

LUBRICATION PUMP **ACF**

APPLICATION

ACF Lubricators are used as a pressure lubricant source for lubricating systems with progressive distributors for permanent, regular lubrication of various machines and equipment. ACF Lubricators are also applied as a pressure source for central lubrication of mobile machines and equipment, mainly of chassis of trucks, buses and trolley-buses. They are recommended for use in lubricating circuits of small to medium-size with up to 100 lubricated points. With a choice of the number of outlets from 1 to 3 the ACF series lubricators may be used as a direct source of pressure lubricant too (multi-outlet lubricator).

ACF Lubricators are supplied with lubricant container volumes of 1, 2 and 5 litres. Supplied tanks are made of organic glass. Number of outlets is optional from 1 to 3. Nominal dose can be adjusted between 0 to 3,8 cm³. Standard electric motor supplied are 12 and 24 V DC with protection to IP 65.

DESCRIPTION

The ACF Lubricator is based on an aluminium body with inner worm gearing, which may be fitted with 1 to 3 working units. On every working unit, there is one outlet with inner thread G1/4", for outlet fitting for tube outer diameter of 6, 8 or 10 mm (see Accessories). The lubricant container with lid is placed vertically on the body. The lid and the tank are firmly connected to the body by means of bolts securing the compact design of the lubricator. To improve pumping of plastic lubricant, the tanks are equipped with a scraping blade and screen (only the execution for grease). On the tank lid, there is a cover serving as a safety valve against pressure increase in the tank during the filling. An electric motor is placed inside in the lower part of the body and enclosed by airtight aluminium lid. A lubricating head for lubricant refilling is situated on the front of the body. An M10x1 tapped, situated on the left of the body and normally sealed with plug, may be used for permanent, remote lubricant refilling in stationary applications of the lubricator. The body is provided with a side foot with two holes for M10 screws for mounting the lubricator to the wall of the machine or equipment.

OPERATION

The pump works on a piston pump principle. When the electric motor is switched on, a cam driving the pistons of the operating pumping units in a straight return movement is driven by internal worm gearing. When the piston moves out of the operating pumping unit towards the inside of the pump body, low pressure results in the operating cylinder of the unit; when it has fully moved out, the suction channel opens and subsequently suction itself takes place; its withdrawal results in lubricant delivery, which proceeds via a one-way valve to the lubricator outlet. As well as rotation of the central shaft and cam, the scraping blade also moves, removing plastic lubricant from the tank wall and moving it to the suction area (the execution for grease only). Its movement enables visual inspection of the operation of the lubricator.

