

MLP High-Pressure Pump Stations

TECHNICAL DATA

TD035GB-08	19-10-09	LR
------------	----------	----



Description

The high-pressure pump station is a compact unit specially developed by ML System a/s.

The pump station is based on water hydraulic i.e. corrosion- and oil free, no oil change.

All components exposed to water are made of corrosion-resistant material.

The hoses are VA-approved Prio-hoses, stainless steel braided or high-pressure hoses in dimension 1/4" or 3/8". The pump is fitted on a steel frame and all components are assembled and the pump station is tested in our production.

Standard

- Type approved water meter
- 1 μ filtration with pressure gauges for read-outs of pressure drop
- UV light for sterile water
- Temperature sensor and pressure switch for protection of pump
- Test water tap
- Pressure controller set to 70 bar
- Working pressure 30-70 bar
- Operational hour meter
- Safety circuit for max hygostat
- Prepared for RO-water

Option

- PLC control for 4 or 8 departments with integrated automatic start (standard for MLP 3x800 & MLP 3x1000)

MLP pump station

High-pressure pump

The oil-free piston pump with 5 pistons provides an operation which is smooth and without vibrations. The pump is made of stainless steel; all other parts are made of corrosion-resistant materials.

NB!

- Check the direction of rotation when starting up the motor (is secured by Phase sequence relay)
- Power supply must be connected according to local regulations
- For systems with one section only the humidity sensor and the max hygostat are to be connected to the pump station.

An electric connection to the external sectional controllers is necessary for systems with several sections.

For systems with PLC 4 and 8 sections the humidity sensor and the max hygostat are to be connected the control cabinet on the pump station.

Please refer to mounting instruction.

3 x 400 VAC+GND+N 50 Hz

Mechanical specifications:

Item no.				Description	Pump type PAH	Min. flow l/h	Max. flow l/h	Inlet fittings	Outlet fittings	Filtration	Sound level dBA
One section MLDM	Several sections MLDM	PLC 1-4 sections	PLC 8 sections								
104700000	104701000	104702000	104703000	MLP 100	2	10	100	3/4 "	1/4 "	1 µ 10 "	< 75
104705000	104706000	104707000	104708000	MLP 300	4	30	265	3/4 "	1/4 "	1 µ 10 "	< 75
104710000	104711000	104712000	104713000	MLP 500	6,3	35	440	3/4 "	3/8 "	1 µ 20 "	< 80
104715000	104716000	104717000	104718000	MLP 800	10	60	790	3/4 "	3/8 "	1 µ 20 "	< 80
104720000	104721000	104722000	104723000	MLP 1000	12,5	90	1000	3/4 "	3/8 "	1 µ 20 "	< 80
104750000	104751000	104752000	104753000	MLP 2x800	2 x 10	60	1580	3/4 "	2 x 3/8 "	1 µ 20 "	< 80
104740000	104741000	104742000	104743000	MLP 2x1000	2 x 12,5	90	2000	3/4 "	2 x 3/8 "	1 µ 20 "	< 80
104...	104...	104...	104...	MLP 3x800	3 x 10	60	2370	2 x 3/4 "	4 x 3/8 "	2 x 1 µ 20 "	< 80
104...	104...	104...	104...	MLP 3x1000	3 x 12,5	90	3000	2 x 3/4 "	4 x 3/8 "	2 x 1 µ 20 "	< 80

Electrical specifications:

