

Chain oil lubrication

Oil lubrication systems for industrial conveyor chains





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Chain lubrication

There are different kind of conveyor chains to better meet the user's needs. The lubrication points are different according to the type of chain.

- roller chain
- cardan chain
- rivetless chain

Demands on feed and chain conveyors are always very high. They have to withstand heavy loading, continuous operation and harsh operating conditions such as extreme temperature, dust, dirt and water. Chain wear caused by friction between the chain elements and/or corrosion forces regular servicing and repair work to be carried out on the chain – that is if the chain does not need to be replaced completely.



The chains have a large number of friction zones that should be lubricated. The illustra-

tion below shows a sectional view of a roller chain with different parts and friction zones. The lubricant flows between the different chain components by gravity and capillarity.

chain components by gravity and capillarity. A lubricant film is build up between the friction points of every component of the chain link. It reduces the temperature rising and therefore the part wear.



Chain oil lubrication system type CLK with oil lubrication unit UCDE01

The CLK airless oil projection system is a simple, reliable and easyto-install solution for lubricating the roller chains of industrial conveyors.

The system comprises a central unit to deliver a precise metered quantity of lubricant to each point of friction of moving chain links. With the integrated control unit, the metered quantity is projected at the right time. Airless projection nozzles have no mechanical contact with the chains, thus reducing wear and dirt accumulation. The main components are corrosion proof and suit to large temperature ranges.

CLK system is offered as a kit with all required components for the installation of a lubrication system. It is also possible to set up its own lubrication system selecting the different components.

Leaflet

For further details on the CLK system, please see the leaflet "CLK, Airless oil projection system for conveyor roller chain lubrication", No. LS/P2 18618.



Operating manual

For further information about the CLK lubrication system, see the mounting and operating manual, No. 951-130-452.



Chain speed

The CLK lubrication system has been designed for lubricating horizontal roller chain conveyors with a chain pitch greater than 25 mm (1"). The chain speed should preferably be less than 3 pitches/s. For higher speeds, a "pitch jump" function is integrated into the automation system. Please contact the SKF Service Centre in this case.

CLK kits

The CLK lubrication system is provided in the form of a complete kit. The kit comprises all components necessary for installation of the centralized lubrication system, including the central unit, nozzles, proximity sensor and all fittings and accessories.

Order information, oil lubrication system

Kit No.	Central unit Flow rate	Outlets	Nozzle ¹⁾ Single	Double	Proximity Ø	switch ¹⁾ Temperature	Range	Tube ¹⁾ short	long
CLK-230R-101+XXX ²⁾	30 mm ³	2	2	-	12 mm	-40 to +85 °C	7 mm	1	_
CLK-260R-100+XXX 2)	60 mm ³	2	-	2	12 mm	-40 to +85 °C	7 mm	1	-
CLK-260R-101+XXX 2)	60 mm ³	2	2	-	12 mm	-40 to +85 °C	7 mm	1	-
CLK-260R-110+XXX 2)	60 mm ³	2	-	2	18 mm	-20 to +180 °C	8 mm	1	-
CLK-430R-101+XXX ²⁾	30 mm ³	4	4	-	12 mm	-40 to +85 °C	7 mm	1	1
CLK-430R-121+XXX ²⁾	30 mm ³	4	4		8 mm	-40 to +85 °C	4 mm	1	1
CLK-460R-100+XXX ²⁾	60 mm ³	4	_	4	12 mm	-40 to +85 °C	7 mm	1	1
CLK-460R-101+XXX ²⁾	60 mm ³	4	4	-	12 mm	-40 to +85 °C	7 mm	1	1
CLK-460R-110+XXX ²⁾	60 mm ³	4	_	4	18 mm	-20 to +180 °C	8 mm	1	1

*) For more information on subsets, see the technical data ²⁾ The order number has to be completed with the voltage key of the central unit: 428 for 230 V AC, 50/60 Hz and 429 for 115 V AC, 50/60 Hz

CLK system components

Oiling unit UCDE01

The pumping unit comprises:

- An electromagnetic pump with 2 or 4 outlets integrated in the pumping unit housing
- Pump flow rate 30 or 60 mm³/stroke and outlet
- A reservoir with a 7.5 l capacity and a minimal level switch
- A control unit with control panel and display on the unit housing front side

