



The electropumps MXV series comply with the European Regulation no. 547/2012.

MXV 25, 32, 40

All parts that come into contact with the liquid, including wet-end covers, are in chrome-nickel stainless steel AISI 304.

Materials (wetted parts)

Component	Material
Flange External jacket Suction casing Delivery casing Stage casing Impeller Lower cover Upper cover Spacer sleeve	Stainless Steel 1.4301 EN 10088 (AISI 304)
Pump shaft Plug	Stainless Steel 1.4305 EN 10088 (AISI 303)
Bearing sleeve Bearing in stage casing	Corrosion-resistant, cemented carbide Ceramic alumina
Mechanical seal ISO 3069 - KU	Hard metal/Carbon/EPDM.
Wear ring	PTFE
O-rings	NBR

Direction of rotation: **clockwise** as seen from the motor.

Variants (to be specified when ordering)

- Pump with threaded ports (G).
- Pump with flanged ports (F).
- Pump without motor.
- Pump with standard motor.

Other variants (on request)

- With counter-flanges in chrome-nickel steel.
- O-rings FPM. Other mechanical seal.
- Pump with motor of Client's choice (if available).
- Single-phase motor 230 V, up to 2.2 kW.
- 4-pole induction motor (MXV4 series).
- Other voltage ratings.
- Frequency 60 Hz.

Construction

Vertical multi-stage pumps with suction and delivery connections of the same diameter and arranged along the same axis (in-line). Corrosion-resistant bearing sleeves lubricated by the pumped liquid. A pump with thrust bearing and sleeve coupling for use of any standard motor with IM V1 construction.

Version with frequency converter (on request)

Applications

For water supply systems.
For clean non-explosive liquids, without solid, filamentary or abrasive matter (with adaptation of sealing materials on request).
A universal pump for civil and industrial use, for pressure-boosting systems, fire-extinguishing systems, high-pressure washing plants, irrigation, agricultural uses and sport installations.

Operating conditions

Temperature of liquid: from -15 °C to +110 °C.
Operating environment temperature: up to 40 °C.
Maximum permissible pressure in pump casing: 25 bar.

Motor

Standard-type: 2-pole induction motor, 50 Hz (n ≈ 2900 rpm).
Construction IM V1 (EN 60034-7).

Motor suitable for operation with frequency converter.

Classification scheme IE3 for three-phase motors.

Insulation class F.

Protection IP 55.

three-phase with rated voltage: up to 3 kW 230/400 V;
from 4 kW 400/690 V.

MXV 50, 65, 80, 100

Internal parts in contact with the liquid in chrome-nickel stainless steel, AISI 304 with pump casing and upper cover in cast iron.

Materials (wetted parts)

Component	Material
Pump casing Upper cover	Cast iron GJL 250 EN 1561
External jacket Stage casing Impeller Spacer sleeve	Stainless Steel 1.4301 EN 10088 (AISI 304)
Pump shaft Plug	Stainless Steel (AISI 303)(AISI 431 for MXV 100) Stainless Steel (AISI 303)(AISI 304 for MXV 100)
Bearing sleeve Bearing in stage casing	Corrosion-resistant, cemented carbide Ceramic alumina (Corrosion-resistant, cemented carbide for MXV 100)
Mechanical seal ISO 3069 - KU	Hard metal/Carbon/EPDM
Wear ring	PTFE
O-rings	NBR (EPDM for MXV 100)

Direction of rotation: **anticlockwise** as seen from the motor.
(**clockwise** as seen from the motor for MXV 100)

