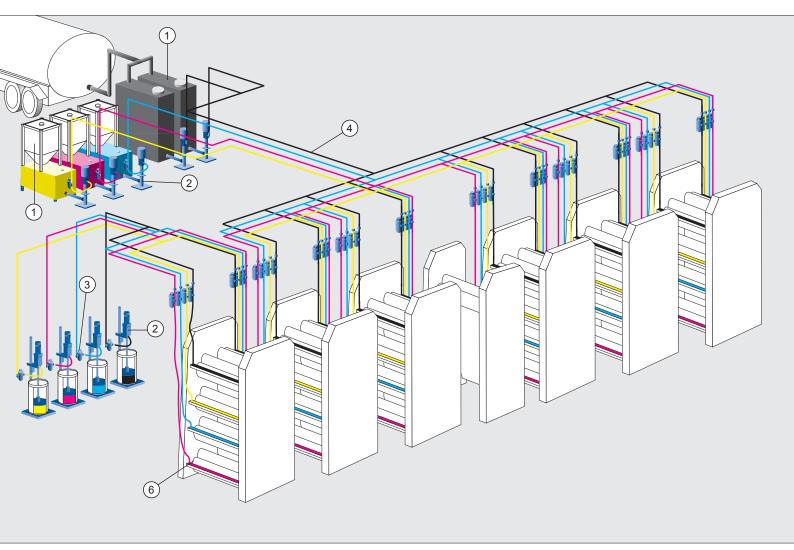
Lincoln has decades of such experience and therefore can offer the perfect system solution also for your application.

For more than 50 years we have been building high-pressure pumps for supplying highly viscous media and have used them with much success also for offset ink since 30 years.

We have supplied a major share of all the ink pumps installed worldwide, and they are working to the full satisfaction of our many users. Lincoln has offices and hundreds of agents worldwide that are at your disposal as contacts as well as for quick replacement part supply or trouble-shooting.

We would be pleased to develop a suitable concept for an ink supply system also for your operation.





Web offset

Environmental Information

■ Ink supply systems are closed pump systems for the automatic feeding of printing inks. The closed system prevents any contact with the skin – especially important where UV inks are

used, because these inks contain substances that may cause skin irritation.

■ Compared to manual ink fountain filling, automatic ink supply systems prevent possible soiling of the workplace from ink spilling. Thus pollution at the workplace is reduced.

■ Ink supply systems allow filling from bulk containers of 200 kg and more instead of small tins. In addition, rectangular containers (from 300 kg) are obtainable as returnable drums. This significantly reduces the amount of waste from empty ink tins (hazardous waste).

1 Base and bulk container

2 Ink pumps

3 Ink filter

4 Tubing

(5) Consumption measurement

(6) Level control

> see chapter

> see chapter 2

> see chapter 4

> see chapter 5

> see chapter 8

> see chapter 10

1.0 Base and Bulk Containers

Bulk container installations for newspaper printing plants and large heatset printing plants

Stationary ink tanks for supplying ink to large printing presses, e.g. heatset or coldset newspaper presses, are standard today.

A distinction is made here between base containers up to 3000 kg and stationary bulk containers from 5000 kg content capacity Stationary tanks are in part being used also to suppy the colour inks, of which the consumption is increasing continually. The advantage of these stationary tank installations is that the operator comes into contact with ink only in the tank room and later on at the press, or ink fountain respectively.

The ink is delivered by the producer on the one hand in a tank vehicle via an infeed station (mainly newspaper printing) and on the other hand via 1000 kg interchangeable containers for base containers.

Both systems offer high levels of comfort and are monitored via a complete control system. Data can be transmitted to the ink producer via a network and the Internet for purposes of ink consumption monitoring and automatic re-ordering.

All these installations are customdesigned and built. No installations are identical.

1.0 Base containers

Model	Content	Dimensions LxWxH	Part number
LBC 800	800 kg blue	1500 x 1250 x 1200 mm	295-10220-8
LBC 800	800 kg yellow	1500 x 1250 x 1200 mm	295-10220-9
LBC 800	800 kg red	1500 x 1250 x 1200 mm	295-10261-1
LBC 800	800 kg black	1500 x 1250 x 1200 mm	295-10261-2
LBC 1500	1500 kg blue	1800 x 1250 x 1450 mm	295-10261-5
LBC 1500	1500 kg yellow	1800 x 1250 x 1450 mm	295-10261-3
LBC 1500	1500 kg red	1800 x 1250 x 1450 mm	295-10261-4
LBC 1500	1500 kg black	1800 x 1250 x 1450 mm	295-10220-1
LBC 3000	3000 kg blue	1800 x 1500 x 1800 mm	295-10261-8
LBC 3000	3000 kg yellow	1800 x 1500 x 1800 mm	295-10261-6
LBC 3000	3000 kg red	1800 x 1500 x 1800 mm	295-10261-7
LBC 3000	3000 kg black	1800 x 1500 x 1800 mm	295-10220-3
LBC	Special size	On request	



Base containers



1.0 Bulk containers

Model	Content	Dimensions LxWxH	Part number
LGC 7000	7000 kg blue	1700 x 1475 x 3600 mm	295-10315-9
LGC 7000	7000 kg yellow	1700 x 1475 x 3600 mm	295-10315-7
LGC 7000	7000 kg red	1700 x 1475 x 3600 mm	295-10315-8
LGC 7000	7000 kg black	1700 x 1475 x 3600 mm	295-10504-5
LGC 10000	10000 kg blue	1700 x 2000 x 3600 mm	295-10504-6
LGC 10000	10000 kg yellow	1700 x 2000 x 3600 mm	295-10504-7
LGC 10000	10000 kg red	1700 x 2000 x 3600 mm	295-10504-8
LGC 10000	10000 kg black	1700 x 2000 x 3600 mm	295-10344-1
LGC 8000R	8000 kg blue	Ø 1800 mm, H = 4350 mm	295-10344-5
LGC 8000R	8000 kg yellow	Ø 1800 mm, H = 4350 mm	295-10344-3
LGC 8000R	8000 kg red	Ø 1800 mm, H = 4350 mm	295-10344-4
LGC 8000R	8000 kg black	Ø 1800 mm, H = 4350 mm	295-10344-2
LGC 10000R	10000 kg blue	Ø 2000 mm, H = 4350 mm	295-10504-1
LGC 10000R	10000 kg yellow	Ø 2000 mm, H = 4350 mm	295-10504-2
LGC 10000R	10000 kg red	Ø 2000 mm, H = 4350 mm	295-10344-9
LGC 10000R	10000 kg black	Ø 2000 mm, H = 4350 mm	295-10504-3
LGC	Special size	On request	



