

MODULAR HYDRAULIC POWER PACKS



MODEL COMPOSITION CHART

	Note	Description	Model	Motor Type					
				ME	MM	MP	MS		
Pump		Delivery l/min BP/AP 0,9 / 0,45 Axial piston pump	A	•	•	-	-		
		" 4,7 / 0,45 Axial piston pump	B	•	•	-	-		
		" - / 0,9 Axial piston pump	C	•	•	-	-		
		" 1,8 / 0,9 Axial piston pump	D	•	•	•	•		
		" 2,4 / 0,9 Axial piston pump	H	•	•	-	-		
		" 9,4 / 0,9 Axial piston pump	E	•	•	•	•		
		" - / 1,8 Axial piston pump	F	•	-	-	•		
		" 4,7 / 1,8 Axial piston pump	G	•	-	-	•		
		" - / 1,6 Axial piston pump	L	•	-	-	-		
		" 11,6 / 1,6 Combined piston/gear pump	K*	•	-	-	-		
		" 10 / 1,8 Combined piston/gear pump	T**	•	-	-	-		
		" 10 / 2,5 Radial piston pump	V*	•	-	-	-		
Reservoir		5 litres	05	•	•	•	-		
		10 litres high	10	•	•	•	-		
		10 litres low	11	•	•	•	•		
		20 litres	20	•	•	•	•		
		30 litres * Tank available for K and V pumps only	30	•	•	•	•		
		40 litres	40	•	•	-	-		
	50 litres * Tank available for V pumps only	50	•	-	-	-			
Valve	Version S Spring centred valve	P and T outlet with by pass	M20	•	•	•	•		
		Manual controlled valve 3 way 2 pos.	M21	•	•	•	•		
		Manual controlled valve 3 way 3 pos.	M31	•	•	•	•		
		Manual controlled valve 3 way 3 pos. with check	M32	•	•	•	•		
		Manual controlled valve 4 way 3 pos.	M41	•	•	•	•		
		Manual controlled valve 4 way 3 pos. with check	M42	•	•	•	•		
		Manual controlled valve 4 way 3 pos. return 150 bar	M51	•	•	•	•		
		Manual controlled valve 4 way 3 pos. with check, return 150 bar	M52	•	•	•	•		
		Version P air valve	Solenoid valve 3 way 2 pos. normally open	E21	•	•	P•	-	
	Solenoid valve 3 way 2 pos. normally closed		E22	•	•	P•	-		
	Solenoid valve 3 way 3 pos.		E31	•	•	P•	-		
	Solenoid valve 4 way 3 pos.		E41	•	•	P•	-		
	Solenoid valve 4 way 3 pos. with check		E42	•	•	P•	-		
	Solenoid valve 4 way 3 pos. return 150 bar		E51	•	•	P•	-		
	Solenoid valve 4 way 3 pos. with check, return 150 bar		E52	•	•	P•	-		
	Accessories			Pressure gauge ***	G	•	•	•	•
				Protective housing (standard for air motor type MS)	C	•	•	•	•
			Protective housing with 4 pivoting wheels Ø 80x25 mm	W	•	•	•	•	
		Hand activated remote control	R	•	•	•	-		
		Pedal activated remote control	F	•	•	•	-		
		Pressure sensor and pressure gauge	P	•	•	-	-		
		Compressed air lubricator reduction filter	L	-	-	•	-		
		Unidirectional flow regulator	U	•	•	•	•		
		Unidirectional flow regulator with fine regulation	H	•	•	•	•		
		Counterbalance valve	B	•	•	•	•		
		Heat exchanger	E	•	•	-	-		
		Filter on return line ****	S	•	•	•	•		
Customisation			Without hand wheel adjustable max. pressure valve	Z	•	•	•	•	
			Without magneto-thermal cut-out	Y	•	•	-	-	

* Tank available for V pumps only (50 litres tank) and for K and V pumps only (30 litres tank)

** Pump T available with 20 and 40 litres tanks only

*** Gauge Ø 100 with hand operated valves - Ø 63 with solenoid valves and hand operated valves with pilot check.
Digital gauges upon request.