Order information, oiling unit UCDE01

Order No.	Flow rate	Outlets	Operating voltage
UCDE01-230RT+428	30 mm ³	2	230 V AC 50/60 Hz
UCDE01-230RT+429	30 mm ³	2	115 V AC 50/60 Hz
UCDE01-260RT+428	60 mm ³	2	230 V AC 50/60 Hz
UCDE01-260RT+429	60 mm ³	2	115 V AC 50/60 Hz
UCDE01-430RT+428	30 mm ³	4	230 V AC 50/60 Hz
UCDE01-430RT+429	30 mm ³	4	115 V AC 50/60 Hz
UCDE01-460RT+428	60 mm ³	4	230 V AC 50/60 Hz
UCDE01-460RT+429	60 mm ³	4	115 V AC 50/60 Hz



Oiling unit UCDE01

Oiling unit UCDE01



Technical data

Oiling unit UCDE01

Flow rate Lubricant Viscosity* Delivery pressure Working frequency Mechanical life Operating temperature Operating voltage Protection

Reservoir capacity Level monitoring Reservoir material Housing material Weight Acoustic emission

The central unit meets following standards: IEC 61010-01: 03/2001 IEC 61010-01: 2010 EN 61000-6-4: 2007/A1: 2011

NF EN 60529 (2000)

30 or 60 mm³/stroke and outlet mineral or synthetic oil, without solid additive 20 to 1 000 mm²//s < 100 bar 2.5 Hz max. ca. 20 × 10° cycles 0 to 60 °C 110/220 V AC; 50/60 Hz IP65 7.5 I (usable capacity) Min. level switch HDPE ABS approx. 12 kg (reservoir full) \leq 70 dB (A)

Safety compliance Safety compliance Electromagnetic compatibility (EMC) – Part 6-4 : Generic standards – Emission standard for industrial environments Degrees of protection provided by enclosures

Projection nozzle kits

The kit includes:

- 2 protection nozzles type AC-A-410 or AC-A-420
- 1 nozzle holder
- fittings

Kit with AC-A-410 nozzles Order No	UCDE01-NOZ1
Kit with AC-A-420 nozzles Order No	UCDE01-N0Z2

The minimum and maximum effective viscosities are recommended at operating temperature. It is therefore necessary to take into account any temperature differences between the central unit and the nozzles, for example for "oven" applications.

As the viscosity affects the velocity of the projection, it is necessary to validate the lubricant selected when the system is started under the actual conditions of use (configuration of the installation, ambient temperatures of each component and chain speed).

Technical data

Nozzles

Type AC-A-410 AC-A-420 Projection Volume Projection distance Lubricant Viscosity Operating temperature Lubricant inlet Weight Material

Number of nozzles

Projection nozzle with one outlet Projection nozzle with two outlets vertical, top-down 30 mm³/stroke and outlet 5 to 50 mm mineral or synthetic oil 7 to 220 mm²/s at projection temperature -25 to +200 °C for metallic tube Ø 4 mm, length 5 m max. approx. 50 g stainless steel 304, FPM seal for check valves 2

Projection nozzle kits 220 85 50 (85) Vis/screws Vis/screws Entrées huile/ (2,5) 24 (13) M8x16 (x2) M6x16 (x2) inlets oil ∝ €₽ Ŧ (x6 Ø6,6) 87,5 54,5 125 € (35) (2,5) 曲 €EHIE (16,4) (9,6) (4,2) Ø18 Buse/nozzle No. AC-A-420 (x2) 98,9 98,9 (11,1) 11,1 (1:3) Support No. SY-9729 (x1)) (1:3) 13,5 13,5 (45) 59,88 <u>55</u> (8,2) 84.8 (20) Õ (Support No. SY-9730 (x1))

Connection tube kits

The kit includes:

- + 2 tubes, stainless steel 316 L, Ø 3 \times 4,
- protected in a PTFE tube, Ø 10×12
- clips and fastening screw M 5× 8 (× 5)
- length 2.5 or 5 m/tube
- fittings



Proximity switch kit

The kit includes:

- 1 inductive proximity sensor
- 1 connection cable, 5 m with connector
- 1 proximity switch holder
- fittings

Order No. for proximity switch kits





Chain oil lubrication with PE electromagnetic pump

The SKF Oil Projection System for Chain Conveyors, type UC, project lubricant to the lubrication point, e.g. the friction point, without any direct mechanical contact with the chain.