Bulk containers

Container accessories

1.1 Connection container to pump

Model	Туре	Description	Part number
DN 80 M	Manual	Ball valve MS G3" internal thread DN 75 PN25	235-10353-4
DN 100 M	Manual	Ball valve MS G4" internal thread DN 100 PN25	235-10664-6
DN 80 MF	Manual flange	Ball valve ST flange DN 80 PN16	235-16166-8
DN 100 MF	Manual flange	Ball valve ST flange DN 100 PN16	235-10664-7
DN 80 MFE	Manual flange Limit switch	Ball valve ST DN 80 PN16 with limit monitoring	235-13197-9
DN 100 MFE	Manual flange Limit switch	Ball valve ST DN 100 PN16 with limit monitoring	235-10664-8
DN 80 AFE	Autom. flange Limit switch	Ball valve ST DN 80 PN16 with actuator and limit monitoring	235-10353-1
DN 100 AFE	Autom. flange Limit switch	Ball valve ST DN 100 PN16 with actuator and limit monitoring	235-10664-9
ERV 80	NBR yellow	Compensator, elast. flange DN 80 yellow	295-10355-7
ERV 100	NBR yellow	Compensator, elast. flange DN 100 yellow	295-10355-5
3ZPUMM	PUR 356	Tank hose DN 75 x 1000 3" nut connecting thread both sides	225-10231-7
4ZPUMM	PUR 356	Tank hose DN 100 x 1000 4" nut connecting thread both sides	on request
3ZPRMM	UPE for eco-inks or similar	Tank hose DN 75 x 1000 3" nut connecting thread both sides	295-10736-1
4ZPRMM	UPE for eco-inks or similar	Tank hose DN 100 x 1000 4" nut connecting thread both sides	On request

1.2 Emptying container directly – special outflow for emptying the container

Model	Туре	Description	Part number
DN 80 M	Manual	Ball valve MS G3" internal thread DN 75 PN25	235-10353-4
DN 80 MF	Manual flange	Ball valve ST flange DN 80 PN16	235-13166-8
DN 80 MFE	Manual flange Limit switch	Ball valve ST DN 80 PN16 with limit monitoring	235-13197-9
DN 80 AFE	Autom. flange Limit switch	Ball valve ST DN 80 PN16 with actuator and limit monitoring	235-10353-1
CV3I	Male adapter	Camlock male adapter MS 75 G 3" internal thread	233-10457-6
CV3A	Male adapter	Camlock male adapter MS 75 G 3" outer thread	233-10457-5
TWV3I	Male adapter	TW male adapter MS MK80 G 3" internal thread	242-14132-8
TWV3A	Male adapter	TW male adapter MS MK80 G 3" outer thread	233-10457-7
TWS	Male adapter	Plug, TW lock MS MK 80	233-10457-3
CS	Male adapter	Plug, Camlock lock MS DC 75	233-10457-4
CK	Female adapter	Cap, Camlock lock MS DC 75	233-10457-1
TWK	Female adapter	Cap, TW lock MS MK 80	233-10457-2
3ZPUCM	PUR 356	Hose, PUR 356 DN 75 x 1000 Camlock D.75/3" nut connecting thread	225-10231-3
3ZPUTM	PUR 356	Hose PUR 356 DN 75 x 1000 tank vehicle 75/3" nut connecting thread	225-10231-4

1.3 Test connection container/back up



1.3.1 Base container system

Model	Туре	Description	Part number
DN 80 M	Manual	Ball valve MS G3" internal thread DN 75 PN25	235-10353-4
DN 80 MF	Manual flange	Ball valve ST flange DN 80 PN16	235-13166-8
DN 80 MFE	Manual flange Limit switch	Ball valve ST DN 80 PN16 with limit monitoring	235-13197-9
DN 80 AFE	Autom. flange Limit switch	Ball valve ST DN 80 PN16 with actuator and limit monitoring	235-10353-1
3ZPUCM	PUR 356	Hose, PUR 356 DN 75 x 1000 camlock D.75/3" nut connection thread	225-10231-3
3ZPUTM	PUR 356	Hose, PUR 356 DN 75 x 1000 tank vehicle 75/3" nut connection thread	225-10231-4
BUAC1500	Manual for LBC 1500	Connection kit, back up container 1500 kg	595-33171-1
BUAC3000	Manual for LBC 3000	Connection kit, back up container 3000 kg	595-33172-1

1.3.2 Bulk container system

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Model	Туре	Description	Part number		
DN 80 M	Manual	Ball valve MS G3" internal thread DN 75 PN25	235-10353-4		
DN 80 MF	Manual flange	Ball valve ST flange DN 80 PN16	235-13166-8		
DN 80 MFE	Manual flange Limit switch	Ball valve ST DN 80 PN16 with limit monitoring	235-13197-9		
DN 80 AFE	Autom. flange Limit switch	Ball valve ST DN 80 PN16 with actuator and limit monitoring	235-10353-1		
3ZPUCM	PUR 356	Hose, PUR 356 DN 75 x 1000 camlock D.75/3" nut connection thread	225-10231-3		
3ZPUTM	PUR 356	Hose, PUR 356 DN 75 x 1000 tank vehicle 75/3" nut connection thread	225-10231-4		
3ZPUTM	PUR 356	Hose, PUR 356 DN 75 x 1500 tank vehicle 75/3" nut connection thread	225-10231-8		

