



Japanese Technology since 1912

EVM series - Vertical Multistage Pumps

Data Book 60Hz



EVMS 1-3-5-10-15-20
EVM 32-45-64



G 3/8



EVMS

EVM

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Rev.B

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VERTICAL MULTISTAGE PUMPS

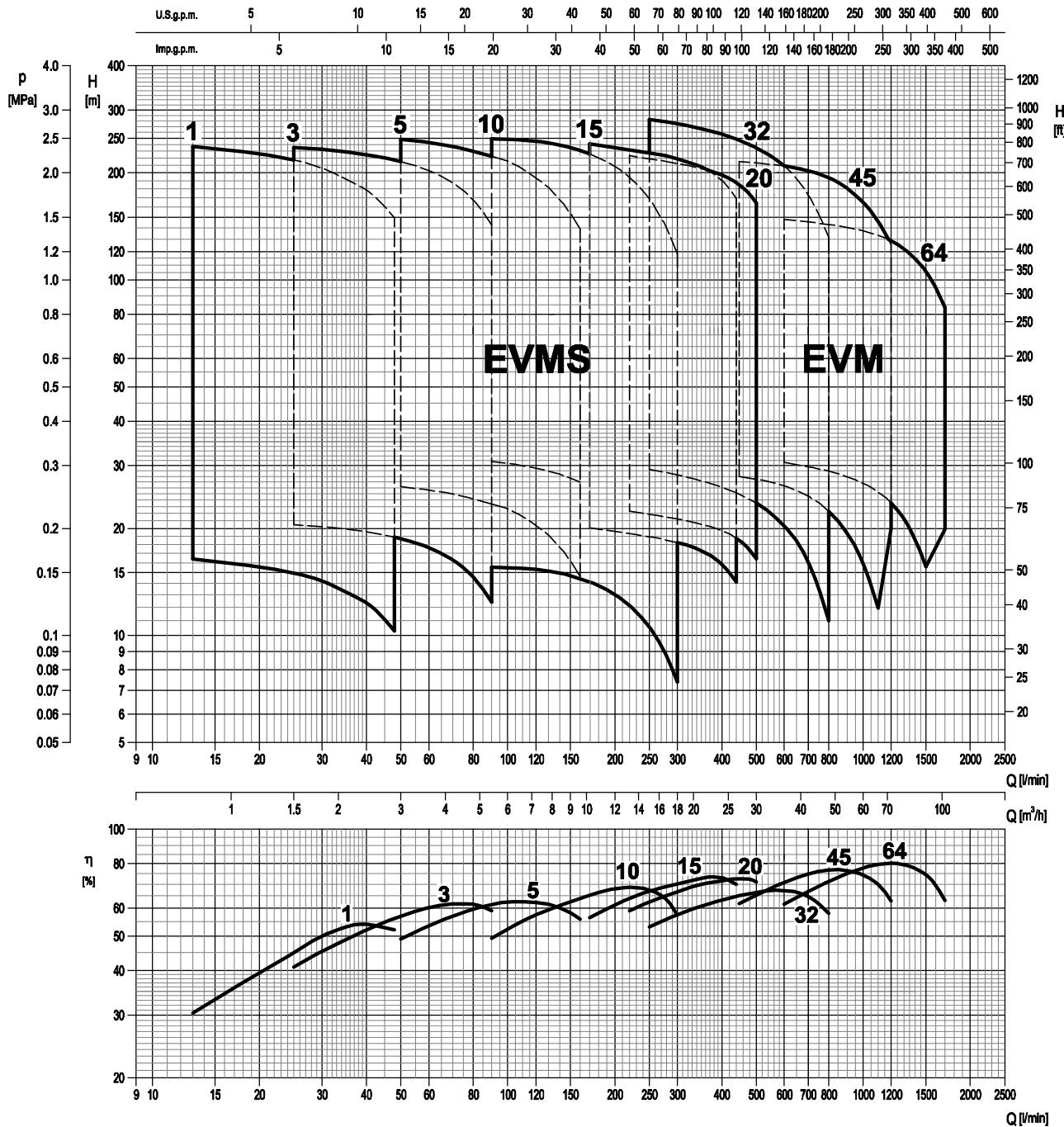
TYPICAL APPLICATIONS

INDUSTRY	BUILDING SERVICE	WATER SUPPLY
 <ul style="list-style-type: none"> • Water treatment reverse osmosis ultra-filtration water purification micro-filtration softening, ionizing and demineralising systems swimming pools separators • Boiler feeding steam systems condensate systems • Wash and clean vehicle washing systems industrial part washing laundry systems supply of liquids with acids and bases supply of chemical liquids • Chilling handling of refrigerants for cooling thermal control systems industrial cooling laser cooling • Machine tooling cooling lubricant supply for tooling machines • Pressure boosting pressure boosting for industrial use • Food & beverage food washing systems bottle wash systems • Pharmaceutical industries • Marine applications freshwater, deckwash, high fog and fire fighting on ships 	 <ul style="list-style-type: none"> • Pressure boosting pressure boosting for buildings pressure boosting for high rise buildings/hotels • Sprinkler systems • Fire fighting systems jockey pump • District heating • Heat exchangers / fan heaters • Air conditioning systems • Heating systems 	 <ul style="list-style-type: none"> • Water treatment water treatment plants filtration water treatment plants transfer • Pressure boosting transfer from water treatment plants (mains) • Irrigation golf course / sport fields irrigation • Agriculture sprinkler irrigation drip irrigation

VERTICAL MULTISTAGE PUMPS

1.2

PERFORMANCE RANGE

PERFORMANCE RANGE
EVMS(.)1-3-5-10-15-20
EVM(.)32-45-64


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60Hz

VERTICAL MULTISTAGE PUMPS

EVMS

EVMS

200



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VERTICAL MULTISTAGE PUMPS

PRODUCT FEATURES

[General]

1. Pump Type

The EVMS is Non-self-priming, vertical multistage in line, centrifugal pumps.

2. Model range

The EVMS comes in **1,3,5,10,15 and 20 m³/h flow sizes** for the majority market needs.

3. Maximum operating pressure

The EVMS can be operated at **16 bar or 25 bar as maximum**.

4. Operating temperature range

The EVMS can be operated from - 30 to + 140 °C as the maximum.

5. Material options

AISI 304, AISI 316 and Cast iron versions are available.

6. Motor

The EVMS can be coupled with the **commercial motors** that are acquired in the markets.

PTC sensor is available from 1.5 kW motor.

[Main Product Features]

1. Innovative hydraulic solutions

- Commercial motors can be fitted to all of the pump models without any modifications thanks to low pump axial thrust load.
- Low axial thrust load impeller can ensure **long life of the motor bearing**.

2. Energy saving

- High efficiency IE2 motor
- The VFD (Variable frequency drive) and the commercial sensor can be directly mounted on EVMS to **Maintain physical constant operations** such as pumping pressure depending on the conditions of use.

3. Piping connection options

- The various pipe connections are available depending on the application requirements **Oval flange / Round flange / Loose flange / Victaulic® / Clamp**
- The external dimensions can be adjusted to the replacement of the existing pump in the wide majority

4. Shaft seal solutions

- Silicon carbide inclusions with graphite can be used as **dry lubricant to reduce friction**.
- It's conforming to EN12756 (ex DIN 24960)

5. Easy maintenance

- The cartridge mechanical seal enables **the plug in replacement** of the shaft seal without disassembling the motor bracket
- The spacer coupling allows easy maintenance without having to remove heavy motors over 5.5 kW.

6. Smart plug solutions

Air ventilation plug / Water filling & sensor plug / Commercial sensor fitting / Measurements for suction and discharge pressure / drain

PRODUCT SPECIFICATIONS
EVMS(.)1-3-5-10-15-20

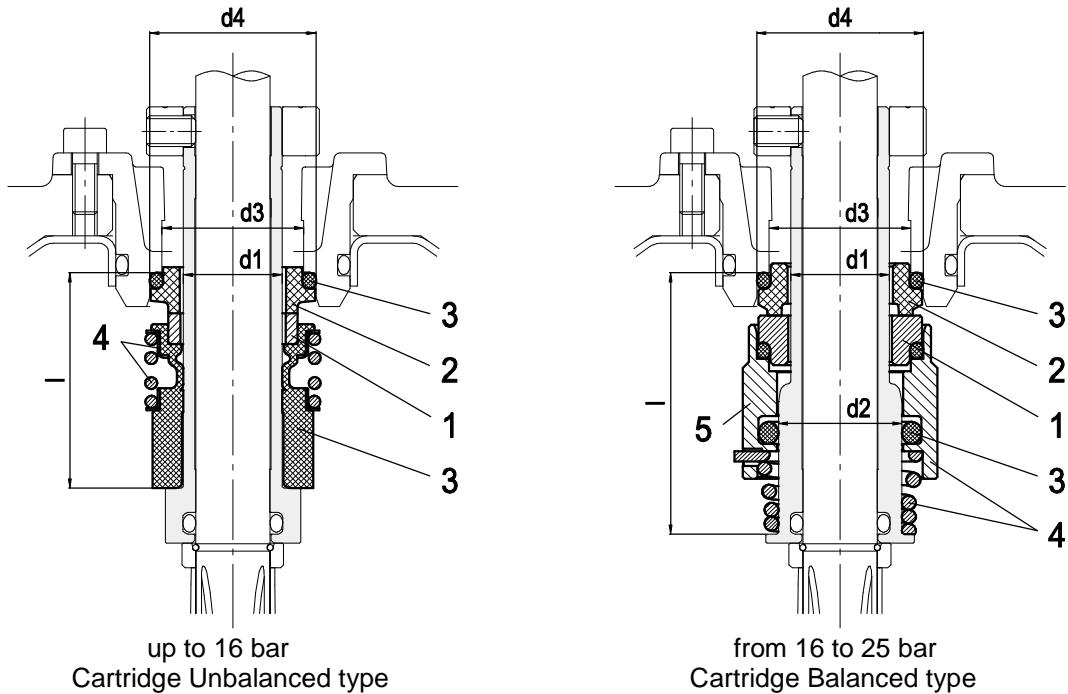
PUMP																					
Version		EVMSG					EVMS					EVMSL									
Operating range	Nominal flow rate (m³/h)	1	3	5	10	15	20	1	3	5	10	15	20	1	3	5	10	15	20		
	Maximum working pressure	1.6 / 2.5 MPa (16 bar/ 25 bar)																			
	Liquid temperature range	-30°C to 140°C																			
Key Components Material	Impeller	EN 1.4301 (AISI 304)										EN 1.4401 (AISI 316)									
	Intermediate casing	EN 1.4301 (AISI 304)										EN 1.4401 (AISI 316)									
	Liner ring	EN 1.4301 (AISI 304) + PPS										EN 1.4401 (AISI 316) + PPS									
	Bottom casing	Cast Iron					EN 1.4301 (AISI 304)					EN 1.4401 (AISI 316)									
	Casing cover	EN 1.4301 (AISI 304)										EN 1.4401 (AISI 316)									
	EN 1.4301 (AISI 304)	EVMSG / EVMS 1-3-10 , EVMSG / EVMS 5-15-20 (depend on models)																			
	Shaft	EVMSL 1-3-10 , EVMSL 5-15-20 (depend on models)					EVMSG / EVMS / EVMSL 5-15-20 (depend on models)														
	EN 1.4404 (AISI 316L)																				
	EN 1.4462 (AISI 329A)																				
	Shaft sleeve bearing	Tungsten carbide																			
	Shaft Seal	See the shaft seal options																			
	EPDM	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
	FPM	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○			
	Outer casing	EN 1.4301 (AISI 304)										EN 1.4404 (AISI 316L)									
	Motor Bracket	Cast Iron																			
	Tie rod	Galvanized steel 6.8 strength class ISO 898/1																			
	Coupling	up to 4 kW					Die cast aluminium														
	from 5.5 kW	Cast Iron																			
	Base	Cast Iron					Die cast aluminium														
Pipe connection	Oval flange	up to 16 bar	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
	Round flange	up to 16 bar	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○			
	(DIN)	from 16 bar to 25 bar	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
	Loose round flange	up to 16 bar						○	○	○	○	○	○	○	○	○	○	○			
	(DIN)	from 16 bar to 25 bar						○	○	○	○	○	○	○	○	○	○	○			
Type	Victaulic®	up to 16/25 bar						○	○	○	○	○	○	○	○	○	○	○			
	Clamp	up to 16/25 bar						○	○	○	○	○	○	○	○	○	○	○			

Legend: ● Standard ○ Options

MOTOR																										
Power Source	Frequency	60 Hz																								
	Phase	Three Phase																								
	Rotation speed	≈ 3500 min-1																								
	Power rating	0.37 ÷ 18.5 kW 0.5 ÷ 25 HP																								
	Voltage	220/380 ± 10% V (up to 4kW) 380/660 ± 10% V (above 5.5 kW)					265/460 ± 10% V (up to 4kW) 460 ± 10% V (above 5.5 kW)																			
Type	Type	Electric - TEFC																								
	Efficiency Level	- from 0.37 up to 0.55 kW IE2 from 0.75 up to 4.0 kW (220-380V / 265-460V) IE2 above 5.5 kW (380-660V / 460V)																								
	No° of poles	2																								
	Protection degree	IP 55																								
Others	Insulation Class	F (temperature rise class B)																								
	Thermal Protection	PTC is available for the above 1.5 kW																								
	Casing Material	Aluminium																								
	Flange mount (IEC motor)	IM B14 (up to 4 kW) IM B5 (above 5.5 kW)																								

VERTICAL MULTISTAGE PUMPS

1. Shaft Seal

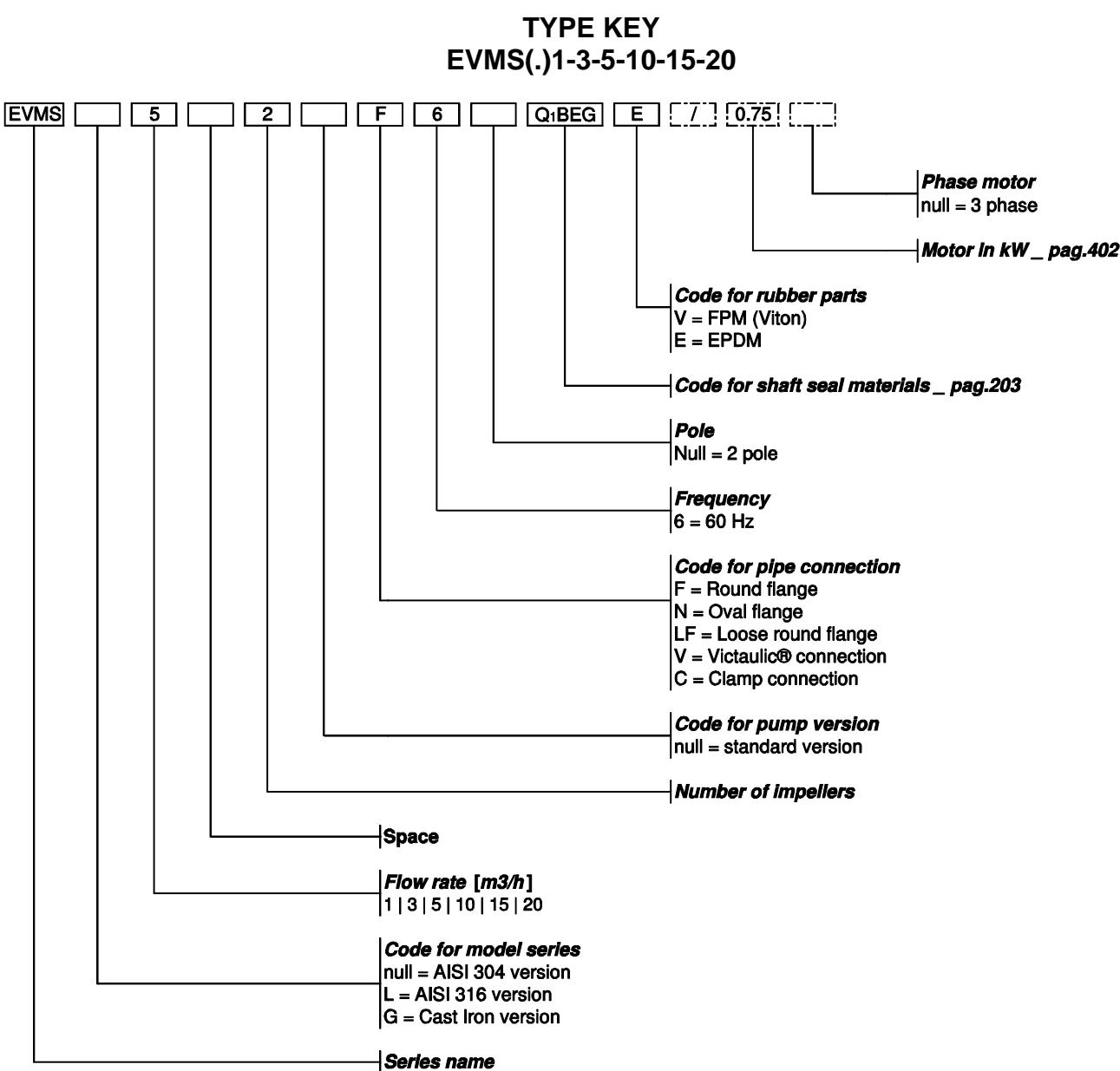


2. Type of Shaft Seal and Dimensions [mm]

Pump model	Max operating temperature	Shaft seal type		Shaft seal material							Type key				
		Cartridge	Unbalanced	1	2	3	4	5	Code	Stationary Part	Code	Elastomers	Code	Compression spring	Collar
up to 16 bar	- 30°C to + 120°C	●		SiC	(Q1)	Carbon	(B)	EPDM	(E)		AISI 316		(G)		Q1BEG
	- 30°C to + 80°C	○		SiC	(Q1)	Carbon	(B)	FPM	(V)		AISI 316		(G)		Q1BVG
	- 30°C to + 140°C		○	SiC with graphite	(Qg)	SiC	(Q1)	EPDM	(E)		AISI 316		(G)		HQgQ1EG
	- 30°C to + 80°C		○	SiC with graphite	(Qg)	SiC	(Q1)	FPM	(V)		AISI 316		(G)		HQgQ1VG
	- 30°C to + 140°C		○	SiC	(Q1)	Carbon	(B)	EPDM	(E)		AISI 316		(G)		HQ1BEG
from 16 bar to 25 bar	- 30°C to + 140°C		●	SiC	(Q1)	Carbon	(B)	EPDM	(E)		AISI 316		(G)		HQ1BEG
	- 30°C to + 80°C		○	SiC	(Q1)	Carbon	(B)	FPM	(V)		AISI 316		(G)		HQ1BVG
	- 30°C to + 140°C		○	SiC with graphite	(Qg)	SiC	(Q1)	EPDM	(E)		AISI 316		(G)		HQgQ1EG
	- 30°C to + 80°C		○	SiC with graphite	(Qg)	SiC	(Q1)	FPM	(V)		AISI 316		(G)		HQgQ1VG

● standard ○ options

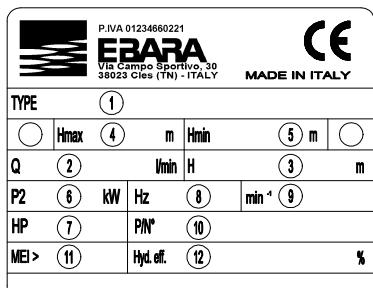
Pump model	Shaft seal type		Max operating pressure	d1 [mm]	d2 [mm]	d3 [mm]	d4 [mm]	I [mm]
EVMS 1/3/5	Cartridge	Unbalanced	16 bar	16	-	23	27	35
		Balanced	25 bar		20			42.5
EVMS 10/15/20	Cartridge	Unbalanced	16 bar	20	-	29	35	37.5
		Balanced	25 bar		24			45



