



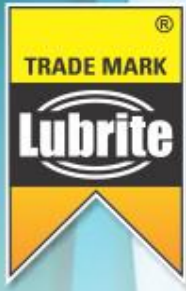
# LUBRITE

Centralised Lubrication Systems

*Right Way to  
Lubrication*



An ISO 9001 : 2008 Company

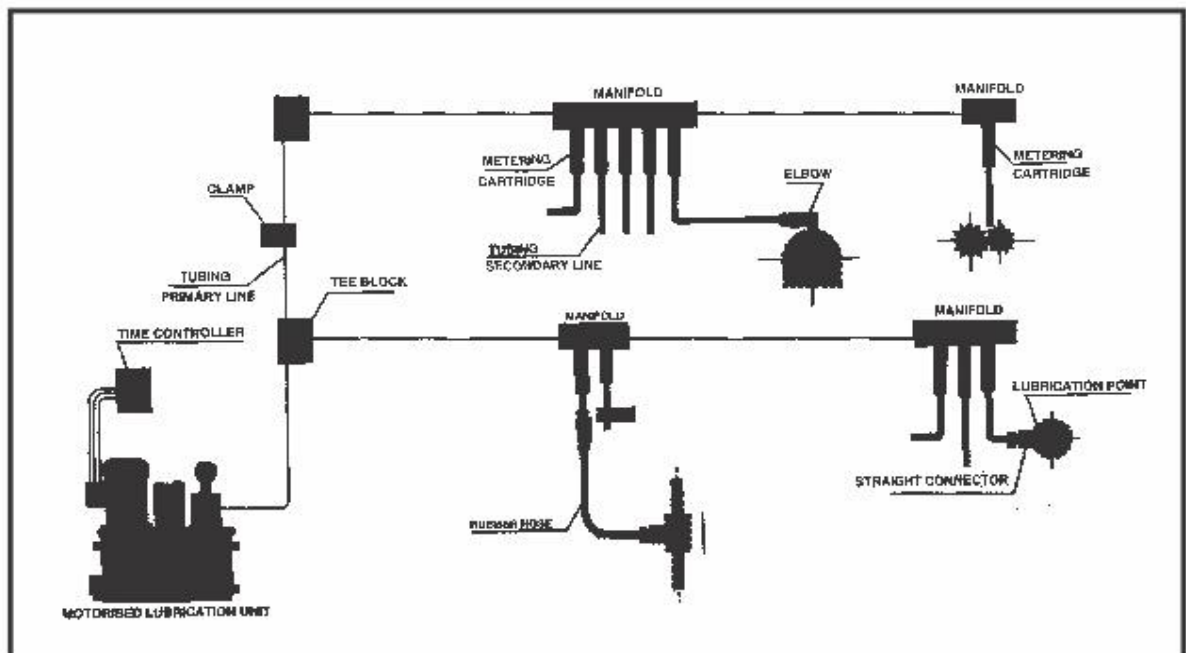


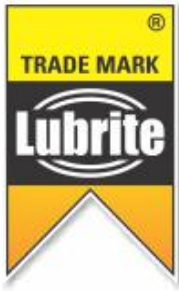
# The Company

Founded in 1975, **LUBRITE** is today one of the major Indian manufacturer of Centralised Lubrication Systems. Over the last three decades, it has been our endeavor to produce quality products for the end users. The Manufacturing plant located at Phagwara is equipped with modern facilities to manufacture and assemble the vast range of **LUBRITE** Products. The availability of ready stocks along with dedicated Sales Network across the country is the sign of our complete customer satisfaction to earn their persistent support.

**LUBRITE** Single Shot Manual & Automatic Lubricating Units installed with Junction Blocks & Metering Cartridges provide safe and effective Centralised Lubrication in the machine/plant. This system delivers predetermined amount of Oil to various Lubricating Points of the machine / plant from one Central Source. It is a total loss system and return line for the collection of oil is not required.

