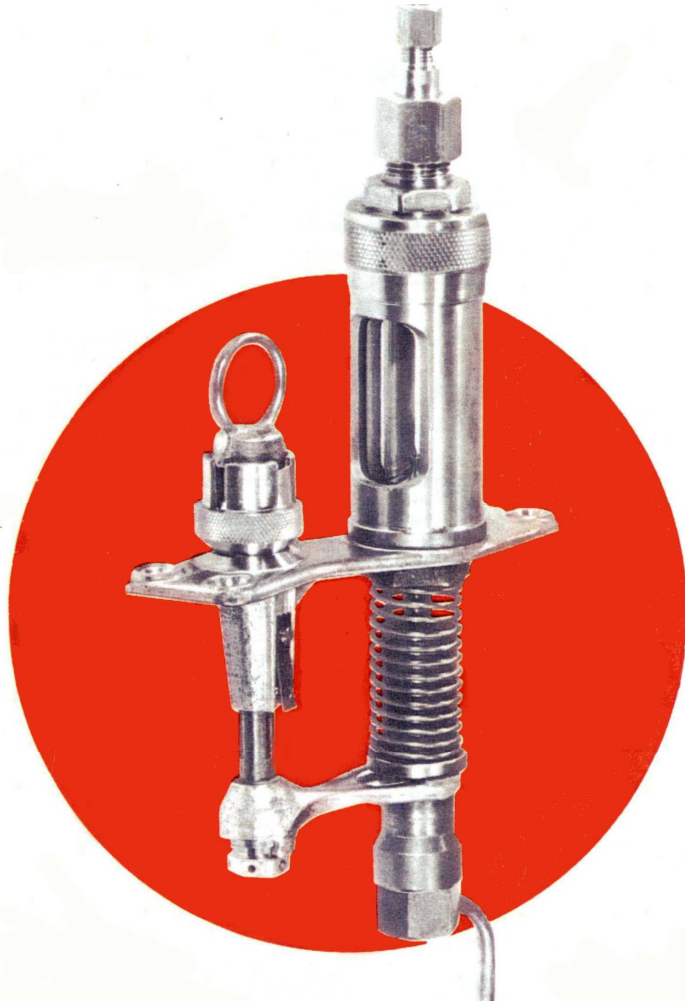


QUERVEL RAUZY MECHANICAL LUBRICATOR

Safety lubrication



Pump type : P

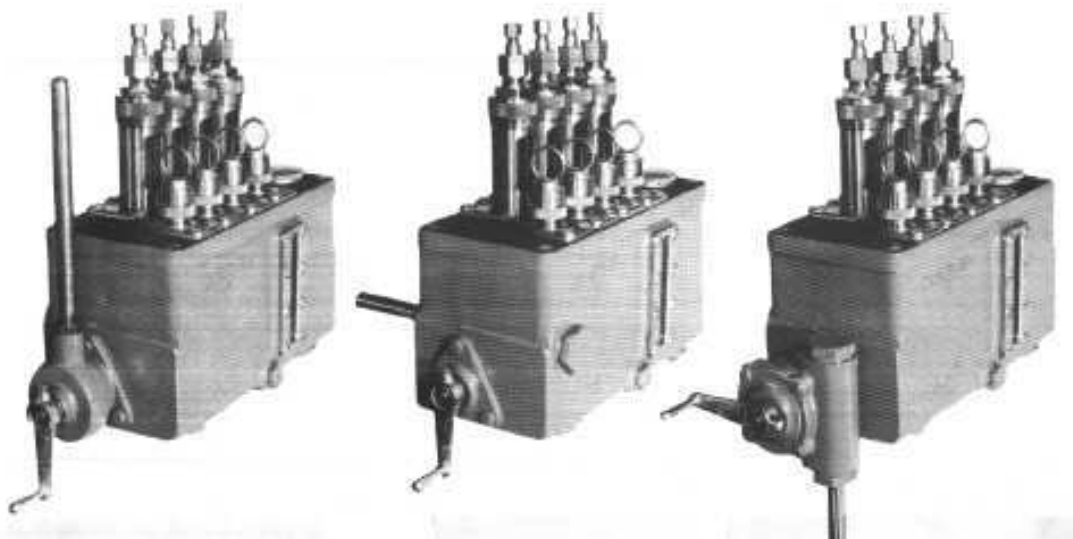
Pressurized oil lubrication
Sight glass at pump discharge

