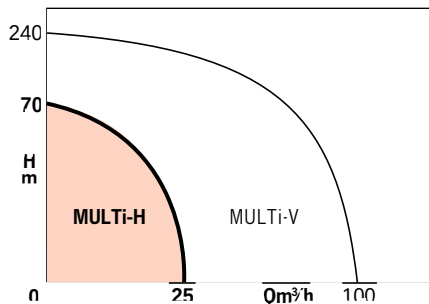


OPERATING LIMITS

Flow rates up to:	25 m ³ /h
Head up to:	70 m CE
Max. operating pressure:	10 bar
Max.suction pressure:	6 bar
Temperature range:	- 15° to + 110°C
Max. ambient temperature:	+ 40°C
ND of ports:	G1 1/4 to G2



• MULTI-H with single-phase motor

APPLICATIONS

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

- Conveyance - Overpressure
- Sprinkling - Irrigation
- Washing station
- Draining - Filling (ponds, pools, etc.)
- Heating - Air conditioning
- Water treatment (demineralization, filtering, etc.).

And incorporation in all modular systems. Catchment from a well, spring, river, pond, etc.

Pumped fluids:

- **304 range:** clear non-aggressive liquids (drinking water, glycol water, etc.).
- **316L range:** aggressive liquids (sea water, demineralized water, chlorinated water, etc.).



• MULTI-H with three-phase motor

MULTI-H

Motor Mob

ASESORANDO INDUSTRIAS

- Motores Eléctricos - Motorreductores
- Bombas Centrífugas y Autocebantes
- Bombas para Presurización y Calefacción
- Bombas para Desagote y Sumergibles
- Válvulas y Accesorios
- Bobinados - Reparaciones
- Sellos Mecánicos - Repuestos
- Ventilación Industrial
- Montajes Industriales

Tel.: (54-011) 4753-2348

Av. 101 (Ruta 8) N° 1882 - San Martín - Pcia. de Bs. As. - Argentina

PAGINA WEB: www.electromecanicamm.com.ar

E-MAIL: electromecanicamm@hotmail.com

MULTi-H

ADVANTAGES

- Monobloc pump, compact, economical and silent.
- Hydraulic assembly in stainless steel: anti-corrosive safety and increased pump service life.
- Motor rolling bearing fitted in the front endshield, amply dimensioned and leaktight.
- Suction rings between very thick cells-insensitive to thermal expansion, elimination of risks of seizing up.
- Maximum reliability - high efficiency due to impeller profile limiting the number of stages, shaft size and axial thrust.
- Standardized mechanical seals, +110°C maximum, maintenance free.
- Easy installation.

DESIGN

• Hydraulic part

ALL STAINLESS STEEL

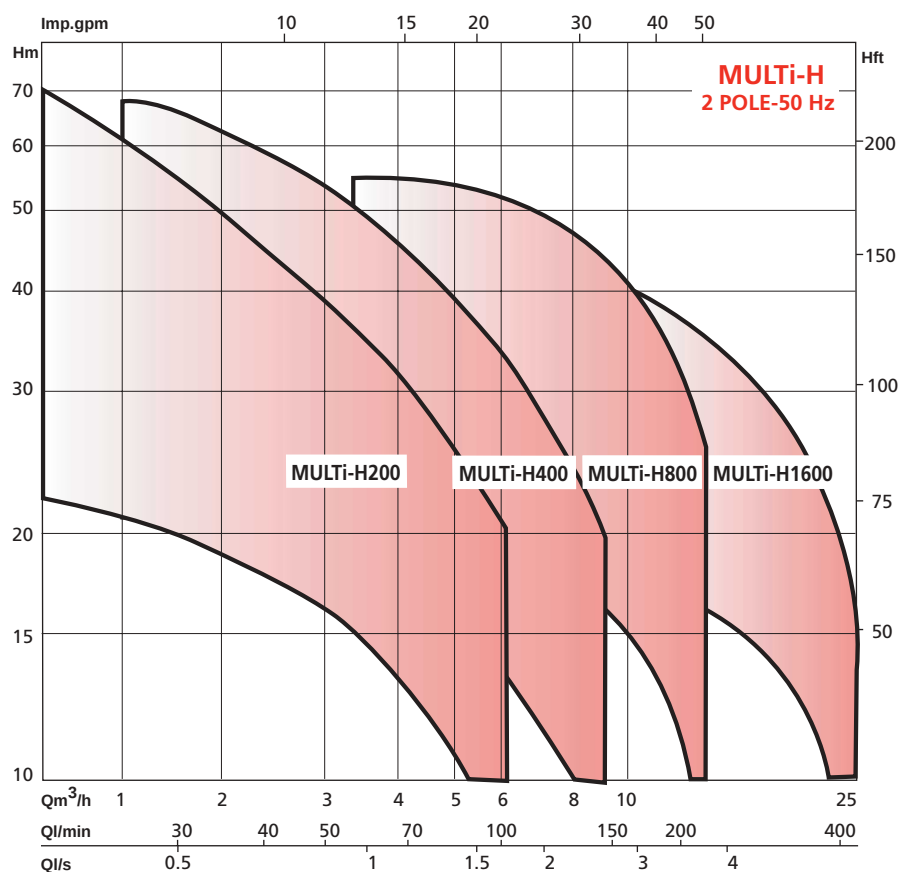
Horizontal, centrifugal, not self-priming.
Multi-stage from 2 to 6 stages.
Axial suction, vertical discharge upwards.
Impellers mounted directly on the motor shaft extension.
Shaft leaktightness by standardized mechanical seal.
Hydraulic assembly mounted at 8 points on a lantern bracket.

