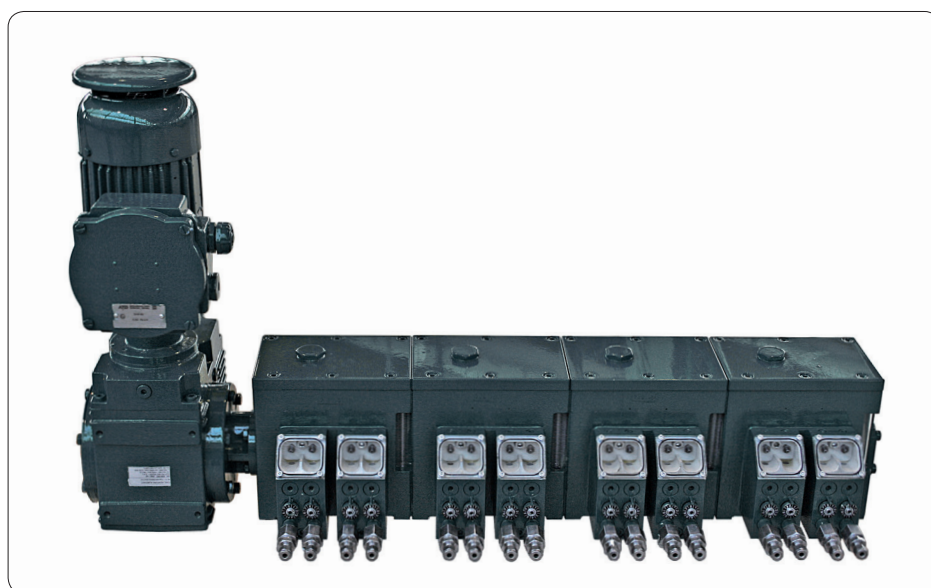


# JM Oil Lubrication Pump

SKF MultiFlex multi-line pump units

for total loss oil lubrication systems on compressors



## General Information

The JM oil lubrication pump is a high-pressure multiline pump that produces a maximum continuous operating pressure of 600 bar per outlet.

The pump's main application is total loss oil lubrication of the cylinders and packing used in piston compressors.

The JM oil lubrication pump can deliver all mineral oils with an operating viscosity between 25 and 3000 mm<sup>2</sup>/s.

### Important:

Contact SKF Lubrication Systems Germany before using synthetic oil.

Please note the important information about product usage on the back cover.

## Advantages

- Pump body with a dual-piston system (feed and working piston) for each outlet
- Equipped with positively actuated, adjustable pump elements for continuous operation in industrial applications
- Equipped with integrated visual drop regulator and conical non-return valve on each outlet
- Three piston sizes cover a delivery rate range from 0.09 to 7.95 cm<sup>3</sup>/min.
- Broad range of adjustable delivery rates from approx. 25% to 100% per outlet
- Maximum operating pressure of up to 600 bar
- Equipped with 1 to a maximum of 28 pump elements (depending on application), can be retrofitted
- Reservoir sizes of 2, 4, 6, 8, 10, 12 or 14 liters
- Additional reservoirs available in standard sizes or according to customer specifications available
- In pressure-tight design system function
- Can be monitored according to API 618

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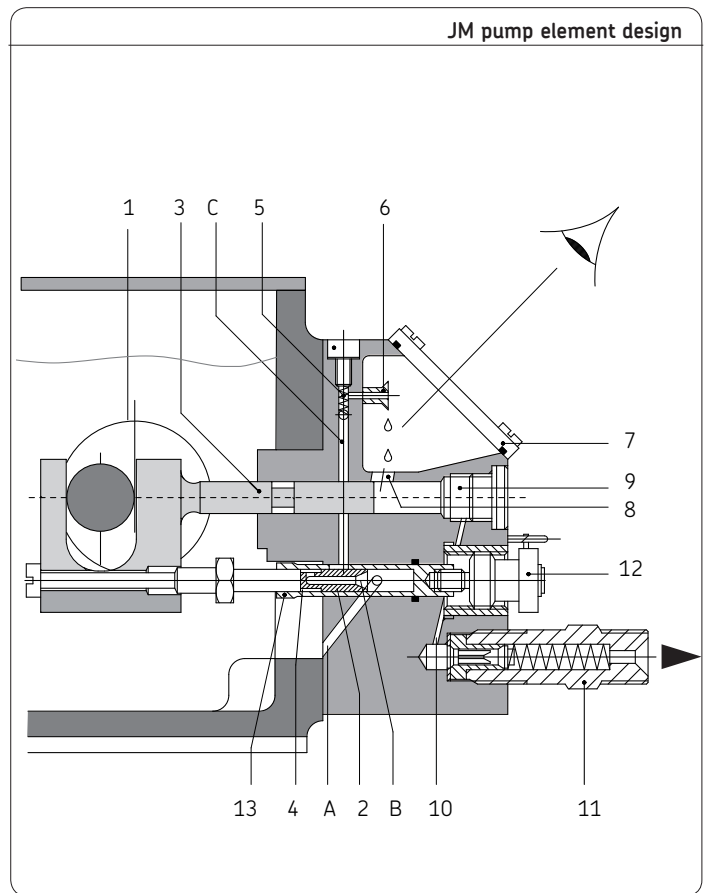
## Design and mode of operation

The pump shaft (1) imparts the required stroke motion to both the feed piston (2) and the working piston (3). The feed piston (2) first presses the lubricant drawn in via duct A into duct B. The lubricant then flows to duct C via the ring groove (4). From there, the oil moves through a check valve (5) into the drop nozzle (6). The oil drops into the intake duct (8) behind the sight glass (7). As it continues its movement, the working piston (3) closes the intake duct (8) and presses the apportioned quantity of oil from the cylinder chamber (9) through the delivery duct (10) and the check valve (11) through to the lubrication point. The delivery volume is regulated via the setting screw (12) that increases or decreases the effective stroke of the feed piston (2) via the cylinder bush (13). Turning the screw clockwise decreases the delivery volume. The control range is between 25% and 100%. In addition to the position of the setting screw (12), the other main factors that determine the delivery volume are the size of the pump elements (0.07, 0.1 or 0.2 cm<sup>3</sup>/full stroke), the drive speed as well as the selected gear ratio. A comparison of the delivery volume ranges for the pump elements (electric motor design) is shown on page 9.