Oil projection

The SKF oil projection system have generally one or several electromagnetic pump(s), one oil reservoir and a control unit.

The chain is lubricated while it is running.

For optimal oil projection, very small amounts of oil should be projected at a specific time on the chain lubrication point. A proximity sensor is used to accurately determine the position of the chain, the rollers and the links, and so the exact time for projecting the lubricant. When a lubrication point is detected the control unit triggers a lubrication impulse. At every lubrication impulse the electromagnetic piston pumps deliver accurate lubricant metered quantity (20, 40 or 60 mm³/impulse) that are projected to the lubrication points with nozzles or applied with oiling brushes.



NOTE

This brochure presents the main components to build up an oil lubrication system.

For further information or specific technical requirements, please contact lubsystems.france@skf.com .

Electromagnetic pump

The electromagnetic pump is the core element of the SKF oil projection systems. It can project with accuracy 20, 40 to 60 mm3 of lubricant per outlet and impulse to the lubrication point.

Description

The electromagnetic pump consists of a housing, a rotating $(-90^\circ, 0^\circ, +90^\circ)$ mounting flange, an electric connector and an electromagnet that acts on the plunger. The plunger moves the pumping pistons with the help of a barrel centered in the pump's housing. A return spring pulls each piston back into its initial position. The pump can have 2, 3 or 4 outlets according to the model. Each outlet port is equipped with a check valve.

Oil is fed directly from the gravity reservoir into the intake chamber. The pump is vented by an opening.

Power is supplied to the pump via a swiveling connector - the signal light lights up when the power is on. DC or AC current supply. Alternating current can be rectified with a diode bridge.

The pump can be operated by hand at any time or when there is a power failure.



PE electromagnetic pump

Order information, PE electromagnetic pump¹)

Pump No. ²⁾	Number of outlets	Flow rate per outlet
DE 0 00	2	20 2
PE-2-20+	2	20 mm ³
PE-2-40+	2	40 mm ³
PE-2-60+	2	60 mm ³
PE-3-20+	3	20 mm ³
PE-3-40+	3	40 mm ³
PE-3-60+	3	60 mm ³
PE-4-20+	4	20 mm ³
PE-4-40+	4	40 mm ³
PE-4-60+	4	60 mm ³
PE-6-20+	6	20 mm ³
PE-6-40+	6	40 mm ³
PE-6-60+	6	60 mm ^{3 3)}

¹⁾ The electric connector is delivered with the pump PE.

²⁾ Please indicate the voltage key when ordering: +428 for 230 VAC, 50/60 Hz, +429 for 115 VAC, 50/60 Hz, +924 for 24 V DC
 ³⁾ For pump with 6 outlets and a flow rate of 60 mm³, please take con-

tact with SKF to check the pump performances according to the operating conditions (viscosity, temperature, etc.).

Operating manual

For further information about the PE electromagnetic pump, see the mounting and operating manual, No. 951-130-403.

Technical data

PE pump

100 bar (1 450 psi) max. 0,01 < P < 0,5 bar Delivery pressure Inlet pressure 20, 40 or 60 mm³/stroke and outlet -20 to +60 °C Flow rate Operating temperature Working frequency Mechanical life Lubricant 2 Hz max. 2 Hz max. ca. 20 × 10⁶ cycles mineral or synthetic oil, without solid additive < 1 000 mm2/s fluorocarbon (FPM) G 1/4 NF E 03-005 max. depth 8 mm effective viscosity Seals Lubricant inlet M 8×1 according to NFR 954-03 G 1/4, plug H12 3,360 g Lubricant outlet Bleeding outlet Weight (PE-6) Electric Direct current or alternative current 24 V DC 115 V – 50/60 Hz or 230 V – 50/60 Hz 4,5 A / 24 VDC 1 A/115 V Intensity max. 0.55 A/230 V Duty cycle Duty ratio Electromagnet, power $0,1 \le T \le 0,2 s$ 40% 105 W according to 93/68/EWG CE / 73/23/EWG low voltage. Type of enclosure (screwed connector) Connector IP 65

according to DIN 43 650





Control unit AEPN-UC

The AEC-UC control unit has been especially designed for the SKF oil projection systems with projection nozzles or oiling brushes. Its main function is to trigger at a regular time interval a lubrication impulse.

