



### 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. Removal of the mechanical seal without dismantling the motor (for MXV 25-32-40-50,100 with motors exceeding 4 kW). 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, high-pressure washing plants, irrigation, agricultural uses and sport installations.

### Operating conditions

Temperature of liquid: from -15 °C to +110 °C (up to +120 °C for MXV 50).  
 Operating environment temperature: up to 40 °C.  
 Maximum permissible pressure in pump casing: 25 bar. (16 bar for pumps with oval flanges).  
 Continuous duty.

### 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.

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

## MXV 25, 32, 40, 50

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) (for MXV 50 AISI 304)
Bearing sleeve Bearing in stage casing	Corrosion-resistant, cemented carbide Ceramic alumina
Mechanical seal ISO 3069 - KU	Hard metal/Carbon/EPDM.
Wear ring	PPS (PTFE for MXV 40)
O-rings	NBR (EPDM for MXV 50)

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

### Variants (to be specified when ordering)

- Pump with flanged ports (F).
- Pump with oval flange ports (O) (for MXV 25,32,40,50).
- 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.
- Other voltage ratings.
- Frequency 60 Hz.

## MXV 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.
- 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).

### Pumps with frequency converter

The **MXV EI** pumps are available with power from 0,75 kW up to 22 kW, the pumps are equipped with **I-MAT** installed on board which allows to realize a variable-speed system extremely compact and efficient, ideal in applications of water supply and in the distribution of hot and cold water. The pump is equipped with transducers suitable for operation and is already programmed at the factory.

#### Advantages

- Energy saving
- Compact design
- Easy to use
- Programmable to suit the system requirements
- Reliability

#### Costruction

The system comprises of:

- Pump
- Induction motor
- I-MAT Frequency converter
- Motor adapter for the motor mounting of the frequency converter
- Connection cable between frequency converter and induction motor
- Transducers

#### Main features

- Rated motor power output from 0,75 kW to 22 kW
- Control range from 1750 to 2900 rpm (2-pole)
- Protection against dry running
- Protection against operations with closed connection ports
- Protection against system leakages
- Protection against overcurrent in the motor
- Protection against overvoltage and undervoltage of the power supply
- Protection against current unbalances between phases

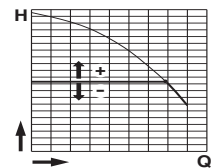


### Operating modes



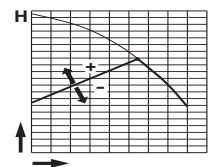
#### Mode at a constant pressure with pressure sensor

In this mode, the system maintains the preset pressure when the flow required by the installation changes.



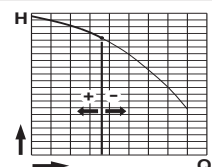
#### Proportional pressure mode with pressure sensor

In this mode the system changes the working pressure according to the required flow rate.



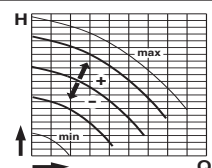
#### Constant flow mode with flow meter

In this mode the system maintains a constant flow rate value in a point of the installation according to the required pressure.



#### Fixed speed mode with setting of the speed preferential rotation.

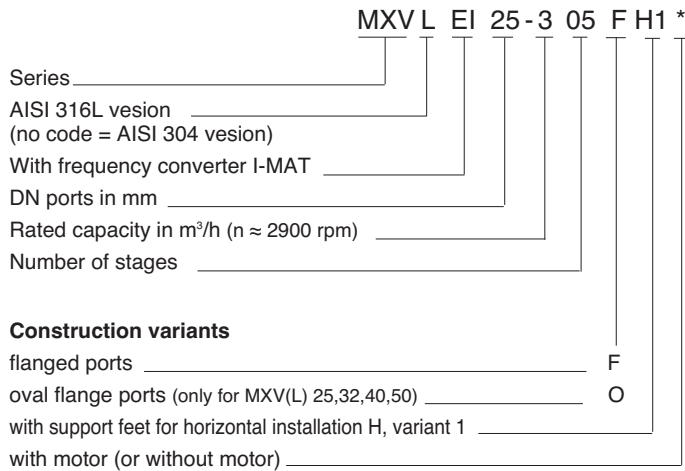
In this mode, by changing the working frequency, you may choose any operational curve included within the working range.



#### Constant temperature mode with temperature transducer

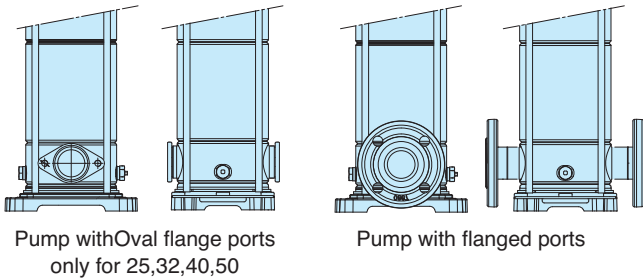
In this mode the system keeps the temperature constant inside a system by changing the speed of the pump.

### Designation

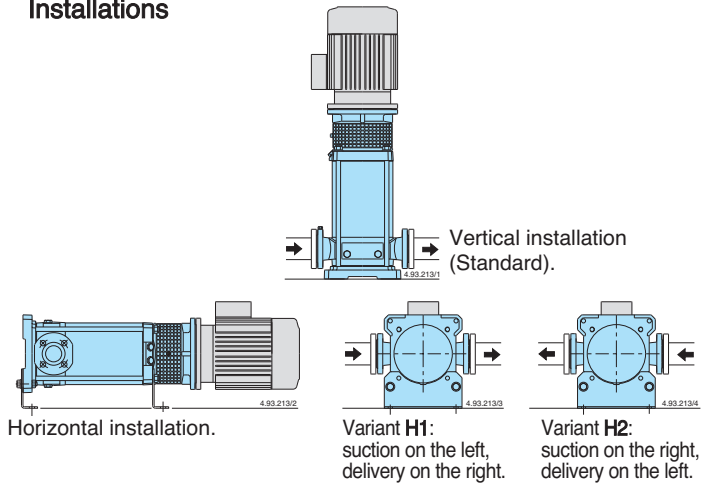


\* with no further designation = with standard motor

### Variants



### Installations



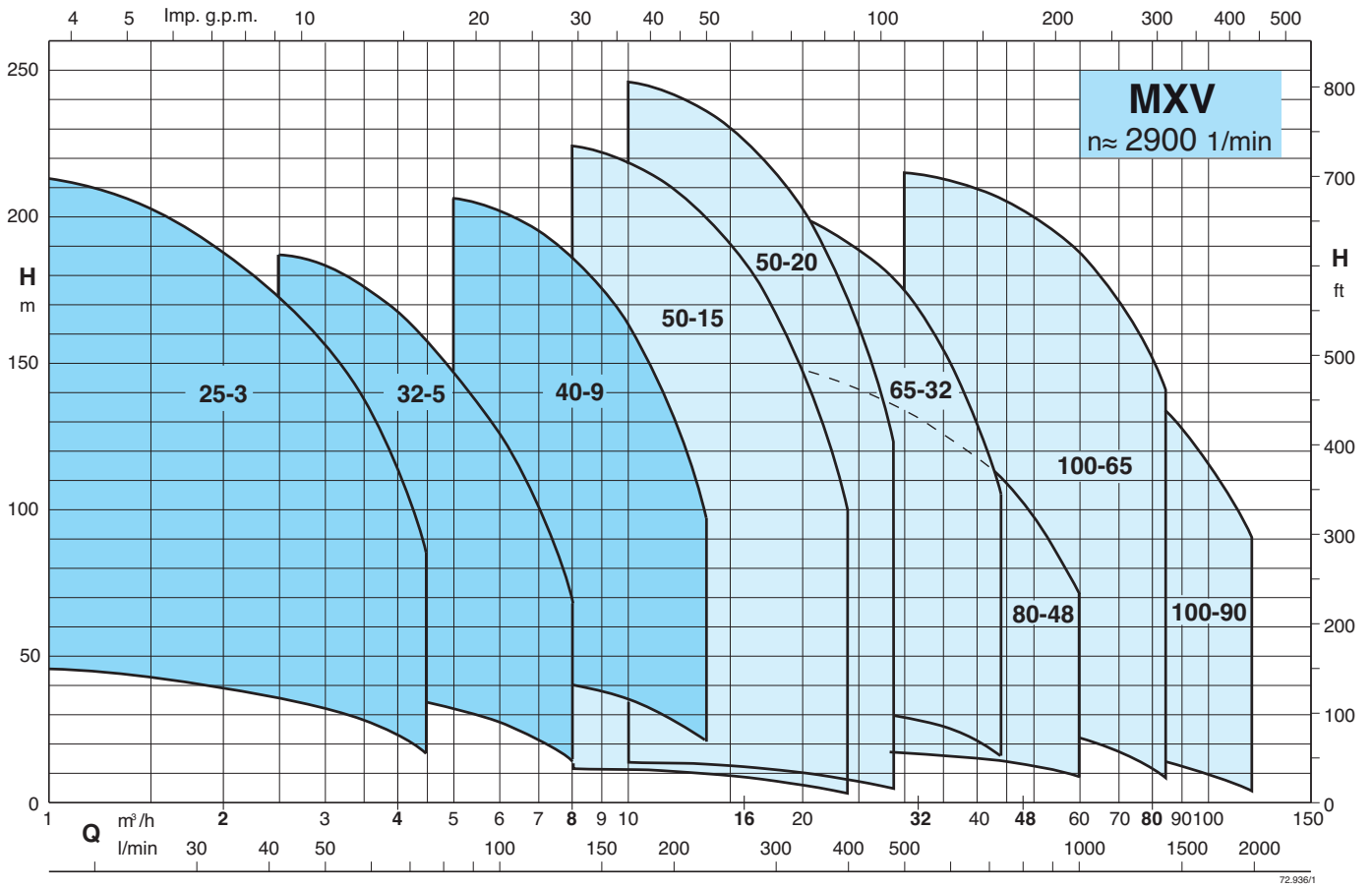
### Variable parts

Pump size MXV			Number of stages	Stage casings with bearing
25-304	32-504	40-904	4	1
25-305	32-505	40-905	5	1
25-306	32-506	40-906	6	1
25-307	32-507	40-907	7	1
25-308	32-508	40-908	8	1
25-310	32-510	40-910	10	1
25-312	32-512	40-911	11	2
		40-912	12	2
		40-913	13	2
25-314	32-514	40-914	14	2
		40-915	15	2
25-316	32-516	40-916	16	2
25-318	32-518	40-918	18	2
25-320		40-917	17	3
		40-919	19	3
		40-920	20	3

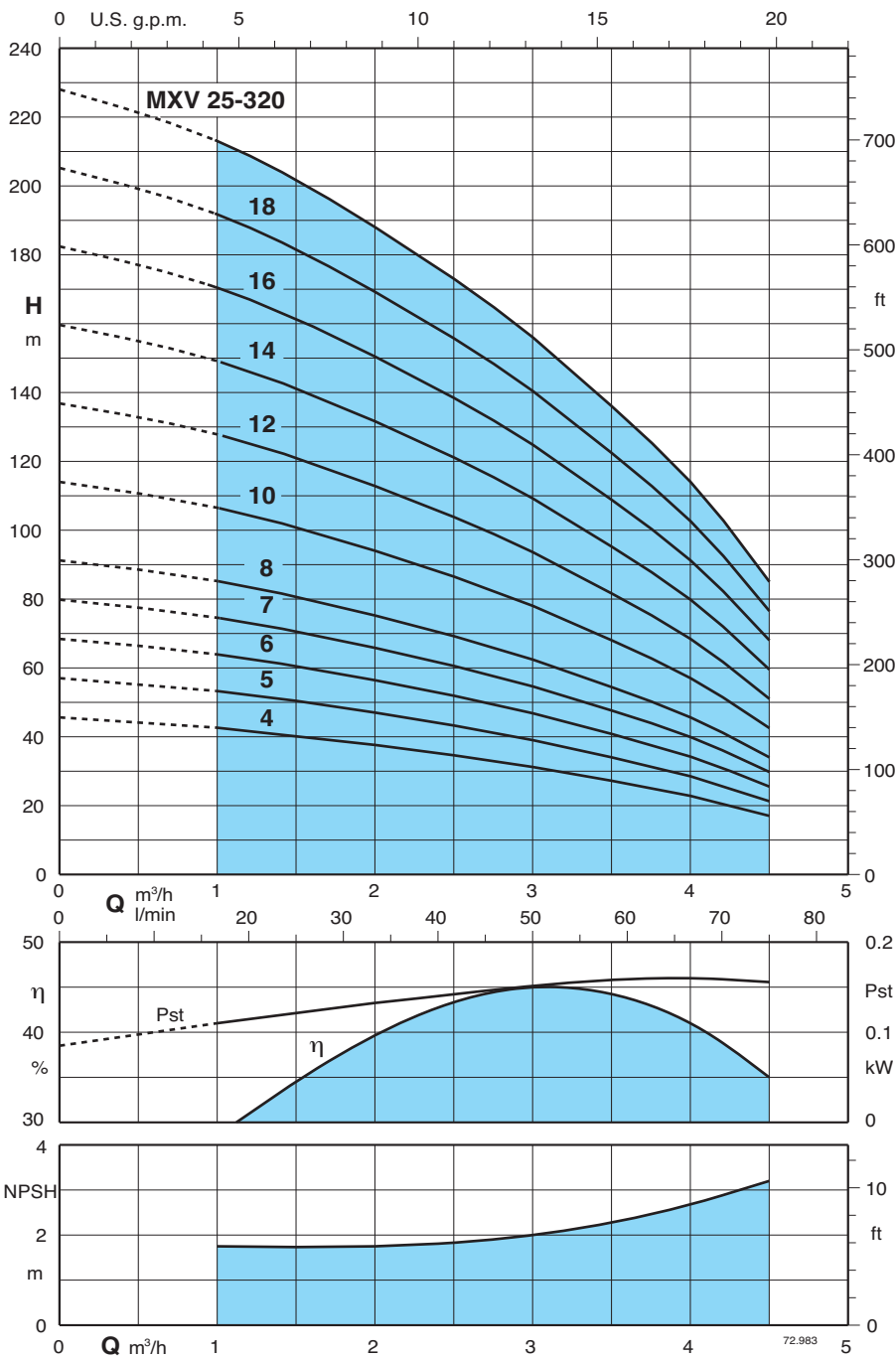
### Variable parts

Pump size MXV				Number of stages	Stage casings with bearing
50-1501	50-2001		80-4801	1	1
50-1502	50-2002	65-3202	80-4802	2	1
50-1503	50-2003	65-3203	80-4803	3	1
50-1504	50-2004	65-3204	80-4804	4	1
50-1505	50-2005	65-3205	80-4805	5	1
50-1506	50-2006	65-3206		6	1
50-1507	50-2007	65-3207		7	1
50-1508	50-2008			8	1
50-1509	50-2009	65-3209	80-4806	6	2
			80-4807	7	2
			80-4808	8	2
				9	2
				10	2
				11	2
50-1512	50-2012	65-3212		12	2
50-1513	50-2013			13	2
50-1514	50-2014			14	3
50-1515	50-2015			15	3
50-1516	50-2016			16	3
50-1517	50-2017			17	3

### Coverage chart



#### 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

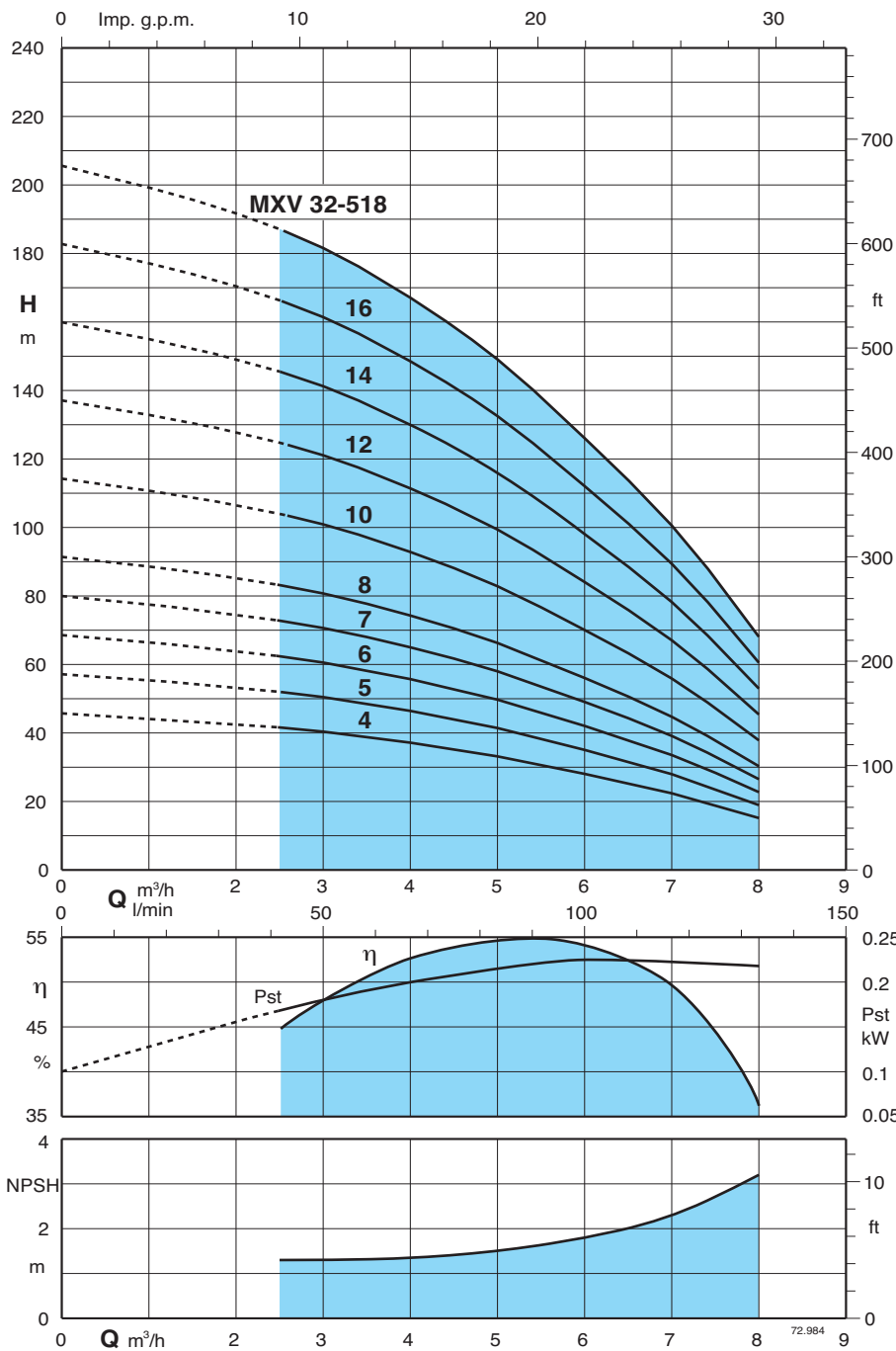
Head and power values valid for liquids with density  $\rho = 1,0 \text{ kg/dm}^3$  and kinematic viscosity  $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$ .