1.4 Circulation

1.4.1 Installation for base containers

Model	Туре	Description	Part number
		On request	

1.4.2 Installation for bulk containers

Model	Туре	Description	Part number
DN 80 M	Manual	Ball valve MS G3" internal thread DN 75 PN25	235-10353-4
DN 80 MF	Manual flange	Ball valve ST flange DN 80 PN16	235-13166-8
DN 80 MFE	Manual flange Limit switch	Ball valve ST DN 80 PN16 with limit monitoring	235-13197-9
DN 80 AFE	Autom. flange Limit switch	Ball valve ST DN 80 PN16 with actuator and limit monitoring	235-10353-1
ERV 80	NBR yellow	Compensator, elast. flange DN 80 yellow	295-10355-7
3ZPUMM	PUR 356	Hose, PUR 356 DN 75 x 1000 3" nut connecting thread both sides	225-10231-7
UWP90	90 I / min	Gear pump, BT 7 BZ OBK 51+ baseplate + reducer	244-10135-8





Circulation

1.5 Ink level measuring system for container **LINCOLN**



1.5.1 Base container systems

Model	Туре	Description	Part number
		Weigh system for ink container up to15 t	On request
DMU	Pressure measurement	Measuring transmitter HDA 4306-A-4A-4-20	295-10737-1
SS30	2 outputs UC2000-30GM 2 SA	Ultrasonic-Sensor 80 – 2000 mm	237-10266-8



1.5.2 Bulk container systems

Model	Туре	Description	Part number
WS15.3	3 weighing sensors	Weigh system for ink containers up to 15 t	595-32652-1
		Weigh system for ink containers up to 30 t	On request
WS15.1	1 weighing sensor	Weigh system for ink containers up to 15 t	595-33140-1
		Weigh system for ink containers up to 30 t	On request
DMU	Pressure measure	Pressure transmitter HDA 4306-A-4A-4-2	295-10737-1



Ink level measuring system

1.6 Filling pipe bulk containers

Model	Туре	Description	Part number
RSKL80	Brass	Check valve DN 80 PN 16 L = 50	295-10355-3
RSKL100	Brass	Check valve DN 100 PN 16 L = 50	295-10355-4
DN 80 MF	Manual flange	Ball valve ST flange DN 80 PN16	235-13166-8
DN 100 MF	Manual flange	Ball valve ST flange DN 100 PN16	235-10664-7
DN 80 MFE	Manual flange Limit switch	Ball valve ST DN 80 PN16 with limit monitoring	235-13197-9
DN 100 MFE	Manual flange Limit switch	Ball valve ST DN 100 PN16 with limit monitoring	235-10664-8
DN 80 AFE	Autom. flange Limit switch	Ball valve ST DN 80 PN16 with actuator and limit monitoring	235-10353-1
DN 100 AFE	Autom. flange Limit switch	Ball valve ST DN 100 PN16 with actuator and limit monitoring	235-10664-9



Filling pipe bulk containers



Filling pipe bulk containers



Filling pipe bulk containers



1.7 Docking station bulk container systems

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Model	Туре	Description	Part number
		Housing with sliding door	On request
TTK80	Male adapter codable	Todo dry coupling 3" male adapter	233-10457-8
DN 80 MF	Manual flange	Ball valve STflange DN 80 PN16	235-13166-8
DN 100 MF	Manual flange	Ball valve STflange DN 100 PN16	235-10664-7
DN 80 MFE	Manual flange Limit switch	Ball valve ST DN 80 PN16 with final position monitoring	235-13197-9
DN 100 MFE	Manual flange Limit switch	Ball valve ST DN 100 PN16 with final position monitoring	235-10664-8
DN 80 AFE	Autom. flange Limit switch	Ball valve ST DN 80 PN16 with actuator and final position monitoring	235-10353-1
DN 100 AFE	Autom. flange Limit switch	Ball valve ST DN 100 PN16 with actuator and final position monitoring	235-10664-9
SBL	Optical/ acoustic	Signal horn with flashing light 24 V DC	236-14280-3



Docking station



Filling filter for bulk container system

1.8 Filling filter for bulk container systems

Model	Туре	Description	Part number		
LLF80/1000	Strainer basket/ flange	In-line filter 10DLW G1000 DN 80	235-10338-4		
LLF80/1000	Strainer basket/ flange	In-line filter 10DLW G1000 DN 100	On request		



Filling filter for bulk container system

1.9 Heating systems

	9 - 7 - 1 - 1 - 1					
Model	Туре	Description	Part number			
LHS16W	Heating main pipe	Strip heater with control box 16 W 230 V	237-10184-5			
LHS21W	Heating filling and suction pipe	Strip heater with control box 21 W 230 V	237-10184-6			
LHS1000W	Heating container	Strip heater with control box 1000 W 230 V	237-10184-9			



1.10 Overflow prevention bulk containers

Model	Туре	Description	Part number
ÜFS	Oscillating fork WHG approved (WHG = German Water Resources Law)	Level switch 10-34 V DC 250 mA	234-10195-4



Heating system



Heating strip

1.11 Level display

71		•	Part number
SL	3-colour	Signal lamp 3-colour 24 V DC	295-10737-2



Level display

Complete Pump Range for all Applications



Lincoln has decades of experience in the design and manufacture of pump systems for highly viscous media, e.g. offset inks. Lincoln pump systems have been used in the market with outstanding success for more than 30 years. Now they have been further enhanced especially for offset inks. They offer both robustness and reliability as well as simple maintenance and servicing. Based on this experience, Lincoln has developed a revised range of pumps.

A distinction is made between:

- Pumps with hoist for 200 kg or 300 kg interchangeable drums
- Pumps for ink containers complete with pump foot stand
- Hydraulic ink pumps with foot stand + hydraulic aggregate for containers
- UV ink pumps for interchangeable and stationary containers

The performance of an ink pump is not dependent on the amount of ink transported per double stroke, but rather on the actual amount of ink supplied in a defined period of time. This is determined by the number of presses, their consumptions and levels of utilisation.

Features of the new ink pumps:

- Attractive modern design
- Robust construction
- Durable and reliable
- Simple maintenance and handling due to metric system
- Special sealing material to match the application concerned
- Pumps can be driven directly with 220 V
- Stroke frequency monitoring with possible simultaneous feed rate calculation
- Worldwide network of replacement parts dealers



Lincoln ink pumps, proven in thousands of applications at printing operations worldwide.

