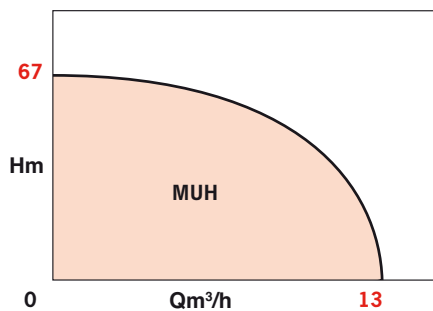


OPERATING LIMITS

Flow up to:	13 m ³ /h
Head up to:	67 m CE
Max. operating pressure:	10 bar
Max. suction pressure:	6 bar
Temperature range:	- 15° à + 90°C
Max. ambient temperature:	+ 40°C
DN of ports:	G1" à G1 1/2"



ADVANTAGES

- Monobloc pump, compact, economical and silent.
- Impellers, hydraulic and pump shaft assembly in stainless steel, pump casing in cast iron.
- Motor rolling bearing fitted in the front endshield, amply dimensioned and leaktight.
- Suction rings between very thick cells limiting thermal expansion and eliminating risks of seizing up.
- Maximum reliability - high efficiency due to impeller profile limiting the number of stages, shaft size and ball bearing size.
- Standardized mechanical seals, + 90°C maximum, maintenance free.
- Easy installation.

MUH

MULTISTAGE HORIZONTAL PUMPS 2 pole - 50 Hz

APPLICATIONS

Pumping of clear non-loaded fluids in the housing, agricultural and industrial sectors:

- Transfert - pressure boosting
- Sprinkling - Irrigation
- Washing station
- Draining - Filling (ponds, etc.)
- Heating - Air conditioning

- Water treatment (demineralization, filtering, etc...).

And incorporation in all modular systems.



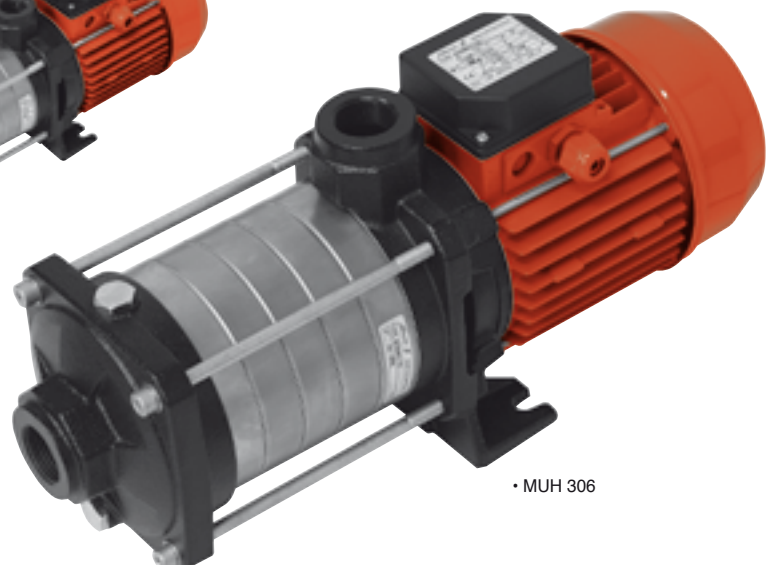
• MUH 902



• MUH 105



• MUH 504



• MUH 306

MUH

DESIGN

• Hydraulic part

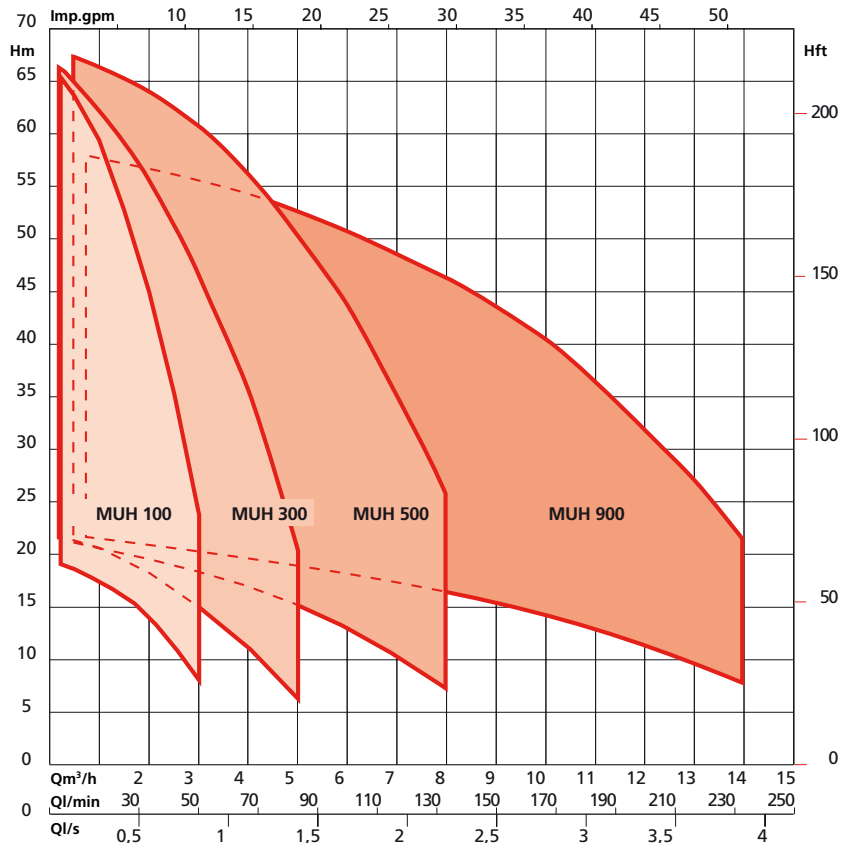
- Horizontal, centrifugal, not self priming
- Multi-stage, from 2 to 7 stages
- Axial suction, vertical discharge upwards
- Impellers mounted directly on the motor shaft extension
- Shaft leaktightness by standardized mechanical seal.