**** Filter not available for 5 litres and 10 litres tank high.

MODEL CODING

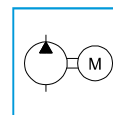
ME	A	05	M21	G
Motor type	Pump type	Reservoir capacity	Valve type	Accessories and customisation

Example: **MPE10P41R** Power pack air motor, pump 9,4/0,9 l/min, tank 10 litres high, air control valve 4 way-3 positions, remote control.

NOTE: for the accessories, fill the letters in alphabetic order.

MODULAR POWER PACKS

FOR GEOTECHNICAL STRUCTURAL TESTS 700 BAR



- Reservoir capacity **10 - 40 l**
- Delivery at 700 bar **0,9 l/min**
- Power rating **1,1 - 1,5 kW**
- Max pressure **700 bar**

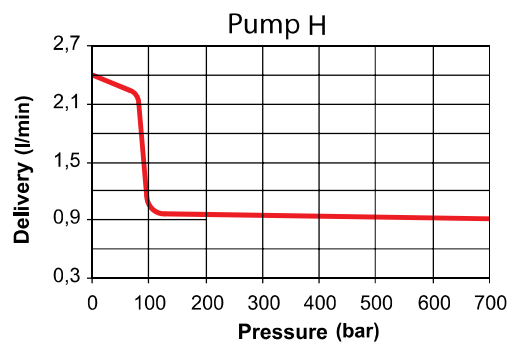
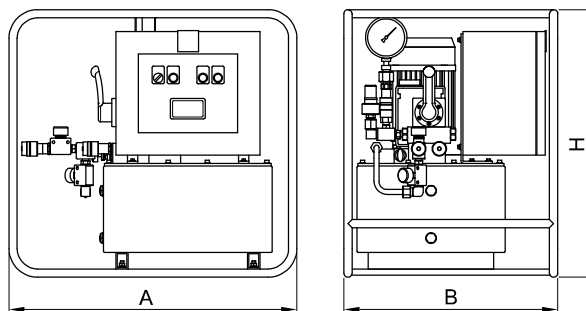
FEATURES

Many years of experience in the geotechnical field, in particular test piles, have enabled EUROPRESS to develop a complete product with special features answering sector needs.

- **Digital display**, programmed for the desired pressure values
- **Automatic pressure restore** (also in case of structural yieldness)
- **Hysteresis system cycle setting**
- **Automatic or manual control**
- Possibility to make test cycles **by decreasing pressure**
- Arranged to be used both with **single than with double acting cylinders**
- External **pressure setting** (50-700 bar range)
- Single or 3-phase electric motor
- Two stage **pump** 2,4/0,9 l/min at 1400 rpm
- Manual 4 way 3 pos **valve** with pilot check
- 10, 20 and 40 litre **tank**
- Protective and transport **cage**
- Analogical **gauge** 100 mm dia.

APPLICATION

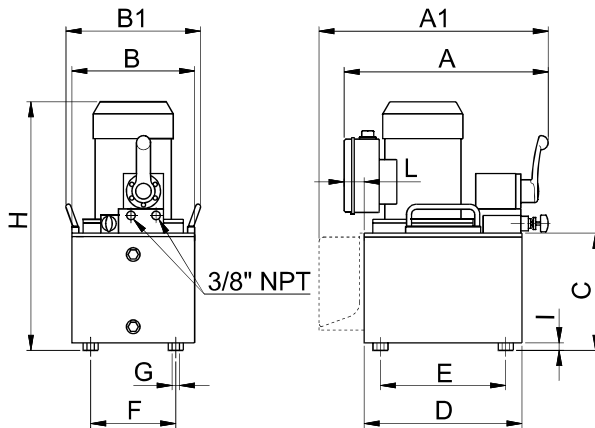
Non destructive tests on concrete structures, construction material trials and geotechnical experiments both on site and in labs.