2.0 Ink Pumps

2.1 Ink pump variations

Model	Туре	Description	Part number
LIP 4FA/200	Pump for drums max. 3000 cm³/min	ink pump LIP 4FA/200 230 VAC incl. pump hoist, follower plate + baseplate	695-41108-1
LIP 6FA/400 Pump for drums max. 6000 cm³/min		ink pump LIP 6FA/400 230 VAC incl. pump hoist, follower plate + baseplate	695-41103-1
LIP 4FA/200	Pump for drums max. 3000 cm³/min	ink pump LIP 4FA/200 24 VDC incl. pump hoist, follower plate + baseplate	695-41103-7
LIP 6FA/400	Pump for drums max. 6000 cm³/min	ink pump LIP 6FA/400 24 VDC incl. pump hoist, follower plate + baseplate	695-41103-6
LIP 4RC/200	Rectangular container pump max. 3000 cm³/min	ink pump LIP 4RC/200 230 VAC incl. pump hoist, follower plate + frame	695-41103-2
LIP 6RC/400	Rectangular container pump max. 6000 cm³/min	ink pump LIP 6RC/400 230 VAC incl. pump hoist, follower plate + frame	695-41103-3
LIP 4RC/200	Rectangular container pump max. 3000 cm³/min	ink pump LIP 4RC/200 24 VDC incl. pump hoist, follower plate + frame	695-41103-5
LIP 6RC/400	Rectangular container pump max. 6000 cm³/min	ink pump LIP 6RC/400 24 VDC incl. pump hoist, follower plate + frame	695-41103-4
LIP 6CO/400	Container pump max. 6000 cm³/min	ink pump LIP 6CO/400 230 VAC complete, mounted on pump base	695-41103-8
LIP 6CO/400	Container pump max. 6000 cm³/min	ink pump LIP 6CO/400 24 VDC complete, mounted on pump base	695-41103-9
LIP 8CO/800	Container pump max. 9600 cm³/min	ink pump LIP 8CO/800 230 VAC complete, mounted on pump base	695-41104-2
LIP 8CO/800	Container pump max. 9600 cm³/min	ink pump LIP 8CO/800 24 VDC complete, mounted on pump base	695-41104-1
LIP 13CO/1200	Container pump max.14400 cm³/min	ink pump LIP 13CO/1200 230 VAC complete, mounted on pump base	695-41104-3
LIP 13CO/1200	Container pump max.14400 cm³/min	ink pump LIP 13CO/1200 24 VDC complete, mounted on pump base	695-41104-4
LIP 3FAUV/200	Pump for drums UV max.1200 cm³/min	ink pump LIP 3 FAUV/200 incl. pump hoist, follower plate + baseplate	695-41104-6
LIP 3RCUV/200	Rectangular container pump UV max.1200 cm³/min	ink pump LIP 3 RCUV/200 incl. pump hoist, follower plate + frame	695-41104-7
· · ·		ink pump LIP 3 COUV/400 complete, mounted on pump base	695-41104-8
LIP HCO/800	Hydraulics f. container max. 9600 cm³/min	ink pump LIP HCO/800 complete, mounted on pump base	695-41104-5
LIP HCO/1200	Hydraulics f. container max.14400 cm³/min	ink pump LIP HCO/1200 complete, mounted on pump base	695-41104-9
	Hobbock pumps up to 60kg		On request
	PM and PD USA pumps		On request



Technical data

		LIP 4FA/200	LIP 6FA/400	LIP 4RC/200	LIP 6RC/400
Transmission ratio		12 : 1	16 : 1	12:1	16 : 1
Delivery/dual stroke ca.	cm ³	200	400	200	400
Pumping frequency max. with counterpressure	dual stroke/mir bar 100	15 100	15 100	15 100	15
Air infeed pressure max.	bar 10	10	10	10	
Air consumption at 10 bar	nl/dual stroke	37	73	37	73
Dimensions ca.	mm H L W	2000 900 650	2000 900 650	2100 1000 900	2100 1000 900

		LIP 6CO/400	LIP 8CO/800	LIP 13CO/1200	LIP 3FAUV/200
Transmission ratio		16 : 1	20 : 1	20 : 1	6:1
Delivery/dual stroke ca.	cm ³	400	800	1200	200
Pumping frequency max. with counterpressure	dual stroke/min bar	12 100	10 100	12 100	6 30
Air infeed pressure max.	bar	10	10	10	5
Air consumption at 10 bar	nl/dual stroke	73	222	374	37
Dimensions ca.	mm H L W	1460 400 400	2060 400 400	1860 400 400	2000 900 650

		LIP 3RCUV/200	LIP 3COUV/400	LIP HCO/800	LIP HCO/1200
Transmission ratio		6:1	6:1	1:1	0.8 : 1
Delivery/dual stroke ca.	cm ³	200	400	800	1200
Pumping frequency max. with counterpressure	dual stroke/min bar	6 30	6 30	12 100	12 100
Air infeed pressure max.	bar	5	5		
Oil infeed pressure max.	bar		200	200	
Air consumption at 10 bar	nl/dual stroke	37	73		
Dimensions ca.	mm H L W	2100 1000 900	1460 400 400	2060 400 400	1860 400 400