Example for **pump without motor**
EVMS5 2F6Q1BEGE

Example for **pump with motor**
EVMS5 2F6Q1BEGE/0.75

NAMEPLATE



- 1) "TYPE" Pump model
- 2) "Q" Indicates upper and lower flow rate limits
- 3) "H" Indicates head limits corresponding to minimum and maximum flow rate
- 4) "H_{max}" Maximum head
- 5) "H_{min}" Minimum head
- 6) "P₂" Rated power of the motor (output at shaft)
- 7) "HP" Rated power of the motor expressed in HP (Horse Power)
- 8) "Hz" Frequency
- 9) "min-1" Speed of rotation
- 10) "P/N" Pump item number
- 11) "MEI" Index of the pump's quality in relation to its efficiency
- 12) "Hyd. Eff. " Hydraulic efficiency of the pump

60Hz

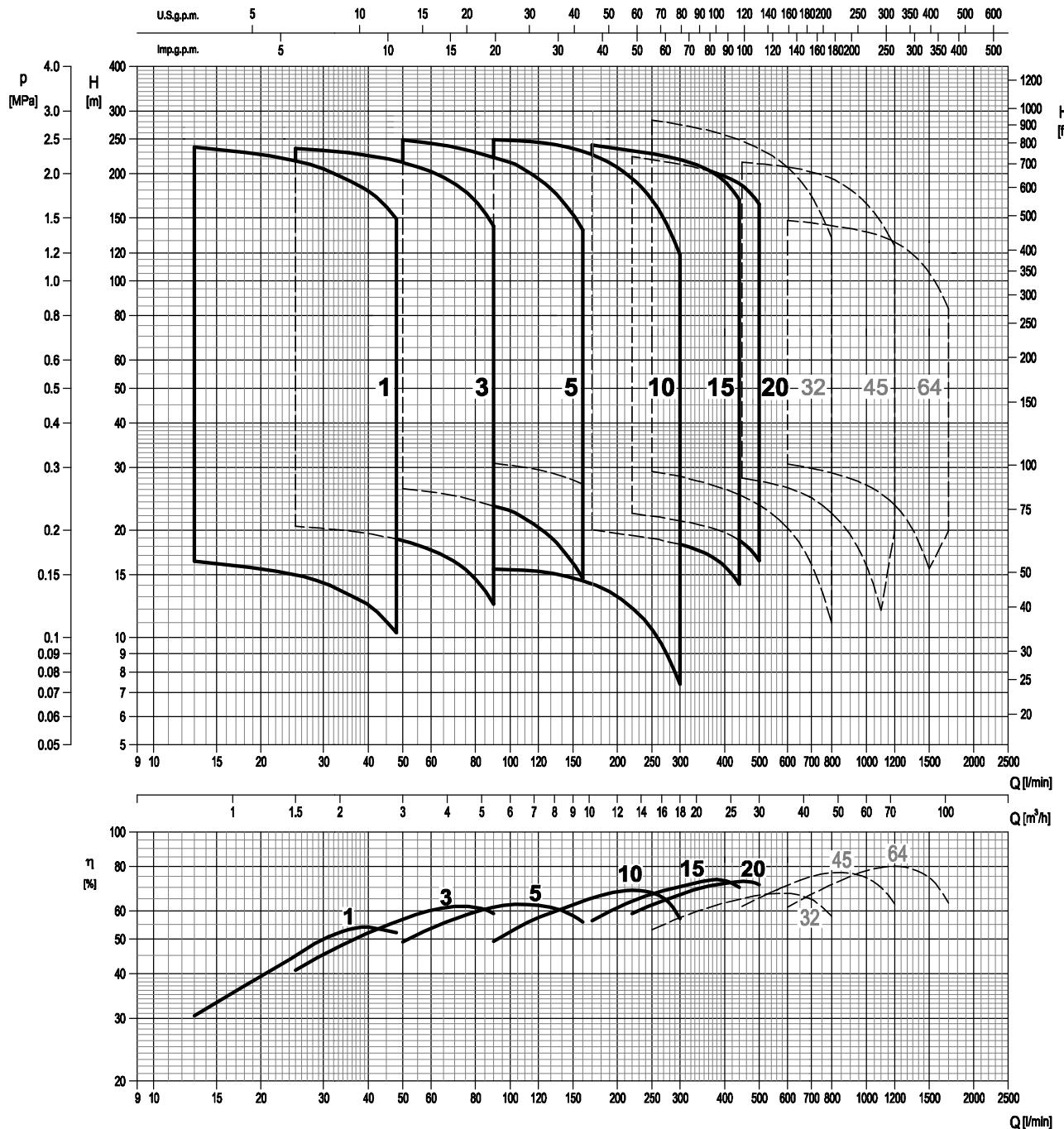
EVMS

2.5

EVMS _ PERFORMANCE RANGE

VERTICAL MULTISTAGE PUMPS

PERFORMANCE RANGE EVMS(.)1-3-5-10-15-20



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CURVE SPECIFICATIONS

The specifications below qualify the curves shown on the following pages.

Tolerances according to ISO 9906:2012 - Grade 3B.

The curves refer to effective speed of asynchronous motors at 60 Hz, 2 poles.

Measurements were carried out with clean water at 20°C of temperature and with a kinematic viscosity of $\nu = 1 \text{ mm}^2/\text{s}$ (1 cSt).

The NPSH curve is an average curve obtained in the same conditions of performance curves.

During the pump selection, consider to get a safety margin of at least 0.5 m.

The continuous curves indicate the recommended working range. The dotted curve is only a guide.

In order to avoid the risk of over-heating, the pumps should not be used at a flow rate below 10% of best efficiency point.

Symbols explanation:

Q	=	volume flow rate
H	=	total head
P_2	=	pump power input (shaft power)
η	=	pump efficiency
NPSH	=	net positive suction head required by the pump

VERTICAL MULTISTAGE PUMPS

SELECTION CHART
EVMS(.)1-3-5

Pump Type	kW	HP	Size	Maximum working pressure (MPa)	Q=Capacity									
					l/min	0	13	25	48	50	75	90	120	160
					m³/h	0	0.8	1.5	2.9	3.0	4.5	5.4	7.2	9.6
Three phase	EVMS(.)1 2/0.37	0.37	0.5	71	1.6	17.2	16.4	15	10.3	-	-	-	-	-
	EVMS(.)1 3/0.37	0.37	0.5	71		25.8	24.6	22.5	15.5	-	-	-	-	-
	EVMS(.)1 4/0.37	0.37	0.5	71		34.5	32.7	30.0	20.6	-	-	-	-	-
	EVMS(.)1 5/0.37	0.37	0.5	71		43.1	40.9	37.5	25.4	-	-	-	-	-
	EVMS(.)1 6/0.55	0.55	0.75	71		51.5	49.1	45	31	-	-	-	-	-
	EVMS(.)1 7/0.55	0.55	0.75	71		60.5	57.5	52.5	36.1	-	-	-	-	-
	EVMS(.)1 8/0.75	0.75	1	80		69	65.5	60	41.5	-	-	-	-	-
	EVMS(.)1 9/0.75	0.75	1	80		77.5	73.5	67.5	46.5	-	-	-	-	-
	EVMS(.)1 10/0.75	0.75	1	80		86	82	75	51.5	-	-	-	-	-
	EVMS(.)1 11/1.1	1.1	1.5	80		94.5	90	82.5	57	-	-	-	-	-
	EVMS(.)1 12/1.1	1.1	1.5	80		103	98	90	62	-	-	-	-	-
	EVMS(.)1 13/1.1	1.1	1.5	80		112	106	97.5	67	-	-	-	-	-
	EVMS(.)1 14/1.1	1.1	1.5	80		121	115	105	72.5	-	-	-	-	-
	EVMS(.)1 16/1.5	1.5	2	90 S		138	131	120	82.5	-	-	-	-	-
	EVMS(.)1 18/1.5	1.5	2	90 S		155	147	135	93	-	-	-	-	-
	EVMS(.)1 20/1.5	1.5	2	90 S	2.5	172	164	150	103	-	-	-	-	-
	EVMS(.)1 22/2.2	2.2	3	90 L		190	180	165	114	-	-	-	-	-
	EVMS(.)1 24/2.2	2.2	3	90 L		207	196	180	124	-	-	-	-	-
	EVMS(.)1 26/2.2	2.2	3	90 L		224	213	195	134	-	-	-	-	-
	EVMS(.)1 27/2.2	2.2	3	90 L		233	221	202	139	-	-	-	-	-
	EVMS(.)1 29/2.2	2.2	3	90 L		250	237	217	150	-	-	-	-	-
Three phase	EVMS(.)3 2/0.37	0.37	0.5	71	1.6	21.4	-	20.5	18.9	18.7	15.5	12.4	-	-
	EVMS(.)3 3/0.55	0.55	0.75	71		32.1	-	30.7	28.3	28	23.3	18.6	-	-
	EVMS(.)3 4/0.75	0.75	1	80		43	-	41	37.7	37.4	31	24.8	-	-
	EVMS(.)3 5/0.75	0.75	1	80		53.5	-	51	47	46.5	38.8	31	-	-
	EVMS(.)3 6/1.1	1.1	1.5	80		64.5	-	61.5	56.5	56	46.5	37.2	-	-
	EVMS(.)3 7/1.1	1.1	1.5	80		75	-	71.5	66	65.5	54.5	43.5	-	-
	EVMS(.)3 8/1.5	1.5	2	90 S		85.5	-	82	75.5	74.5	62	49.5	-	-
	EVMS(.)3 9/1.5	1.5	2	90 S		96.5	-	92	85	84	69	56	-	-
	EVMS(.)3 10/1.5	1.5	2	90 S		107	-	102	94.5	93.5	77.5	62	-	-
	EVMS(.)3 11/2.2	2.2	3	90 L		118	-	113	104	103	85.5	68	-	-
	EVMS(.)3 12/2.2	2.2	3	90 L		129	-	123	113	112	93.0	74.5	-	-
	EVMS(.)3 13/2.2	2.2	3	90 L		139	-	133	123	122	101	80.5	-	-
	EVMS(.)3 14/2.2	2.2	3	90 L		150	-	143	132	131	109	86.5	-	-
	EVMS(.)3 15/3.0	3.0	4	100 L		161	-	154	142	140	116	93	-	-
	EVMS(.)3 16/3.0	3.0	4	100 L	2.5	172	-	164	151	150	124	99	-	-
	EVMS(.)3 17/3.0	3.0	4	100 L		182	-	174	160	159	132	105	-	-
	EVMS(.)3 19/3.0	3.0	4	100 L		204	-	195	179	178	147	118	-	-
	EVMS(.)3 20/3.0	3.0	4	100 L		214	-	205	189	187	155	124	-	-
	EVMS(.)3 21/4.0	4.0	5.5	112 M		225	-	215	198	196	163	130	-	-
	EVMS(.)3 22/4.0	4.0	5.5	112 M		236	-	225	208	206	171	136	-	-
Three phase	EVMS(.)3 23/4.0	4.0	5.5	112 M	1.6	247	-	235	217	215	178	143	-	-
	EVMS(.)5 2/0.75	0.75	1	80		27.6	-	-	26.1	24.6	23.4	20.4	14.6	-
	EVMS(.)5 3/1.1	1.1	1.5	80		41.4	-	-	39.2	36.9	35.1	30.6	21.9	-
	EVMS(.)5 4/1.5	1.5	2	90 S		55	-	-	52.5	49	47	40.5	29.3	-
	EVMS(.)5 5/2.2	2.2	3	90 L		69	-	-	65.5	61.5	58	51	36.6	-
	EVMS(.)5 6/2.2	2.2	3	90 L		83	-	-	78.5	74	70	61	44	-
	EVMS(.)5 7/3.0	3.0	4	100 L		96.5	-	-	91.5	86	82	71.5	51	-
	EVMS(.)5 8/3.0	3.0	4	100 L		110	-	-	105	98.5	93.5	81.5	58.5	-
	EVMS(.)5 9/3.0	3.0	4	100 L		124	-	-	118	111	105	91.5	66	-
	EVMS(.)5 10/4.0	4.0	5.5	112 M		138	-	-	131	123	117	102	73	-
	EVMS(.)5 11/4.0	4.0	5.5	112 M		152	-	-	144	135	129	112	80.5	-
	EVMS(.)5 12/4.0	4.0	5.5	112 M		166	-	-	157	148	140	122	88	-
	EVMS(.)5 13/5.5	5.5	7.5	132 S	2.5	179	-	-	170	160	152	132	95	-
	EVMS(.)5 14/5.5	5.5	7.5	132 S		193	-	-	183	172	164	143	102	-
	EVMS(.)5 15/5.5	5.5	7.5	132 S		207	-	-	196	185	175	153	110	-
	EVMS(.)5 16/5.5	5.5	7.5	132 S		221	-	-	209	197	187	163	117	-
	EVMS(.)5 17/7.5	7.5	10	132 S		235	-	-	222	209	199	173	124	-
	EVMS(.)5 19/7.5	7.5	10	132 S		262	-	-	248	234	222	194	139	-

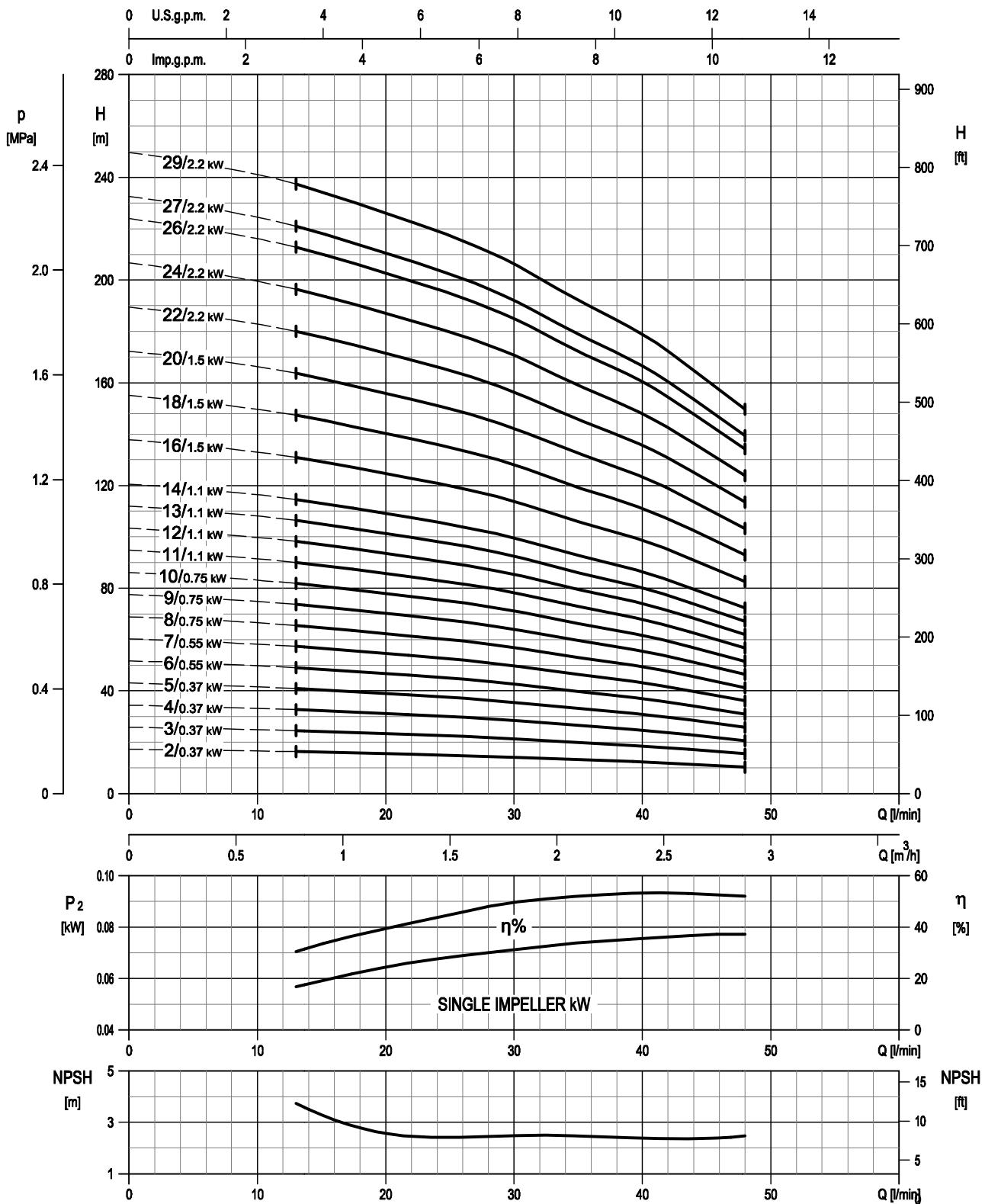
1.6 MPa=16 bar ; 2.5 MPa=25 bar

**SELECTION CHART
EVMS(.)10-15-20**

Pump Type	kW	HP	Size	Maximum working pressure (MPa)	Q=Capacity														
					l/min	0	90	120	160	170	200	220	250	300	350	400	440	500	
					m³/h	0	5.4	7.2	9.6	10.2	12.0	13.2	15	18	21	24	26.4	30	
10	EVMS(.)10 1/0.75	0.75	1	80	1.6	16	15.6	15.3	14.4	14.1	13	12.1	10.6	7.4	-	-	-	-	
	EVMS(.)10 2/1.5	1.5	2	90 S		32	31.1	30.7	28.9	28.2	26.1	24.3	21.1	14.8	-	-	-	-	
	EVMS(.)10 3/2.2	2.2	3	90 L		48	46.5	46	43.3	42.4	39.1	36.4	31.7	22.2	-	-	-	-	
	EVMS(.)10 4/3.0	3.0	4	100 L		64	62	61.5	58	56.5	52	48.5	42	29.6	-	-	-	-	
	EVMS(.)10 5/4.0	4.0	5.5	112 M		80	77.5	76.5	72	70.5	65	60.5	52.5	37	-	-	-	-	
	EVMS(.)10 6/4.0	4.0	5.5	112 M		96	93.5	92	86.5	84.5	78	73	63.5	44.5	-	-	-	-	
	EVMS(.)10 7/5.5	5.5	7.5	132 S		112	109	107	101	99	91	85	74	52	-	-	-	-	
	EVMS(.)10 8/5.5	5.5	7.5	132 S		128	125	123	115	113	104	97.1	84.5	59	-	-	-	-	
	EVMS(.)10 9/5.5	5.5	7.5	132 S		144	140	138	130	127	117	109	95	66.5	-	-	-	-	
	EVMS(.)10 10/7.5	7.5	10	132 S		160	156	153	144	141	130	121	106	74	-	-	-	-	
15	EVMS(.)10 11/7.5	7.5	10	132 S	2.5	176	171	169	159	155	143	134	116	81.5	-	-	-	-	
	EVMS(.)10 12/7.5	7.5	10	132 S		192	187	184	173	170	156	146	127	89	-	-	-	-	
	EVMS(.)10 14/11	11	15	160 M		224	218	215	202	198	182	170	148	104	-	-	-	-	
	EVMS(.)10 15/11	11	15	160 M		240	233	230	216	219	195	182	158	111	-	-	-	-	
	EVMS(.)10 16/11	11	15	160 M		256	249	245	231	226	208	194	169	118	-	-	-	-	
	EVMS(.)15 1/1.5	1.5	2	90 S	1.6	21.7	-	-	-	19.1	18.4	18.0	17.4	15.8	14.2	12.1	9.9	-	
	EVMS(.)15 2/3.0	3.0	4	100 L		43.6	-	-	-	40	39.1	38.6	37.9	36.5	34.7	31.7	28.2	-	-
	EVMS(.)15 3/5.5	5.5	7.5	132 S		65.4	-	-	-	60	58.5	58	57	54.5	52	47.5	42.5	-	-
	EVMS(.)15 4/7.5	7.5	10	132 S		87	-	-	-	80.5	78.5	78	76	73	69	63.5	56.5	-	-
	EVMS(.)15 5/7.5	7.5	10	132 S		109	-	-	-	100	98	96.5	95	91	86.5	79.5	70.5	-	-
20	EVMS(.)15 6/11	11	15	160 M	2.5	131	-	-	-	120	117	116	114	109	104	95.5	84.5	-	-
	EVMS(.)15 7/11	11	15	160 M		153	-	-	-	141	137	135	133	128	121	111	99	-	-
	EVMS(.)15 8/15	15	20	160 M		174	-	-	-	161	157	154	152	146	138	127	113	-	-
	EVMS(.)15 9/15	15	20	160 M		196	-	-	-	181	176	174	171	164	156	143	127	-	-
	EVMS(.)15 10/15	15	20	160 M		218	-	-	-	201	196	193	190	182	173	159	141	-	-
	EVMS(.)15 11/18.5	18.5	25	160 L	2.5	240	-	-	-	221	215	212	208	201	190	175	155	-	-
	EVMS(.)15 12/18.5	18.5	25	160 L		262	-	-	-	241	235	232	227	219	208	190	169	-	-
	EVMS(.)20 1/2.2	2.2	3	90 L	1.6	28.0	-	-	-	-	-	23.2	22.4	20.9	18.9	16.7	14.7	10.6	
	EVMS(.)20 2/4.0	4.0	5.5	112 M		49.5	-	-	-	-	-	44.5	44	42.5	41	39.4	37.5	32.8	
	EVMS(.)20 3/7.5	7.5	10	132 S		74	-	-	-	-	-	67	65.5	64	61.5	59	56	49	
	EVMS(.)20 4/7.5	7.5	10	132 S		99	-	-	-	-	-	89.5	87.5	85	82	79	75	65.5	
	EVMS(.)20 5/11	11	15	160 M		124	-	-	-	-	-	112	110	106	103	98.5	93.5	82	
20	EVMS(.)20 6/11	11	15	160 M	2.5	148	-	-	-	-	-	134	131	128	123	118	112	98.5	
	EVMS(.)20 7/15	15	20	160 M		173	-	-	-	-	-	156	153	149	144	138	131	115	
	EVMS(.)20 8/15	15	20	160 M		198	-	-	-	-	-	179	175	170	164	158	150	131	
	EVMS(.)20 9/18.5	18.5	25	160 L		223	-	-	-	-	-	201	197	191	185	177	169	148	
	EVMS(.)20 10/18.5	18.5	25	160 L		247	-	-	-	-	-	223	219	213	206	197	187	164	