OPERATING CHARACTERISTICS

MODEL	Delivery		Pressure		Motor			Reservoir capacity	Usable oil volume	Dimensions mm		
	1° Stage	2° Stage	1° Stage	2° Stage	Voltage	Power	Speed			A	B	H
	l/min	l/min	bar	bar		kW	rpm	litres	litres			
MEH11M52PP	2,4	0,9	85	700	400V-50Hz	1,1	1400	10	7,7	700	520	522
MEH20M52PP								20	17,7	700	520	650
MEH40M52PP								40	35,8	710	700	650
MMH11M52PP					230V-50Hz	1,5		10	7,7	700	520	522
MMH20M52PP								20	17,7	700	520	650
MMH40M52PP								40	35,8	710	700	650

MODULAR POWER PACKS WITH 3-PHASE ELECTRIC MOTOR 700 BAR



- Reservoir Capacity **5 - 50 l**
- Delivery at 700 bar **0,45 - 2,5 l/min**
- Power rating **0,75 - 3 kW**
- Max pressure **700 bar**

DIMENSIONS

Reservoir capacity	Usable oil volume	Dimensions mm											
		A	A1 [Ⓞ]	B	B1	C	D	E	F	G	H	I	L
litres	litres												
5	3,8	370	470	245	270	129	315	250	170	M8	390 [Ⓞ]		40
10 high	8,8					227					488 [Ⓞ]	10	
10 low	7,7	447				129	410	320	270		390 [Ⓞ]		
20	17,7			360			410	320	270				
40	35,8	462				257	440	350	510		518 [Ⓞ]		
MEK 30	22			600		343	410	320	270	∅9	640	40	-
MEV 30	20	447					410	320	270				
MEV 50	32	462				307	440	350	510		634		

- Ⓞ Add 16 mm for models MEC, MEH; add 40 mm for models MEL, MEF, MEG, and MET.
- Ⓞ For power packs with 5 l and 10 l high tanks with remote control model R or F only.

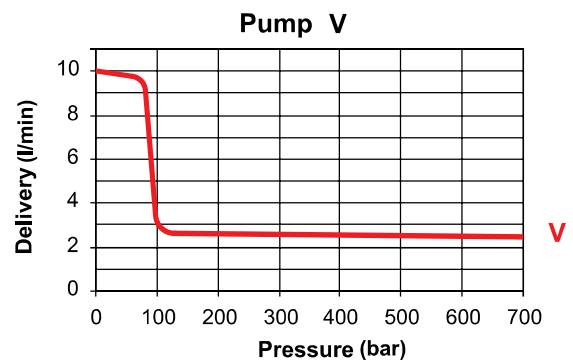
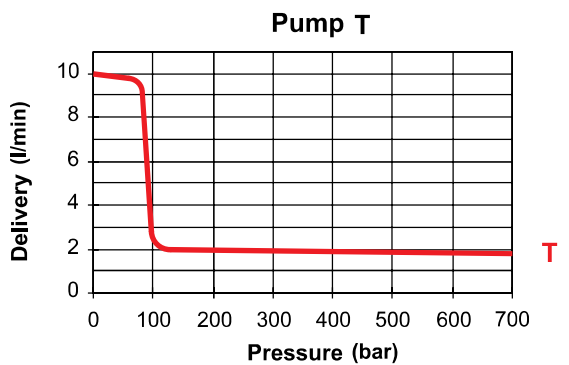
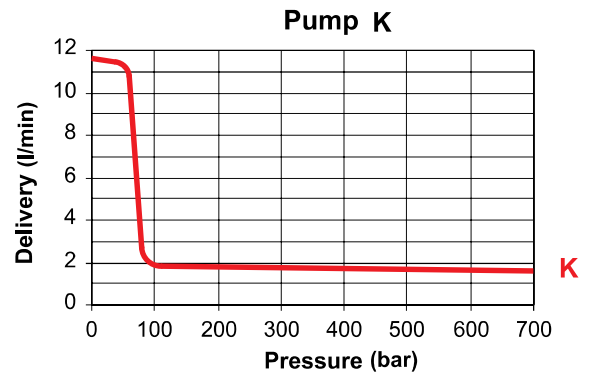
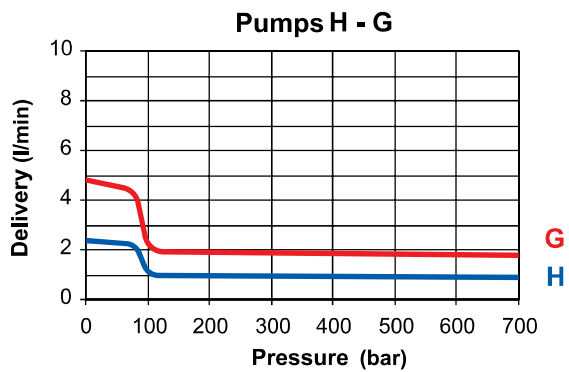
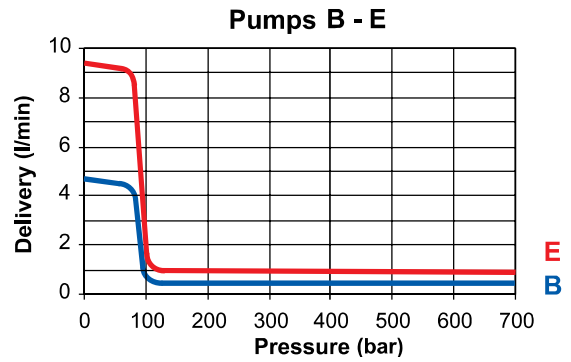
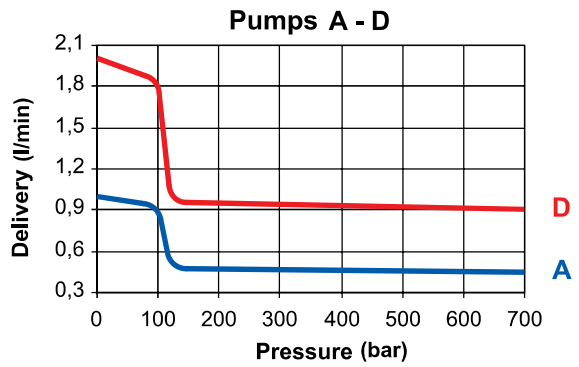
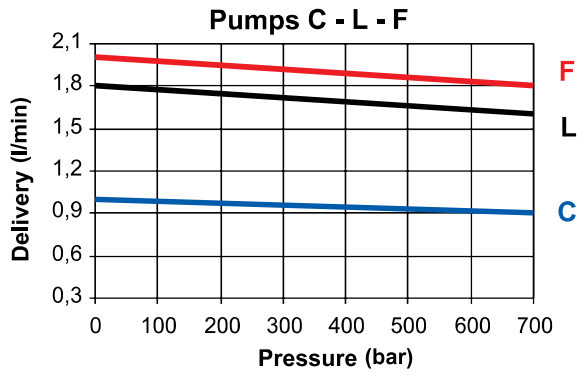


