

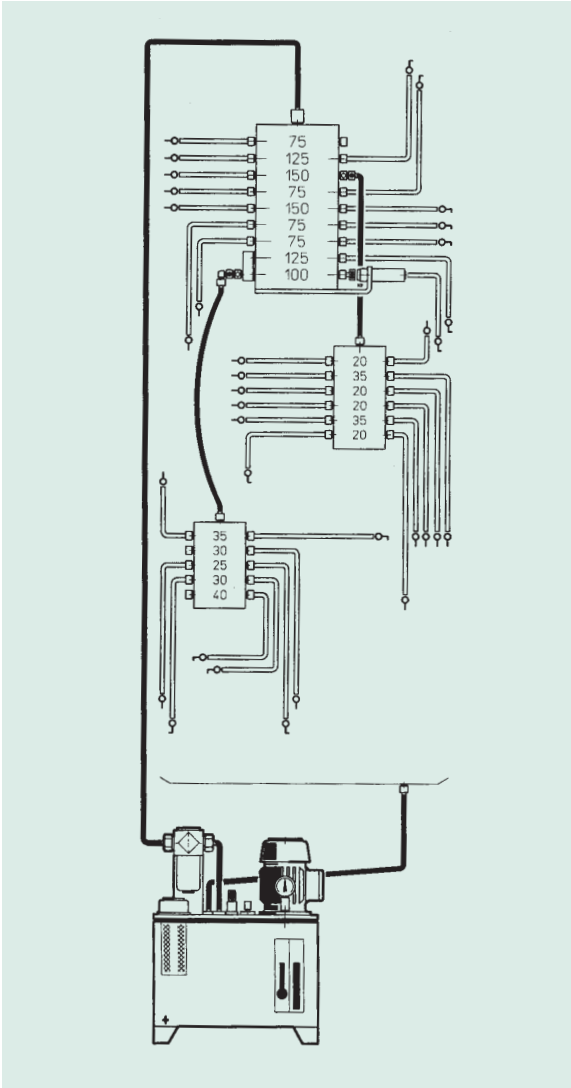
# Adams



## □ Continuous

**C**ontinuous oil lubrication systems can employ various mechanical or electrically operated pumps to give a relatively low pressure but constant flow of lubricant to bearing journals, slideways or gears in any self-contained piece of machinery.

Regulation of oil flow is achieved either by needle valves, fixed flow control units or divider blocks.



## Description

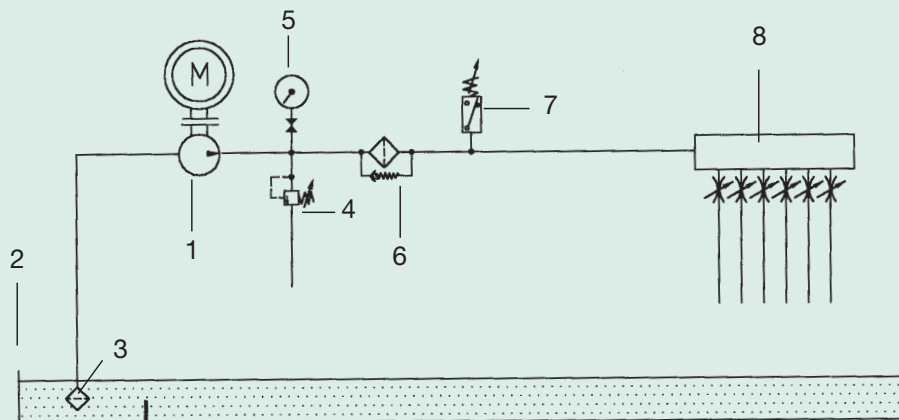
Adams Continuous Lubrication Systems are designed primarily for internal lubrication, for example gearboxes, where splash or oil ring lubrication techniques provide inadequate lubrication for the entire gear train. Various types of pump may be used, mechanical or electrically operated are available, giving a range of output deliveries and pressures to suit each application.

Oil flow to individual points is normally controlled by adjustable needle valves or by using the fixed type capillary 'CONTROL' meter units (as shown in the 'Proportional System' section of this catalogue). It is also possible to use the divider block type Progressive Distributors, when using the higher-pressure pump system. (Details of Progressive Distributors will be found in the 'Progressive Systems' section of this catalogue). Oil supply for the Continuous System can be from the machine sump or gearbox, alternatively an external independent reservoir.