The delivery volume can be easily determined and/or set as follows:

- Unscrew the sight glass (7)
- Measure the delivery volume per time at the drop nozzle using a calibrated glass gauge
- Increase or decrease the delivery volume by turning the setting screw (12)
- ☞ Repeat the procedure until the desired delivery volume is reached: Setting screw position 1 = minimum quantity, Setting screw position 8 = full quantity
- Screw on the sight glass (7)

Since each outlet is supplied separately, the set delivery rate remains constant and independent of the rate set for neighboring setting screws. The number of drops can also be counted in the delivery rate settings. Depending on the oil viscosity, a drop of oil is between 30 and 50 mm<sup>3</sup> in size.



### Housing versions

The JM pump consists of 1 to 7 pump housings (individual reservoirs) with 1 to 4 outlets each. Each pump housing has a capacity of 2 liters. A maximum of 7 housings can be screwed together to form one pump. The pump housings can optionally be mounted on a common oil reservoir. They are available in ventilated or pressure-tight versions.(max. admission pressure of 1 bar)

### Drive versions

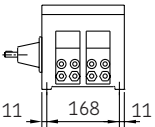
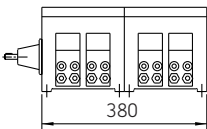
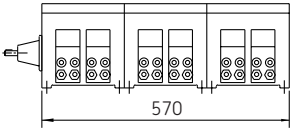
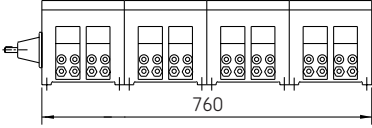
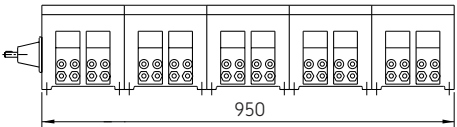
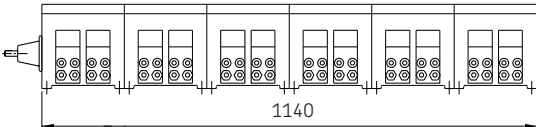
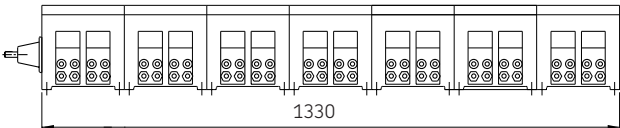
The pump shaft can optionally be driven directly via a coupled shaft or via a gear train, with or without an electric motor, and with or without free-wheeling. On designs with integrated free-wheeling, a prelubricator can optionally be installed on the side opposite the drive.(not permissible within the scope of the ATEX Guidelines)

### Monitoring recommendation

The last pump element (farthest from the motor) is equipped with a shortened intake pipe. The fill level is monitored in this layout and with a downstream pulse generator. This layout also allows the entire pump drive to be monitored, and is therefore in compliance with API 618. The pump element is generally passive and connected with the additional reservoir by piping.

### Special designs

At the current state of the art, JM pumps can be designed in accordance with the Guidelines of 94/9/EC ATEX, and can be used in Category 2, Zone 1. Additional reservoirs are available on request with built-in components such as filter, heating and fill level control.

Pump housing designs			
	Number of housings [n]	Capacity [liters]	Outlets max. [n]
	1	2	4
	2	4	8
	3	6	12
	4	8	16
	5	10	20
	6	12	24
	7	14	28

# Rotary drive

## Technical Data

### General information

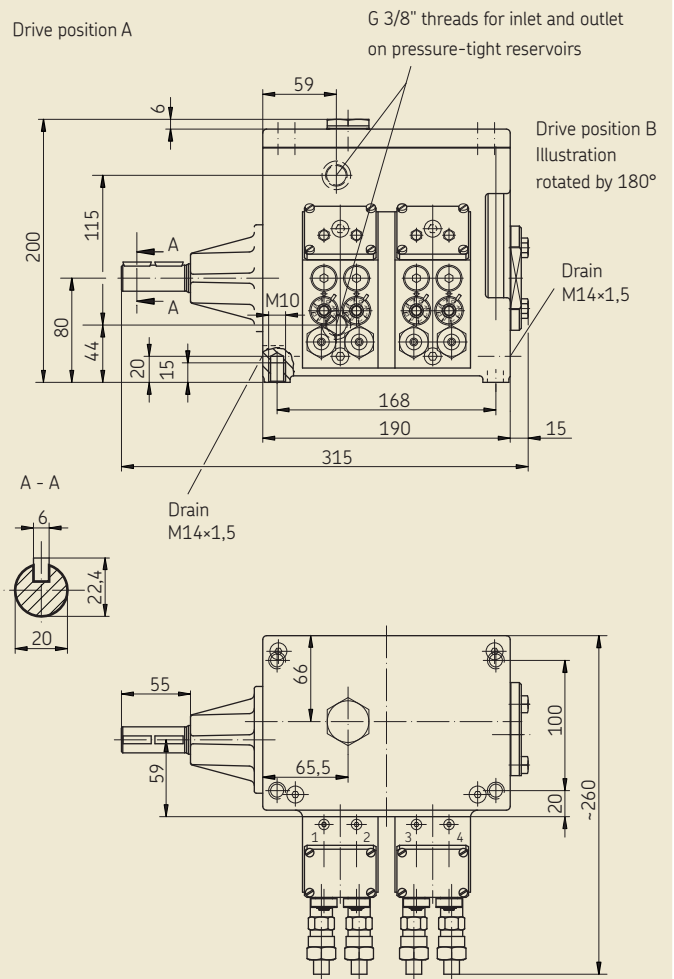
Mounting position	horizontal, level surface
Ambient temperature	0 °C to + 60 °C
Reservoir capacity	2, 4, 6, 8, 10, 12, 14 liters
<b>Weights</b>	
Drive	13.5 kg
Each reservoir	6.0 kg
Each pump element	3.1 kg

### Pump

Type	high-pressure pump with eccentric shaft drive of pump pistons
Max. operating pressure	600 bar <sup>1)</sup>
<b>Number of attachable</b>	
individual housings	1 to 7
Pump bodies per individual housing	1 to 2
Outlets per pump body	1 to 2
Number of outlets	1 to 28
<b>Delivery volume adjustment</b>	
per pump outlet	continuous, min. 25%
Delivery volume per outlet and full stroke	(max.) 0.07-/0.1- /0.2 cm <sup>3</sup>
Direction of rotation	CW or CCW (without free-wheeling)
Drive speed $n_1$	6 - 25 rpm
Lubricant	mineral oils
Lubricant temperature range	0 °C to + 80 °C
Operating viscosity	25 to 3000 mm <sup>2</sup> /s

<sup>1)</sup> Consult with the SKF Service Center for continuous operating pressures > 400 bar and operating viscosities < 100 mm<sup>2</sup>/s.

