

lubrication systems



# MPT

## ELECTRIC PUMPS FOR OIL AND SOFT GREASE



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REV28012020

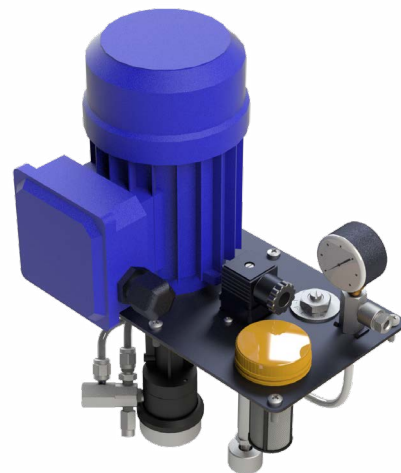
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All ILC products must only be used for their intended purposes, as specified in this brochure and in all instructions. If the product is supplied together with user instructions, the user is required to read them and comply with them. Not all lubricants are suitable for centralised lubrication systems. ILC lubrication systems or relative components cannot be used together with gas, liquid gas, pressurised gas in solution and liquids with vapour pressure exceeding normal atmospheric pressure (1013 bar) by more than 0.5 bar, maximum temperature permitted. Any type of dangerous materials, namely those classified as such by European Community Directive (EC) 67/548/EEC, Article 2 (2), can only be used in ILC centralised lubrication systems or relative components upon consultation with ILC and after having received written approval from the company.

**Description**

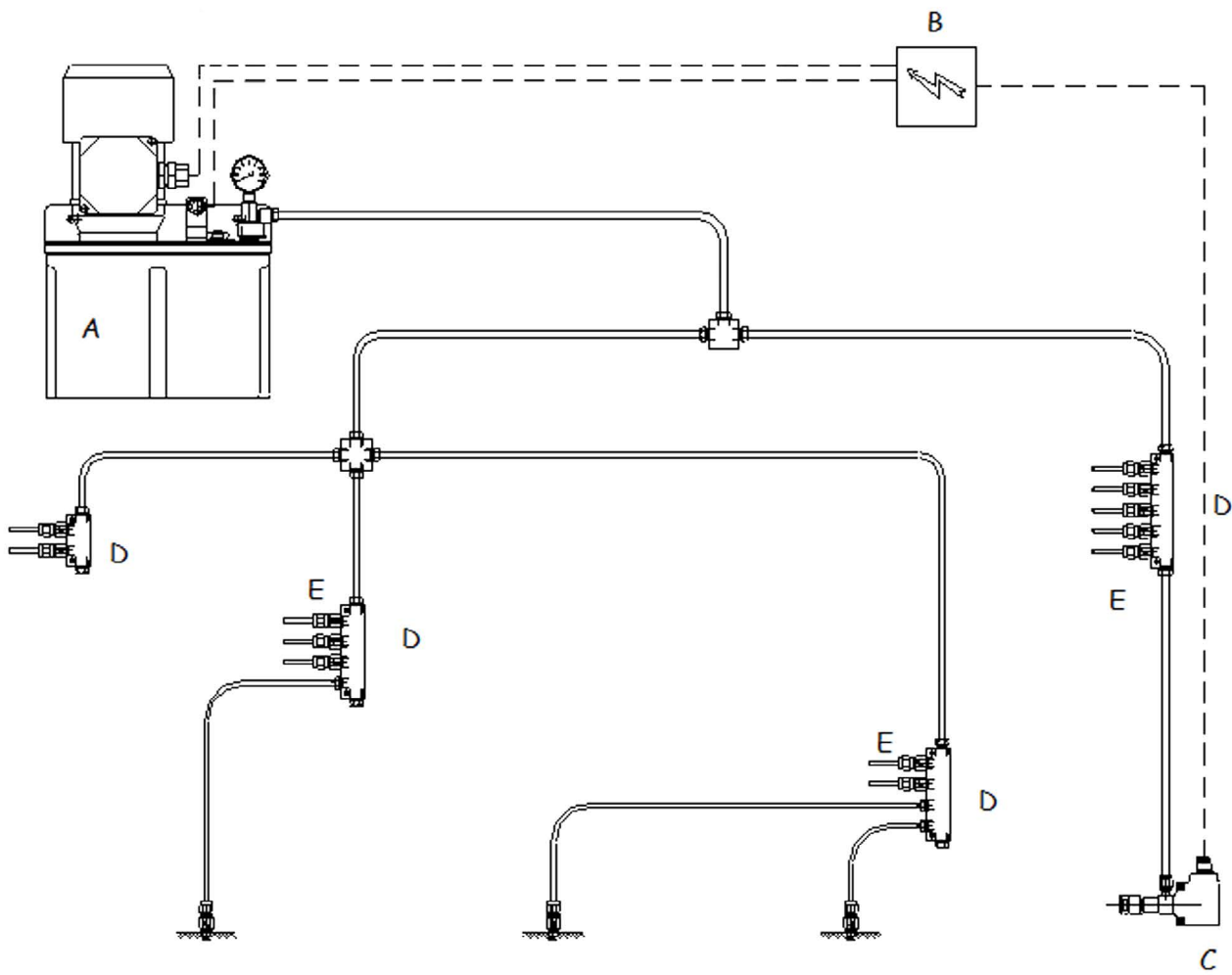
MPT electric pumps are designed to supply oil or soft grease lubrication systems where volumetric metering valves are installed. The pump motor unit is applied to a sheet-metal angle plate acting as a cover of the tank. A valve unit is applied to the gear pump, which performs the priming (automatic air purge during the start-up stage) – decompression (automatic pressure release in the circuit at the end of the working cycle) and safety (automatic lubricant discharge inside the tank when the maximum working pressure is reached) functions. Minimum level electrical warning and a pressure gauge are also installed, while the intake filter and the load filter are for the Oil version only.