Modular system
Each pump flow set independently

Oil consumption control

Maximum pressure : 140 bar

Precise flow setting



QUERVEL RAUZY S.a.r.l

167 rue des Renouillers—92700 COLOMBES France

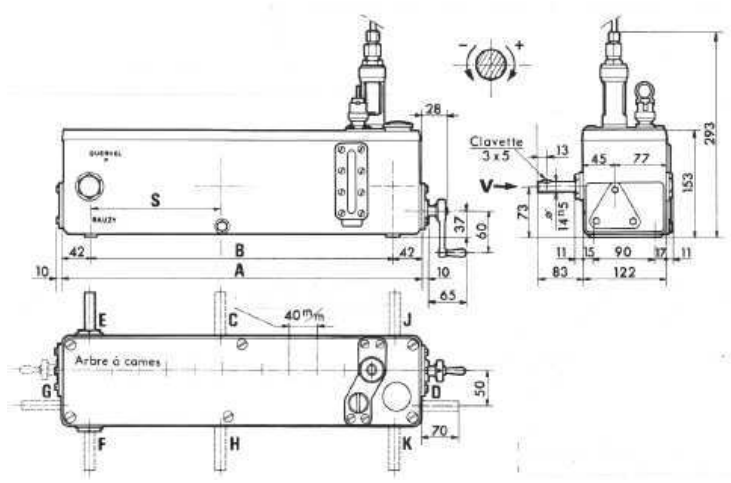
Tél : (33-1) 41 19 74 60 Fax : (33-1) 41 19 74 61

Site : www.quervel-rauzy.com

The QUERVEL RAUZY mechanical lubricator is used in "pump to point" system for mechanical machinery, is a modular system composed by one or more lubricator boxes, P pumps, a cam shaft driving system common to all pumps and accessories as level control regulator, level switch, electric or steam heater. Generally, at each lubricating pump is corresponding a different lubricating point. The QUERVEL RAUZY pumps can be used with mineral or synthetic oil, the pump low flow is adjustable.

QUERVEL RAUZY P LUBRICATOR BOX MAIN CHARACTERISTICS

Maxi number of pumps P	2	4	6	8	10	12	16
Lubricator box reference	P	Q	R	U	V	W	X
A (mm)	184	264	344	444	524	604	784
B (mm)	100	180	260	360	440	520	700
Volume (liters)	2	3	4	5	6	7	10
Lubricator box weight (kg)	10	14	18	24	30	34	48
S (mm)	Simple reduct	68	108	148	188	228	448
	Double reduct	56	98	148	188	228	448



ROTATION WAY
 The rotation way of the QUERVEL RAUZY lubricators is both ways except if there is a clutching hand wheel. In this case the rotation way has to be given, CW or CCW facing the lubricator shaft.

Driver shaft and hand wheel

8 possible driver shaft positions (C-D-E-F-G-H-J-K)

6 possible positions for the clutching hand wheel (E-F-J-K-D'-G')

Lubricator cam shaft speed

The necessary oil flow at each lubricating point is given by the mechanical machinery manufacturer. The cam shaft speed is dependent on the required oil flows. The cam shaft speed is generally between 2 to 12 RPM. According to the driver shaft speed, a gear box will be used or will not be used.

ROTARY DRIVER

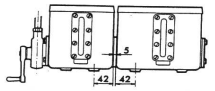
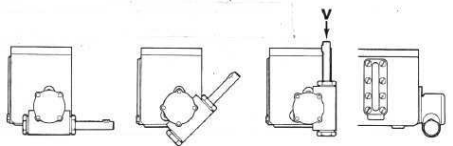
By the mechanical machinery auxiliary shaft.
 By electric motor.