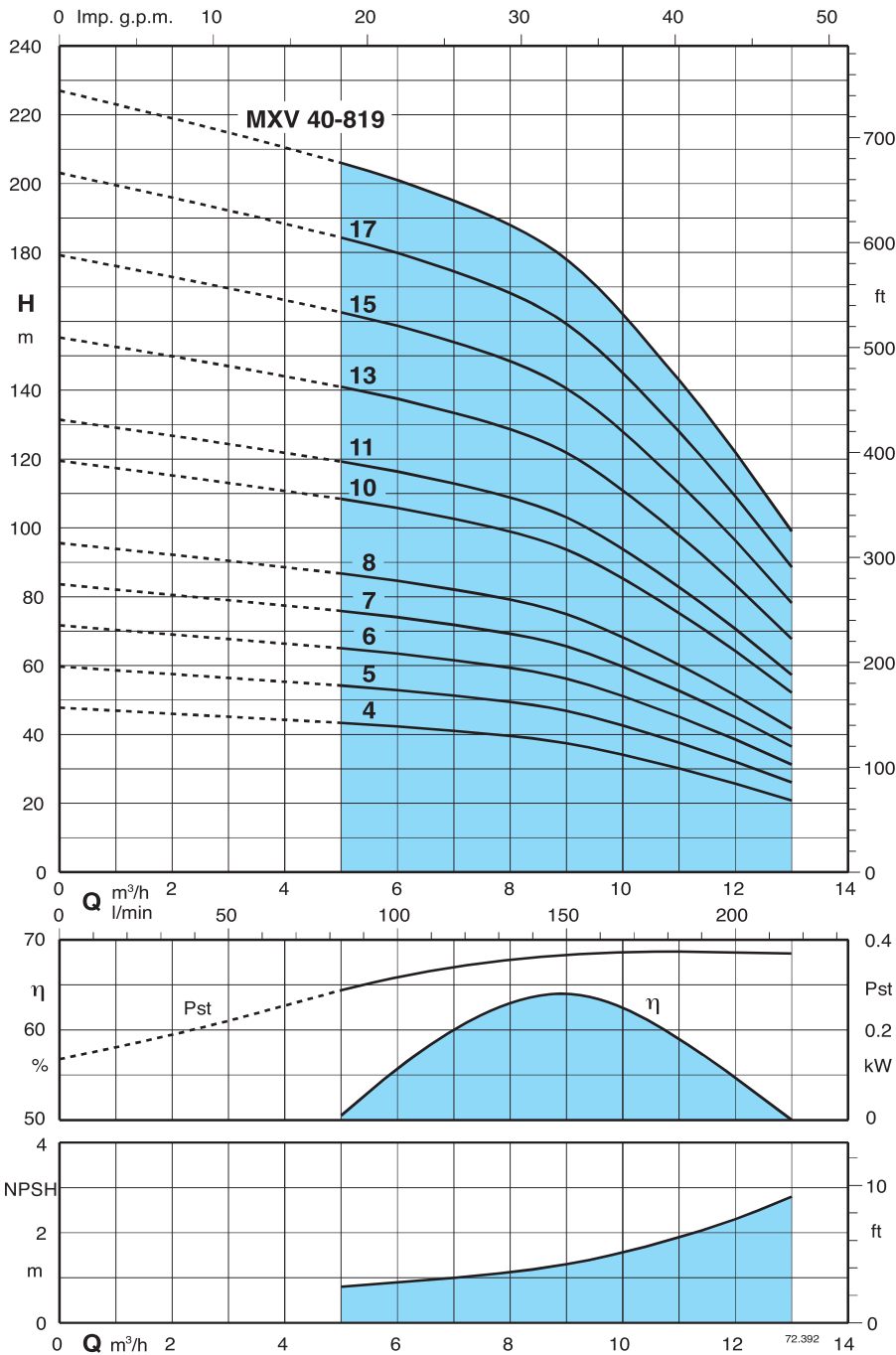
Variants (to be specified when ordering)

- Pump without motor.
- Pump with standard motor.

Other variants (on request)

- O-rings FPM. Other mechanical seal.
- Pump with motor of Client's choice (if available).
- Other voltage ratings.
- 4-pole induction motor (MXV4 series).
- Frequency 60 Hz.
- Pump with support feet for horizontal installation (H1 or H2).
- Support feet for horizontal installation, set.
- Welding counter-flanges, PN 25 (steel).

