MXH 2,4,8,16

Horizontal Multi-Stage Close Coupled Pumps in stainless steel

Construction

Horizontal multi-stage close coupled pumps in **chrome-nickel stainless steel**.
Compact and robust construction, without protruding flange and with single-piece lantern bracket and base.
Single-piece barrel casing, with front suction port above pumps axis and radial delivery at top.
Filling and draining plugs on the middle of the pump, accessible from any side (like the terminal box).

Applications

For water supply.
For clean liquids, without abrasives, which are non-aggressive for stainless steel (with suitable seal materials, on request).
Universal pump, for domestic use, for civil and industrial applications, for garden use and irrigation.

Operating conditions

Liquid temperature from - 15 °C to + 110 °C.
Ambient temperature up to 40 °C.
Maximum permissible pressure in the pump casing: 8 bar.
Continuous duty.

Motor

2-pole induction motor, 50 Hz (n = 2800 rpm).
MXH: three-phase 230/400 V ± 10% up to 3 kW;
400/690 V ± 10% from 3,7 to 4 kW.
MXHM: single-phase 230 V ± 10%, with thermal protector.
Capacitor inside the terminal box.
Insulation class F.
Protection IP 54.
Classification scheme IE2 for three-phase motors from 0,75 kW.
Constructed in accordance with: EN 60034-1; EN 60034-30.
EN 60335-1, EN 60335-2-41.