• Motor

Standard ventilated.
Extended shaft end.
Single-phase motor with integrated thermal protection, automatic reset.
Capacitor incorporated in the terminal box.
Guiding rolling bearings of the impeller shaft lubricated for life.

Speed of rotation : 2900 rpm
Windings three-phase : 230-400 V
Single-phase : 230 V
Frequency : 50 Hz (option 60 Hz)
Insulating class : F
Protection index : IP 54

HYDRAULIC PRESELECTION CHARTS



STANDARD CONSTRUCTION

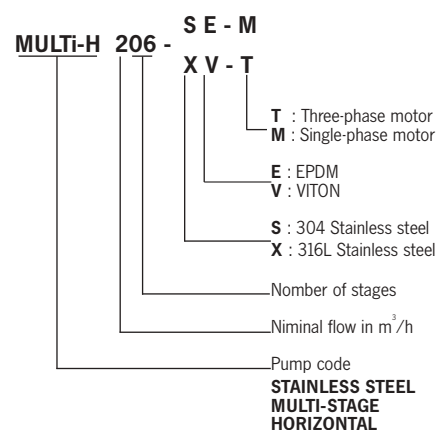
Main parts

	Materials	
	non-aggressive liquids	aggressive liquids
Body casing	304 st. steel	316L st. steel
Impellers	304 st. steel	316L st. steel
Cells (stage shell)	304 st. steel	316L st. steel
Pump shaft	316L st. steel	316L st. steel
Cell centring	304 st. steel	316L st. steel
Mechanical seal	Carbon/ Ceramic	Tungsten carbide/ Carbon
O'rings	EPDM Ethylene Propylene	VITON
Plugs	316L st. steel	316L st. steel
Fixing-support bearing	Aluminium	Aluminium