Characteristic curves and performance $n \approx 2900$ rpm



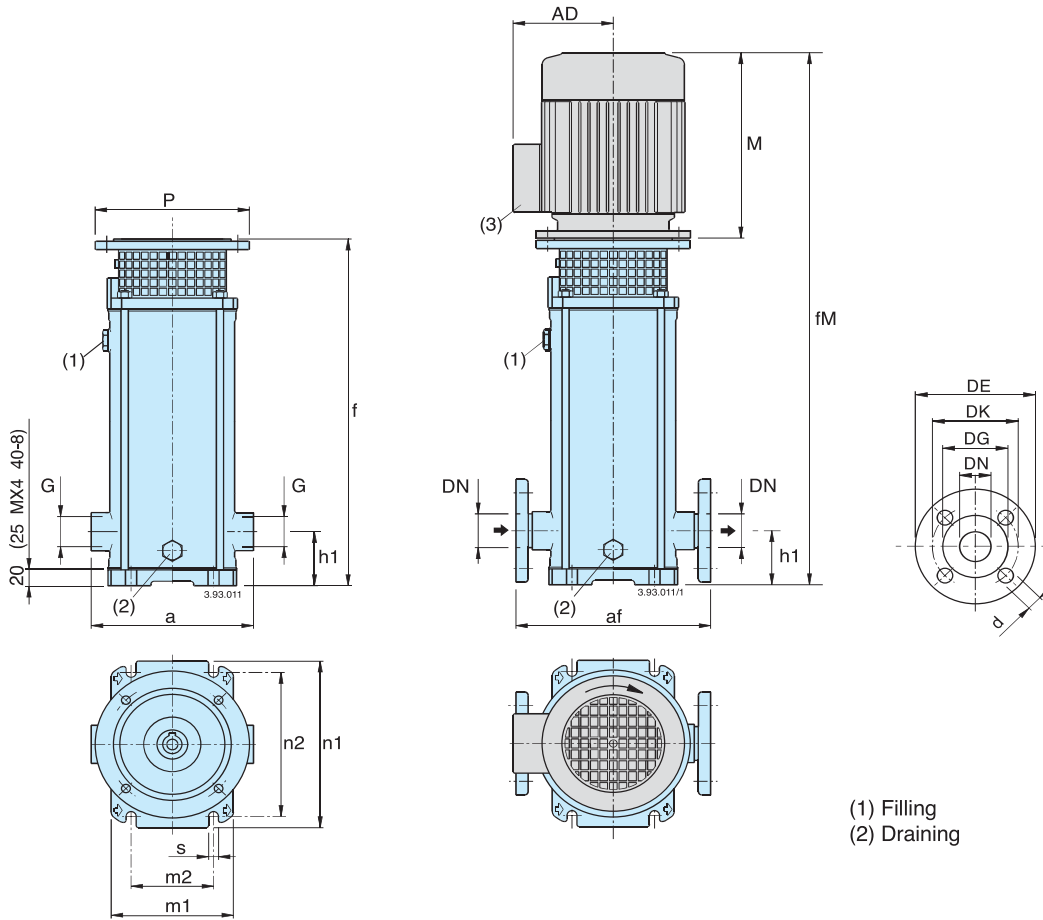
Test results with clean cold water, without gas content.
 A safety margin of + 0.5 m is recommended for the NPSH value.
 Tolerances in accordance with UNI EN ISO 9906:2012

Head and power values valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$.

Pst = Power with reference to one stage.
 A* Calpeda motor currents

Pump type	230 V		400 V		Motor power		Q m³/h l/min	0	5	6	7	8	9	10	11	12	13	
	A*	A*	kW	HP	kW	HP												
MXV 40-804/D	7,4	4,3	1,5	2	0	83,3	100	116,6	133,3	150	166,6	183,3	200	216,6				
MXV 40-805/D	9,2	5,3	2,2	3	47	43	42	41	40	37	34	30	26	21				
MXV 40-806/D	9,2	5,3	2,2	3	59	54	53	51	50	47	43	38	32	26				
MXV 40-807/C	11,4	6,6	3	4	71	65	63	62	59	56	51	45	39	31				
MXV 40-808/C	11,4	6,6	3	4	83	76	74	72	69	66	60	53	45	36				
MXV 40-810/D		9,6	4	5,5	95	87	85	82	79	75	69	60	51	42				
MXV 40-811/D		9,6	4	5,5	119	109	106	103	99	94	86	75	64	52				
MXV 40-813/C		10,9	5,5	7,5	131	119	116	113	109	103	94	83	71	57				
MXV 40-815/C		10,9	5,5	7,5	155	141	138	134	129	122	111	98	84	68				
MXV 40-817/C		14,3	7,5	10	179	163	159	154	149	141	128	113	96	78				
MXV 40-819/C		14,3	7,5	10	202	184	180	175	168	159	145	128	109	89				
					226	206	201	195	188	178	162	143	122	99				

