



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 V1 construction.

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: 2-4 pole induction motor, 50 Hz.

Classification scheme **EFF2** or **EFF1** (High efficiency) on request.

Construction IM V1 (EN 60034-7).

Insulation class F.

Protection IP 55.

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

Rated speed of rotation (50 Hz): **MXV** = 2900 rpm
MXV4 = 1450 rpm.

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

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

Materials (wetted parts)

Pos. Nr. (pag.110)	Component	Material
13.60	Flange	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
14.02	External jacket	
16.00	Suction casing	
20.00	Delivery casing	
25.02	Stage casing	
28.00	Impeller	
34.01	Lower cover	
34.02	Upper cover	
64.15	Spacer sleeve	Chrome-nickel steel 1.4305 EN 10088 (AISI 303)
64.00	Pump shaft Plug	
64.10	Bearing sleeve	Corrosion-resistant, cemented carbide Ceramic alumina
25.03	Bearing in stage casing	
36.00	Mechanical seal ISO 3069 - KU	Hard metal/Carbon/EPDM.
14.54	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.
- Other voltage ratings. Frequency 60 Hz.
- Higher or lower liquid or ambient temperatures.

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

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)

Pos. Nr. (pag.110)	Component	A (standard)
14.00	Pump casing	Cast iron G.JL 250 EN 1561
34.02	Upper cover	
14.02	External jacket	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
25.02	Stage casing	
28.00	Impeller	
64.15	Spacer sleeve	
64.00	Pump shaft Plug	Chrome-nickel steel 1.4305 EN 10088 (AISI 303)
64.10	Bearing sleeve	Corrosion-resistant, cemented carbide Ceramic alumina
25.03	Bearing in stage casing	
36.00	Mechanical seal ISO 3069 - KU	Hard metal/Carbon/EPDM
14.54	Wear ring	PTFE
	O-rings	NBR

Direction of rotation: anticlockwise as seen from the motor.

Variants (to be specified when ordering)

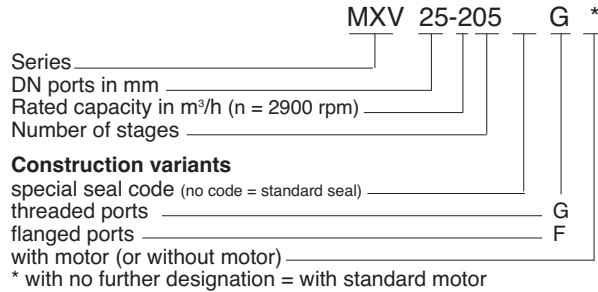
- Pump without motor.
- Pump with standard motor.

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).
- Higher or lower liquid or ambient temperatures.