1.6 MPa=16 bar ; 2.5 MPa=25 bar

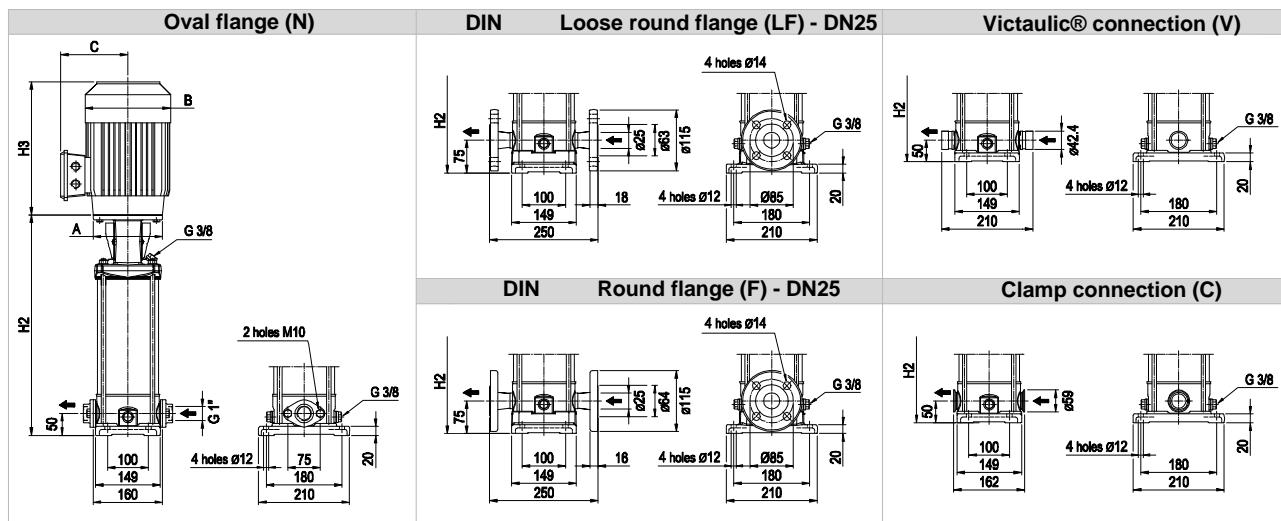
VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVE
EVMS(L)1

Rotation speed ≈ 3500 min⁻¹
Test standard: ISO 9906:2012 - Grade 3B

TECHNICAL DATA EVMS(L)1

Dimensional sketch



Dimensions [mm] and Weights [Kg]

Pump Type	P _{max} [MPa]	Motor			Oval flange (N)			Loose round flange (LF) Round flange (F)			Vicatualic® connection (V) Clamp connection (C)					
		kW	Size	A	B	C	H3	H2	Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor
EVMS(L)1 2/0.37	1.6	0.37	71	ø105	139	114	216	250	10	15.8	275	10.7	16.5	250	10	15.8
EVMS(L)1 3/0.37	1.6	0.37	71	ø105	139	114	216	271	10.5	16.3	296	11.2	17	271	10.4	16.2
EVMS(L)1 4/0.37	1.6	0.37	71	ø105	139	114	216	292	10.9	16.7	317	11.6	17.4	292	10.8	16.6
EVMS(L)1 5/0.37	1.6	0.37	71	ø105	139	114	216	313	11.4	17.2	338	12	17.8	313	11.3	17.1
EVMS(L)1 6/0.55	1.6	0.55	71	ø105	139	114	216	334	11.8	18	359	12.4	18.6	334	11.7	17.9
EVMS(L)1 7/0.55	1.6	0.55	71	ø105	160	139	232	355	12.5	18.7	380	13.1	19.3	355	12.4	18.6
EVMS(L)1 8/0.75	1.6	0.75	80	ø120	160	139	232	386	12.9	22.4	411	13.6	23.1	386	12.8	22.3
EVMS(L)1 9/0.75	1.6	0.75	80	ø120	160	139	232	407	13.3	22.8	432	14	23.5	407	13.3	22.8
EVMS(L)1 10/0.75	1.6	0.75	80	ø120	160	139	232	428	13.8	23.3	453	14.4	23.9	428	13.7	23.2
EVMS(L)1 11/1.1	1.6	1.1	80	ø120	160	139	232	449	14.2	25.3	474	14.9	26	449	14.1	25.2
EVMS(L)1 12/1.1	1.6	1.1	80	ø120	160	139	232	470	14.6	25.7	495	15.3	26.4	470	14.6	25.7
EVMS(L)1 13/1.1	1.6	1.1	80	ø120	160	139	232	491	15.3	26.4	516	16	27.1	491	15.3	26.4
EVMS(L)1 14/1.1	1.6	1.1	80	ø120	160	139	232	512	15.7	26.8	537	16.4	27.5	512	15.7	26.8
EVMS(L)1 16/1.5	1.6	1.5	90 S	ø140	180	148	267	564	16.7	29.4	589	17.4	30.1	564	16.7	29.4
EVMS(L)1 18/1.5	1.6	1.5	90 S	ø140	180	148	267	606	17.6	30.3	631	18.3	31.0	606	17.6	30.3
EVMS(L)1 20/1.5	2.5	1.5	90 S	ø140	180	148	267	-	-	-	673	19.2	31.9	648	18.5	31.2
EVMS(L)1 22/2.2	2.5	2.2	90 L	ø140	180	148	267	-	-	-	715	20.6	36.6	690	19.9	35.9
EVMS(L)1 24/2.2	2.5	2.2	90 L	ø140	180	148	267	-	-	-	757	21.6	37.6	732	20.9	36.9
EVMS(L)1 26/2.2	2.5	2.2	90 L	ø140	180	148	267	-	-	-	799	22.5	38.5	774	21.8	37.8
EVMS(L)1 27/2.2	2.5	2.2	90 L	ø140	180	148	267	-	-	-	820	23	39	795	22.3	38.3
EVMS(L)1 29/2.2	2.5	2.2	90 L	ø140	180	148	267	-	-	-	862	23.9	39.9	837	23.2	39.2

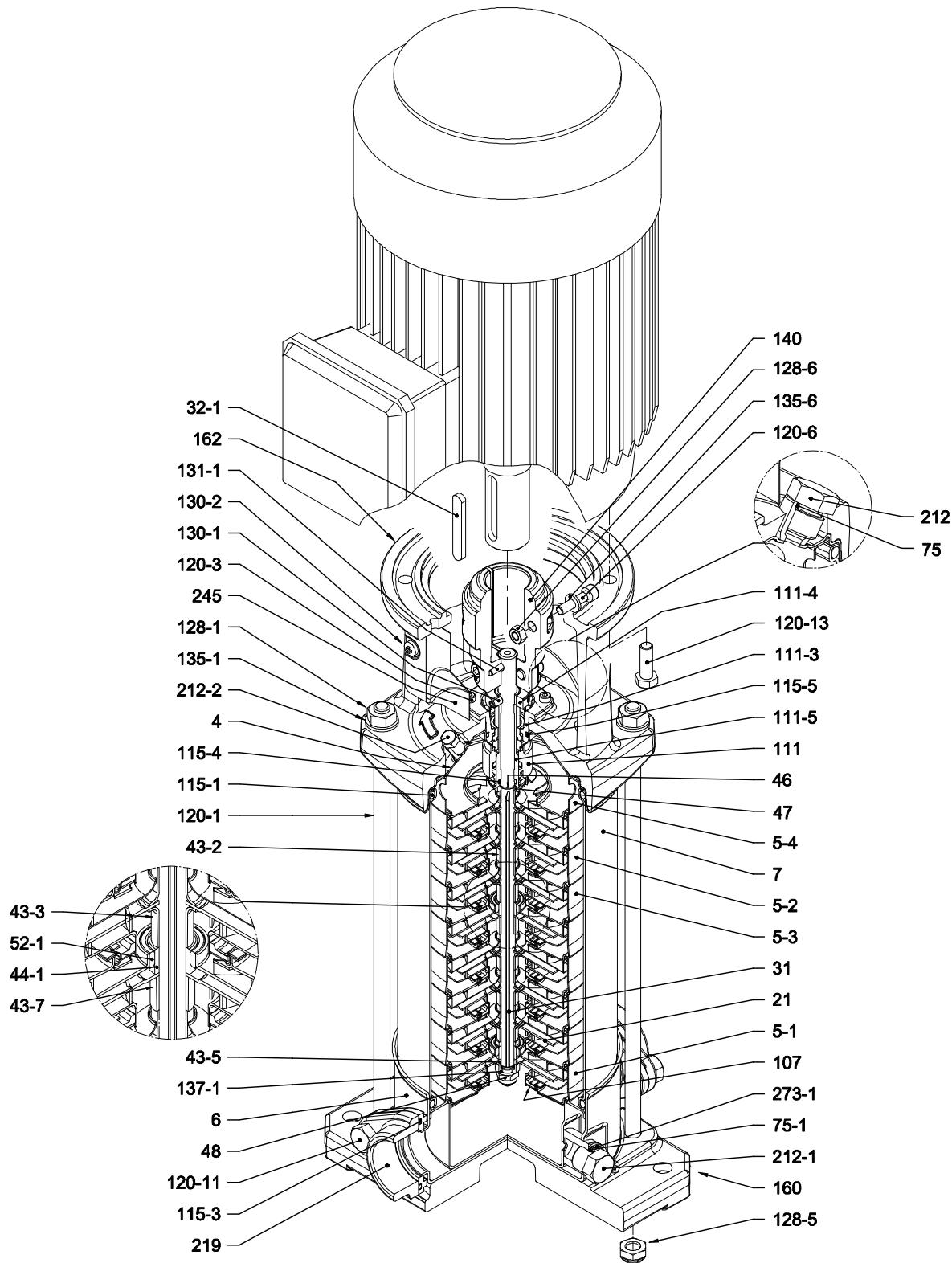
1.6 MPa=16 bar ; 2.5 MPa=25 bar

- not available model

VERTICAL MULTISTAGE PUMPS

2.8

EVMS(L)1

SECTIONAL VIEW
EVMS(L)1

with Oval flange (N)

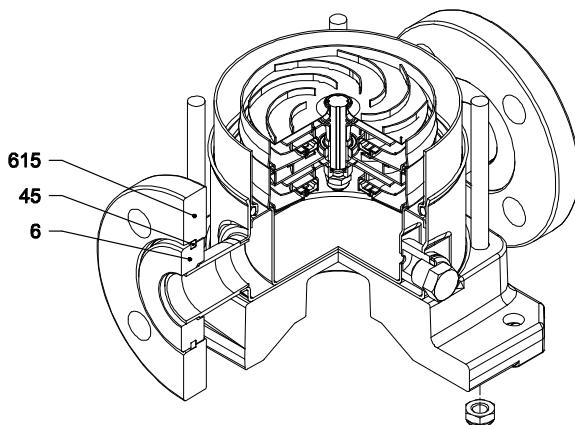
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EBARA Pumps Europe

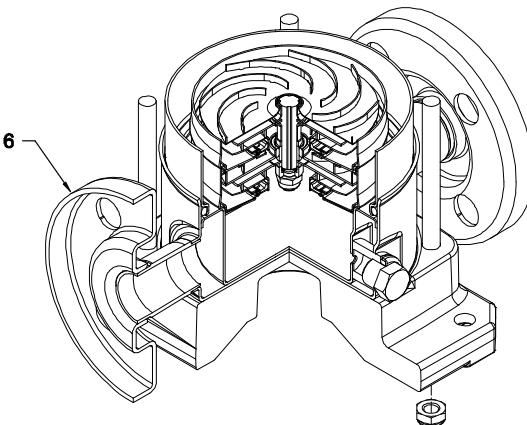
EBARA Pumps Europe reserves the right to make changes without prior notice

 EBARA

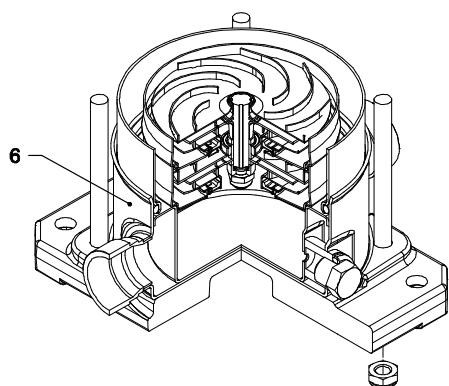
PIPE CONNECTION EVMS(L)1



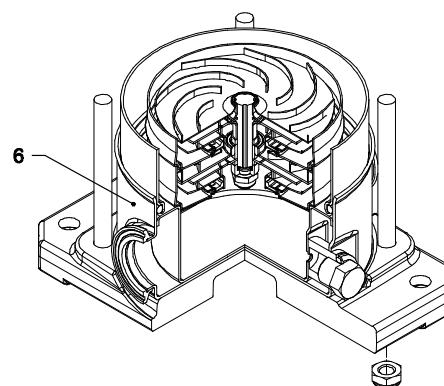
with Loose round flange (LF)



with Round flange (F)



with Victaulic® connection (V)



with Clamp connection (C)

VERTICAL MULTISTAGE PUMPS

SECTIONAL TABLE
EVMS(L)1

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD
		EVMS	EVMSL	
4	Casing cover	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
5-1	Suction casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
5-2	Intermediate Casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
5-3	Intermediate casing bearing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
5-4	Discharge casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
6	Bottom casing	EN 1.4308 (AISI 304)	EN 1.4408 (AISI 316)	
7	Outer casing	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)	
21	Impeller	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
31	Shaft	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)	
32-1	Adjuster Key	EN 1.4301 (AISI 304)		
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)	
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
43-5	Shaft sleeve (last stage)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
43-7	Spacer	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)	
44-1	Shaft sleeve bearing	Tungsten carbide		
45	Flange holder	EN 1.4301 (AISI 304)		
46	Ring (mechanical seal)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
47	Ring Holder	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
48	Impeller nut	A2-70 UNI 7323 with inox insert	A4-70 UNI 7323 with inox insert	M8
52-1	Bearing	Tungsten carbide		
75	O-Ring (plug)	EPDM		
75-1	O-Ring (plug)	EPDM		
107	Liner ring	EN 1.4301 (AISI 304) + PPS	EN 1.4401 (AISI 316) + PPS	
111	Mechanical Seal	SiC/Carbon/EPDM		
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
111-4	Seal holder	EN 1.4301 (AISI 304)		
111-5	Mechanical seal cartridge	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
115-1	O-Ring (outer casing)	EPDM		
115-3	O-Ring	EPDM		
115-4	O-Ring (cartridge sleeve)	EPDM		
115-5	O-Ring (seal cover)	EPDM		
120-1	Tie-rod	Galvanized steel 6.8 strength class ISO 898/1		
120-3	Screw	A2-70 UNI 7323		
120-6	Screw for coupling	Galvanized steel		
120-11	Screw for counterflange	A2-70 UNI 7323		
120-13	Screw for motor	MEC 71-80 MEC 90	Galvanized steel 8.8 strength class ISO 898/1	M6x20 M8x20
128-1	Nut for tie rod	Galvanized steel		
128-5	Nut for tie rod	A2-70 UNI 7323		
128-6	Nut for coupling	Galvanized steel		
130-1	Set screw	A2-70 UNI 7323		
130-2	Screw for coupling guard	A2-70 UNI 7323		
131-1	Pin for shaft	Carbon Steel		
135-1	Washer	Galvanized steel		
135-6	Washer	Carbon Steel		
137-1	Impeller spacer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
140	Coupling	up to 4.0 kW	Die cast Aluminium EN AB-AISI11Cu2 (Fe)	
160	Base	Die cast Aluminium EN AB-AISI11Cu2 (Fe)		
162	Motor bracket	Cast iron EN-GJL-200-EN 1561		
212	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	G 3/8
212-1	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	G 3/8
212-2	Venting plug	EN 1.4404 (AISI 316L)		
219	Counter flange	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
245	Coupling guard	EN 1.4301 (AISI 304)		
273-1	Plug Washer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
615	Flange	Nodular Cast Iron		