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	1	1,5	2	2,5	3	3,5	4	4,5
	A*	A*	kW	HP	kW	HP										
MXV 25-304	4	2,3	0,75	1	H m	0	16,6	25	33,3	41,6	50	58,3	66,6	75		
MXV 25-305	4	2,3	0,75	1		44	42,5	40	37,5	34,5	31	27	22,5	17		
MXV 25-306	4,7	2,7	1,1	1,5		56	53	50	47	43	39	34	28	21		
MXV 25-307	4,7	2,7	1,1	1,5		68	63,5	60,5	56	51,5	46,5	40,5	34	25		
MXV 25-308	7,4	4,3	1,5	2		79,5	74	70,5	65,5	60	54,5	47,5	39,5	30		
MXV 25-310	7,4	4,3	1,5	2		91	85	80,5	75	69	62	54	45,5	34		
MXV 25-312	9,2	5,3	2,2	3		114	106	101	94	86	78	68	57	42		
MXV 25-314	9,2	5,3	2,2	3		136	127	121	112	103	93,5	81,5	68	51		
MXV 25-316	11,4	6,6	3	4		159	149	141	131	121	109	95	79,5	59		
MXV 25-318	11,4	6,6	3	4		182	170	161	150	138	124	108	91	68		
MXV 25-320	11,4	6,6	3	4		205	191	181	169	155	140	122	102	76		
						228	213	202	188	173	156	136	114	85		

#### Characteristic curves and performance $n \approx 2900$ rpm



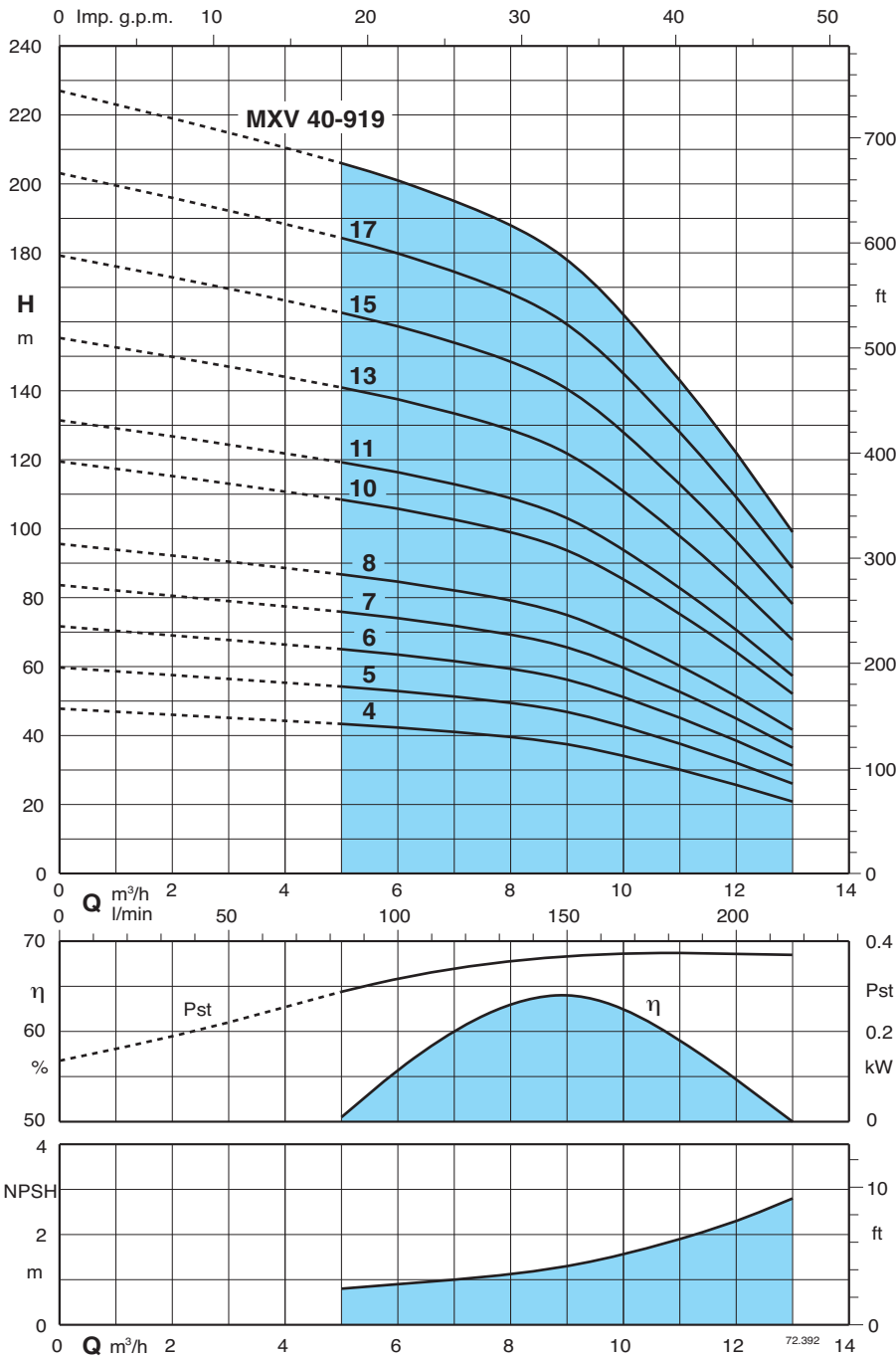
Test results with clean cold water, without gas content.  
 A safety margin of + 0.5 m is recommended for the NPSH value.  
 Tolerances in accordance with UNI EN ISO 9906:2012

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	H m										
	A*	A*	A*	A*	kW	HP		0	2,5	3	3,5	4	4,5	5	6	7	8	
MXV 32-504	4,7	2,7	1,1	1,5			0	2,5	3	3,5	4	4,5	5	6	7	8		
MXV 32-505	4,7	2,7	1,1	1,5			0	41,6	50	58,3	66,6	75	83,3	100	116,6	133,3		
MXV 32-506	7,4	4,3	1,5	2			45	41,5	40	38,5	36,5	34,5	32,5	27,5	22	14,5		
MXV 32-507	7,4	4,3	1,5	2			56	51,5	50	48	46	43,5	41	34,5	27,5	18,5		
MXV 32-508	9,2	5,3	2,2	3			68	62	60	58	55,5	52,5	49,5	42	33,5	22,5		
MXV 32-510	9,2	5,3	2,2	3			79,5	72,5	70,5	68	65	61,5	58	49	39	26,5		
MXV 32-512	11,4	6,6	3	4			91	83	80,5	78	74	70	66	56	44,5	30		
MXV 32-514	11,4	6,6	3	4			114	104	101	97,5	93	88	83	70	56	38		
MXV 32-516		9,6	4	5,5			136	124	121	117	111	105	99,5	84	67	45,5		
MXV 32-518		9,6	4	5,5			159	145	141	136	130	123	116	98	78	53		
							182	166	161	156	148	140	132	112	89,5	60,5		
							205	187	181	175	167	158	149	126	100	68		

## 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

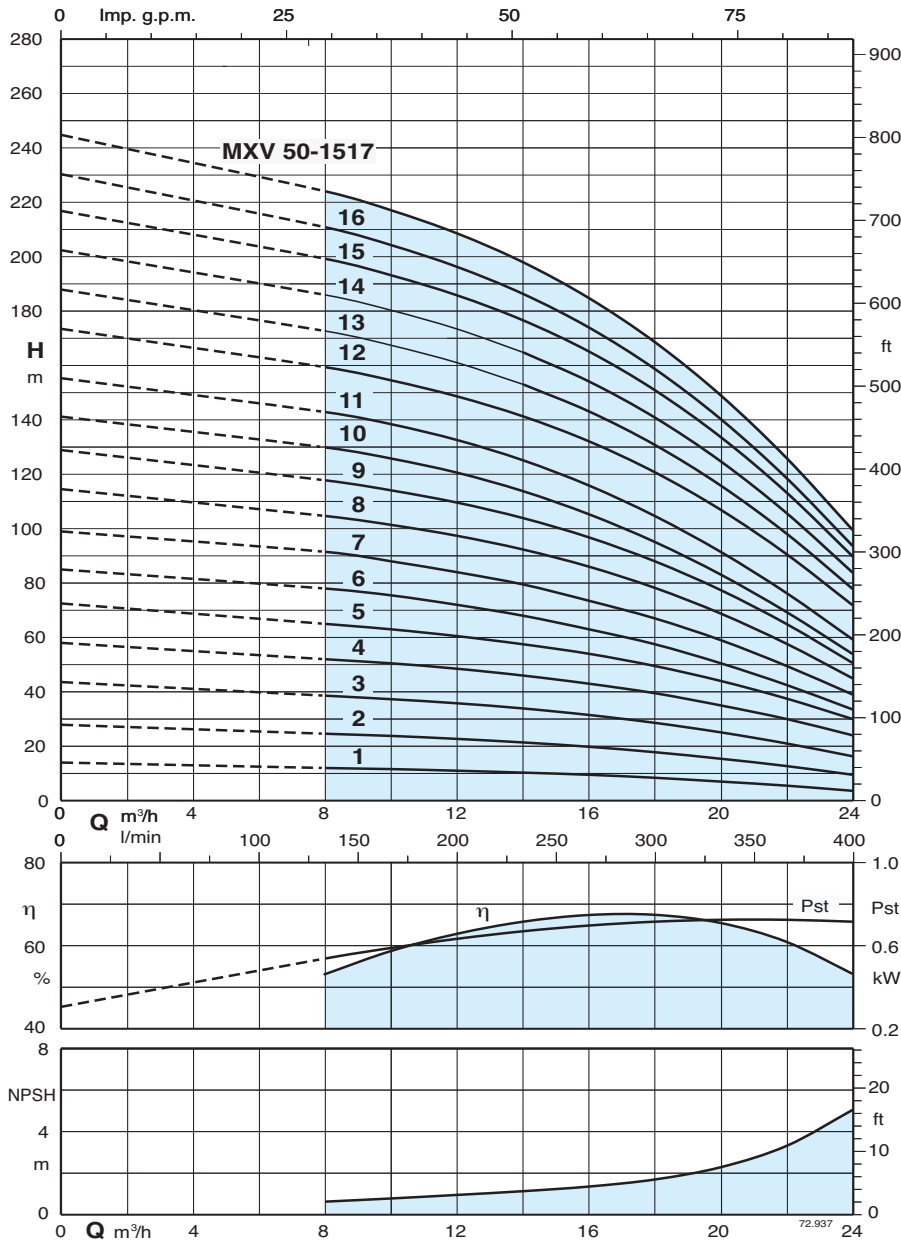
Head and power values valid for liquids with density  $\rho = 1,0 \text{ kg/dm}^3$  and kinematic viscosity  $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$ .

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 40-904	7,4	4,3	1,5	2			0	83,3	100	116,6	133,3	150	166,6	183,3	200	216,6			
MXV 40-905	9,2	5,3	2,2	3	H m		47	43	42	41	40	37	34	30	26	21			
MXV 40-906	9,2	5,3	2,2	3		59	54	53	51	50	47	43	38	32	26				
MXV 40-907	11,4	6,6	3	4		71	65	63	62	59	56	51	45	39	31				
MXV 40-908	11,4	6,6	3	4		83	76	74	72	69	66	60	53	45	36				
MXV 40-910		9,6	4	5,5		95	87	85	82	79	75	69	60	51	42				
MXV 40-911		9,6	4	5,5		119	109	106	103	99	94	86	75	64	52				
MXV 40-913		10,9	5,5	7,5		131	119	116	113	109	103	94	83	71	57				
MXV 40-915		10,9	5,5	7,5		155	141	138	134	129	122	111	98	84	68				
MXV 40-917		14,3	7,5	10		179	163	159	154	149	141	128	113	96	78				
MXV 40-919		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				

## 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  $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$ .

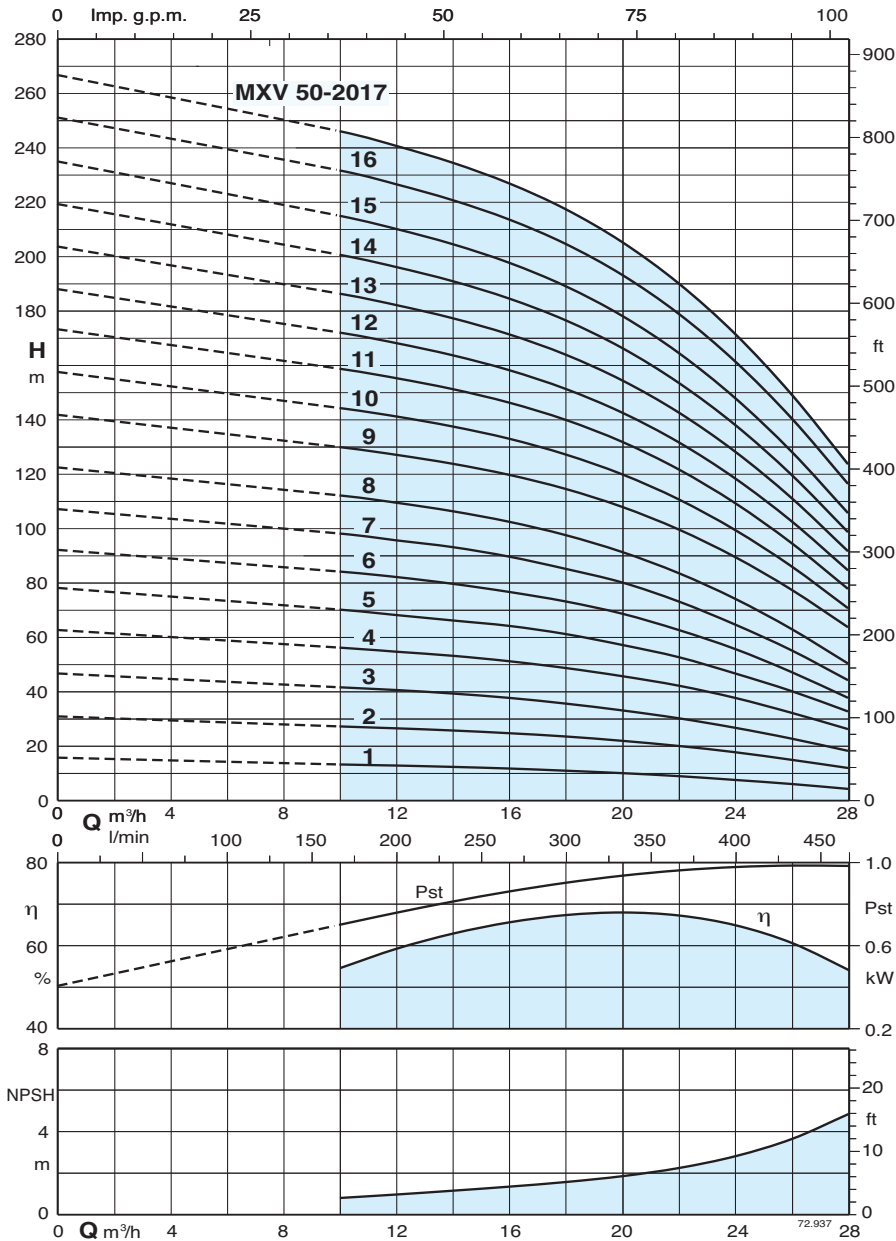
Pst = Power with reference to one stage.