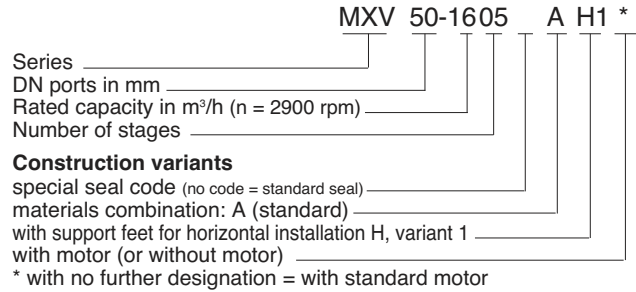
MXV 25-2, 32-4, 40-8

Designation

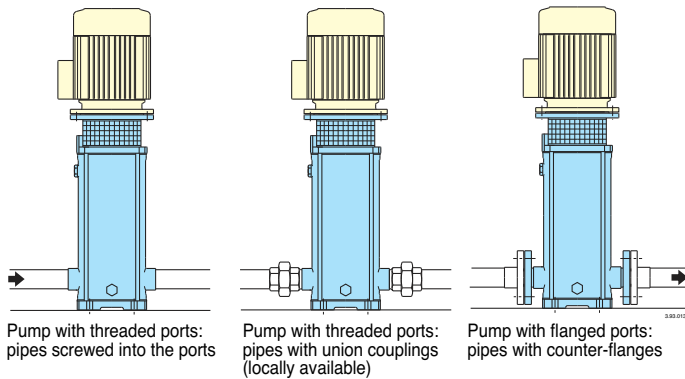


MXV 50-16, 65-32, 80-48

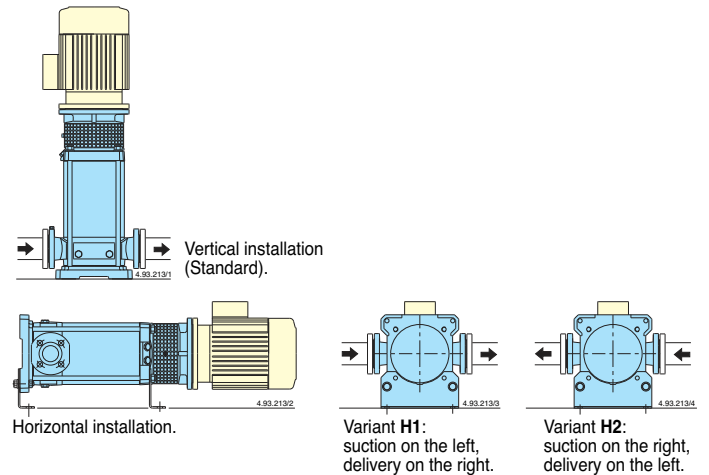
