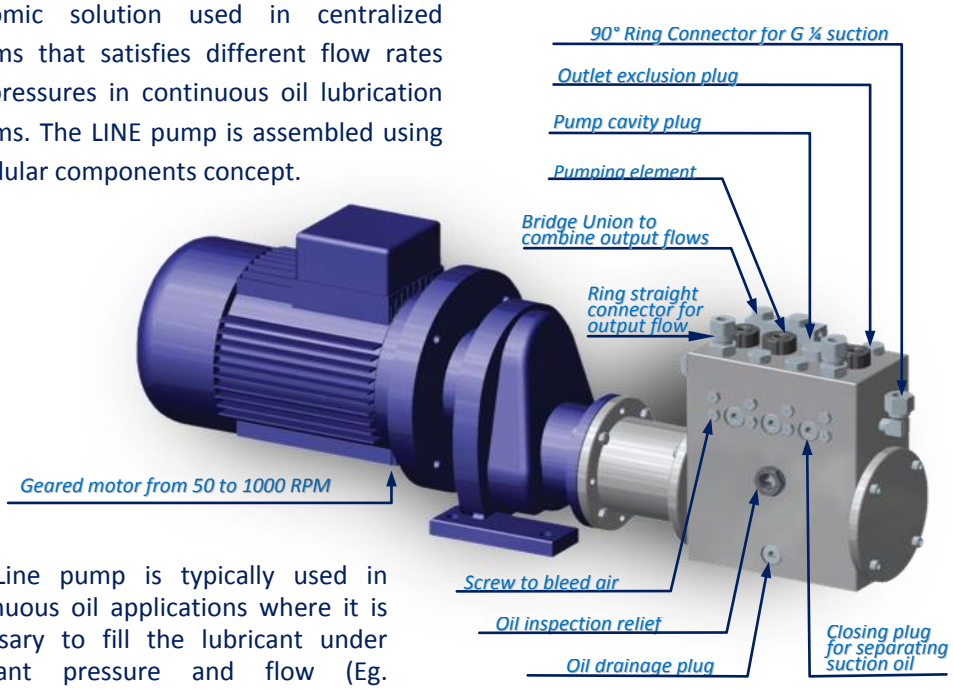
CHARACTERISTICS

- PUMPING OUTLET CONNECTION: ¼" BSP
- ADJUSTABLE FLOW ON EACH PUMP ELEMENT
- TWO LUBRICANTS CAN BE USED SIMULTANEOUSLY IN THE SAME LINE PUMP- TYPICALLY LUBE AND PROCESS OILS
- ABILITY TO SPLIT LUBE AND PROCESS LUBRICANT INLETS AT ANY PUMP ELEMENT POINT (1/3 – 2/2 – 3/1 CONFIGURATION).
- POSSIBILITY OF COMBINING OUTPUTS WITH BRIDGE ELEMENT.

LINE PUMP ADVANCED DESIGN AND SOLUTIONS

The LINE piston pump is an efficient and economic solution used in centralized systems that satisfies different flow rates and pressures in continuous oil lubrication systems. The LINE pump is assembled using a modular components concept.



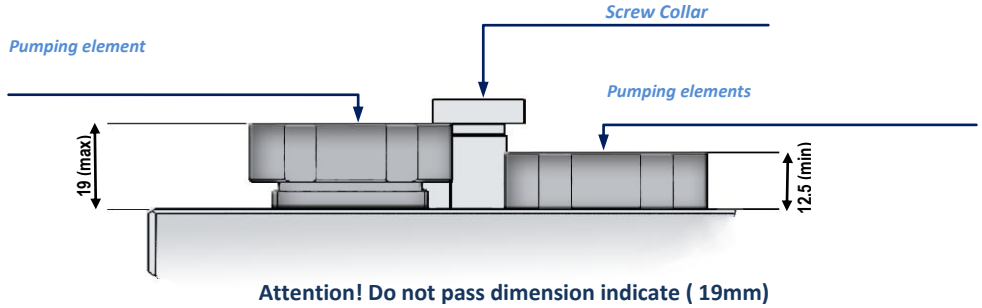
The Line pump is typically used in continuous oil applications where it is necessary to fill the lubricant under constant pressure and flow (Eg. bearings, hubs, pins, joints, etc ...).

Pumping elements are driven by a crankshaft and cam mechanism.