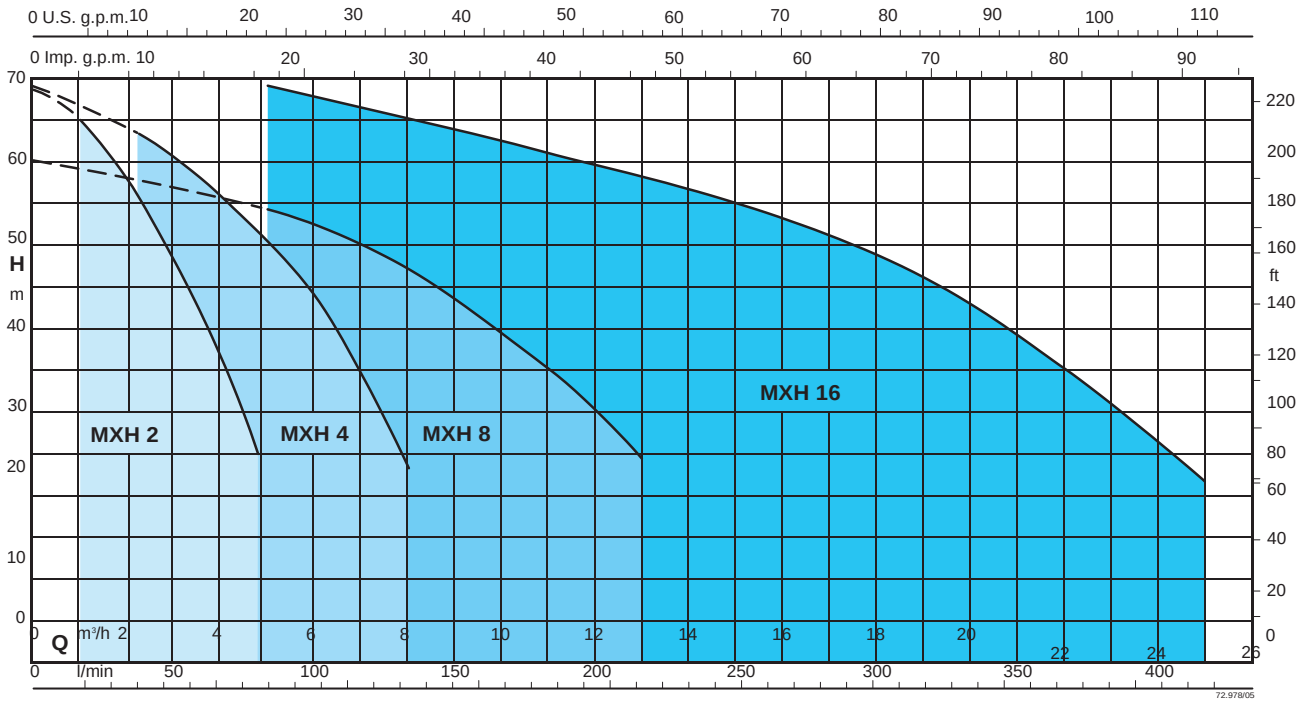
Materials

Component	Material
Pump casing	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Stage casing	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Wear ring	PTFE
Impeller	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Casing cover	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Spacer sleeve	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Pump shaft	Chrome-nickel steel 1.4305 EN 10088 (AISI 303)
Plug	Chrome-nickel steel 1.4305 EN 10088 (AISI 303)
Mechanical seal with seat according to ISO 3069	Ceramic alumina, carbon, EPDM (Other materials on request)

Special features on request

- Other voltages.
- Frequency 60 Hz (as per 60 Hz data sheet).
- Protection IP 55.
- Special mechanical seal
- Pump casing seal rings in FPM.
- Higher or lower liquid or ambient temperatures.

Coverage chart n ≈ 2800 rpm



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Horizontal Multi-Stage Close Coupled Pumps in stainless steel

calpeda®

Performance n ≈ 2800 rpm

3 ~	230 V	400 V	1 ~	230 V	P_1	P_2		Q m^3/h	0	1	1,5	2	2,5	3	3,5	4	4,25	4,8
	A	A		A	kW	kW	HP	l/min	0	16,6	25	33,3	41,6	50	58,3	66,6	70,8	80
MXH 202E	1,7	1	**MXHM 202E**	2,3	0,5	0,33	0,45	**H** m	22	20,5	19,4	18	16,4	14,2	12	9,9	8,7	5,5
MXH 203E	2,4	1,4	**MXHM 203E**	3	0,65	0,45	0,6		33	31	29	27	24,5	21,7	18,6	15,5	13,8	9
MXH 204/A	2,8	1,6	**MXHM 204/A**	4,2	0,9	0,55	0,75		45	42,5	40,4	37,5	34,5	30,8	26,7	22,4	20,1	14,8
MXH 205/A	3,5	2	**MXHM 205/A**	5,4	1,2	0,75	1		57	53,5	50,5	47,5	43,5	39	34	28,5	25,8	19
MXH 206/B	4,7	2,7	**MXHM 206**	7,4	1,5	1,1	1,5		68,5	65	61,5	58	53,5	48	43	36,5	33,5	25

3 ~	230 V	400 V	1 ~	230 V	P_1	P_2		Q m^3/h	0	2,25	3	3,5	4	4,5	5	6	7	8
	A	A		A	kW	kW	HP	l/min	0	37,5	50	58,3	66,6	75	83,3	100	116	133
MXH 402E	2,4	1,4	**MXHM 402E**	3	0,65	0,45	0,6	**H** m	22,5	20	19	18,5	17,5	16	15	12,5	9,5	6
MXH 403/A	2,8	1,6	**MXHM 403/A**	4,2	0,9	0,55	0,75		33	30	29	27,5	26	24,5	23	19,5	15	9,5
MXH 404/A	3,5	2	**MXHM 404/A**	5,4	1,2	0,75	1		44,5	40,5	38	36,5	35	33	31	26	20	12,5
MXH 405/B	4,7	2,7	**MXHM 405**	7,4	1,5	1,1	1,5		56,5	52	50	47,5	45,5	43	40	33,5	26	16,5
MXH 406	6,2	3,6	**MXHM 406**	9,2	2	1,5	2		68,5	63	60	58	56	53,5	51	44	35	23

3 ~	230 V	400 V	1 ~	230 V	P_1	P_2		Q m^3/h	0	5	6	7	8	9	10	11	12	13
	A	A		A	kW	kW	HP	l/min	0	83,3	100	116	133	150	166	183	200	216
MXH 802/A	3,5	2	**MXHM 802/A**	5,4	1,2	0,75	1	**H** m	22,5	20,5	20	19	18	16,5	15	13	11	8,5
MXH 803	5	2,9	**MXHM 803**	7,4	1,5	1,1	1,5		36	32	30,5	29	27,5	25,5	23	20	17	14
MXH 804	6,2	3,6	**MXHM 804**	9,2	2	1,5	2		48	42,5	41	39	37	34,5	32	28	24	19,5
MXH 805/A	7,5	4,3				1,8	2,5		60	54	52	49,5	47	43,5	39,5	35	29,5	24

