

# 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 trolleybuses. 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 0.8 to 3.8 cm<sup>3</sup>. Standard electric motor supplied is 24V DC or 12V DC with protection to IP65.

## 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

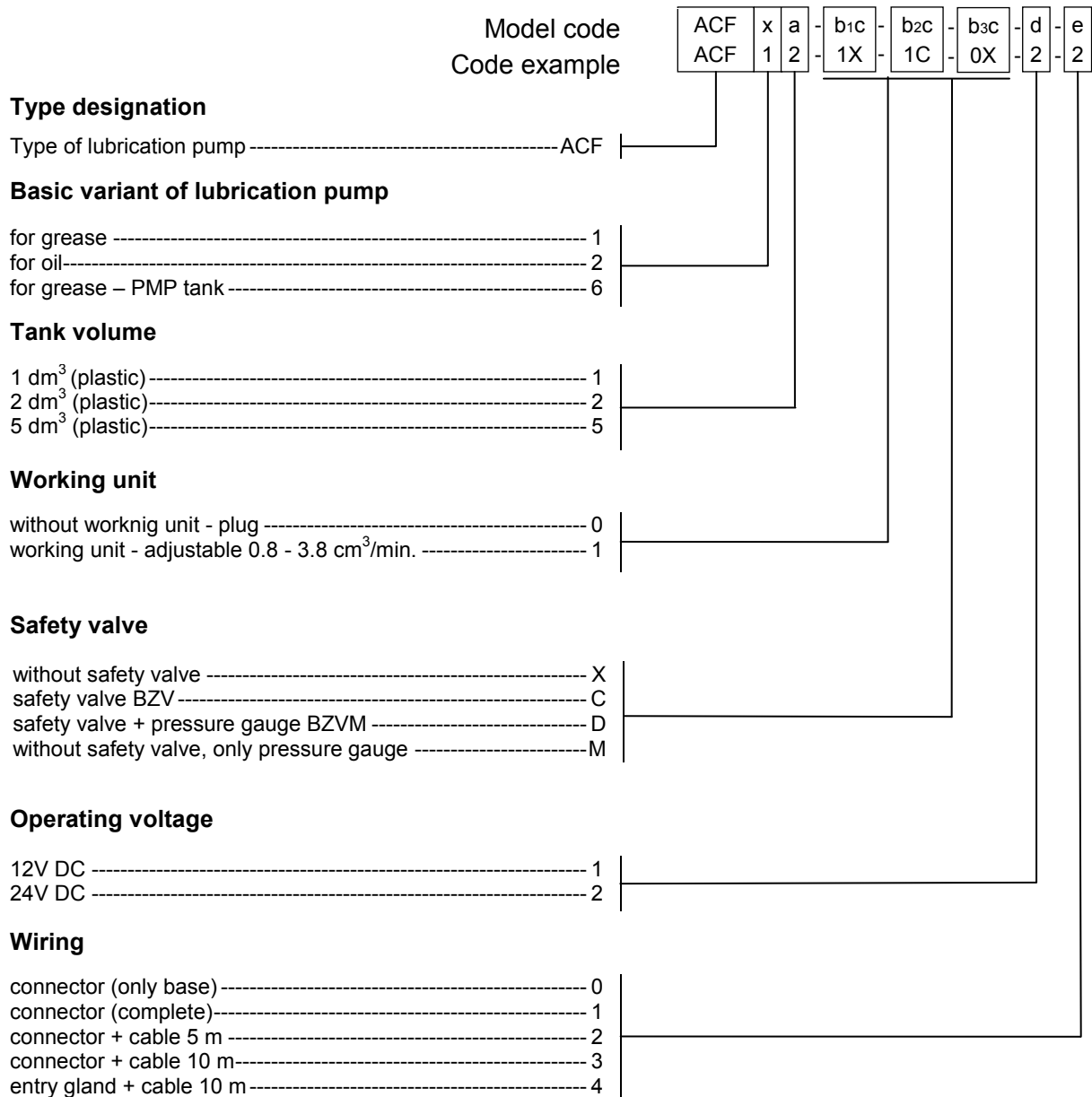
The lubricator is intended for installation in horizontal position by M10 screws through two anchoring bolts. The electric motor is connected in compliance with relevant standards. The lubricator is filled with the specified lubricant via lubricating head, switched on and monitored for smooth and regular 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 <sup>3</sup> /min./outlet
Nominal dose regulation range		0.8 - 3.8 cm <sup>3</sup> /min.
Lubricant reservoir capacity		1, 2 and 5 dm <sup>3</sup>
Number of outlets		1 to 3
Outlet pipe union		G1/4", for tube outside dia 6, 8, 10 mm
Electric motor		24V DC, 1A, 24W, IP65 12V DC, 2A, 24W, IP65
Lubricant	grease	max. NLGI-2
	oil	min. 50 mm <sup>2</sup> /sec.
Temperature of working environment		-25 to 80°C
Weight		6.6 kg