Item no.				Pumpstation		Motor				UV light 30.000 µWs/cm	Dimensions L x W x H	Approx. net weight kg
One section MLDM	Several sections MLDM	PLC 1-4 sections	PLC 8 sections	Description	Power input kW	Motor type	Voltage 3 phase	Power kW	Current A			
104700000	104701000	104702000	104703000	MLP 100	0,9	MG 80 A4	380-415	0,5	1,5	S1Q-PA/2	660x500x1300	50-65
104705000	104706000	104707000	104708000	MLP 300	1,1	MG 80 B4	380-415	0,75	1,9	S2Q-PA/2	660x500x1300	55-70
104710000	104711000	104712000	104713000	MLP 500	2,1	MG90 LA4	380-415	1,5	3,7	S2Q-PA/2	660x500x1300	65-80
104715000	104716000	104717000	104718000	MLP 800	3,0	MG100 LB4	380-415	2,2	5,3	S5Q-PA/2	660x500x1300	75-90
104720000	104721000	104722000	104723000	MLP 1000	3,9	MG112 MA4	380-415	3	6,9	S5Q-PA/2	660x500x1300	85-100
104750000	104751000	104752000	104753000	MLP 2x800	5,9	2xMG100 LB4	380-415	2x2,2	2x5,3	S8Q-PA/2	820x700x1600	155-170
104740000	104741000	104742000	104743000	MLP 2x1000	7,7	2xMG112 MA4	380-415	2x3	2x6,9	S8Q-PA/2	820x700x1600	160-175
104...	104...	104...	104...	MLP 3x800	8,9	3xMG100 LB4	380-415	3x2,2	3x5,3	2xS8Q-PA/2	1400x700x1600	
104...	104...	104...	104...	MLP 3x1000	11,6	3xMG112 MA4	380-415	3x3	3x6,9	2xS8Q-PA/2	1400x700x1600	

3 x 230 VAC+GND 50Hz

Mechanical specifications:

Item no.				Description	Pump type PAH	Min. flow l/h	Max. flow l/h	Inlet fittings	Outlet fittings	Filtration	Sound level dBA
One section MLDM	Several sections MLDM	PLC 1-4 sections	PLC 8 sections								
104730001	104730002	104730003	104730004	MLP 100	2	10	100	3/4 "	1/4 "	1 µ 10 "	< 75
104730005	104730006	104730007	104730008	MLP 300	4	30	265	3/4 "	1/4 "	1 µ 10 "	< 75
104730009	104730010	104730011	104730012	MLP 500	6,3	35	440	3/4 "	3/8 "	1 µ 20 "	< 80
104730013	104730014	104730015	104730016	MLP 800	10	60	790	3/4 "	3/8 "	1 µ 20 "	< 80
104730017	104730018	104730019	104730020	MLP 1000	12,5	90	1000	3/4 "	3/8 "	1 µ 20 "	< 80
104730021	104730022	104730023	104730024	MLP 2x800	2 x 10	60	1580	3/4 "	2 x 3/8 "	1 µ 20 "	< 80
104730025	104730026	104730027	104730028	MLP 2x1000	2 x 12,5	90	2000	3/4 "	2 x 3/8 "	1 µ 20 "	< 80
104...	104...	104...	104...	MLP 3x800	3 x 10	60	2370	2 x 3/4 "	4 x 3/8 "	2 x 1 µ 20 "	< 80
104...	104...	104...	104...	MLP 3x1000	3 x 12,5	90	3000	2 x 3/4 "	4 x 3/8 "	2 x 1 µ 20 "	< 80

Electrical specifications:

Item no.				Pumpstation		Motor				UV light 30.000 µWs/cm	Dimensions L x W x H	Approx. net weight kg
One section MLDM	Several sections MLDM	PLC 1-4 sections	PLC 8 sections	Description	Power input kW	Motor type	Voltage 3 phase	Power kW	Current A			
104730001	104730002	104730003	104730004	MLP 100	0,9	MG 80 A4	208-277	0,5	2,6	S1Q-PA/2	660x500x1300	50-65
104730005	104730006	104730007	104730008	MLP 300	1,1	MG 80 B4	208-277	0,75	3,4	S2Q-PA/2	660x500x1300	55-70
104730009	104730010	104730011	104730012	MLP 500	2,1	MG90 LA4	208-277	1,5	6,4	S2Q-PA/2	660x500x1300	65-80
104730013	104730014	104730015	104730016	MLP 800	3,0	MG100 LB4	208-277	2,2	9,2	S5Q-PA/2	660x500x1300	75-90
104730017	104730018	104730019	104730020	MLP 1000	3,9	MG112 MA4	208-277	3	12,0	S5Q-PA/2	660x500x1300	85-100
104730021	104730022	104730023	104730024	MLP 2x800	5,9	2xMG100 LB4	208-277	2x2,2	2x9,2	S8Q-PA/2	820x700x1600	155-170
104730025	104730026	104730027	104730028	MLP 2x1000	7,7	2xMG112 MA4	208-277	2x3	2x12,0	S8Q-PA/2	820x700x1600	160-175
104...	104...	104...	104...	MLP 3x800	8,9	3xMG100 LB4	208-277	3x2,2	3x9,2	2xS8Q-PA/2	1400x700x1600	
104...	104...	104...	104...	MLP 3x1000	11,6	3xMG112 MA4	208-277	3x3	3x12,0	2xS8Q-PA/2	1400x700x1600	