**QUANTITY FOR MODEL
EVMS(L)1**

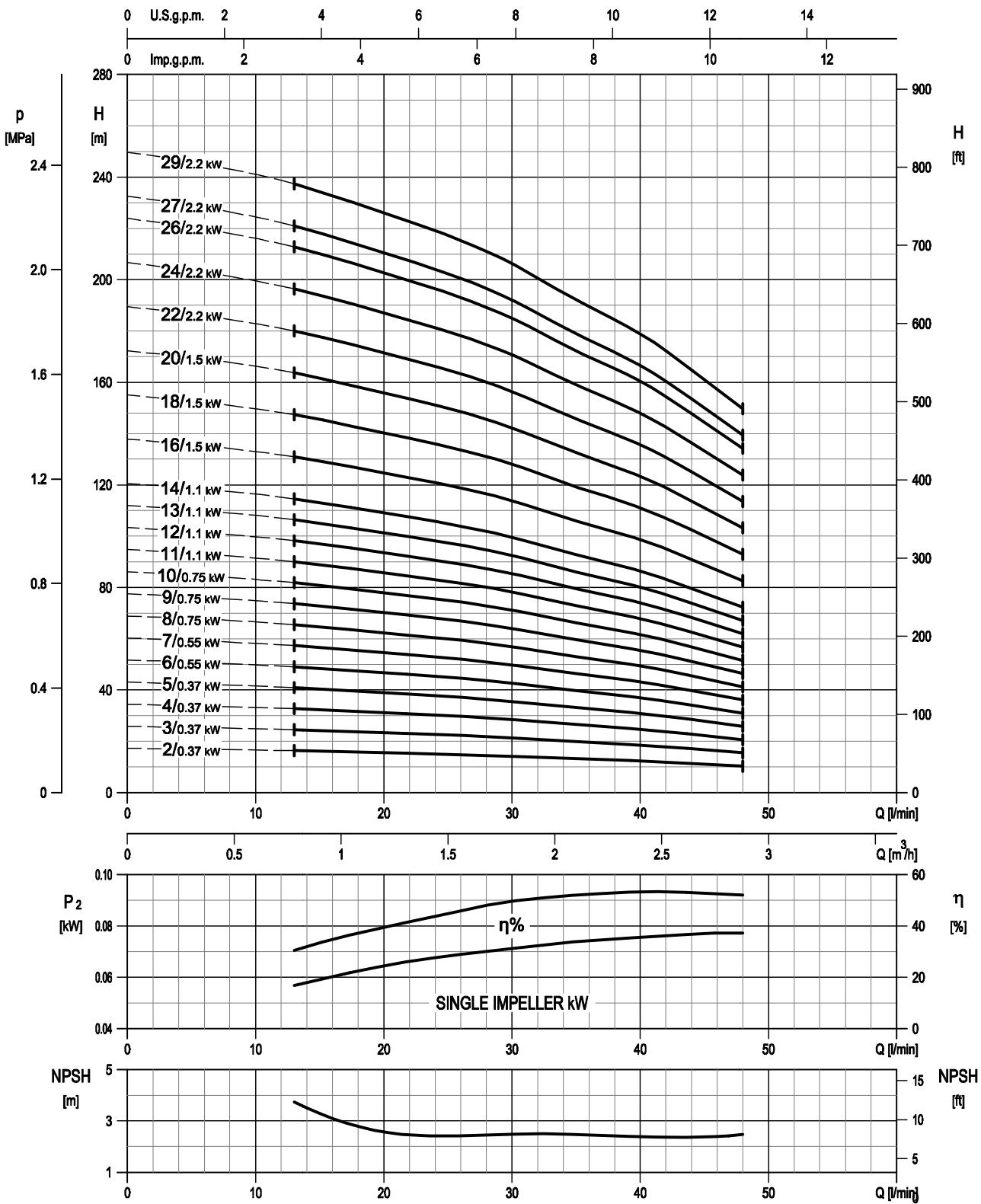
Pump Type	N°																															
	4	5-1	5-2	5-3	5-4	6	7	21	31	32-1	43-2	43-3	43-5	43-7	44-1	45**	46	47	48	52-1	75	75-1	107	111	111-3	111-4	111-5	115-1	115-3*	115-4	115-5	
EVMS(L)1 2/0.37	1	1	/	1	1	1	1	2	1	1	/	1	/	/	1	4	2	1	1	1	2	2	1	1	1	1	2	2	1	1		
EVMS(L)1 3/0.37	1	1	1	1	1	1	1	3	1	1	3	1	/	/	1	4	2	1	1	1	1	2	3	1	1	1	1	2	2	1	1	
EVMS(L)1 4/0.37	1	1	2	1	1	1	1	4	1	1	5	1	/	/	1	4	2	1	1	1	1	2	4	1	1	1	1	1	2	2	1	1
EVMS(L)1 5/0.37	1	1	3	1	1	1	1	5	1	1	7	1	1	/	1	4	2	1	1	1	1	2	5	1	1	1	1	2	2	1	1	1
EVMS(L)1 6/0.55	1	1	4	1	1	1	1	6	1	1	9	1	/	/	1	4	2	1	1	1	1	2	6	1	1	1	1	2	2	1	1	1
EVMS(L)1 7/0.55	1	1	5	1	1	1	1	7	1	1	11	1	/	/	1	4	2	1	1	1	1	2	7	1	1	1	1	2	2	1	1	1
EVMS(L)1 8/0.75	1	1	6	1	1	1	1	8	1	1	13	1	/	/	1	4	2	1	1	1	1	2	8	1	1	1	1	2	2	1	1	1
EVMS(L)1 9/0.75	1	1	7	1	1	1	1	9	1	1	15	1	1	/	1	4	2	1	1	1	1	2	9	1	1	1	1	2	2	1	1	1
EVMS(L)1 10/0.75	1	1	8	1	1	1	1	10	1	1	17	1	/	/	1	4	2	1	1	1	1	2	10	1	1	1	1	2	2	1	1	1
EVMS(L)1 11/1.1	1	1	9	1	1	1	1	11	1	1	19	1	/	/	1	4	2	1	1	1	1	2	11	1	1	1	1	2	2	1	1	1
EVMS(L)1 12/1.1	1	1	10	1	1	1	1	12	1	1	21	1	/	/	1	4	2	1	1	1	1	2	12	1	1	1	1	2	2	1	1	1
EVMS(L)1 13/1.1	1	1	10	2	1	1	1	13	1	1	20	2	1	1	2	4	2	1	1	2	1	2	13	1	1	1	1	2	2	1	1	1
EVMS(L)1 14/1.1	1	1	11	2	1	1	1	14	1	1	22	2	/	1	2	4	2	1	1	2	1	2	14	1	1	1	1	2	2	1	1	1
EVMS(L)1 16/1.5	1	1	13	2	1	1	1	16	1	1	26	2	/	1	2	4	2	1	1	2	1	2	16	1	1	1	1	2	2	1	1	1
EVMS(L)1 18/1.5	1	1	15	2	1	1	1	18	1	1	30	2	/	1	2	4	2	1	1	2	1	2	18	1	1	1	1	2	2	1	1	1
EVMS(L)1 20/1.5	1	1	17	2	1	1	1	20	1	1	34	2	/	1	2	4	2	1	1	2	1	2	20	1	1	1	1	2	/	1	1	1
EVMS(L)1 22/2.2	1	1	19	2	1	1	1	22	1	1	38	2	/	1	2	4	2	1	1	2	1	2	22	1	1	1	1	2	/	1	1	1
EVMS(L)1 24/2.2	1	1	21	2	1	1	1	24	1	1	42	2	/	1	2	4	2	1	1	2	1	2	24	1	1	1	1	2	/	1	1	1
EVMS(L)1 26/2.2	1	1	23	2	1	1	1	26	1	1	46	2	/	1	2	4	2	1	1	2	1	2	26	1	1	1	1	2	/	1	1	1
EVMS(L)1 27/2.2	1	1	24	2	1	1	1	27	1	1	48	2	/	1	2	4	2	1	1	2	1	2	27	1	1	1	1	2	/	1	1	1
EVMS(L)1 29/2.2	1	1	26	2	1	1	1	29	1	1	52	2	/	1	2	4	2	1	1	2	1	2	29	1	1	1	1	2	/	1	1	1

Pump Type	N°																							
	120-1	120-3	120-6	120-11*	120-13	128-1	128-5	128-6	130-1	130-2	131-1	135-1	135-6	137-1	140	160	162	212	212-1	212-2	219*	245	273-1	615**
EVMS(L)1 2/0.37	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 3/0.37	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 4/0.37	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 5/0.37	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 6/0.55	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 7/0.55	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 8/0.75	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 9/0.75	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 10/0.75	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 11/1.1	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 12/1.1	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 13/1.1	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 14/1.1	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 16/1.5	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 18/1.5	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 20/1.5	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	/	2	2
EVMS(L)1 22/2.2	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)1 24/2.2	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	/	2	2
EVMS(L)1 26/2.2	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	/	2	2
EVMS(L)1 27/2.2	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	/	2	2
EVMS(L)1 29/2.2	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	/	2	2

* only for Oval flange (N)

** only for Loose round flange (LF)

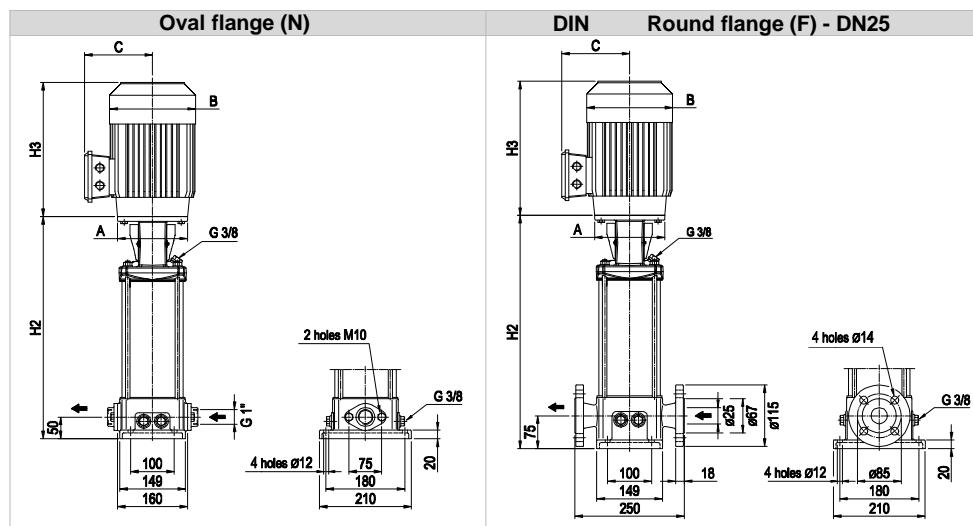
VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVE
EVMSG1

Rotation speed ≈3500 min-1
Test standard: ISO 9906:2012 - Grade 3B

TECHNICAL DATA EVMSG1

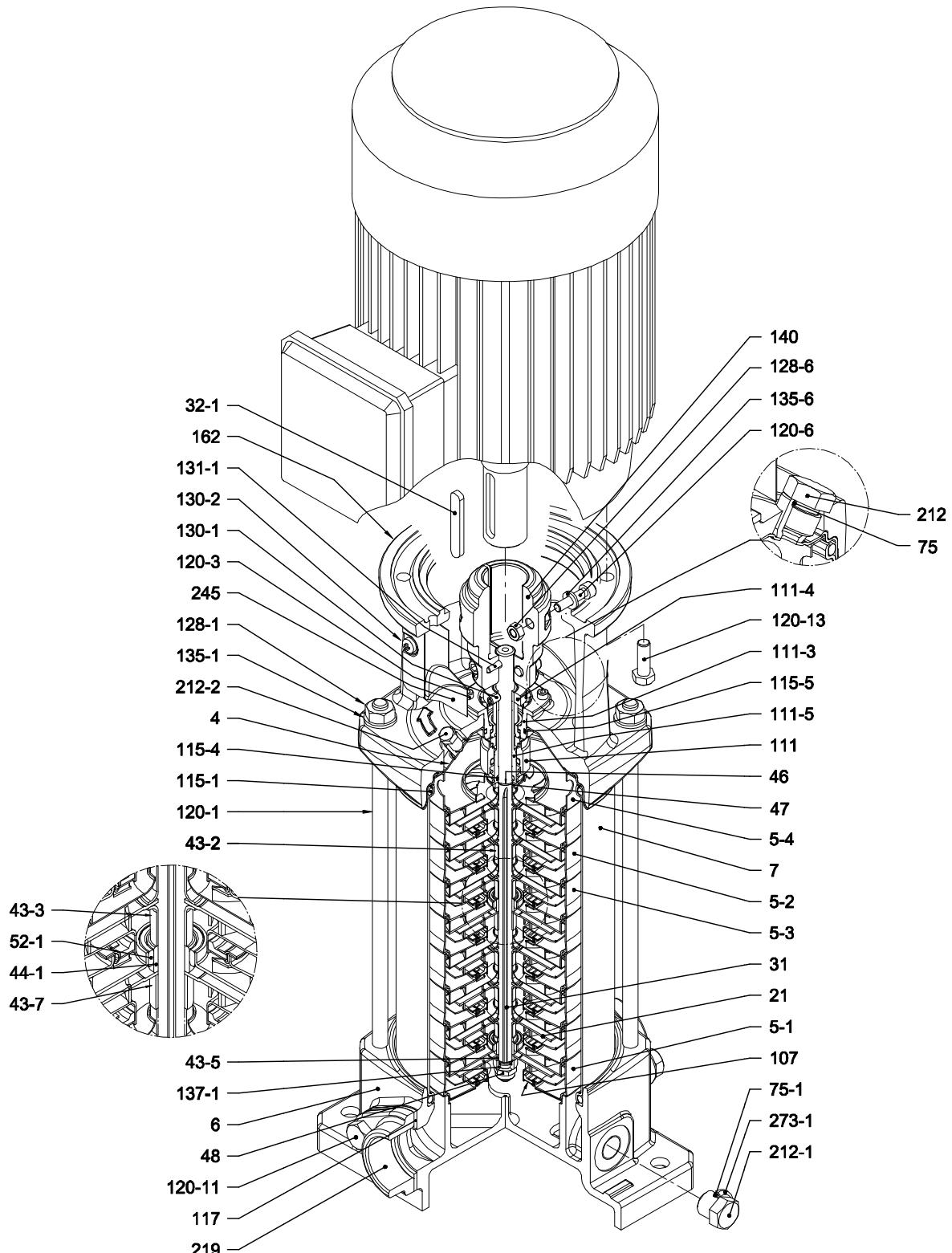
Dimensional sketch



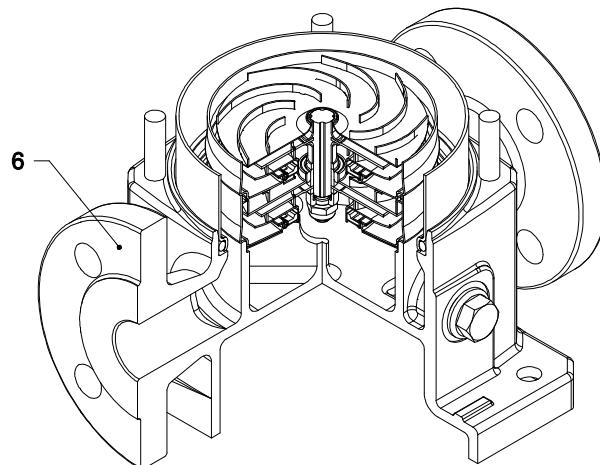
Dimensions [mm] and Weights [Kg]

Pump Type	Pmax [MPa]	Motor			H2	Oval flange (N)		Round flange (F)					
		kW	Size	A		B	C	H3	Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor
EVMSG1 2/0.37	1.6	0.37	71	ø105	139	114	216	250	14.3	20.1	275	17.7	23.5
EVMSG1 3/0.37	1.6	0.37	71	ø105	139	114	216	271	14.7	20.5	296	18.1	23.9
EVMSG1 4/0.37	1.6	0.37	71	ø105	139	114	216	292	15.1	20.9	317	18.5	24.3
EVMSG1 5/0.37	1.6	0.37	71	ø105	139	114	216	313	15.6	21.4	338	19	24.8
EVMSG1 6/0.55	1.6	0.55	71	ø105	139	114	216	334	16	22.2	359	19.4	25.6
EVMSG1 7/0.55	1.6	0.55	71	ø105	160	139	232	355	16.7	22.9	380	20.1	26.3
EVMSG1 8/0.75	1.6	0.75	80	ø120	160	139	232	386	17.1	26.6	411	20.5	30.0
EVMSG1 9/0.75	1.6	0.75	80	ø120	160	139	232	407	17.6	27.1	432	21	30.5
EVMSG1 10/0.75	1.6	0.75	80	ø120	160	139	232	428	18	27.5	453	21.4	30.9
EVMSG1 11/1.1	1.6	1.1	80	ø120	160	139	232	449	18.4	29.5	474	21.8	32.9
EVMSG1 12/1.1	1.6	1.1	80	ø120	160	139	232	470	18.9	30	495	22.3	33.4
EVMSG1 13/1.1	1.6	1.1	80	ø120	160	139	232	491	19.6	30.7	516	23	34.1
EVMSG1 14/1.1	1.6	1.1	80	ø120	160	139	232	512	20	31.1	537	23.4	34.5
EVMSG1 16/1.5	1.6	1.5	90 S	ø140	180	148	267	564	21	34	589	24.4	37.1
EVMSG1 18/1.5	1.6	1.5	90 S	ø140	180	148	267	606	21.9	34.6	631	25.3	38.0
EVMSG1 20/1.5	2.5	1.5	90 S	ø140	180	148	267	-	-	-	673	26.2	38.9
EVMSG1 22/2.2	2.5	2.2	90 L	ø140	180	148	267	-	-	-	715	27.6	43.6
EVMSG1 24/2.2	2.5	2.2	90 L	ø140	180	148	267	-	-	-	757	28.6	44.6
EVMSG1 26/2.2	2.5	2.2	90 L	ø140	180	148	267	-	-	-	799	29.5	45.5
EVMSG1 27/2.2	2.5	2.2	90 L	ø140	180	148	267	-	-	-	820	30	46
EVMSG1 29/2.2	2.5	2.2	90 L	ø140	180	148	267	-	-	-	862	30.9	46.9

1.6 MPa=16 bar ; 2.5 MPa=25 bar
- not available model

SECTIONAL VIEW
EVMG1

with Oval flange (N)

**PIPE CONNECTION
EVMSG1**

with Round flange (F)

EVMSG1

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VERTICAL MULTISTAGE PUMPS

SECTIONAL TABLE
EVMSG1

N°	PART NAME	MATERIAL EVMSG	DIMENSIONS	STANDARD
4	Casing cover	EN 1.4301 (AISI 304)		
5-1	Suction casing	EN 1.4301 (AISI 304)		
5-2	Intermediate Casing	EN 1.4301 (AISI 304)		
5-3	Intermediate casing bearing	EN 1.4301 (AISI 304)		
5-4	Discharge casing	EN 1.4301 (AISI 304)		
6	Bottom casing	Cast Iron EN GJL-250-EN1561		
7	Outer casing	EN 1.4301 (AISI 304)		
21	Impeller	EN 1.4301 (AISI 304)		
31	Shaft	EN 1.4301 (AISI 304)		
32-1	Adjuster Key	EN 1.4301 (AISI 304)		
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)		
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)		
43-5	Shaft sleeve (last stage)	EN 1.4301 (AISI 304)		
43-7	Spacer	EN 1.4301 (AISI 304)		
44-1	Shaft sleeve bearing	Tungsten carbide		
46	Ring (mechanical seal)	EN 1.4301 (AISI 304)		
47	Ring Holder	EN 1.4301 (AISI 304)		
48	Impeller nut	A2-70 UNI 7323 with inox insert	M8	
52-1	Bearing	Tungsten carbide		
75	O-Ring (plug)	EPDM	D. 12.37x2.62	OR 3050
75-1	O-Ring (plug)	EPDM		
107	Liner ring	EN 1.4301 (AISI 304) + PPS		
111	Mechanical Seal	SiC/Carbon/EPDM		
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)		
111-4	Seal holder	EN 1.4301 (AISI 304)		
111-5	Mechanical seal cartridge	EN 1.4301 (AISI 304)		
115-1	O-Ring (outer casing)	EPDM	D. 129.54x5.34	OR 6510
115-4	O-Ring (cartridge sleeve)	EPDM	D. 11.91x2.62	OR 115
115-5	O-Ring (seal cover)	EPDM	D. 32.99x2.62	OR 3131
117	Flange gasket	EPDM		
120-1	Tie-rod	Galvanized steel 6.8 strength class ISO 898/1	M10	
120-3	Screw	A2-70 UNI 7323	M4x10	ISO 4762
120-6	Screw for coupling	Galvanized steel	M6x25	ISO 4762
120-11	Screw for counterflange	A2-70 UNI 7323		
120-13	Screw for motor	MEC 71-80 MEC 90	Galvanized steel 8.8 strength class ISO 898/1	M6x20 ISO 4017 M8x20 ISO 4017
128-1	Nut for tie rod		Galvanized steel	M10 UNI 5588
128-6	Nut for coupling		Galvanized steel	M6 ISO 4032
130-1	Set screw	A2-70 UNI 7323	M5x8	UNI 5923
130-2	Screw for coupling guard	A2-70 UNI 7323	M5x6	UNI 7687
131-1	Pin for shaft	Carbon Steel	D. 4x32	UNI 4838
135-1	Washer	Galvanized steel	D. 10.5x21x2	UNI 6592
135-6	Washer	Carbon Steel	Ø6	
137-1	Impeller spacer	EN 1.4301 (AISI 304)		
140	Coupling	up to 4.0 kW	Die cast Aluminium EN AB-AISI11Cu2 (Fe)	
162	Motor bracket		Cast iron EN-GJL-200-EN 1561	
212	Plug		EN 1.4301 (AISI 304)	G 3/8
212-1	Plug		EN 1.4301 (AISI 304)	G 3/8
212-2	Venting plug		EN 1.4404 (AISI 316L)	
219	Counter flange		Galvanized steel	
245	Coupling guard		EN 1.4301 (AISI 304)	
273-1	Plug Washer		EN 1.4301 (AISI 304)	