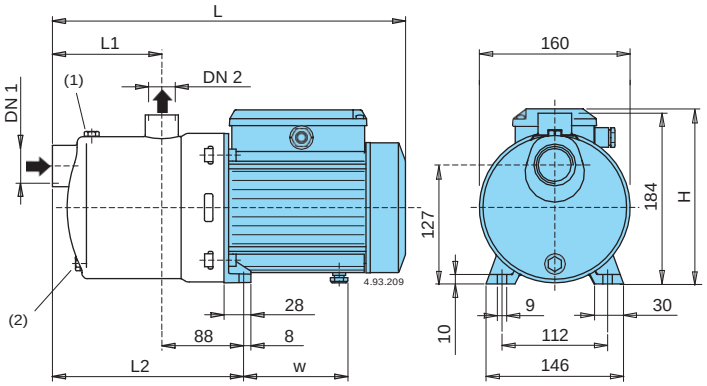
3 ~	230 V	400 V		P_2		Q m^3/h	0	5	8	11	14	16	18	20	22	25
	A	A		kW	HP	l/min	0	83,3	133	183	233	266	300	333	366	416
MXH 1602	6,2	3,6		1,5	2	**H** m	24	23	21,7	20,5	18,8	17,5	15,8	14	11,5	6,5
MXH 1603/A	7,5	4,3		1,8	2,5		36	34	31,8	29,5	26,8	24,8	22,4	19,2	15,3	8,8
MXH 1604/A	11,5	6,6		3	4		48	46,5	44,5	41,5	38	36	33	29	23	14
MXH 1605/A		9,6		3,7	5		60	57,5	55	51,5	48	45	42	37,5	31,5	19
MXH 1606/A		9,6		4	5,5		71	68	65	61	56	53	49	44	36	22

P_1 Max. power input.
P_2 Rated motor power output.

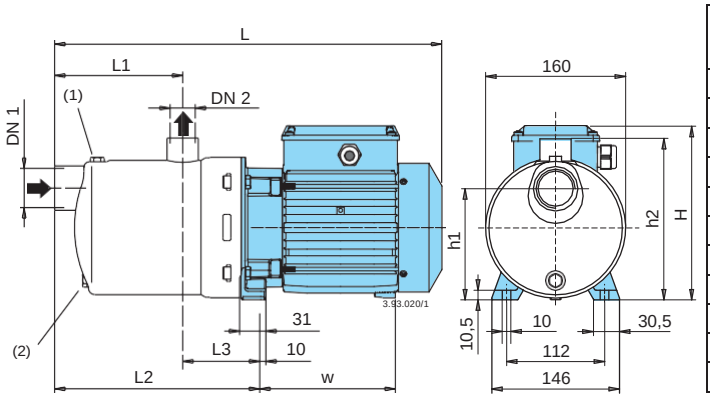
Test results with clean cold water, without gas content.
Tolerances according to ISO 9906, annex A.

+ 0,5 m security margin on NPSH-value is necessary.