SPEED REDUCTION GEAR INSIDE THE LUBRICATOR

The speed reduction gear takes the place of 1 or 2 pumps..
 Simple reduction : 1/1, 1/3, 1/10, 1/20, 1/40 (C-D-E-F-G-H-J-K)
 Multiple reduction (maximum 3) : combination of simple reductions, maximum 1/600 (C-E-F-G-H-J-K)

SPEED REDUCTION GEAR OUTSIDE THE LUBRICATOR

- 1) by orientable gear box
 With this orientable gear box the cam shaft
 Can be driven from any angle - installation on G and D.
 Possible reduction : 1/10, 1/20, 1/40.
- 2) by separate gear box
 QUERVEL oil bath gear box



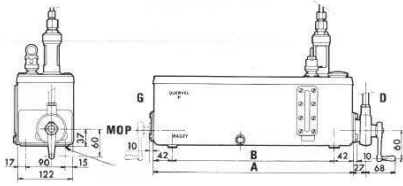
3) Standard gear box



RATCHET DRIVER

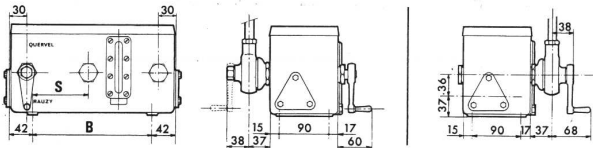
1) DIRECT DRIVING OF THE CAM SHAFT

Positions G ou D with clutching hand wheel mounted on the ratchet or on the opposite side.



2) DRIVING THROUGH A GEAR BOX

Positions E-C-J-F-H-K with clutching hand wheel mounted on the ratchet or on the opposite side.

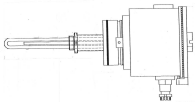


Maximum number of reciprocating motions per minute : 500

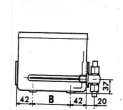
Degree of rotation min / maxi : 80 / 8°

ACCESSORIES

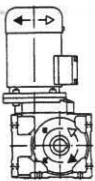
Electric heater



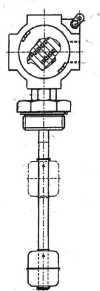
Steam heater



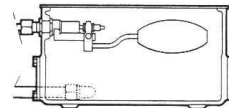
Moto-gear reducer



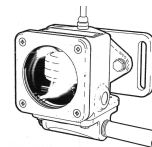
Level switch



Oil level regulator inside the lubricator box



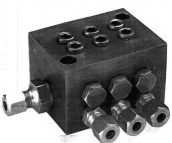
Oil level regulator outside the lubricator box



Flow switch

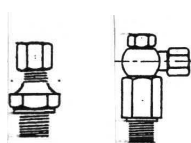
QUERVEL RAUZY other products

Progressive piston dividers



from 2 à 22 outlets

Special non return valve

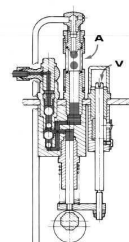


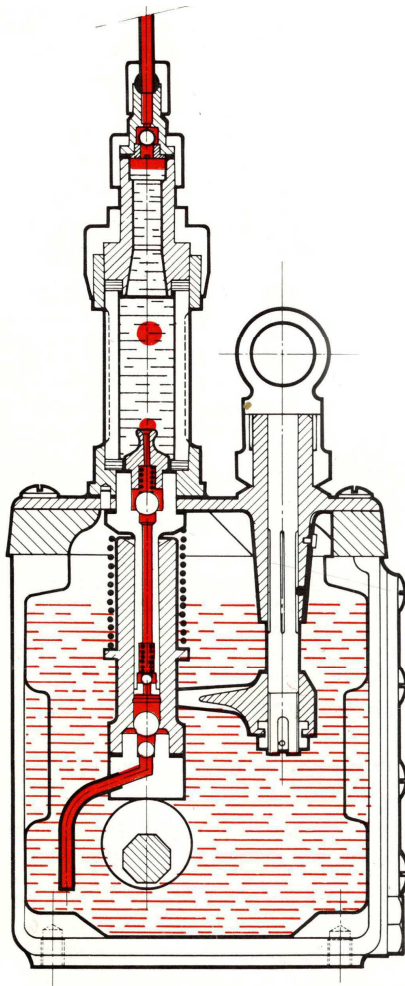
Pressure up to 200 bar and vacuum

Flow glass



Lubricator Type PR





DESCRIPTION

The QUERVEL-RAUZY mechanical lubricator P type is composed of a lubricator box, a series of single cylinder pumps and a cam shaft (one cam per pump). The cam shaft is driven by :
 A ratchet system.
 A rotative system with or without speed reducer.