Function

When the chain is running, the proximity switch located upon the chain detects the lubrication point passing forward. At every activation it sends a signal to the control unit.

If the system is in lubrication phase, the control unit triggers a lubrication impulse at every signal (or according an impulse rhythm set by the user). The number of lubrication impulses is set in accordance with the needs.

When the system is in pause phase, no lubrication impulse is triggered. The length of the pause phase is set by the user. It can be a time or a number of pulses. In the second case, the control unit counts the pulses sent by the proximity switch. When the set number of pulses is reached, the pause phase is over and a new lubrication phase starts.

The AEPN-UC control unit can control two lubrication circuit (applications with nozzles) or three (applications with brushes).

It can monitor too the lubricant level in the reservoir (minimal level and warning level according to the version). When receiving a signal from the minimal level switch, the control unit stops the lubrication system, when receiving a signal from the warning level switch (before the minimal level), the control unit sends a signal to the operator.



Control unit AEPN-UC

Order information, control unit AEPN-UC					
Control unit No.	Number of cycles	Lubrication phase Pause phase		Level monitoring	
Nozzle applications					
AEPN-UC-01 AEPN-UC-05 AEPN-UC-07	1 2 2	impulses impulses impulses	impulses or time impulses or time impulses or time	minimum minimum minimum or warning	
Brush application					
AEPN-UC-03 AEPN-UC-04 AEPN-UC-08	up to 3 1 up to 3 (external machine contact for cycles possible)	impulses impulses impulses	time time time	minimum minimum minimum	

Operating manual

For further information on the AEPN-UC control unit see the operating manual, No. 951-130-424 (nozzle applications) or 951-130-424-1 (brush applications).



Control unit AEPN-UC technical data

Technical data	Value
Pated input voltage LIp	100 2/01/00
Rated frequency	50/60 Hz
Max. fusing (5×20)	1.6 A 230 V AC – 3.15 A / 115 V DC
Max. switching current	2AAC
Max. relay switching current	250 V AC
Rated voltage of inputs	24 V DC
Output voltage for inputs and external consumers	table body 24V DC +10% / -15%
Pulse input Max. input frequency	3 kHz
Protection	IP 65
Operating temperature	0 °C to 40 °C
Storage temperature EMC:	-25 °C to +70 °C
Interference emission	EN 50081-1

Oil projection nozzle AC-A

Compact design, pinpoint accuracy, high temperature resistant, the projection nozzles AC-A suit perfectly to aggressive surroundings. These nozzles are spraying, straight and without air, very small metered quantity of oil under pressure, which are delivered by pneumatic micropumps or electromagnetic pumps. The spray distance can vary from a few centimeters up to several decimeters.

AC-A nozzles spray mineral or synthetic oil with a viscosity of 220 $\rm mm^2/s$ at 40 °C.

The nozzle have a stainless steel body, fluorocarbon (FPM) seals and are equipped with a check valve. They are fed via tubes OD 4 with a max. length of 3 m.



Projection nozzles Double nozzle AC-A-420 Simple nozzle AC-A-410

Order information, AC-A nozzles

Nozzle No.	Possible volume ¹⁾	outlet Ø	Valve ²⁾	Temperature	Washer	Fastening	Weight
	mm ³ /stroke	mm	bar	°C			g
AC-A-410 AC-A-410-1 AC-A-410-2 AC-A-420	10/60 10/60 10/60 2 × -30 ³⁾	0.5 0.5 1.5 2 × 0.5	6 2 6 6	-25 to +200 10 to 220 -25 to +200 -25 to +200	FPM - FPM FPM	M 8 × 1,25 M 8 × 1,25 M 8 × 1,25 Ø 8.5	~25 ~22 ~25 ~50

¹⁾The volume depends on the pump or distributor flow rate. ²⁾Valve setting at 20 °C for an oil with recommended viscosity

³⁾ For a supply volume of 60 mm³

The minimum and maximum effective viscosities are recommended at operating temperature. Take into account any temperature differences between the central unit and the nozzles, for example for "oven" applications.