A\* Calpeda motor currents

Pump type	230 V		400 V		Motor power		Q m³/h l/min	0	8	10	12	14	16	18	20	22	24
	A*	A*	kW	HP	kW	HP											
MXV 50-1501	4,7	2,7	1,1	1,5			0	133,3	166,6	200	233	266	300	333	366	400	
MXV 50-1502	7,4	4,3	1,5	2			14,0	12,0	11,6	11,0	10,3	9,5	8,4	7,0	5,5	3,6	
MXV 50-1503/A	9,2	5,3	2,2	3			27,9	24,6	23,8	22,7	21,4	19,8	17,8	15,4	12,7	9,5	
MXV 50-1504	11,4	6,6	3	4			43,6	38,6	37,3	35,8	33,9	31,5	28,6	25,1	21,0	16,3	
MXV 50-1505		9,6	4	5,5			58,0	52,0	50,5	48,5	46,0	43,0	39,5	35,0	30,0	24,0	
MXV 50-1506		10,9	5,5	7,5			72,5	65,0	63,0	60,5	57,5	54,0	49,5	44,0	37,5	30,0	
MXV 50-1507		10,9	5,5	7,5			85,0	78,0	75,5	72,0	68,0	63,0	57,5	50,5	42,5	33,5	
MXV 50-1508/A		10,9	5,5	7,5			99,0	91,5	88,0	84,0	79,5	73,5	67,0	59,0	49,5	39,0	
MXV 50-1509		14,3	7,5	10			115	105	101	97	92	86	78	69	58	45	
MXV 50-1510		14,3	7,5	10			129	118	114	110	104	97	88	77	65	51	
MXV 50-1511		18,5	9,2	12,5			141	130	126	121	114	105	95	83	69	54	
MXV 50-1512		18,5	9,2	12,5			155	143	138	133	125	116	105	91	76	59	
MXV 50-1513		21,5	11	15			173	159	155	149	141	132	121	107	91	72	
MXV 50-1514		21,5	11	15			188	173	167	161	153	143	131	116	98	78	
MXV 50-1515		21,5	11	15			202	186	180	173	165	154	141	125	106	84	
MXV 50-1516		27,3	15	20			217	199	193	186	177	165	151	134	113	90	
MXV 50-1517		27,3	15	20			230	211	204	196	186	174	159	140	119	94	
							245	224	217	209	198	185	169	149	126	100	



## 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

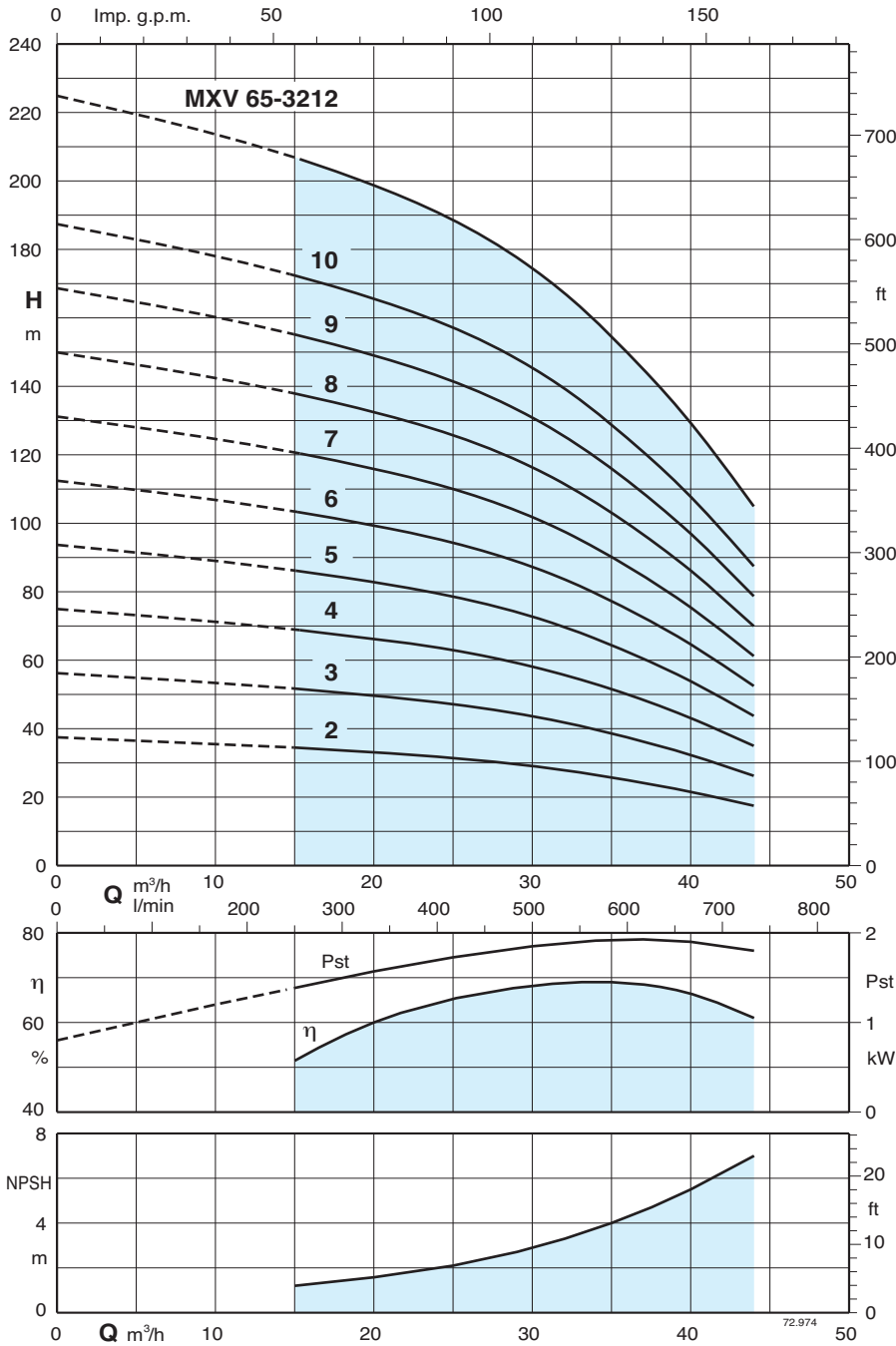
Head and power values valid for liquids with density  $\rho = 1,0 \text{ kg/dm}^3$  and kinematic viscosity  $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$ .

Pst = Power with reference to one stage.

A\* Calpeda motor currents

Pump type	230 V		400 V		Motor power		Q m³/h l/min	H														
	A*	A*	A*	A*	kW	HP		0	10	12	14	16	18	20	22	24	26	28				
MXV 50-2001	4,7	2,7	1,1	1,5	1,1	1,5	0	166,6	200	233	266	300	333	366	400	433	466					
MXV 50-2002	9,2	5,3	2,2	3	2,2	3	15,5	13,0	12,6	12,1	11,5	10,7	9,8	8,7	7,3	5,8	4,0					
MXV 50-2003	11,4	6,6	3	4	3	4	30,7	27,0	26,3	25,5	24,5	23,3	21,7	19,8	17,5	14,7	11,7					
MXV 50-2004		9,6	4	5,5	4	5,5	46,5	41,4	40,4	39,1	37,5	35,4	32,9	30,0	26,5	22,5	18,0					
MXV 50-2005		10,9	5,5	7,5	5,5	7,5	62,5	56,0	54,5	53,0	51,0	48,5	45,5	42,0	37,5	32,0	26,0					
MXV 50-2006		14,3	7,5	10	7,5	10	78,0	70,0	68,0	66,0	64,0	61,0	57,0	52,5	46,5	40,0	32,5					
MXV 50-2007		14,3	7,5	10	7,5	10	92,0	84,0	82,0	79,5	76,5	73,0	68,5	62,5	55,5	47,0	37,5					
MXV 50-2008		18,5	9,2	12,5	9,2	12,5	107,0	98,0	95,5	93,0	89,5	85,0	80,0	73,0	64,5	55,0	44,0					
MXV 50-2009		18,5	9,2	12,5	9,2	12,5	122	112	109	106	102	97	91	83	74	63	50					
MXV 50-2010		21,5	11	15	11	15	142	130	127	124	120	114	108	100	89	77	63					
MXV 50-2011		21,5	11	15	11	15	158	144	141	137	133	127	120	111	99	86	71					
MXV 50-2012		27,3	15	20	15	20	173	159	155	151	146	140	132	122	109	94	78					
MXV 50-2013		27,3	15	20	15	20	188	172	168	164	158	151	143	132	118	103	84					
MXV 50-2014		27,3	15	20	15	20	204	186	182	177	171	164	154	143	128	111	91					
MXV 50-2015		27,3	15	20	15	20	219	201	196	191	185	177	166	154	138	120	99					
MXV 50-2016		34	18,5	25	18,5	25	235	215	210	205	198	189	178	165	148	128	106					
MXV 50-2017		34	18,5	25	18,5	25	251	232	227	221	214	205	193	179	161	140	116					
							267	246	241	235	227	217	205	190	172	149	124					

## 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

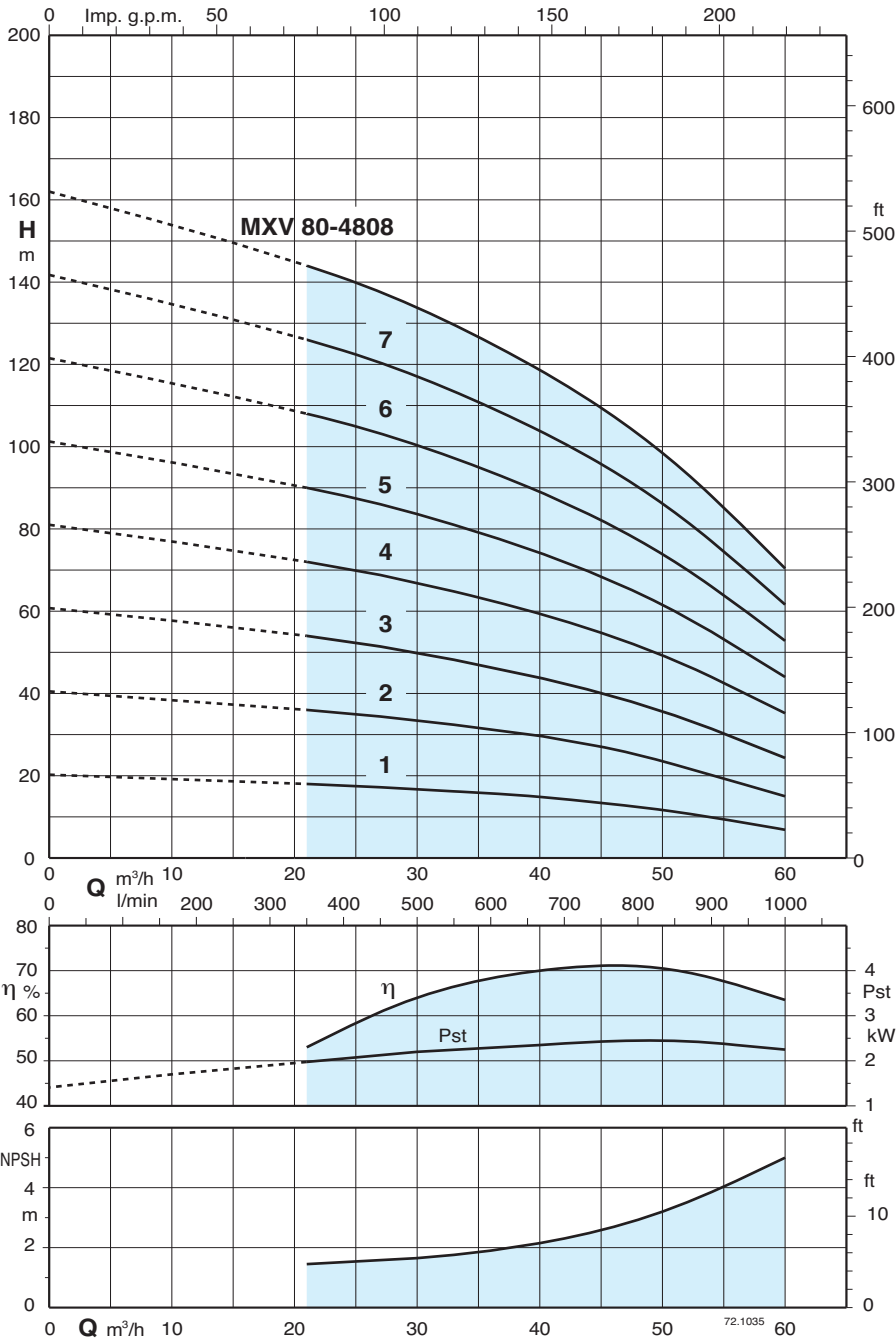
Head and power values valid for liquids with density  $\rho = 1,0 \text{ kg/dm}^3$  and kinematic viscosity  $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$ .

Pst = Power with reference to one stage.

A\* Calpeda motor currents

Pump type	230 V		400 V		Motor power		Q										
	A*	A*	kW	HP	m³/h	l/min	0	15	21	24	27	30	33	36	39	44	
MXV 65-3202/D			9,6	4	5,5		0	250	350	400	450	500	550	600	650	733	
MXV 65-3203/C			10,9	5,5	7,5		37	34	32	31	30	29	27	24,5	22	17	
MXV 65-3204/C			14,3	7,5	10		55,5	51	49	47,5	46	43,5	40,5	37	33,5	25,5	
MXV 65-3205/D			21,5	11	15		75	69	65,5	63,5	61	58,5	54,5	50	45	35	
MXV 65-3206/D			21,5	11	15		93,5	86	82	79,5	77	73	68	62,5	56,5	44	
MXV 65-3207/D			27,3	15	20		112	103	98,5	95,5	92	87	82	75	67,5	52,5	
MXV 65-3208/D			27,3	15	20		131	121	115	111	107	102	95,5	87,5	79	61,5	
MXV 65-3209/E			34	18,5	25		150	138	131	127	123	116	109	100	90	70	
MXV 65-3210/E			34	18,5	25		168	155	148	143	138	130	122	112	101	79	
MXV 65-3212/D			41	22	30		187	172	164	159	154	145	136	125	112	87,5	
							225	207	197	191	185	174	163	150	135	105	

## 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

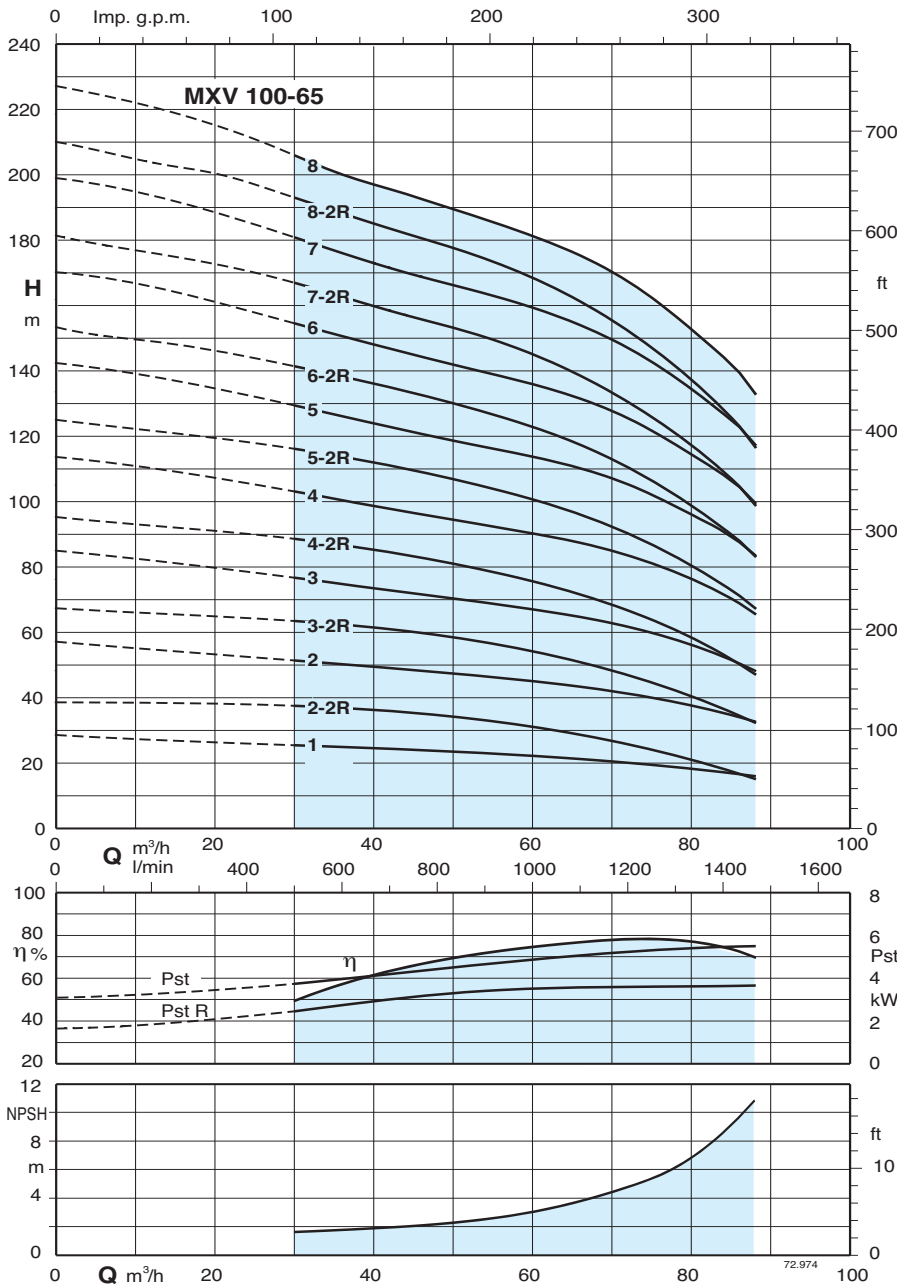
Head and power values valid for liquids with density  $\rho = 1,0 \text{ kg/dm}^3$  and kinematic viscosity  $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$ .

Pst = Power with reference to one stage.

A\* Calpeda motor currents

Pump type	Motor power		Q m³/h l/min	H m										
	230 V A*	400 V A*		kW	HP	0	21	27	33	39	45	48	51	54
MXV 80-4801/D		9,6	4	5,5	0	21	27	33	39	45	48	51	54	60
MXV 80-4802/C		10,9	5,5	7,5	0	350	450	550	650	750	800	850	900	1000
MXV 80-4803/C		14,3	7,5	10	20	18	17	16	15	13	12	10,7	9,5	7
MXV 80-4804/D		21,5	11	15	40,5	36	34,5	32,5	29,5	26,5	24,5	22	20	15,5
MXV 80-4805/D		27,3	15	20	61	54	51	48	44	40	37	34	31	24,5
MXV 80-4806/D		27,3	15	20	81	72	69	65	60	55	51,5	48	44	35
MXV 80-4807/E		34	18,5	25	101	90	86	81	75	68,5	64,5	60	55	44
MXV 80-4808/D		41	22	30	121	108	103	97	90	82	77,5	72	66	53
					142	126	120	113	105	96	90	84	77	61,5
					162	144	137	129	120	109	103	96	88	70,5

## 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

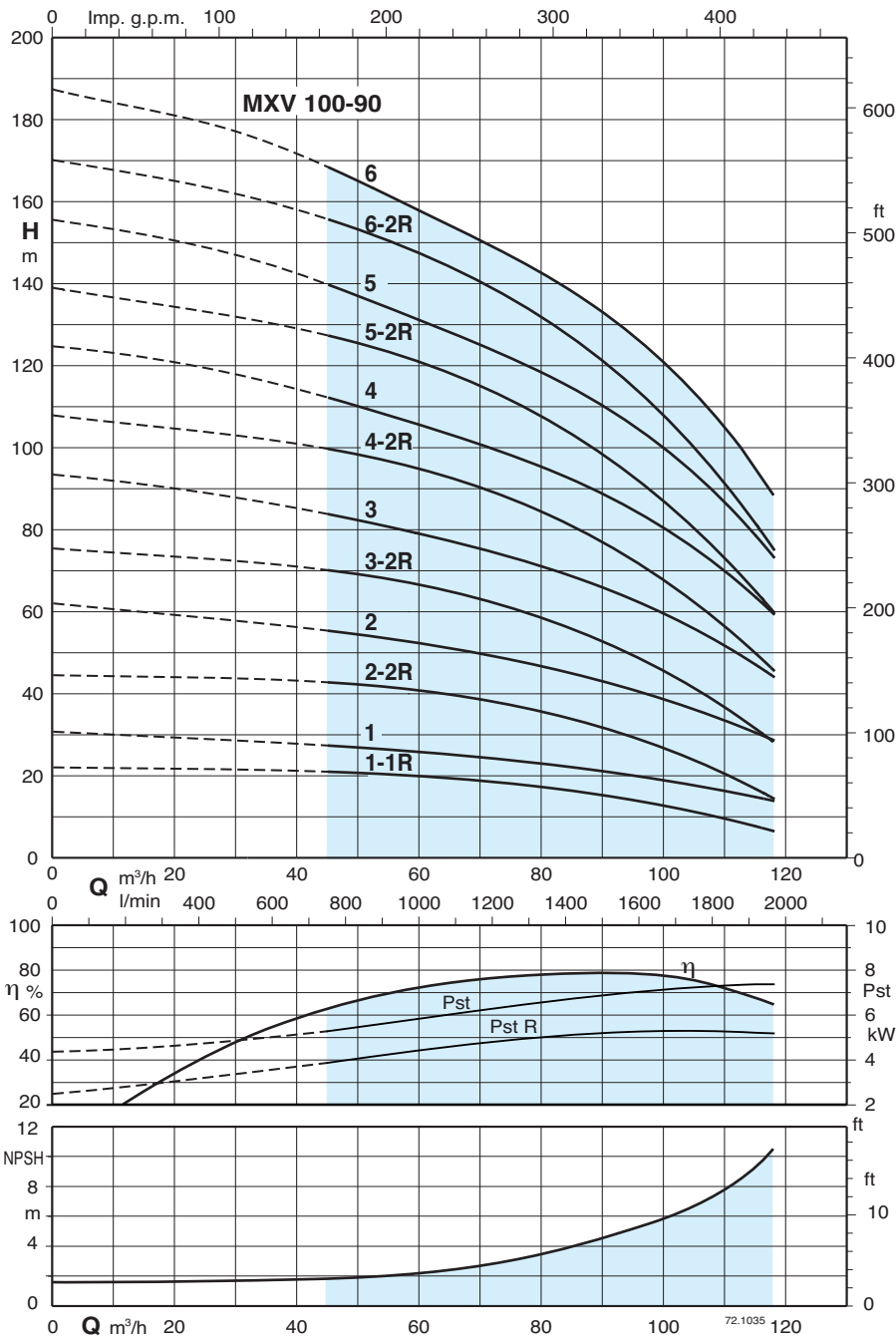
Head and power values valid for liquids with density  $\rho = 1,0 \text{ kg/dm}^3$  and kinematic viscosity  $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$ .