APPLICATIONS

- PETROCHEMICAL REFINERIES
- GAS HANDLING
- REFRIGERATION CELLS
- COMPRESSOR LUBRICATION
- RUBBER / PLASTICS

The LINE pump is a piston pump with spring return driven by an ***eccentric drive*** shaft. The flow rate of the pump is easily adjustable.



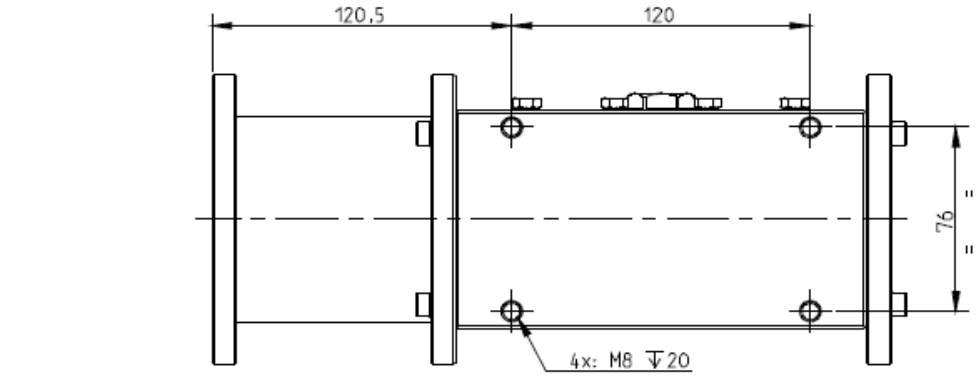
Attention! Do not pass dimension indicate (19mm)

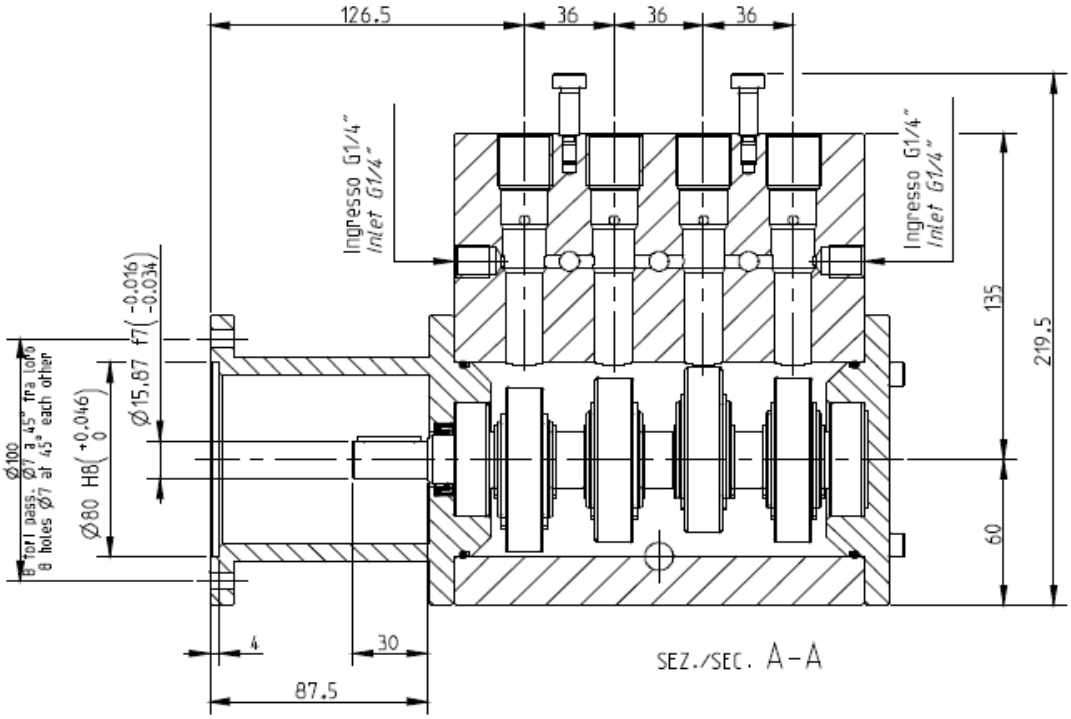
THE LINE PUMPS ARE CAPABLE OF PROVIDING EXACT FLOW AT HIGH PRESSURES FOR LUBRICATION HYDROSTATIC LUBRICATION.