Exhaustive tests has proved **LUBRITE** Single Shot Lubrication System most pertinent for different kind of Industries such as Machine Tools, Rubber Processing Industries, Textile Machineries, Sugar Mills, Paper Processing Machines, Cement Plants, Pharmaceutical Industries and Bottling Plants etc.





## MOTORISED LUBRICATION UNIT

Motorised Lubrication Units are electric motor driven pumps along with reservoir, oil filter & breather, suction strainer, pressure relief valve & bleed valve etc. These units installed are suitable for Single shot automatic oil lubrication. These units are to be run intermittently only. During motor's ON time (normally 5 seconds), all the metering cartridges eject out predetermined amount of oil at the various points of the machine and during motor OFF period (selectable) the same metering cartridges get recharged for the next lubrication cycle.

if desired, these units can be supplied without float & pressure switch as per customer requirements. Units for liquid grease (fluid grease) are also manufactured.



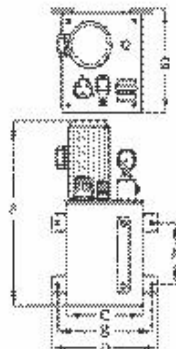
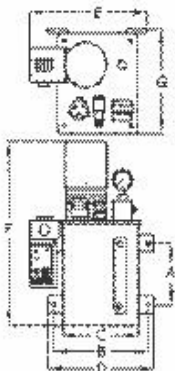
LAU-03SFS  
LAU-03SFT



LAU-03FS  
LAU-03FPS



LAU-05FS, LAU-05FPS  
LAU-08FS, LAU-08FPS







## DELUXE LUBRICATION UNIT

LUBRITE Deluxe Lubrication Units are same in working principle but the metal reservoir is replaced with transparent to get the visual look of the oil level in the reservoir. These units are widely accepted in CNC machines, SPM's, Pharmaceutical Machines, Printing & Packaging Machines and all types of sophisticated machines. If desired, these units can be supplied without float & pressure switch as per customer requirements. Units for liquid grease (fluid grease) are also manufactured.

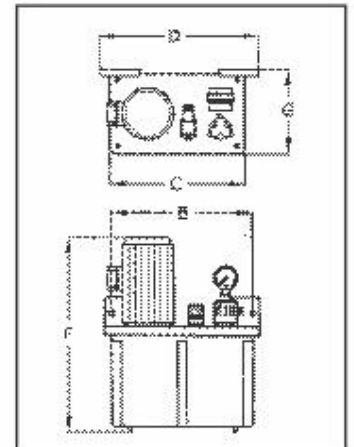


LDU-03SFS/SFT

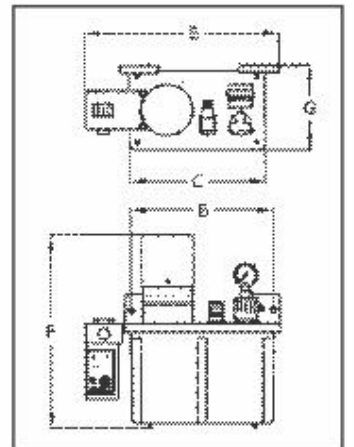


LDU-03FS/FPS

MODEL	A	B	C	D	E	F	G
LAU-03 SFS/SFT	100	170	150	190	240	315	190
LAU-03 FS/FPS	100	170	150	190	190	305	190
LAU-05 FS/FPS	100	310	280	335	-	410	170
LAU-08 FS/FPS	100	330	300	350	-	420	200
LDU-03 SFS/SFT	-	222	220	275	315	310	140
LDU-03 FS/FPS	-	222	220	275	-	300	140