2.2 Accessories

Model	Туре	Description	Part number
LIP 4	Pump max. 3000 cm ³ /min	Replacement ink pump LIP 4 230 VAC	695-41105-4
LIP 4	Pump max. 3000 cm ³ /min	Replacement ink pump LIP 4 24 VDC	695-41105-3
LIP 6	Pump max. 6000 cm ³ /min	Replacement ink pump LIP 6 230 VAC	695-41105-6
LIP 6	Pump max. 6000 cm ³ /min	Replacement ink pump LIP 6 24 VDC	695-41105-5
LIP 8	Pump max. 9600 cm ³ /min	Replacement ink pump LIP 8 230 VAC	695-41105-8
LIP 8	Pump max. 9600 cm³/min	Replacement ink pump LIP 8 24 VDC	695-41105-7
LIP 13	Pump max. 14400 cm ³ /min	Replacement ink pump LIP 13 230 VAC	695-41106-1
LIP 13	Pump max. 14400 cm ³ /min	Replacement ink pump LIP 13 24 VDC	695-41105-9
LIP 3UV	Pump UV max. 1200 cm³/min	Replacement ink pump LIP 3 UV	695-41105-2
LIP 3COUV	Pump UV max. 2400 cm³/min	Replacement ink pump LIP 3 COUV	695-41105-1
LIBS	Stationary	Pump base, stationary	495-71817-1
LIBSF	Mobile	Pump base, mobile	495-71818-1
LIFT200	With operation	Pump hoist for 200 kg interchangeable drum	595-33173-1
LIFT300	With operation	Pump hoist for 300 kg rectangular container	595-33174-1
LIFP	Round follower plate	Replacement follower plate 200 kg	595-33175-1
LIFPR Rectangular follower plate		Replacement follower plate 300 kg	595-33176-1
NEW!			
LIP 6CO	Pump max. 6000 cm ³ /min	Replacement ink pump LIP 6CO 230 VAC	695-41106-3
LIP 6CO	Pump max. 6000 cm³/min	Replacement ink pump LIP 24 VDC	695-41106-2

3.0 Hydraulic Aggregates



3.0 Hydraulic aggregates

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Model	Туре	Description	Part number
LHA/8	For 8 ink pumps HCO	Hydraulic aggregate LHA4 P=200 bar	244-10375-4
LHA/4	For 4 ink pumps HCO	Hydraulic aggregate LHA8 P=200 bar	244-10375-5



Hydraulic aggregate

4.0 Ink Filters

4.0 Ink filters

Model	Туре	Description	Part number
LIF3611/100	Without bypass, optical display	Ink filter PI210 3611 optical 100 µm	295-10619-7
LIF3611/200	Dto.	Ink filter PI210 3611 Opt. 200 μm	295-10619-1
LIF3615/100	Dto.	Ink filter PI210 3615 Opt. 100 μm	295-10619-8
LIF3615/200	Dto.	Ink filter PI210 3615 Opt. 200 μm	295-10619-2
LIF3630/100	Dto.	Ink filter PI210 3630 Opt. 100 µm	295-10619-9
LIF3630/200	Dto.	Ink filter PI210 3630 Opt. 200 µm	295-10619-3
LIF3630/500	Dto.	Ink filter PI210 3630 Opt. 500 μm	295-10619-4
LIF3645/100	Dto.	Ink filter PI210 3645 Opt. 100 µm	295-10634-1
LIF3645/200	Dto.	Ink filter PI210 3645 Opt. 200 µm	295-10619-5
LIF3645/500	Dto.	Ink filter PI210 3645 Opt. 500 µm	295-10619-6
LIFAZ	Adapter for electr. scan	Electr. display for ink filter PI210	295-10620-1
LIFE3611/100	Replacement part	Filter elem. for PI210 3611 100 μm	295-10620-8
LIFE3611/200	Replacement part	Filter elem. for PI210 3611 200 μm	295-10620-2
LIFE3615/100	Replacement part	Filter elem. for PI210 3615 100 μm	295-10620-9
LIFE3615/200	Replacement part	Filter elem. for PI210 3615 200 μm	295-10620-3
LIFE3630/100	Replacement part	Filter elem. for PI210 3630 100 μm	295-10635-1
LIFE3630/200	Replacement part	Filter elem. for PI210 3630 200 μm	295-10620-4
LIFE3630/500	Replacement part	Filter elem. for PI210 3630 500 μm	295-10620-5
LIFE3645/100	Replacement part	Filter elem. for PI210 3645 100 µm	295-10635-2
LIFE3645/200	Replacement part	Filter elem. for PI210 3645 200 μm	295-10620-6
LIFE3645/500	Replacement part	Filter elem. for PI210 3645 500 µm	295-10620-7



Ink filter



Ink filter

Technical data

Model		LIF 3611/	LIF 3615/	LIF 3630/	LIF 3645/
Flow rate at Pressure difference 5 bar		18 I / min	35 I / min	50 I / min	80 I / min
Connecting th	read	G 3/4"	G 1 1/4"	G 1 1/4"	G 1 1/4"
Dimensions Ø	x L	90 x 401 mm	137 x 315 mm	137 x 440 mm	137 x 615 mm
Max. operating	g pressure	315 bar	315 bar	210 bar	210 bar
Sheet-fed offset one press several presses		yes yes	no yes	no no	no no
Web offset	one press several presses	no no	yes no	yes yes	no yes
Filter mesh	Standard Alternative	200 μm 100 μm	200 μm 100 μm	200 μm 100 μm 500 μm	200 μm 100 μm 500 μm
Filter surface		1350 cm²	1800 cm²	3400 cm²	5020 cm²



Tubing

Tubing corresponding to the pressure loads concerned is installed to provide the necessary connection between the containers, pumps and presses.

These systems are quick and easy to install and are flushed and cleaned at the time of installation. Different conditions and requirements are the criteria that determine the suitable diameter of tubing to be used.



5.1 Pressure tubing per metre incl. fittings and mounting

Model	Туре	Description	Part number
LITS 28	Main ink line	Tube system 28L, consisting of:	
	Steel tube	Tube ST37.4 NBK D 28, 0X 2,0 A3C	105-35308-1
		Fitting ST W28-L C	223-13772-2
		Fitting ST G28-L A3C	223-14493-2
		Tube clamp 428PP	226-14276-3
		Hex. socket head screw 8.8 M 6X 40C	201-12587-7
		Guide rail nut SM A3C F. size 1-8	226-14173-8
		Guide rail TS 11	226-10113-4
		Mounting rail C 36/36/2,5	233-10186-6
		Clamp carrier for mounting rail C 36/36/2,5	233-10240-2
		Hexagon nut 8M10C	207-12136-1
		Washer ST 10,5C	209-13072-3