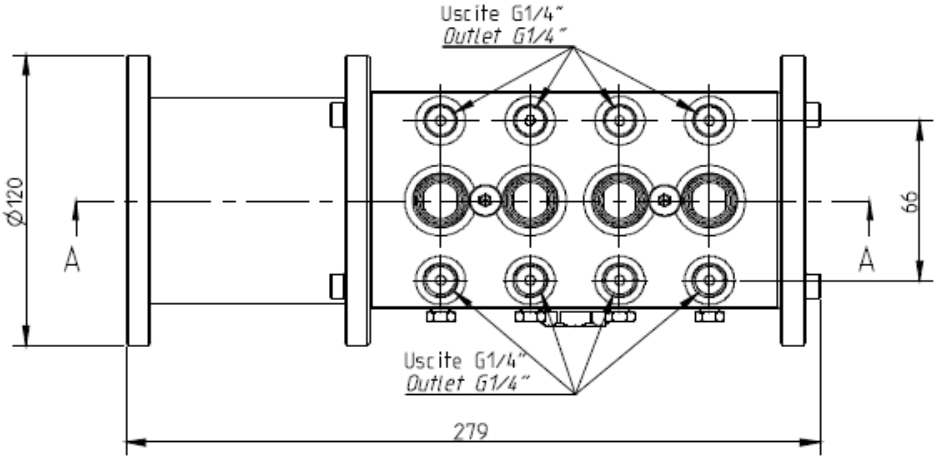
All working components within the pump are protected from contamination, water, impurities and are continuously self lubricated by the process lubricant. It is therefore not necessary to change oil in the pump casing.

A robust construction renders the LINE pump a highly reliable device. The piston has been designed with sufficient stroke-volume to avoid any risk of aerating the oil and avoids scaveing problems.

DIMENSIONS


120,5
120
76
4x: M8 ↧20

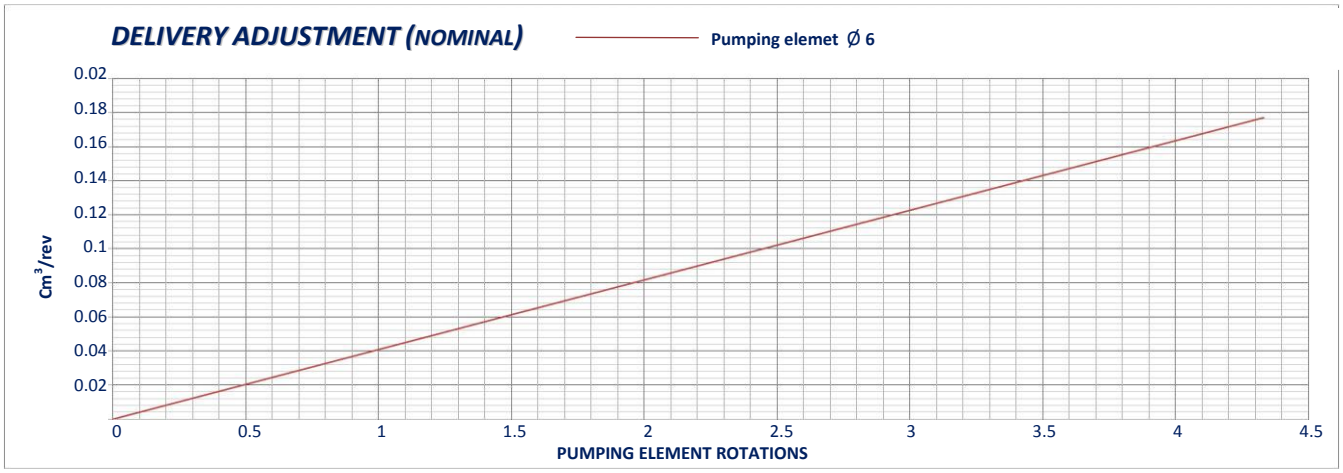

126,5
36
36
36
Ingresso G1/4"
Inlet G1/4"
Ingresso G1/4"
Inlet G1/4"
135
219,5
60
Ø15,87 f7 (-0.016 -0.034)
Ø100
8 fori pass. Ø7 a 45° tra loro
8 holes Ø7 at 45° each other
Ø80 H8 (+0.046 0)
4
30
87,5
SEZ./SEC. A-A