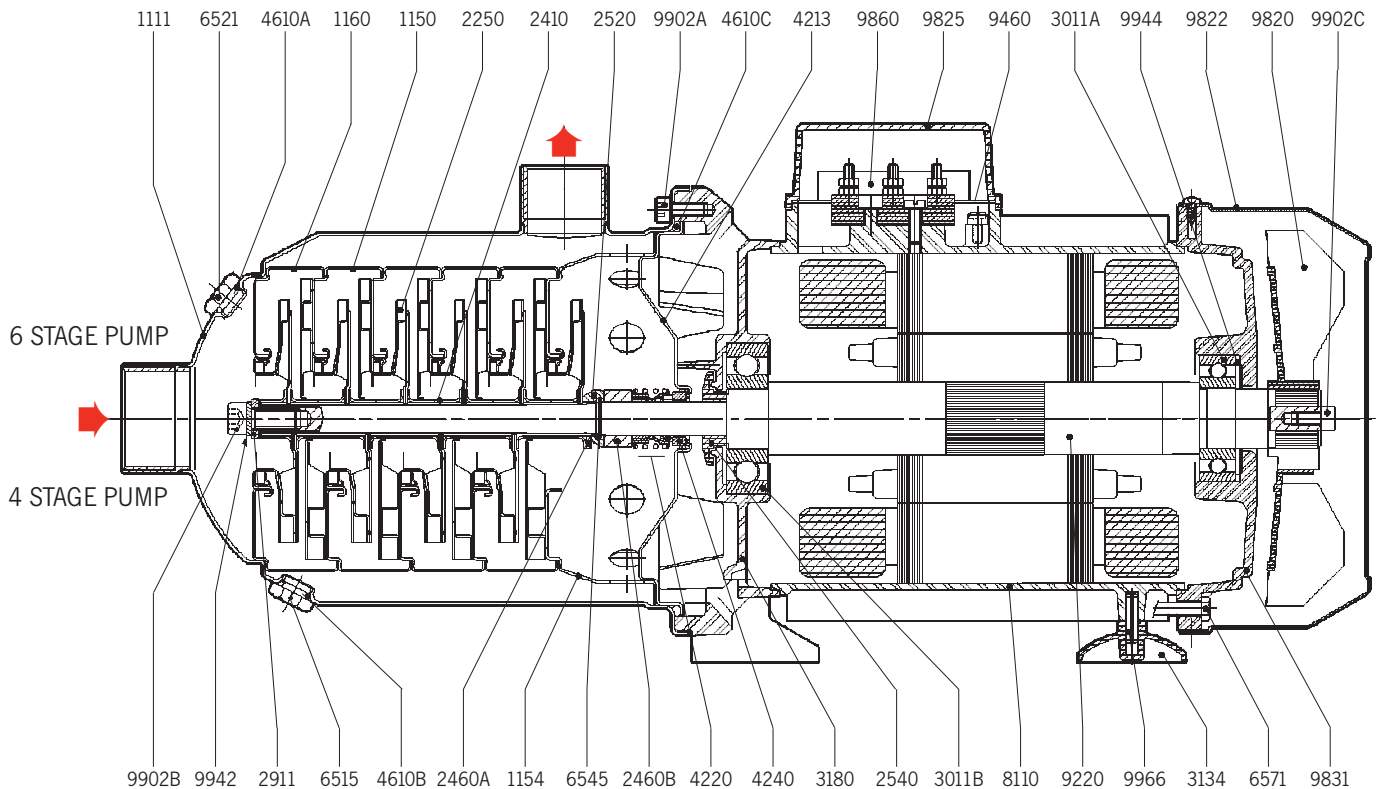
* Except MULTi-H1600 series

NB: 304 stainless steel (X5CrNi18-10) or **316L stainless steel** (X2CrNiMo17-12) recommended materials offering very considerable resistance to corrosion. Clean, clear, fibreless liquids conveyed and only slightly loaded in sand/silica (40g/m³ maximum concentration).

