

The pneumatic lubricator is the simplest way of efficiently lubricating the actuators linked to a circuit. As compressed air flows towards the lubricator, it encounters a flexible diaphragm which partially blocks the way, creating a small pressure difference between the inlet and outlet air. Being at the higher pressure, the oil in the bowl is pumped through a tube with a filter towards the regulation pin.

The quantity of oil can be metered accurately since the drops can be viewed through the transparent dome.

Filling with oil must take place in the absence of pressure, unscrewing the plug next to the dome. On the front and back there is a port (1/8" for size 1 and 1/4" for size 2) that can be used with pressure gauges, pressure switches or as an additional air intake.



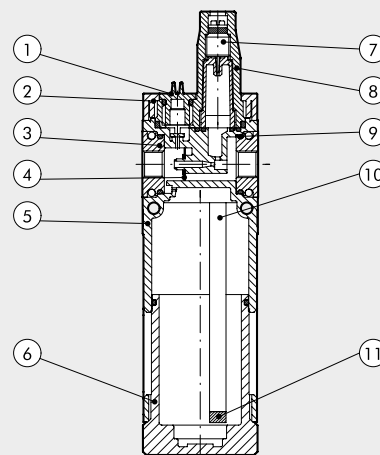
TECHNICAL DATA	LUB SY1			LUB SY2			
	1/8"	1/4"	3/8"	3/8"	1/2"	3/4"	1"
Threaded port	Oil mist						
Type of lubrication	Manual filling from the top						
Version							
Max. input pressure	bar			bar			
	15			13			
	MPa			1.3			
	1.5			1.3			
	psi			188			
	217			188			
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 0.5 bar (0.05 MPa; 7 psi)	Nl/min	1300	1700	2200	2300	3900	3900
	scfm	46	60	78	81	138	138
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	Nl/min	1600	3000	3650	3650	6100	6100
	scfm	57	106	129	129	216	216
Min/max temperature at 10 bar; 1 MPa; 145 psi	°C			°C			
	From -10 to +50			From -10 to +50			
Weight	g			g			
	185	180	171	480	453	449	437
Fluid	Compressed air or other inert gases						
Quantity of filled oil	cm <sup>3</sup>			cm <sup>3</sup>			
	60			130			
Mounting position	Vertical			Vertical			
Port for additional air take-off	1/8", front and rear, lubricated air			1/4", front and rear, lubricated air			
Additional air take-off flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	Nl/min	450		800			
	scfm	16		53			
Wall fixing screws	No. 2 M4 screws			No. 2 M5 screws			
Recommended oils	ISO and UNI FD22 (Energol HPL; Spinesso; Mobil DTE; Tellus oil)						
Notes on use	Install the lubricator as close as possible to the point of use. Fill the lubricator bowl with oil before pressurizing the system. Do not use cleaning oils, brake fluid oils or solvents in general. For the best lubrication results, set the drip rate to one drop for 300-600 Nl.						

UNITS

Syntesi<sup>®</sup> LUBRICATOR

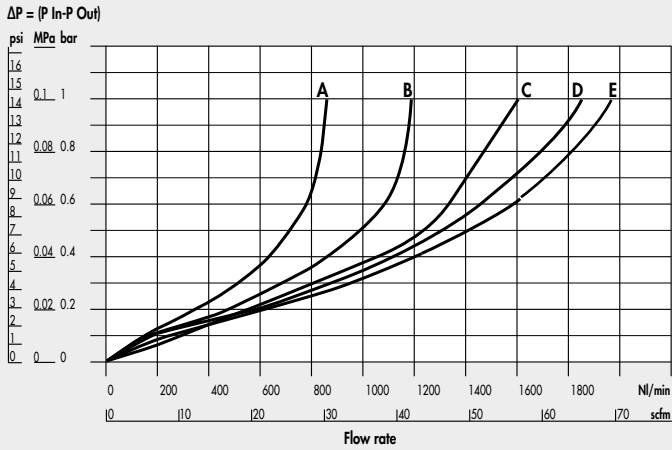
## COMPONENTS

- ① Technopolymer oil filling plug
- ② Technopolymer flange
- ③ IN/OUT bushing made of OT58 nickel-plated brass or passivated aluminium for 3/4" - 1"
- ④ Venturi NBR diaphragm
- ⑤ Technopolymer body
- ⑥ Clear technopolymer bowl
- ⑦ OT 58 brass oil flow regulation needle
- ⑧ Clear technopolymer cover
- ⑨ NBR o-ring gasket
- ⑩ Rilsan<sup>®</sup> oil suction pipe
- ⑪ Oil filter