3 x 208 VAC+GND 60 Hz

Mechanical specifications:

Item no.				Description	Pump type PAH	Min. flow l/h	Max. flow l/h	Inlet fittings	Outlet fittings	Filtration	Sound level dBA
One section MLDM	Several sections MLDM	PLC 1-4 sections	PLC 8 sections								
104730001	104730002	104730003	104730004	MLP 100	2	12	120	3/4 "	1/4 "	1 μ 10 "	< 75
104730005	104730006	104730007	104730008	MLP 300	4	36	318	3/4 "	1/4 "	1 μ 10 "	< 75
104730009	104730010	104730011	104730012	MLP 500	6,3	42	528	3/4 "	3/8 "	1 μ 20 "	< 80
104730013	104730014	104730015	104730016	MLP 800	10	72	948	3/4 "	3/8 "	1 μ 20 "	< 80
104730017	104730018	104730019	104730020	MLP 1000	12,5	108	1200	3/4 "	3/8 "	1 μ 20 "	< 80
104730021	104730022	104730023	104730024	MLP 2x800	2 x 10	72	1896	3/4 "	3/8 "	1 μ 20 "	< 80
104730025	104730026	104730027	104730028	MLP 2x1000	2 x 12,5	108	2400	3/4 "	3/8 "	1 μ 20 "	< 80
104...	104...	104...	104...	MLP 3x800	3 x 10	72	2844	2 x 3/4 "	4 x 3/8 "	2 x 1 μ 20 "	< 80
104...	104...	104...	104...	MLP 3x1000	3 x 12,5	108	3600	2 x 3/4 "	4 x 3/8 "	2 x 1 μ 20 "	< 80

Electrical specifications:

Item no.				Pumpstation		Motor				UV light 30.000 μWs/cm	Dimensions L x W x H	Approx. net weight kg
One section MLDM	Several sections MLDM	PLC 1-4 sections	PLC 8 sections	Description	Power input kW	Motor type	Voltage 3 phase	Power kW	Current A			
104730001	104730002	104730003	104730004	MLP 100	0,8	MG 80 A4	208-277	0,5	2,6	S1Q-PA/2	660x500x1300	50-65
104730005	104730006	104730007	104730008	MLP 300	1,5	MG 90 SA4	208-277	1,1	5,0	S2Q-PA/2	660x500x1300	55-70
104730009	104730010	104730011	104730012	MLP 500	1,9	MG90 LA4	208-277	1,5	6,6	S2Q-PA/2	660x500x1300	65-80
104730013	104730014	104730015	104730016	MLP 800	2,7	MG100 LB4	208-277	2,2	9,4	S5Q-PA/2	660x500x1300	75-90
104730017	104730018	104730019	104730020	MLP 1000	3,6	MG112 MA4	208-277	3	12,4	S5Q-PA/2	660x500x1300	85-100
104730021	104730022	104730023	104730024	MLP 2x800	5,4	2xMG100 LB4	208-277	2x2,2	2x9,4	S8Q-PA/2	820x700x1600	155-170
104730025	104730026	104730027	104730028	MLP 2x1000	7,1	2xMG112 MA4	208-277	2x3	2x12,4	S8Q-PA/2	820x700x1600	160-175
104...	104...	104...	104...	MLP 3x800	8,2	3xMG100 LB4	208-277	3x2,2	3x9,4	2xS8Q-PA/2	1400x700x1600	
104...	104...	104...	104...	MLP 3x1000	10,8	3xMG112 MA4	208-277	3x3	3x12,4	2xS8Q-PA/2	1400x700x1600	