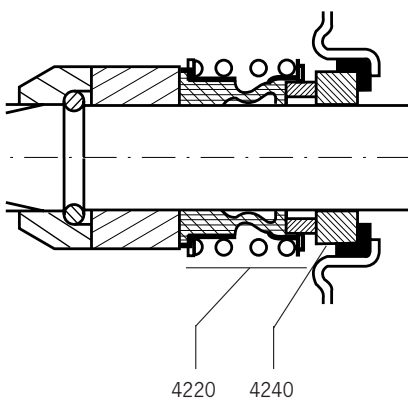
PUMP IDENTIFICATION



SECTION DRAWING



MECHANICAL SEAL



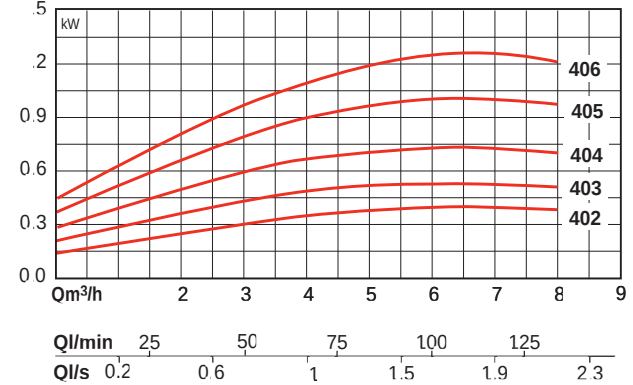
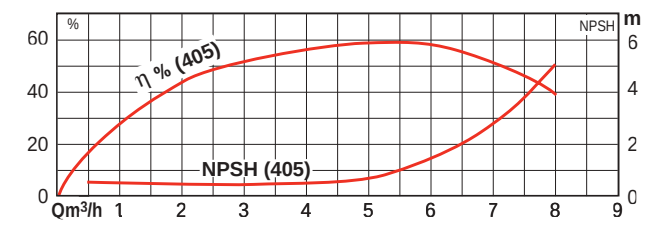
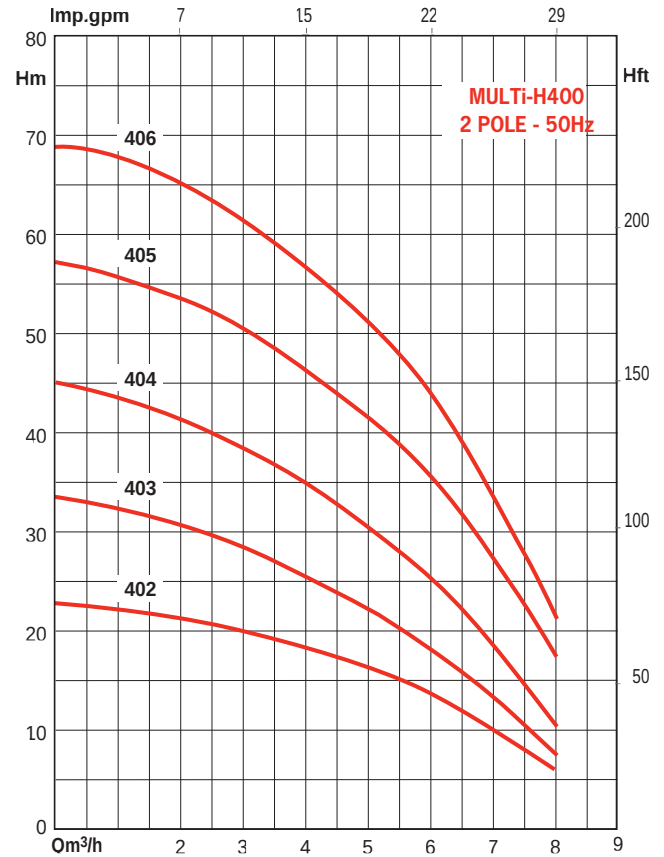
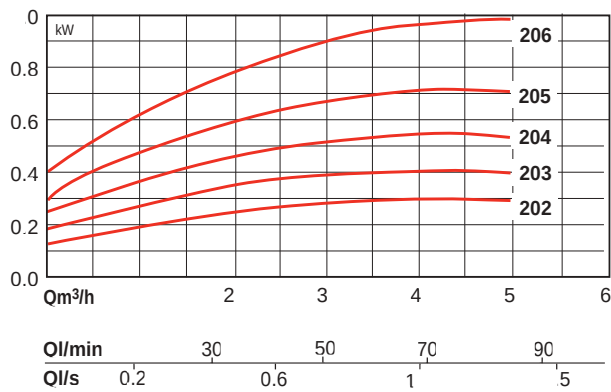
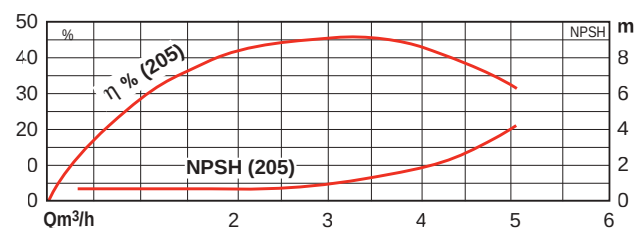
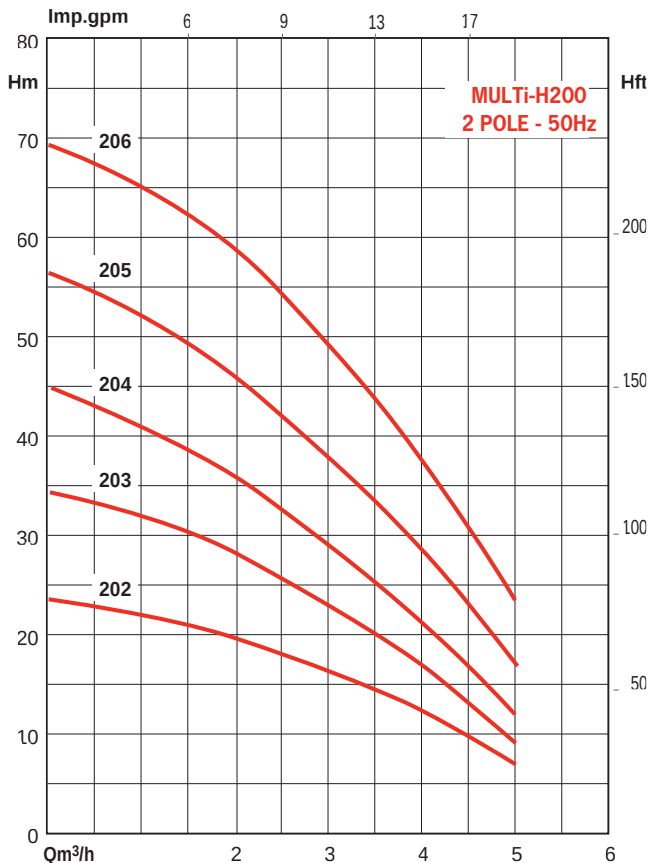
PARTS LIST