## Rotary drive

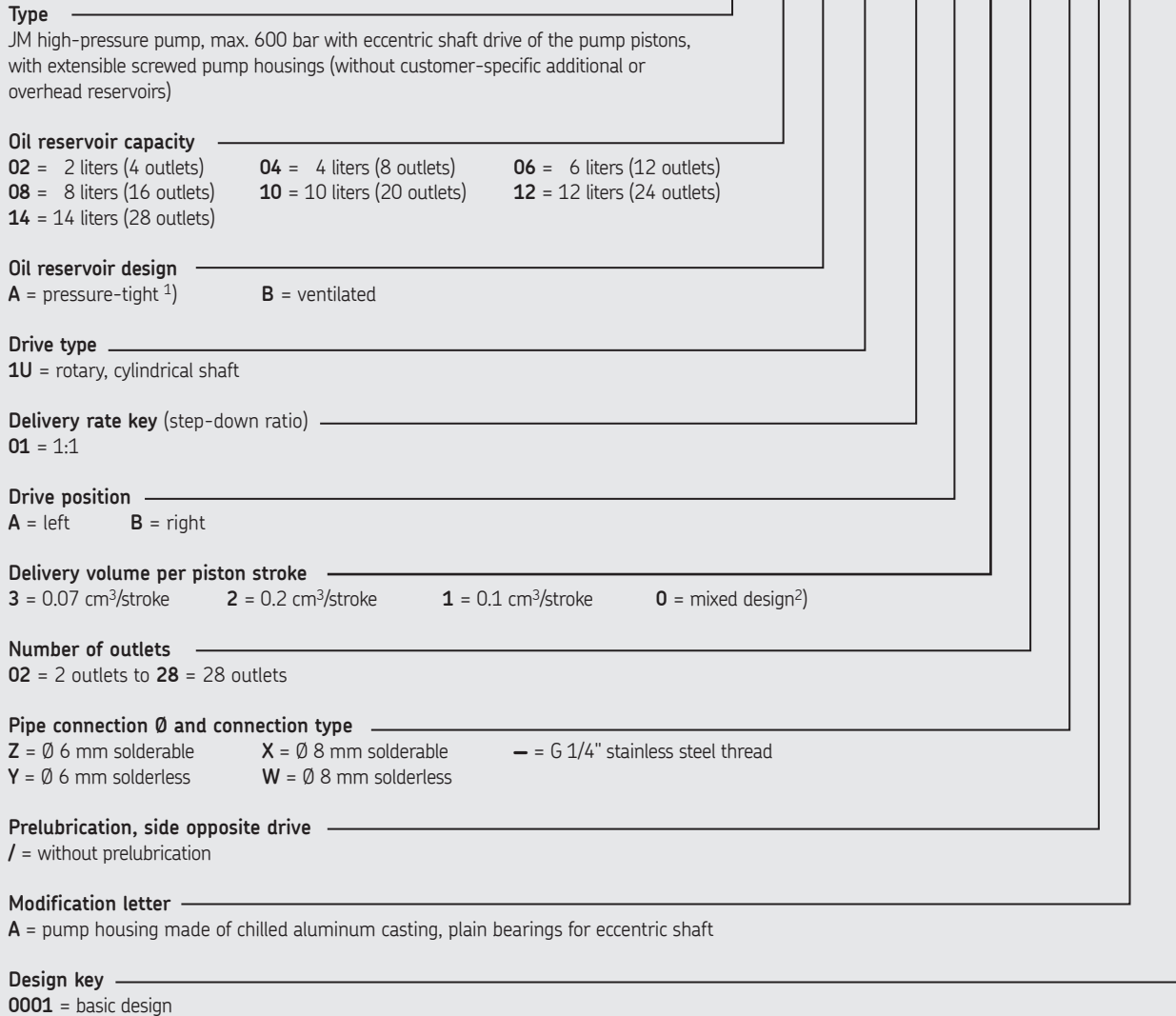


### Important:

Contact SKF Lubrication Systems Germany before using synthetic oil.

Explanation of order codes

**JM 02 A 1U 01 A 1 04 W / A 0001**



<sup>1)</sup> For supply via additional or overhead reservoir (max. installation height of 10 m; 5 m in conjunction with an additional tank in steel design)  
<sup>2)</sup> For different delivery volumes indicate them (based on the drive side) in addition to the order number.

**Order example**

Oil lubrication pump consisting of a **JM** type high-pressure pump, with max. of 4 outlets with an oil reservoir capacity of 2 liters (**02**), pressure-tight design (**A**), rotary drive type (**1U**) with drive speed of 1:1 (**01**), drive position left (**A**), with a delivery volume of 0.1 cm<sup>3</sup>/stroke (**1**), with 4 outlets (**04**), pipe connection Ø 8 mm solderless (**W**), without prelubrication (**/**), modification letter A (**A**), and design key (**0001**) gives the order No. **JM02A1U01A104W/A0001**.