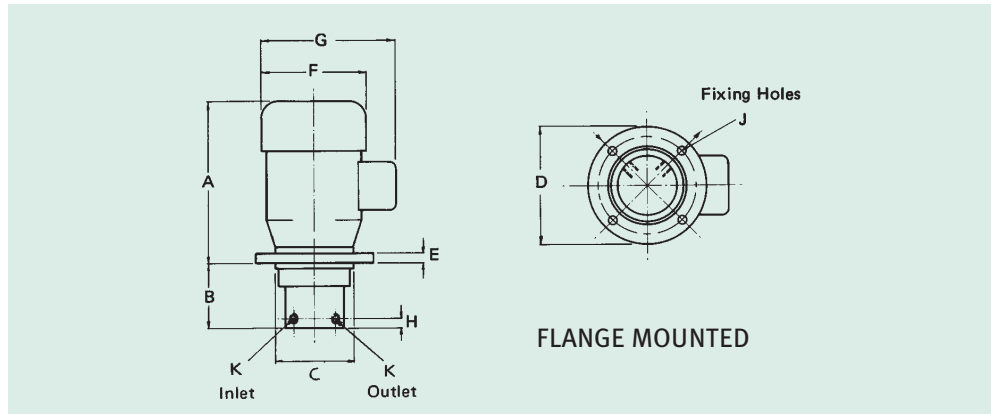
When used as a re-circulating system provision must be made for an oil strainer on the suction side of the pump that has an adequate surface area.

The schematic below shows the motorised pump (1) drawing oil from the reservoir (2) via the suction strainer (3), outlet pressure is controlled by a pressure relief valve (4) and pressure gauge (5). An in-line filter with bypass (6) and pressure switch (7) protects the main supply line to the needle valve distributors (8). Oil is then fed to the lubrication points before draining down into the reservoir, which is provided with a weir, before returning to the pick-up area.

## Schematic

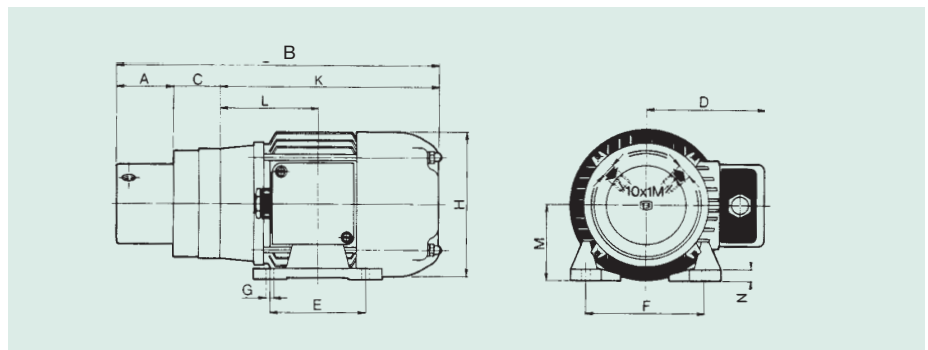


## Motorised Pumps



### Flange Mounted

Part No.	Out/Min	Watts	Pressure	A	B	C	D	E	F	G	H	J	K
LV 62589	0.18 Lt	90	70 bar	180	75	80	120	10	110	145	15	7.5	M10X1
LV 62590	0.35 Lt				71						14		
LV 62592	0.50 Lt				75						11		
LV 62593	1.00 Lt	180	10 bar	195	79	95	140	12	125	153	12	9.5	1/4 BSP
LV 62596	2.50 Lt				101						12		
LV 62612	5.00 Lt	750	70 bar	246	124	130	200	12	145	180.5	13	11.5	3/8 BSP



### Foot Mounted

Part No.	Out/Min	Watts	Pressure	A	B	C	D	E	F	G	H	K	L	M	N
LV 62599	0.18 Lt	90	70 bar	39	235	34	88	71	90	6	111	162	70	56	8
LV 62600	0.35 Lt			41	237										
LV 62602	0.50 Lt			51	247										
LV 62603	1.00 Lt	180	10 bar	56	252	40	90	80	100	7	188	80	63	8.5	
LV 62606	2.50 Lt			64	292										
LV 62622	5.00 Lt	750	70 bar	59	370	77	108	100	125	9	145	234	100	80	10