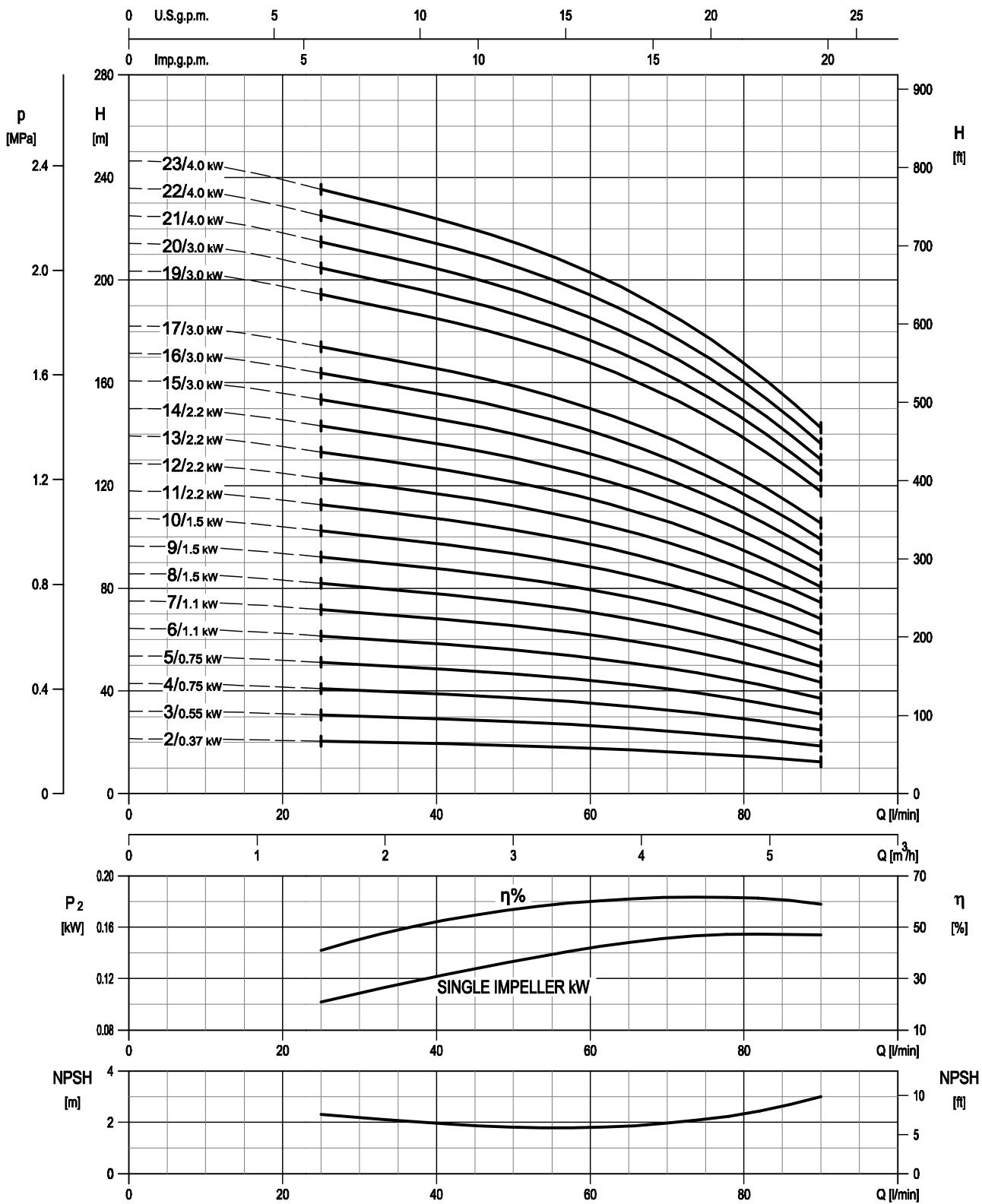
QUANTITY FOR MODEL
EVMSG1

Pump Type	4	5-1	5-2	5-3	5-4	6	7	21	31	32-1	43-2	43-3	43-5	43-7	44-1	46	47	48	52-1	75	75-1	107	111	111-3	111-4	111-5	115-1	115-4	115-5
EVMSG1 2/0.37	1	1	/	1	1	1	2	1	1	/	1	/	/	1	2	1	1	1	1	4	2	1	1	1	1	1	2	1	1
EVMSG1 3/0.37	1	1	1	1	1	1	3	1	1	3	1	/	/	1	2	1	1	1	1	4	3	1	1	1	1	1	2	1	1
EVMSG1 4/0.37	1	1	2	1	1	1	1	4	1	1	5	1	/	/	1	2	1	1	1	1	4	4	1	1	1	1	2	1	1
EVMSG1 5/0.37	1	1	3	1	1	1	1	5	1	1	7	1	1	/	1	2	1	1	1	1	4	5	1	1	1	1	2	1	1
EVMSG1 6/0.55	1	1	4	1	1	1	1	6	1	1	9	1	/	/	1	2	1	1	1	1	4	6	1	1	1	1	1	2	1
EVMSG1 7/0.55	1	1	5	1	1	1	1	7	1	1	11	1	/	/	1	2	1	1	1	1	4	7	1	1	1	1	1	2	1
EVMSG1 8/0.75	1	1	6	1	1	1	1	8	1	1	13	1	/	/	1	2	1	1	1	1	4	8	1	1	1	1	1	2	1
EVMSG1 9/0.75	1	1	7	1	1	1	1	9	1	1	15	1	1	/	1	2	1	1	1	1	4	9	1	1	1	1	1	2	1
EVMSG1 10/0.75	1	1	8	1	1	1	1	10	1	1	17	1	/	/	1	2	1	1	1	1	4	10	1	1	1	1	1	2	1
EVMSG1 11/1.1	1	1	9	1	1	1	1	11	1	1	19	1	/	/	1	2	1	1	1	1	4	11	1	1	1	1	1	2	1
EVMSG1 12/1.1	1	1	10	1	1	1	1	12	1	1	21	1	/	/	1	2	1	1	1	1	4	12	1	1	1	1	1	2	1
EVMSG1 13/1.1	1	1	10	2	1	1	1	13	1	1	20	2	1	1	2	2	1	1	2	1	4	13	1	1	1	1	1	2	1
EVMSG1 14/1.1	1	1	11	2	1	1	1	14	1	1	22	2	/	1	2	2	1	1	2	1	4	14	1	1	1	1	1	2	1
EVMSG1 16/1.5	1	1	13	2	1	1	1	16	1	1	26	2	/	1	2	2	1	1	2	1	4	16	1	1	1	1	1	2	1
EVMSG1 18/1.5	1	1	15	2	1	1	1	18	1	1	30	2	/	1	2	2	1	1	2	1	4	18	1	1	1	1	1	2	1
EVMSG1 20/1.5	1	1	17	2	1	1	1	20	1	1	34	2	/	1	2	2	1	1	2	1	4	20	1	1	1	1	1	2	1
EVMSG1 22/2.2	1	1	19	2	1	1	1	22	1	1	38	2	/	1	2	2	1	1	2	1	4	22	1	1	1	1	1	2	1
EVMSG1 24/2.2	1	1	21	2	1	1	1	24	1	1	42	2	/	1	2	2	1	1	2	1	4	24	1	1	1	1	1	2	1
EVMSG1 26/2.2	1	1	23	2	1	1	1	26	1	1	46	2	/	1	2	2	1	1	2	1	4	26	1	1	1	1	1	2	1
EVMSG1 27/2.2	1	1	24	2	1	1	1	27	1	1	48	2	/	1	2	2	1	1	2	1	4	27	1	1	1	1	1	2	1
EVMSG1 29/2.2	1	1	26	2	1	1	1	29	1	1	52	2	/	1	2	2	1	1	2	1	4	29	1	1	1	1	1	2	1

* only for Oval flange (N)

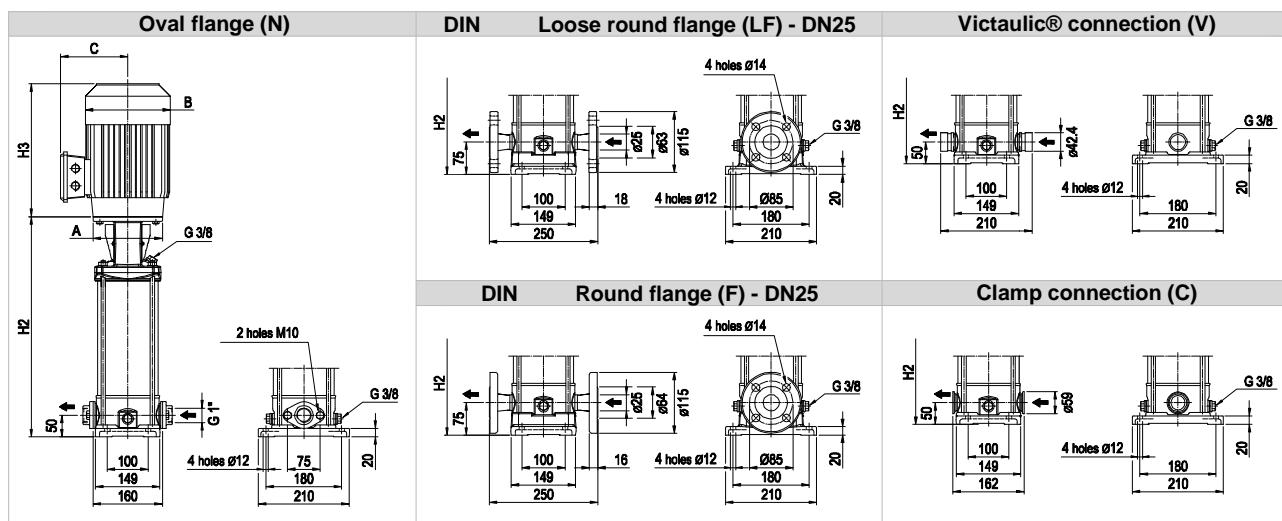
Pump Type	117*	120-1	120-3	120-6	120-11*	120-13	128-1	128-6	130-1	130-2	131-1	135-1	135-6	137-1	140	162	212	212-1	212-2	219*	245	273-1	
EVMSG1 2/0.37	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG1 3/0.37	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG1 4/0.37	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG1 5/0.37	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG1 6/0.55	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG1 7/0.55	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG1 8/0.75	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG1 9/0.75	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG1 10/0.75	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG1 11/1.1	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG1 12/1.1	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG1 13/1.1	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
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EVMSG1 16/1.5	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG1 18/1.5	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG1 20/1.5	/	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4
EVMSG1 22/2.2	/	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4
EVMSG1 24/2.2	/	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4
EVMSG1 26/2.2	/	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4
EVMSG1 27/2.2	/	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4
EVMSG1 29/2.2	/	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4

VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVE
EVMS(L)3

Rotation speed $\approx 3500 \text{ min}^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

Dimensional sketch



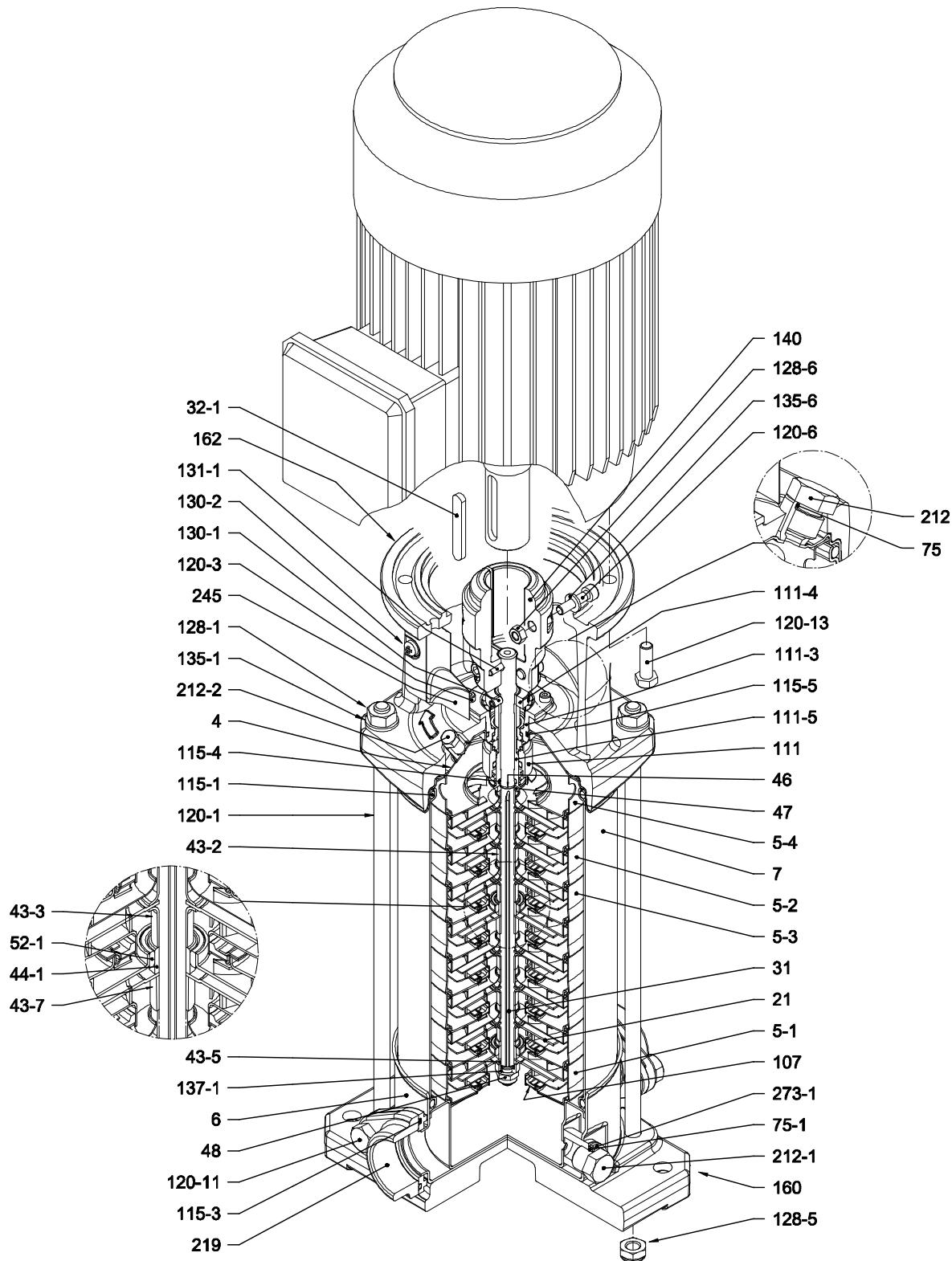
Dimensions [mm] and Weights [Kg]

Pump Type	P _{max} [MPa]	Motor				Oval flange (N)			Loose round flange (LF) Round flange (F)			Victaulic® connection (V) Clamp connection (C)		
		kW	Size	A	B C H3	H2	Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor
EVMS(L)3 2/0.37	1.6	0.37	71	ø105	139 114 216	250	9.9	15.7	275	10.6	16.4	250	9.8	15.6
EVMS(L)3 3/0.55	1.6	0.55	71	ø105	139 114 216	271	10.3	16.5	296	11	17.2	271	10.3	16.5
EVMS(L)3 4/0.75	1.6	0.75	80	ø120	160 139 232	302	11	20.5	327	11.6	21.1	302	10.9	20.4
EVMS(L)3 5/0.75	1.6	0.75	80	ø120	160 139 232	323	11.4	20.9	348	12.1	21.6	323	11.3	20.8
EVMS(L)3 6/1.1	1.6	1.1	80	ø120	160 139 232	344	11.8	22.9	369	12.5	23.6	344	11.7	22.8
EVMS(L)3 7/1.1	1.6	1.1	80	ø120	160 139 232	365	12.2	23.3	390	12.9	24	365	12.2	23.3
EVMS(L)3 8/1.5	1.6	1.5	90 S	ø140	180 148 267	396	12.7	26.7	421	13.3	27.3	396	12.6	26.6
EVMS(L)3 9/1.5	1.6	1.5	90 S	ø140	180 148 267	417	13.1	27.1	442	13.7	27.7	417	13	27
EVMS(L)3 10/1.5	1.6	1.5	90 S	ø140	180 148 267	438	13.5	27.5	463	14.2	28.2	438	13.4	27.4
EVMS(L)3 11/2.2	1.6	2.2	90 L	ø140	180 148 267	459	13.9	29.9	484	14.6	30.6	459	13.8	29.8
EVMS(L)3 12/2.2	1.6	2.2	90 L	ø140	180 148 267	480	14.3	30.3	505	14.9	30.9	480	14.2	30.2
EVMS(L)3 13/2.2	1.6	2.2	90 L	ø140	180 148 267	501	15	31	526	15.7	31.7	501	15	31
EVMS(L)3 14/2.2	1.6	2.2	90 L	ø140	180 148 267	522	15.4	31.4	547	16.1	32.1	522	15.4	31.4
EVMS(L)3 15/3.0	1.6	3.0	100 L	ø160	196 155 306	553	16	38.8	578	16.6	39.4	553	15.9	38.7
EVMS(L)3 16/3.0	2.5	3.0	100 L	ø160	196 155 306	-	-	-	599	17.6	40.4	574	16.9	39.7
EVMS(L)3 17/3.0	2.5	3.0	100 L	ø160	196 155 306	-	-	-	620	18.1	40.9	595	17.3	40.1
EVMS(L)3 19/3.0	2.5	3.0	100 L	ø160	196 155 306	-	-	-	662	19	41.8	637	18.2	41
EVMS(L)3 20/3.0	2.5	3.0	100 L	ø160	196 155 306	-	-	-	683	19.4	42.2	658	18.7	41.5
EVMS(L)3 21/4.0	2.5	4.0	112 M	ø160	196 155 306	-	-	-	704	19.9	46.4	679	19.1	45.6
EVMS(L)3 22/4.0	2.5	4.0	112 M	ø160	196 155 306	-	-	-	725	20.3	46.8	700	19.6	46.1
EVMS(L)3 23/4.0	2.5	4.0	112 M	ø160	196 155 306	-	-	-	746	20.8	47.3	721	20	46.5

1.6 MPa=16 bar ; 2.5 MPa=25 bar

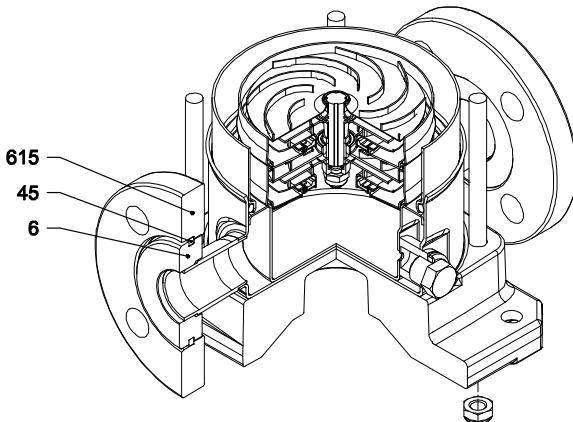
- not available model

VERTICAL MULTISTAGE PUMPS

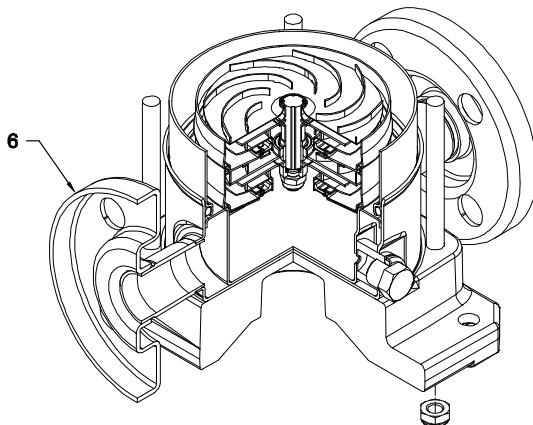
SECTIONAL VIEW
EVMS(L)3

with Oval flange (N)