• Motor

- Standard ventilated
- Extended shaft end
- Single-phase motor ; capacitor incorporated into the terminal box
- Ball bearings of the impeller shaft lubricated for life

Speed of rotation : 2900 rpm
 Windings 3~ : 230-400 V
 1~ : 230 V
 Frequency : 50 Hz (option 60 Hz)
 Insulating class : 155°C (F)
 Protection index : IP 54

HYDRAULIC PRESELECTION CHARTS



STANDARD CONSTRUCTION

Pièces principales	Matériau
Pump casing	EN GJL250
Impellers	304 stainless steel
Cells (stage casing)	304 stainless steel
Pump shaft	stainless steel
Cell centring	304 stainless steel
Mechanical seal	Carbon/silicon carbide
Round section joint rings	EPDM ethylene propylene
Fixing-support bearing	EN GJL250

IDENTIFICATION

MUH - 3 02 - E - M / 6 / OEM / XX / B

Pump family _____

Nominal flow in m³/h (at 50 Hz/2 poles) _____

No. of stages _____

E = O ring: EPDM
 V = O ring: VITON

M = single-phase
 M11 = Single-phase 110 V
 T = three-phase

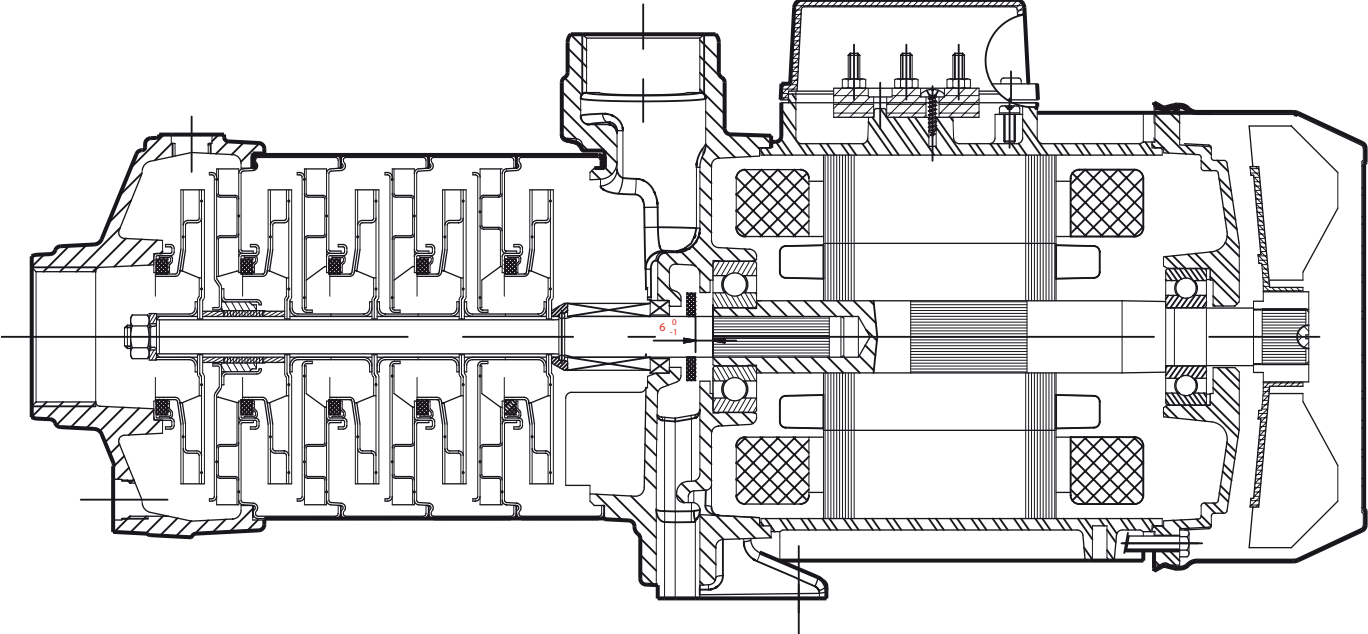
6 = 60 Hz
 Nothing = 50 Hz

OEM = Original Equipment Manufacturer _____

Technical definition code _____

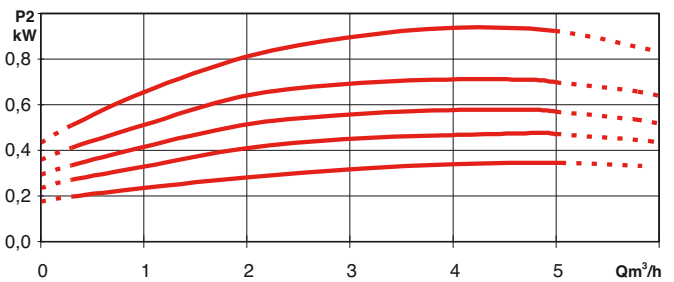
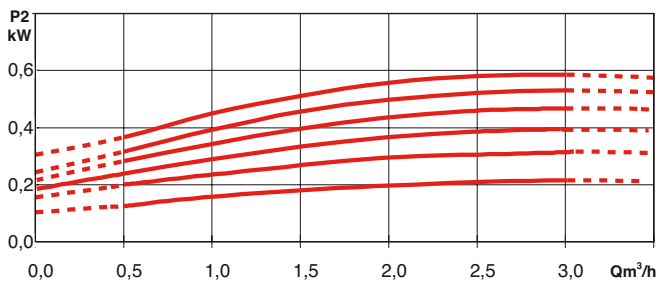
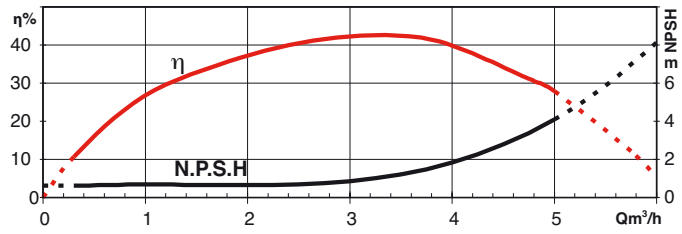
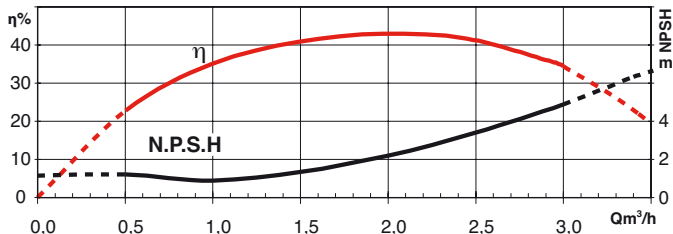
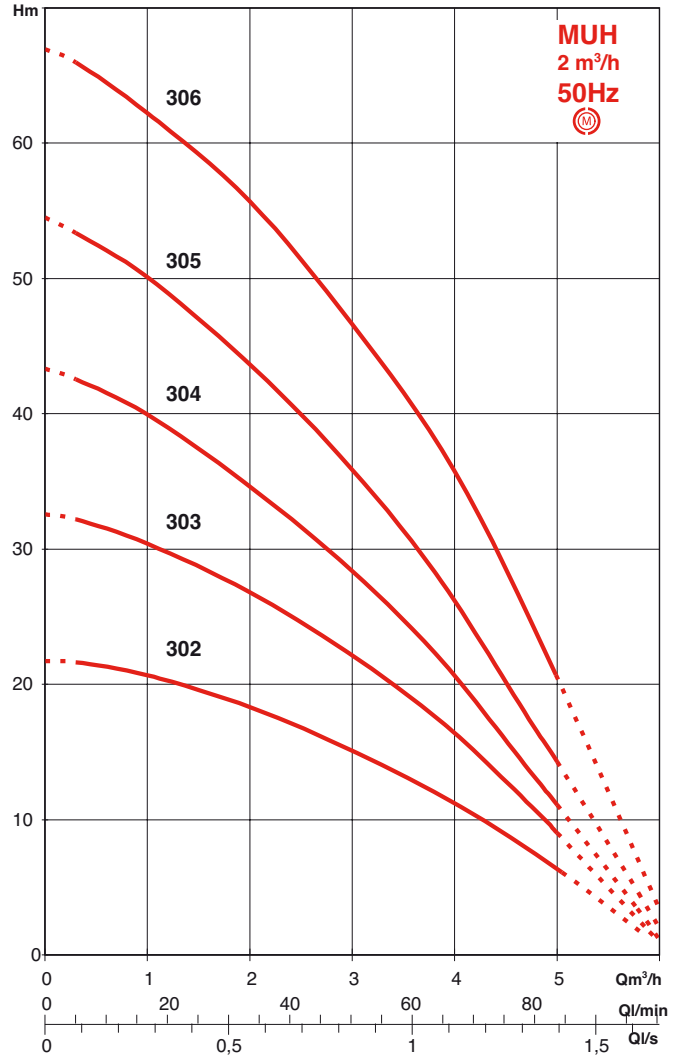
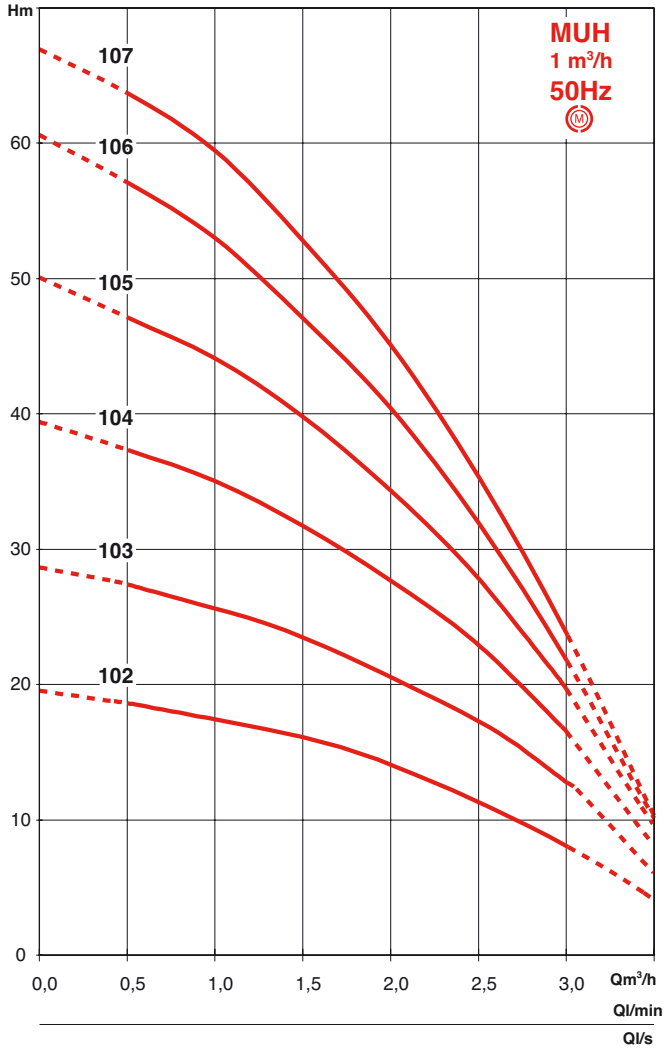
Version index _____