Designation



Pipe connection



Installations



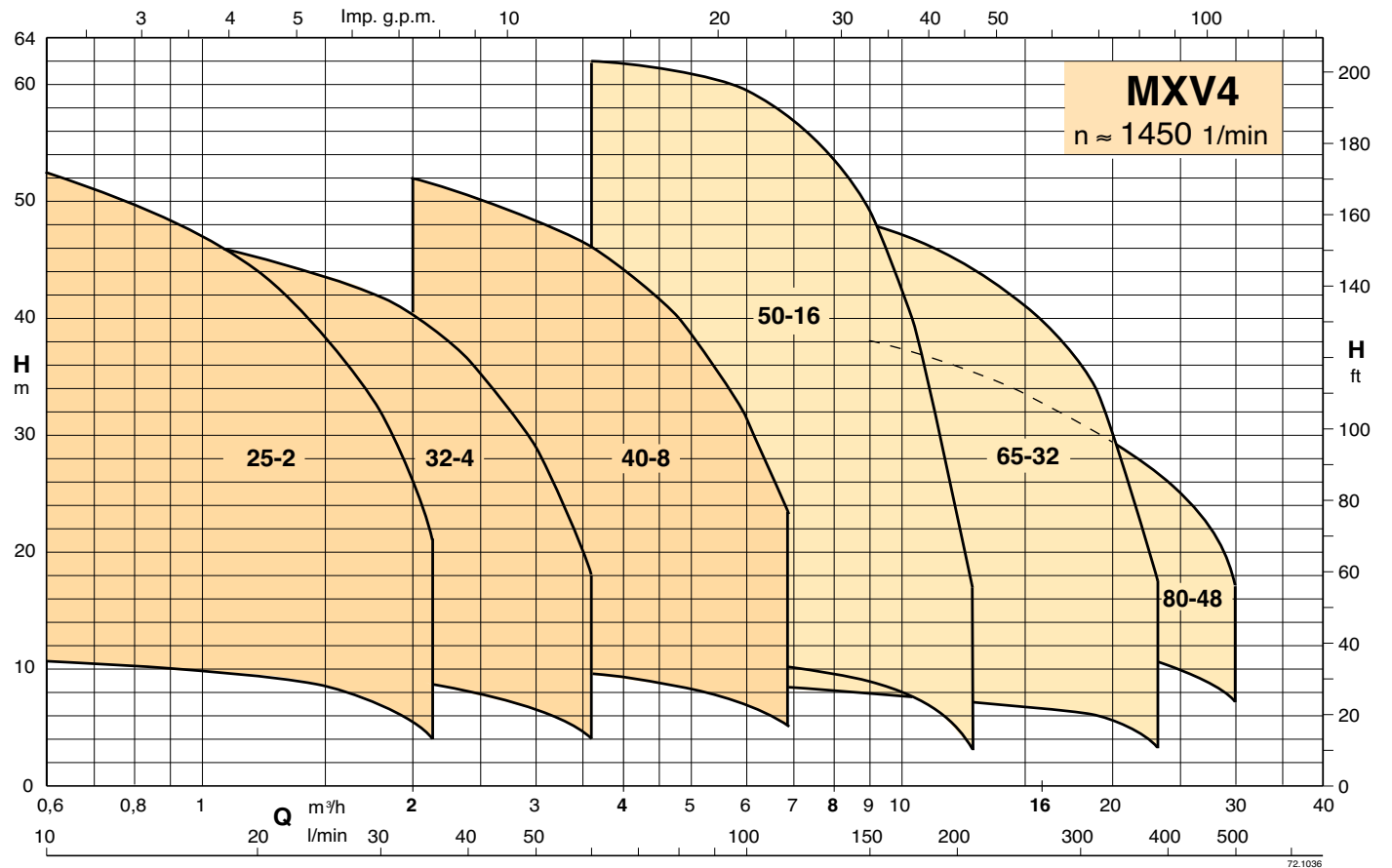
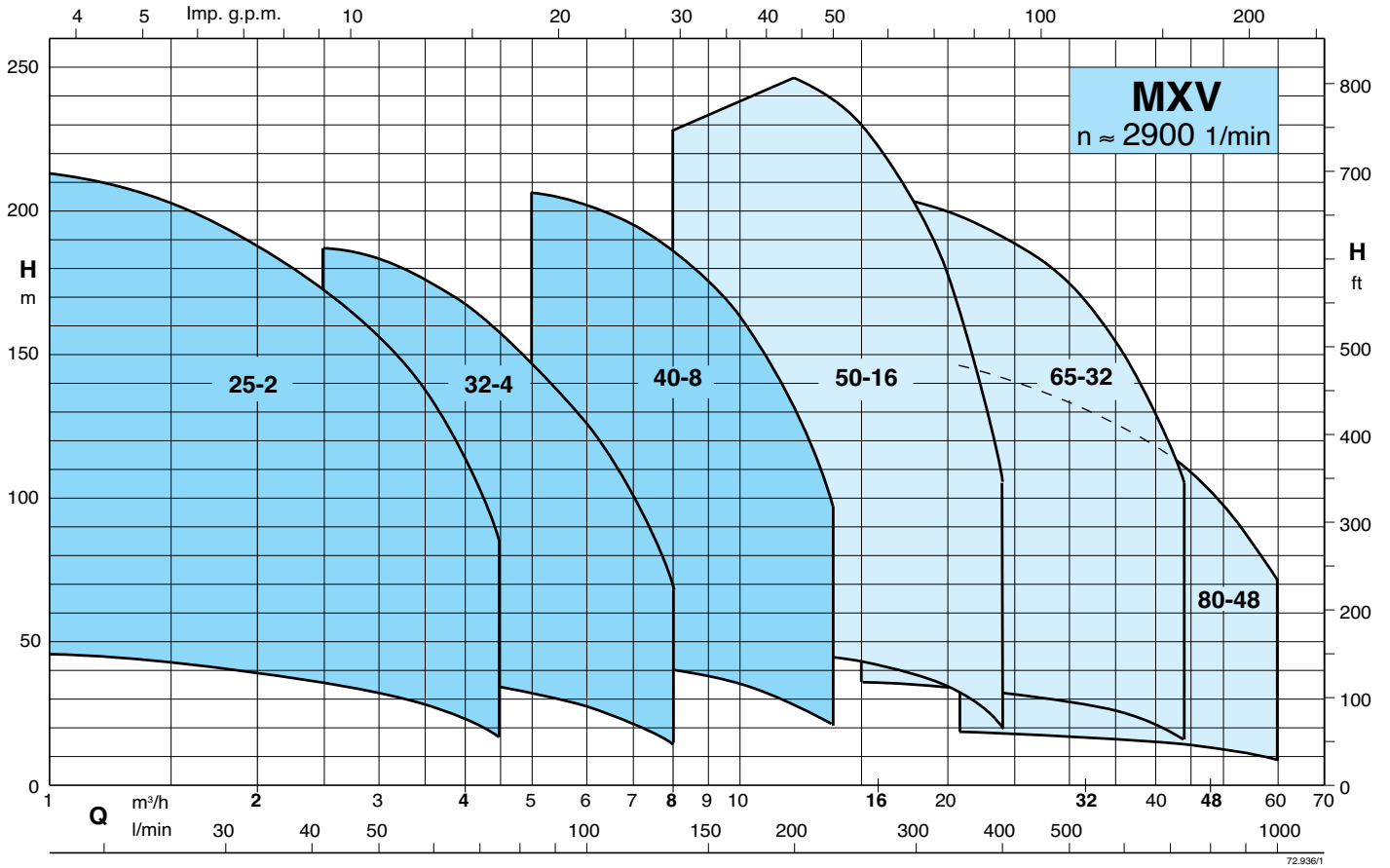
Variable parts