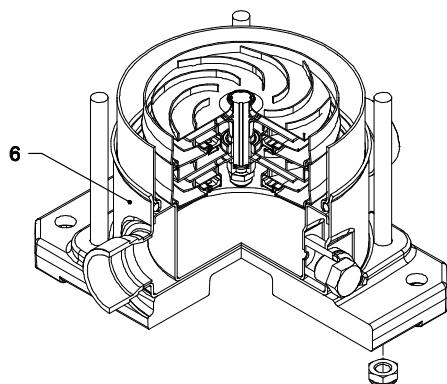
PIPE CONNECTION EVMS(L)3



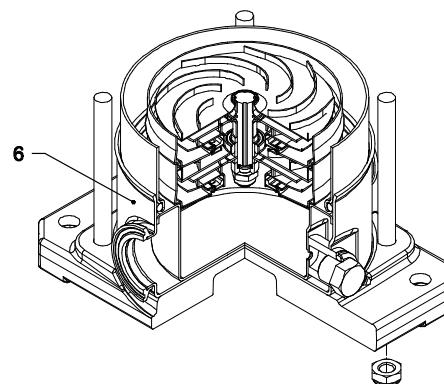
with Loose round flange (LF)



with Round flange (F)



with Victaulic® connection (V)



with Clamp connection (C)

VERTICAL MULTISTAGE PUMPS

SECTIONAL TABLE
EVMS(L)3

N°	PART NAME	MATERIAL		DIMENSIONS	STANDARD
		EVMS	EVMSL		
4	Casing cover	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-1	Suction casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-2	Intermediate Casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-3	Intermediate casing bearing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-4	Discharge casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
6	Bottom casing	EN 1.4308 (AISI 304)	EN 1.4408 (AISI 316)		
7	Outer casing	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		
21	Impeller	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
31	Shaft	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		
32-1	Adjuster Key	EN 1.4301 (AISI 304)			
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-5	Shaft sleeve (last stage)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-7	Spacer	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		
44-1	Shaft sleeve bearing	Tungsten carbide			
45	Flange holder	EN 1.4301 (AISI 304)			
46	Ring (mechanical seal)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
47	Ring Holder	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
48	Impeller nut	A2-70 UNI 7323 with inox insert	A4-70 UNI 7323 with inox insert	M8	
52-1	Bearing	Tungsten carbide			
75	O-Ring (plug)	EPDM		D. 12.37x2.62	OR 3050
75-1	O-Ring (plug)	EPDM			
107	Liner ring	EN 1.4301 (AISI 304) + PPS	EN 1.4401 (AISI 316) + PPS		
111	Mechanical Seal	SiC/Carbon/EPDM			
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
111-4	Seal holder	EN 1.4301 (AISI 304)			
111-5	Mechanical seal cartridge	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
115-1	O-Ring (outer casing)	EPDM		D. 129.54x5.34	OR 6510
115-3	O-Ring	EPDM			
115-4	O-Ring (cartridge sleeve)	EPDM		D. 11.91x2.62	OR 115
115-5	O-Ring (seal cover)	EPDM		D. 32.99x2.62	OR 3131
120-1	Tie-rod	Galvanized steel 6.8 strength class ISO 898/1		M10	
120-3	Screw	A2-70 UNI 7323		M4x10	ISO 4762
120-6	Screw for coupling	Galvanized steel		M6x25	ISO 4762
120-11	Screw for counterflange	A2-70 UNI 7323			
120-13	Screw for motor	MEC 71-80 MEC 90-100-112	Galvanized steel 8.8 strength class ISO 898/1		M6x20 ISO 4017 M8x20 ISO 4017
128-1	Nut for tie rod	Galvanized steel		M10	UNI 5588
128-5	Nut for tie rod	A2-70 UNI 7323		M10	UNI 7474
128-6	Nut for coupling	Galvanized steel		M6	ISO 4032
130-1	Set screw	A2-70 UNI 7323		M5x8	UNI 5923
130-2	Screw for coupling guard	A2-70 UNI 7323		M5x6	UNI 7687
131-1	Pin for shaft	Carbon Steel		D. 4x32	UNI 4838
135-1	Washer	Galvanized steel		D. 10.5x21x2	UNI 6592
135-6	Washer	Carbon Steel		Ø6	
137-1	Impeller spacer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
140	Coupling up to 4.0 kW	Die cast Aluminium EN AB-AISI11Cu2 (Fe)			
160	Base	Die cast Aluminium EN AB-AISI11Cu2 (Fe)			
162	Motor bracket	Cast iron EN-GJL-200-EN 1561			
212	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	G 3/8	
212-1	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	G 3/8	
212-2	Venting plug	EN 1.4404 (AISI 316L)			
219	Counter flange	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
245	Coupling guard	EN 1.4301 (AISI 304)			
273-1	Plug Washer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
615	Flange	Nodular Cast Iron			

**QUANTITY FOR MODEL
EVMS(L)3**

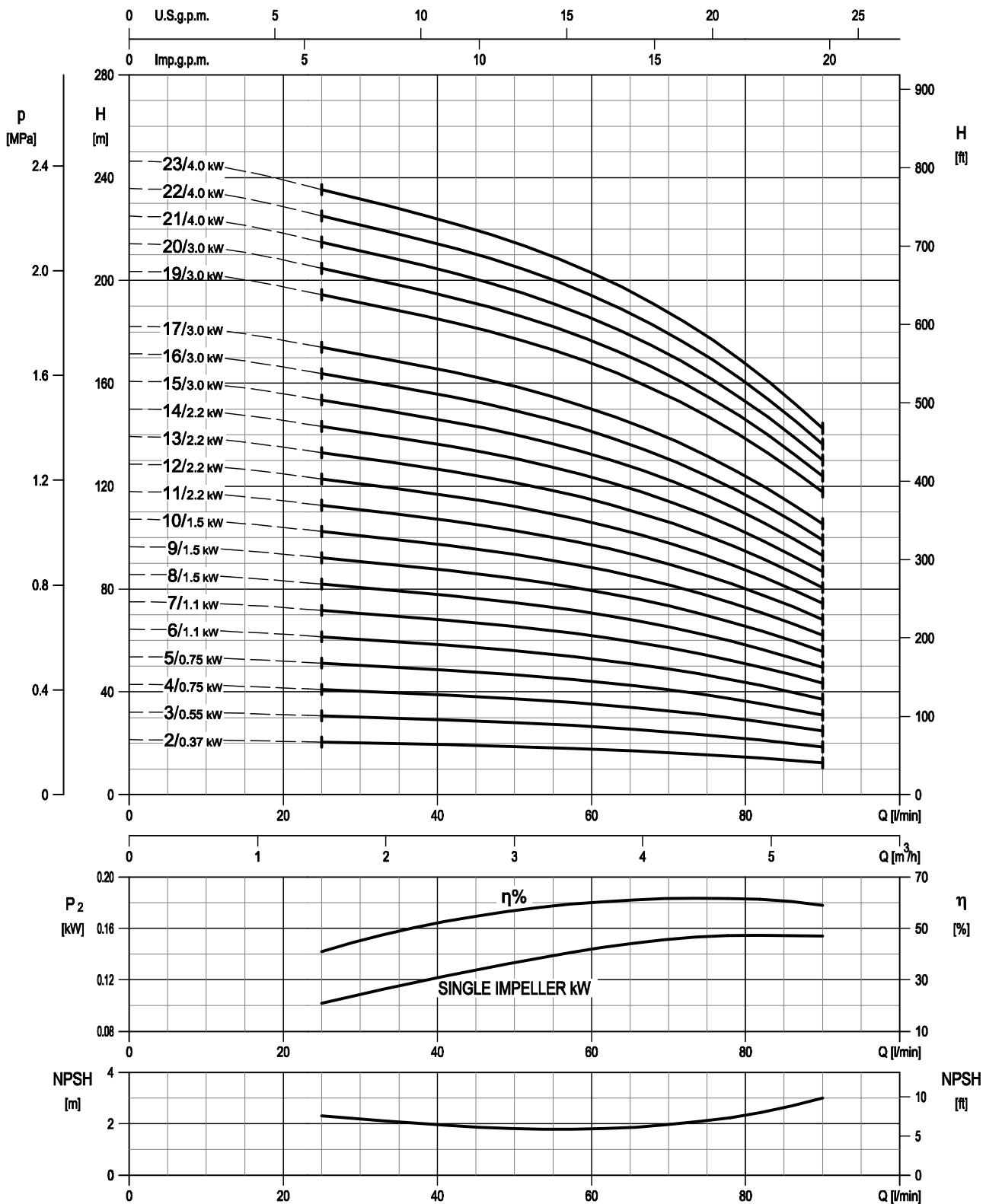
Pump Type	N°																																
	4	5-1	5-2	5-3	5-4	6	7	21	31	32-1	43-2	43-3	43-5	43-7	44-1	45**	46	47	48	52-1	75	75-1	107	111	111-3	111-4	111-5	115-1	115-3*	115-4	115-5		
EVMS(L)3 2/0.37	1	1	/	1	1	1	1	2	1	1	/	1	/	/	1	4	2	1	1	1	1	4	2	1	1	1	1	1	2	2	1	1	1
EVMS(L)3 3/0.55	1	1	1	1	1	1	1	3	1	1	3	1	1	/	1	4	2	1	1	1	1	4	3	1	1	1	1	2	2	1	1	1	
EVMS(L)3 4/0.75	1	1	2	1	1	1	1	4	1	1	5	1	1	/	1	4	2	1	1	1	1	4	4	1	1	1	1	2	2	1	1	1	
EVMS(L)3 5/0.75	1	1	3	1	1	1	1	5	1	1	7	1	1	/	1	4	2	1	1	1	1	4	5	1	1	1	1	2	2	1	1	1	
EVMS(L)3 6/1.1	1	1	4	1	1	1	1	6	1	1	9	1	/	/	1	4	2	1	1	1	1	4	6	1	1	1	1	2	2	1	1	1	
EVMS(L)3 7/1.1	1	1	5	1	1	1	1	7	1	1	11	1	/	/	1	4	2	1	1	1	1	4	7	1	1	1	1	2	2	1	1	1	
EVMS(L)3 8/1.5	1	1	6	1	1	1	1	8	1	1	13	1	/	/	1	4	2	1	1	1	1	4	8	1	1	1	1	2	2	1	1	1	
EVMS(L)3 9/1.5	1	1	7	1	1	1	1	9	1	1	15	1	1	/	1	4	2	1	1	1	1	4	9	1	1	1	1	2	2	1	1	1	
EVMS(L)3 10/1.5	1	1	8	1	1	1	1	10	1	1	17	1	/	/	1	4	2	1	1	1	1	4	10	1	1	1	1	2	2	1	1	1	
EVMS(L)3 11/2.2	1	1	9	1	1	1	1	11	1	1	19	1	/	/	1	4	2	1	1	1	1	4	11	1	1	1	1	2	2	1	1	1	
EVMS(L)3 12/2.2	1	1	10	1	1	1	1	12	1	1	21	1	/	/	1	4	2	1	1	1	1	4	12	1	1	1	1	2	2	1	1	1	
EVMS(L)3 13/2.2	1	1	10	2	1	1	1	13	1	1	20	1	1	1	2	4	2	1	1	2	1	4	13	1	1	1	1	2	2	1	1	1	
EVMS(L)3 14/2.2	1	1	11	2	1	1	1	14	1	1	22	1	1	/	1	2	4	2	1	1	2	1	4	14	1	1	1	1	2	2	1	1	1
EVMS(L)3 15/3.0	1	1	12	2	1	1	1	15	1	1	24	1	/	/	1	2	4	2	1	1	2	1	4	15	1	1	1	1	2	2	1	1	1
EVMS(L)3 16/3.0	1	1	13	2	1	1	1	16	1	1	26	1	/	1	2	4	2	1	1	2	1	4	16	1	1	1	1	2	/	1	1	1	
EVMS(L)3 17/3.0	1	1	14	2	1	1	1	17	1	1	28	1	1	1	2	4	2	1	1	2	1	4	17	1	1	1	1	2	/	1	1	1	
EVMS(L)3 19/3.0	1	1	16	2	1	1	1	19	1	1	32	1	/	1	2	4	2	1	1	2	1	4	19	1	1	1	1	2	/	1	1	1	
EVMS(L)3 20/3.0	1	1	17	2	1	1	1	20	1	1	34	1	/	1	2	4	2	1	1	2	1	4	20	1	1	1	1	2	/	1	1	1	
EVMS(L)3 21/4.0	1	1	18	2	1	1	1	21	1	1	36	1	1	1	2	4	2	1	1	2	1	4	21	1	1	1	1	2	/	1	1	1	
EVMS(L)3 22/4.0	1	1	19	2	1	1	1	22	1	1	38	1	/	1	2	4	2	1	1	2	1	4	22	1	1	1	1	2	/	1	1	1	
EVMS(L)3 23/4.0	1	1	20	2	1	1	1	23	1	1	40	1	/	1	2	4	2	1	1	2	1	4	23	1	1	1	1	2	/	1	1	1	

EVMS(L)3

* only for Oval flange (N)

** only for Loose round flange (LF)

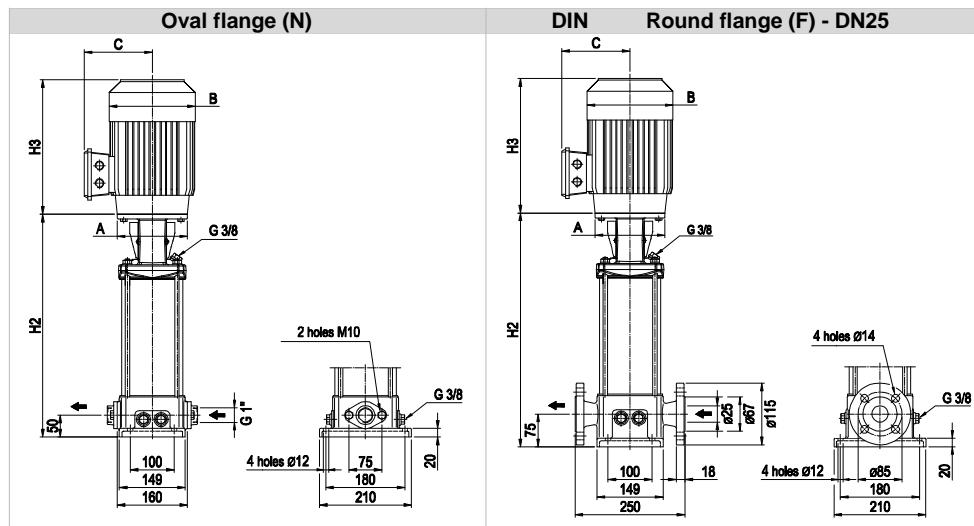
VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVE
EVMG3

Rotation speed ≈ 3500 min $^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

TECHNICAL DATA EVMSG3

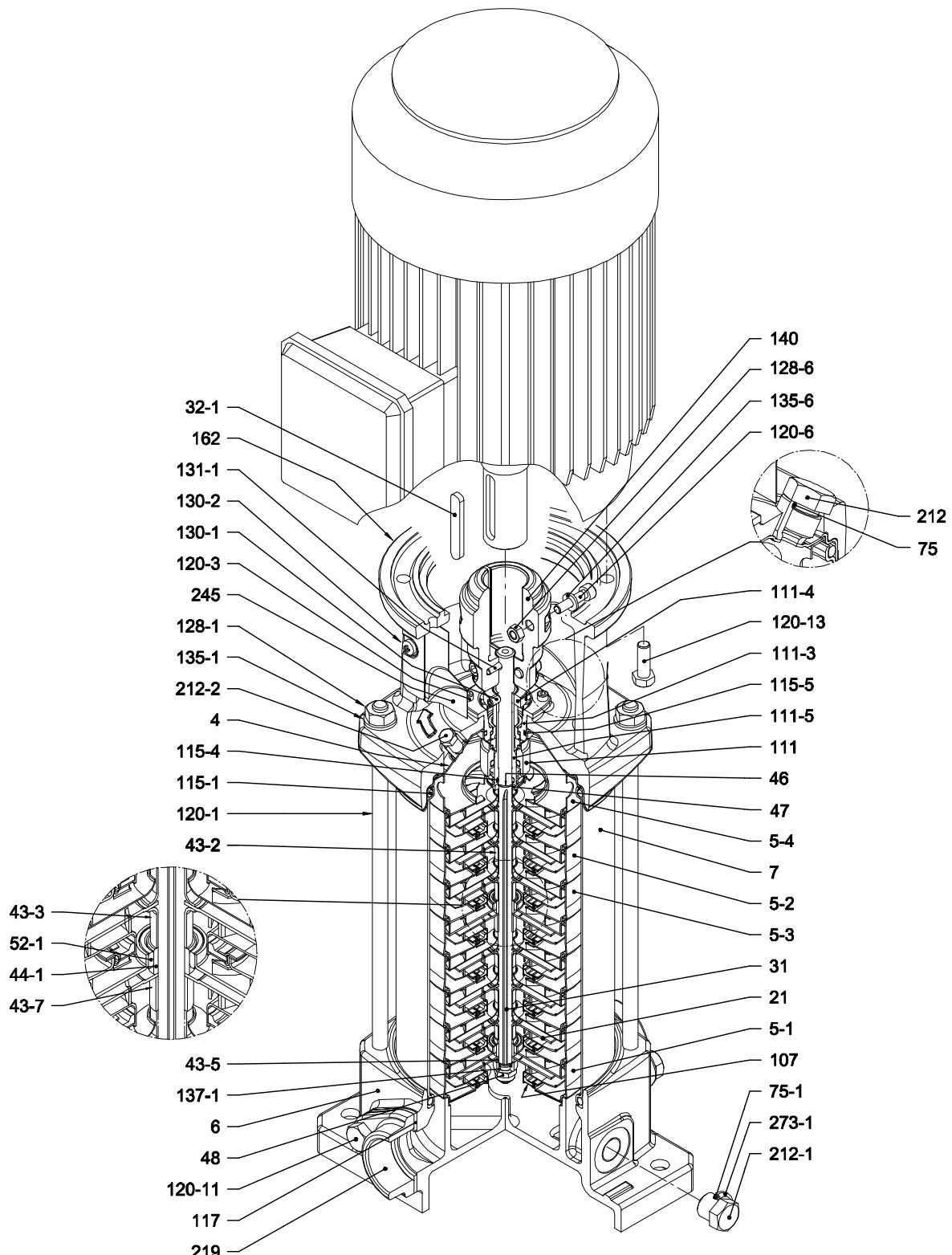
Dimensional sketch



Dimensions [mm] and Weights [Kg]