SECTIONAL DRAWING

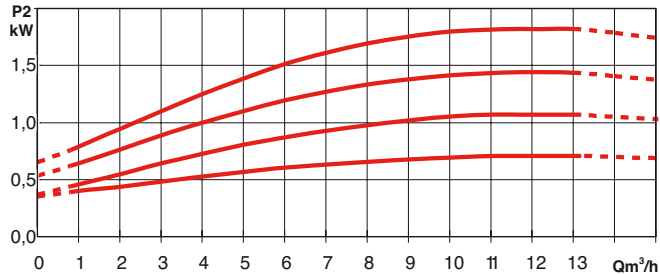
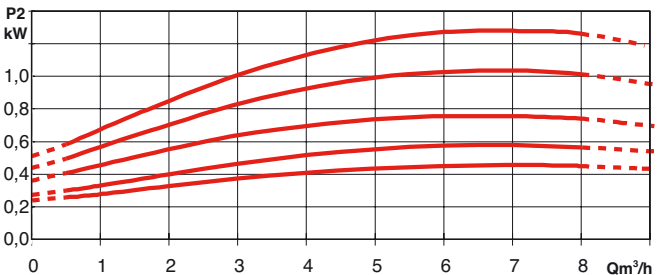
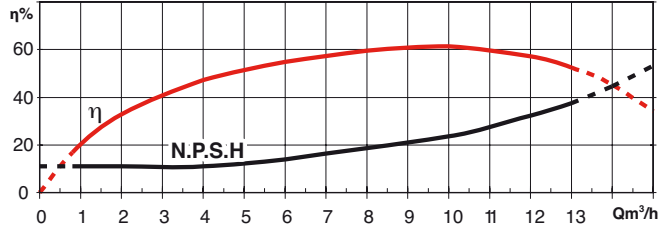
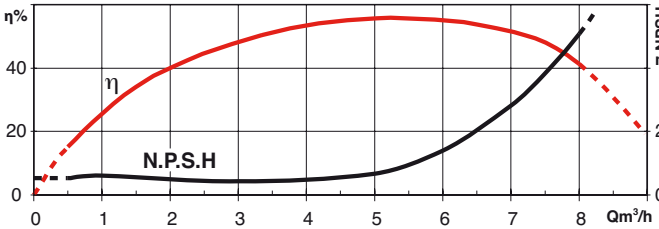
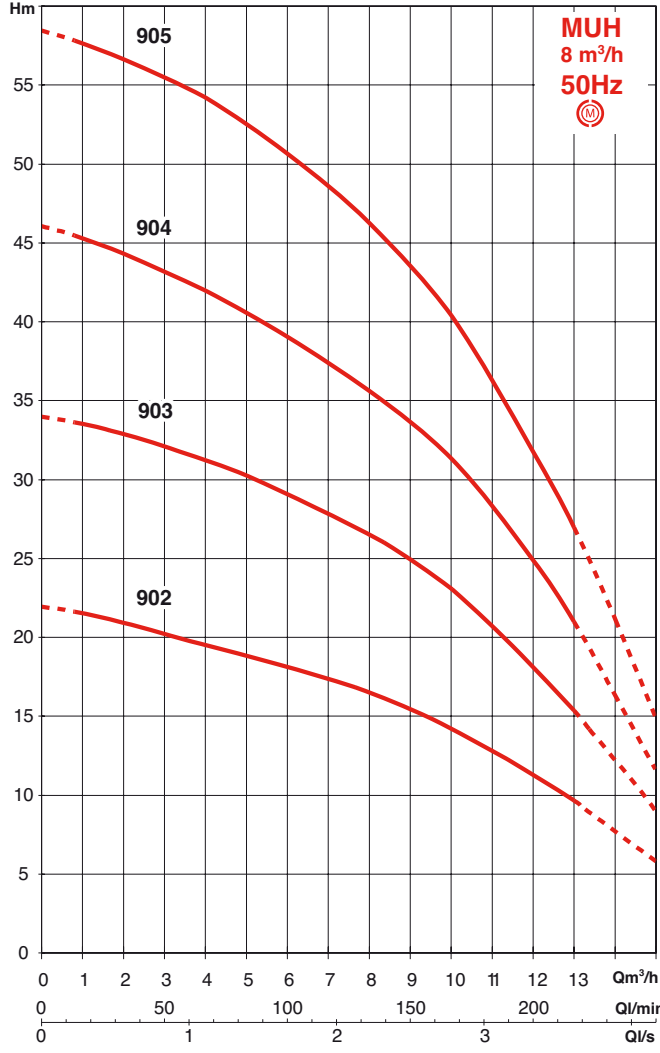
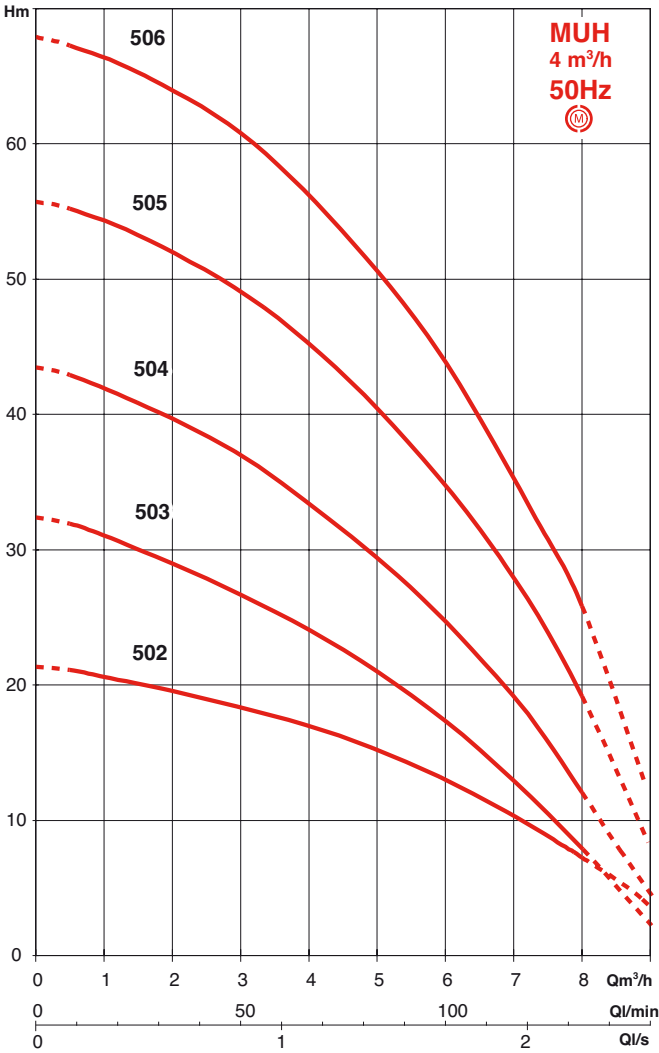