Pst = Power with reference to one stage.

A\* Calpeda motor currents

Pump type	400 V A*	Motor power		Q m³/h l/min	H m											
		kW	HP		0	30	36	42	45	54	60	72	78	85		
MXV(L) 100-6501	10,9	5,5	7,5	0	28	25	24,5	24	23,5	22,5	22	20	18,5	16,5		
MXV(L) 100-6502-2R	14,3	7,5	10	30	39	37,5	36,5	35,5	35	33	31	25	22	17,5		
MXV(L) 100-6502	21,5	11	15	36	56,5	51	49,5	48,5	48	46	45	41	38,5	34,5		
MXV(L) 100-6503-2R	27,3	15	20	42	67,5	63,5	62	60,5	59,5	56,5	54	46,5	42	35,5		
MXV(L) 100-6503/A	34	18,5	25	45	84,5	76	74	72,5	71,5	69	67	61,5	57,5	51,5		
MXV(L) 100-6504-2R/A	34	18,5	25	54	95,5	88,5	86	84	83	79	75,5	66	60,5	52		
MXV(L) 100-6504	41	22	30	60	113	102	100	97,5	96,5	92,5	90,5	83	78	70		
MXV(L) 100-6505-2R	53	30	40	72	125	116	113	110	109	104	101	90	83	72,5		
MXV(L) 100-6505	53	30	40	78	142	129	125	122	121	116	114	105	98,5	88,5		
MXV(L) 100-6506-2R	53	30	40	85	153	141	137	134	133	127	123	110	102	89,5		
MXV(L) 100-6506	65	37	50	90	170	154	150	147	145	139	136	125	117	105		
MXV(L) 100-6507-2R	65	37	50	100	181	166	162	158	156	150	145	130	120	106		
MXV(L) 100-6507	78	45	60	110	199	180	175	172	169	163	159	147	138	124		
MXV(L) 100-6508-2R	78	45	60	120	210	193	188	184	181	174	168	152	141	125		
MXV(L) 100-6508	78	45	60	1417	227	206	200	196	193	186	181	167	157	141		

## 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

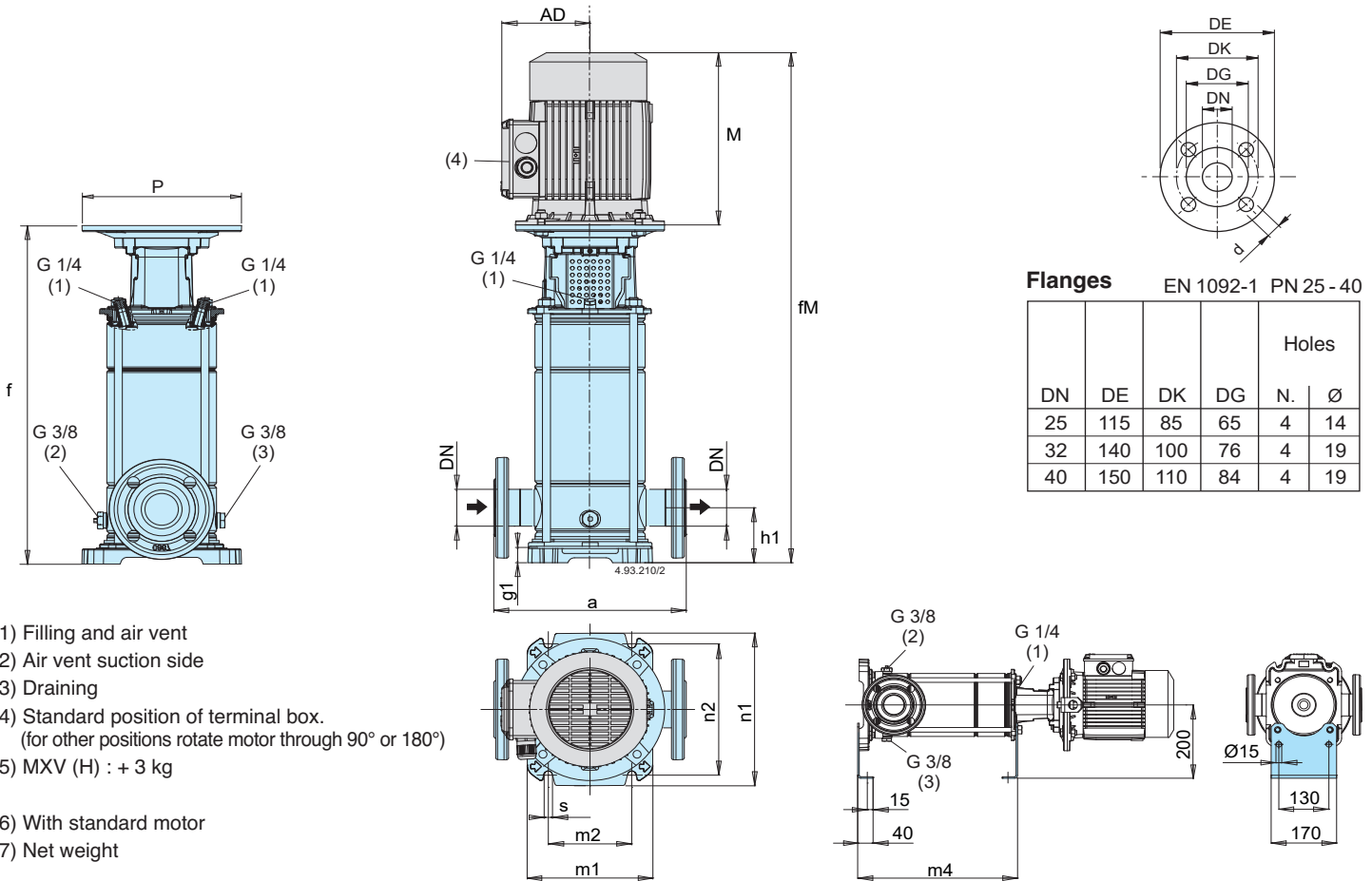
Head and power values valid for liquids with density  $\rho = 1,0 \text{ kg/dm}^3$  and kinematic viscosity  $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$ .

Pst = Power with reference to one stage.

A\* Calpeda motor currents

Pump type	400 V		Motor power	Q	Q (m³/h)										
	A*	kW			HP	0	45	54	60	72	78	85	96	108	118
MXV(L) 100-9001-1R	10,9	5,5	7,5	0	0	750	900	1000	1200	1300	1417	1600	1800	1967	
MXV(L) 100-9001	14,3	7,5	10	22	21	20,5	20	19	17,5	16,5	13,5	10	6,5		
MXV(L) 100-9002-2R	21,5	11	15	30,5	27,5	26	25,5	24	23,5	22	20	17	13,5		
MXV(L) 100-9002	27,3	15	20	44,5	43	42	41	38,5	36,5	34	28,5	21,5	15		
MXV(L) 100-9003-2R/A	34	18,5	25	62	55,5	53	51,5	49	47,5	45	41	35	28,5		
MXV(L) 100-9003	41	22	30	75,5	70,5	68	66,5	62,5	59,5	56	48,5	38,5	28,5		
MXV(L) 100-9004-2R	53	30	40	93,5	84	80,5	78	74	72	69	62,5	53,5	44		
MXV(L) 100-9004	53	30	40	108	100	97	94,5	89	85,5	81	71,5	59	46		
MXV(L) 100-9005-2R	65	37	50	125	112	108	105	99,5	96,5	92,5	84	72	60		
MXV(L) 100-9005	65	37	50	139	127	123	120	113	109	103	92	76	60		
MXV(L) 100-9006-2R	78	45	60	156	140	134	130	123	120	114	104	89	74		
MXV(L) 100-9006	78	45	60	170	156	150	146	138	134	127	113	94,5	75,5		
				188	169	161	157	149	144	138	126	108	89,5		

### Dimensions and weights

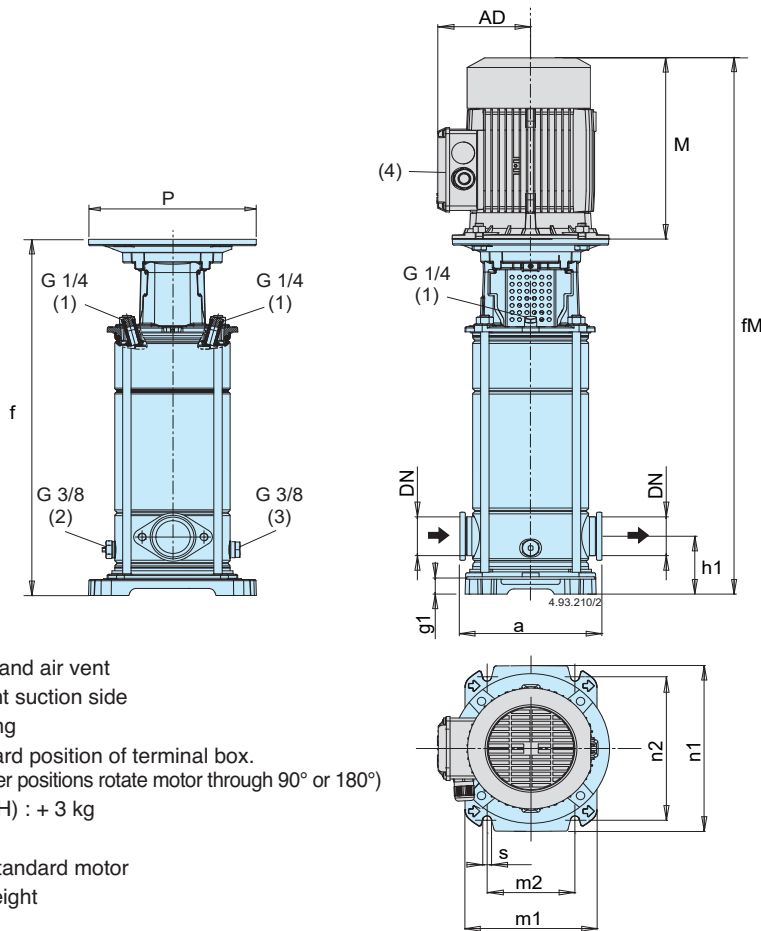


**Flanges** EN 1092-1 PN 25 - 40

DN	DE	DK	DG	Holes	
				N.	Ø
25	115	85	65	4	14
32	140	100	76	4	19
40	150	110	84	4	19

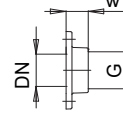
Pump	Motor			mm															without motor	with motor
	kW	HP		DN	a	h1	f	n1	n2	m1	m2	s	g1	(6) M	fM	P	(6) AD	m4	(5) (7) kg	(5) (7) kg
MXV 25-304	0,75	1	M80 V1	25	250	75	382,5	205	180	165	100	13	35,5	255	637,5	200	127,5	283	-	-
MXV 25-305	0,75	1	M80 V1	25	250	75	406,5	205	180	165	100	13	35,5	255	661,5	200	127,5	307		
MXV 25-306	1,1	1,5	M80 V1	25	250	75	430,5	205	180	165	100	13	35,5	255	685,5	200	127,5	331		
MXV 25-307	1,1	1,5	M80 V1	25	250	75	454,5	205	180	165	100	13	35,5	255	709,5	200	127,5	355		
MXV 25-308	1,5	2	M90 V1	25	250	75	478,5	205	180	165	100	13	35,5	255	733,5	200	127,5	379		
MXV 25-310	1,5	2	M90 V1	25	250	75	527	205	180	165	100	13	35,5	255	782	200	127,5	427,5		
MXV 25-312	2,2	3	M90 V1	25	250	75	575,5	205	180	165	100	13	35,5	295	870,5	200	127,5	476		
MXV 25-314	2,2	3	M90 V1	25	250	75	623,5	205	180	165	100	13	35,5	295	918,5	200	127,5	524		
MXV 25-316	3	4	M100 V1	25	250	75	672	205	180	165	100	13	35,5	311	983	250	137,5	572,5		
MXV 25-318	3	4	M100 V1	25	250	75	720,5	205	180	165	100	13	35,5	311	1031,5	250	137,5	621		
MXV 25-320	3	4	M100 V1	25	250	75	768,5	205	180	165	100	13	35,5	311	1079,5	250	137,5	669		
MXV 32-504	1,1	1,5	M80 V1	32	250	75	382,5	205	180	165	100	13	35,5	255	637,5	200	127,5	283		
MXV 32-505	1,1	1,5	M80 V1	32	250	75	406,5	205	180	165	100	13	35,5	255	661,5	200	127,5	307		
MXV 32-506	1,5	2	M90 V1	32	250	75	430,5	205	180	165	100	13	35,5	255	685,5	200	127,5	331		
MXV 32-507	1,5	2	M90 V1	32	250	75	454,5	205	180	165	100	13	35,5	255	709,5	200	127,5	355		
MXV 32-508	2,2	3	M90 V1	32	250	75	478,5	205	180	165	100	13	35,5	295	773,5	200	127,5	379		
MXV 32-510	2,2	3	M90 V1	32	250	75	527	205	180	165	100	13	35,5	295	822	200	127,5	427,5		
MXV 32-512	3	4	M100 V1	32	250	75	575,5	205	180	165	100	13	35,5	311	886,5	250	137,5	476		
MXV 32-514	3	4	M100 V1	32	250	75	623,5	205	180	165	100	13	35,5	311	934,5	250	137,5	524		
MXV 32-516	4	5,5	M112 V1	32	250	75	672	205	180	165	100	13	35,5	311	983	250	137,5	572,5		
MXV 32-518	4	5,5	M112 V1	32	250	75	720,5	205	180	165	100	13	35,5	311	1031,5	250	137,5	621		
MXV40-904	1,5	2	M90 V1	40	280	80	411,5	250	215	190	130	14	30,5	255	666,5	200	127,5	312		
MXV 40-905	2,2	3	M90 V1	40	280	80	441,5	250	215	190	130	14	30,5	295	736,5	200	127,5	342		
MXV 40-906	2,2	3	M90 V1	40	280	80	471,5	250	215	190	130	14	30,5	295	766,5	200	127,5	372		
MXV 40-907	3	4	M100 V1	40	280	80	501,5	250	215	190	130	14	30,5	311	812,5	250	137,5	402		
MXV 40-908	3	4	M100 V1	40	280	80	532	250	215	190	130	14	30,5	311	843	250	137,5	432,5		
MXV 40-910	4	5,5	M112 V1	40	280	80	592	250	215	190	130	14	30,5	311	903	250	137,5	492,5		
MXV 40-911	4	5,5	M112 V1	40	280	80	622	250	215	190	130	14	30,5	311	933	250	137,5	522,5		
MXV 40-913	5,5	7,5	M132 V1	40	280	80	769,5	250	215	190	130	14	30,5	339	1108,5	300	159,5	583,5		
MXV 40-915	5,5	7,5	M132 V1	40	280	80	830	250	215	190	130	14	30,5	339	1169	300	159,5	644		
MXV 40-917	7,5	10	M132 V1	40	280	80	890	250	215	190	130	14	30,5	339	1229	300	159,5	704		
MXV 40-919	7,5	10	M132 V1	40	280	80	950	250	215	190	130	14	30,5	339	1289	300	159,5	764		

### Dimensions and weights



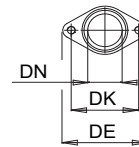
- (1) Filling and air vent
- (2) Air vent suction side
- (3) Draining
- (4) Standard position of terminal box.  
(for other positions rotate motor through 90° or 180°)
- (5) MXV (H) : + 3 kg
- (6) With standard motor
- (7) Net weight

#### Oval Counterflanges

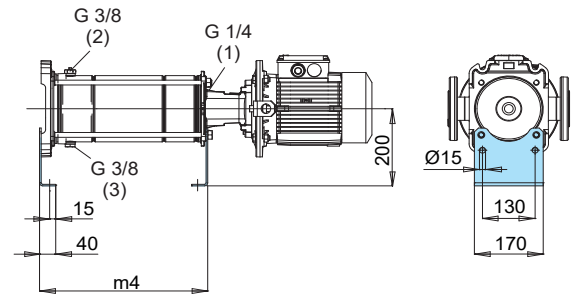


PN 16			
DN	G	w	Holes
			N.   Ø
25	1	23	2   12
32	1 1/4	23	2   12
40	1 1/2	26	2   15