# Rotary drive with gear train

## Technical Data

### General information

Mounting position . . . . . horizontal, level surface  
 Ambient temperature . . . . . 0 °C to + 60 °C  
 Reservoir capacity . . . . . 2, 4, 6, 8, 10, 12, 14 liters

### Pump

Type . . . . . high-pressure pump with eccentric shaft drive of the pump pistons

### Weight

Drive . . . . . 11.0 kg  
 Each reservoir . . . . . 6.0 kg  
 Each pump element . . . . . 3.1 kg  
 Max. operating . . . . . pressure 600 bar<sup>1)</sup>

### Number of attachable

individual housings . . . . . 1 to 7  
 Pump bodies per individual housing . . . . . 1 to 2  
 Outlets per pump body . . . . . 1 to 2  
 Number of outlets . . . . . 1 to 28

### Delivery volume adjustment per

pump outlet . . . . . continuous, min. 25%  
 Delivery volume per outlet  
 and full stroke . . . . . (max.) 0.07-/0.1- /0.2 cm<sup>3</sup>

### Gear train

Gear ratio . . . . . 35.1:1; 62.8:1; 83.2:1; 100.9:1;  
 125,7:1; 162:1

### Drive speed,

delivery volume/min . . . . . see page 7  
 Drive speed  $n_1$  . . . . . 210 - 4000 rpm  
 Drive speed  $n_2$  . . . . . 6 - 25 rpm

Direction of rotation . . . . . clockwise or counterclockwise  
 (without/with free-wheeling)

Lubricant . . . . . mineral oils<sup>2)</sup>

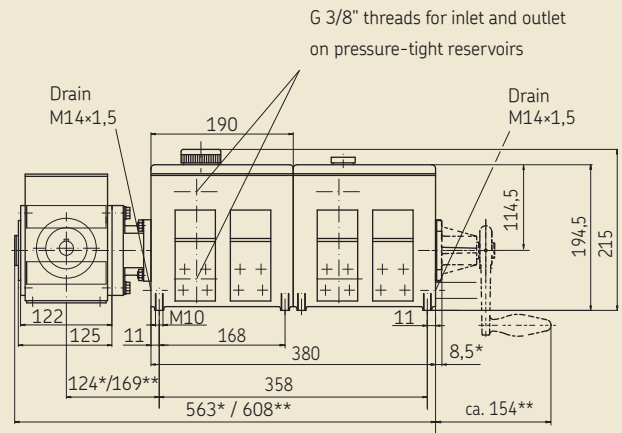
Lubricant temperature range . . . . . 0 °C to + 80 °C

Operating viscosity . . . . . 25 to 3000 mm<sup>2</sup>/s

1) Consult with the SKF Service Center for continuous operating pressures > 400 bar and operating viscosities < 100 mm<sup>2</sup>/s.

2) Please inquire before using synthetic lubricants.

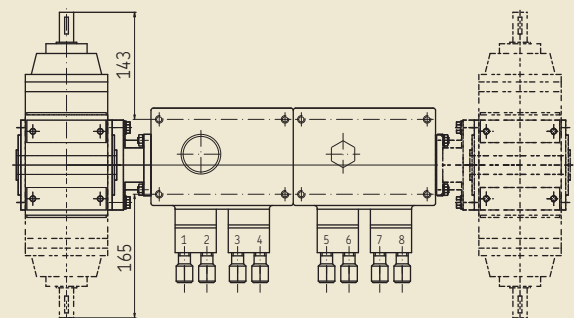
## Rotary drive with gear train



\* = without prelubrication  
 \*\* = with prelubrication

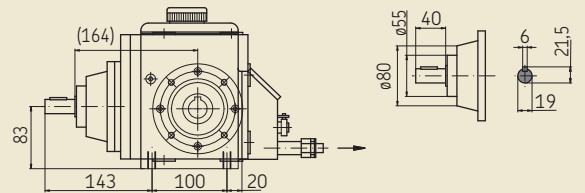
Drive position "C"

Drive position "E"



Drive position "D"

Drive position "F"



Explanation of order codes

**JM 02 A 6U 78 C 1 04 W H R A 0001**

**Type**

JM high-pressure pump, max. 600 bar with eccentric shaft drive of the pump pistons, with extensible screwed pump housings (without customer-specific additional or overhead reservoirs)

**Oil reservoir capacity**

02 = 2 liters (4 outlets)      04 = 4 liters (8 outlets)      06 = 6 liters (12 outlets)  
 08 = 8 liters (16 outlets)    10 = 10 liters (20 outlets)    12 = 12 liters (24 outlets)  
 14 = 14 liters (28 outlets)

**Oil reservoir design**

A = pressure-tight <sup>1)</sup>      B = ventilated

**Drive type**

5U = gear train with rotary shaft    6U = gear train with rotary shaft and free-wheeling

**Delivery rate key <sup>2)</sup>** (gear ratio)

39 = 35,1:1      57 = 62,8:1      78 = 83,2:1      98 = 100,9:1      13 = 125,7:1      17 = 162,1:1

**Drive position**

C = rear left      D = front left      E = rear right      F = front right (see drawing on page 6)

**Delivery volume per piston stroke**

3 = 0.07 cm<sup>3</sup>/stroke    2 = 0.2 cm<sup>3</sup>/stroke    1 = 0.1 cm<sup>3</sup>/stroke    0 = mixed design<sup>3)</sup>

**Number of outlets**

02 = 2 outlets to 28 = 28 outlets

**Pipe connection Ø and connection type**

Z = Ø 6 mm solderable      X = Ø 8 mm solderable      – = G 1/4" stainless steel thread  
 Y = Ø 6 mm solderless      W = Ø 8 mm solderless

**Prelubrication, side opposite drive**

/ = without prelubrication    H = with prelubrication (only 6U)

**Direction of rotation/drive shaft** (only with prelubrication)

R = clockwise      L = counterclockwise

**Modification letter**

A = pump housing made of chilled aluminum casting, plain bearings for eccentric shaft

**Design key**

0001 = basic design

1) For supply via additional or overhead reservoir (max. installation height of 10 m; 5 m in conjunction with an additional tank in steel design)

2) Further gear ratios available on request.

3) For designs with different delivery volumes, indicate them (based on the drive side) in addition to the order number.

**Order example**

Oil lubrication pump consisting of a **JM** type high-pressure pump, with max. of 4 outlets with an oil reservoir capacity of 2 liters (**02**), pressure-tight design (**A**), gear train with rotary shaft and free-wheeling (**6U**), gear ratio of 83.2:1 (**78**), drive position rear left (**C**), with a delivery volume of 0.1 cm<sup>3</sup>/stroke (**1**), with 4 outlets (**04**), pipe connection Ø 8 mm solderless (**W**), with prelubrication (**H**), clockwise direction of rotation (**R**), modification letter A (**A**), and design key (**0001**), gives the order No. **JM02A6U78C104WHRA0001**.