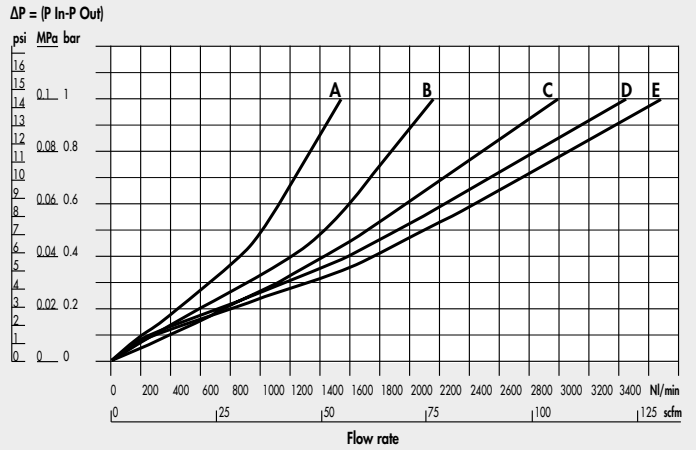


FLOW CHARTS

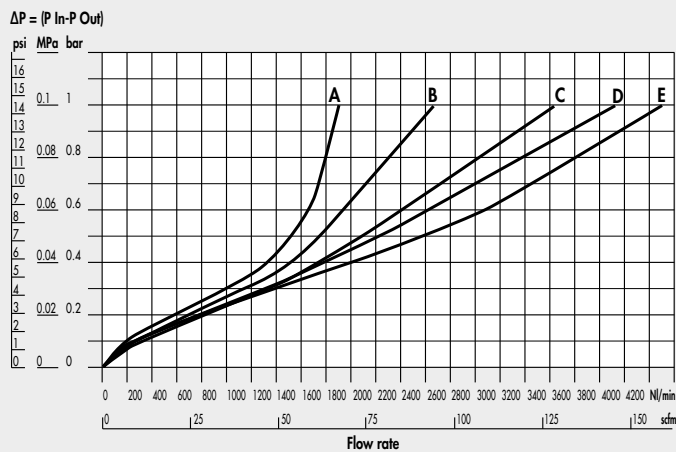
LUB Syntesi® SY1 1/8"



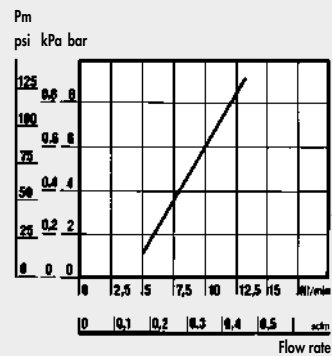
LUB Syntesi® SY1 1/4"



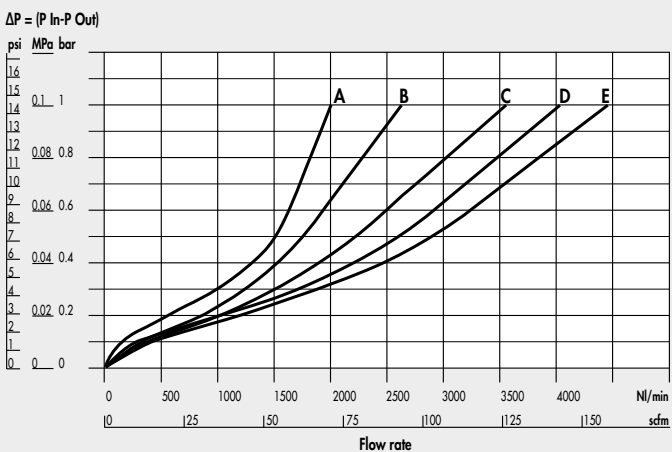
LUB Syntesi® SY1 3/8"



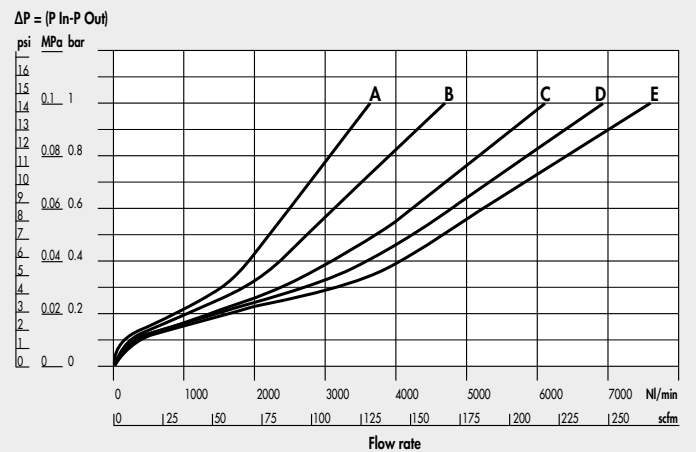
Minimum operating flow chart SY1



LUB Syntesi® SY2 3/8"



LUB Syntesi® SY2 1/2"