5.2 Pressure tubing per metre incl. fittings and mounting

Model	Туре	Description	Part number
LITS 42	Main ink line	Tube system 42L, consisting of:	
	Steel tube	Tube ST37.4 NBK D 42, 0X 3,0 C	105-35134-8
		Fitting ST G42-L C	223-13732-5
		Fitting ST W42-L C	223-13772-1
		Fitting T42-L C	223-13738-5
		Tube clamp 54PP	226-14276-5
		Hex. socket head screw 8.8 M 6X 55C	201-12019-5
		Guide rail nut SM A3C F. size 1-8	226-14173-8
		Guide rail TS 11	226-10113-4
		Mounting rail C 36/36/2,5	233-10186-6
		Clamp carrier for mounting rail C 36/36/2,5	233-10240-2
		Screw 6KT 8.8 M10X 25C	200-13092-9
		Hexagon nut 8 M10C	207-12136-1
		Washer ST 10,5C	209-13072-3
		Threaded pin ST37K M10	101-35112-8
		Coupling M10	222-10052-2
		Heavy duty dowel M10	226-14159-4

5.3 Pressure pipe per metre incl. fittings and fixing

Model	Туре	Description	Part number
LITS 60	Main ink line	Pipe system 60, consisting of:	
	Steel tube	Pipe, ST35.8 D 60,3X 4,5MM	105-35199-4
		Connector, pipe W 60,3MM 90 GRAD	295-10740-4
		Connector, pipe W 60,3MM 45 GRAD	295-10740-5
		Connector, pipe 60,3MM X 1-1/2"	295-10740-2
		Connector, pipe T 60,3MM	295-10740-3
		Connector, pipe T 60,3MM	295-10740-1
		Doni connecting element 280 R 2 Z	222-12349-8
		Plug 290 R 2	203-12096-3
		Pipe clamp ST rubber for pipe 2"	295-10355-6
		Pipe clamp 760,3PP	226-10454-5
		Hex. socket head screw 8.8 M 6X 55C	201-12019-5
		Guide rail nut SM A3C F. size 1-8	226-14173-8
		Guide rail TS 11	226-10113-4
		Mounting rail C 36/36/2,5	233-10186-6
		Clamp carrier for mounting rail C 36/36/2,5	233-10240-2
		Screw 6KT 8.8 M10X 25C	200-13092-9
		Hexagon nut 8 M10C	207-12136-1
		Washer ST 10,5C	209-13072-3
		Threaded pin ST37K M10	101-35112-8
		Coupling M10	222-10052-2
		Heavy-duty dowel M10	226-14159-4



5.4 Filling and suction tubing 3" per metre incl. fittings and mounting

Model	Туре	Description	Part number
LITS 3"	Filling and suction	Tube system 3", consisting of	
	tubing, steel tube	Tube, thread NW80 Z	105-35211-4
		Coupling 270 RP3 Z	222-12344-9
		Bend EGAL 90 RP3 Z	235-10353-4
		DONI connecting element 280 R 3 Z	222-12354-9
		Tube DONI ST R3 X 80Z	222-12427-5
		Tube clamp ST rubber for tube 2"	295-10355-6
		Guide rail TS 11	226-10113-4
		Mounting rail C 36/36/2,5	233-10186-6
		Clamp carrier for mounting rail C 36/36/2,5	233-10240-2
		Screw 6KT 8.8 M10X 25C	200-13092-9
		Hexagon nut 8 M10C	207-12136-1
		Washer ST 10,5C	209-13072-3
		Threaded pin ST37K M10	101-35112-8
		Coupling M10	222-10052-2
		Heavy-duty dowel M10	226-14159-4

5.5 Filling and suction tubing 4" per metre incl. fittings and mounting

Model	Туре	Description	Part number
LITS 4"	Filling and suction	Tube system 4"	
	tubing, steel tube	Tube, thread NW100 Z	205-35211-5
		Coupling 270 RP2 Z	222-12250-9
		Bend EGAL 90 RP4 Z	222-10739-1
		DONI 280 R 4 Z	222-10085-2
		Tube DONI ST R4 X 80Z	222-12427-4
		Tube clamp ST rubber for tube 4"	295-10355-8
		Guide rail TS 11	226-10113-4
		Mounting rail C 36/36/2,5	233-10186-6
		Clamp carrier for mounting rail C 36/36/2,5	233-10240-2
		Screw 6KT 8.8 M10X 25C	200-13092-9
		Hexagon nut 8 M10C	207-12136-1
		Washer ST 10,5C	209-13072-3
		Threaded pin ST37K M10	101-35112-8
		Coupling M10	222-10052-2
		Heavy-duty dowel M10	226-14159-4

6.0 Tubing Outflow

6.1 Outflow 28L

Model	Туре	Description	Part number
LIAB 28	Outflow at print unit	Pipe outflow 28L, consisting of:	
		Fitting ST T28-L C	223-13738-6
		Coupling ST EW28-L A3C	223-14171-2
		Coupling ST GZR28/15-L A3C	223-10334-1
		Fitting ST GE15-L G 1/2AC	223-12361-9
		Ball valve ST G 1/2I DN13 500 bar	235-13108-4
		Plug G1/2A DN12	252-10086-9

6.2 Outflow 42L

Model	Туре	Description	Part number
LIAB 42	Outflow at print unit	Pipe outflow 42L, consisting of:	
		Fitting ST T42-L C	223-13738-5
		Coupling ST EW42-L A3C	223-12397-7
		Fitting ST GE42-L G1-1/4A A3C	223-10263-4
		Ball valve R1-1/4 Typ MK 315-732	968006-E

6.3 Outflow 60

Model	Туре	Description	Part number
LIAB 60	Transfer main ink line to the press	Pipe outflow 60, consisting of:	
		Connector, pipe W 60 3MM 90 GRAD	295-10740-4
		Connector, pipe W 60 3MM 45 GRAD	295-10740-5
		Connector, pipe 60 3MM X 1-1/2"	295-10740-2
		Connector, pipe T 60,3MM	295-10740-3
		Connector, pipe 60,3MM	295-10740-1
		Ball valve R1-1/4 Typ MK 315-732	968006-E
		Fitting ST GE42-L G1-1/4A A3C	223-10263-4
		Pipe socket ST EGE42-L G1-1/2A EDC	223-13686-5