Dimensions and weights



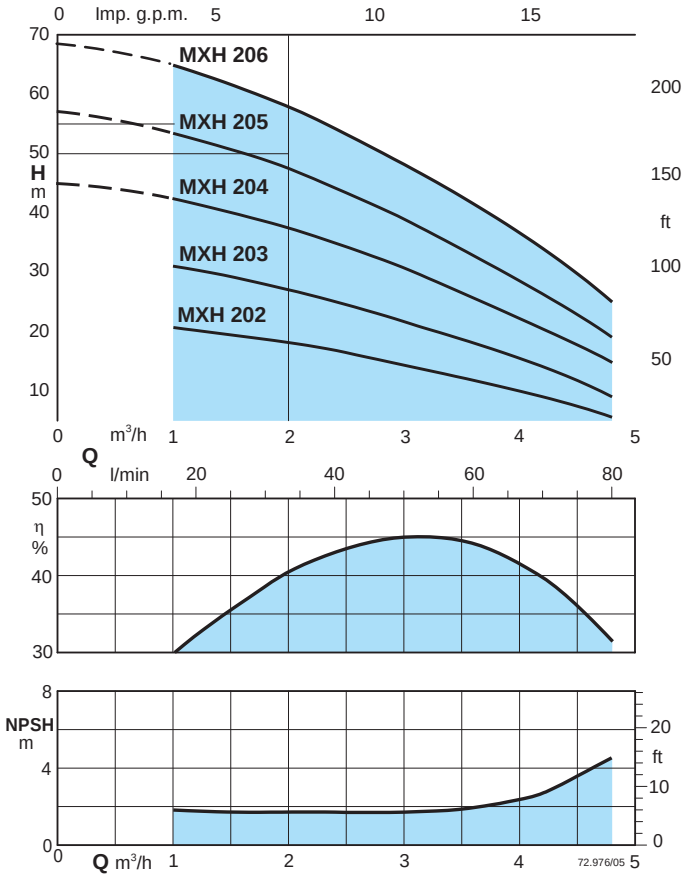
TYPE	DN1 DN2 ISO 228		mm						kg	
			L	L1	L2	H	w		MXH	MXHM
MXH 202E - MXHM 202E	G 1 1/4	G 1	331	94	182	176	98,5		6,8	6,9
MXH 203E - MXHM 203E	G 1 1/4	G 1	331	94	182	176	98,5		7,6	7,7
MXH 204/A - MXHM 204/A	G 1 1/4	G 1	381	118	206	193	112		10	11
MXH 205/A - MXHM 205/A	G 1 1/4	G 1	405	142	230	193	112		11,5	12,5
MXH 402E - MXHM 402E	G 1 1/4	G 1	331	94	182	176	98,5		7,6	7,7
MXH 403/A - MXHM 403/A	G 1 1/4	G 1	357	94	182	193	112		9,3	10,3
MXH 404/A - MXHM 404/A	G 1 1/4	G 1	381	118	206	193	112		10,8	11,8
MXH 802/A - MXHM 802/A	G 1 1/2	G 1	381	118	206	193	112		10,6	11,6