#### Oval Flanges

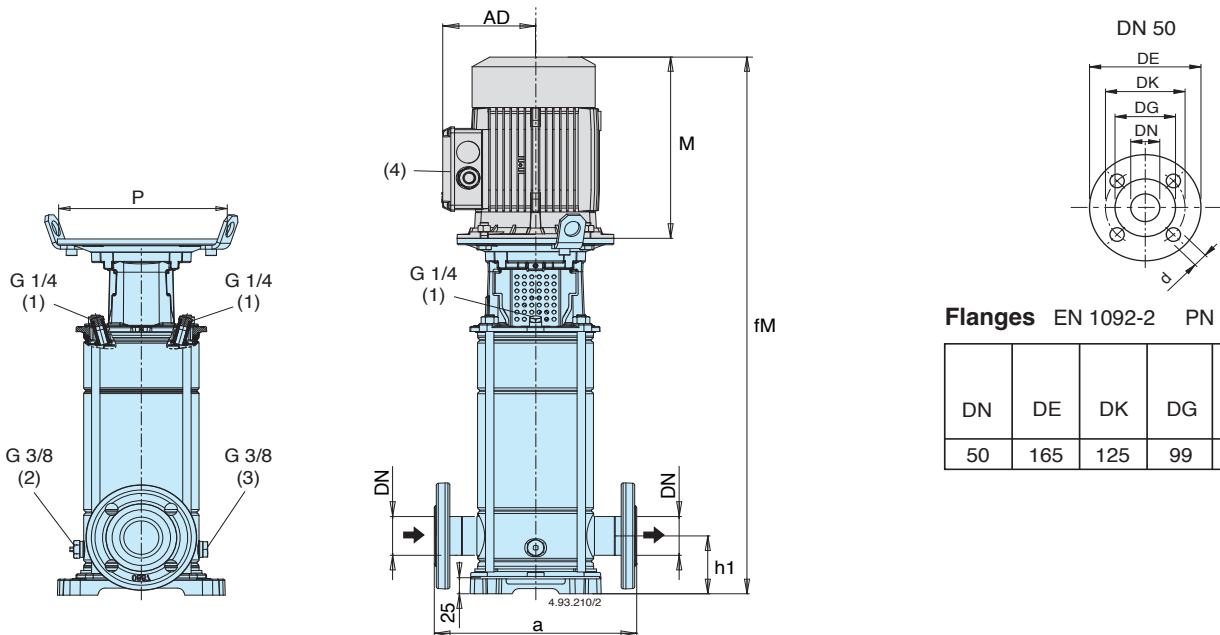


PN 16				
DN	DE	DK	Holes	
			N.	Ø
25	95	75	2	M10
32	95	75	2	M10
40	125	100	2	M12



Pump	Motor			mm															without motor	with motor
	kW	HP		DN	ao	h1	f	n1	n2	m1	m2	s	g1	(6) M	fM	P	(6) AD	m4	(5) (7) kg	(5) (6) (7) kg
MXV 25-304 O	0,75	1	M80 V1	25	160	50	367	205	180	165	100	13	20	255	622	200	127,5	268	-	-
MXV 25-305 O	0,75	1	M80 V1	25	160	50	391	205	180	165	100	13	20	255	646	200	127,5	292		
MXV 25-306 O	1,1	1,5	M80 V1	25	160	50	415	205	180	165	100	13	20	255	670	200	127,5	316		
MXV 25-307 O	1,1	1,5	M80 V1	25	160	50	439	205	180	165	100	13	20	255	694	200	127,5	340		
MXV 25-308 O	1,5	2	M90 V1	25	160	50	463	205	180	165	100	13	20	255	718	200	127,5	364		
MXV 25-310 O	1,5	2	M90 V1	25	160	50	511,5	205	180	165	100	13	20	255	766,5	200	127,5	412,5		
MXV 25-312 O	2,2	3	M90 V1	25	160	50	560	205	180	165	100	13	20	295	855	200	127,5	461		
MXV 25-314 O	2,2	3	M90 V1	25	160	50	608	205	180	165	100	13	20	295	903	200	127,5	509		
MXV 32-504 O	1,1	1,5	M80 V1	32	160	50	367	205	180	165	100	13	20	255	622	200	127,5	267,5		
MXV 32-505 O	1,1	1,5	M80 V1	32	160	50	391	205	180	165	100	13	20	255	646	200	127,5	291,5		
MXV 32-506 O	1,5	2	M90 V1	32	160	50	415	205	180	165	100	13	20	255	670	200	127,5	315,5		
MXV 32-507 O	1,5	2	M90 V1	32	160	50	439	205	180	165	100	13	20	255	694	200	127,5	339,5		
MXV 32-508 O	2,2	3	M90 V1	32	160	50	463	205	180	165	100	13	20	295	758	200	127,5	363,5		
MXV 32-510 O	2,2	3	M90 V1	32	160	50	511,5	205	180	165	100	13	20	295	806,5	200	127,5	412		
MXV 32-512 O	3	4	M100 V1	32	160	50	560	205	180	165	100	13	20	311	871	250	137,5	460,5		
MXV 32-514 O	3	4	M100 V1	32	160	50	608	205	180	165	100	13	20	311	919	250	137,5	508,5		
MXV40-904 O	1,5	2	M90 V1	40	200	80	411,5	250	215	190	130	14	30,5	255	666,5	200	127,5	312		
MXV 40-905 O	2,2	3	M90 V1	40	200	80	441,5	250	215	190	130	14	30,5	295	736,5	200	127,5	342		
MXV 40-906 O	2,2	3	M90 V1	40	200	80	471,5	250	215	190	130	14	30,5	295	766,5	200	127,5	372		
MXV 40-907 O	3	4	M100 V1	40	200	80	501,5	250	215	190	130	14	30,5	311	812,5	250	137,5	402		
MXV 40-908 O	3	4	M100 V1	40	200	80	532	250	215	190	130	14	30,5	311	843	250	137,5	432,5		
MXV 40-910 O	4	5,5	M112 V1	40	200	80	592	250	215	190	130	14	30,5	311	903	250	137,5	492,5		
MXV 40-911 O	4	5,5	M112 V1	40	200	80	622	250	215	190	130	14	30,5	311	933	250	137,5	522,5		
MXV 40-913 O	5,5	7,5	M132 V1	40	200	80	769,5	250	215	190	130	14	30,5	339	1108,5	300	159,5	583,5		

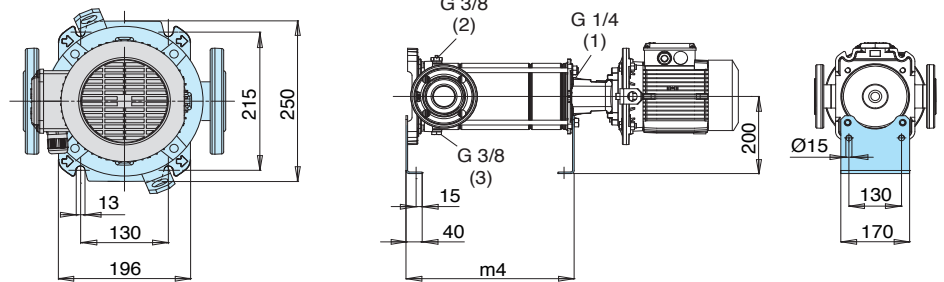
## Dimensions and weights



Flanges EN 1092-2 PN 25

DN	DE	DK	DG	Holes	
				N.	Ø
50	165	125	99	4	19

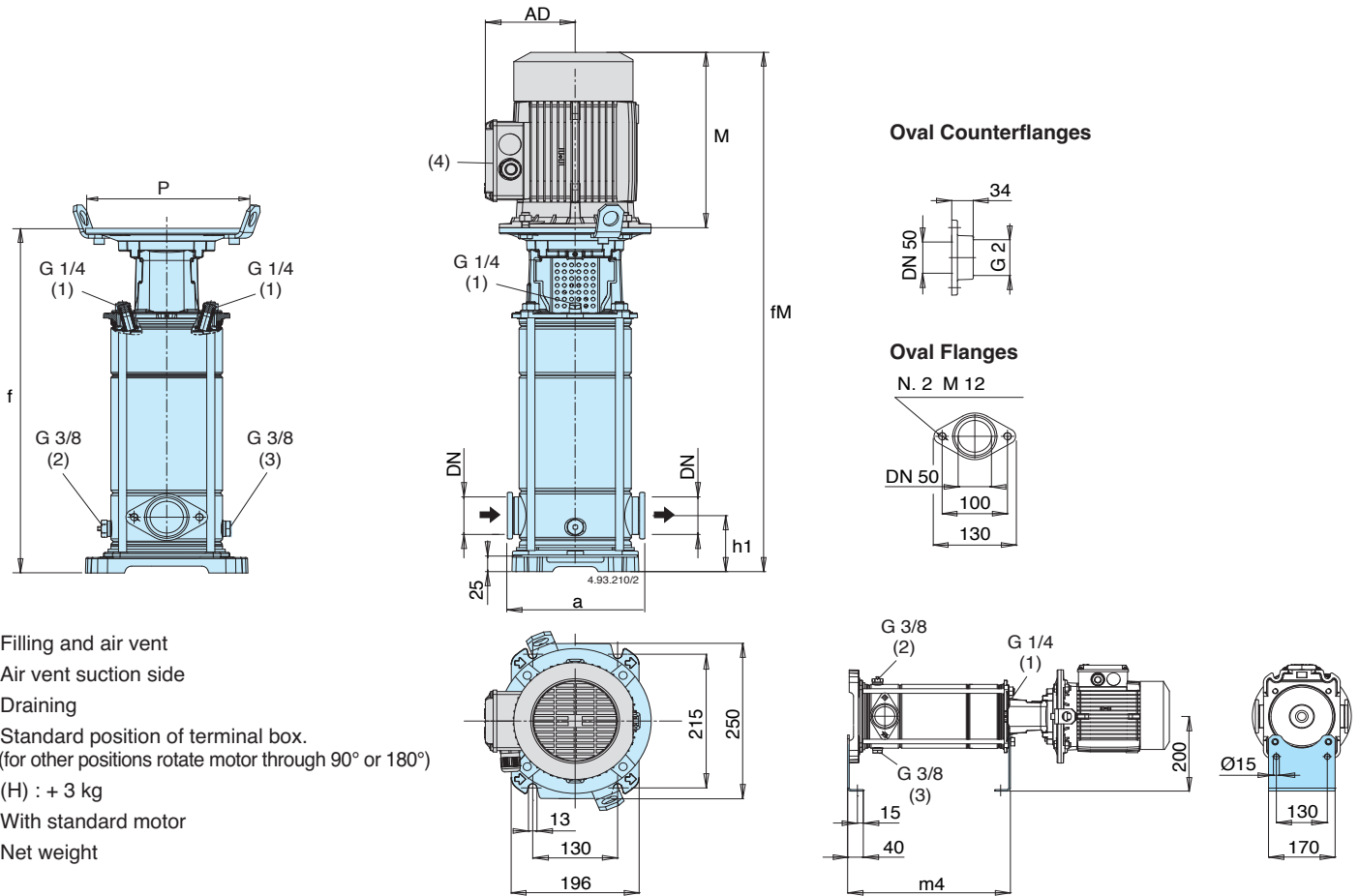
- (1) Filling and air vent
- (2) Air vent suction side
- (3) Draining
- (4) Standard position of terminal box.  
(for other positions rotate motor through 90° or 180°)
- (5) (H) : + 3 kg
- (6) With standard motor
- (7) Net weight



Pump	Motor			mm									without motor MXV (5) (7) kg	with motor (6) (7) kg
	kW	HP		DN	a	h1	f	(6) M	fM	P	(6) AD	m4		
MXV 50-1501	1,1	1,5	M80 V1	50	300	90	438	255	693	200	127,5	313	27,4	40,7
MXV 50-1502	1,5	2	M90 V1	50	300	90	438	255	693	200	127,5	313	27,9	41,2
MXV 50-1503/A	2,2	3	M90 V1	50	300	90	486	311	797	200	137,5	361	29,4	55,0
MXV 50-1504	3	4	M100 V1	50	300	90	534	311	845	250	137,5	409	31,8	57,4
MXV 50-1505	4	5,5	M112 V1	50	300	90	582	311	893	250	137,5	457	33,3	61,1
MXV 50-1506	5,5	7,5	M132 V1	50	300	90	693	339	1032	300	159,5	505	44,3	86,6
MXV 50-1507	5,5	7,5	M132 V1	50	300	90	741	339	1080	300	159,5	553	45,7	88,0
MXV 50-1508/A	5,5	7,5	M132 V1	50	300	90	789	339	1128	300	159,5	601	47,2	94,9
MXV 50-1509	7,5	10	M132 V1	50	300	90	837	339	1176	300	159,5	649	48,6	96,3
MXV 50-1510	7,5	10	M132 V1	50	300	90	885	339	1224	300	159,5	697	50,1	97,8
MXV 50-1511	9,2	12,5	M160 V1	50	300	90	963	413	1376	350	186	745	58,0	128
MXV 50-1512	9,2	12,5	M160 V1	50	300	90	1011	413	1424	350	186	793	59,3	129,3
MXV 50-1513	11	15	M160 V1	50	300	90	1059	459	1518	350	186	841	60,7	136,7
MXV 50-1514	11	15	M160 V1	50	300	90	1107	459	1566	350	186	889	62,2	138,2
MXV 50-1515	11	15	M160 V1	50	300	90	1155	459	1614	350	186	937	63,7	139,7
MXV 50-1516	15	20	M160 V1	50	300	90	1203	484	1687	350	186	985	65,1	167,1
MXV 50-1517	15	20	M160 V1	50	300	90	1251	484	1735	350	186	1033	66,6	168,6
MXV 50-2001	1,1	1,5	M80 V1	50	300	90	438	255	693	200	127,5	313	27,4	40,7
MXV 50-2002	2,2	3	M90 V1	50	300	90	438	295	733	200	127,5	313	27,9	46,0
MXV 50-2003	3	4	M100 V1	50	300	90	486	311	797	250	137,5	361	30,3	55,9
MXV 50-2004	4	5,5	M112 V1	50	300	90	534	311	845	250	137,5	409	31,8	59,6
MXV 50-2005	5,5	7,5	M132 V1	50	300	90	645	339	984	300	159,5	457	42,8	85,1
MXV 50-2006	7,5	10	M132 V1	50	300	90	693	339	1032	300	159,5	505	44,3	92,0
MXV 50-2007	7,5	10	M132 V1	50	300	90	741	339	1080	300	159,5	553	45,7	93,4
MXV 50-2008	9,2	12,5	M160 V1	50	300	90	819	413	1232	350	186	601	53,5	123,5
MXV 50-2009	9,2	12,5	M160 V1	50	300	90	867	413	1280	350	186	649	54,9	124,9
MXV 50-2010	11	15	M160 V1	50	300	90	915	459	1374	350	186	697	56,4	132,4
MXV 50-2011	11	15	M160 V1	50	300	90	963	459	1422	350	186	745	57,8	133,8
MXV 50-2012	15	20	M160 V1	50	300	90	1011	484	1495	350	186	793	59,3	161,3
MXV 50-2013	15	20	M160 V1	50	300	90	1059	484	1543	350	186	841	60,7	162,7
MXV 50-2014	15	20	M160 V1	50	300	90	1107	484	1591	350	186	889	62,2	164,2
MXV 50-2015	15	20	M160 V1	50	300	90	1155	484	1639	350	186	937	63,7	165,7
MXV 50-2016	18,5	25	M160 V1	50	300	90	1203	538	1741	350	206	985	65,1	187,1
MXV 50-2017	18,5	25	M160 V1	50	300	90	1251	538	1789	350	206	1033	66,6	188,6



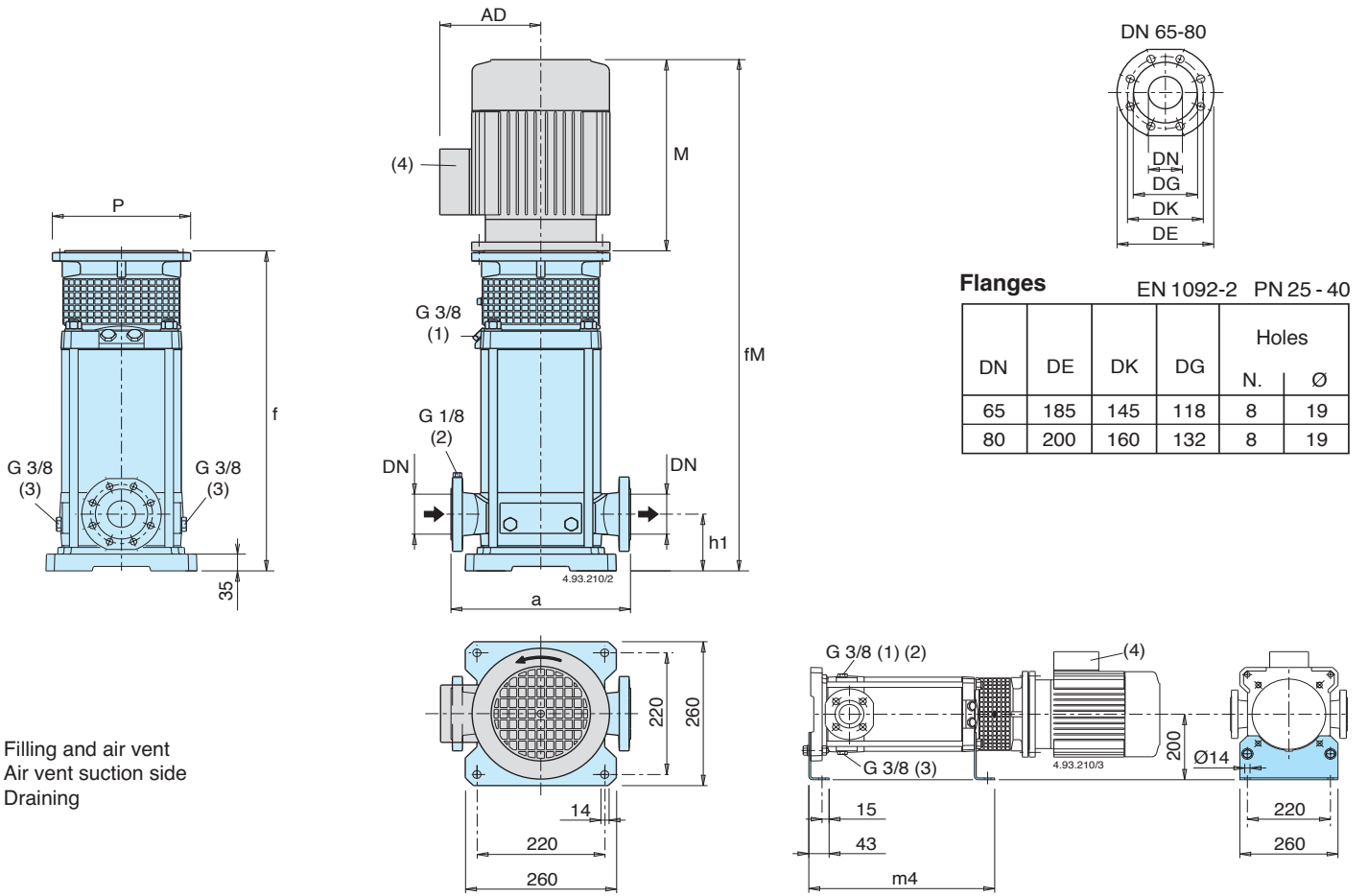
## Dimensions and weights



- (1) Filling and air vent
- (2) Air vent suction side
- (3) Draining
- (4) Standard position of terminal box.  
(for other positions rotate motor through 90° or 180°)
- (5) (H) : + 3 kg
- (6) With standard motor
- (7) Net weight