- | | |
|--|---------------------------------------|
| 1111 - Pump casing | 6515 - Draining cap |
| • 1150 - Stage casing with return vane | 6521 - Purging and filling cap |
| • 1154 - Stage centring | • 6545 - Circlip (back-up ring) |
| • 1160 - Stage casing without return vane | 6571 - Motor tie bolt |
| • 2250 - Impeller | • 8110 - Electric motor casing |
| 2410 - Impeller spacer | • 9220 - Impeller shaft |
| 2460 A - Impeller adjusting washer | • 9460 - Terminal cover seal |
| 2460 B - Mechanical seal tapered ring | • 9820 - Fan |
| 2520 - Impeller back-up ring | 9822 - Fan cover |
| 2540 - Thrower | • 9825 - Motor terminal cover |
| 2911 - Shaft end washer | • 9831 - Motor rear bearing |
| • 3011 A - Rolling bearing - fan side | • 9860 - Capacitor |
| • 3011 B - Rolling bearing - pump side | 9902 A - Lantern casing bracket screw |
| • 3134 - Motor support foot | 9902 B - Shaft end screw |
| 3180 - Lantern bracket | 9902 C - Cle aning screw |
| 4213 - Ring casing | 9942 - Fan-type washer |
| • 4220 - Rotating part } Mechanical | 9944 - Spring washer |
| • 4240 - Stationary part } seal | 9966 - Elastic pin |
| • 4610 A - Round section joint ring (filling cap) | |
| • 4610 B - Round section joint ring (draining cap) | |
| • 4610 C - Round section joint ring (lantern casing bracket) | |