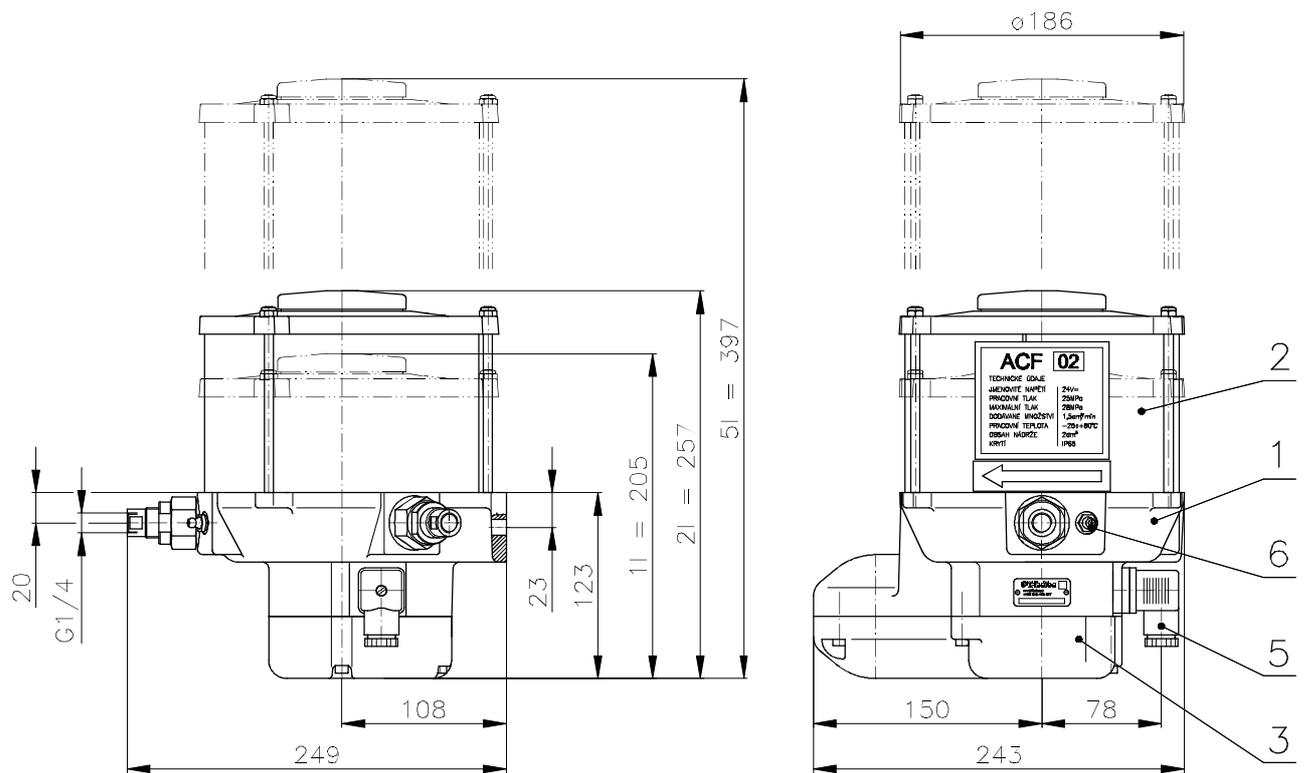
SERVICE AND MAINTENANCE

The lubricator is intended for installation in horizontal position by M10 screws through two anchoring bolts. The electric motor is connected to a supply 12 or 24 V DC in compliance with relevant standards. The lubricator is filled with the specified lubricant via lubricating head, switched on and monitored for smooth and regular running. The lubricant left in the lubricator after pressure test as a preserving agent is pumped out. When the lubricant runs out of the outlets regularly and with no air bubbles, the outlet can be closed by connecting it to the lubricating circuit piping.

Except for lubricant refilling, the lubricator needs no other maintenance. The lubricant level has to be maintained so that a sufficient amount is ensured in the area of grease cup body at least. If not, proper operation of the lubricator cannot be guaranteed, especially the nominal dose, due to non-homogeneity of the lubricant and air incursion to the working unit.