### SPECIFICATION

Standard Voltage - 230 - 400V 3 Phase 50 Hz (other voltages available on request)

Electrical Protection - IP 55

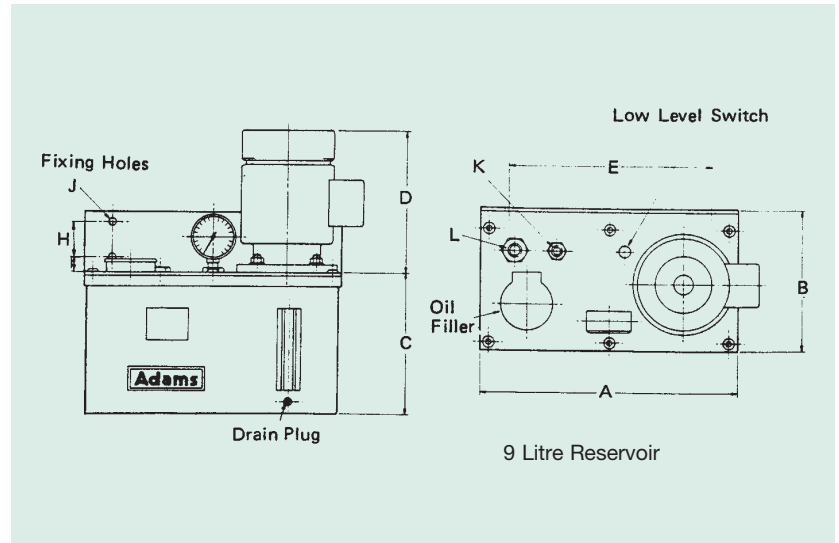
Lubricant - Mineral based oil which does not affect nitrile seals.

Viscosity Range - ISO VG 22 to 1500

Maximum Suction Lift - 1000mm

Note: Motorised Pumps with larger outputs and having single or double outlets can be supplied

## Motorised Pumps and Reservoirs - Type PR



Part No.	Output/Min litres	Reservoir Capacity	A	B	C	D	E	H	J	K	L
LV 60370	0.18	5 Lt	248	174	155	180	218	40	8.5	1/4 BSP	3/8 BSP
LV 10634FS		8 Lt	363	185	180		333				
LV 63235F		15 Lt	280	410	310		455	-			
LV 63235B			225					13	1/2 BSP		

### MOTOR SPECIFICATION -

3 Phase Continuous rating.

50 Hz 0.09 kW 230/400V 0.74/0.42A

60 Hz 0.09 kW 265/460V 0.80/0.46A 1600 rpm

Protection - IP 55, others available on request

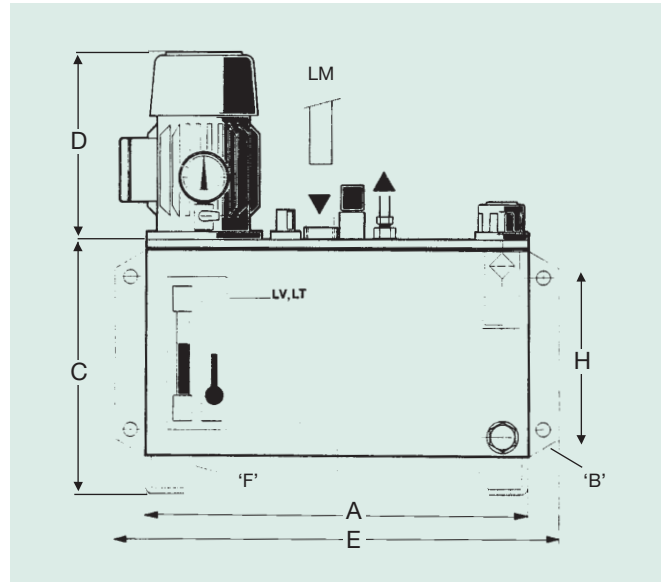
### PUMP SPECIFICATION -

External gear pump giving pressures up to 70 bar for displacements 0.18 Lt/min.