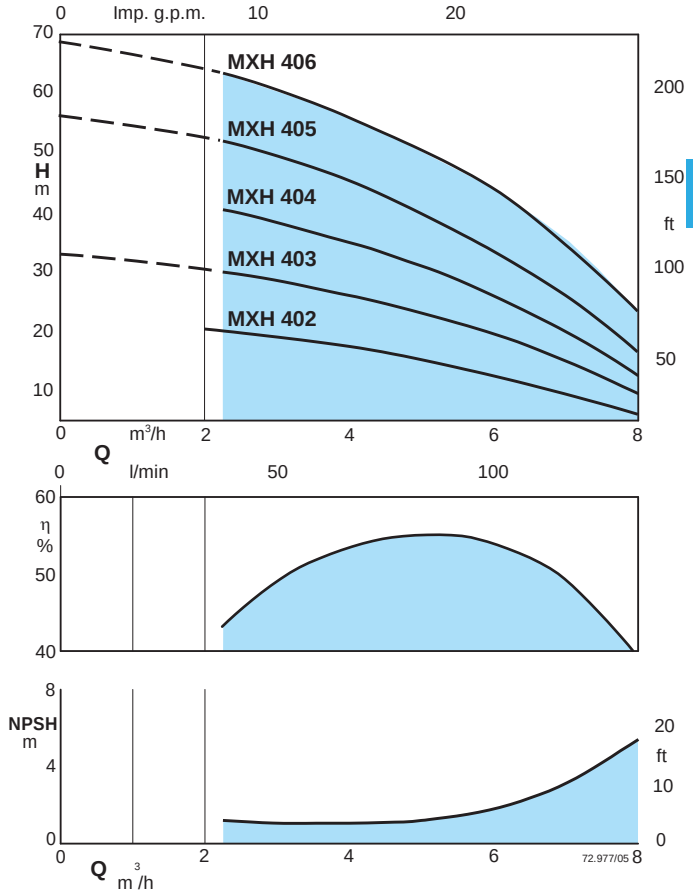


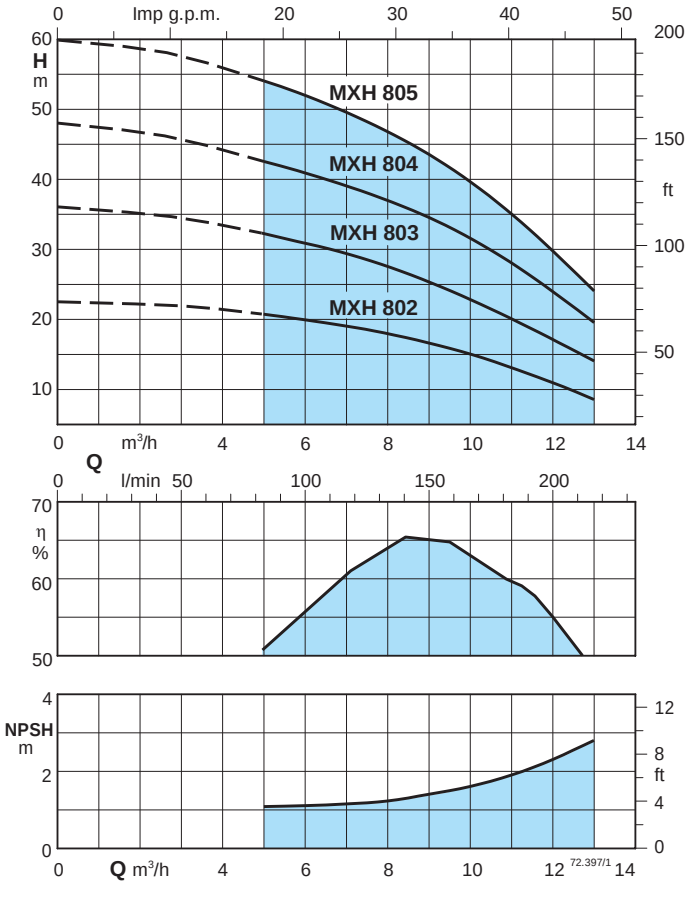
TYPE	DN1	DN2 ISO 228	mm								kg	
			L	L1	L2	L3	H	h1	h2	w	MXH	MXHM
MXH 206/B - MXHM 206	G 1 1/4	G 1	500	166	254	88	210	127	184	167	18,5	18,6
MXH 405/B - MXHM 405	G 1 1/4	G 1	476	142	230	88	210	127	184	167	18	18
MXH 406 - MXHM 406	G 1 1/4	G 1	500	166	254	88	210	127	184	167	19,5	20,5
MXH 803 - MXHM 803	G 1 1/2	G 1	452	118	206	88	210	127	184	167	15,8	16,9
MXH 804 - MXHM 804	G 1 1/2	G 1	482	148	236	88	210	127	184	167	18,2	19,2
MXH 805/A	G 1 1/2	G 1	552	178	266	88	210	127	184	207	21,4	-
MXH 1602	G 2	G 1 1/2	476	128	230	101	210	117	187	167	18,2	-
MXH 1603/A	G 2	G 1 1/2	516	128	230	101	210	117	187	207	20,8	-
MXH 1604/A	G 2	G 1 1/2	612	166	279	113	235	132	202	232	33,8	-
MXH 1605/A	G 2	G 1 1/2	650	203	316	113	235	132	202	232	35,5	-
MXH 1606/A	G 2	G 1 1/2	687	241	354	113	235	132	202	232	36,4	-