As the viscosity affects the velocity of the projection, it is necessary to validate the lubricant selected when the system is started under the actual conditions of use (configuration of the installation, ambient temperatures of each component and chain speed).









Nozzle AC-A-410

Nozzle AC-A-410-1

NOTE

The tubes have to be imperatively metallic, as direct as possible, and without connector on the pump/nozzle line. The inner diameter of the tube shall not exceed 3 mm.

NOTE

Projection quality depends on many factors such as lubricant viscosity, temperature, tube length, required projection frequency and mounting position. Therefore the result of the projection differs according to the application.

Nozzle holder

Mounting bracket

Mounting bracket (nut and adjustable bracket for threaded nozzles) Order No. UC-1065



Oiling brushes

Oiling brushes UC are used to apply lubricant to a chain. They ensure a constant lubricant film on the chain. These brushes are available in different shapes and sizes and with different materials (bristle, brass or polyamide) in order to better meet the needs and specification of the chains. The brushes are fed with tubes \emptyset 4 × 0,75.

Brushes are delivered without bracket supports, which have to be ordered separately.



Oiling brushes

Order information, brushes

Brush order No.	Shape	Sizes	Temperature	Brush material	Fixing	Weight	Bracket support
		mm	°C		mm	g	Order No.
UC-1066-01 UC-1066-02 UC-1066-03 UC-1066-04 UC-1066-05 UC-1066-06	•	55 × 16 55 × 16 Ø 30 Ø 15 Ø 15 55 × 16	10 to 60 10 to 200 10 to 60 10 to 60 10 to 80 10 to 80	bristle brass bristle polyamide 6.6 polyamide 6.6	Ø 8.5 Ø 8.5 Ø 19 Ø 12.5 Ø 12.5 Ø 8.5	110 160 85 45 45 45	AC.2879 AC.2879 UC.1010.100 AC.3398 AC.3398 AC.2879



UC-1066-01; UC-1066-06



UC-1066-02



UC-1066-03



UC-1066-04; UC-1066-05

Oil reservoirs

These reservoirs, with a capacity of 3.3 l to 20 l, supply with lubricant the pneumatic or electromagnetic pumps of the chain lubrication system. They can be equipped with a stopcock valve for maintenance tasks on the lubrication system.

The lubricant min. level can be visually (sight glass) or electrically (level switch) monitored.

On request: Some reservoirs have an electric preheating device in order to maintain the lubricant at the optimal operating temperature. It is also possible to have some reservoirs with level switch with two switching points (warning and minimal).



Reservoir TK-350-VMC

Order information, reservoirs

Brush order No.	Capacity	Material	Level switch min.	Stopcock valve	Filter	Operating temperature	Weight (ca.)
	l				μ	°C	kg
TK-350-VMC TK-840-V TK-840-VM TK-940	3.3 10 10 20	PEHD aluminum aluminum aluminum	• •	• • •	200 (outlet) 400 (inlet) 400 (inlet) 400 (inlet)	-10 to +60 -10 to +60 -10 to +60 -10 to +60	1.2 6.5 6.55 17

TK-350-VMC

- Filling plug with filter
 Min. level switch (with connector), NO, when the min. level is reached the contact opens.
- 3 Stopcock valve
- 4 Outlet port with filter G 1/4, max. depth 9 mm



TK-840-V/-VM

- 1 Min. level switch (with connector), changeover switch
- 2 Breather
- 2 Breather
 3 Filling port Ø RP 1/4
 4 Filling plug with filter
 5 Sight glass
 6 Outlet port G 1/4

- 7 Stopcock valve

Level switch

- When min. filling level is reached. contact 1-2 opens contact 1-3 closes



TK-940

- 1 Breather
- 2 Filling plug with filter
- **3** Sight glass
- 4 Min. level switch (with connector), changeover switch
- 5 Outlet port G 1/4, max. depth 9 mm6 Stopcock valve

Level switch

- When min. filling level is reached.
 contact 1-2 opens
 contact 1-3 closes







TK-940

Proximity switch

The inductive proximity switches are essential for the chain lubrication systems. They detect with accuracy and without any mechanical contact to the chain the position of the lubrication points on the running chain. When a lubrication point has been detected, the proximity switch sends a signal to the control unit, which triggers a lubrication impulse (actuation of the pump).