Pump	Motor			mm									without motor MXV (5) (7) kg	with motor (6) (7) kg
	kW	HP		DN	a	h1	f	(6) M	fM	P	(6) AD	m4		
MXV 50-1501 O	1,1	1,5	M80 V1	50	200	90	438	255	693	200	127,5	313	24,6	37,9
MXV 50-1502 O	1,5	2	M90 V1	50	200	90	438	255	693	200	127,5	313	25,1	38,4
MXV 50-1503/A O	2,2	3	M90 V1	50	200	90	486	311	797	200	137,5	361	26,6	52,2
MXV 50-1504 O	3	4	M100 V1	50	200	90	534	311	845	250	137,5	409	29,0	54,6
MXV 50-1505 O	4	5,5	M112 V1	50	200	90	582	311	893	250	137,5	457	30,5	58,3
MXV 50-1506 O	5,5	7,5	M132 V1	50	200	90	693	339	1032	300	159,5	505	41,5	83,8
MXV 50-1507 O	5,5	7,5	M132 V1	50	200	90	741	339	1080	300	159,5	553	42,9	85,2
MXV 50-1508/A O	5,5	7,5	M132 V1	50	200	90	789	339	1128	300	159,5	601	44,4	86,7
MXV 50-1509 O	7,5	10	M132 V1	50	200	90	837	339	1176	300	159,5	649	45,8	93,5
MXV 50-1510 O	7,5	10	M132 V1	50	200	90	885	339	1224	300	159,5	697	47,3	95,0
MXV 50-2001 O	1,1	1,5	M80 V1	50	200	90	438	255	693	200	127,5	313	24,6	37,9
MXV 50-2002 O	2,2	3	M90 V1	50	200	90	438	295	733	200	127,5	313	25,1	43,2
MXV 50-2003 O	3	4	M100 V1	50	200	90	486	311	797	250	137,5	361	27,6	53,2
MXV 50-2004 O	4	5,5	M112 V1	50	200	90	534	311	832	250	137,5	409	29,0	56,8
MXV 50-2005 O	5,5	7,5	M132 V1	50	200	90	645	339	984	300	159,5	457	40,0	82,3
MXV 50-2006 O	7,5	10	M132 V1	50	200	90	693	339	1032	300	159,5	505	41,5	89,2
MXV 50-2007 O	7,5	10	M132 V1	50	200	90	741	339	1080	300	159,5	553	42,9	90,6
MXV 50-2008 O	9,2	12,5	M160 V1	50	200	90	819	413	1232	350	186	601	50,7	120,7
MXV 50-2009 O	9,2	12,5	M160 V1	50	200	90	867	413	1280	350	186	649	52,1	122,1
MXV 50-2010 O	11	15	M160 V1	50	200	90	915	459	1374	350	186	697	53,6	129,6

## Dimensions and weights

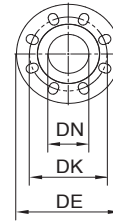
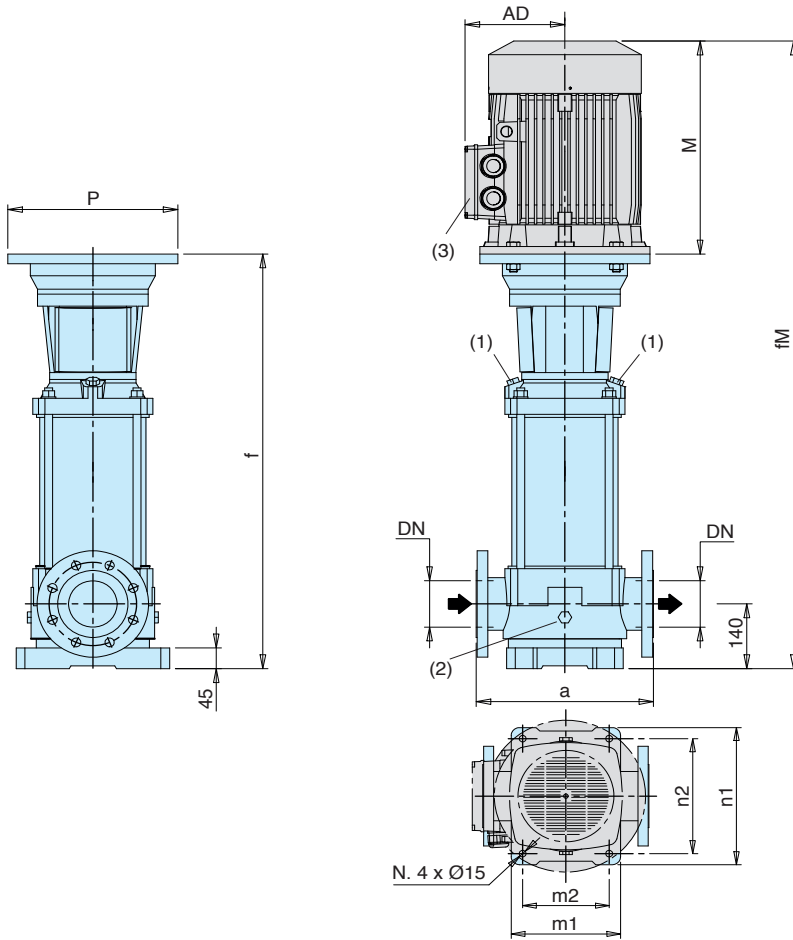


- (1) Filling and air vent
- (2) Air vent suction side
- (3) Draining

Pump	Motor			mm									without motor	with motor
	kW	HP		DN	a	h1	f	(6) M	fM	P	(6) AD	m4	MXV (5) kg (7)	(6) kg (7)
MXV 65-3202/D	4	5,5	M112 V1	65	320	105	407	311	718	250	137,5	334	45	72,8
MXV 65-3203/C	5,5	7,5	M132 V1	65	320	105	473	339	812	300	159,5	380	51	93,3
MXV 65-3204/C	7,5	10	M132 V1	65	320	105	519	339	858	300	159,5	426	53	100,7
MXV 65-3205/D	11	15	M160 V1	65	320	105	595	459	1054	350	186	472	62	138
MXV 65-3206/D	11	15	M160 V1	65	320	105	641	459	1100	350	186	518	64	140
MXV 65-3207/D	15	20	M160 V1	65	320	105	687	484	1171	350	186	564	66	168
MXV 65-3208/D	15	20	M160 V1	65	320	105	733	484	1217	350	186	610	68	170
MXV 65-3209/E	18,5	25	M160 V1	65	320	105	779	538	1317	350	206	656	70	192
MXV 65-3210/E	18,5	25	M160 V1	65	320	105	825	538	1363	350	206	702	72	194
MXV 65-3212/D	22	30	M180 V1	65	320	105	917	538	1455	350	206	794	75	204
MXV 80-4801/D	4	5,5	M112 V1	80	320	105	411	311	722	250	137,5	338	45	72,8
MXV 80-4802/C	5,5	7,5	M132 V1	80	320	105	466	339	805	300	159,5	373	51	93,3
MXV 80-4803/C	7,5	10	M132 V1	80	320	105	527	339	866	300	159,5	434	54	101,7
MXV 80-4804/D	11	15	M160 V1	80	320	105	618	459	1077	350	186	495	64	140
MXV 80-4805/D	15	20	M160 V1	80	320	105	680	484	1164	350	186	557	66	168
MXV 80-4806/D	15	20	M160 V1	80	320	105	741	484	1225	350	186	618	69	171
MXV 80-4807/E	18,5	25	M160 V1	80	320	105	802	538	1340	350	206	679	72	194
MXV 80-4808/D	22	30	M180 V1	80	320	105	864	538	1402	350	206	741	74	203

(4) Standard position of terminal box. (for other positions rotate motor through 90° or 180°) (5) MXV (L) : + 3 kg      (6) With standard motor      (7) Net weight  
 MXV (H) : + 3 kg

**Dimensions and weights**



**Flanges**

EN 1092-2

DN	PN	DE	DK	Holes	
				N.	Ø
100	16	230	180	8	19
100	25	255	190	8	23

(1) Filling and air vent  
(2) Draining

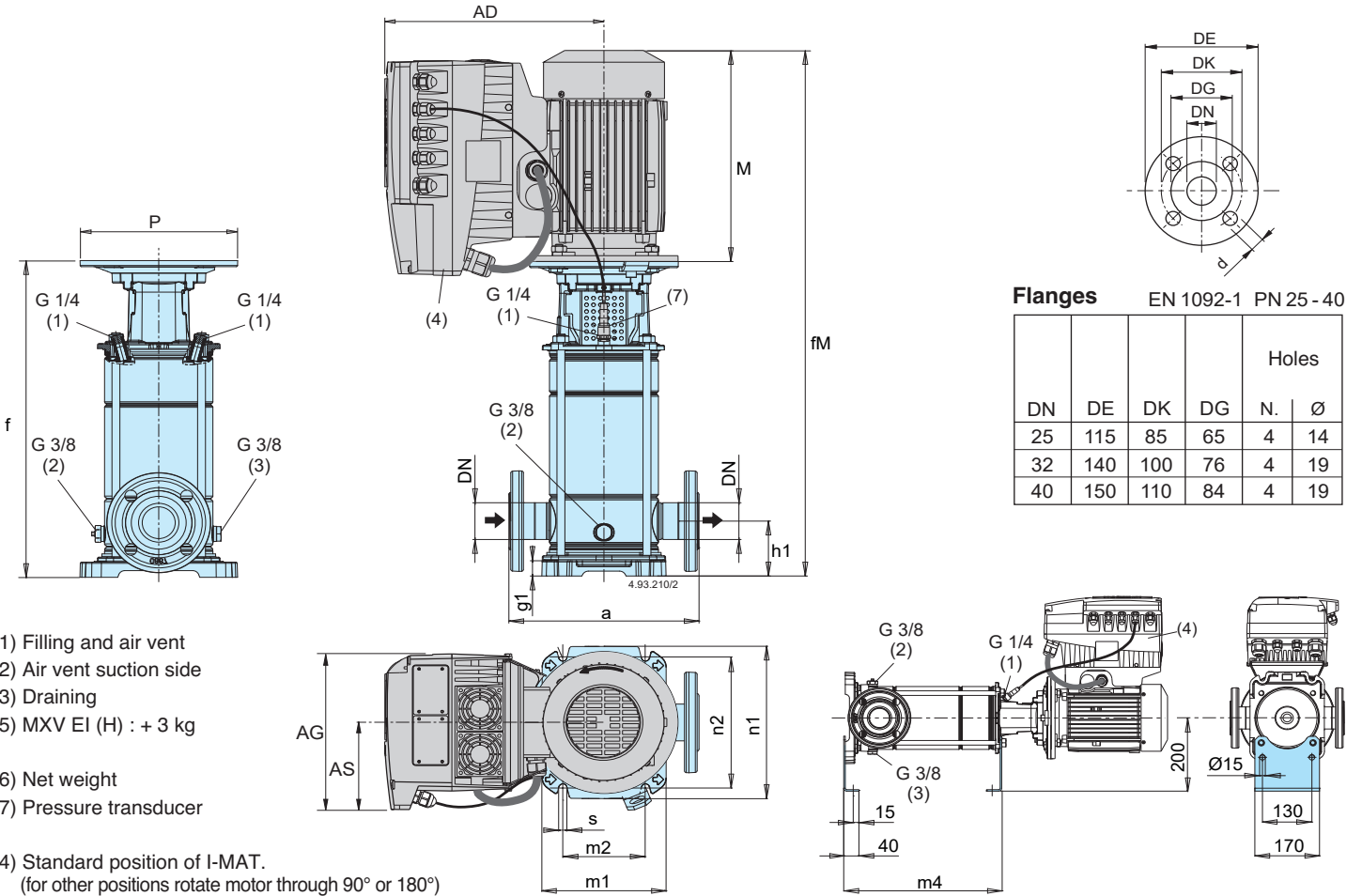
Pump	Motor				mm										without motor	with motor
	kW	HP	PN	Size	a	f	n1	n2	m1	m2	(4) M	fm	P	AD	MXV kg (5)	(4) kg (5)
MXV 100-6501	5,5	7,5	16	M132 V1	365	737	316	265	240	190	339	1076	300	159,5	81	123,3
MXV 100-6502-2R	7,5	10	16	M132 V1	365	829	316	265	240	190	339	1168	300	159,5	85,5	127,8
MXV 100-6502	11	15	16	M160 V1	365	849	316	265	240	190	459	1308	350	186	88,5	164,5
MXV 100-6503-2R	15	20	16	M160 V1	365	941	316	265	240	190	484	1425	350	186	93	195
MXV 100-6503/A	18,5	25	16	M160 V1	365	941	316	265	240	190	538	1479	350	206	93	215
MXV 100-6504-2R/A	18,5	25	16	M160 V1	365	1033	316	265	240	190	538	1571	350	206	97,5	219,5
MXV 100-6504	22	30	16	M180 V1	365	1033	316	265	240	190	538	1571	350	206	98	227
MXV 100-6505-2R	30	40	16	M200 V1	365	1131	316	265	240	190	636	1767	400	315	105,5	278,5
MXV 100-6505	30	40	16	M200 V1	365	1131	316	265	240	190	636	1767	400	315	105,5	278,5
MXV 100-6506-2R	30	40	16	M200 V1	365	1223	316	265	240	190	636	1859	400	315	110	283
MXV 100-6506	37	50	25	M200 V1	365	1223	316	265	240	190	636	1859	400	315	110	304
MXV 100-6507-2R	37	50	25	M200 V1	365	1315	316	265	240	190	636	1951	400	315	114,5	308,5
MXV 100-6507	45	60	25	M225 V1	365	1315	316	265	240	190	708	2023	450	338	117,5	432,5
MXV 100-6508-2R	45	60	25	M225 V1	365	1407	316	265	240	190	708	2115	450	338	122	437
MXV 100-6508	45	60	25	M225 V1	365	1407	316	265	240	190	708	2115	450	338	122	437
MXV 100-9001-1R	5,5	7,5	16	M132 V1	380	737	341	280	260	199	339	1076	300	159,5	82,5	124,8
MXV 100-9001	7,5	10	16	M132 V1	380	737	341	280	260	199	339	1076	300	159,5	82,5	124,8
MXV 100-9002-2R	11	15	16	M160 V1	380	849	341	280	260	199	459	1308	350	186	89	165
MXV 100-9002	15	20	16	M160 V1	380	849	341	280	260	199	484	1333	350	186	89	191
MXV 100-9003-2R/A	18,5	25	16	M160 V1	380	941	341	280	260	199	538	1479	350	206	93	215
MXV 100-9003	22	30	16	M180 V1	380	941	341	280	260	199	538	1479	350	206	93	222
MXV 100-9004-2R	30	40	16	M200 V1	380	1038	341	280	260	199	636	1674	400	315	100	273
MXV 100-9004	30	40	16	M200 V1	380	1038	341	280	260	199	636	1674	400	315	100	273
MXV 100-9005-2R	37	50	16	M200 V1	380	1131	341	280	260	199	636	1767	400	315	104	298
MXV 100-9005	37	50	16	M200 V1	380	1131	341	280	260	199	636	1767	400	315	104	298
MXV 100-9006-2R	45	60	25	M225 V1	380	1223	341	280	260	199	708	1931	450	338	110,5	425,5
MXV 100-9006	45	60	25	M225 V1	380	1223	341	280	260	199	708	1931	450	338	110,5	425,5

(3) Standard position of terminal box. (for other positions rotate motor through 90° or 180°)

(4) With standard motor

(5) Net weight

### Dimensions and weights

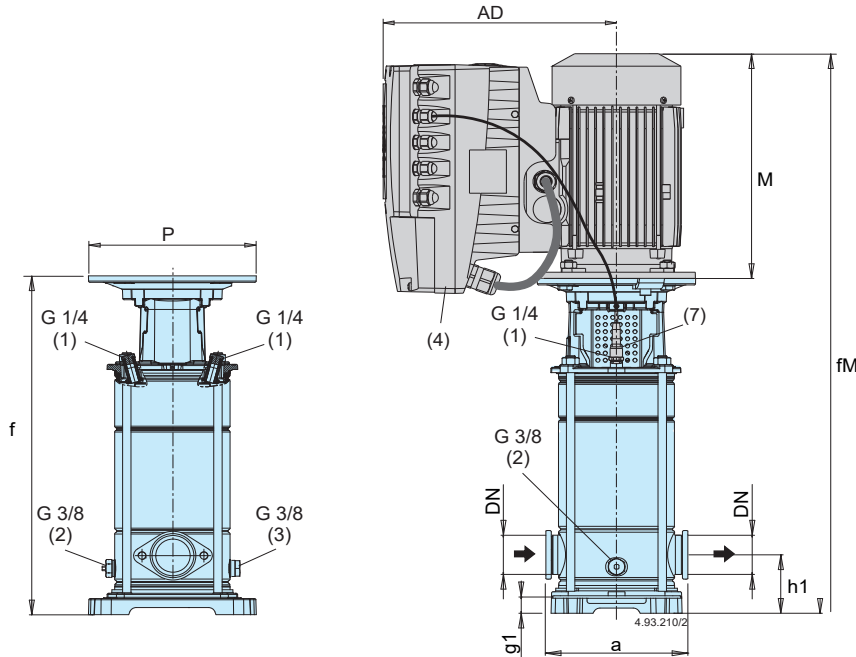


Flanges EN 1092-1 PN 25 - 40

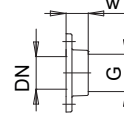
Holes					
DN	DE	DK	DG	N.	Ø
25	115	85	65	4	14
32	140	100	76	4	19
40	150	110	84	4	19