MODEL	Capacity	Discharge Of Pump	Motor	Relief Valve Setting	Pressure Switch Setting	Float switch
LAU-03SFS	03 Ltr.	01 LPM	1 $\phi$ ,120W, 230V	13Kg/Cm <sup>2</sup>	NA	220V, 1Amp. Max
LAU-03SFT	03 Ltr.	01 LPM	1 $\phi$ ,120W, 230V	13Kg/Cm <sup>2</sup>	NA	220V, 1Amp. Max
LAU-03FS	03 Ltr.	01 LPM	3 $\phi$ ,0.12kw, 415V	15Kg/Cm <sup>2</sup>	NA	220V, 1Amp. Max
LAU-03FPS	03 Ltr.	01 LPM	3 $\phi$ ,0.12kw, 415V	15Kg/Cm <sup>2</sup>	10Kg/Cm <sup>2</sup>	220V, 1Amp. Max
LDU-03SFS	03 Ltr.	0.5 LPM	1 $\phi$ ,120W, 230V	13Kg/Cm <sup>2</sup>	NA	220V, 1Amp. Max
LDU-03SFT	03 Ltr.	0.5 LPM	1 $\phi$ ,120W, 230V	13Kg/Cm <sup>2</sup>	NA	220V, 1Amp. Max
LDU-03FS	03 Ltr.	0.5 LPM	3 $\phi$ ,0.12kw, 415V	13Kg/Cm <sup>2</sup>	NA	220V, 1Amp. Max
LDU-03FPS	03 Ltr.	0.5 LPM	3 $\phi$ ,0.12kw, 415V	13Kg/Cm <sup>2</sup>	10Kg/Cm <sup>2</sup>	220V, 1Amp. Max
LAU-05FS	05 Ltr.	1.5 LPM	3 $\phi$ ,0.18kw, 415V	20Kg/Cm <sup>2</sup>	NA	220V, 1Amp. Max
LAU-05FPS	05 Ltr.	1.5 LPM	3 $\phi$ ,0.18kw, 415V	20Kg/Cm <sup>2</sup>	15Kg/Cm <sup>2</sup>	220V, 1Amp. Max
LAU-08FS	08 Ltr.	2.5 LPM	3 $\phi$ ,0.18kw, 415V	20Kg/Cm <sup>2</sup>	NA	220V, 1Amp. Max
LAU-08FPS	08 Ltr.	2.5 LPM	3 $\phi$ ,0.18kw, 415V	20Kg/Cm <sup>2</sup>	18Kg/Cm <sup>2</sup>	220V, 1Amp. Max





## ELECTRONIC TIMERS

Electronic timers are used to maintain the lubrication cycle in automatic single shot lubrication units. It is basically On/Off timers with following specifications.

<b>Power Supply</b>	: 220 V AC $\pm$ 10%, 50 Hz.	<b>Operating Temperature</b>	: 0-55° C
<b>Maximum Power Consumption</b>	: 2.0 VA	<b>Control Action</b>	: On Off Type.
<b>Output</b>	: 220 VAC	<b>Start</b>	: Automatic On output when power is turned On.
<b>Application</b>	: Provides On-Off action of Lubricator Motor.		

MODEL	ON TIME	OFF TIME	TIME SETTING	PRESENCE OF SWITCH FOR LUB SHOT
ET-5	5 sec. Fix	1-128 Min.	Manual	YES
ETC-5	5 sec. Fix	1-128 Min.	Manual	YES

Suitable for direct running of single phase motor of Lubrication Units:

LAU-03 SFS, LAU-03SFT, LDU-03S/ST

Suitable for 3 phase Units where pressure switch is not present such as LAU-03FS, LAU-05 FS, LAU-08FS. however a contactor is to be used in this case.

Suitable for solinoid operation of direction control valve with pneumatic oil pump like Pn-8/16.

In case arrangement of contactor is not possible, ETC-5 can be used. It is complete arrangement with inbuilt timer, contactor & indication of low oil in the pump thru float switch. This device is very useful in the adverse conditions as it even doesn't require neutral in the input supply.