Pump size MXV - MXV4			Number of stages	Stage casings with bearing
25 - 204	32 - 404	40 - 804		
25 - 205	32 - 405	40 - 805	5	1
25 - 206	32 - 406	40 - 806	6	1
25 - 207	32 - 407	40 - 807	7	1
25 - 208	32 - 408	40 - 808	8	1
25 - 210	32 - 410	40 - 810	10	1
25 - 212	32 - 412	40 - 811	11	2
		40 - 813	12	2
		40 - 815	13	2
25 - 214	32 - 414	40 - 815	14	2
		40 - 815	15	2
25 - 216	32 - 416	40 - 815	16	2
		40 - 815	17	2
25 - 218	32 - 418	40 - 815	18	2
		40 - 817	19	3
		40 - 819	20	3
25 - 220		40 - 819	20	3

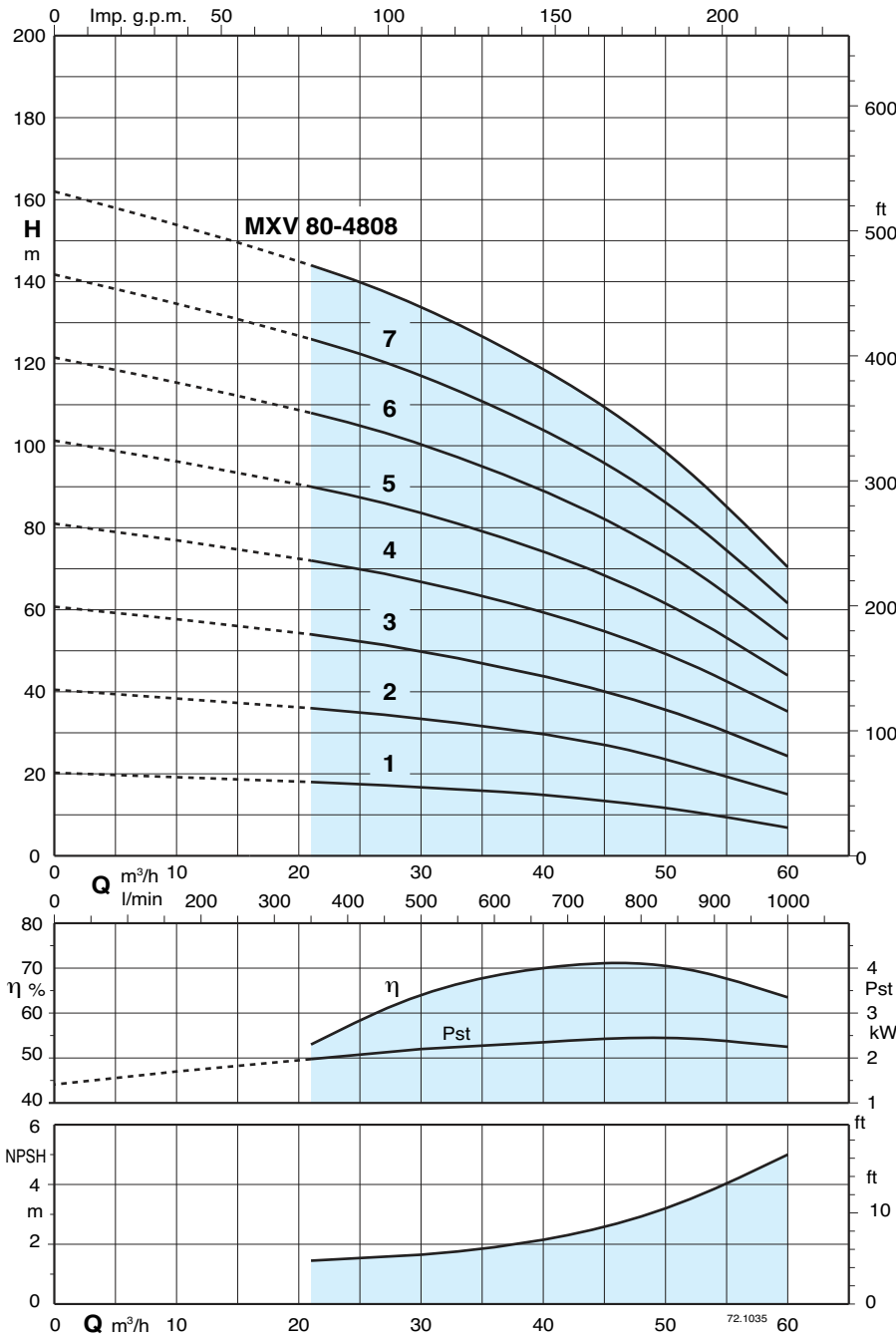
Variable parts

Pump size MXV - MXV4			Number of stages	Stage casings with bearing