Order information, proximity switch

The proximity switches are delivered with the connector or the cable, and the bracket support.

Proximity switch No.	Туре	Nominal range	Operating voltage	Operating temperature	Housing
		mm		°C	
UC-1060-11 UC-1060-14 UC-1060-16 UC-1060-17 UC-1060-19	3 wires, PNP, NO 3 wires, PNP, NO 3 wires, PNP, NO 2 wires, NO 3 wires, PNP, NO	15 5 5 5 10	12 to 24 V DC 12 to 30 V DC 12 to 48 V DC 24 to 240 V AC / 24 to 210 V DC 10 to 30 V DC	-25 to +80 -40 to +175 -25 to +80 -25 to +80 -40 to +70	plastic, IP67 metal, IP67 metal, IP68 metal, IP68 metal, IP67



UC-1060-11









Connection kits

reservoir/pumps and pump/nozzle or brush

SKF offers several connection kits to connect the reservoir to the PE pump(s). These kits differ in G 1/4 outlet connection (straight or elbow connector) and number of pumps.

Order information, reservoir/pump(s) connection kit

Order No.	Reservoir outlet	Pumps	Description
UC-1070-1 UC-1070-2 UC-1070-3 UC-1070-4 UC-1071-1 UC-1071-2 UC-1071-3 UC-1071-4	straight straight straight elbow elbow elbow elbow	1 2 3 4 1 2 3 4	straight connector (× 1), copper washer (× 1), steel tube (1 m), banjo fitting (× 1) straight connector (× 1), copper washer (× 1), steel tube (1 m), banjo fitting (× 2), T connector (× 1) straight connector (× 1), copper washer (× 1), steel tube (1 m), banjo fitting (× 3), cross connector (× 1) straight connector (× 1), copper washer (× 1), steel tube (1 m), banjo fitting (× 3), cross connector (× 1) straight connector (× 1), steel tube (1 m), banjo fitting (× 4), T connector (× 3) elbow connector (× 1), steel tube (1 m), banjo fitting (× 2) elbow connector (× 1), steel tube (1 m), banjo fitting (× 2), tee connector (× 1) elbow connector (× 1), steel tube (1 m), banjo fitting (× 3), cross connector (× 1) elbow connector (× 1), steel tube (1 m), banjo fitting (× 4), tee connector (× 3)

Order information, pump/nozzle or brush connection kit

Order No.	Pump outlet	-Description
UC-1074 UC-1074-1 UC-1074-2	4 6 2	double tapered sleeve + union, steel tube 5 m Ø 2,6 × 4, connector for tube Ø 4 (× 4), clips and screws (× 20) double tapered sleeve + union, steel tube 5 m Ø 2,6 × 4, connector for tube Ø 4 (× 6), clips and screws (× 30) double tapered sleeve + union, steel tube 5 m Ø 2,6 × 4, connector for tube Ø 4 (× 2), clips and screws (× 10)

Order information, pump/nozzle or brush connection kit

Order No.	Pump outlets	Description
UC-1074 UC-1074-1 UC-1074-2	4 6 2	double tapered sleeve + union (× 6), steel tube 5 m Ø 2.6 × 4 (× 4), connector for tube Ø 4 (× 4), clips and screws (× 20) double tapered sleeve + union (× 10), steel tube 5 m Ø 2.6 × 4 (× 6), connector for tube Ø 4 (× 6), clips and screws (× 30) double tapered sleeve + union (× 4), steel tube 5 m Ø 2.6 × 4 (× 2), connector for tube Ø 4 (× 2), clips and screws (× 10)

Connectors and tubes for the connection reservoir / pump

Connectors and tubes for the connection pump / nozzles or brushes $\ensuremath{^{(1)}}$

Order No.	Designation	Order No.
508-108 410-403W 410-405W 982-120-100 445-516-101	Copper washer Straight screw-in connector Elbow screw-in connector Steel tube Ø8×10 Babio fitting	Connection pu 982-120-041 404-002 404-001
443-310-101 410-407 446-310-001	Tee connector Cross screw-in connector	Connection pu 982-120-041 404-002
410-410 1) 610-001 1)	Straight connector* for tube OD 10 Flange* for tube OD 10	404-001 TU-2.5x4-RL