Dimensions and weights



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Pump	Motor			MXV (G) threaded ports	MXV (F) flanged ports	mm													without motor MXV (G) (4) kg(6)	with motor (5) kg(6)		
						G ISO 228		DN	af	h1	f	(5) M	fM	P	(5) AD	n1	n2	m1			m2	s
						a	a															
MXV 25-204/C	0,75	1	M80 V1	G 1	215	25	250	75	372	255	627	200	127,5	210	180	150	100	12,5	18	30,2		
MXV 25-205/C	0,75	1	M80 V1	G 1	215	25	250	75	396	255	651	200	127,5	210	180	150	100	12,5	19	31,2		
MXV 25-206/D	1,1	1,5	M80 V1	G 1	215	25	250	75	420	255	675	200	127,5	210	180	150	100	12,5	20	33,3		
MXV 25-207/D	1,1	1,5	M80 V1	G 1	215	25	250	75	444	255	699	200	127,5	210	180	150	100	12,5	21	34,3		
MXV 25-208/D	1,5	2	M90 V1	G 1	215	25	250	75	478	255	733	200	127,5	210	180	150	100	12,5	22	37,2		
MXV 25-210/D	1,5	2	M90 V1	G 1	215	25	250	75	526	255	781	200	127,5	210	180	150	100	12,5	23	38,2		
MXV 25-212/D	2,2	3	M90 V1	G 1	215	25	250	75	574	295	869	200	127,5	210	180	150	100	12,5	25	43,1		
MXV 25-214/D	2,2	3	M90 V1	G 1	215	25	250	75	622	295	917	200	127,5	210	180	150	100	12,5	26	44,1		
MXV 25-216/C	3	4	M100 V1	G 1	215	25	250	75	680	311	991	250	137,5	210	180	150	100	12,5	29	54,6		
MXV 25-218/C	3	4	M100 V1	G 1	215	25	250	75	728	311	1039	250	137,5	210	180	150	100	12,5	31	56,6		
MXV 25-220/C	3	4	M100 V1	G 1	215	25	250	75	776	311	1087	250	137,5	210	180	150	100	12,5	32	57,6		
MXV 32-404/D	1,1	1,5	M80 V1	G 1 1/4	215	32	250	75	372	255	627	200	127,5	210	180	150	100	12,5	19	31,2		
MXV 32-405/D	1,1	1,5	M80 V1	G 1 1/4	215	32	250	75	396	255	651	200	127,5	210	180	150	100	12,5	20	32,2		
MXV 32-406/D	1,5	2	M90 V1	G 1 1/4	215	32	250	75	430	255	685	200	127,5	210	180	150	100	12,5	21	36,2		
MXV 32-407/D	1,5	2	M90 V1	G 1 1/4	215	32	250	75	454	255	709	200	127,5	210	180	150	100	12,5	22	37,2		
MXV 32-408/D	2,2	3	M90 V1	G 1 1/4	215	32	250	75	478	295	773	200	127,5	210	180	150	100	12,5	23	41,1		
MXV 32-410/D	2,2	3	M90 V1	G 1 1/4	215	32	250	75	526	295	821	200	127,5	210	180	150	100	12,5	24	42,1		
MXV 32-412/C	3	4	M100 V1	G 1 1/4	215	32	250	75	584	311	895	250	137,5	210	180	150	100	12,5	27	52,6		
MXV 32-414/C	3	4	M100 V1	G 1 1/4	215	32	250	75	632	311	943	250	137,5	210	180	150	100	12,5	29	54,6		
MXV 32-416/D	4	5,5	M112 V1	G 1 1/4	215	32	250	75	680	311	991	250	137,5	210	180	150	100	12,5	30	57,8		
MXV 32-418/D	4	5,5	M112 V1	G 1 1/4	215	32	250	75	728	311	1039	250	137,5	210	180	150	100	12,5	31	58,8		
MXV 40-804/D	1,5	2	M90 V1	G 1 1/2	225	40	280	80	411	255	666	200	127,5	246	215	190	130	14	21	36,2		
MXV 40-805/D	2,2	3	M90 V1	G 1 1/2	225	40	280	80	441	295	736	200	127,5	246	215	190	130	14	22	40,1		
MXV 40-806/D	2,2	3	M90 V1	G 1 1/2	225	40	280	80	471	295	766	200	127,5	246	215	190	130	14	23	41,1		
MXV 40-807/C	3	4	M100 V1	G 1 1/2	225	40	280	80	511	311	822	250	137,5	246	215	190	130	14	25	50,6		
MXV 40-808/C	3	4	M100 V1	G 1 1/2	225	40	280	80	541	311	852	250	137,5	246	215	190	130	14	26	51,6		
MXV 40-810/D	4	5,5	M112 V1	G 1 1/2	225	40	280	80	601	311	912	250	137,5	246	215	190	130	14	28	55,8		
MXV 40-811/D	4	5,5	M112 V1	G 1 1/2	225	40	280	80	631	311	942	250	137,5	246	215	190	130	14	29	56,8		
MXV 40-813/C	5,5	7,5	M132 V1	G 1 1/2	225	40	280	80	711	339	1050	300	159,5	246	215	190	130	14	35	77,3		
MXV 40-815/C	5,5	7,5	M132 V1	G 1 1/2	225	40	280	80	771	339	1110	300	159,5	246	215	190	130	14	36	78,3		
MXV 40-817/C	7,5	10	M132 V1	G 1 1/2	225	40	280	80	831	339	1170	300	159,5	246	215	190	130	14	38	85,7		
MXV 40-819/C	7,5	10	M132 V1	G 1 1/2	225	40	280	80	891	339	1230	300	159,5	246	215	190	130	14	39	86,7		