Operation

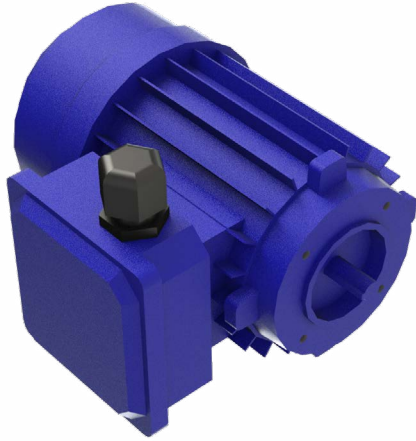
At the end of the pause cycle set, the supply voltage is sent to the pump motor, thus starting the work cycle. In this stage, the electric pump delivers the preset flow rate to the volumetric metering valves that send the lubricant to the various points of the machine. At the end of the working time set, the electric pump stops and, at the same time, it must be checked whether the end-of-line pressure switch has sent the contact closure signal. At this point, the lubrication cycle is complete. Once the electric pump stops, the pressure release stage begins in the circuit, which allows the metering valves to be filled. Further lubrication cycles will be repeated according to the pause time set. Additional cycles can be performed by activating the manual button.

Any anomalies such as lack of lubricant in the tank, insufficient working pressure and failure to release pressure at the end of the working cycle can be reported.



- |                                      |                          |
|--------------------------------------|--------------------------|
| <b>A</b> Electric pump               | <b>C</b> Distributors    |
| <b>B</b> End of line pressure switch | <b>D</b> Metering valves |

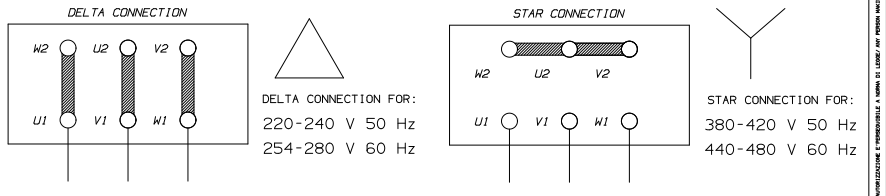
Motor



The MPT series electric pumps have a standard configuration that has a three-phase motor. It is possible to supply single-phase motors 115 VAC, 230 VAC 50/60 Hz or motors with special voltages.