50 - 1603	65 - 3202	80 - 4801		
		80 - 4802	2	1
		80 - 4803	3	1
		80 - 4804	4	1
		80 - 4805	5	1
		80 - 4805	6	1
		80 - 4805	7	1
		80 - 4805	8	1
		80 - 4805	9	1
		80 - 4805	10	1
50 - 1607	65 - 3207	80 - 4806	6	2
		80 - 4807	7	2
		80 - 4808	8	2
		80 - 4808	9	2
		80 - 4808	10	2
		80 - 4808	11	2
50 - 1611	65 - 3210	80 - 4808	12	2
		80 - 4808	13	2
		80 - 4808	14	2
		80 - 4808	15	2
		80 - 4808	16	2
50 - 1612	65 - 3212	80 - 4808	17	2
		80 - 4808	18	2
		80 - 4808	19	2
		80 - 4808	20	2
		80 - 4808	21	2

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.

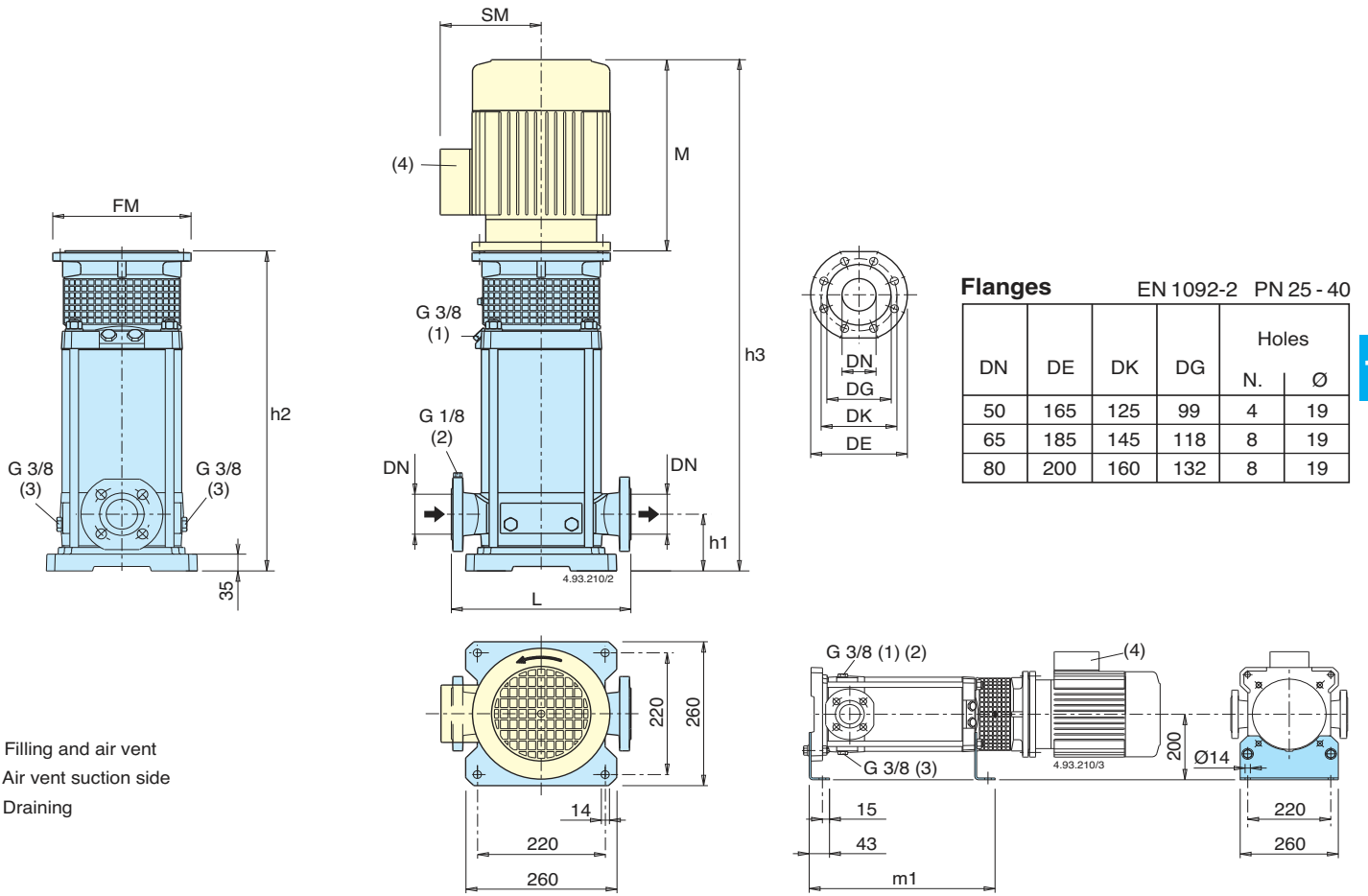
Tolerances in accordance with ISO 9906, Annex A.