# Electric motor drive with gear train

## Technical Data

### General

Mounting position ..... horizontal, level surface  
 Reservoir capacity ..... 2, 4, 6, 8, 10, 12, 14 liters  
 PumpType ..... high-pressure pump with eccentric shaft drive of the pump elements

### Weight

Gear train with motor ..... 20.0 kg  
 Each reservoir ..... 6.0 kg  
 Each pump element ..... 3.1 kg  
 Max. operating ..... pressure 600 bar <sup>1)</sup>

### Number of attachable

individual housings ..... 1 to 7  
 Pump bodies per individual housing ..... 1 to 2  
 Outlets per pump body ..... 1 to 2  
 Number of outlets ..... 1 to 28

### Delivery volume adjustment

per pump outlet ..... continuous, min. 25%  
 Delivery volume per outlet and full stroke ..... (max.) 0.07-/0.1-/0.2 cm<sup>3</sup>

### Motor

Type ..... B14/V18  
 Type of voltage ..... 3-phase AC voltage  
 Power ..... depending on gear ratio and speed 0.18 - 0.75 kW  
 Direction of rotation ..... clockwise or counterclockwise (without/with free-wheeling)

Lubricant ..... mineral oils <sup>2)</sup>

Lubricant temperature range ..... 0 °C to + 80 °C

Operating viscosity ..... 25 to 3000 mm<sup>2</sup>/s

### Gear train

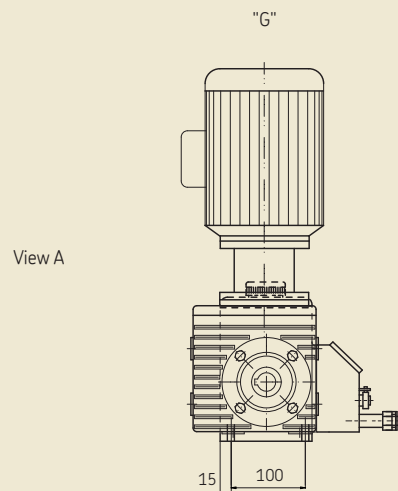
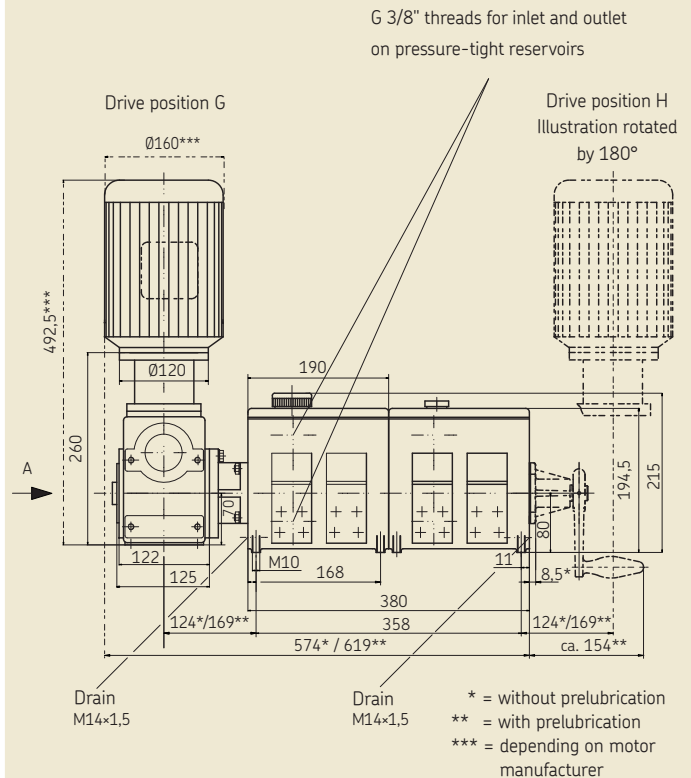
Gear ratio ..... 35.1:1; 62.8:1; 83.2:1; 100.9:1; 125.7:1; 162:1

Drive speed, delivery volume/min see page 9

Rated speed [rpm]	Frequency [Hz]	Rated output [kW]	Rated current at 230/400 V[A]
1000	50	0,18	1,17/0,67
		0,25	1,43/0,82
		0,37	2,05/1,18
		0,55	2,90/1,67
1500	50	0,25	1,37/0,78
		0,37	1,97/1,13
		0,55	2,79/1,61

1) Consult with the SKF Service Center for continuous operating pressures > 400 bar and operating viscosities < 100 mm<sup>2</sup>/s.  
 2) Please inquire before using synthetic lubricants.

## Electric motor drive with gear train





## Delivery volumes with electric motor drive

The delivery volume depends on the rated speed, motor make, gear train, gear ratio, pump elements and settings.

Characteristics at delivery volumes of 0.07, 0.1 and 0.2 cm <sup>3</sup> /piston stroke									
Motor		Gear train		Pump element					
Rated speed rpm	Rated output kW	i=n <sub>1</sub> / n <sub>2</sub>	Order Code	Q=0.07 cm <sup>3</sup> /stroke		Q=0.1 cm <sup>3</sup> /stroke		Q=0.2 cm <sup>3</sup> /stroke	
				Q <sub>min</sub> cm <sup>3</sup> /min	Q <sub>max</sub> cm <sup>3</sup> /min	Q <sub>min</sub> cm <sup>3</sup> /min	Q <sub>max</sub> cm <sup>3</sup> /min	Q <sub>min</sub> cm <sup>3</sup> /min	Q <sub>max</sub> cm <sup>3</sup> /min
1000	0,18	162	6	0,09	0,38	0,13	0,53	0,26	1,05
	0,18	125,7	8	0,12	0,47	0,17	0,68	0,34	1,35
	0,25	100,9	10	0,15	0,60	0,22	0,86	0,43	1,72
	0,25	83,2	12	0,18	0,73	0,26	1,05	0,52	2,09
	0,37	62,8	16	0,25	1,01	0,36	1,45	0,72	2,90
	0,55	35,1	28	0,45	1,80	0,64	2,56	1,28	5,13
1500	0,25	162	9	0,14	0,57	0,20	0,82	0,41	1,64
	0,25	125,7	12	0,18	0,74	0,26	1,05	0,53	2,11
	0,37	100,9	15	0,24	0,95	0,34	1,36	0,68	2,73
	0,37	83,2	18	0,29	1,16	0,41	1,65	0,83	3,31
	0,55	62,8	21	0,39	1,56	0,55	2,22	1,11	4,44
	0,75	35,1	42	0,70	2,78	0,99	3,97	1,99	7,95