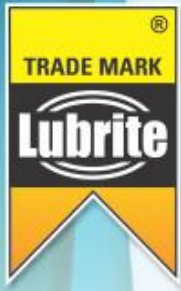


ET - 5



ETC - 5





## ELECTRONIC CONTROLLERS

Electronic Controller can also be used to ON-OFF the Motorised units. This device maintain the lubrication cycle as well as monitors the operation of Float Switch and Pressure switch at the same time. Electronic Controllers are suitable for Units such as:

LAU-03FPS, LAU-05 FPS, LAU-08 FPS & LDU-03 FPS However, Contactor is to be used in this case.

Fault relay contacts can also be used for audio/ visual commands or for interlocking the machine in case of lubrication failure.

In case arrangement for contactor is not possible, ECC-5 can be used. It is a complete solution with inbuilt controller and contactor.

<b>Power Supply</b>	:	220V $\pm$ 10% AC, 50Hz.
<b>Motor relay On time</b>	:	5 seconds after actuation of pressure switch.
<b>Limitation of motor relay On time</b>	:	60 seconds in case of pressure failure.
<b>Off Time</b>	:	Selectable 1 -1 28 minutes.
<b>Off Time Setting</b>	:	By knob.
<b>Start</b>	:	Motor Relay On when power is turned On.
<b>Reset</b>	:	By Pushing the Button Reset.
<b>Repeat Accuracy</b>	:	$\pm$ 10%
<b>Operating Temperature</b>	:	0-55°C
<b>Maximum Power Consumption</b>	:	3VA
<b>Contact Rating</b>	:	(a) Motor Relay: One potential free NO contact 2 amp non inductive at 220V AC (b) Fault Relay: One potential free change over 2 amp non inductive at 220V AC
<b>Lub Shot Facility</b>	:	A lub shot switch parallel to relay contacts provides extra lubrication as and when required.
<b>Monitoring of Oil Pressure</b>	:	LED Lub fault flickers & fault relay is actuated in case pump fails to develop pressure even in 60 seconds.
<b>Monitoring of Oil Level</b>	:	LED Low Oil Flickers when oil level in the Reservoir goes below the Float Switch.



EC - 5



ECC - 5

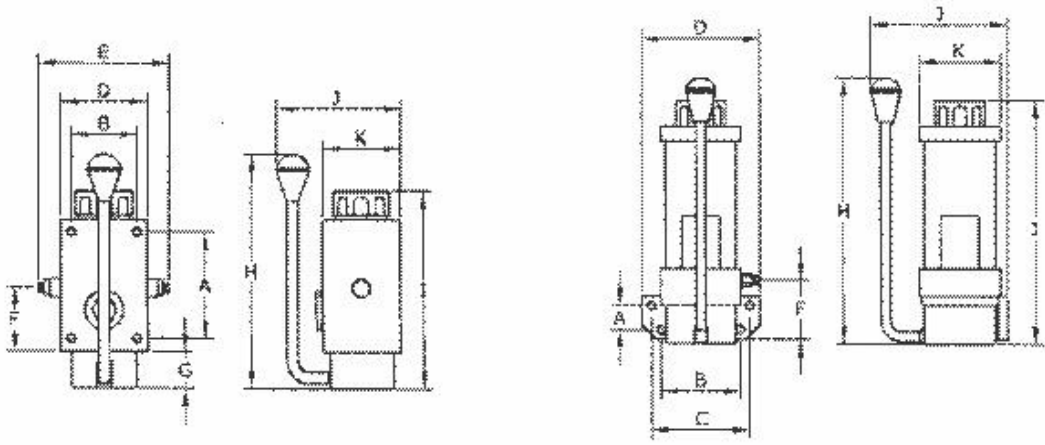


# HAND OPERATED LUBRICATORS

Hand operated Single shot pumps are spring returned piston type pumps. The piston is operated by pulling the cam handle. These pumps are suitable for manual centralised lubrication for light duty machines such as Small Power Presses, Die Punching Machines, Grinding Machines, Pouch Packaging Machines, Pharmaceutical Machines and etc. Normally these pumps are recommended for the machines with lubrication points within 2-20.