(*) Recommended spare parts

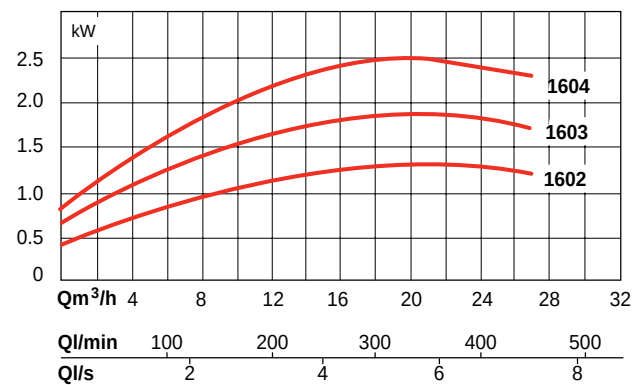
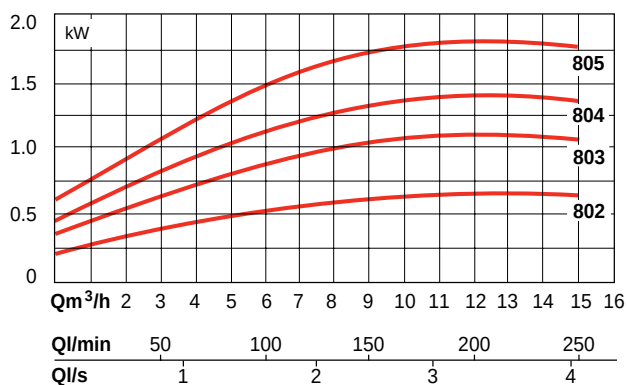
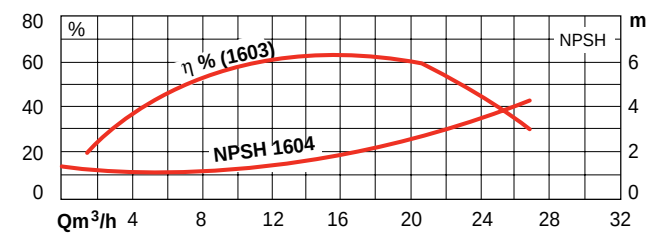
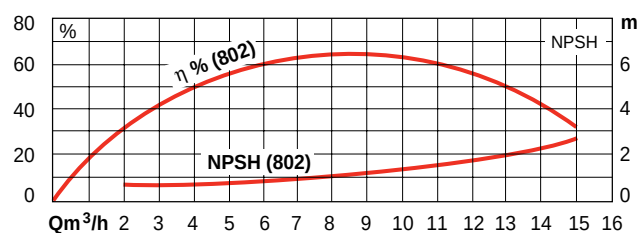
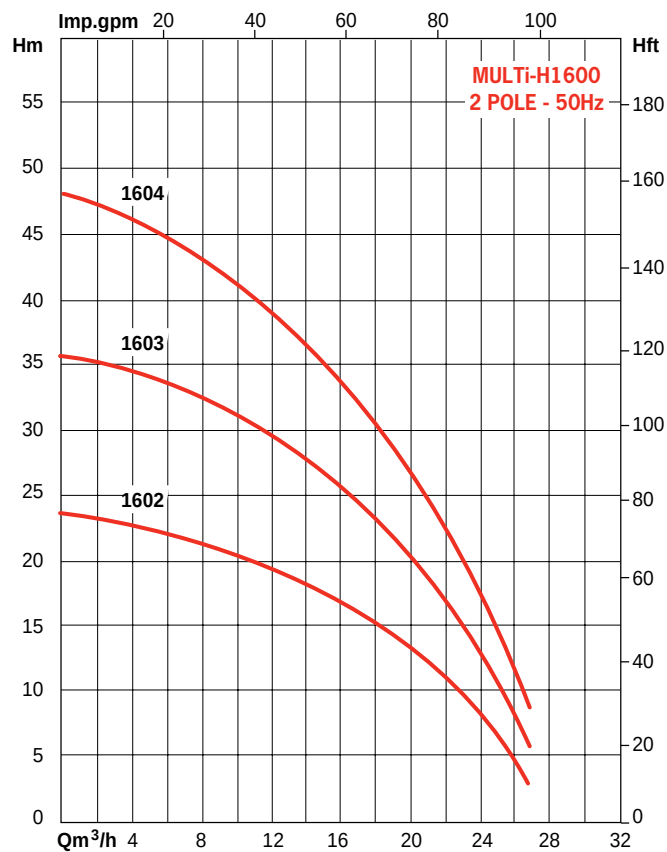
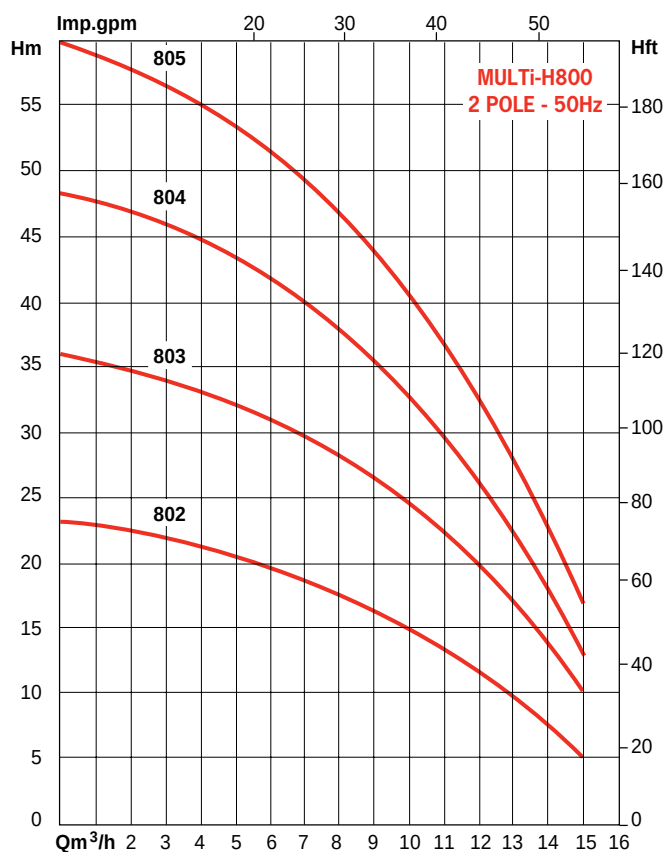
MULTi-H

HYDRAULIC PERFORMANCE – 200 AND 400 SERIES



Hydraulic performance at actual speed

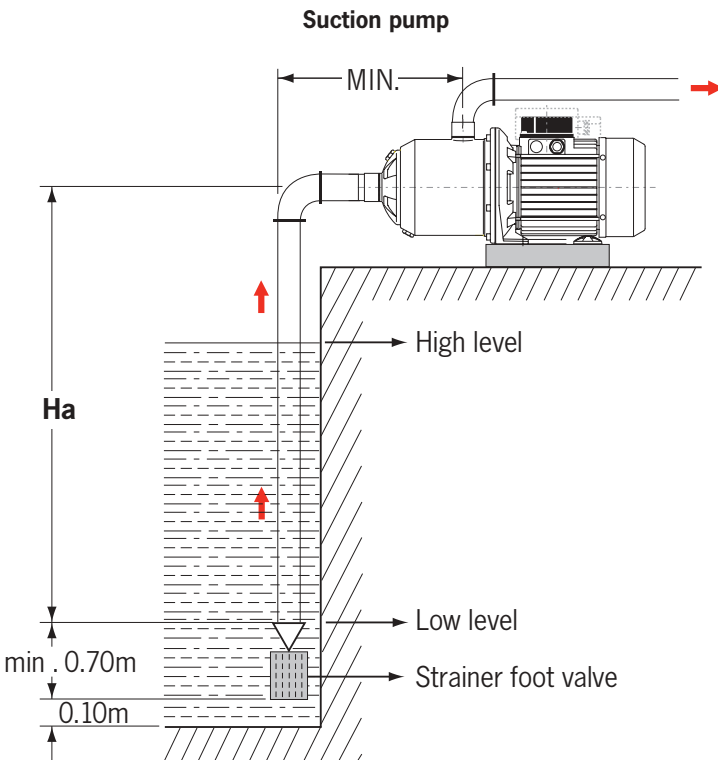
HYDRAULIC PERFORMANCE – 800 AND 1600 SERIES