6.4 Outflow 3"

Model	Туре	Description	Part number
LIAB 3"	Filling and suction tubing, steel tube	Tube outflow 3", consisting of:	
		T, EGAL 130RP4 Z	222-10398-3
		DONI connecting element 280 R 4 Z	222-10085-2
		Bend, EGAL 90 RP4 Z	222-10739-1
		Tube DONI ST R3 X 80Z	222-12427-5
		Ball valve MS G3 I DN75 PN25	235-10353-4
DN 80 M	Manual	Ball valve MS G3" internal thread DN 75 PN25	235-10353-4
DN 80 MF	Manual flange	Ball valve ST flange DN 80 PN16	235-13166-8
DN 80 MFE	Manual flange limit switch	Ball valve ST DN 80 PN16 with limit monitoring	235-13197-9
DN 80 AFE	Autom. flange limit switch	Ball valve ST DN 80 PN16 with actuator and limit monitoring	235-10353-1

6.5 Outflow 4"

Model	Туре	Description	Part number
LIAB 4"	Filling and suction tubing, steel tube	Tube outflow 4" consisting of:	on request
		T, EGAL 130RP3 Z	222-10398-2
		DONI connecting element 280 R 3 Z	222-10085-1
		Bend, EGAL 90 RP3 Z	222-12354-9
		Tube DONI ST R3 X 80Z	222-12427-5
		DONI, red 245 R 4 XR 3Z	222-12258-9
DN 100 M	Manual	Ball valve MS G4" internal thread DN 100 PN25	235-10664-6
DN 100 MF	Manual flange	Ball valve ST flange DN 100 PN16	235-10664-7
DN 100 MFE	Manual flange limit switch	Ball valve ST DN 100 PN16 with limit monitoring	235-10664-8
DN 100 AFE	Autom. flange limit switch	Ball valve ST DN 100 PN16 with actuator and limit monitoring	235-10664-9

6.6 Pressure control in the main pump lead

Model	Туре	Description	Part number
LIDÜ	Digital in main ink line	Press control, consisting of:	
		Pressure switch 0-400 bar-G1/4	234-10330-4
		Fitting ST T42-L C	223-13738-5
		Fitting ST RED42/12-L A3C	223-10187-7
		Fitting ST MAVE12-L G 1/4 A3C	223-14268-4

7.0 Controls

Control and monitoring (alarms)

A distinction is made here between different levels of control comfort.

Simple control has no display and only offers standard control functions.

Comfortable control and monitoring works with compatible modules and therefore permits various levels of operating comfort.

All system modules can be integrated into a network, i.e. the alarm message from the basic container then also appears on the display of the ink level control at the press desk. All displays are designed as touch screens and thus allow a very high level of operating comfort. Interfaces to in-house networks are prepared and can be integrated at any time.

The visualisation of the tank systems is also realised via a colour touch screen. All relevant information is displayed in a well-organised and easily identifiable way at the central control cabinet. In principle, any customer wish can be implemented in such a control.

7.0 Controls

Model	Туре	Description	Part number
LICC4	Level control for 4 containers	Electronic inst. for monitoring 4 containers	A765.73.85/2
LICC8	Level control for	Electronic inst. for monitoring	
	8 containers	2 x 4 containers	A765.73.94
LIVM1	Consumpt. control for 4 colours	Electronic inst. for liquids consumpt. measurement with 1 display	A765.73.89
LIVM2	Consumpt. control for 4 colours	Electronic inst. for liquids consumpt. measurement with 2 displays	A765.73.90
	Complete inst.	On request	By order



Control



Colour touch screen



Control cabinet

8.0 Consumption Measurement



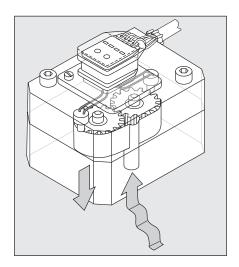
Consumption measurement

Ink consumption measurement enables the ink consumption for each press to be recorded and displayed separately. Therefore the exact quantities of ink for each job are available and can be allocated directly to the individual jobs for calculation or costing purposes.

That means total cost accountability for each print job. Consumption recording is done via measuring heads integrated into the tubing at the press. A separate flowmeter is installed for each colour.

The consumption is displayed on the control screen. Optionally, this can be integrated into the press control desk in combination with an additional line. With certain prerequisites, it is also possible to connect it to an in-house network.

In cases where the press is supplied with two different types of ink, the signals of the measuring heads are recorded and displayed separately.





8.1 Sheet-fed presses and commercial presses

Model	Туре	Description	Part number
LIV1	Max. 65 l/min	Consumption measurement, consisting of:	
		Flowmeter VCA2F3PS +VC2 G1	234-10267-6
		Fitting ST GE42-L RED G1-1/4A A3C	223-13610-9
		Fitting ST RHZ 28-L G1 A A3C	223-13706-4
		Terminal box E634	664-29348-1
		Pipe, covered 7x1.0 MM2	113-35344-2

8.2 Commercial presses and newspaper presses

Model	Туре	Description	Part number
LIV2	Max. 80 l/min	Consumption measurement, consisting of:	
		Flowmeter VC5F3PS +VC5 G1-1/4	234-13118-7
		Fitting ST GE42-L G1-1/4A A3C	223-10263-4
		Fitting ST GE42 G1-1/2AC	223-13749-2
		Fitting ST RHZ 42-L G1-1/2A A3C	223-13706-5
		Couplings ST RI G1-1/2AXG1-1/4C	222-13670-2
		Terminal box E634	664-29348-1
		Pipe, covered 4x0.5 MM2	113-35344-1

9.0 Ink Change

9.1 Manual, without limit monitoring

Model	Туре	Description	Part number
LIFUM	Manual, without limit contact	Ink change consisting of:	
		Coupling ST GZR42/28-L A3C	223-14253-8
		Coupling ST EW28-L A3C	223-14171-2
		Ball valve 3/2 ST DN 25 400 bar	235-13197-4
	or	Ball valve 3/2 ST DN 32 400 bar	295-10741-1

9.2 Manual, with limit monitoring

Model	Туре	Description	Part number
LIFUME	Manual, with limit contact	Ink change consisting of	
		Coupling ST GZR42/28-L A3C	223-14253-8
		Coupling ST EW28-L A3C	223-14171-2
		Ball valve 3/2 DN 25 160 bar with limit monitoring	235-10353-6
	or	Ball valve 3/2 DN 32 160 bar with limit monitoring	295-10741-2