Uscite G1/4"
Outlet G1/4"
Ø120
A
A
66
Uscite G1/4"
Outlet G1/4"
279

TECHNICAL INFORMATION

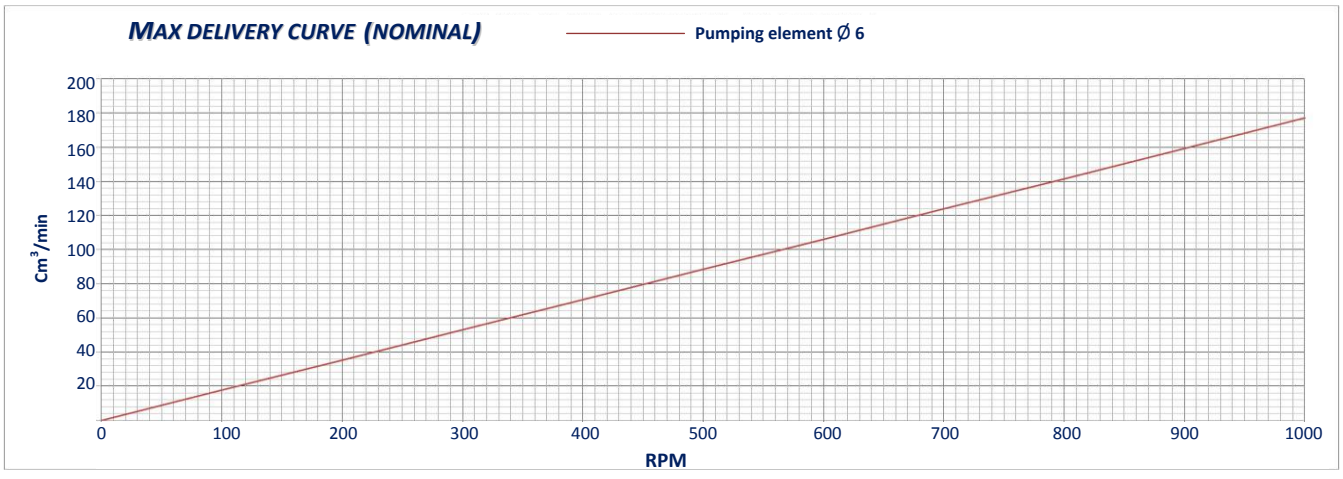
TECHNICAL FEATURES		
Pump type		Eccentric driven piston pump with spring return
Pumping outlet connection		G 1/4 UNI – ISO 228/1
Reservoir inlet connection		G 1/4 UNI – ISO 228/1
RPM		50 ÷ 1000
Rotation direction		bidirectional
Working temperature		+5°C ÷ +40°C
Pumping delivery	**Ø6**	Stroke tot. 8mm utile 6,5mm
		0,177cm³/rev (adjustable)
Outlet pressure	**Ø6**	550bar (constant)
		690bar (intermittent)
Inlet pressure		0,1bar ÷ 3,44bar
Lubricant viscosity		10,5cSt ÷ 462cSt
Storage temperature		-30°C ÷ +80°C
Max relative humidity without working condensation		90%
Sound pressure level		< 70 db (A)
Weight		9Kg (without geared motor)

As standard the pumps should be ordered factory preset to customer requirement. If necessary the pumping elements can be adjusted: rotating the pump clockwise increases the flow and rotating anti-clockwise to decreases the flow.
The graph on the next page below shows the adjusting range that can be achieved on the pump.



GRAPHIC N. 1

The choice of pumping elements is based on the output required and the RPM of the geared motor. Refer to the following graph for each pump output.



GRAPH. 2

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ORDERING INFORMATION

The LINE pump configurations allow the customer to use it in many applications and conditions.

Configuration Variables:

Positions A-B-C-D (see imm. N. 2)

This refers to the position of where the pumps are installed in the unit. You can use all 4 pumps or plug unused pump element cavities. The pumps sizes available are Ø6 or Ø10 and are both adjustable).

Position E

With a purpose built pin inserted at various positions the pump inlet can be divided. For example, applying the pin at position E2 will separate the inlet to pump elements A-B from inlet to pump elements C-D allowing to different lubricants to be used.

Position I-L

If the bridging unions are not used, the output threads must be plugged off with the appropriate plugs. The positioning of the plugs must be done correctly taking into account the number of pumps used. For example: if using only 1 pump element in Position A, with B-C-D plugged, output side I1 or I3 can be selected by plugging the unused outlet.