MEK power packs are particularly indicated for intensive use or when a very noiseless product is required.

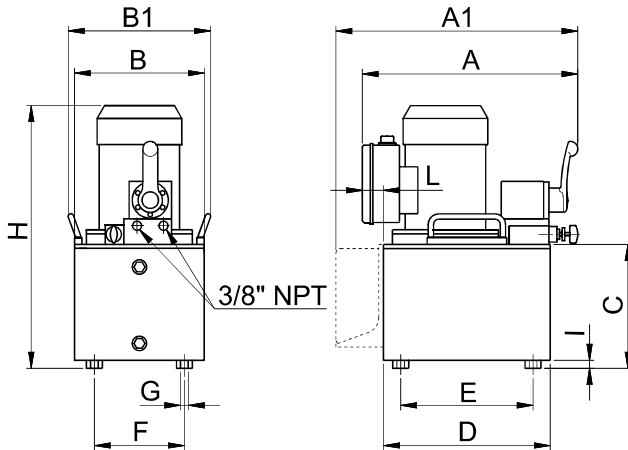
Operating characteristics

MODEL	Oil delivery		Pressure		Motor		
	1 st Stage	2 st Stage	1 st Stage	2 st Stage	Voltage	Power	Speed
	l/min	l/min	bar	bar		kW	rpm
MEA	0,9	0,45	100	700	400V-50Hz (Motors with different voltage upon request)	0,75	1400
MEB	4,7		85				
MEC	-	-					
MED	1,8	100					
MEH	2,4	0,9	85				
MEE	9,4						
MEL	-	1,6	-				
MEK	11,6		70				
MEF	-		-				
MEG	4,7	1,8	85				
MET	10						
MEV		2,5					
						2,2	2800
						3	1400