3 x 480VAC+GND 60 Hz

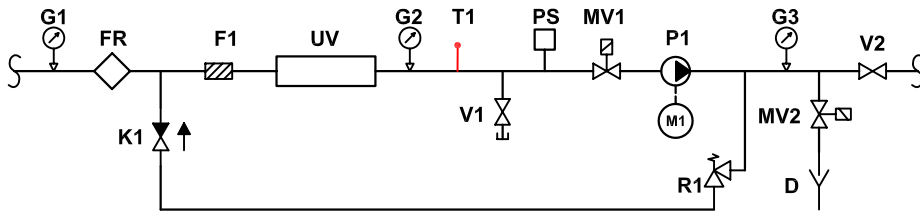
Mechanical specifications:

Item no.				Description	Pump type PAH	Min. flow l/h	Max. flow l/h	Inlet fittings	Outlet fittings	Filtration	Sound level dBA
One section MLDM	Several sections MLDM	PLC 1-4 sections	PLC 8 sections								
104735001	104735002	104735003	104735004	MLP 100	2	12	120	3/4 "	1/4 "	1 µ 10 "	< 75
104735005	104735006	104735007	104735008	MLP 300	4	36	318	3/4 "	1/4 "	1 µ 10 "	< 75
104735009	104735010	104735011	104735012	MLP 500	6,3	42	528	3/4 "	3/8 "	1 µ 20 "	< 80
104735013	104735014	104735015	104735016	MLP 800	10	72	948	3/4 "	3/8 "	1 µ 20 "	< 80
104735017	104735018	104735019	104735020	MLP 1000	12,5	108	1200	3/4 "	3/8 "	1 µ 20 "	< 80
104735021	104735022	104735023	104735024	MLP 2x800	2 x 10	72	1896	3/4 "	3/8 "	1 µ 20 "	< 80
104735025	104735026	104735027	104735028	MLP 2x1000	2 x 12,5	108	2400	3/4 "	3/8 "	1 µ 20 "	< 80
104...	104...	104...	104...	MLP 3x800	3 x 10	72	2844	2 x 3/4 "	4 x 3/8 "	2 x 1 µ 20 "	< 80
104...	104...	104...	104...	MLP 3x1000	3 x 12,5	108	3600	2 x 3/4 "	4 x 3/8 "	2 x 1 µ 20 "	< 80

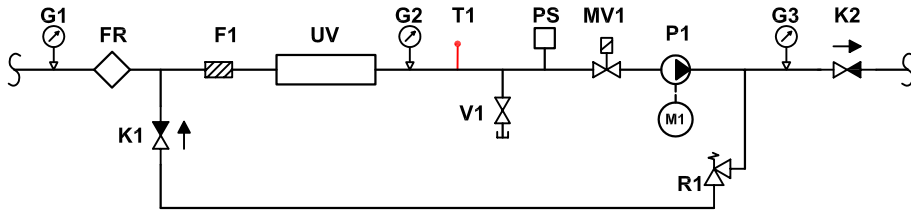
Electrical specifications:

Item no.				Pumpstation		Motor				UV light 30.000 µWs/cm	Dimensions L x W x H	Approx. net weight kg
One section MLDM	Several sections MLDM	PLC 1-4 sections	PLC 8 sections	Description	Power input kW	Motor type	Voltage 3 phase	Power kW	Current A			
104735001	104735002	104735003	104735004	MLP 100	1,0	MG 80 A4	380-480	0,5	1,5	S1Q-PA/2	660x500x1300	50-65
104735005	104735006	104735007	104735008	MLP 300	1,8	MG 80 B4	380-480	0,75	2,6	S2Q-PA/2	660x500x1300	55-70
104735009	104735010	104735011	104735012	MLP 500	2,2	MG90 LA4	380-480	1,5	3,3	S2Q-PA/2	660x500x1300	65-80
104735013	104735014	104735015	104735016	MLP 800	3,2	MG100 LB4	380-480	2,2	4,8	S5Q-PA/2	660x500x1300	75-90
104735017	104735018	104735019	104735020	MLP 1000	4,0	MG112 MA4	380-480	3	6,0	S5Q-PA/2	660x500x1300	85-100
104735021	104735022	104735023	104735024	MLP 2x800	6,4	2xMG100 LB4	380-480	2x2,2	2x4,8	S8Q-PA/2	820x700x1600	155-170
104735025	104735026	104735027	104735028	MLP 2x1000	8,0	2xMG112 MA4	380-480	2x3	2x6,0	S8Q-PA/2	820x700x1600	160-175
104...	104...	104...	104...	MLP 3x800	9,7	3xMG100 LB4	380-480	3x2,2	3x4,8	2xS8Q-PA/2	1400x700x1600	
104...	104...	104...	104...	MLP 3x1000	12,1	3xMG112 MA4	380-480	3x3	3x6,0	2xS8Q-PA/2	1400x700x1600	