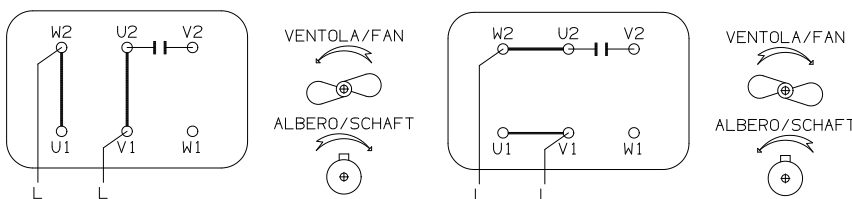
For orders with motors of different voltages, add the voltage value to the relative code, for example **60.821.0** becomes **60.821.0.230**.

Three-phase		A94.150053		General features	
<b>Power supply voltage</b>	<b>Frequency</b>	<b>Absorption</b>		Power	90 W
220-240/380-420	50 Hz	0.64–0.74/0.37-0.46 A		Protection rating	IP55
254-280/440-480	60 Hz	0.64–0.74/0.37-0.46 A		Service	Continuous S1
				Insulation	Class F
				Construction shape	B14
				Size	Mec56



The three-phase motor is supplied with a star electric connector

Single-phase		A94.150054 / A94.150054		
<b>Power supply voltage</b>	<b>Frequency</b>	<b>Absorption</b>	<b>Code</b>	
115 V AC	50/60 Hz	2.2 A	A94.150053	
230 V AC	50/60 Hz	0.9 A	A94.150054	



MPT-200

Polypropylene Tank

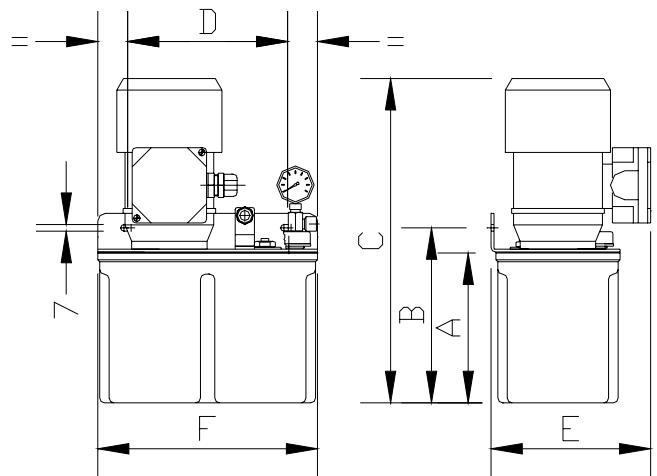


The flow rate and pressure performance of these pumps make them ideal for small and medium installations.

Flow Rate / Minute	100 cc
Operating pressure	5 - 25 Bar (70-354 PSI) adjustable
Release valve	0.7 Bar
Tank Capacity	2 - 3 - 6 L
Intake filter	250 micron
Pressure gauge	0 - 60 BAR / 0 - 870 PSI
Delivery fitting	M12X1 Pipe 6mm
Operating temperature	FROM -20°C TO +80°C
Lubricants	OILS 50 - 1000 cSt 40°C
Minimum electric level	1.5 A 250V AC 200V DC 50 W

Models and Dimensions

Code	Ltr	A	B	C	D	E	F	Weight
60.821.0	2	160	186	340	128	158	148	4.8 kg
60.821.1	3	155	181	335	167	165	230	5.3 kg
60.821.2	6	250	276	430	167	165	230	5.5 kg