MODULAR POWER PACKS WITH 3-PHASE ELECTRIC MOTOR 700 BAR



MODULAR POWER PACKS WITH SINGLE PHASE ELECTRIC MOTOR 700 BAR



- Reservoir capacity **5 - 40 l**
- Delivery at 700 bar **0,45 - 0,9 l/min**
- Power rating **0,75 - 1,5 kW**
- Max pressure **700 bar**

DIMENSIONS

Reservoir capacity		Usable oil volume		Dimensions mm									
litres	litres	A	A1 [Ⓢ]	B	B1	C	D	E	F	G	H [Ⓢ]	I	
5	3,8	370	470	245	270	129	315	250	170	M8	410	10	
10 high	8,8					227					508		
10 low	7,7	447	-	360	378	129	410	320	270	Ø9	410	40	
20	17,7					257					538		
40	35,8	462	-	600	-	257	440	350	510	-	538	40	

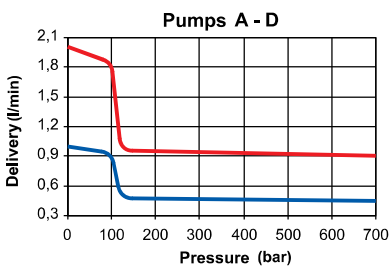
Ⓢ Add 48 mm for model **MMC, MMH**.

Ⓢ For power packs with **5 l** and **10 l** high tanks with remote control model **R** or **F** only.

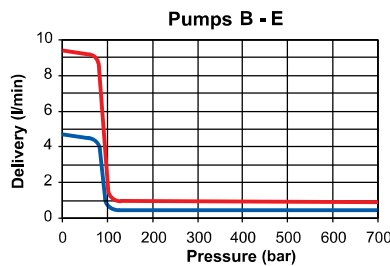
OPERATING CHARACTERISTICS

MODEL	Oil delivery		Pressure		Motor		
	1 st Stage	2 nd Stage	1 st Stage	2 nd Stage	Voltage	Power	Speed
	l/min	l/min	bar	bar		kW	rpm
MMA	0,9	0,45	100	700	230V-50Hz (Motors with different voltage upon request)	0,75	1400
MMB	4,7		85				
MMC	-	-					
MMD	1,8	100					
MMH	2,4	0,9	85				
MME	9,4		85				

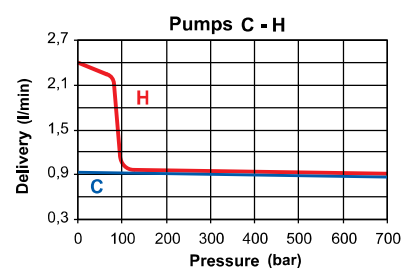
DELIVERY DIAGRAM



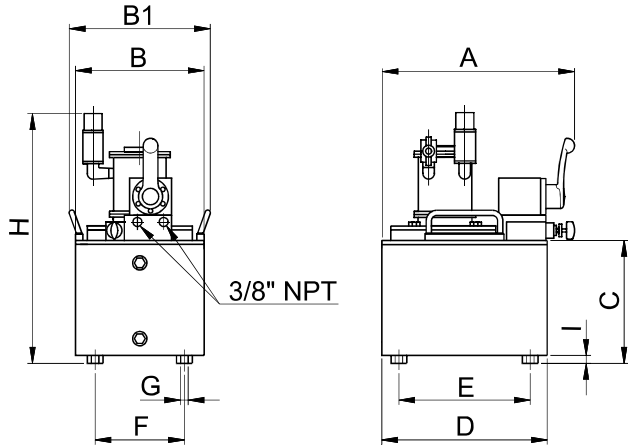
DELIVERY DIAGRAM



DELIVERY DIAGRAM



MODULAR POWER PACKS WITH AIR MOTOR 700 BAR



- Reservoir capacity **5 - 40 l**
- Delivery at 700 bar **0,9 l/min**
- Power rating **2,6 kW**
- Max pressure **700 bar**
- Consumption **3400 l/min**