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.

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

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	L	h1	h2	(6) M	h3	FM	(6) SM	m1	MXV (A) (5) kg (7)	(6) kg (7)
MXV 50-1603	3	4	100 L	50	300	90	395	313	708	250	135	322	42	65
MXV 50-1604	4	5,5	112M	50	300	90	430	334	764	250	148	357	43	73
MXV 50-1605	5,5	7,5	132SA	50	300	90	484	374	858	300	167	391	49	92
MXV 50-1606	5,5	7,5	132SA	50	300	90	519	374	893	300	167	426	51	94
MXV 50-1607	7,5	10	132SB	50	300	90	553	374	927	300	167	460	52	105
MXV 50-1608	7,5	10	132SB	50	300	90	588	374	962	300	167	495	53	106
MXV 50-1609	11	15	160MA	50	300	90	652	478	1130	350	197	529	62	134
MXV 50-1610	11	15	160MA	50	300	90	687	478	1165	350	197	564	64	136
MXV 50-1611	11	15	160MA	50	300	90	721	478	1199	350	197	598	65	137
MXV 50-1612	15	20	160MB	50	300	90	756	478	1234	350	197	633	67	152
MXV 50-1614	15	20	160MB	50	300	90	825	478	1303	350	197	702	70	155
MXV 50-1616	18,5	25	160L	50	300	90	894	478	1372	350	197	771	73	175
MXV 65-3202	4	5,5	112 M	65	320	105	407	334	741	250	148	334	45	75
MXV 65-3203	5,5	7,5	132SA	65	320	105	473	374	847	300	167	380	51	94
MXV 65-3204	7,5	10	132SB	65	320	105	519	374	893	300	167	426	53	106
MXV 65-3205	11	15	160MA	65	320	105	595	478	1073	350	197	472	62	134
MXV 65-3206	11	15	160MA	65	320	105	641	478	1119	350	197	518	64	136
MXV 65-3207	15	20	160MB	65	320	105	687	478	1165	350	197	564	66	151
MXV 65-3208	15	20	160MB	65	320	105	733	478	1211	350	197	610	68	153
MXV 65-3209	18,5	25	160L	65	320	105	779	478	1257	350	197	656	70	172
MXV 65-3210	18,5	25	160L	65	320	105	825	478	1303	350	197	702	72	174
MXV 65-3212	22	30	180M	65	320	105	917	602	1519	350	259	794	75	190
MXV 80-4801	4	5,5	112 M	80	320	105	411	334	745	250	148	338	45	75
MXV 80-4802	5,5	7,5	132SA	80	320	105	466	374	840	300	167	373	51	94
MXV 80-4803	7,5	10	132SB	80	320	105	527	374	901	300	167	434	54	107
MXV 80-4804	11	15	160MA	80	320	105	618	478	1096	350	197	495	64	136
MXV 80-4805	15	20	160MB	80	320	105	680	478	1158	350	197	557	66	151
MXV 80-4806	15	20	160MB	80	320	105	741	478	1219	350	197	618	69	154
MXV 80-4807	18,5	25	160L	80	320	105	802	478	1280	350	197	679	72	174
MXV 80-4808	22	30	180M	80	320	105	864	602	1466	350	259	741	74	189

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

(5) MXV (N) : + 3 kg
MXV (H) : + 3 kg

(6) With standard motor

(7) Net weight