Pump Type	P _{max} [MPa]	Motor				H2	Oval flange (N)		Round flange (F)				
		kW	Size	A	3 ~		B	C	H3	Weight Pump	Weight Pump + Motor	H2	Weight Pump
EVMSG3 2/0.37	1.6	0.37	71	Ø105	139 114 216	250	12.3	18.1	275	15.7	21.5		
EVMSG3 3/0.55	1.6	0.55	71	Ø105	139 114 216	271	12.7	18.9	296	16.1	22.3		
EVMSG3 4/0.75	1.6	0.75	80	Ø120	160 139 232	302	13.4	22.9	327	16.8	26.3		
EVMSG3 5/0.75	1.6	0.75	80	Ø120	160 139 232	323	13.8	23.3	348	17.2	26.7		
EVMSG3 6/1.1	1.6	1.1	80	Ø120	160 139 232	344	14.2	25.3	369	17.6	28.7		
EVMSG3 7/1.1	1.6	1.1	80	Ø120	160 139 232	365	14.6	25.7	390	18	29.1		
EVMSG3 8/1.5	1.6	1.5	90 S	Ø140	180 148 267	396	15	29	421	18.4	32.4		
EVMSG3 9/1.5	1.6	1.5	90 S	Ø140	180 148 267	417	15.5	29.5	442	18.9	32.9		
EVMSG3 10/1.5	1.6	1.5	90 S	Ø140	180 148 267	438	15.9	29.9	463	19.3	33.3		
EVMSG3 11/2.2	1.6	2.2	90 L	Ø140	180 148 267	459	16.3	32.3	484	19.7	35.7		
EVMSG3 12/2.2	1.6	2.2	90 L	Ø140	180 148 267	480	16.6	32.6	505	20	36		
EVMSG3 13/2.2	1.6	2.2	90 L	Ø140	180 148 267	501	17.4	33.4	526	20.8	36.8		
EVMSG3 14/2.2	1.6	2.2	90 L	Ø140	180 148 267	522	17.8	33.8	547	21.2	37.2		
EVMSG3 15/3.0	1.6	3.0	100 L	Ø160	196 155 306	553	18.3	41.1	578	21.7	44.5		
EVMSG3 16/3.0	2.5	3.0	100 L	Ø160	196 155 306	-	-	-	599	22.7	45.5		
EVMSG3 17/3.0	2.5	3.0	100 L	Ø160	196 155 306	-	-	-	620	23.2	46		
EVMSG3 19/3.0	2.5	3.0	100 L	Ø160	196 155 306	-	-	-	662	24.1	46.9		
EVMSG3 20/3.0	2.5	3.0	100 L	Ø160	196 155 306	-	-	-	683	24.5	47.3		
EVMSG3 21/4.0	2.5	4.0	112 M	Ø160	196 155 306	-	-	-	704	25	51.5		
EVMSG3 22/4.0	2.5	4.0	112 M	Ø160	196 155 306	-	-	-	725	25.4	51.9		
EVMSG3 23/4.0	2.5	4.0	112 M	Ø160	196 155 306	-	-	-	746	25.9	52.4		

1.6 MPa=16 bar ; 2.5 MPa=25 bar
- not available model

SECTIONAL VIEW
EVMG3

with Oval flange (N)

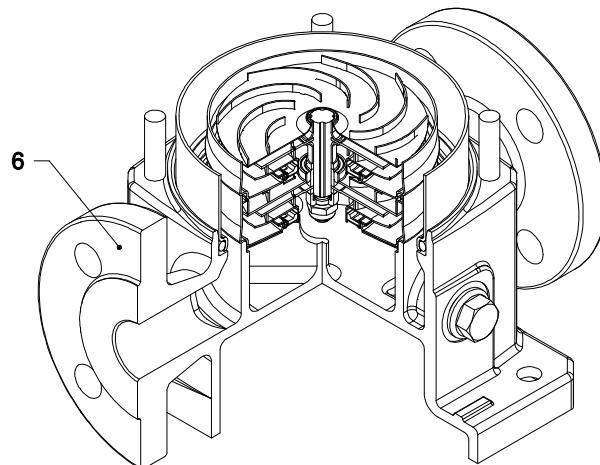
EVMS

VERTICAL MULTISTAGE PUMPS

60Hz

2.9

PIPE CONNECTION EVMSG3



with Round flange (F)

EVMSG3

230

VERTICAL MULTISTAGE PUMPS

SECTIONAL TABLE
EVMSG3

N°	PART NAME	MATERIAL EVMSG	DIMENSIONS	STANDARD
4	Casing cover	EN 1.4301 (AISI 304)		
5-1	Suction casing	EN 1.4301 (AISI 304)		
5-2	Intermediate Casing	EN 1.4301 (AISI 304)		
5-3	Intermediate casing bearing	EN 1.4301 (AISI 304)		
5-4	Discharge casing	EN 1.4301 (AISI 304)		
6	Bottom casing	Cast Iron EN GJL-250-EN1561		
7	Outer casing	EN 1.4301 (AISI 304)		
21	Impeller	EN 1.4301 (AISI 304)		
31	Shaft	EN 1.4301 (AISI 304)		
32-1	Adjuster Key	EN 1.4301 (AISI 304)		
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)		
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)		
43-5	Shaft sleeve (last stage)	EN 1.4301 (AISI 304)		
43-7	Spacer	EN 1.4301 (AISI 304)		
44-1	Shaft sleeve bearing	Tungsten carbide		
46	Ring (mechanical seal)	EN 1.4301 (AISI 304)		
47	Ring Holder	EN 1.4301 (AISI 304)		
48	Impeller nut	A2-70 UNI 7323 with inox insert	M8	
52-1	Bearing	Tungsten carbide		
75	O-Ring (plug)	EPDM	D. 12.37x2.62	OR 3050
75-1	O-Ring (plug)	EPDM		
107	Liner ring	EN 1.4301 (AISI 304) + PPS		
111	Mechanical Seal	SiC/Carbon/EPDM		
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)		
111-4	Seal holder	EN 1.4301 (AISI 304)		
111-5	Mechanical seal cartridge	EN 1.4301 (AISI 304)		
115-1	O-Ring (outer casing)	EPDM	D. 129.54x5.34	OR 6510
115-4	O-Ring (cartridge sleeve)	EPDM	D. 11.91x2.62	OR 115
115-5	O-Ring (seal cover)	EPDM	D. 32.99x2.62	OR 3131
117	Flange gasket	EPDM		
120-1	Tie-rod	Galvanized steel 6.8 strength class ISO 898/1	M10	
120-3	Screw	A2-70 UNI 7323	M4x10	ISO 4762
120-6	Screw for coupling	Galvanized steel	M6x25	ISO 4762
120-11	Screw for counterflange	A2-70 UNI 7323		
120-13	Screw for motor	MEC 71-80 MEC 90-100-112	Galvanized steel 8.8 strength class ISO 898/1	M6x20 ISO 4017 M8x20 ISO 4017
128-1	Nut for tie rod	Galvanized steel	M10	UNI 5588
128-6	Nut for coupling	Galvanized steel	M6	ISO 4032
130-1	Set screw	A2-70 UNI 7323	M5x8	UNI 5923
130-2	Screw for coupling guard	A2-70 UNI 7323	M5x6	UNI 7687
131-1	Pin for shaft	Carbon Steel	D. 4x32	UNI 4838
135-1	Washer	Galvanized steel	D. 10.5x21x2	UNI 6592
135-6	Washer	Carbon Steel	Ø6	
137-1	Impeller spacer	EN 1.4301 (AISI 304)		
140	Coupling	up to 4.0 kW	Die cast Aluminium EN AB-AISI11Cu2 (Fe)	
162	Motor bracket		Cast iron EN-GJL-200-EN 1561	
212	Plug		EN 1.4301 (AISI 304)	G 3/8
212-1	Plug		EN 1.4301 (AISI 304)	G 3/8
212-2	Venting plug		EN 1.4404 (AISI 316L)	
219	Counter flange		Galvanized steel	
245	Coupling guard		EN 1.4301 (AISI 304)	
273-1	Plug Washer		EN 1.4301 (AISI 304)	

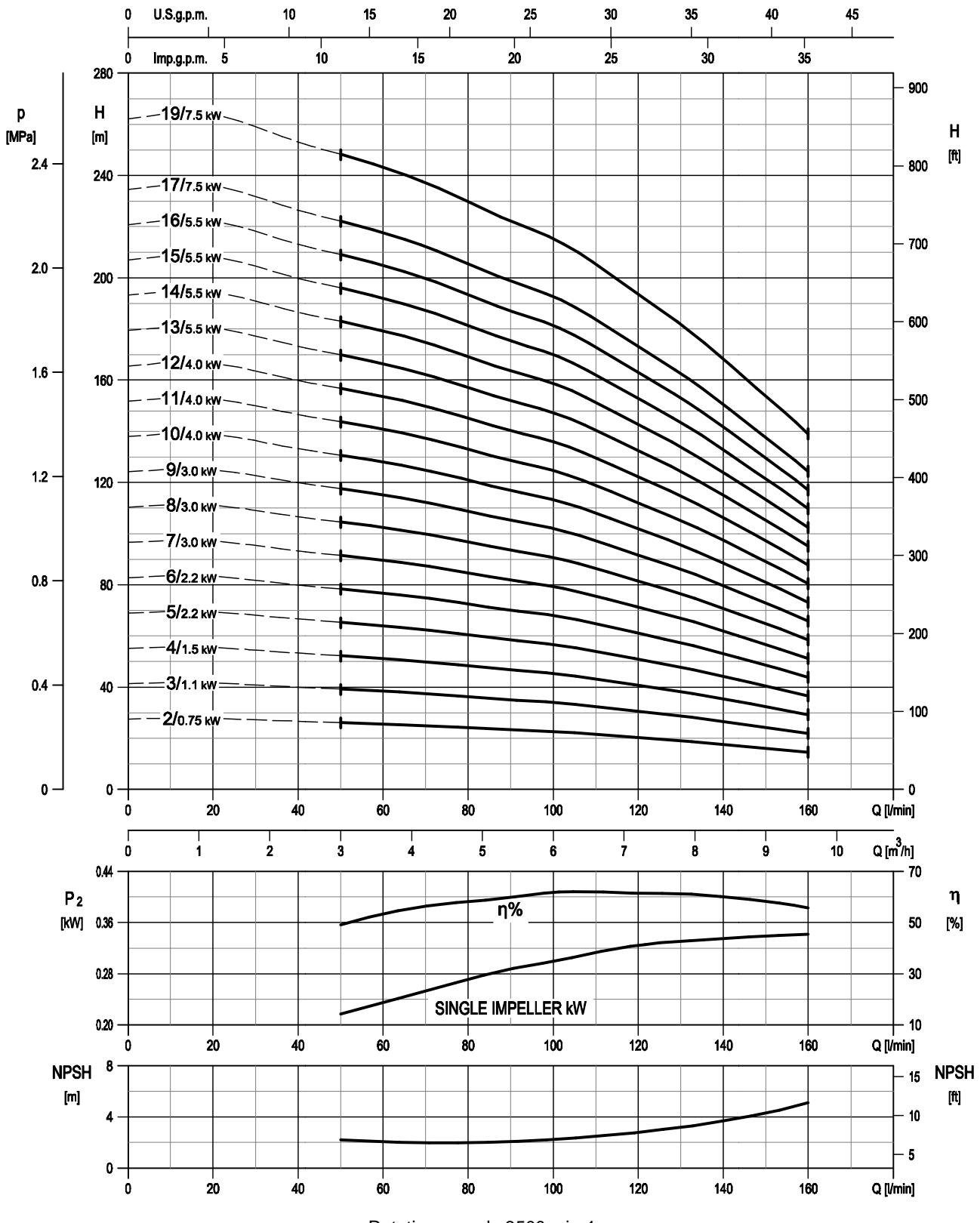
QUANTITY FOR MODEL
EVMSG3

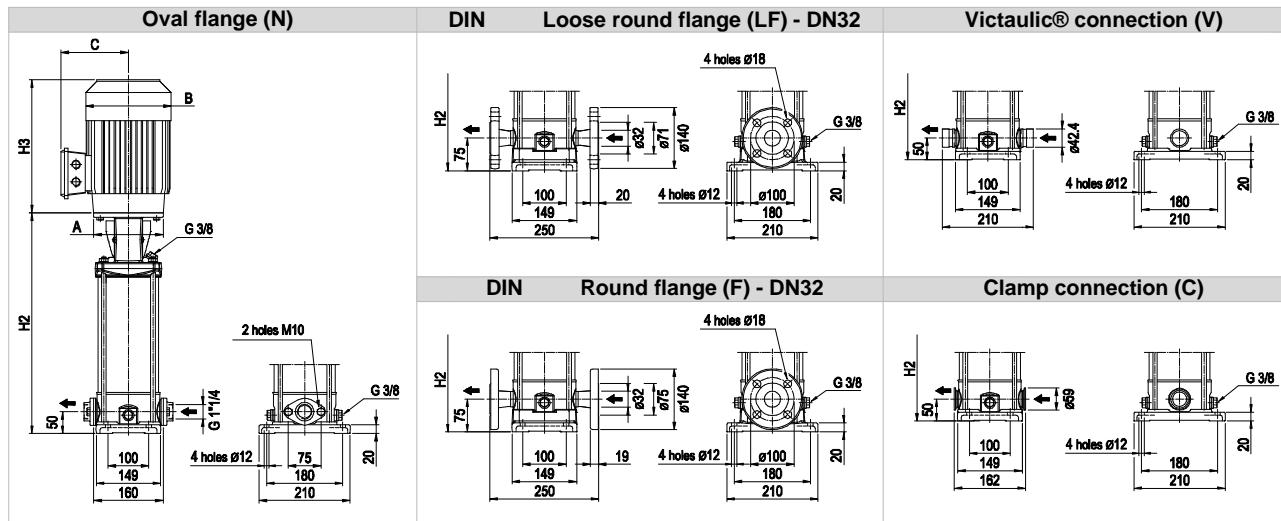
Pump Type	Nº																													
	4	5-1	5-2	5-3	5-4	6	7	21	31	32-1	43-2	43-3	43-5	43-7	44-1	46	47	48	52-1	75	107	111	111-3	111-4	111-5	115-1	115-4	115-5		
EVMSG3 2/0.37	1	1	/	1	1	1	1	2	1	1	/	1	/	/	1	2	1	1	1	4	2	1	1	1	1	2	1	1		
EVMSG3 3/0.55	1	1	1	1	1	1	1	3	1	1	3	1	/	/	1	2	1	1	1	4	3	1	1	1	1	1	2	1	1	
EVMSG3 4/0.75	1	1	2	1	1	1	1	4	1	1	5	1	/	/	1	2	1	1	1	4	4	1	1	1	1	2	1	1		
EVMSG3 5/0.75	1	1	3	1	1	1	1	5	1	1	7	1	1	/	1	2	1	1	1	4	5	1	1	1	1	2	1	1		
EVMSG3 6/1.1	1	1	4	1	1	1	1	6	1	1	9	1	/	/	1	2	1	1	1	4	6	1	1	1	1	1	2	1	1	
EVMSG3 7/1.1	1	1	5	1	1	1	1	7	1	1	11	1	/	/	1	2	1	1	1	4	7	1	1	1	1	1	2	1	1	
EVMSG3 8/1.5	1	1	6	1	1	1	1	8	1	1	13	1	/	/	1	2	1	1	1	4	8	1	1	1	1	1	2	1	1	
EVMSG3 9/1.5	1	1	7	1	1	1	1	9	1	1	15	1	1	/	1	2	1	1	1	4	9	1	1	1	1	1	2	1	1	
EVMSG3 10/1.5	1	1	8	1	1	1	1	10	1	1	17	1	/	/	1	2	1	1	1	4	10	1	1	1	1	1	2	1	1	
EVMSG3 11/2.2	1	1	9	1	1	1	1	11	1	1	19	1	/	/	1	2	1	1	1	4	11	1	1	1	1	1	2	1	1	
EVMSG3 12/2.2	1	1	10	1	1	1	1	12	1	1	21	1	/	/	1	2	1	1	1	4	12	1	1	1	1	1	2	1	1	
EVMSG3 13/2.2	1	1	10	2	1	1	1	13	1	1	20	1	1	1	2	2	1	1	2	1	4	13	1	1	1	1	1	2	1	1
EVMSG3 14/2.2	1	1	11	2	1	1	1	14	1	1	22	1	/	1	2	2	1	1	2	1	4	14	1	1	1	1	1	2	1	1
EVMSG3 15/3.0	1	1	12	2	1	1	1	15	1	1	24	1	/	1	2	2	1	1	2	1	4	15	1	1	1	1	1	2	1	1
EVMSG3 16/3.0	1	1	13	2	1	1	1	16	1	1	26	1	/	1	2	2	1	1	2	1	4	16	1	1	1	1	1	2	1	1
EVMSG3 17/3.0	1	1	14	2	1	1	1	17	1	1	28	1	1	1	2	2	1	1	2	1	4	17	1	1	1	1	1	2	1	1
EVMSG3 19/3.0	1	1	16	2	1	1	1	19	1	1	32	1	/	1	2	2	1	1	2	1	4	19	1	1	1	1	1	2	1	1
EVMSG3 20/3.0	1	1	17	2	1	1	1	20	1	1	34	1	/	1	2	2	1	1	2	1	4	20	1	1	1	1	1	2	1	1
EVMSG3 21/4.0	1	1	18	2	1	1	1	21	1	1	36	1	1	1	2	2	1	1	2	1	4	21	1	1	1	1	1	2	1	1
EVMSG3 22/4.0	1	1	19	2	1	1	1	22	1	1	38	1	/	1	2	2	1	1	2	1	4	22	1	1	1	1	1	2	1	1
EVMSG3 23/4.0	1	1	20	2	1	1	1	23	1	1	40	1	/	1	2	2	1	1	2	1	4	23	1	1	1	1	1	2	1	1

Pump Type	Nº																						
	117*	120-1	120-3	120-6	120-11*	120-13	128-1	128-6	130-1	130-2	131-1	135-1	135-6	137-1	140	162	212	212-1	212-2	219*	245	273-1	
EVMSG3 2/0.37	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG3 3/0.55	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG3 4/0.75	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG3 5/0.75	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG3 6/1.1	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG3 7/1.1	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG3 8/1.5	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG3 9/1.5	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG3 10/1.5	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG3 11/2.2	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG3 12/2.2	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG3 13/2.2	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG3 14/2.2	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG3 15/3.0	2	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG3 16/3.0	/	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4
EVMSG3 17/3.0	/	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4
EVMSG3 19/3.0	/	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4
EVMSG3 20/3.0	/	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4
EVMSG3 21/4.0	/	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4
EVMSG3 22/4.0	/	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4
EVMSG3 23/4.0	/	4	4	4	4	/	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4

* only for Oval flange (N)

VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVE
EVMS(L)5

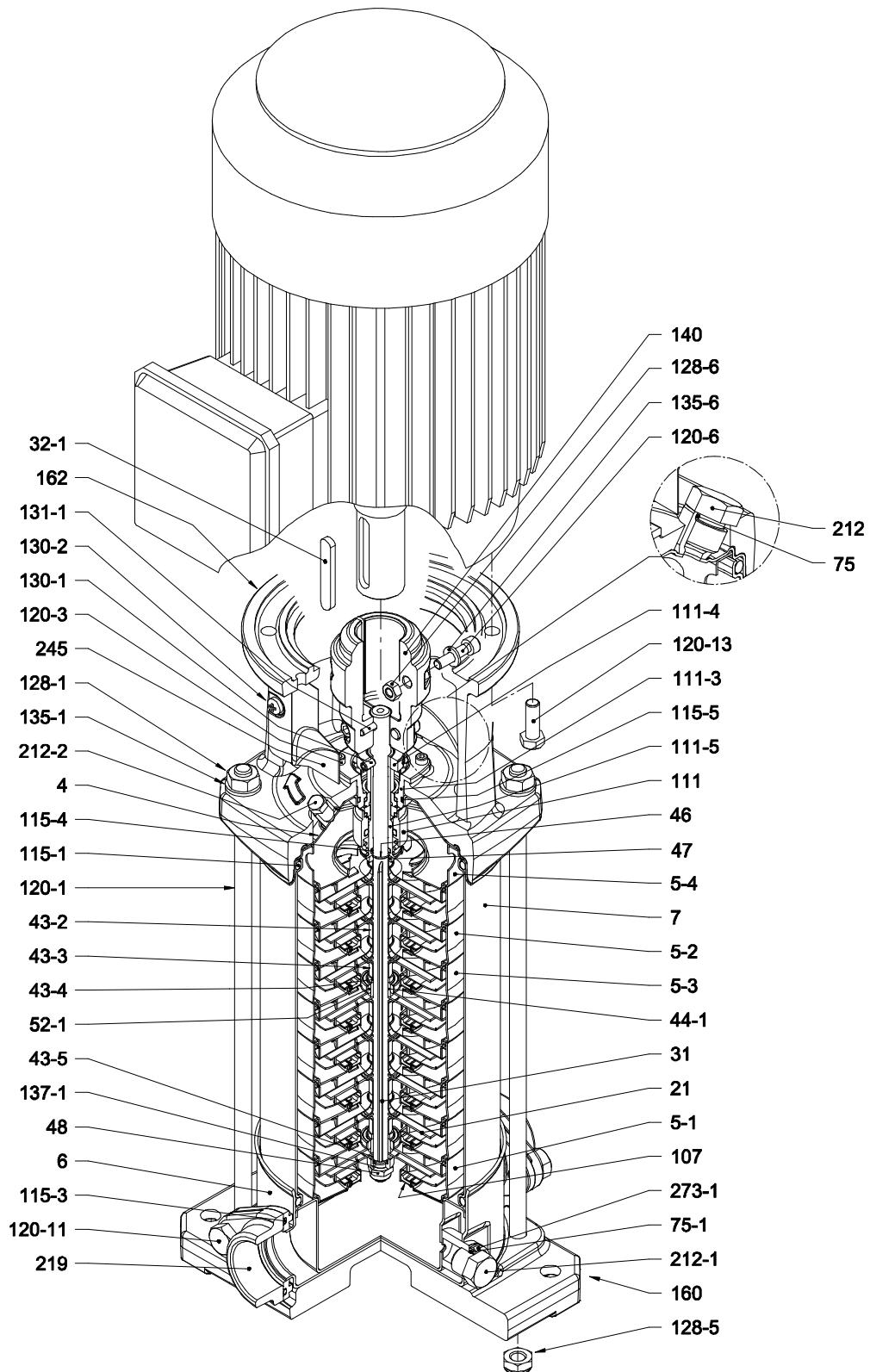
**TECHNICAL DATA
EVMS(L)5**
Dimensional sketch