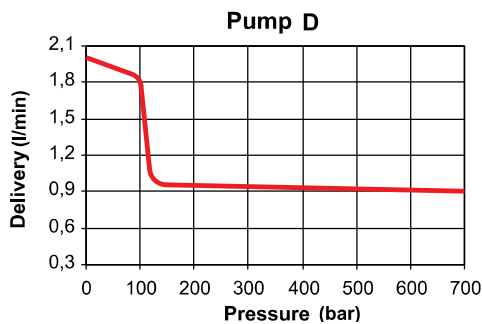
DIMENSIONS

Reservoir capacity		Usable oil volume		Dimensions mm							
litres	litres	A	B	B1	C	D	E	F	G	H	I
5	3,8	370	245	270	129	315	250	170	M8	390	10
10 high	8,8				227					488	
10 low	7,7	447	360	378	129	410	320	270		390	
20	17,7				257				518	40	
40	35,8	462	600	-	257	440	350	510	∅9	518	40

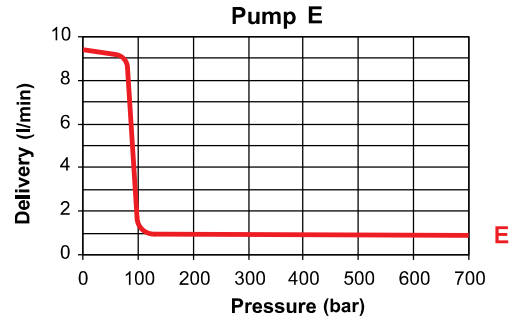
OPERATING CHARACTERISTICS

MODEL	Oil delivery		Pressure		Motor	
	1 st Stage	2 nd Stage	1 st Stage	2 nd Stage	Power	Speed
	l/min	l/min	bar	bar	kW	rpm
MPD	1,8	0,9	100	700	2,6	3000
MPE	9,4		85			

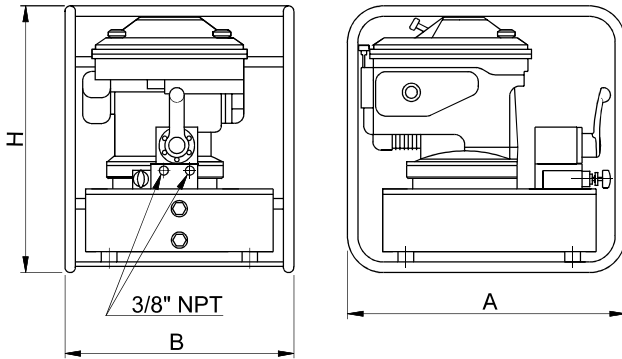
DELIVERY DIAGRAM



DELIVERY DIAGRAM



MODULAR POWER PACKS WITH PETROL ENGINE 700 BAR



- Reservoir capacity **10 - 40 l**
- Delivery at 700 bar **0,9 - 1,8 l/min**
- Power rating **3,6 kW**
- Max pressure **700 bar**
- Consumption **1,28 l/h with full load**
0,9 l/h at 75%

DIMENSIONS

Reservoir capacity litres	Usable oil volume litres	Dimensions mm		
		A	B	H
10 low	7,7	555	440	500
20	17,7			628
40	35,8	510	660	580

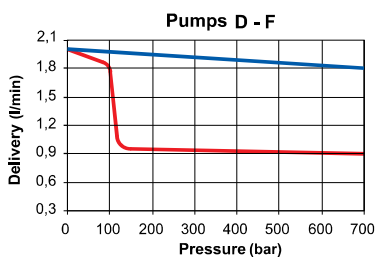
Follow our safety instructions,
see useful pages

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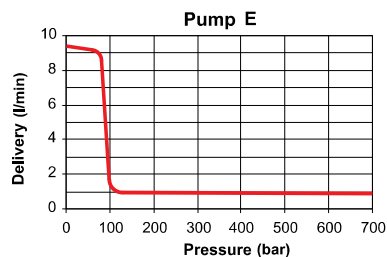
OPERATING CHARACTERISTICS

MODEL	Oil delivery		Pressure		Engine	
	1 st Stage	2 nd Stage	1 st Stage	2 nd Stage	Power	Speed
	l/min	l/min	bar	bar	kW	rpm
MSD	1,8	0,9	100	700	4,4	3000
MSE	9,4		85			
MSF	-	1,8	-			
MSG	4,7		85			