### Note

The delivery rate figures are based on motor designs with a main frequency of 50 Hz. The delivery rate figures are increased by 20% at a mains frequency of 60 Hz. The figures for measurements, delivery rates and power consumption refer to standard VEM motors. If other makes are used, deviations have to be expected. 1 cm<sup>3</sup> ≈ 30 drops

# Electric motor drive with gear train

## Explanation of order codes

**JM 06 A 3M 17 G 2 12 Z / A 0001 AG 07**

### Type

JM high-pressure pump, max. 600 bar with eccentric shaft drive of the pump pistons, with extensible screwed pump housings (without customer-specific additional or overhead reservoirs)

### Oil reservoir capacity

**02** = 2 liters (4 outlets)      **04** = 4 liters (8 outlets)      **06** = 6 liters (12 outlets)  
**08** = 8 liters (16 outlets)      **10** = 10 liters (20 outlets)      **12** = 12 liters (24 outlets)  
**14** = 14 liters (28 outlets)

### Oil reservoir design

**A** = pressure-tight <sup>1)</sup>      **B** = ventilated

### Drive type

**3M** = electric motor with gear train      **4M** = electric motor with gear train and free-wheeling

### Delivery rate key <sup>2)</sup> (gear ratio)

**39** = 35,1:1      **57** = 62,8:1      **78** = 83,2:1      **98** = 100,9:1      **13** = 125,7:1      **17** = 162,1:1

### Drive position

**G** = left      **H** = right

### Delivery volume per piston stroke

**3** = 0.07 cm<sup>3</sup>/stroke      **2** = 0.2 cm<sup>3</sup>/stroke      **1** = 0.1 cm<sup>3</sup>/stroke      **0** = mixed design<sup>3)</sup>

### Number of outlets

**02** = 2 outlets to **24** = 24 outlets

### Pipe connection Ø and connection type

**Z** = Ø 6 mm solderable      **X** = Ø 8 mm solderable      **-** = G1/4" thread  
**Y** = Ø 6 mm solderless      **W** = Ø 8 mm solderless

### Prelubrication, side opposite drive

**/** = without prelubrication      **H** = with prelubrication (only 4M)

### Modification letter

**A** = pump housing made of chilled aluminum casting, plain bearings for eccentric shaft, reinforced gear design

### Design key

**0001** = basic design      **4068** = according to ATEX II 2G EEx c IIC T4

### Order code (motor)

**AG**= 230/400 V, 1000 rpm      **AL**= 290/500 V, 1000 rpm      **AP**= 400/690 V, 1000 rpm/min  
**AF**= 230/400 V, 1500 rpm/min      **AK**= 290/500 V, 1500 rpm/min      **AO**= 400/690 V, 1500 rpm,

See page 8 for further data

### Protection class (motor)

**07** = protection class IP55F      **13** = EEx eII T3 IP55F      **34** = EEx deIICT4 IP55F/B

1) For supply via additional or overhead reservoir (max. installation height of 10 m; 5m in conjunction with an additional tank in steel design)

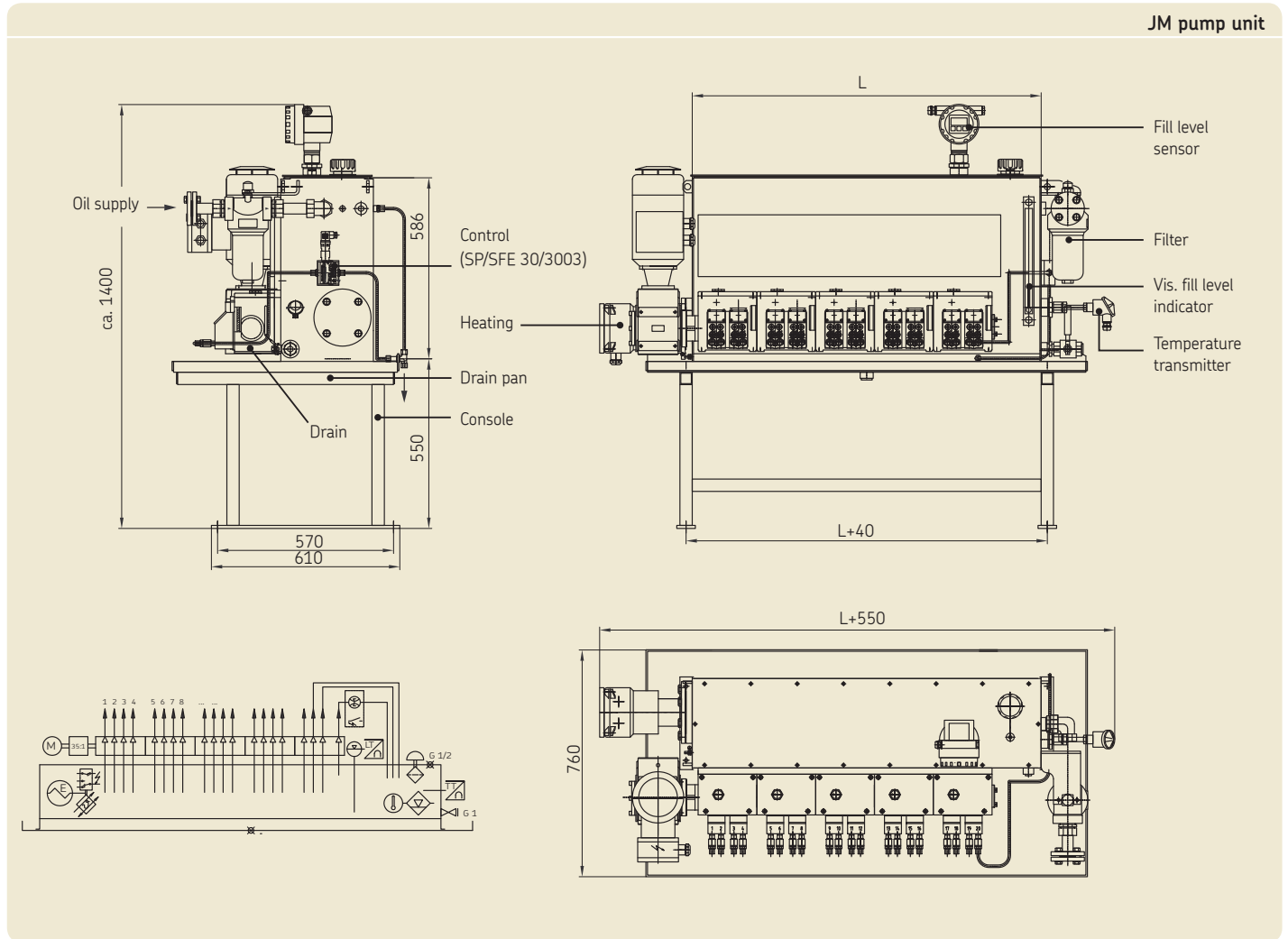
2) Further gear ratios available on request.