Hydraulic performance at actual speed

MULTi-H

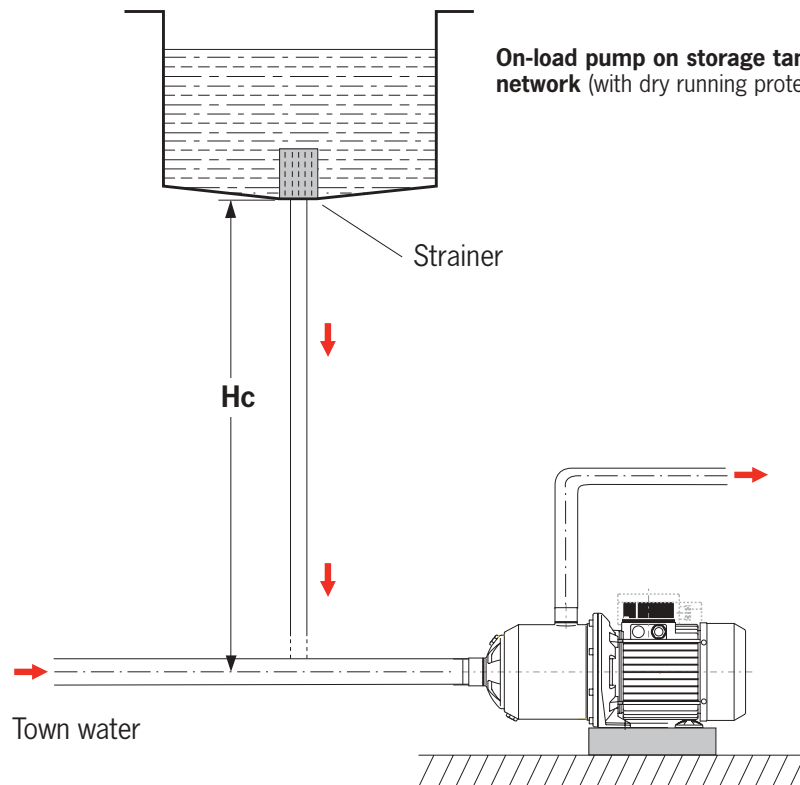
SECTIONAL VIEW OF THE INSTALLATION



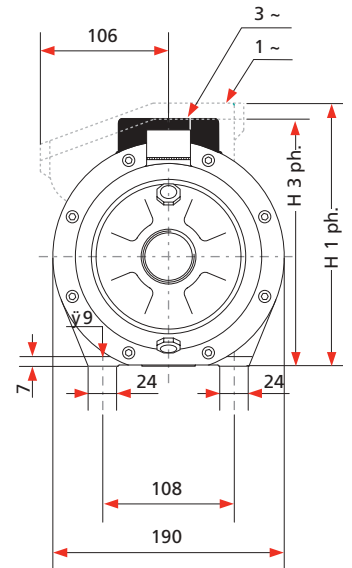
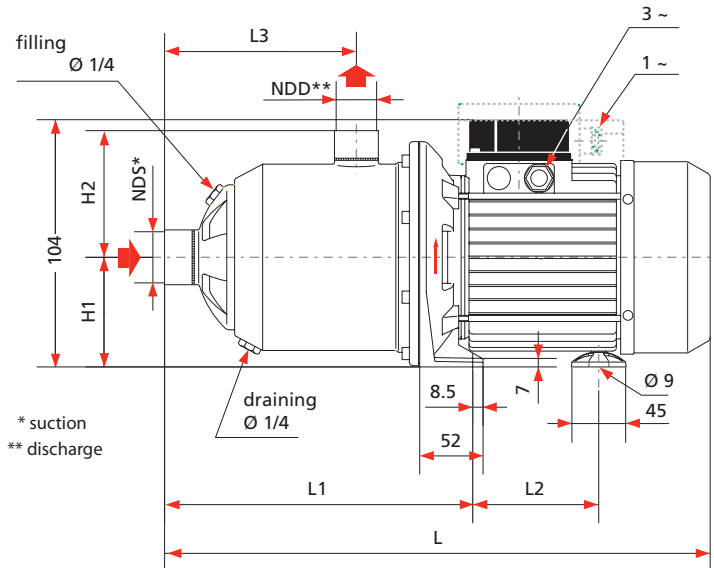
Maximum suction head (H_a) and minimum pump head (H_c) at nominal pump flow rate.