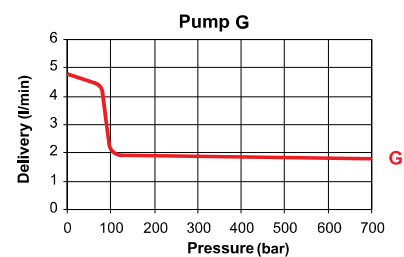
DELIVERY DIAGRAM



DELIVERY DIAGRAM



DELIVERY DIAGRAM



VALVES FOR MODULAR POWER PACKS

TABLE OF MANUAL CONTROLLED VALVE FUNCTIONS

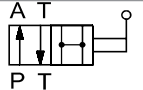
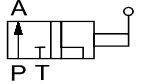
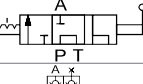
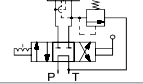
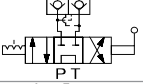
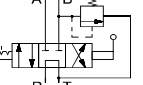
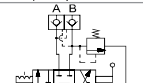
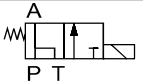
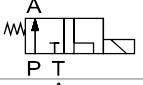
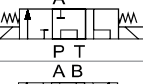
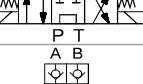
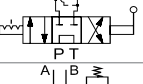
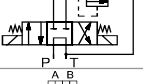
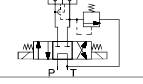
MODEL	For use with	Valve function	Symbol
VMM20	To shift control to in-line valve	Outlet P and T with by pass	
VMM21	SINGLE acting	Advance - return	
VMM31		Advance - hold - return	
VMM32		Advance - hold with pilot check - return	
VMM41		DOUBLE acting	Advance - hold - return
VMM42	Advance - hold with pilot check - return		
VMM51	Advance - hold - return at 150 bar		
VMM52	Advance - hold with pilot check - return at 150 bar		

TABLE OF ELECTRIC CONTROLLED VALVE FUNCTIONS (230 VAC VOLTAGE)

MODEL	For use with	Valve function	Symbol
VME21	SINGLE acting	Advance - return	
VME22		Advance - hold - return	
VME31		Advance - hold - return	
VME41	DOUBLE acting	Advance - hold - return	
VME42		Advance - hold with pilot check - return	
VME51		Advance - hold - return at 150 bar	
VME52		Advance - hold with pilot check - return at 150 bar	