Other outputs and pressures available to order.

An adjustable Pressure Relief Valve is provided together with Pressure Gauge and Low Level Switch.

Oil tanks of capacity 15 Lt and above have option of bracket or foot mounted. Please state suffix 'F' for Foot Mounted or "B" for Bracket.

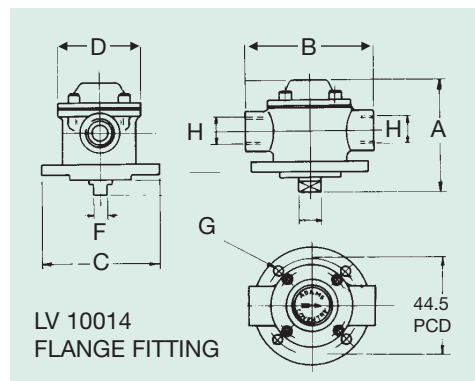
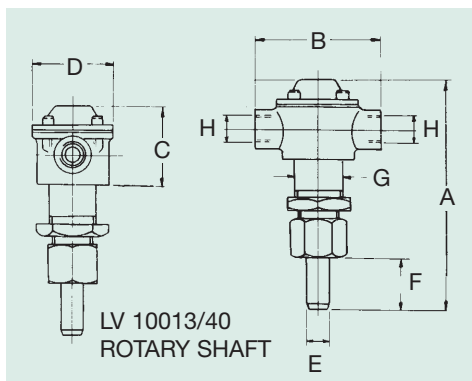


## Mechanical Pumps - Rotary Plunger Pump

Part No.	Max. Output/Minute	Max Operating Pressure	A	B	C	D	E	Min	F	G	H
LV 10013	1.2 Lt	1.3 bar	106	58.7	36.8	38	11.11	11.08	25.4	28.35	1/4 BSP
LV 10040	7.5 Lt		142	79.4	55	63	15.35	15.32	40	28.58	3/8 BSP
LV 10014	1.2 Lt		50	58.7	54	38	11.11	11.08	6.35	5.16	1/4 BSP

Max. Speed 1500 rpm

Drive bi-directional

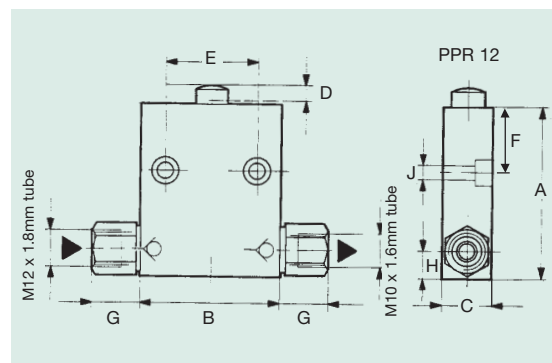


## Plunger Pumps - Type PPR 12

Part No.	A	B	C	D	E	F	G	H	J
LV 60216	64	50	19	6	34	24	19	10	5.2

### SPECIFICATION

Piston stroke: max 5mm/min 1mm  
 Cycles frequency: not higher than 3000 cycles/min  
 Output: 0.113 ccm/cycle with 1mm stroke adjustable  
 up to 0.56 ccm/cycle with 5mm stroke  
 Delivery pressure: 30-40 bar, can reach figures up to 80 bar