¹⁾These parts are not included in the kits

Connection pump / nozzle982-120-041Steel tube Ø 4× 0.7404-002Connector (pump outlet)404-001Double tapered sleeve (pump outlet)Connection pump / brush982-120-041Steel tube Ø 4× 0.7

404-002
404-001Connector (pump outlet)
Double tapered sleeve (pump outlet)TU-2.5x4-RL
RB.401
404-611Hose, polyamide, Ø 2.5×4
Reinforcing socket (pump outlet)
Tapered sleeve (pump outlet)
Connector (pump outlet)

Designation

 404-612
 Connector (pump outlet)

 1) Nozzles and brushes are delivered with their own fittings.







Connection kit pump / nozzles or brushes

Drip pan

The drip pans are designed for the electromagnetic pump PE. They prevent any pollution in the case of leakage at the connections or during maintenance tasks.







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Drip pan for 1 PE pump 1)

Capacity	•	•											1	10.4 l
Material	•	•	•	•	•	•	•	•	•	•	•	•	•	steel

Order No..... GR.2713.7

 The drip pan is delivered with screws and washers for pump fixation.



Drip pan GR.2713.7



Drip pan for 2 PE pumps ¹) Capacity 10.4 I Material steel Order No. GR.2713.8

Drip pari 0K.27.

Oiling unit type UC-DES for floor conveyors

- PE pump technology
- 1, 2 or 3 pumps
- Pumps with 2, 3, 4 or 6 outlets
- Flow rate 20 mm³/stroke or 40 mm³/stroke and outlet
- Reservoir 3.3 l or 10 l
- Control unit type AEPN-UC
- For applications with projection nozzles or oiling brushes



UC-DES units presented here are the most common models. Other models are available. For further information please contact lubsystems.france@skf.com .

Oiling unit for floor conveyor

Application with projection nozzles

Order No. *)	Pump P.1	(outlets / flow rate P.2	e mm ³ /stroke) P.3	Reservoir Capacity	Level monitoring	Control unit version	Drawing No.
UC-DES-0427+ UC-DES-0472+ UC-DES-0473+ UC-DES-0474+ UC-DES-0475+ UC-DES-0552+ UC-DES-0553+ UC-DES-0578+	4 /40 2 /40 4 /40 4 /40 6 /40 4 /40 4 /40 4 /40	4 /40 2 /40 4 /20 4 /40 6 /40 - 4 /40 4 /40	2/40 	10 10 10 10 10 3.3 10	1 level switch (min.) 1 level switch (min.) + 1 level gauge 3 level switches (min., warning, max.) 1 level switch (min.)	AEPN-UC-09 AEPN-UC-05 AEPN-UC-05 AEPN-UC-05 AEPN-UC-02 AEPN-UC-02 AEPN-UC-01 AEPN-UC-05	UC-DES-315 UC-DES-325 UC-DES-325 UC-DES-325 UC-DES-325 UC-DES-341 UC-DES-342 UC-DES-325

Applications with oiling brushes

Order No. *)	Pump P.1	Pump (outlets / flow rate mm ³ /stroke) P.1 P.2		Level monitoring	Control unit version	Drawing No.	
UC-DES-0429+	2/20		3.31	1 level switch (min.)	AEPN-UC-04	UC-DES-0316	
UC-DES-0440+	2/40	-	3.31	1 level switch (min.)	AEPN-UC-04	UC-DES-0316	
UC-DES-0441+	3/40	_	3.31	1 level switch (min.)	AEPN-UC-04	UC-DES-0316	
UC-DES-0442+	4/40	-	3.31	1 level switch (min.)	AEPN-UC-04	UC-DES-0316	
UC-DES-0443+	6/40	-	3.31	1 level switch (min.)	AEPN-UC-04	UC-DES-0316	
UC-DES-0444+	2/40	2/40	3.31	1 level switch (min.)	AEPN-UC-03	UC-DES-0316	
UC-DES-0445+	2/40	4/40	3.31	1 level switch (min.)	AEPN-UC-03	UC-DES-0316	
UC-DES-0446+	3/40	4/40	3.31	1 level switch (min.)	AEPN-UC-03	UC-DES-0316	
UC-DES-0447+	4/40	4/40	3.31	1 level switch (min.)	AEPN-UC-03	UC-DES-0316	
UC-DES-0448+	2/40	6 /40	3.31	1 level switch (min.)	AEPN-UC-03	UC-DES-0316	
UC-DES-0449+	3/40	6/40	3.31	1 level switch (min.)	AEPN-UC-03	UC-DES-0316	
UC-DES-0450+	4/40	6/40	3.31	1 level switch (min.)	AEPN-UC-03	UC-DES-0316	
UC-DES-0451+	6/40	6/40	3.31	1 level switch (min.)	AEPN-UC-03	UC-DES-0316	