VALVES FOR MODULAR POWER PACKS

TABLE OF MANUAL CONTROLLED VALVE FUNCTIONS - SPRING RETURN IN CENTRAL POSITION

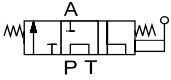
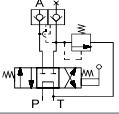
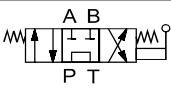
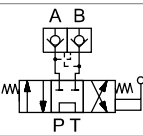
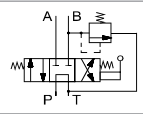
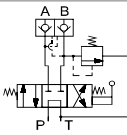
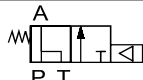
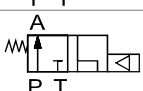
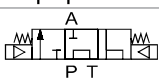
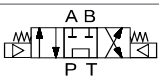
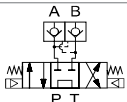
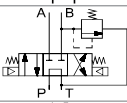
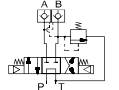
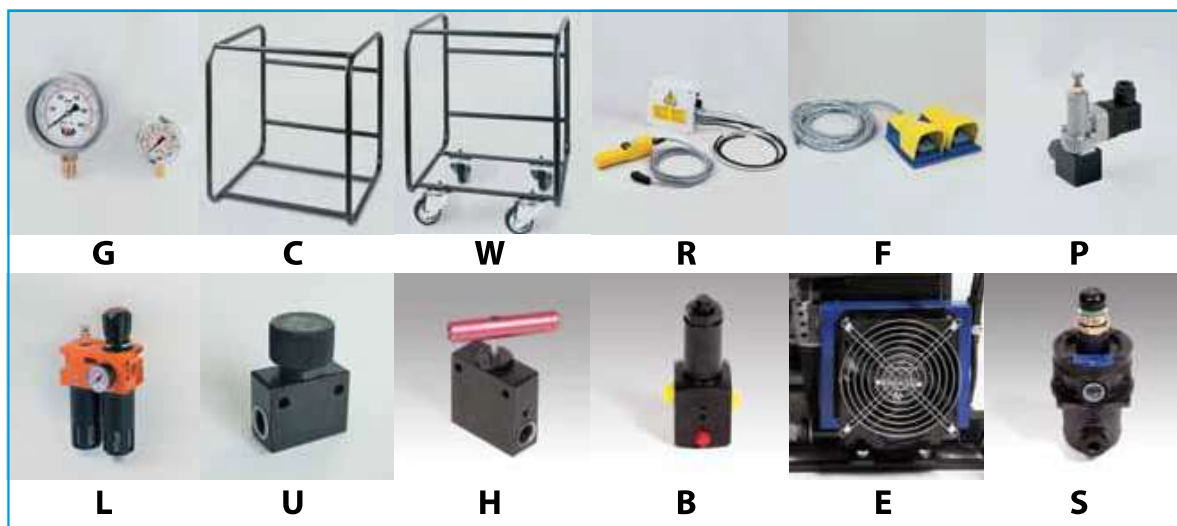
MODEL	For use with	Valve function	Symbol
VMS31	SINGLE acting	Advance - hold - return	
VMS32		Advance - hold with pilot check - return	
VMS41	DOUBLE acting	Advance - hold - return	
VMS42		Advance - hold with pilot check - return	
VMS51		Advance - hold - return at 150 bar	
VMS52		Advance - hold with pilot check - return at 150 bar	

TABLE OF PNEUMATIC CONTROLLED VALVE FUNCTIONS

MODEL	For use with	Valve function	Symbol
VMP21	SINGLE acting	Advance - return	
VMP22		Advance - hold - return	
VMP31		Advance - hold - return	
VMP41	DOUBLE acting	Advance - hold - return	
VMP42		Advance - hold with pilot check - return	
VMP51		Advance - hold - return at 150 bar	
VMP52		Advance - hold with pilot check - return at 150 bar	

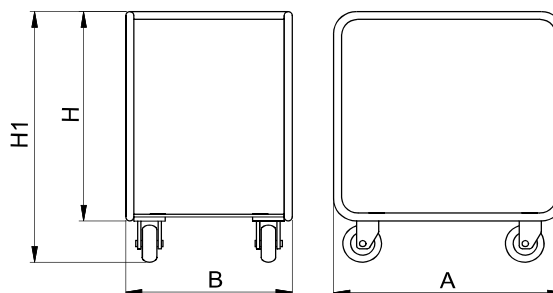
FOR MODULAR POWER PACKS 700 BAR



- **G**- Glycerine filled Pressure gauge \varnothing 100 with manual valves and \varnothing 63 with solenoids and with controlled check manual valves. (digital gauge upon request).
- **C**- Protective housing (standard for MS power packs).
- **W**- Protective housing with 4 pivoting wheels \varnothing 80x25 mm
- **R**- Manual activated remote control length 5 metres.
- **F**- Pedal activated remote control length 5 metres.
- **P**- Pressure sensor and pressure gauge.
- **L**- Filter and pressure reducer for models with air motor.
- **U**- Unidirectional flow regulator.
- **H**- Unidirectional flow regulator with fine regulation.
- **B**- Counterbalance valve.
- **E**- Heat exchanger.
- **S**- Filter on return line (not available for power packs with 5 l and 10 l tank high).

CUSTOMIZED VERSIONS

- **Z**- Without hand wheel adjustable max. pressure valve.
- **Y**- Without magneto-thermal cut out for models fitted with electric motor.



DIMENSIONS OF PROTECTIVE HOUSING

With reservoir	Dimensions mm			
	A	B	H	H1
litres				
5	495	325	500	595
10 high			600	695
10 low	580	440	500	595
20			640	733
40	540	700	690	783
MEK 30 - MEV 30	580	440		
MEV 50	540	700		