Fluid temperature	MULTI-H 200		MULTI-H 400/800/1600	
	Ha mCL	Hc mCL	Ha mCL	Hc mCL
+ 20°C	7	---	7	---
+ 50°C	6	---	6	---
+ 80°C	2.2	---	3	---
+ 110°C	---	8.1	---	7

These figures do not take into account load losses in the suction duct.



ELECTRICAL DATA AND DIMENSIONS



ORDER REFERENCE	P2 kW	MOTOR					Ports		L mm	H mm	PUMP H1 mm	L1 mm	L2 mm	L3 mm	Mass kg
		1x 230 V	3x 230 V	3x 400 V	Capacitor µF		suction NDA	discharge NDR							
MULTI-H202-M	0.55	3.8	2.8	1.6	12		G1	G1	375	216	90	205	88	110	09.8
MULTI-H202-T					-					192					08.9
MULTI-H203-M	0.55	3.8	2.8	1.6	12		G1	G1	375	216	90	205	88	110	09.8
MULTI-H203-T					-					192					08.9
MULTI-H204-M	0.55	3.8	2.8	1.6	12		G1	G1	423	216	90	253	88	158	10.6
MULTI-H204-T					-					192					09.7
MULTI-H205-M	0.75	4.8	3.1	1.8	16		G1	G1	423	216	90	253	88	158	12.2
MULTI-H205-T					-					192					11.3
MULTI-H206-M	1.10	6.3	4.5	2.6	30		G1	G1	472	224	90	277	104	182	15.7
MULTI-H206-T					-				447	192			88		12.9
MULTI-H402-M	0.55	3.8	2.8	1.6	12		G1 1/4	G1	375	216	90	205	88	110	09.8
MULTI-H402-T					-					192					08.9
MULTI-H403-M	0.55	3.8	2.8	1.6	16		G1 1/4	G1	375	216	90	205	88	110	10.7
MULTI-H403-T					-					192					09.8
MULTI-H404-M	0.75	4.8	3.1	1.8	16		G1 1/4	G1	423	216	90	253	88	158	12.2
MULTI-H404-T					-					192					11.3
MULTI-H405-M	1.10	6.3	4.5	2.6	20		G1 1/4	G1	448	224	90	253	104	158	15.2
MULTI-H405-T					-				423	192			83		12.9
MULTI-H406-M	1.50	9.5	6.1	3.5	30		G1 1/4	G1	472	224	90	277	104	182	17.8.0
MULTI-H406-T					-				472	206	90		104		15.2
MULTI-H802-M	0.75	4.8	3.1	1.8	16		G1 1/2	G1 1/4	387	216	90	217	88	122	15.8
MULTI-H802-T					-					192					10.6
MULTI-H803-M	1.10	6.3	4.5	2.6	20		G1 1/2	G1 1/4	412	224	90	217	104	122	14.5
MULTI-H803-T					-				387	192			88		12.2
MULTI-H804-M	1.50	9.5	6.1	3.5	40		G1 1/2	G1 1/4		224		277		182	16.0
MULTI-H804-T					-				472	206	90		104		15.8
MULTI-H805-T	1.85	-	8.0	4.6	-		G1 1/2	G1 1/4	472	206	90	277	104	182	17.0
MULTI-H1602-T	1.50	-	6.6	3.8	-		G2	G1 1/2	477	206	90	236	104	138	15.3
MULTI-H1603-T	1.85	-	8.55	4.95	-		G2	G1 1/2	477	206	90	236	104	138	17.16
MULTI-H1604-T	2.50	-	10.1	5.85	-		G2	G1 1/2	515	221	100	236	137	138	21.1

MULTi-H

ACCESSORIES



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



• Strainer foot valve



• Anti-vibratory sleeves



• Water hammer tank

• Three-phase motor protection overload cut-out



• Check valve



• Shut-off valve



• Bladder tank

FEATURES

a) Electrical

- **"T" types:** Three-phase 230-400 V - 50 Hz
- **"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 stuffing-box.

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.

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
- ME dry running protection kit
- ACSON: ON/OFF control device and protection against lack of water
- 3-phase overload cut-out motor protection, etc.