MPT-200 LAM

Sheet Metal Tank

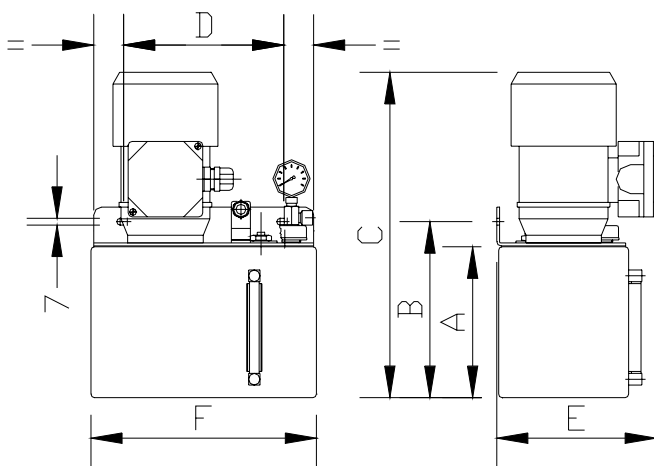
The flow rate and pressure performance of these pumps make them ideal for small and medium installations.



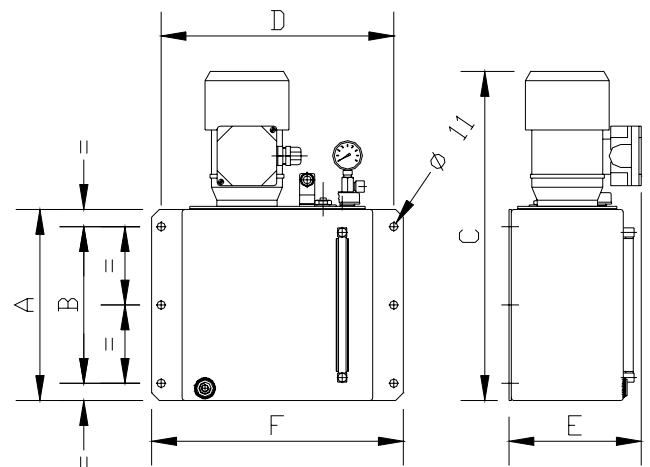
Flow Rate / Minute	100 cc
Operating pressure	5 - 25 Bar (70-354 PSI) adjustable
Release valve	0.7 Bar
Tank Capacity	5 - 8 - 12 - 50 L
Intake filter	250 micron
Pressure gauge	0 - 60 BAR / 0 - 870 PSI
Delivery fitting	M12X1 PIPE 6mm
Operating temperature	FROM -20°C TO +80°C
Lubricants	OILS 50 - 1000 cSt 40°C
Minimum electric level	1.5 A 250V AC 200V DC 50 W

Models and Dimensions

Code	Ltr	A	B	C	D	E	F	Weight
60.821.3	5	156	182	335	167	165	236	7.5 kg
60.821.4	8	250	205	430	305	173	330	10 kg
60.821.5	12	250	205	430	330	196	355	12 kg
60.821.6	50	400	300	580	530	270	560	18 kg



3 L



8 - 12 - 50 L

MPT-500

Polypropylene Tank

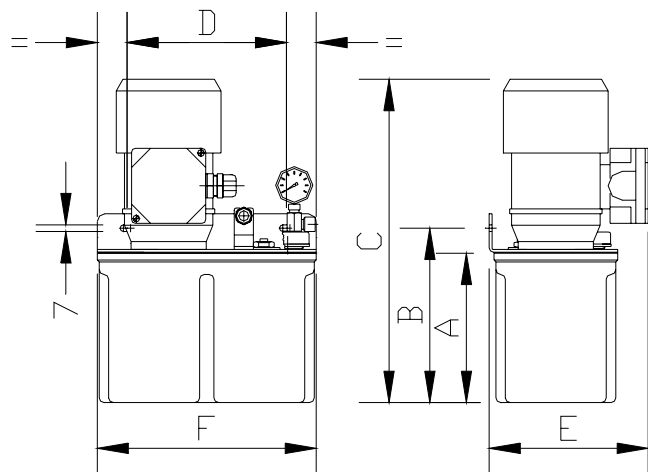


The flow rate and pressure performance of these pumps make them ideal for medium and large installations.