Pump	Motor		mm																	(5) (6) kg	
	kW	HP	DN	a	h1	f	n1	n2	m1	m2	s	g1	M	fM	P	AD	AG	AS	m4		
MXV EI 25-304	0,75	1	M80 V1	25	250	75	382,5	205	180	165	100	13	35,5	255	637,5	200	286	190	105	283	-
MXV EI 25-305	0,75	1	M80 V1	25	250	75	406,5	205	180	165	100	13	35,5	255	661,5	200	286	190	105	307	-
MXV EI 25-306	1,1	1,5	M80 V1	25	250	75	430,5	205	180	165	100	13	35,5	255	685,5	200	286	190	105	331	-
MXV EI 25-307	1,1	1,5	M80 V1	25	250	75	454,5	205	180	165	100	13	35,5	255	709,5	200	286	190	105	355	-
MXV EI 25-308	1,5	2	M90 V1	25	250	75	478,5	205	180	165	100	13	35,5	255	733,5	200	286	190	105	379	-
MXV EI 25-310	1,5	2	M90 V1	25	250	75	527	205	180	165	100	13	35,5	255	782	200	286	190	105	427,5	-
MXV EI 25-312	2,2	3	M90 V1	25	250	75	575,5	205	180	165	100	13	35,5	295	870,5	200	286	210	118	476	-
MXV EI 25-314	2,2	3	M90 V1	25	250	75	623,5	205	180	165	100	13	35,5	295	918,5	200	286	210	118	524	-
MXV EI 25-316	3	4	M100 V1	25	250	75	672	205	180	165	100	13	35,5	311	983	250	294	210	118	572,5	-
MXV EI 32-504	1,1	1,5	M80 V1	32	250	75	382,5	205	180	165	100	13	35,5	255	637,5	200	286	190	105	283	-
MXV EI 32-505	1,1	1,5	M80 V1	32	250	75	406,5	205	180	165	100	13	35,5	255	661,5	200	286	190	105	307	-
MXV EI 32-506	1,5	2	M90 V1	32	250	75	430,5	205	180	165	100	13	35,5	255	685,5	200	286	190	105	331	-
MXV EI 32-507	1,5	2	M90 V1	32	250	75	454,5	205	180	165	100	13	35,5	255	709,5	200	286	190	105	355	-
MXV EI 32-508	2,2	3	M90 V1	32	250	75	478,5	205	180	165	100	13	35,5	295	773,5	200	286	210	118	379	-
MXV EI 32-510	2,2	3	M90 V1	32	250	75	527	205	180	165	100	13	35,5	295	822	200	286	210	118	427,5	-
MXV EI 32-512	3	4	M100 V1	32	250	75	575,5	205	180	165	100	13	35,5	311	886,5	250	294	210	118	476	-
MXV EI 32-514	3	4	M100 V1	32	250	75	623,5	205	180	165	100	13	35,5	311	934,5	250	294	210	118	524	-
MXV EI 32-516	4	5,5	M112 V1	32	250	75	672	205	180	165	100	13	35,5	311	983	250	294	210	118	572,5	-
MXV EI 40-904	1,5	2	M90 V1	40	280	80	411,5	250	215	190	130	14	30,5	255	666,5	200	286	190	105	312	-
MXV EI 40-905	2,2	3	M90 V1	40	280	80	441,5	250	215	190	130	14	30,5	295	736,5	200	286	210	118	342	-
MXV EI 40-906	2,2	3	M90 V1	40	280	80	471,5	250	215	190	130	14	30,5	295	766,5	200	286	210	118	372	-
MXV EI 40-907	3	4	M100 V1	40	280	80	501,5	250	215	190	130	14	30,5	311	812,5	250	294	210	118	402	-
MXV EI 40-908	3	4	M100 V1	40	280	80	532	250	215	190	130	14	30,5	311	843	250	294	210	118	432,5	-
MXV EI 40-910	4	5,5	M112 V1	40	280	80	592	250	215	190	130	14	30,5	311	903	250	294	210	118	492,5	-
MXV EI 40-911	4	5,5	M112 V1	40	280	80	622	250	215	190	130	14	30,5	311	933	250	294	210	118	522,5	-
MXV EI 40-913	5,5	7,5	M132 V1	40	280	80	769,5	250	215	190	130	14	30,5	339	1108,5	300	321	210	118	583,5	-
MXV EI 40-915	5,5	7,5	M132 V1	40	280	80	830	250	215	190	130	14	30,5	339	1169	300	321	210	118	644	-

### Dimensions and weights



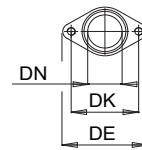
#### Oval Counterflanges



PN 16

DN	G	w	Holes	
			N.	Ø
25	1	23	2	12
32	1 1/4	23	2	12
40	1 1/2	26	2	15

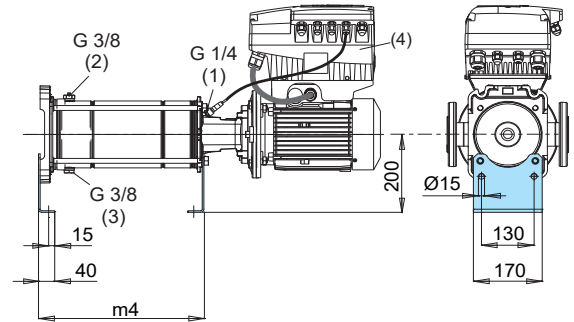
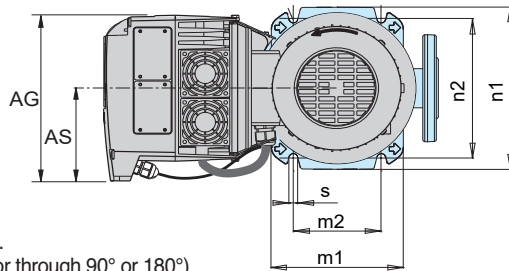
#### Oval Flanges



PN 16

DN	DE	DK	Holes	
			N.	Ø
25	95	75	2	M10
32	95	75	2	M10
40	125	100	2	M12

- (1) Filling and air vent
- (2) Air vent suction side
- (3) Draining
- (5) MXV EI (H) : + 3 kg
- (6) Net weight
- (7) Pressure transducer

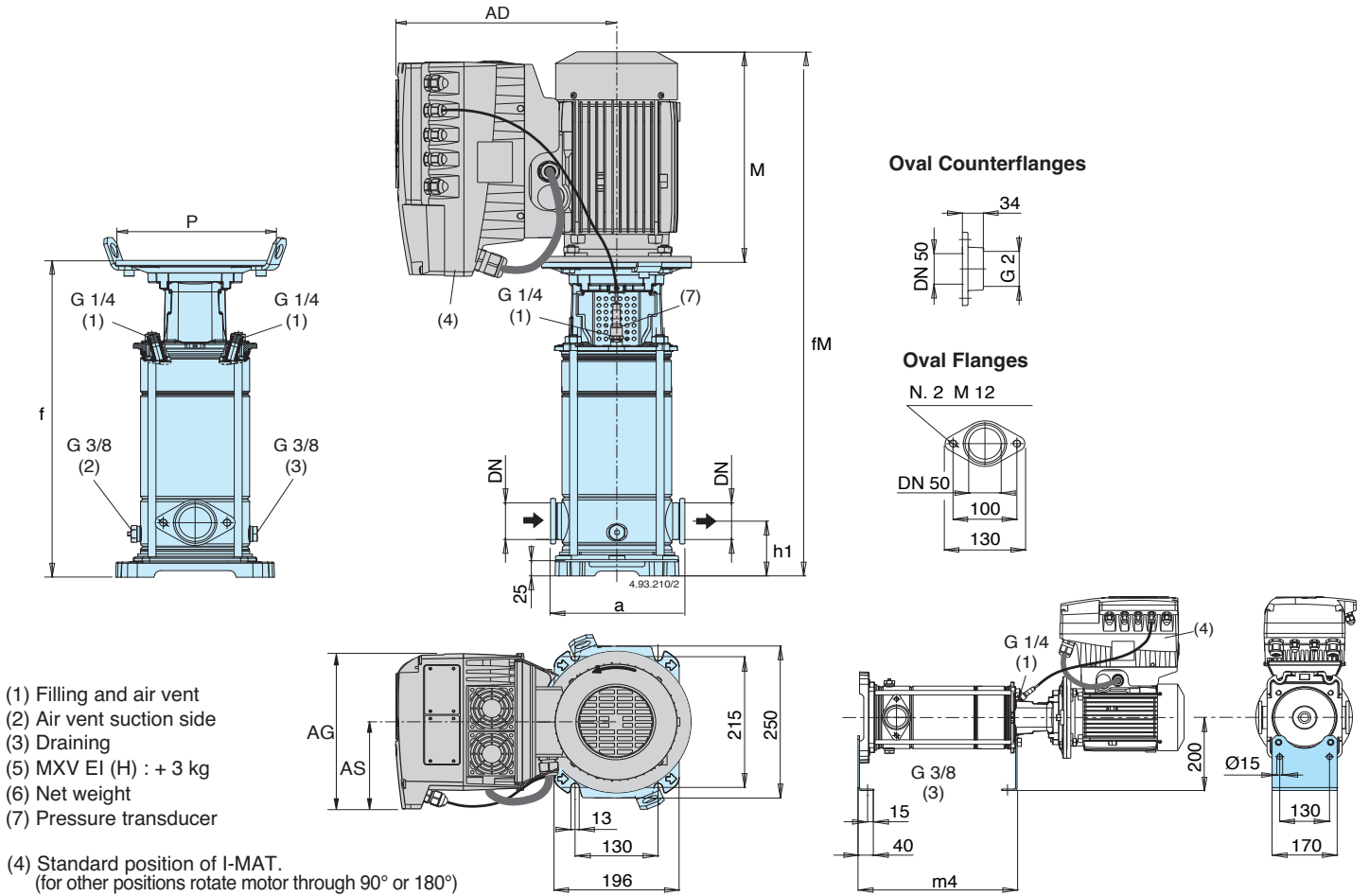


- (4) Standard position of I-MAT.  
(for other positions rotate motor through 90° or 180°)

Pump	Motor		mm																	(5) (6) kg	
	kW	HP	DN	a	h1	f	n1	n2	m1	m2	s	g1	M	fM	P	AD	AG	AS	m4		
MXV EI 25-304 O	0,75	1	M80 V1	25	160	50	367	205	180	165	100	13	20	255	622	200	286	190	105	268	-
MXV EI 25-305 O	0,75	1	M80 V1	25	160	50	391	205	180	165	100	13	20	255	646	200	286	190	105	292	-
MXV EI 25-306 O	1,1	1,5	M80 V1	25	160	50	415	205	180	165	100	13	20	255	670	200	286	190	105	316	-
MXV EI 25-307 O	1,1	1,5	M80 V1	25	160	50	439	205	180	165	100	13	20	255	694	200	286	190	105	340	-
MXV EI 25-308 O	1,5	2	M90 V1	25	160	50	463	205	180	165	100	13	20	255	718	200	286	190	105	364	-
MXV EI 25-310 O	1,5	2	M90 V1	25	160	50	511,5	205	180	165	100	13	20	255	766,5	200	286	190	105	412,5	-
MXV EI 25-312 O	2,2	3	M90 V1	25	160	50	560	205	180	165	100	13	20	295	855	200	286	210	118	461	-
MXV EI 25-314 O	2,2	3	M90 V1	25	160	50	608	205	180	165	100	13	20	295	903	200	286	210	118	509	-
MXV EI 32-504 O	1,1	1,5	M80 V1	32	160	50	367	205	180	165	100	13	20	255	622	200	286	190	105	267,5	-
MXV EI 32-505 O	1,1	1,5	M80 V1	32	160	50	391	205	180	165	100	13	20	255	646	200	286	190	105	291,5	-
MXV EI 32-506 O	1,5	2	M90 V1	32	160	50	415	205	180	165	100	13	20	255	670	200	286	190	105	315,5	-
MXV EI 32-507 O	1,5	2	M90 V1	32	160	50	439	205	180	165	100	13	20	255	694	200	286	190	105	339,5	-
MXV EI 32-508 O	2,2	3	M90 V1	32	160	50	463	205	180	165	100	13	20	295	758	200	286	210	118	363,5	-
MXV EI 32-510 O	2,2	3	M90 V1	32	160	50	511,5	205	180	165	100	13	20	295	806,5	200	286	210	118	412	-
MXV EI 32-512 O	3	4	M100 V1	32	160	50	560	205	180	165	100	13	20	311	871	250	294	210	118	460,5	-
MXV EI 32-514 O	3	4	M100 V1	32	160	50	608	205	180	165	100	13	20	311	919	250	294	210	118	508,5	-
MXV EI 40-904 O	1,5	2	M90 V1	40	200	80	411,5	250	215	190	130	14	30,5	255	666,5	200	286	190	105	312	-
MXV EI 40-905 O	2,2	3	M90 V1	40	200	80	441,5	250	215	190	130	14	30,5	295	736,5	200	286	210	118	342	-
MXV EI 40-906 O	2,2	3	M90 V1	40	200	80	471,5	250	215	190	130	14	30,5	295	766,5	200	286	210	118	372	-
MXV EI 40-907 O	3	4	M100 V1	40	200	80	501,5	250	215	190	130	14	30,5	311	812,5	250	294	210	118	402	-
MXV EI 40-908 O	3	4	M100 V1	40	200	80	532	250	215	190	130	14	30,5	311	843	250	294	210	118	432,5	-
MXV EI 40-910 O	4	5,5	M112 V1	40	200	80	592	250	215	190	130	14	30,5	311	903	250	294	210	118	492,5	-
MXV EI 40-911 O	4	5,5	M112 V1	40	200	80	622	250	215	190	130	14	30,5	311	933	250	294	210	118	522,5	-
MXV EI 40-913 O	5,5	7,5	M132 V1	40	200	80	769,5	250	215	190	130	14	30,5	339	1108,5	300	321	210	118	583,5	-

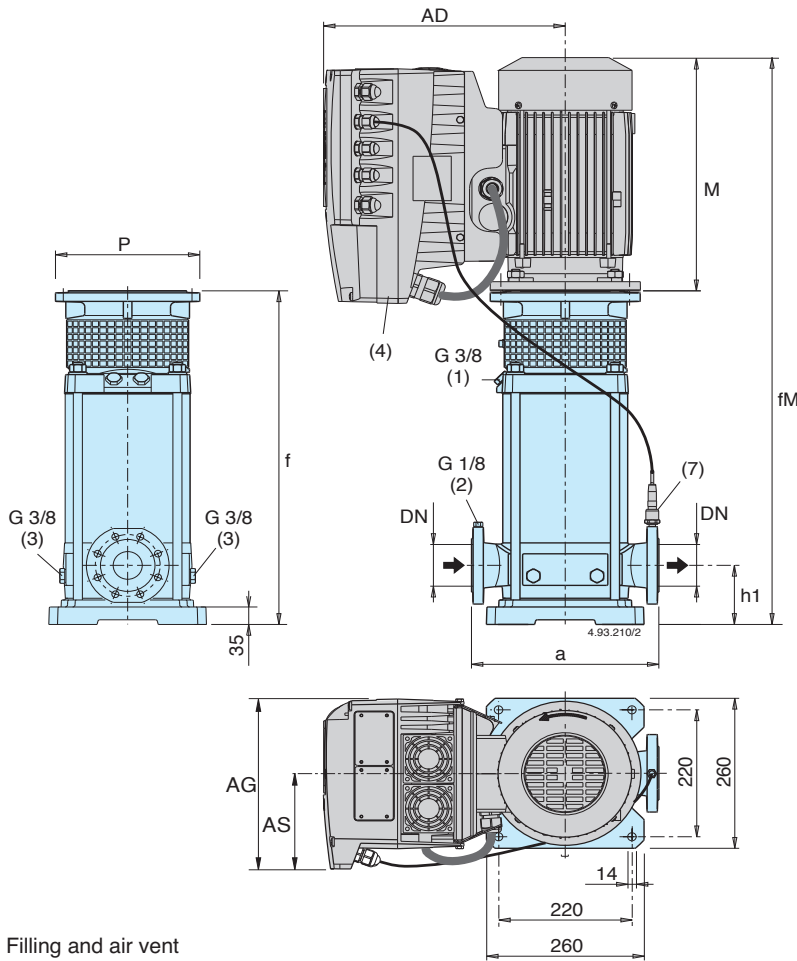


### Dimensions and weights

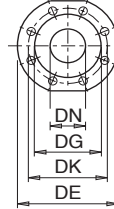


Pump	Motor		mm											(5) (6) kg	
	kW	HP	DN	a	h1	f	M	fM	P	AD	AG	AS	m4		
MXV EI 50-1501 O	1,1	1,5	M80 V1	50	200	90	438	255	693	200	286	190	105	313	44,3
MXV EI 50-1502 O	1,5	2	M90 V1	50	200	90	438	255	693	200	286	190	105	313	44,8
MXV EI 50-1503/A O	2,2	3	M90 V1	50	200	90	486	311	797	200	294	210	118	361	59,7
MXV EI 50-1504 O	3	4	M100 V1	50	200	90	534	311	845	250	294	210	118	409	62,1
MXV EI 50-1505 O	4	5,5	M112 V1	50	200	90	582	311	893	250	294	210	118	457	66,3
MXV EI 50-1506 O	5,5	7,5	M132 V1	50	200	90	693	339	1032	300	321	210	118	505	91,8
MXV EI 50-1507 O	5,5	7,5	M132 V1	50	200	90	741	339	1080	300	321	210	118	553	93,2
MXV EI 50-1508/A O	5,5	7,5	M132 V1	50	200	90	789	339	1128	300	368	281	153	601	95,2
MXV EI 50-1509 O	7,5	10	M132 V1	50	200	90	837	339	1176	300	368	281	153	649	108,3
MXV EI 50-1510 O	7,5	10	M132 V1	50	200	90	885	339	1224	300	368	281	153	697	109,8
MXV EI 50-2001 O	1,1	1,5	M80 V1	50	200	90	438	255	693	200	286	190	105	313	44,3
MXV EI 50-2002 O	2,2	3	M90 V1	50	200	90	438	295	733	200	286	210	118	313	50,2
MXV EI 50-2003 O	3	4	M100 V1	50	200	90	486	311	797	250	294	210	118	361	60,7
MXV EI 50-2004 O	4	5,5	M112 V1	50	200	90	534	311	845	250	294	210	118	409	64,8
MXV EI 50-2005 O	5,5	7,5	M132 V1	50	200	90	645	339	984	300	321	210	118	457	90,3
MXV EI 50-2006 O	7,5	10	M132 V1	50	200	90	693	339	1032	300	368	281	153	505	104,0
MXV EI 50-2007 O	7,5	10	M132 V1	50	200	90	741	339	1080	300	368	281	153	553	105,4
MXV EI 50-2008 O	9,2	12,5	M160 V1	50	200	90	819	413	1232	350	393	281	153	601	137,9
MXV EI 50-2009 O	9,2	12,5	M160 V1	50	200	90	867	413	1280	350	393	281	153	649	139,3
MXV EI 50-2010 O	11	15	M160 V1	50	200	90	915	459	1374	350	393	281	153	697	144,4