TECHNICAL DATA

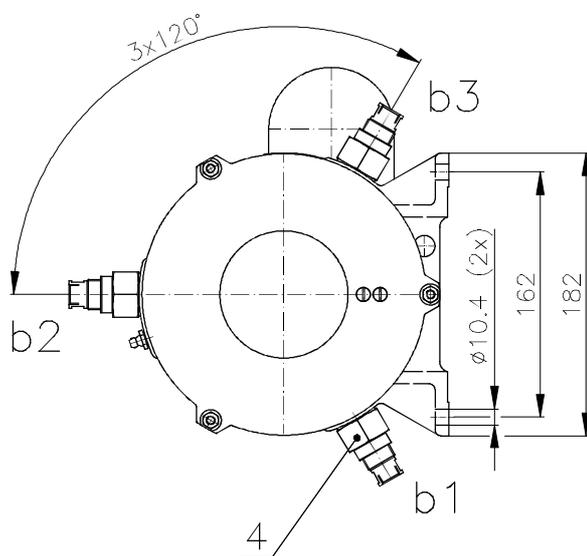
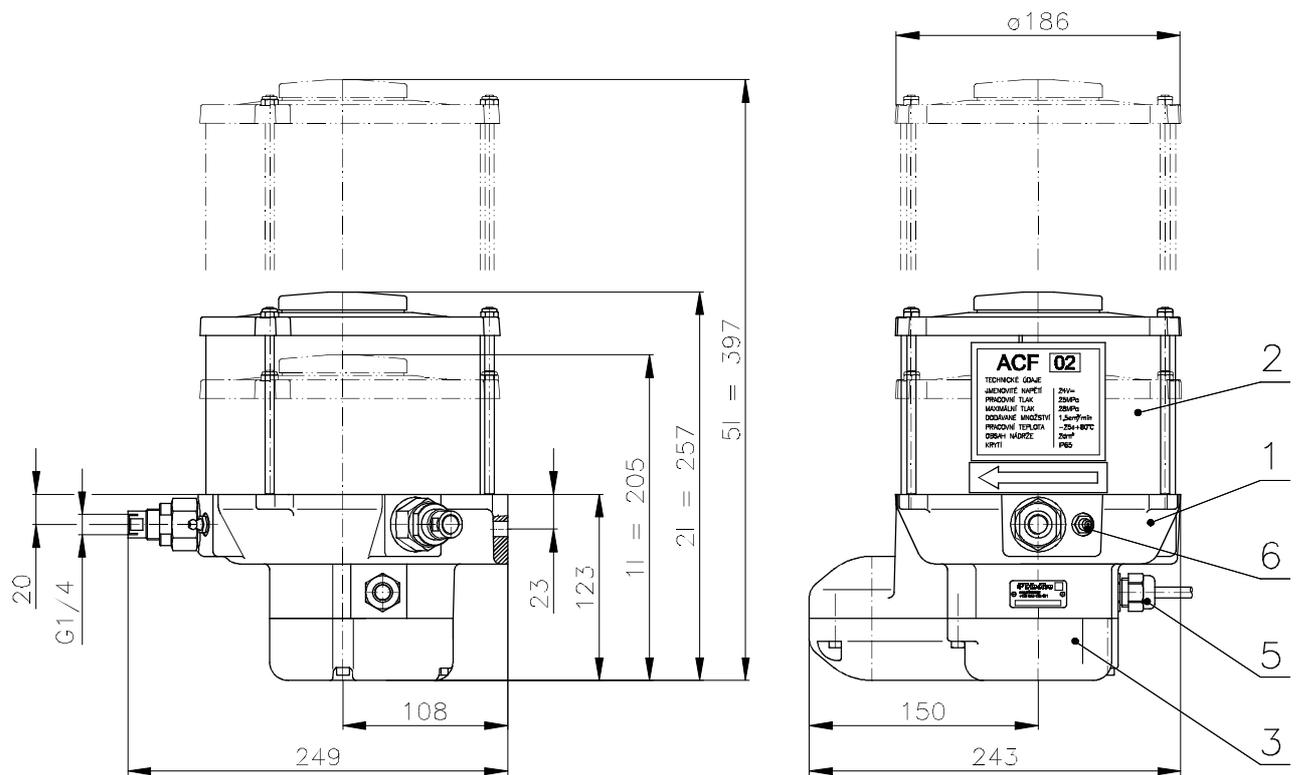
Maximum pressure		280 bar
Working pressure		250 bar
Nominal supplied quantity		3.8 cm ³ min ⁻¹ / outlet
Nominal dose regulation range		0 - 100 %
Lubricant reservoir capacity		2 and 5 dm ³
Number of outlets		1 to 3
Outlet pipe union		G1/4", for tube outside dia 6, 8, 10 mm
Electric motor		12 V DC, 2A, 24 V DC, 1 A, 24 W, IP 65
Lubricant	grease	max. NLGI - 2
	oil	min. 50 mm ² s ⁻¹
Temperature of working environment		- 25 to 80 °C
Weight		6.6 kg



Pos	Name
1	Pump body
2	Lubricant tank
3	Electromotor cover
4	Working unit
5	Connector
6	Filling hole

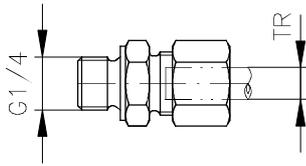
Name	LUBRICATION PUMP	
Type	ACF 12-111-21 (ACF 15-111-21)	
Code		

Tribotec s.r.o.
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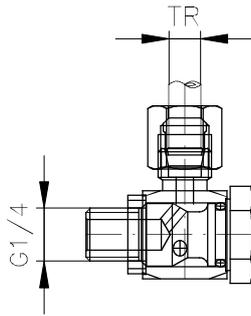