MUH

HYDRAULIC PERFORMANCE - 100 AND 300 SERIES

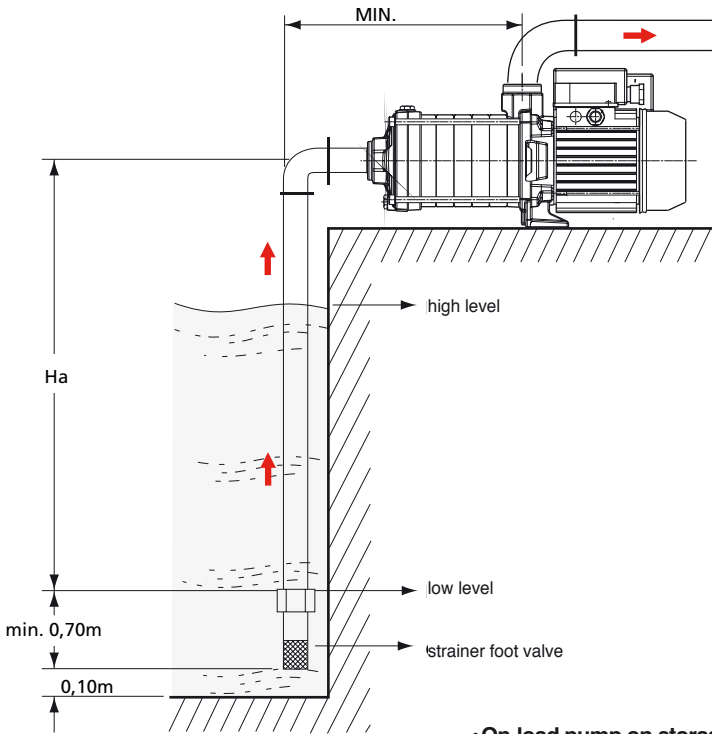


HYDRAULIC PERFORMANCE - 500 AND 900 SERIES



SECTIONAL VIEW OF THE INSTALLATION

• Suction pump

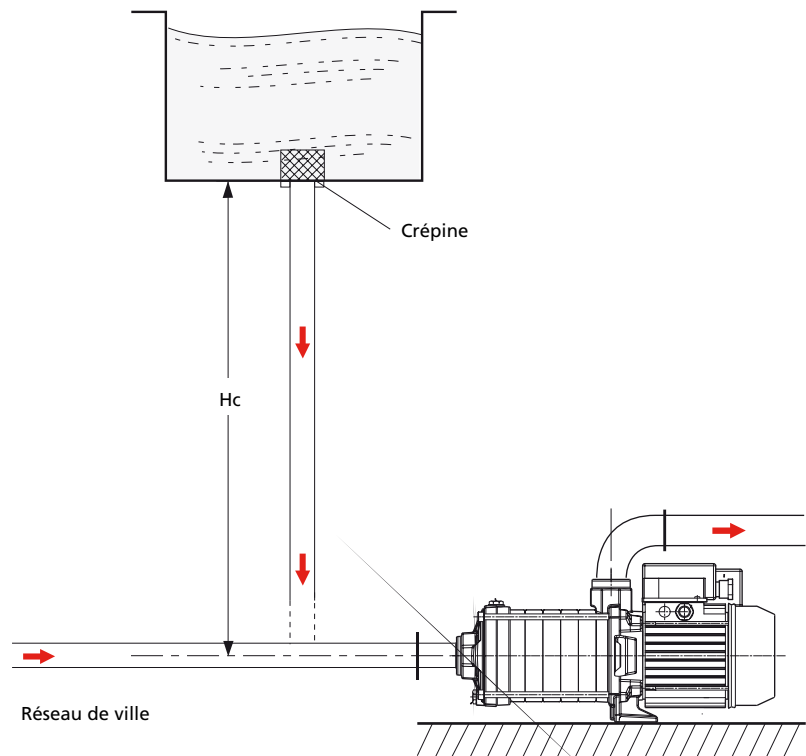


Suction pump Max. suction head (H_a) and minimum pump head (H_c) at nominal pump flow rate