## Technical Specifications

MODEL	A	B	C	D	E	F	G	H	I	J	K	Reservoir Capacity (CC)	Discharge Per Stroke (CC)	Mounting Bolts
HCL-M	-	55	-	73	100	60	40	200	170	115	73	250	4	M6x75
HCL-4	95	65	-	90	145	60	40	210	190	130	80	400	4	M6x90
HCL-8	120	75	-	100	155	70	40	275	215	140	90	800	8	M6x100
HCL-16	100	142	-	114	165	70	40	300	250	165	114	1600	10	M6x25
HCL-MDX	25	85	105	120	-	55	-	210	210	125	86	250	4	M6x30
HCL-4DX	25	85	105	120	-	55	-	210	240	125	86	400	4	M6x30
HCL-8DX	25	100	130	150	-	55	-	285	255	150	110	800	8	M6x30



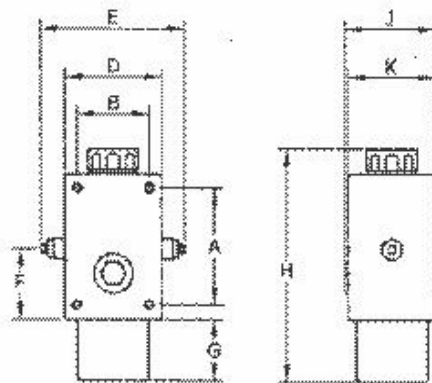
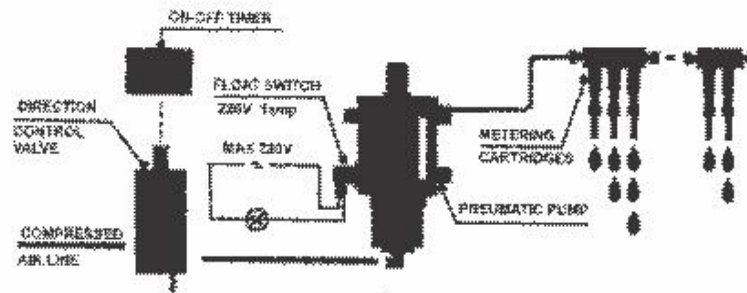


## PNEUMATIC LUBRICATORS

These pumps are similar to Hand Pumps except that the handle is substituted with pneumatic cylinder. Air pressure is fed at the input port of the pump which actuates built in cylinder and piston of the pump. Lubricating oil with fixed quantity & pressure of 15kg/cm<sup>2</sup> is discharged from the outlet whenever air pressure of 5-7 kg/cm<sup>2</sup> is maintained in the pneumatic line.

For recharging of the pump for next impulse, pressure in pneumatic line must be dropped down to zero. These pumps can be successfully used as Automatic Lubrication System with the help of direction control valve and electronic timer.

MODEL	A	B	C	D	E	F	G	H	I	J	K	Reservoir Capacity (CC)	Discharge Per Stroke (CC)	Mounting Bolts
HCL-8Pnu	120	75	-	100	155	70	70	245	-	96	90	800	10	M6x100
HCL-16Pnu	100	142	-	114	165	70	70	285	-	124	114	1600	10	M8x20







# METERING CARTRIDGES

In Single Shot Centralised Lubrication System, amount of oil at each lubrication point is controlled by the element known as Metering Cartridge. For each lubrication point, at least one metering cartridge has to be used. The metering cartridges are a metering valves where the stroke of the piston determines the amount of the oil to be ejected. The cartridges operate as soon as pressure builds up in the lubrication line. When the pump is off and the pressure in the lubrication line drops, Cartridges get recharged for the next cycle. Small time gap (minimum 1 minute) is allowed between the subsequent operations of the Pump for proper recharging of the Metering Cartridges.