Pos	Name
1	Pump body
2	Lubricant tank
3	Electromotor cover
4	Working unit
5	Cable gland with cable l=10m
6	Filling hole

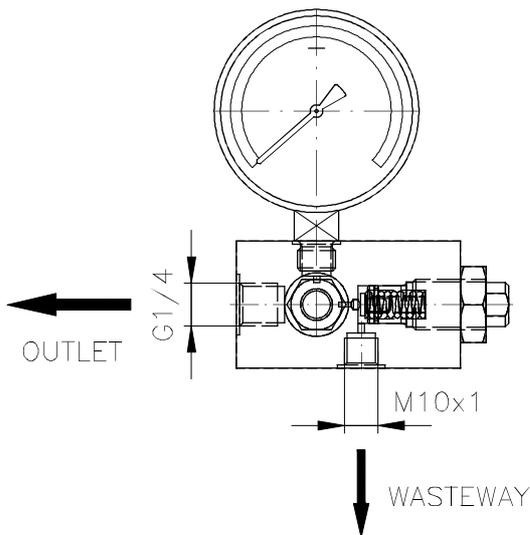
Name	LUBRICATION PUMP		Tribotec s.r.o. Košuličova 4 Brno www.tribotec.cz +420 543 425 611
Type	ACF 12-111-24 (ACF 15-111-24)		
Code			



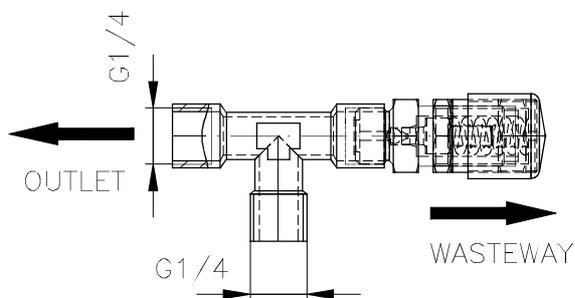
Indication	Code
Direct connection TR6 / G1/4	425041062812
Direct connection TR8 / G1/4	425041082814
Direct connection TR10/ G1/4	425041102816
Sealing washer 13,2 x 18 x 1	319419131810



Indication	Code
Adjustable connection TR6 / G1/4	430000006014
Adjustable connection TR8 / G1/4	430000008014
Adjustable connection TR10 / G1/4	430006014010



Indication	Code
SZV safety valve	8450705
SZVM safety valve + manometer	8450706



Indication	Code
BZV safety valve	8451193

Name	ACCESSORIES	©Tribotec s.r.o. Košuličova 4 Brno www.tribotec.cz +420 543 425 611
Type	ACF	
Code		

LUBRICATION PUMP ACF - TYPE IDENTIFICATION KEY

Lubrication pump ACF X a - b1 b2 b3 - c f

Lubrication pump ACF

for grease 1
for oil 2

Tank volume

1 dm³ (plastic)..... 1
2 dm³ (plastic)..... 2
5 dm³ (plastic)..... 5

Working units

without working unit- plug 0
working unit 1
working unit + safety valve SZV..... 2
working unit + safety valve SZVM (manometer)..... 3
working unit + safety valve BZV..... 4

Operating voltage

12V DC 1
24V DC 2

Wiring

connector (only base) 0
connector (complete)..... 1
connector + cabel 5m 2
connector + cabel 10m 3
entry gland + cabel 10m 4

Identification example:

Lubrication pump ACF 12-111-21

Lubrication pump ACF with grease tank of volume 2 dm³,
with working units on the positions b1, b2, b3,
with voltage supply 24VDC,
with a connctor without cable.

Identification example:

Lubrication pump ACF 15-010-23

Lubrication pump ACF with grease tank of volume 5 dm³,
wiht working unit on the position b2, on the posotions b1, b3 are mounted a plugs,
with supply voltage 24VDC,
with connector and cable of 10m length.

Name	CODE IDENTIFICATION	©Tribotec s.r.o. Košuličova 4 Brno www.tribotec.cz +420 543 425 611
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