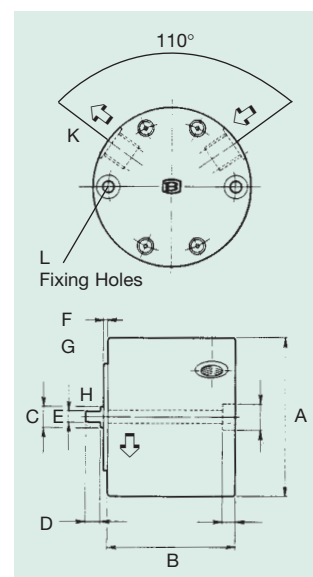


## Gear Pumps - Type FN

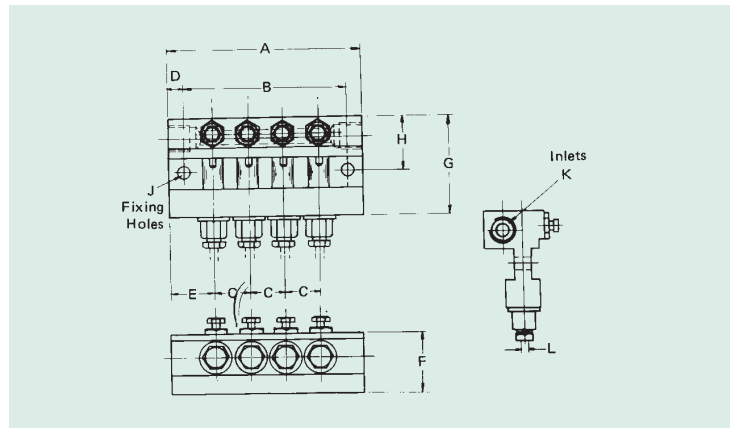
Part No.	Output/minute @ 1450 rpm	A	B	C	D	E	F	G	H	J	K	L
LV 62452	0.18 Lt	54	45	28	2	6	8	5	3	44	6mm	5.2
LV 62453	0.35 Lt		47									
LV 62455	0.5 Lt	62	51	28	2	8	6	5	4	48	1/4 BSP	6.5
LV 62457	1.0 Lt		56									
LV 62459	1.5 Lt	74	59	50	2	10	8	7	5	60	1/4 BSP	6.5
LV 62461	2.0 Lt		62									
LV 62463	2.5 Lt		64									
LV 62483	5.0 Lt	108	59	52	3	14	32	30	Key	80	3/8 BSP	10.5

### SPECIFICATION

Maximum Operating Pressure - LV 62452, 62453, 62483 - 70 bar. All others - 10 bar.  
 Maximum Speed - 1450 rpm drive uni-directional Maximum Lift - 1000mm  
 Pumps with larger outputs and having Single or Double outlets can be supplied for both uni-directional or reversible drives.



## Sight Glass Distributors



Part No.	No. of Outlets	A	B	C	D	E	F	G	H	J	K	L
LV 10026	4	96.8	81	17.5	7.9	22.2	30.2	49.2	26.6	6.75	1/4 BSP	4mm Ø tube
LV 10027	6	132	116									

The distributor must be mounted vertically with outlets below.

Care must be taken that outlet pipes and lubrication pumps are below the level of the distributor to avoid “flooding” from the sight tube. Each sight glass is “vented” and lubricant therefore, is not fed under pressure to the outlet point.

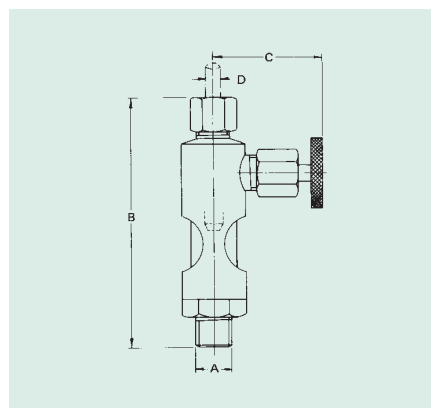
4mm tubing nuts and sleeves provided for outlet ports:

Body material - aluminium

Sight tube - acrylic

Do not unscrew gland nuts when regulating flow.

## Flow Regulator



Part No.	A	B	C	D
LV 10078	1/8 BSP	76	28.6	4mm Ø tube

Body material - brass

Sight tube - acrylic

Finish - natural

This brass bodied flow regulator incorporates the sight tube to facilitate flow regulation.

The outlet side has a 1/8 BSP male connection for mounting directly into a bearing journal.

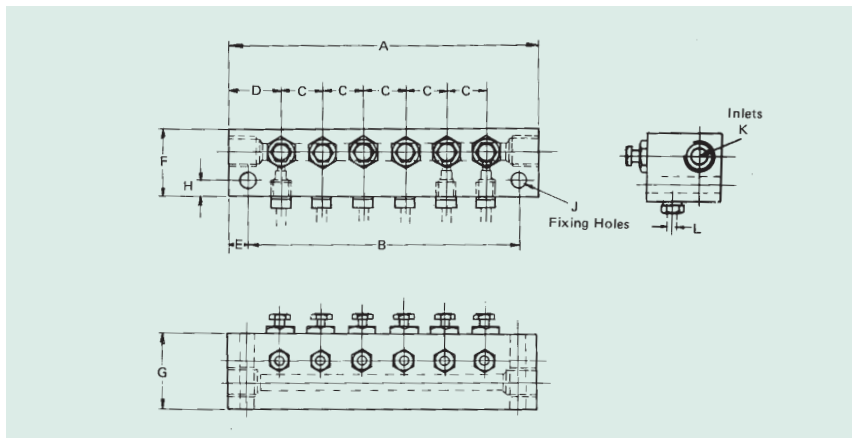
Mounting and operation as for above distributors. 4mm tubing nut and sleeve provided for inlet port.