DISCHARGE RANGE

MC-1	MC-2	MC-3
0.03cc (1 Drop)	0.25cc (8 Drop)	1.00cc (30 Drop)
0.05cc (2 Drop)	0.40cc (12 Drop)	1.60cc (50 Drop)
0.10cc (3 Drop)	-----	-----
0.16cc (5 Drop)	-----	-----

## DOSE SELECTION

Dose of metering cartridge to a particular points shall be determined as per following procedure.

1) Calculate equivalent area as per below :

a) PLAIN BEARINGS :

$A = \pi D L$   
 D = Shaft Diameter  
 L = Length of Bearing

b) GEARS :

$A = \pi D W$   
 D = Pitch Diameter of Gear  
 W = Width of Gear

c) LARGE BULL GEARS :

$A = 2 \pi D W$   
 D = Pitch Diameter of Pinion  
 W = Width of pinion Gear

d) WORM GEARS :

$A = 7 \pi (D_1 + D_2) W$   
 D<sub>1</sub> = Pitch Diameter of worm  
 D<sub>2</sub> = Pitch Diameter of Worm Gear  
 W = Width of Worm Gear

2) Select Metering cartridge as per the following table :

Lubricated Area in Cm <sup>2</sup>	Dose in cc
Upto 12	0.03
12 to 20	0.05
20 to 40	0.10
40 to 65	0.16
65 to 100	0.25
100 to 150	0.40
150 to 400	1.00
400 to 650	1.60

3) This dose is normally Sufficient for every one hour. It is to be noted that following Factors may Effect the Volume Required.

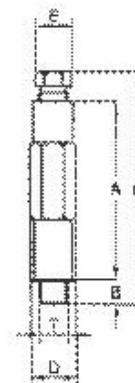
- a) Shock Loading
- b) Extreme Heat
- c) High Speed
- d) Dusty Atmosphere

Volume can be increased by selecting metering cartridges of higher dose or increasing the frequency of lubrication Cycle.

4) For Metering cartridges of dose other than above mentioned consult us



Model	Dimensions					
	A	B	C	D	E	T
MC-1	37	7	50	A/F 11	A/F 9	M8X1
MC-2	45	7	58	A/F 11	A/F 9	M8X1
MC-3	64	9	80	A/F 18	A/F 9	M10X1



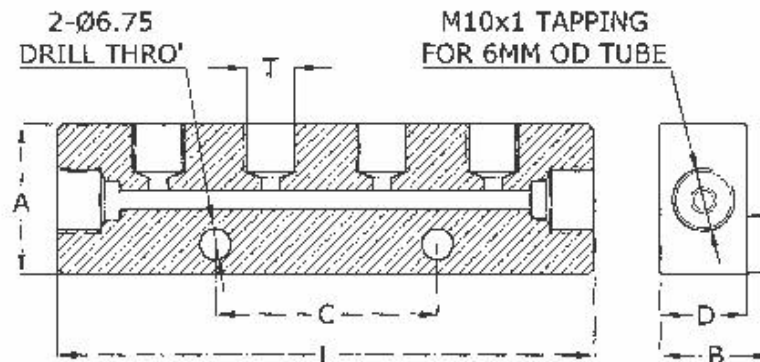


## JUNCTION BLOCKS

Lubrication line from Pump is further connected to the side port of the Junction Block and the other side port is meant for joining the next Junction Block in the line with 6 mm OD tube. Metering Cartridges are directly screwed on top outlets of the Junction Block. Type of Junction Block is selected depending upon the metering cartridges to be fitted. A Junction Block should cater all the lubrication points lying in the same vicinity.