9.3 Automatic, with limit monitoring

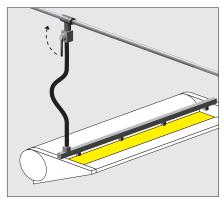
Model	Туре	Description	Part number
LIFUAE	Automatic, with limit contact	Ink change consisting of:	
		Coupling ST GZR42/28-L A3C	223-14253-8
		Coupling ST EW28-L A3C	223-14171-2
		Ball valve 3/2 DN 25 160 bar with actuator and limit monitoring	235-10353-5
	or	Ball valve 3/2 DN 32 160 bar with actuator and limit monitoring	295-10741-3



Ink fountain filling options

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

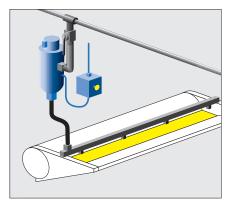
Manual systems



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.



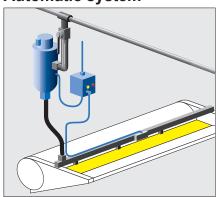
Semi-automatic ink fountain filling

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 handheld 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	Туре	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	Туре	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	Туре	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	Туре	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	Туре	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





Ultrasonic sensor



Sensor holder



Sensor with holder



Ink valve



Overflow stop



Ink filling tube

11.0 Tap Stations/Mixing Stations

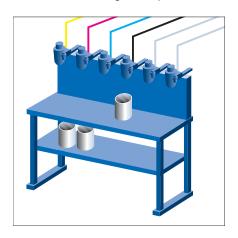


Tap stations

In the version with the tap station, a tap station is installed either in a central position in the printing plant or directly beside the pumps, from where the printers collect the required ink in the desired quantities.

Tap stations can be installed either with semi-automatic or manual filling.

To facilitate cleaning, the tap station



is made mainly of stainless steel and offers sufficient shelf area for the ink tins to be filled.

Mixing stations

Packaging printing operations require an especially large number of special colours. In order to reduce the resulting vast quantities of residue inks and therefore the amount of required storage space, many printing operations have started to mix these special colours themselves.

The advantages are:

- Reduced storage
- Ink production to match jobs
- Inks available at short notice (no problem due to possible delayed delivery from the ink manufacturer)

These colour mixing systems are matched to the basic colour mixing systems and recipe software of the ink manufacturer concerned.

11.1 Manual

Model	Туре	Description	Part number
LIZSM4	Manual operation	Ink tap station 4 colours manual, consisting of: steel frame with special steel trough, shut-off ball valves, antidrip spouts and small material	595-33178-1
LIZSM6	Manual operation	Ink tap station 6 colours manual	On request

11.2 Semi-automatic

Model	Туре	Description	Part number
LIZSS4	Semi-autom. operation	Ink tap station 4 colours semi-automatic, consisting of: steel frame with special steel trough, ink valves, manual pushbutton, antidrip spouts and small material.	595-33179-1
LIZSS6	Semi-autom. operation	Ink tap station 6 colours semi-automatic	On request

11.3 Mixing station

Model	Туре	Description	Part number
LIMX	On request	Ink mixing station incl. weigh system	On request

12.0 UV Ink Supply

UV ink supply systems, special features and applications

UV inks have up to now confronted all pump manufacturers with problems that are almost impossible to resolve. However, with intensive research & development work, Lincoln has succeeded in finding a way to handle even the highly-sensitive UV ink in ink supply systems. A special control of the pumping strokes, seals to match the

ink including lubrication and a changed surface in the pump tube now permit the pumping of highly viscous UV ink.

This process is immensely beneficial above all for the personnel working with UV ink, as it is especially important to avoid direct contact with the skin.

The options for UV ink supply are almost identical to the conventional systems and range from the pumping station with adjoining tap station, ink stirring in the fountain up to automatic

ink fountain filling within the press. The ink supply system allows several presses to be supplied with ink from one pumping station.

This process is now patent protected.

12.1 Automatic, with ink filling tube

Model	Туре	Description	Part number
		Level control, consisting of: ink filling tube with adjustable dispensing ball valves and ultrasonic sensor, special ink valve, manual/automatic switch, shut-off ball valve, ink hose with quick connector, connecting cable and small material	
LIL RAUV1	Auto. with ink filling tube + ink valve	UV ink fountain up to 800 mm	595-33180-1
LIL RAUV2	Auto. with ink filling tube + ink valve	UV ink fountain up to 1100 mm	595-33181-1
LIL RAUV3	Auto. with ink filling tube + ink valve	UV ink fountain up to 1500 mm	595-33182-1
LIL RAUV4	Auto. with ink filling tube + ink valve	UV ink fountain up to 1900 mm	595-33183-1



12.2 Control

Model	Туре	Description	Part number
LICUV	UV version	Electronic system for UV installations incl. display	On request



Register Ink supply systems

Part number	page	Part number	page	Part number	page
101-35112-8	21	222-10739-1	25	225-10231-3	8
101-35112-8	22	222-12250-9	23	225-10231-3	9
101-35112-8	23	222-12258-9	25	225-10231-3	9
101-35112-8	23	222-12344-9	23	225-10231-4	8
105-35134-8	21	222-12349-8	22	225-10231-4	9
105-35199-4	22	222-12354-9	23	225-10231-4	9
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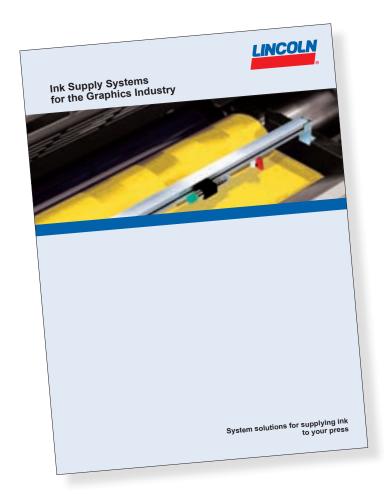


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