## TYPE IDENTIFICATION KEY



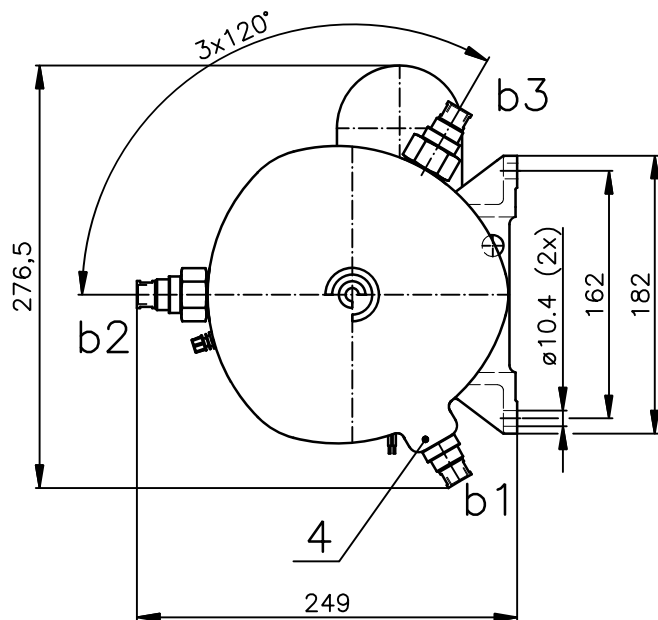
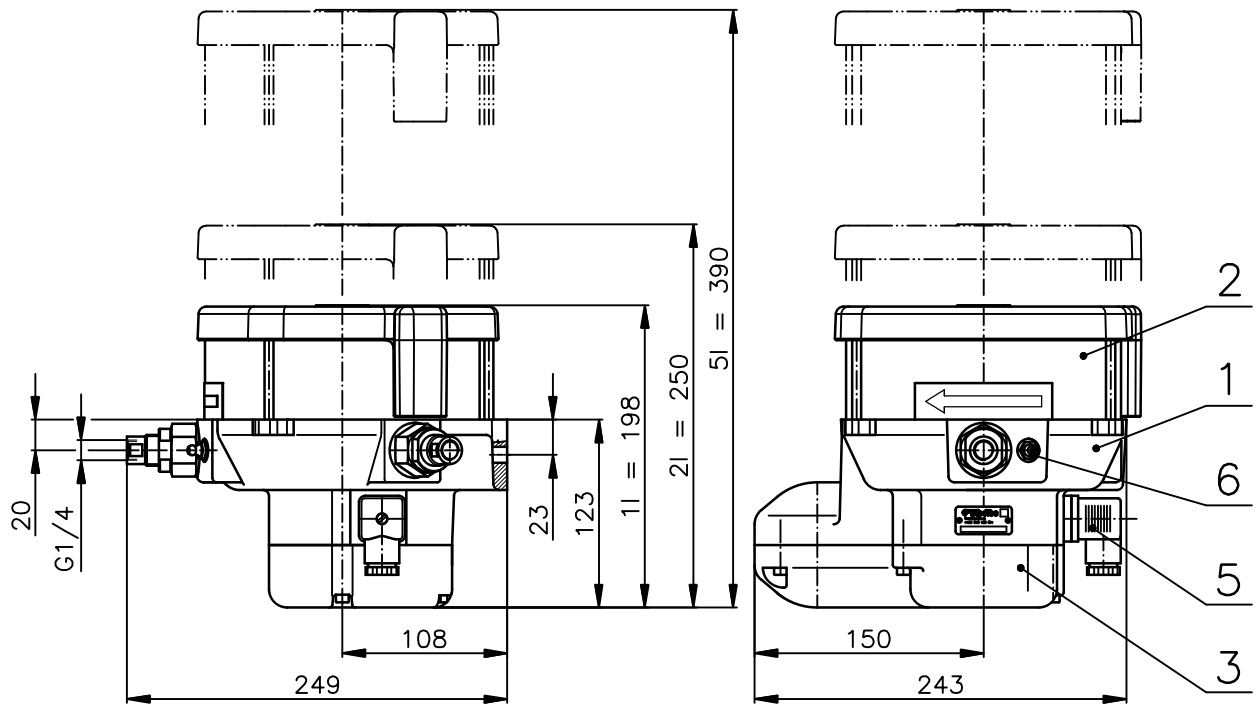
### NOTE:

The position of outlet worknig unit is marked by indices 1, 2, 3. The position of working units at the pump are shoown in the sketch in next datasheet.

### EXAMPLE OF IDENTIFICATION: ACF 12-1X-1C-0X-22

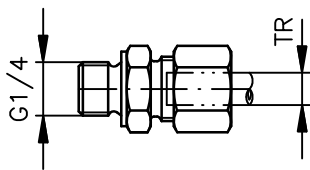
Lubrication pump ACF, for grease with 2 dm<sup>3</sup>. Position 1 is adjustable worknig unit without safety valve, position 2 is adjustable working unit with safety valve BZV, position 3 is plug. Operating voltage 24V DC, connector + cable 5 m.



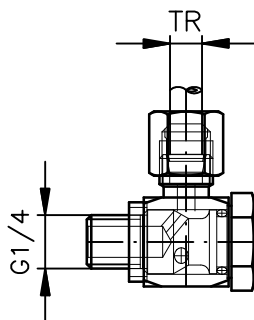


Pos	Name
1	Pump body
2	Lubricant tank
3	Electromotor cover
4	Working unit
5	Connector
6	Filling hole

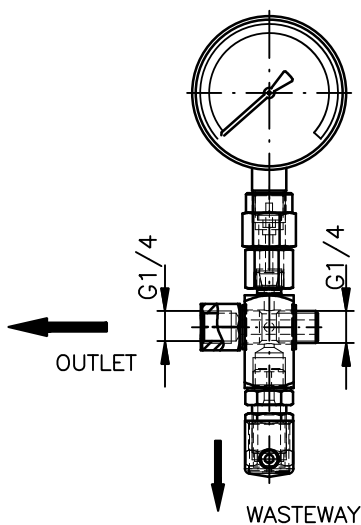
Name	<b>LUBRICATION PUMP</b>		<b>©Tribotec s.r.o.</b> Košuličova 4 Brno <a href="http://www.tribotec.cz">www.tribotec.cz</a> +420 543 425 611
Type	<b>ACF 61-1X-1X-1X-21</b>		
Code			



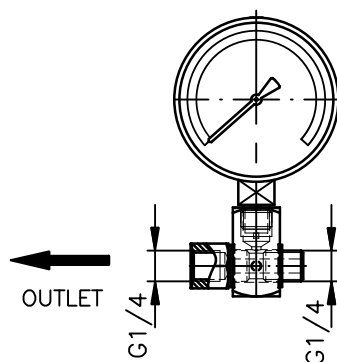
Indication	Code
Direct connection TR6 / G1/4	425041062812
Direct connection TR8 / G1/4	425041082814
Direct connection TR10/ G1/4	425041102816
Sealing washer 13,2 x 18 x 1	319419131810



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



Indication	Code
Safety valve BZVM - regul. 40 až 350 bar	8451592



Indication	Code
Body with pressure gauge	8451636

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