Flow Rate / Minute	500 cc
Operating pressure	5 - 25 bar (70-354 psi) adjustable 15 – 50 bar (212-708 psi) adjustable
Release valve	0.7 Bar
Tank Capacity	3 - 6 L
Intake filter	250 micron
Pressure gauge	0 - 60 BAR / 0 - 870 PSI
Delivery fitting	M12X1 PIPE 6mm
Operating temperature	FROM -20°C TO +80°C
Lubricants	OILS 50 - 1000 cSt 40°C
Minimum electric level	1.5 A 250V AC 200V DC 50 W

Models			
5-25 bar	15-50 bar	Ltr	Weight
60.822.0	60.822.2	3	5.3 kg
60.822.1	60.822.3	6	5.5 kg

Dimensions						
Code	A	B	C	D	E	F
60.822.0 / 60.822.2	155	181	335	167	165	230
60.822.1 / 60.822.3	250	276	430	167	165	230





MPT-500 LAM

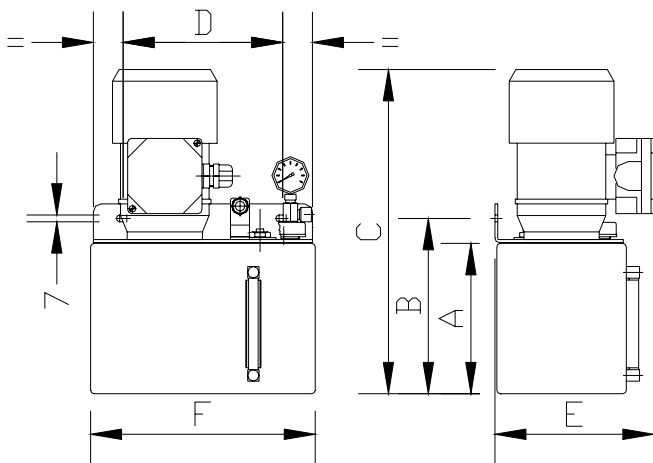
Sheet Metal Tank



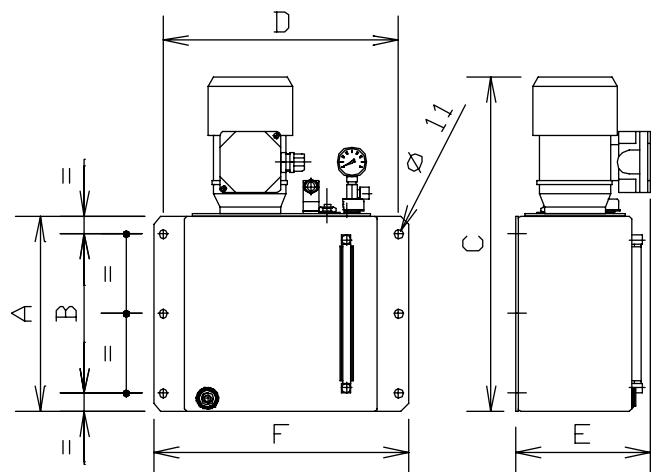
The flow rate and pressure performance of these pumps limit them to small and medium installations with a limited number of points.

Flow Rate / Minute	500 cc
Operating pressure	5 - 25 bar (70-354 psi) adjustable 15 - 50 bar (212-708 psi) adjustable
Release valve	0.7 Bar
Tank Capacity	5-8-12-50 L
Intake filter	250 micron
Pressure gauge	0 - 60 BAR / 0 - 870 PSI
Delivery fitting	M12X1 PIPE 6mm
Operating temperature	FROM -20°C TO +80°C
Lubricants	OILS 50 - 1000 cSt 40°C
Minimum electric level	1.5 A 250V AC 200V DC 50 W