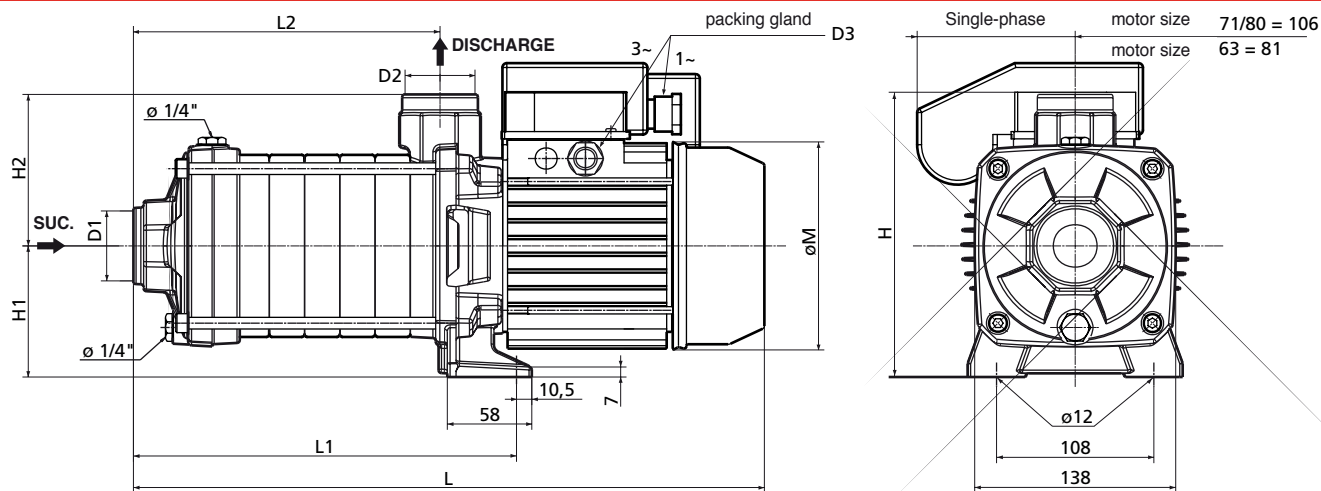
Fluid temperature	MUH 100		MUH 300/500/900	
	H_a mCL	H_c mCL	H_a mCL	H_c mCL
+ 20°C	7	---	7	---
+ 50°C	6	---	6	---
+ 80°C	2,2	---	3	---
+ 90°C	---	8,1	---	7

These values do not take into account pressure loss in the suction pipe

• On-load pump on storage tank or town water network (with dry running protection kit)