Do not unscrew gland nut when regulating flow.

For fixed flow rate control units - see Proportional section of catalogue.

For progressive divider blocks - see Progressive section of catalogue.

## Pressure Feed Distributors - Single Sided



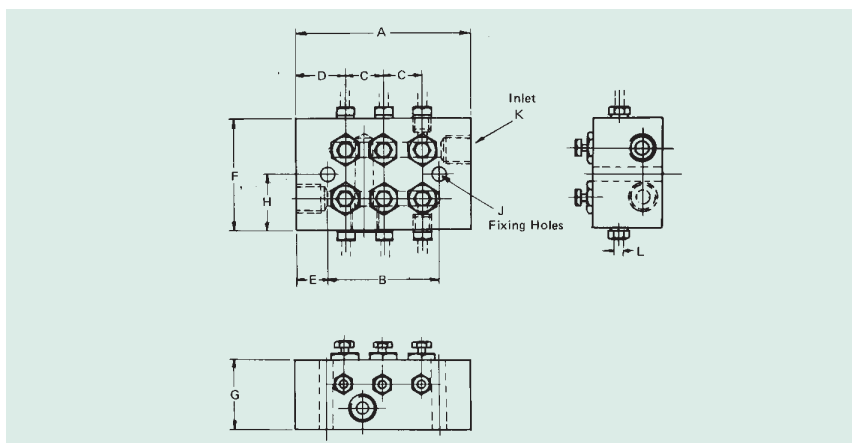
Part No.	No. of Outlets	A	B	C	D	E	F	G	H	J	K	L
LV 10051	4	96.8	81	17.5	22.2	7.94	31.8	31.8	7.14	6.75	1/4 BSP	4mm Ø tube
LV 10052	6	132	116									
LV 10053	8	166	151									

Single sided aluminium bodied distributors with regulator screws and nuts. These distributors will work in any plane. Only the regulator need be adjusted to obtain the flow required and approximately three complete turns will give the total regulation from closed to full flow. Lubricant is fed under pressure to outlet point.

4mm tubing nuts and sleeves provided for outlet ports:

Material - aluminium      Do not unscrew gland nuts when regulating flow.

## Pressure Feed Distributors - Double Sided



Part No.	No. of Outlets	A	B	C	D	E	F	G	H	J	K	L
LV 10061	6	79.4	50.8	17.5	22.2	14.3	50.8	31.8	25.4	6.75	1/4 BSP	4mm Ø tube
LV 10062	8	96.3	68.3									
LV 10063	10	114	85.7									

Similar to the single sided pressure feed distributors with outlet ports on two sides.

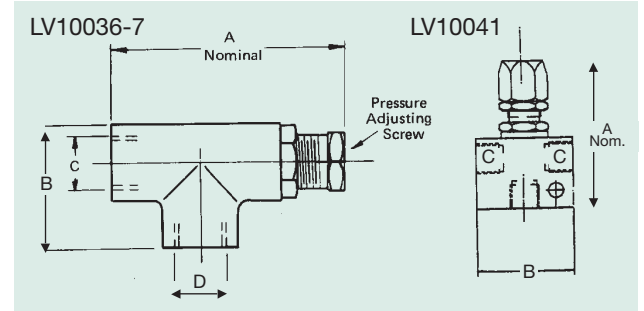
4mm tubing nuts and sleeves provided for outlet ports.

Material - aluminium      Do not unscrew gland nut when regulating flow.