Models				Dimensions					
5-25 bar	15-50 Bar	Ltr	Weight	A	B	C	D	E	F
60.822.4	60.822.7	5	7.5 kg	155	181	335	167	165	230
60.822.5	60.822.8	8	10 kg	250	205	430	167	165	230
60.822.6	60.822.9	12	12 kg	250	205	430	305	173	330
60.829.0	60.829.1	50	18 kg	400	300	580	530	270	560



3 L



8 - 12 - 50 L

MPT-200/G

Polypropylene Tank

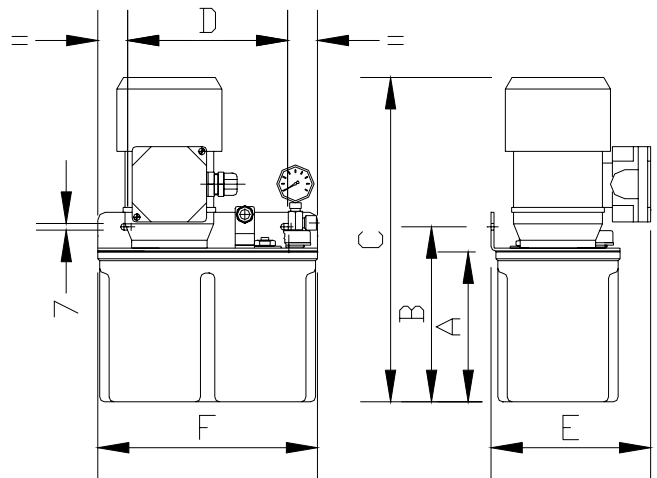


The flow rate and pressure performance of these pumps limit them to small and medium installations with a limited number of points.

Flow Rate / Minute	100 cc
Operating pressure	15-50 BAR (212-708 PSI) adjustable
Release valve	0.7 Bar
Tank Capacity	3 - 6 L
Intake filter	400 micron
Pressure gauge	0 - 60 BAR / 0 - 870 PSI
Delivery fitting	M12X1 Pipe 6mm
Operating temperature	FROM -20°C TO +80°C
Lubricants	Soft Grease NLGI 000 - 00
Minimum electric level	2 A 24 v DC

Models

Code	Ltr	A	B	C	D	E	F	Weight
60.823.1	3	155	181	335	167	165	230	5.3 kg
60.823.2	6	250	276	430	167	165	230	5.5 kg



MPT-200/G LAM

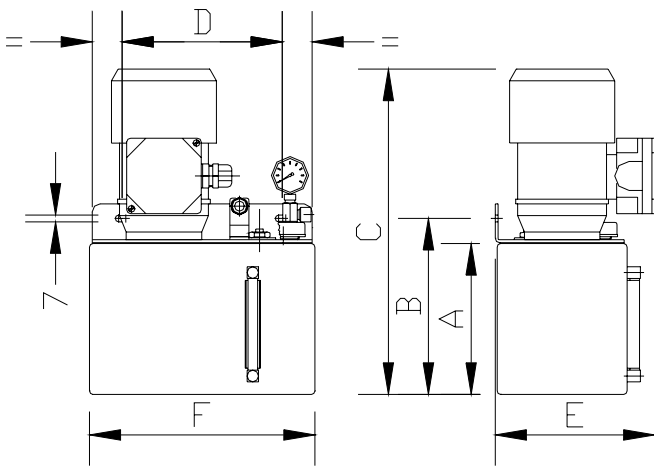
Sheet Metal Tank



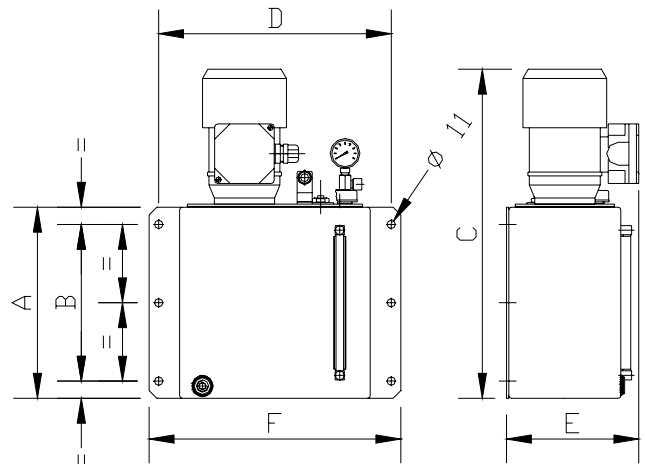
The flow rate and pressure performance of these pumps limit them to small and medium installations with a limited number of points.