ELECTRICAL DATA AND DIMENSIONS



~	Hz	V	V	A	A	P2	capaci- tor	H	H1	H2	L	L1	L2	M	D1	D2	D3	Weight	
				1x230V- 3xΔ230	3xY400	kW	μF	mm	mm	mm	mm	mm	mm	mm			mm	kg	
MUH102-E-M	1	50	230	-	4	-	0,55	12	190	90	104	321	156	103	126	1"	1"	11	12,1
MUH103-E-M	1	50	230	-	4	-	0,55	12	190	90	104	341	176	123	126	1"	1"	11	12,7
MUH104-E-M	1	50	230	-	4	-	0,55	12	190	90	104	362	197	143	126	1"	1"	11	13,3
MUH105-E-M	1	50	230	-	4	-	0,55	12	190	90	104	382	217	163	126	1"	1"	11	13,9
MUH106-E-M	1	50	230	-	4	-	0,55	12	190	90	104	402	237	184	126	1"	1"	11	14,5
MUH107-E-M	1	50	230	-	4	-	0,55	12	190	90	104	422	257	204	126	1"	1"	11	15,1
MUH302-E-M	1	50	230	-	4	-	0,55	12	190	90	104	332	167	114	126	1"	1"	11	12,3
MUH303-E-M	1	50	230	-	4	-	0,55	12	190	90	104	356	191	138	126	1"	1"	11	13
MUH304-E-M	1	50	230	-	4	-	0,55	12	190	90	104	381	216	162	126	1"	1"	11	14
MUH305-E-M	1	50	230	-	5,1	-	0,75	16	216	90	104	409	240	186	145	1"	1"	13,5	18
MUH306-E-M	1	50	230	-	7,2	-	1,1	30	224	90	104	458	264	211	162	1"	1"	13,5	21
MUH502-E-M	1	50	230	-	4	-	0,55	12	190	90	104	332	167	114	126	1 ^{1/4} "	1"	11	12,3
MUH503-E-M	1	50	230	-	4	-	0,55	12	190	90	104	356	191	138	126	1 ^{1/4} "	1"	11	13
MUH504-E-M	1	50	230	-	5,1	-	0,75	16	216	90	104	394	216	162	145	1 ^{1/4} "	1"	13,5	19
MUH505-E-M	1	50	230	-	7,2	-	1,1	30	224	90	104	434	240	186	162	1 ^{1/4} "	1"	13,5	18,2
MUH506-E-M	1	50	230	-	9,2	-	1,5	40	224	90	104	458	264	211	162	1 ^{1/4} "	1"	13,5	22
MUH902-E-M	1	50	230	-	5,1	-	0,75	16	216	90	104	342	173	120	145	1 ^{1/2} "	1 ^{1/4} "	13,5	17
MUH903-E-M	1	50	230	-	7,2	-	1,1	30	224	90	104	397	203	150	162	1 ^{1/2} "	1 ^{1/4} "	13,5	16,1
MUH904-E-M	1	50	230	-	9,2	-	1,5	40	224	90	104	429	234	180	162	1 ^{1/2} "	1 ^{1/4} "	13,5	18,2
MUH102-E-T	3	50	Δ230	Y400	3	1,7	0,55	-	190	90	104	321	156	103	126	1"	1"	11	12,1
MUH103-E-T	3	50	Δ230	Y400	3	1,7	0,55	-	190	90	104	341	176	123	126	1"	1"	11	12,7
MUH104-E-T	3	50	Δ230	Y400	3	1,7	0,55	-	190	90	104	362	197	143	126	1"	1"	11	13,3
MUH105-E-T	3	50	Δ230	Y400	3	1,7	0,55	-	190	90	104	382	217	163	126	1"	1"	11	13,9
MUH106-E-T	3	50	Δ230	Y400	3	1,7	0,55	-	190	90	104	402	237	184	126	1"	1"	11	15,5
MUH107-E-T	3	50	Δ230	Y400	3	1,7	0,55	-	190	90	104	422	257	204	126	1"	1"	11	15,1
MUH302-E-T	3	50	Δ230	Y400	3	1,7	0,55	-	190	90	104	332	167	114	126	1"	1"	11	12,3
MUH303-E-T	3	50	Δ230	Y400	3	1,7	0,55	-	190	90	104	356	191	138	126	1"	1"	11	13
MUH304-E-T	3	50	Δ230	Y400	3	1,7	0,55	-	190	90	104	381	216	162	126	1"	1"	11	14