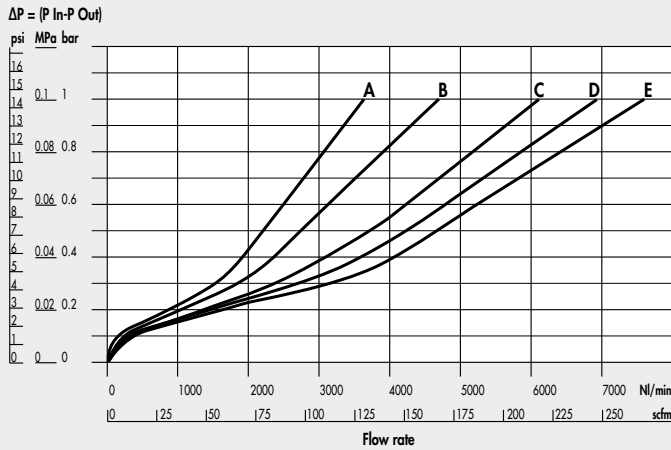


A = 2.5 bar - 0.25 MPa - 36 psi  
 B = 4 bar - 0.4 MPa - 58 psi

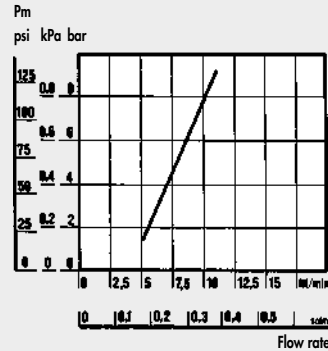
C = 6.3 bar - 0.63 MPa - 91 psi  
 D = 8 bar - 0.8 MPa - 116 psi

E = 10 bar - 1 MPa - 145 psi

LUB Syntesi® SY2 3/4" - 1"



Minimum operating flow chart SY2

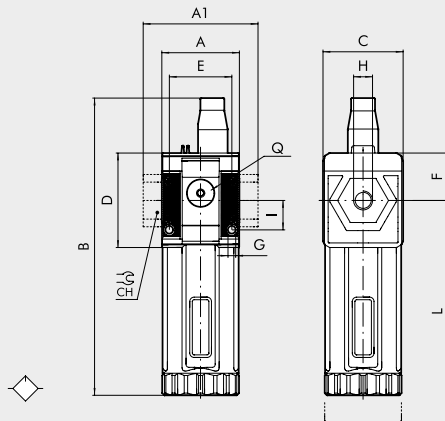


A = 2.5 bar - 0.25 MPa - 36 psi  
 B = 4 bar - 0.4 MPa - 58 psi

C = 6.3 bar - 0.63 MPa - 91 psi  
 D = 8 bar - 0.8 MPa - 116 psi

E = 10 bar - 1 MPa - 145 psi

DIMENSIONS



	SIZE 1			SIZE 2			
H (threaded port)	1/8"	1/4"	3/8"	3/8"	1/2"	3/4"	1"
A	42			60.5			
A1	-	-	44	-	-	95	95
B	162			200.5			
C	44			61			
CH	-			-	-	32	36
D	51.5			70.5			
E	33.5			47.5			
F	25.8			38.2			
G	Hole for M4 screws			Hole for M5 screws			
I	16			22.5			
L	158			193			
Q (no. 2 additional air takes-off)	1/8"			1/4"			

KEY TO CODES

56 SYNTESI	1 SIZE	1 THREADED INPUT CONNECTION	L ELEMENT	10 OIL FILLING	1 THREADED OUTPUT CONNECTION
56 Syntesi 5X Syntesi anti-corrosion	1 Size 1	0 Without bushing 1 1/8" port 2 1/4" port 3 3/8" port	L Lubricator	10 Manual filling from the top	0 Without bushing 1 1/8" port 2 1/4" port 3 3/8" port
	2 Size 2	0 Without bushing 3 3/8" port 4 1/2" port 5 3/4" port 6 1" port			0 Without bushing 3 3/8" port 4 1/2" port 5 3/4" port 6 1" port

PURCHASE ORDER CODES HAVING A MORE FREQUENT USE

N.B. Besides the below mentioned codes, you can order elements composed at your will according to the key to codes.

Code	Description	Code	Description	NOTE
LUBRIFICATORE Syntesi® SY1		LUBRIFICATORE Syntesi® SY2		Anti-corrosion version
5610L100	LUB SY1 without bushings	5620L100	LUB SY2 without bushings	5X-----
5611L101	LUB SY1 1/8	5623L103	LUB SY2 3/8	Example
5612L102	LUB SY1 1/4	5624L104	LUB SY2 1/2	5X11L101 LUB SY1 1/8 anti-corrosion
5613L103	LUB SY1 3/8	5625L105	LUB SY2 3/4	
		5626L106	LUB SY2 1	