Flow Rate / Minute	100 cc
Operating pressure	15-50 BAR (212-708 PSI) adjustable
Release valve	0.7 Bar
Tank Capacity	5 - 8 - 12 - 50 L
Intake filter	400 micron
Pressure gauge	0 - 60 BAR / 0 - 870 PSI
Delivery fitting	M12X1 Pipe 6mm
Operating temperature	FROM -20°C TO +80°C
Lubricants	Soft Grease NLGI 000 - 00
Minimum electric level	2 A 24 v DC

Models								
Code	Ltr	A	B	C	D	E	F	Weight
60.823.3	5	156	182	335	167	165	236	7.5 kg
60.823.4	8	250	205	430	305	173	330	10 kg
60.823.5	12	250	205	430	330	196	355	12 kg
60.823.6	50	400	300	580	530	270	560	18 kg



3L



8 - 12 - 50 L

MPT-500/G

Polypropylene Tank

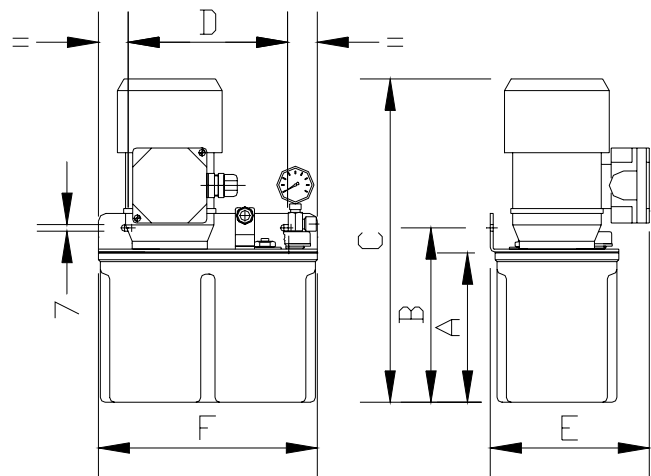


The flow rate and pressure performance of these pumps limit them to small and medium installations with a limited number of points.

Flow Rate / Minute	500 cc
Operating pressure	15-50 BAR (212-708 PSI) adjustable
Release valve	0.7 Bar
Tank Capacity	3 - 6 L
Intake filter	400 micron
Pressure gauge	0 - 60 BAR / 0 - 870 PSI
Delivery fitting	M12X1 Pipe 6mm
Operating temperature	FROM -20°C TO +80°C
Lubricants	Soft Grease NLGI 000 - 00
Minimum electric level	2 A 24 v DC

Models

Code	Ltr	A	B	C	D	E	F	Weight
60.824.2	3	155	181	335	167	165	230	5.3 kg
60.824.3	6	250	276	430	167	165	230	5.5 kg