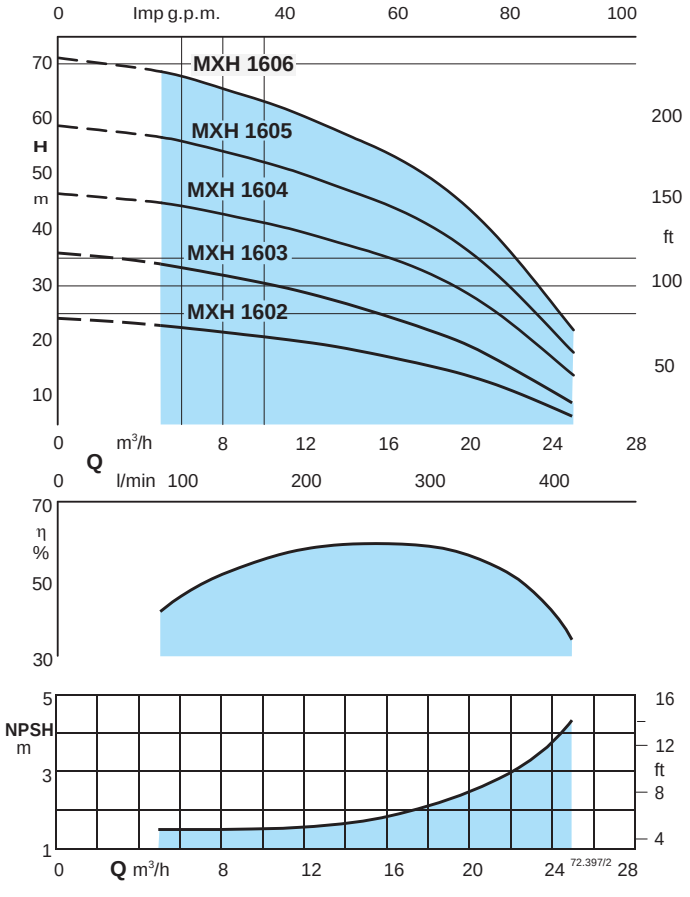
(1) Filling (2) Draining

Characteristic curves n ≈ 2800 rpm

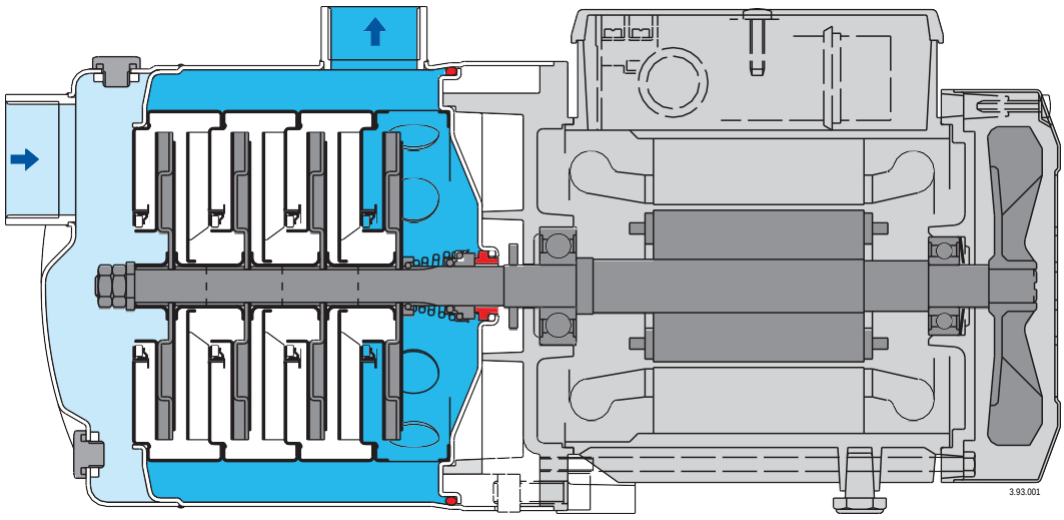








Features



Extra safety
against running dry, with the suction port above pump axis.

Reliable
All hydraulic parts in contact with the pumped liquid are of stainless steel.
For liquids from -15 °C to 110 °C.

Robust
Single-piece, thick barrel casing.

Compact
Single-piece lantern bracket and base.
Without protruding flange.

Greater protection
against leakage, with the pump casing cover separated from the motor shield.
Possibility of inspecting the seal through the side apertures between the two walls.
Greater protection against water entering the motor from outside provided by an extension of the pump casing around the lantern bracket.