3) For designs with different delivery volumes, indicate them (based on the drive side) in addition to the order number.

## Order example

Oil lubrication pump consisting of a **JM** type high-pressure pump, with max. of 12 outlets with an oil reservoir capacity of 6 liters (**06**), pressure-tight design (**A**), electric motor drive with gear train (**3M**), gear ratio of 162:1 (**17**), drive position left (**G**), with a delivery volume of 0.2 cm<sup>3</sup>/stroke (**2**), with 12 outlets (**12**), pipe connection Ø 6 mm solderable (**Z**), without prelubrication (**/**), modification letter A (**A**), design key (**0001**) and motor values of 1000 rpm, 230/400 V AC, 50 Hz (**AG**), with protection class IP55 F (**07**), gives the order No.: **JM06A3M17G212Z/A0001AG07**.

## Special design with additional reservoir, drain pan and console



Standard additional reservoirs can be used, depending on the number of pump reservoirs.

Drain pans and consoles are available which match the additional reservoirs in carbon steel, paint or stainless steel and allow the compressor-lubrication unit to be quickly and easily set up anywhere.

### Technical Data

#### Correlation of additional reservoir volumes to pump size

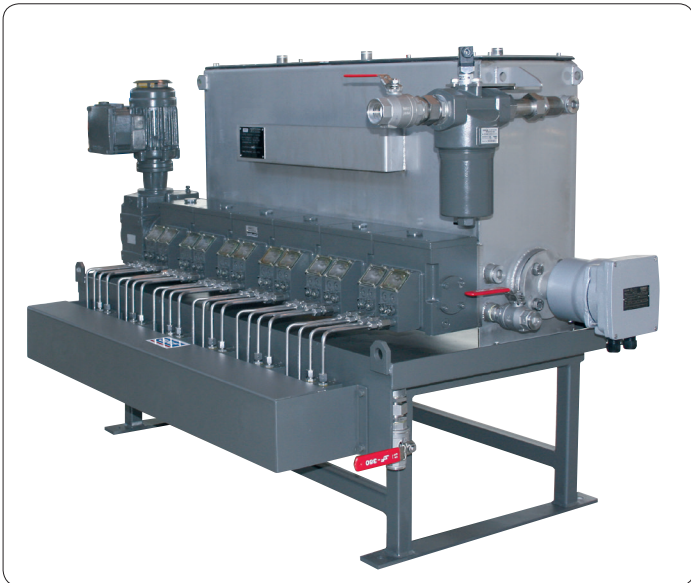
Pump size	Total/usable volume [l]	Measurement L [mm]
JM04 / JM06	50 / 35	750
JM06 / JM08	95 / 70	940
JM08 / JM010	145 / 105	1130
JM010 / JM012	170 / 120	1320



### Special designs

Additional reservoirs are available in four standard sizes from 50 to 170 liters. Built-in components with 1, 2 or 3 switching points and continuous measuring are available for fill level monitoring. Depending on the installation location, it may be necessary to heat the additional reservoir. The heaters are suitable for use in explosion protection areas and meet the requirements of Guideline 94/9/EG ATEX. A line filter can be used to guarantee the purity of oil during automatic filling of the additional reservoirs. Filters with an electric contamination indicator can be supplied, provided the customer has the appropriate analysis capabilities and wishes to reduce manual maintenance effort.

In addition to using the pulse generator to control for pump function and fill level (according to API 618 - passive pump element, piped with the additional reservoir), all active outputs can be connected to one pulse generator for each output. With the appropriate analysis technology, it is possible to monitor each output both qualitatively and quantitatively.



# SP/SFE Pulse Generator

for high-pressure total loss oil lubrication systems

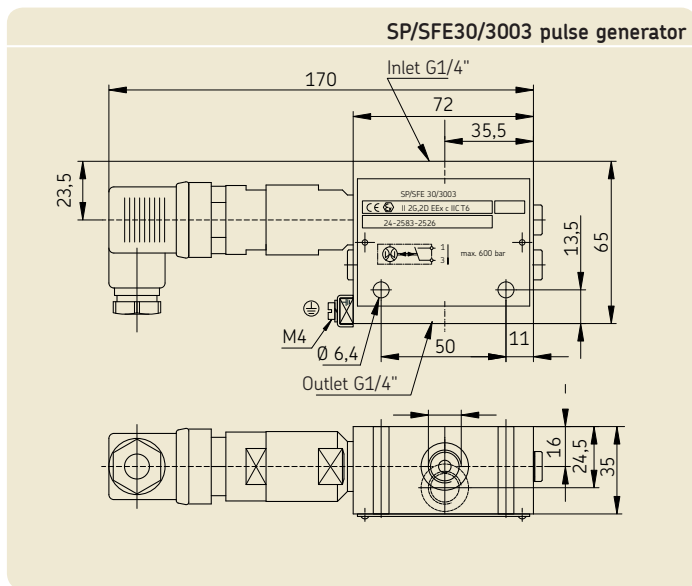


Pulse generators of the SP/SFE series are used to monitor volumetric oil flows from 0.1 to 50 cm<sup>3</sup>/min at a maximum permissible operating pressure of 600 bar.

A standard design of the SP/SFE30/5 pulse generator is used.

The SP/SFE30/3003 pulse generator is used in explosion protection areas categorized as 2G or 2D in the equipment class II; in zone 1 or zone 21 in conjunction with a switching amplifier in protection class EXII (2) G [E Ex ia] IIc (intrinsically safe).

The pulse generators can be installed either on the oil lubrication unit or in the downstream lubrication point line.



**Note**  
See brochure No. 1-3009-EN for information on the usage, function, design and ordering of SP/SFE30/5 pulse generators and brochure No. 1-3018-EN for ATEX SP/SFE30/3003 pulse generators.