### Dimensions and weights

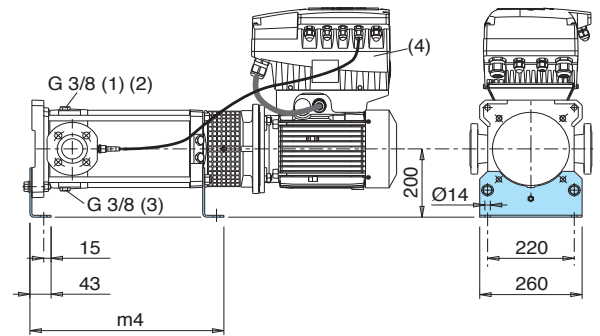


DN 65-80



Flanges in accordance  
EN 1092-2 PN 25 - 40

DN	DE	DK	DG	Holes	
				N.	Ø
65	185	145	118	8	19
80	200	160	132	8	19



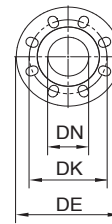
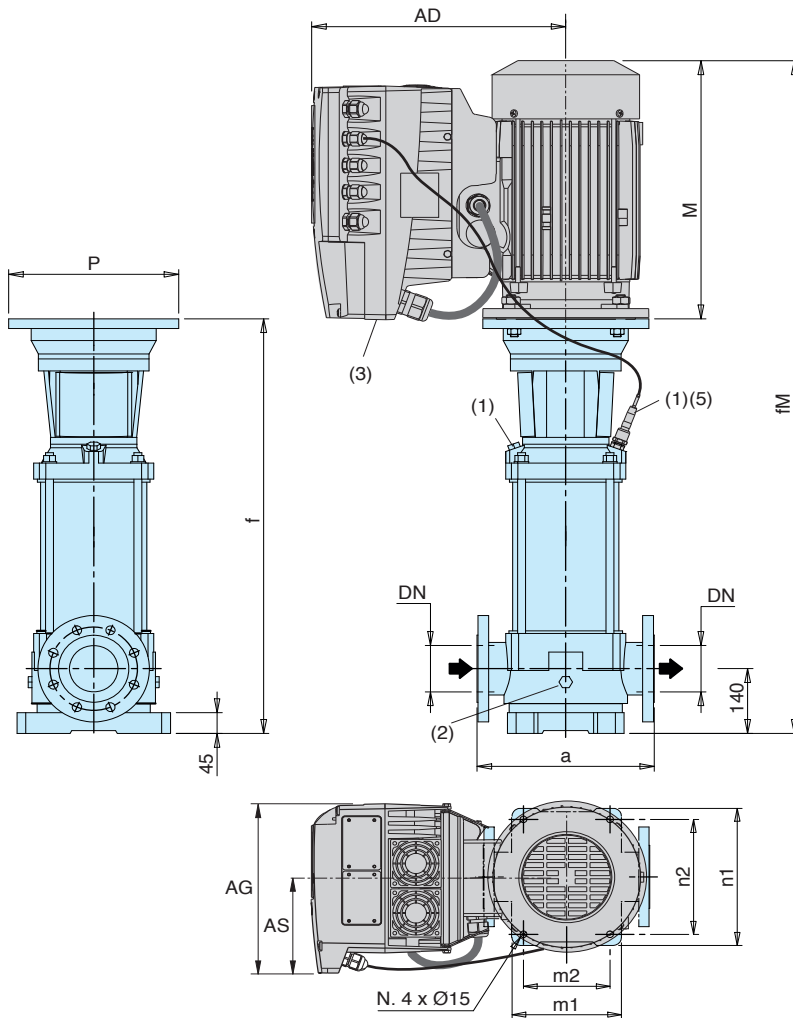
- (1) Filling and air vent
- (2) Air vent suction side
- (3) Draining
- (4) Standard position of I-MAT  
(for other positions rotate motor through 90° or 180°)

- (5) MXV (L) : + 3 kg, MXV (H) : + 3 kg
- (6) Net weight (7) Pressure transducer

Pump	Motor			mm											MXV EI (5) kg (6)
	kW	HP		DN	a	h1	f	M	fM	P	AD	AG	AS	m4	
MXV EI 65-3202/D	4	5,5	M112 V1	65	320	105	407	311	718	250	294	210	118	334	80,8
MXV EI 65-3203/C	5,5	7,5	M132 V1	65	320	105	473	339	812	300	321	210	118	380	101,3
MXV EI 65-3204/C	7,5	10	M132 V1	65	320	105	519	339	858	300	368	281	153	426	115,5
MXV EI 65-3205/D	11	15	M160 V1	65	320	105	595	459	1054	350	393	281	153	472	152,8
MXV EI 65-3206/D	11	15	M160 V1	65	320	105	641	459	1100	350	393	281	153	518	154,8
MXV EI 65-3207/D	15	20	M160 V1	65	320	105	687	484	1171	350	471	350	190	564	203
MXV EI 65-3208/D	15	20	M160 V1	65	320	105	733	484	1217	350	471	350	190	610	205
MXV EI 65-3209/E	18,5	25	M160 V1	65	320	105	779	538	1317	350	491	350	190	656	227
MXV EI 65-3210/E	18,5	25	M160 V1	65	320	105	825	538	1363	350	491	350	190	702	229
MXV EI 65-3212/D	22	30	M180 V1	65	320	105	917	538	1455	350	491	350	190	794	239
MXV EI 80-4801/D	4	5,5	M112 V1	80	320	105	411	311	722	250	294	210	118	338	80,8
MXV EI 80-4802/C	5,5	7,5	M132 V1	80	320	105	466	339	805	300	321	210	118	373	101,3
MXV EI 80-4803/C	7,5	10	M132 V1	80	320	105	527	339	866	300	368	281	153	434	116,5
MXV EI 80-4804/D	11	15	M160 V1	80	320	105	618	459	1077	350	393	281	153	495	154,8
MXV EI 80-4805/D	15	20	M160 V1	80	320	105	680	484	1164	350	471	350	190	557	203
MXV EI 80-4806/D	15	20	M160 V1	80	320	105	741	484	1225	350	471	350	190	618	206
MXV EI 80-4807/E	18,5	25	M160 V1	80	320	105	802	538	1340	350	491	350	190	679	229
MXV EI 80-4808/D	22	30	M180 V1	80	320	105	864	538	1402	350	491	350	190	741	238



### Dimensions and weights



Flanges in accordance EN 1092-2

DN	PN	DE	DK	Holes	
				N.	Ø
100	16	230	180	8	19
100	25	225	190	8	23

- (1) Filling and air vent
- (2) Draining
- (3) Standard position of I-MAT  
(for other positions rotate motor through 90° or 180°)
- (4) Net weight
- (5) Pressure transducer

Pump	Motor				mm												MXV EI kg (4)
	kW	HP	PN	Size	a	f	n1	n2	m1	m2	M	fm	P	AD	AG	AS	
MXV EI 100-6501	5,5	7,5	16	M132 V1	365	737	316	265	240	190	339	1076	300	321	210	118	131,3
MXV EI 100-6502-2R	7,5	10	16	M132 V1	365	829	316	265	240	190	339	1168	300	368	281	153	142,6
MXV EI 100-6502	11	15	16	M160 V1	365	849	316	265	240	190	459	1308	350	393	281	153	179,3
MXV EI 100-6503-2R	15	20	16	M160 V1	365	941	316	265	240	190	484	1425	350	471	350	190	230
MXV EI 100-6503/A	18,5	25	16	M160 V1	365	941	316	265	240	190	538	1479	350	491	350	190	250
MXV EI 100-6504-2R/A	18,5	25	16	M160 V1	365	1033	316	265	240	190	538	1571	350	4-1	350	190	254,5
MXV EI 100-6504	22	30	16	M180 V1	365	1033	316	265	240	190	538	1571	350	491	350	190	262
MXV EI 100-9001-1R	5,5	7,5	16	M132 V1	380	737	341	280	260	199	339	1076	300	321	210	118	132,8
MXV EI 100-9001	7,5	10	16	M132 V1	380	737	341	280	260	199	339	1076	300	368	281	153	139,6
MXV EI 100-9002-2R	11	15	16	M160 V1	380	849	341	280	260	199	459	1308	350	393	281	153	179,8
MXV EI 100-9002	15	20	16	M160 V1	380	849	341	280	260	199	484	1333	350	471	350	190	226
MXV EI 100-9003-2R/A	18,5	25	16	M160 V1	380	941	341	280	260	199	538	1479	350	491	350	190	250
MXV EI 100-9003	22	30	16	M180 V1	380	941	341	280	260	199	538	1479	350	491	350	190	257

### 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

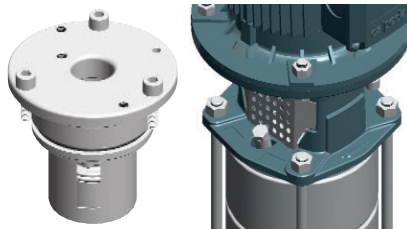
With the single-piece sleeve coupling the pump unit can be supplied fully assembled also without the motor. This eliminates the risk of damage caused by shifting of the pump shaft during transportation.

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.

#### Removable mechanical Seal

Easy removal of the mechanical seal without dismantling the motor (for MXV 25,32,40,50 and MXV 100 with motors exceeding 4 KW).

MXV 25,32,40,50



#### 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.

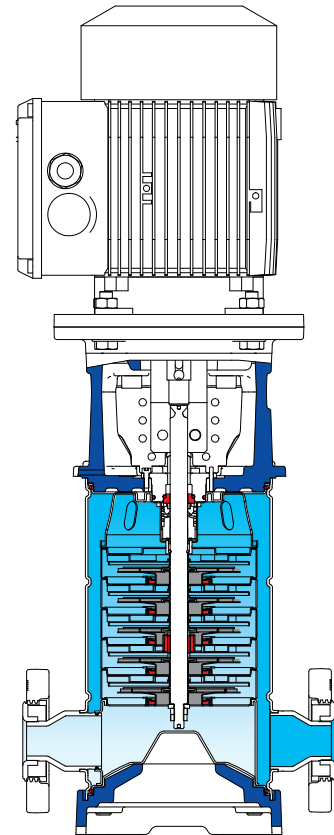
The lantern brackets compact and robust design maintains a sure alignment between rotating and fixed parts, reducing vibration.

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

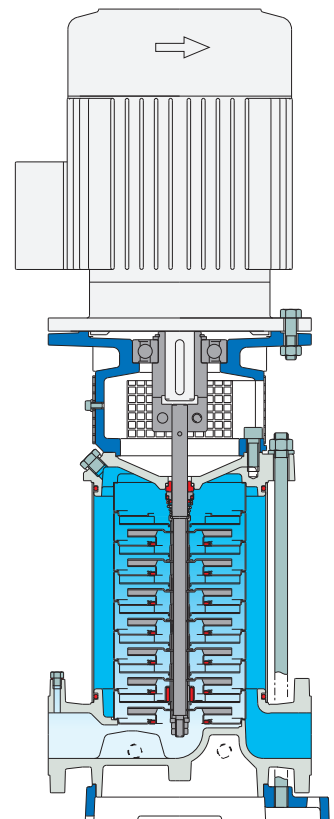
#### Low-Noise Operation

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

Low-noise standard motor.



MXV 25, 32, 40, 50



MXV 65, 80



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

### 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. Removal of the mechanical seal without dismantling the motor (for MXVL 25, 32, 40, 50, 100 with motors exceeding 4 kW). 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 (up to +120 °C for MXVL 50).

Operating environment temperature: up to 40 °C.

Maximum permissible pressure in pump casing: 25 bar. (16 bar for pumps with oval flanges).

### 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.

## MXVL 25, 32, 40, 50

All parts that come into contact with the liquid, including wet-end covers, are in chrome-nickel-molybdenum stainless steel AISI 316L.

### Materials (wetted parts)

Component	Material
Flange	Stainless Steel 1.4404 EN 10088 (AISI 316L)
External jacket	
Suction casing	
Delivery casing	
Stage casing	
Impeller	
Lower cover	
Upper cover	
Spacer sleeve	Stainless Steel 1.4404 EN 10088 (AISI 316L)
Pump shaft	
Plug	Stainless Steel 1.4404 EN 10088 (AISI 316L)
Bearing sleeve	Corrosion-resistant, cemented carbide Ceramic alumina
Bearing in stage casing	
Mechanical seal ISO 3069 - KU	Hard metal/Carbon/EPDM.
Wear ring	PPS (PTFE for MXVL 40)
O-rings	NBR (EPDM for MXVL 50)

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

### Variants (to be specified when ordering)

- Pump with flanged ports (F).
- Pump with oval flange ports (O) (for MXVL 25, 32, 40, 50).
- 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.
- Other voltage ratings.
- Frequency 60 Hz.

## MXVL 65, 80, 100

Internal parts in contact with the liquid with pump casing and upper cover in chrome-nickel-molybdenum stainless steel AISI 316L.

### Materials (wetted parts)

Component	Material
Pump casing	Stainless Steel 1.4404 EN 10088 (AISI 316L)
Upper cover	
External jacket	Stainless Steel 1.4404 EN 10088 (AISI 316L)
Stage casing	
Impeller	
Spacer sleeve	
Pump shaft	Stainless Steel (AISI 316L)(AISI 329 for MXVL 100)
Plug	
Bearing sleeve	Corrosion-resistant, cemented carbide Ceramic alumina (Corrosion-resistant, cemented carbide for MXVL 100)
Bearing in stage casing	
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 MXVL 100)

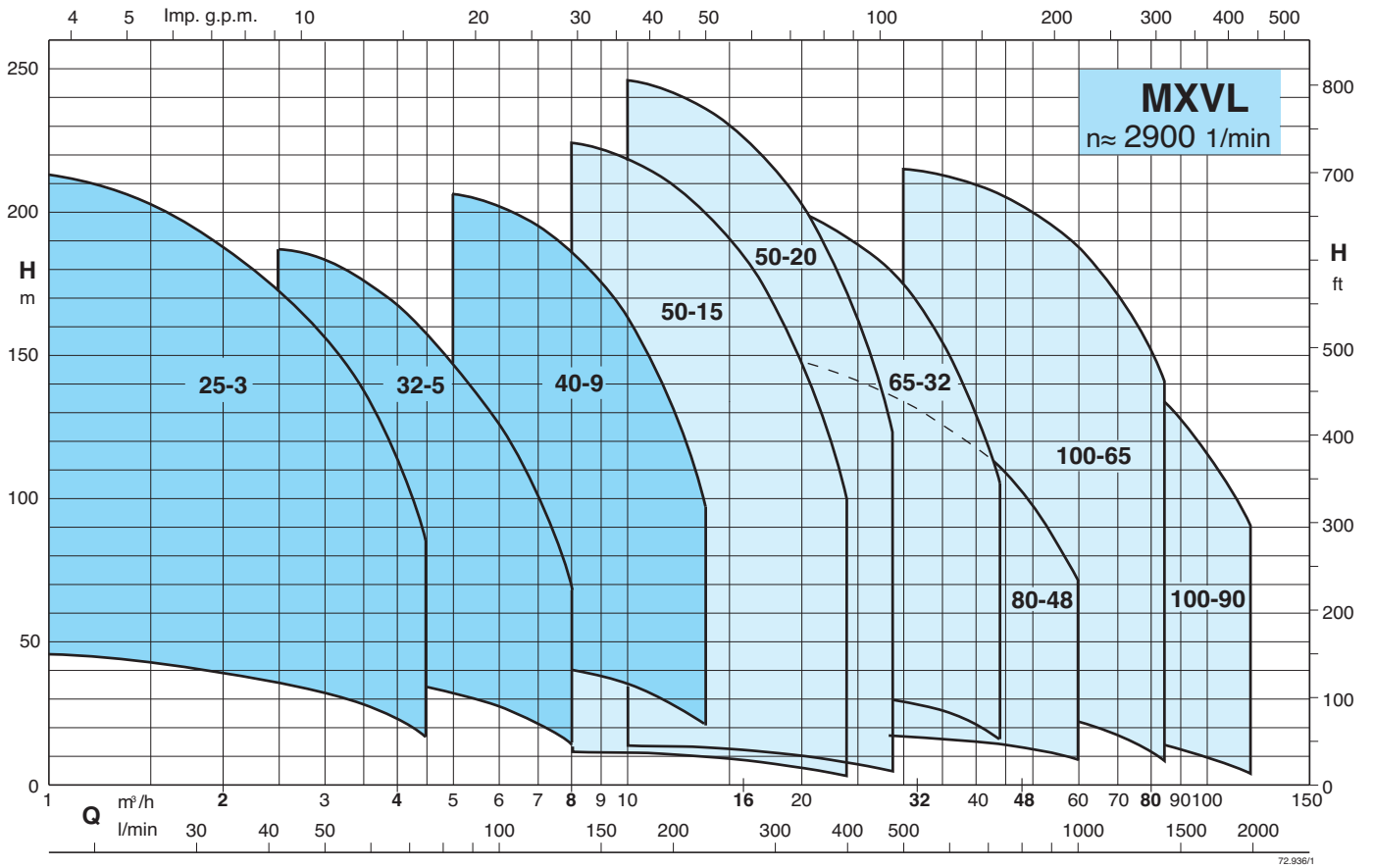
### Variants (to be specified when ordering)

- 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.
- 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).

### Coverage chart



**For characteristic curves, dimensions and weights see MXV**