MPT-500/G LAM

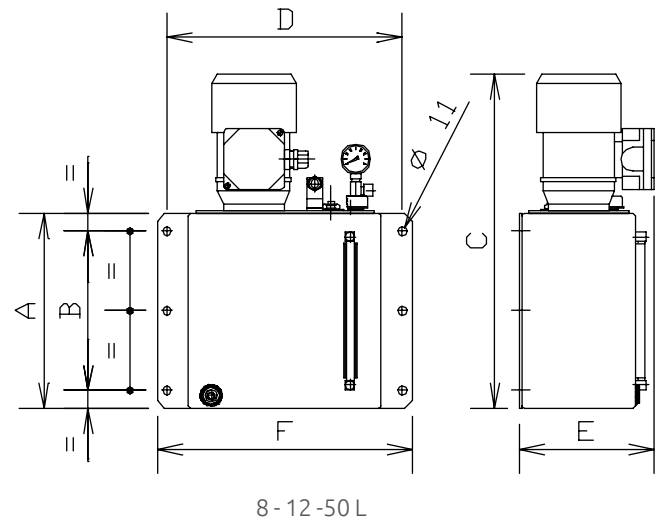
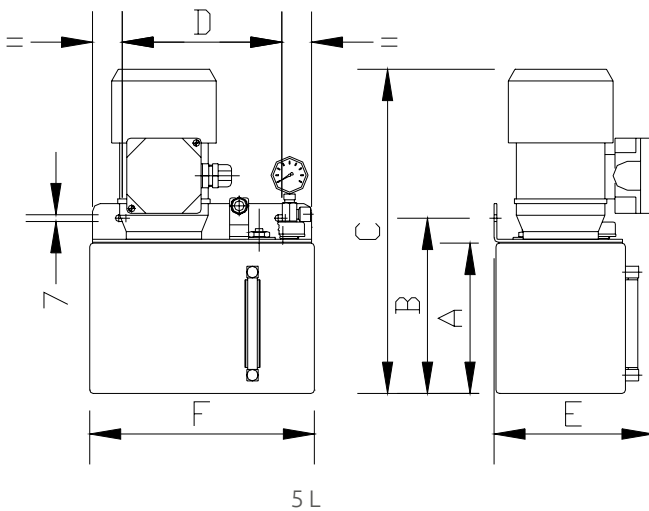
Sheet Metal Tank



The flow rate and pressure performance of these pumps limit them to small and medium installations with a limited number of points.

Flow Rate / Minute	500 cc
Operating pressure	15-50 BAR (212-708 PSI) adjustable
Release valve	0.7 Bar
Tank Capacity	5 - 8 - 12 - 50 L
Intake filter	400 micron
Pressure gauge	0 - 60 BAR / 0 - 870 PSI
Delivery fitting	M12X1 Pipe 6mm
Operating temperature	FROM -20°C TO +80°C
Lubricants	Soft Grease NLGI 000 - 00
Minimum electric level	2 A 24 v DC

Models								
Model	Ltr	A	B	C	D	E	F	Weight
60.824.7	5	155	181	335	167	165	230	7.5 kg
60.824.8	8	250	205	430	167	165	230	10 kg
60.824.9	12	250	205	430	305	173	330	12 kg
60.829.3	50	400	300	580	530	270	560	18 kg



MPT-200/500 Without tank



Flow Rate / Minute	100 or 500 cc
Operating pressure	5-25 BAR (70-354 PSI) Adjustable 15-50 BAR (212-708 PSI) Adjustable
Release valve	0.7 Bar
Intake filter	250 or 400 micron
Pressure gauge	0 - 60 BAR / 0 - 870 PSI
Delivery fitting	M12X1 Pipe 6mm
Operating temperature	FROM -20°C TO +80°C
Lubricants	Oils 50 - 1000 cSt 40°C Soft Grease NLGI 000 - 00
Minimum electric level	2 A 24 v DC

MPT-500 Oil			MPT-200 Oil		
Model	Pressure	Overall dimensions	Model	Pressure	Overall dimensions
60.825.2	5 - 25 bar	145	60.825.0	5 - 25 bar	145
60.825.3	5 - 25 bar	240	60.825.1	5 - 25 bar	240
60.825.4	15 - 50 bar	145			
60.825.5	15 - 50 bar	240			

MPT-500 Soft Grease			MPT-200 Soft Grease		
Model	Pressure	Overall dimensions	Model	Pressure	Overall dimensions
60.826.4	15 - 50 bar	145	60.826.0	15 - 50 bar	145
60.826.5	15 - 50 bar	240	60.826.1	15 - 50 bar	240