*) Enter the voltage key at the end of the order number (+428: 230 V, 50/60 Hz; +429: 115 V, 50/60 Hz). Example: UC-DES-0427+428

Drawings

If you do not have the drawings listed in the table above, please contact ubsystems.france@skf.com



UC-DES units are delivered without projection nozzles and connection tubes. These components must be ordered separately.



- Oiling system type UC-DES
 1 Reservoir with simple level switch, capacity 10 l
 2 Outlet ports M 8×1
 3 Electromagnetic pumps
 4 Connector with rectifier
 5 Drip pan with drain port
 6 Programmable control unit

Oiling unit type UC-DEA for overhead conveyors

- PE pump or UCDE01 oiling unit technology
- Flow rate 20 mm³/stroke, 30 mm³/stroke or 40 mm³/stroke and outlet
- Reservoir 3.3 l or 7.5 l
- AEPN-UC control unit or integrated control unit
- Detection device for lubrication points
- Projection nozzles
- Minimal level switch in reservoir
- For applications with projection nozzles or oiling brushes

UC-DEA units presented here are the most common models. Other models are available. For further information please contact lubsystems.france@skf.com .



Oiling unit for overhead conveyor

Application with PE electromagnetic pump

Order No. *)	Rail	Chain P	A	В	С	Pump Output	Flow rate	Reservoir Capacity	Control unit version	Drawing No.
UC.DEA.0226+	A.S 4″ (101,6 × 67,5)	6″	40	87	1,000	2	40 mm ³	3.3 l	AEPN-UC-01	UC-DEA-123
UC.DEA.0227+	A.S 4″×3″ (101,6 × 76,2)	4″	40	88	1,500	2	20 mm ³	3.3 l	AEPN-UC-01	UC-DEA-123

Application with oiling unit UCDE01

Order No. *)	Rail	Chain P	А	В	С	Oil lubr Output	ication unit Flow rate	Reservoir Capacity	Control unit version	Drawing No.
UC-DEA-0219+	I.A.S 4″ (101,6 × 67,5)	6″	120	87.5	1,000	2	30 mm ³	7.5 l	integrated	UC-DEA-146
UC-DEA-0220+	I.A.S 4″ (101,6 × 67,5)	4″	120	81.5	1,000	2	30 mm ³	7.5 l	integrated	UC-DEA-146
UC-DEA-0229+	I.A.S 3″ (76,2 × 59,2)	3″	120	64	1,000	2	30 mm ³	7.5 l	integrated	UC-DEA-146

*) Enter the voltage key at the end of the order number (+428: 230 V, 50/60 Hz; +429: 115 V, 50/60 Hz). Example: UC-DES-0427+428

Drawings If you do not have the drawings listed in the table above, please contact lubsystems.france@skf.com.





Oiling unit type UC-DEA with PE pump

- Init type UC-DEA with PE purity
 Programmable control unit
 Reservoir with level, capacity 3.3 l
 Connector with rectifier
 Pump outlet M 8 × 1
 2 projection nozzles

- 6 Electromagnetic pumps
- 7 Electromagnetic pump P.1
- 8 Electromagnetic pump P.2

- 9 Rail
- 10 Photoelectric sensor bracket11 Photoelectric transmitter
- 12 Photoelectric receiver

7 2 motion directions 8 Forged-chain

13 Two possible motion directions





Oiling unit type UC-DEA with UCDE01 oiling unit 1 Central unit with 2 outlets

- 2 3 2 projection nozzles Rail
- 4 Photoelectric sensor bracket
- 5 Photoelectric transmitter
- 6 Photoelectric receiver

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