(3) Standard position of terminal box. (for other positions rotate motor through 90° or 180°) (4) MXV (F) = MXV (G) + 1kg (5) With standard motor (6) Net weight

Features

Long Service Life with Standard Motor

Pump with thrust bearing without additional axial loads on the motor bearings.

Any standard motor V1 design (suitable to be lifted in vertical position) can be used, of our choice or of Client's choice.

Easy Assembly of the Motor

With the single-piece sleeve coupling the pump unit can be supplied fully assembled also without the motor. This eliminates the risk of damage caused by shifting of the pump shaft during transportation. The motor is simply inserted in the coupling and fastened to the flange without the necessity for adapting the axial position of the pump shaft.

Extra Safety

Single-piece coupling guard to be removed only by means of a tool, positioned around the lantern bracket, thus avoiding accidental pushing and rubbing against the coupling.

Low Cost Installation

Vertical construction with reduced pump height for installation in small spaces.

In-line connections to simplify the piping layout with the possibility of inserting the pump in straight pipe-lines.

Disassembly, inspection or cleaning of internal parts without removal of piping.

Robust and Reliable

Single PN 25 construction for all pump sizes.

The suction and discharge nozzles arranged in-line absorb the forces of the piping on the pump without the creation of distorting loads causing local friction and early wears.

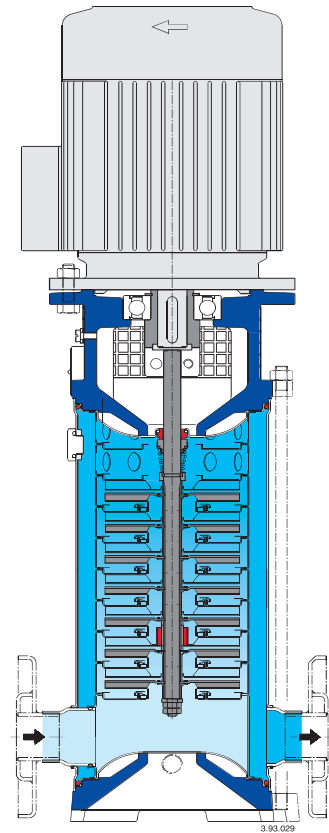
The lantern brackets compact and robust design maintains a sure alignment between rotating and fixed parts, reducing vibration.

The upper cover design prevents entrapment of air around the mechanical seal.

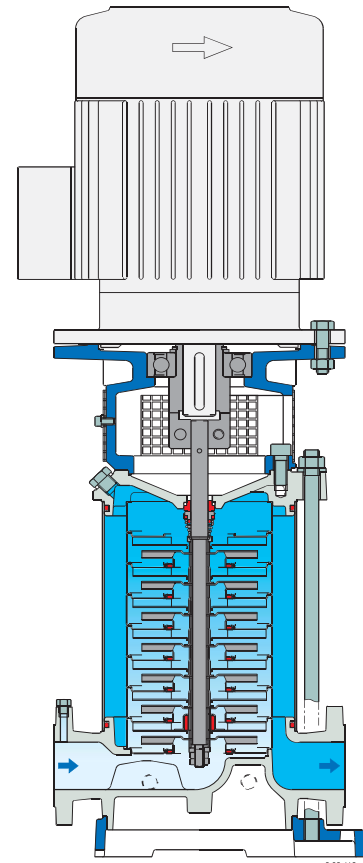
Low-Noise Operation

The water filled shroud around the stages and thick external walls, work together for low-noise operation.

Low-noise standard motor.



MXV 25-2, 32-4, 40-8



MXV 50-16, 65-32, 80-48