OPERATION

The pump cylinder is moved by a cam, the transmission per cam gives a low torque value and a long life time for the parts.
 The piston stroke is corresponding to a cam rotation.
 In the cylinder upper part, a spring maintains the cylinder in contact with the cam.
 On the cylinder way down, a vacuum is created between the piston and the suction check valve. The suction check valve opens, the oil is admitted in the cylinder and the discharge valve is closed. On the cylinder way up, the oil contained in the cylinder is pushed by the piston through the discharge valve up to the lubricated point. The oil flow is observed through the sight glass (drops per minute). In the sight glass full of water or anti-freezing liquid by the difference of gravity, the oil goes up dripping and under pressure. The change of the pump stroke setting creates the variation of flow.

SETTING

The setting is done with the knurled nut (E) on the pump, the fingerstall of the pull (D) placed in the shortest slots (a) see sketch I.

Full flow : Knurled nut totally screwed, length R = 0 mm
 Maximum flow 0,5 cm³ per cam shaft rotation

Zero flow : Knurled nut unscrewed of 10 mm, length R = 10 mm

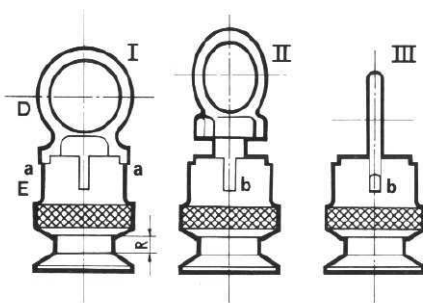
To obtain a better lubrication, without changing the original setting, pull the fingerstall and make a rotation of 90° to place the fingerstall of the pull in the longest slots (b) see sketch II et III

To get a manual lubrication, pump with the fingerstall, at the end of the operation put back the pull in position (a) or (b) following the needed lubrication.

QUERVEL-RAUZY MECHANICAL LUBRICATORS BENEFITS

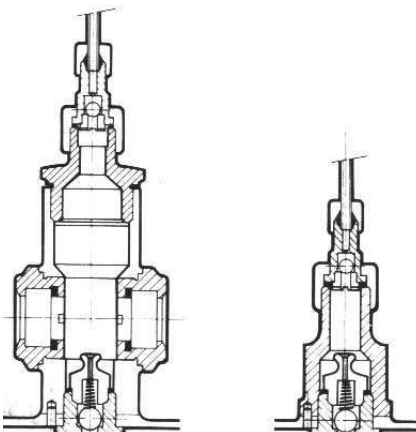
- 1 - The lubricator is built following client specific request with standard elements.
- 2 - The use of standard elements facilitate maintenance cost reduction.
- 3 - All moving parts are permanently lubricated by the oil contained in the lubricator box.
- 4 - Precise flow setting of each lubricated point.
- 5 - Discharge flow visual control.
- 6 - Working at high pressure.
- 7 - Pumps can be dismounted or installed during normal running of the lubricator.
- 8 - Sensitivity, robustness, silence of the ratchet system and train of gears.
- 9 - Choice of driving shaft position.
- 10 - Driving system by machinery to be lubricated auxiliary shaft, electric or pneumatic motor, ratchet driver.
- 11 - Possibility to added accessories, control and safety devices :
 level controller
 level switch
 Oil heater

Setting



High pressure sight glass

Direct outlet



CHARACTERISTIC

Pump outlet connection : 6 mm OD tubing fitting
 Pump material : brass (option : zing plated brass)
 Standard Pump : maximum operating pressure 60 bar g

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