### TECHNICAL SPECIFICATIONS

Model	L	C	T	A	B	D
JB1	35	-	M8X1	24	18	14
JB2	55	-	M8X1	24	18	14
JB3	75	40	M8X1	24	18	14
JB4	95	40	M8X1	24	18	14
JB5	115	40	M8X1	24	18	14
JB6	135	60	M8X1	24	18	14
JB7	155	60	M8X1	24	18	14
JB8	175	100	M8X1	24	18	14
JB1 (3)	40	-	M10X1	22	22	22
JB2 (3)	65	-	M10X1	22	-	22
JB3 (3)	90	40	M10X1	22	-	22
JB4 (3)	115	40	M10X1	22	-	22
JB5 (3)	140	50	M10X1	22	-	22
JB6 (3)	165	60	M10X1	22	-	22



Following kinds of Tubes are available for single shot lubrication system:

1. **STEEL TUBES** : These are Zinc plated MS Seamless tubes with thickness of 0.89 mm.
  - a. **STEEL TUBES 6 mm OD**: Tube with 6 mm OD is used for Main Line from pump to each junction blocks. It has smallest bending radius of 22mm and permissible pressure more than 200 kg/cm<sup>2</sup>
  - b. **STEEL TUBES 4 mm OD**: Tube with 4 mm OD is used for branch line from metering cartridges to end points. It has smallest bending radius of 8 mm and permissible pressure more than 200 kg/cm<sup>2</sup>
2. **NYLON TUBES**: These are semi transparent flexible tubes of material Nylon 6. These tubes are easy to work with.

These are necessary for the points, which have motion. For better tube life, it can be protected with springs available with us. Thickness of tubes is 1mm.

## TUBINGS



Type	Steel Tubings		Nylon Tubings	
Model	ST6	ST4	NT6	NT4
Size	6mm OD	4mm OD	6mm OD	4mm OD





# FITTINGS

## St. Connectors



Model	Tube Outer Dia (mm)	Thread
ST4(M6)	4	M6x1
ST4(M8)	4	M8x1
ST4(1/8)	4	1/8" BSP
ST6(M8)	6	M8x1
ST6(1/8)	6	1/8" BSP
ST6(M10)	6	M10x1

## Plugs



Model	Sealing Washer	Thread
P8	Cu W8	M8x1
P10	Cu W10	M10x1

## Elbow Connector



Model	Tube Outer Dia (mm)	Thread
EC4(M6)	4	M6x1
EC4(M8)	4	M8x1
EC4(1/8)	4	1/8" BSP
EC6(1/8)	6	1/8" BSP

## Elbow Block



Model	Tube Outer Dia (mm)
EB6	06

## Banjo Bolt Assy. Ø 4



Model	Tube Outer Dia (mm)	Thread
BA4(M6)	4	M6x1
BA4(M8)	4	M8x1
BA4(1/8)	4	1/8" BSP
BA4(M10)	4	M10x1

## Banjo Bolt Assy. Ø 6



Model	Tube Outer Dia (mm)	Thread
BA6(1/8)	6	1/8" BSP
BA6(M10)	6	M10x1

## D/E Connector



Model	Tube Outer Dia (mm)
DE4	4
DE6	6

## Junction Header



Model	Tube Outer Dia (mm)
JH3	06

## Clamps



Model	Tube Outer Dia (mm)
CS4	4/1 Nos.
CD4	4/2 Nos.
CT4	4/3 Nos.
CS6	6/1 Nos.
CS10	10/1 Nos.

## Cross



Model	Tube Outer Dia (mm)
JH4	06





*Right Way to  
Lubrication*

Manufacturers & Exporters

**LUBRITE INDUSTRIES**

OPP. B. N. DUGGAL PETROL PUMP,  
G.T. ROAD PHAGWARA 144 401 (Pb.) INDIA

Tele : + 91 1824 228438, 329988 Fax. : +91 1824 503488

Email : [info@lubriteindustries.com](mailto:info@lubriteindustries.com) Website : [lubriteindustries.com](http://lubriteindustries.com)

Auth Dealers :