Position F-G-H

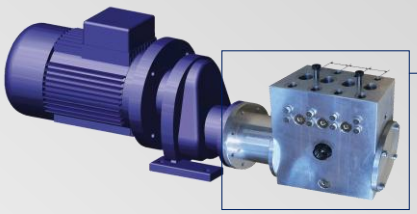
The outputs F1-F2-G1-G2-H1-H2 can be joined with a bridging union allowing the combination of flow into a single outlet.

Position M

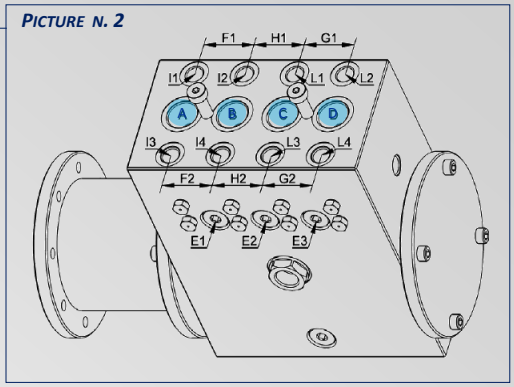
The pump can be ordered with or without a geared motor. Please refer to the table below. In the event a special geared motor is needed and it is not listed, please contact Dropsa sales office to check availability.

PART NUMBERING 3099180

A	B	C	D	E	F	G	H	I	L	M



PICTURE N. 2



A	
0	PLUG
1	PUMPING Ø6

B	
0	PLUG
1	PUMPING Ø6

C	
0	PLUG
1	PUMPING Ø6

D	
0	PLUG
1	PUMPING Ø6

E	
0	W/OUT DIVISION
1	DIVISION A-BCD
2	DIVISION AB-CD
3	DIVISION ABC-D

F	
	W/OUT BRIDGE
1	BRIDGE POS. 1
2	BRIDGE POS. 2

G	
	W/OUT BRIDGE
1	BRIDGE POS. 1
2	BRIDGE POS. 2

H	
	W/OUT BRIDGE
1	BRIDGE POS. 1
2	BRIDGE POS. 2

I	
A	W/OUT PLUGS
B	PLUG IN POS. 1
C	PLUG IN POS. 2
D	PLUG IN POS. 3
E	PLUG IN POS. 4
F	PLUG IN POS. 1+2
G	PLUG IN POS. 3+4
H	PLUG IN POS. 1+4
I	PLUG IN POS. 2+3
L	PLUG IN POS. 1+2+3
M	PLUG IN POS. 1+2+4
N	PLUG IN POS. 2+3+4
O	PLUG IN POS. 1+3+4
P	PLUG IN POS. 1+2+3+4

L	
A	W/OUT PLUGS
B	PLUG IN POS. 1
C	PLUG IN POS. 2
D	PLUG IN POS. 3
E	PLUG IN POS. 4
F	PLUG IN POS. 1+2
G	PLUG IN POS. 3+4
H	PLUG IN POS. 1+4
I	PLUG IN POS. 2+3
L	PLUG IN POS. 1+2+3
M	PLUG IN POS. 1+2+4
N	PLUG IN POS. 2+3+4
O	PLUG IN POS. 1+3+4
P	PLUG IN POS. 1+2+3+4

M	
0	WITHOUT GEARED MOTOR
1	681 RPM - 2,2kW (°) (°°)
2	628 RPM - 1,5kW (°)
3	1025 RPM - 2,2kW (°) (°°)
4	1111 RPM - 1,85kW (°)
5	N/A
6	N/A
7	N/A
8	N/A
9	N/A

(°) 230/400V – 240/415V - 50Hz 3Ph 280/480V – 60Hz – 3Ph

(°°) With Anti condensation 240V – 50Hz – 1Ph

SPARE PARTS AND ACCESSORIES

Part Number	DESCRIPTION	Part Number	DESCRIPTION
0299654	Pumping element Ø6	92243	Straight Ring Connector for tube Ø10
3234309	Pumping spare plug	93485	90° Ring Connector for tube Ø12
0017144	Plug dividing the suction outlets	622167	Plug for excluding outlet
0641321	Bridge Union for combining flow	3230149	Air bleed screw
0265037	Oil inspection relief	3301550	geared motor 681 RPM - 2,2kW (M1)
3234253	Oil drainage plug	3301553	geared motor 628 RPM - 1,5kW (M2)
0010513	Neck screw	3301554	geared motor 1025 RPM - 2,2kW (M3)
3200164	Pump /geared motor coupling	3301555	geared motor 1111 RPM - 1,85kW (M4)