MUH305-E-T	3	50	Δ230	Y400	3,6	2,1	0,75	-	192	90	104	409	240	186	145	1"	1"	11	19,3
MUH306-E-T	3	50	Δ230	Y400	5,3	3,1	1,1	-	192	90	104	433	264	211	145	1"	1"	11	19,5
MUH502-E-T	3	50	Δ230	Y400	3	1,7	0,55	-	190	90	104	332	167	114	126	1 ^{1/4} "	1"	11	12,3
MUH503-E-T	3	50	Δ230	Y400	3	1,7	0,55	-	190	90	104	356	191	138	126	1 ^{1/4} "	1"	11	13
MUH504-E-T	3	50	Δ230	Y400	3,6	2,1	0,75	-	192	90	104	394	216	162	145	1 ^{1/4} "	1"	11	19
MUH505-E-T	3	50	Δ230	Y400	5,3	3,1	1,1	-	192	90	104	409	240	186	145	1 ^{1/4} "	1"	11	19,4
MUH506-E-T	3	50	Δ230	Y400	6,6	3,8	1,5	-	206	90	104	458	264	211	162	1 ^{1/4} "	1"	13,5	19,2
MUH902-E-T	3	50	Δ230	Y400	3,6	2,1	0,75	-	192	90	104	342	173	120	145	1 ^{1/2} "	1 ^{1/4} "	11	15
MUH903-E-T	3	50	Δ230	Y400	5,3	3,1	1,1	-	192	90	104	373	203	150	145	1 ^{1/2} "	1 ^{1/4} "	11	18,1
MUH904-E-T	3	50	Δ230	Y400	6,6	3,8	1,5	-	206	90	104	429	234	180	162	1 ^{1/2} "	1 ^{1/4} "	13,5	18,2
MUH905-E-T	3	50	Δ230	Y400	8,55	4,95	1,85	-	206	90	104	459	264	210	162	1 ^{1/2} "	1 ^{1/4} "	13,5	22

ACCESSORIES

• ACSO: ON/OFF control device and protection against lack of water



• Shut-off valve



• Strainer foot valve



• Three-phase motor protection overload cut-out



• Check valve



• Water hammer tank



• Bladder tank



• Anti-vibratory sleeves



FEATURES

a) Electrical

- "T" Types: Three-phase 230-400V 50Hz .
- "M" Types: Single-phase 230 V-50 Hz with capacitor integrated in terminal box.
- Motor protection by overload cut-out essential for three-phase motor.
- Connections to the motor terminal by packing gland.

b) Installation

- On the solid base with fixing by foundation bolts.
 - Suction pump assembly with compulsory strainer foot valve, or on-load pump on storage tank or on town water network with protection system against lack of water.
 - Pump connection through flexible or rigid piping.
- The pump should be installed in a place protected from direct sunlight, rain and frost.

c) Packaging

Pump supplied in cardboard packaging, without connection accessories.

d) Maintenance

Replacement of recommended spare parts (*) subject to wear and tear.

OPTIONS & ACCESSORIES

- Shut-off valves
- Check valves
- Strainer foot valve
- Anti-vibratory sleeves
- Suction kit
- Bladder or galvanized tanks
- Water hammer tanks
- Dry running protection kit
- ACSO: ON/OFF control device and protection against lack of water
- 3-phase overload cut-out motor protection, etc.