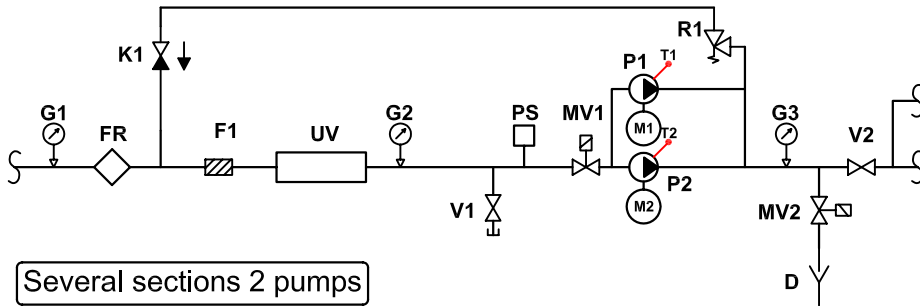
One section 1 pump



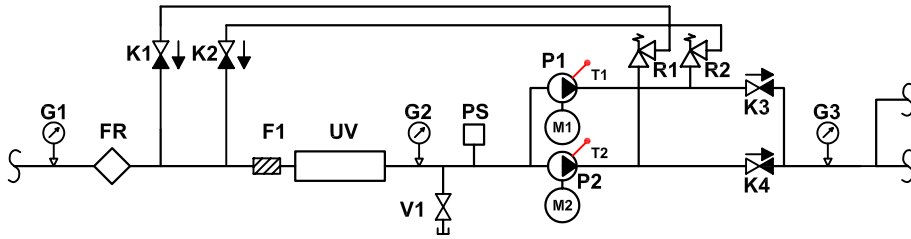
Several sections 1 pump



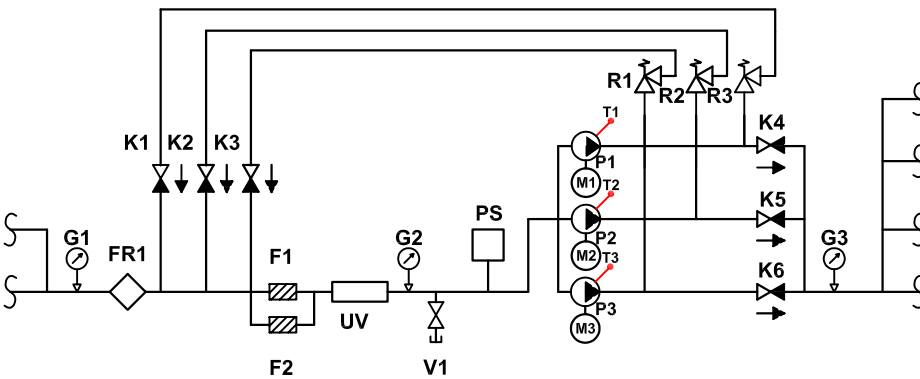
One section 2 pumps



Several sections 2 pumps



Several sections 3 pumps



- D Drain
- F1-F2 Filter 1µ
- FR Water meter
- G1-G2 Pressure gauge, 0-10 bar
- G3 Pressure gauge, 0-135 bar or 0-160 bar
- K1-K6 Check valve
- M1-M3 Motor for pump
- MV1 ON/OFF valve
- MV2 Pressure release valve
- P1-P3 Pump
- PS Pressure switch
- R1-R3 Pressure regulator
- T1-T3 Thermostat
- UV UV system
- V1 Test water tap
- V2 Shut off valve



TECHNICAL DATA

MLP High Pressure Pump

TD035GB-08

19.10.09

LR