	Order number
SP/SFE 30/3003 pulse generator	<b>24-2583-2526</b>
<b>Accessories</b>	
Male coupling straightG 1/4 for pipe Ø 6 mm	<b>406-411</b>
Male coupling straightG 1/4 for pipe Ø 6 mm	<b>96-1108-0058</b>

## Technical Data

### General information

Protection class	Zone 1 Ex II 2G EEx c IIC T6 Zone 21 Ex II 2D EEx tD IP65 T70°C
Mounting position	discretionary
Lubricant temperature range	- 15 to + 70 °C
Ambient temperature range	up to + 50 °C
Vibration resistance	4 x g
Weight	1.1 kg

### Hydraulic

Operating pressure	4 to 600 bar
Control pressure loss	approx. 4 bar
Lubricant	mineral oils, synthetic oils and environmentally friendly oils, greases based on mineral oil
Operating viscosity	> 12 mm <sup>2</sup> /s
Worked penetration	> 260 <sup>1</sup> / <sub>10</sub> mm
Volumetric flow range	0.1 to 50 cm <sup>3</sup> /min
Volume/pulse	0.34 cm <sup>3</sup> <sup>1)</sup>
Volume/cycle	0.68 cm <sup>3</sup> <sup>2)</sup>

### Electrical

Type of contact	reed contact
Voltage U <sub>i</sub>	30 V DC
Current I <sub>i</sub>	100 mA
Capacity C <sub>i</sub>	0.5 pF
Inductance L <sub>i</sub>	0 mH

### Connection

Connection type	DIN 43 650-A plug
Plug	3 + PE

1) A pulse comprises the opening or closing of the reed contact.  
2) When using a pulse monitor, volume/pulse = 0.68 cm<sup>3</sup> (opening to re-opening / closing to re-closing of the reed contact).

## Order information

The configuration of a JM oil lubrication unit is customer-specific. The most important data for the generation of an order number are summarized on pages 4 to 12. A sample order number is shown for each design as an example.

Please fill this order/inquiry form out with the order number according to the description of order codes on page 5, 7 or 10 and supplement it with additional details from the list below.

Copy this order sheet, fill it out, and send it to the following address:

### SKF Lubrication Systems Germany AG

2. Industriestrasse  
468766 Hockenheim  
Germany

Tel. +49 (0)62 05 27-0  
Fax +49 (0)62 05 27-101  
www.skf.com/lubrication

Please complete your address here:

Company: \_\_\_\_\_

Address: Reference: Name: \_\_\_\_\_

Function/dept.: Phone: Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

## Order description

according to explanation of order codes on page 5, 7 or 10, for example:

JM 02 A 1U 01 A 1 04 W / A 0001

## Customer specifications

### Number of lubrication points

Delivery volume in:

cm<sup>3</sup>/min       cm<sup>3</sup>/h

Delivery volume per lubrication point:

1	<input type="checkbox"/>	9	<input type="checkbox"/>	17	<input type="checkbox"/>	25	<input type="checkbox"/>
2	<input type="checkbox"/>	10	<input type="checkbox"/>	18	<input type="checkbox"/>	26	<input type="checkbox"/>
3	<input type="checkbox"/>	11	<input type="checkbox"/>	19	<input type="checkbox"/>	27	<input type="checkbox"/>
4	<input type="checkbox"/>	12	<input type="checkbox"/>	20	<input type="checkbox"/>	28	<input type="checkbox"/>
5	<input type="checkbox"/>	13	<input type="checkbox"/>	21	<input type="checkbox"/>		
6	<input type="checkbox"/>	14	<input type="checkbox"/>	22	<input type="checkbox"/>		
7	<input type="checkbox"/>	15	<input type="checkbox"/>	23	<input type="checkbox"/>		
8	<input type="checkbox"/>	16	<input type="checkbox"/>	24	<input type="checkbox"/>		

Reservoir capacity:

50 (35 l usable)       95 (70 l usable)       145 (105 l usable)       170 (120 l usable)

Max. operating pressure:

bar

Drive:

electric motor       mechanical

Motor voltage at 50 Hz:

230/400 V       290/500 V       400/690 V      Custom voltage \_\_\_\_/\_\_\_\_V  
Frequency \_\_\_\_\_ Hz

### Protection class:

Design compliant with Directive 94/9/EC ATEX      Zone:

Further specifications:

Additional reservoir in:

stainless steel       carbon steel

Drain pan in:

carbon steel

Console matching drain pan

carbon steel

### Additional attachments

- |   |   |
|---|---|
| <input type="checkbox"/> SP/SFE30/3003 pulse generator (API control) incl. mounting         | <input type="checkbox"/> Line filter  |
| <input type="checkbox"/> Fill level sensor intrinsically safe ia (ATEX)                     | <input type="checkbox"/> Contamination detector for filter, visual-electrical |
| <input type="checkbox"/> Fill level switch 2 switching points, intrinsically safe ia (ATEX) | <input type="checkbox"/> Explosion-proof heater 0.5 - 1.5 kW                  |
| <input type="checkbox"/> Fill level switch 1 switching point, pressure-tight enclosure      | <input type="checkbox"/> Temperature transmitter                              |



**Order number: 1-3007-EN**

Subject to change without notice. (07/2014)

**Important information on product usage**

All products from SKF may be used only for their intended purpose as described in this brochure and the operating instructions. If operating instructions are supplied together with the products, they must be read and followed.

Not all lubricants can be fed using centralized lubrication systems. SKF can, on request, inspect the feedability of the lubricant selected by the user in centralized lubrication systems. Lubrication systems and their components manufactured by SKF are not approved for use in conjunction with gases, liquefied gases, pressurized gases in solution, vapors or such fluids whose vapor pressure exceeds normal atmospheric pressure (1013 mbar) by more than 0.5 bar at their maximum permissible temperature. In particular, we call your attention to the fact that hazardous materials of any kind, especially the materials classified as hazardous by EC Directive 67/548/EEC, Article 2, Para. 2, may only be filled into SKF centralized lubrication systems and components and delivered and/or distributed with the same after consultation with and written approval from SKF.

**Further brochures**

951-130-302-EN Operating Instructions for JM Oil Lubrication Pump

**SKF Lubrication Systems Germany GmbH**

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[www.skf.com/lubrication](http://www.skf.com/lubrication)

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