## Accessories

### Over Pressure Relief Valves

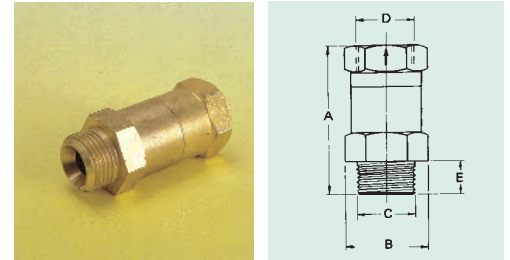
Part No.	Pressure Range	A nominal	B	C & D
LV 10036	0-1 bar	57.2	33.3	1/4 BSP
LV 10037	0.7 - 8 bar	76.2	41.3	3/8 BSP
LV 10041	10-210 bar	85	50	



### Non Return Valve

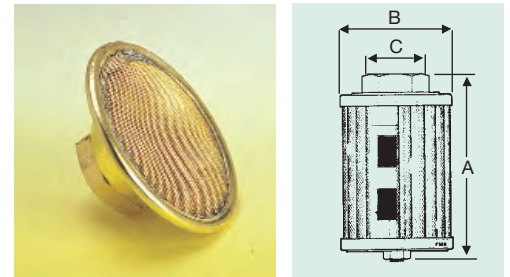
Part No.	A	B a/f	C	D	E
LV 10038	43	20.8	3/8 BSP	3/8 BSP	9.5

This non return valve should be fitted vertically into the oil strainer and connected to the pump inlet by a suction pipe. Brass bodied, the valve is fitted with a stainless steel ball.



### Oil Strainers

Part No.	Diameter	Depth	Thread	Filter
LV 10046	76.4	32	3/8 BSP	40 Mesh
LV 10011	82.55	50.8	1/2 BSP	24 SWG
LV 10012	105.5	46		125 Micron



### Oil Filters - with bypass set to 6 bar

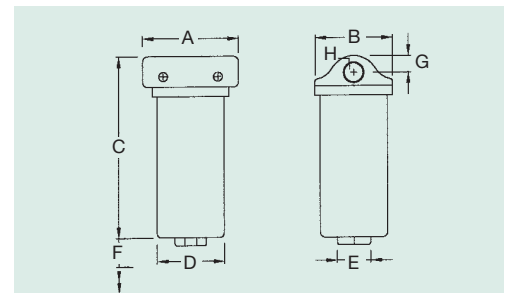
Part No.	Max. Pressure Bar	Flow Rate	A	B	C	D	E a/f	F	G	H
LV 10540	110	60 Lt/Min	80	83	157	56	22	60	27	1/2 BSP
LV 10541										
LV 10542	12	Gravity	95	76	189	98	-	15	22	3/4 BSP

Filtration Rating for LV 10540 is 25 Micron and for LV 10541 is 60 Micron.

For Visual Blockage Indicator state Suffix FI. For Electrical Indicator state Suffix G1.

Return Line Filter LV 10542 is fitted with 60 Micron Mesh Spin-Off.

Cartridge and Return By-Pass.



### Pressure Gauges

Part No.	Pressure Range	Diameter	Thread
LV 10406	0-10 bar	50	1/8 BSP
LV 10409	0-100 bar		



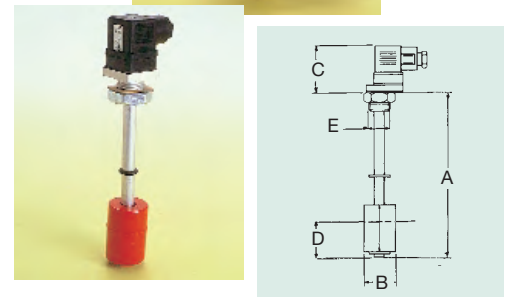
### Low Oil Level Switch

Part No.	A	B	C	D	E
LV 10465	150	30	45	35	M20 x 1.5

Electrical Specifications

Max. contact rating - 20 Watts AC/DC Max. amps - 1.5AC/DC

Max. volts - 350 AC Other sizes available on request



### Pressure Switch - with Din Plug to IP 65

Part No.	Adjustment Range Bar	A	B	Thread
LV 10550	1-10	73	27 A/F	1/4 BSP
LV 10551	10-100			

Switch electrical rating 250 Volts AC/6A (res) 2A (ind) N.O.  
Protection IP 65 (Pg9 gland standard)