Dimensions [mm] and Weights [Kg]

Pump Type	P _{max} [MPa]	Motor			Oval flange (N)			Loose round flange (LF) Round flange (F)			Victaulic® connection (V) Clamp connection (C)					
		KW	Size	A	B	C	H3	H2	Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor
EVMS(L)5 2/0.75	1.6	0.75	80	ø120	160	139	232	274	9.8	19.3	299	10.8	20.3	274	9.7	19.2
EVMS(L)5 3/1.1	1.6	1.1	80	ø120	160	139	232	302	10.2	21.3	327	11.3	22.4	302	10.2	21.3
EVMS(L)5 4/1.5	1.6	1.5	90 S	ø140	180	148	267	340	11	25	365	12	26	340	10.9	24.9
EVMS(L)5 5/2.2	1.6	2.2	90 L	ø140	180	148	267	368	11.4	27.4	393	12.5	28.5	368	11.4	27.4
EVMS(L)5 6/2.2	1.6	2.2	90 L	ø140	180	148	267	396	11.9	27.9	421	12.9	28.9	396	11.8	27.8
EVMS(L)5 7/3.0	1.6	3.0	100 L	ø160	196	155	306	434	12.7	35.5	459	13.7	36.5	434	12.6	35.4
EVMS(L)5 8/3.0	1.6	3.0	100 L	ø160	196	155	306	462	13	35.8	487	14	36.8	462	12.9	35.7
EVMS(L)5 9/3.0	1.6	3.0	100 L	ø160	196	155	306	490	13.4	36.2	515	14.5	37.3	490	13.4	36.2
EVMS(L)5 10/4.0	1.6	4.0	112 M	ø160	196	155	306	518	13.9	40.4	543	15	41.5	518	13.9	40.4
EVMS(L)5 11/4.0	1.6	4.0	112 M	ø160	196	155	306	546	14.7	41.2	571	15.7	42.2	546	14.6	41.1
EVMS(L)5 12/4.0	1.6	4.0	112 M	ø160	196	155	306	574	15.8	42.3	599	16.8	43.3	574	15.7	42.2
EVMS(L)5 13/5.5	2.5	5.5	132 S	ø300	225	160	328	-	-	-	721	23.9	62.5	696	22.8	61.4
EVMS(L)5 14/5.5	2.5	5.5	132 S	ø300	225	160	328	-	-	-	749	24.4	63	724	23.3	61.9
EVMS(L)5 15/5.5	2.5	5.5	132 S	ø300	225	160	328	-	-	-	777	24.9	63.5	752	23.8	62.4
EVMS(L)5 16/5.5	2.5	5.5	132 S	ø300	225	160	328	-	-	-	805	25.5	64.1	780	24.4	63
EVMS(L)5 17/7.5	2.5	7.5	132 S	ø300	225	160	350	-	-	-	833	26.1	66.5	808	25	65.4
EVMS(L)5 19/7.5	2.5	7.5	132 S	ø300	225	160	350	-	-	-	889	27	67.4	864	25.9	66.3

1.6 MPa=16 bar ; 2.5 MPa=25 bar

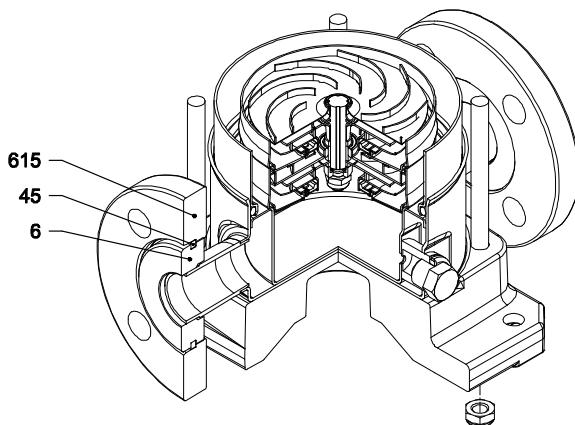
- not available model

VERTICAL MULTISTAGE PUMPS

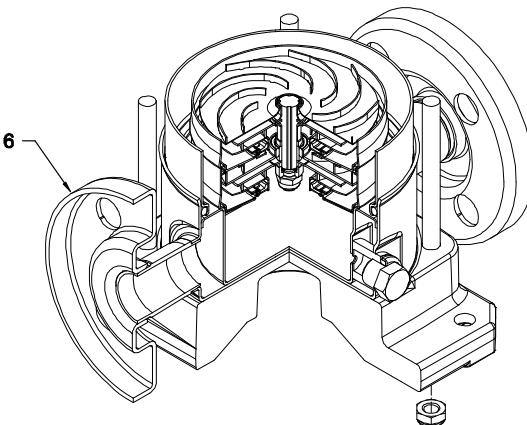
SECTIONAL VIEW
EVMS(L)5

with Oval flange (N)

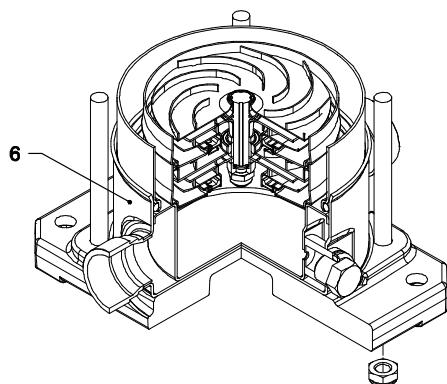
PIPE CONNECTION EVMS(L)5



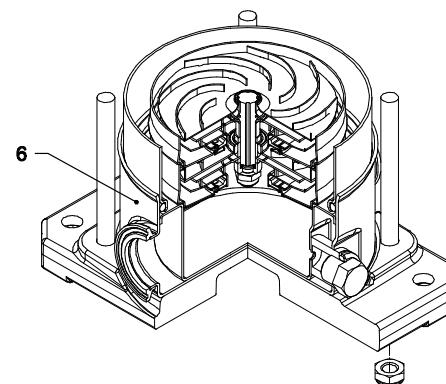
with Loose round flange (LF)



with Round flange (F)



with Victaulic® connection (V)



with Clamp connection (C)

VERTICAL MULTISTAGE PUMPS

SECTIONAL TABLE
EVMS(L)5

N°	PART NAME	MATERIAL		DIMENSIONS	STANDARD
		EVMS	EVMSL		
4	Casing cover	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-1	Suction casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-2	Intermediate Casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-3	Intermediate casing bearing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-4	Discharge casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
6	Bottom casing	EN 1.4308 (AISI 304)	EN 1.4408 (AISI 316)		
7	Outer casing	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		
21	Impeller	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
31	Shaft	EN 1.4301 (AISI 304) - EN 1.4462 (AISI 329A)	EN 1.4404 (AISI 316L) - EN 1.4462 (AISI 329A)		
32-1	Adjuster Key	EN 1.4301 (AISI 304)			
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-4	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-5	Shaft sleeve (last stage)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
44-1	Shaft sleeve bearing	Tungsten carbide			
45	Flange holder	EN 1.4301 (AISI 304)			
46	Ring (mechanical seal)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
47	Ring Holder	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
48	Impeller nut	A2-70 UNI 7323 with inox insert	A4-70 UNI 7323 with inox insert	M8	
52-1	Bearing	Tungsten carbide			
75	O-Ring (plug)	EPDM		D. 12.37x2.62	OR 3050
75-1	O-Ring (plug)	EPDM			
107	Liner ring	EN 1.4301 (AISI 304) + PPS	EN 1.4401 (AISI 316) + PPS		
111	Mechanical Seal	SiC/Carbon/EPDM			
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
111-4	Seal holder	EN 1.4301 (AISI 304)			
111-5	Mechanical seal cartridge	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
115-1	O-Ring (outer casing)	EPDM		D. 129.54x5.34	OR 6510
115-3	O-Ring	EPDM			
115-4	O-Ring (cartridge sleeve)	EPDM		D. 11.91x2.62	OR 115
115-5	O-Ring (seal cover)	EPDM		D. 32.99x2.62	OR 3131
120-1	Tie-rod	Galvanized steel 6.8 strength class ISO 898/1		M10	
120-3	Screw	A2-70 UNI 7323		M4x10	ISO 4762
120-6	Screw for coupling	up to 4.0 kW	Galvanized steel		M6x25
		above 5.5 kW			M8x20
120-11	Screw for counterflange	A2-70 UNI 7323			
120-13	Screw for motor	MEC 80 MEC 90-100-112 MEC 132	Galvanized steel 8.8 strength class ISO 898/1		M6x20
					M8x20
					M12x40
128-1	Nut for tie rod	Galvanized steel		M10	UNI 5588
128-3	Nut (motor)	MEC 132	Galvanized steel		M12
128-5	Nut for tie rod	A2-70 UNI 7323		M10	UNI 7474
128-6	Nut for coupling	Galvanized steel		M6	ISO 4032
130-1	Set screw	A2-70 UNI 7323		M5x8	UNI 5923
130-2	Screw for coupling guard	A2-70 UNI 7323		M5x6	UNI 7687
131-1	Pin for shaft	Carbon Steel		D. 4x32	UNI 4838
135-1	Washer	Galvanized steel		D. 10.5x21x2	UNI 6592
135-6	Washer	Carbon Steel		Ø6	
137-1	Impeller spacer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
140	Coupling	up to 4.0 kW	Die cast Aluminium EN AB-AISI11Cu2 (Fe)		
		above 5.5 kW	Cast Iron		
160	Base	Die cast Aluminium EN AB-AISI11Cu2 (Fe)			
162	Motor bracket	Cast iron EN-GJL-200-EN 1561			
212	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	G 3/8	
212-1	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	G 3/8	
212-2	Venting plug	EN 1.4404 (AISI 316L)			
219	Counter flange	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
245	Coupling guard	EN 1.4301 (AISI 304)			
273-1	Plug Washer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
615	Flange	Nodular Cast Iron			

QUANTITY FOR MODEL
EVMS(L)5

Pump Type	4	5-1	5-2	5-3	5-4	6	7	21	31***	32-1	43-2	43-3	43-4	43-5	44-1	45**	46	47	48	52-1	75	75-1	107	111	111-3	111-4	111-5	115-1	115-3*	115-4	115-5	
EVMS(L)5 2/0.55	1	1	/	1	1	1	1	2	1	1	/	1	1	/	1	4	2	1	1	1	1	2	1	1	1	1	1	2	2	1	1	
EVMS(L)5 3/1.1	1	1	1	1	1	1	1	3	1	1	3	1	1	1	1	4	2	1	1	1	1	2	3	1	1	1	1	2	2	1	1	
EVMS(L)5 4/1.5	1	1	2	1	1	1	1	4	1	1	5	1	1	1	/	1	4	2	1	1	1	1	2	4	1	1	1	1	2	2	1	1
EVMS(L)5 5/2.2	1	1	3	1	1	1	1	5	1	1	7	1	1	/	1	4	2	1	1	1	1	2	5	1	1	1	1	2	2	1	1	
EVMS(L)5 6/2.2	1	1	4	1	1	1	1	6	1	1	9	1	1	1	1	4	2	1	1	1	1	2	6	1	1	1	1	2	2	1	1	
EVMS(L)5 7/3.0	1	1	5	1	1	1	1	7	1	1	11	1	1	/	1	4	2	1	1	1	1	2	7	1	1	1	1	2	2	1	1	
EVMS(L)5 8/3.0	1	1	6	1	1	1	1	8	1	1	13	1	1	/	1	4	2	1	1	1	1	2	8	1	1	1	1	2	2	1	1	
EVMS(L)5 9/3.0	1	1	7	1	1	1	1	9	1	1	15	1	1	1	1	4	2	1	1	1	1	2	9	1	1	1	1	2	2	1	1	
EVMS(L)5 10/4.0	1	1	8	1	1	1	1	10	1	1	17	1	1	/	1	4	2	1	1	1	1	2	10	1	1	1	1	2	2	1	1	
EVMS(L)5 11/4.0	1	1	8	2	1	1	1	11	1	1	17	2	2	/	2	4	2	1	1	2	1	2	11	1	1	1	1	2	2	1	1	
EVMS(L)5 12/4.0	1	1	9	2	1	1	1	12	1	1	19	2	2	1	2	4	2	1	1	2	1	2	12	1	1	1	1	2	2	1	1	
EVMS(L)5 13/5.5	1	1	10	2	1	1	1	13	1	1	21	2	2	/	2	4	2	1	1	2	1	2	13	1	1	1	1	2	/	1	1	
EVMS(L)5 14/5.5	1	1	11	2	1	1	1	14	1	1	23	2	2	/	2	4	2	1	1	2	1	2	14	1	1	1	1	2	/	1	1	
EVMS(L)5 15/5.5	1	1	12	2	1	1	1	15	1	1	25	2	2	1	2	4	2	1	1	2	1	2	15	1	1	1	1	2	/	1	1	
EVMS(L)5 16/5.5	1	1	13	2	1	1	1	16	1	1	27	2	2	/	2	4	2	1	1	2	1	2	16	1	1	1	1	2	/	1	1	
EVMS(L)5 17/7.5	1	1	14	2	1	1	1	17	1	1	29	2	2	/	2	4	2	1	1	2	1	2	17	1	1	1	1	2	/	1	1	
EVMS(L)5 19/7.5	1	1	16	2	1	1	1	19	1	1	33	2	2	/	2	4	2	1	1	2	1	2	19	1	1	1	1	2	/	1	1	

Pump Type	120-1	120-3	120-6	120-11*	120-13	128-1	128-3	128-5	128-6	130-1	130-2	131-1	135-1	135-6	137-1	140	160	162	212	212-1	212-2	219*	245	273-1	615**
EVMS(L)5 2/0.55	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)5 3/1.1	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)5 4/1.5	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)5 5/2.2	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)5 6/2.2	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)5 7/3.0	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)5 8/3.0	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)5 9/3.0	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)5 10/4.0	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)5 11/4.0	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)5 12/4.0	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2
EVMS(L)5 13/5.5	4	4	4	4	/	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	/	2	2	2
EVMS(L)5 14/5.5	4	4	4	4	/	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	/	2	2	2
EVMS(L)5 15/5.5	4	4	4	4	/	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	/	2	2	2
EVMS(L)5 16/5.5	4	4	4	4	/	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	/	2	2	2
EVMS(L)5 17/7.5	4	4	4	4	/	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	/	2	2	2
EVMS(L)5 19/7.5	4	4	4	/	4	4	4	4	4	3	4	1	4	4	1	2	1	1	1	2	1	/	2	2	2

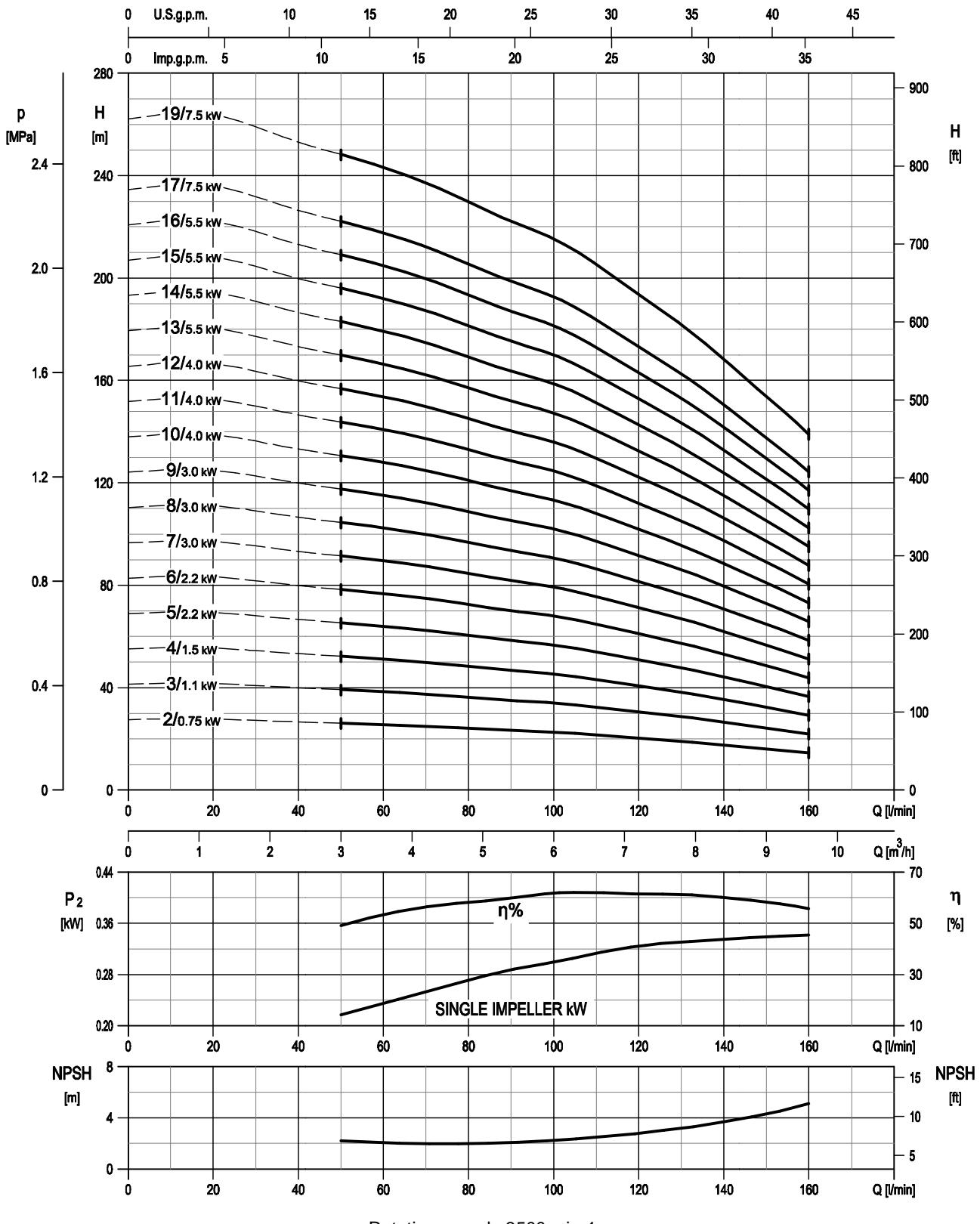
* only for Oval flange (N)

** only for Loose round flange (LF)

***  shaft in EN 1.4462 (AISI 329A)

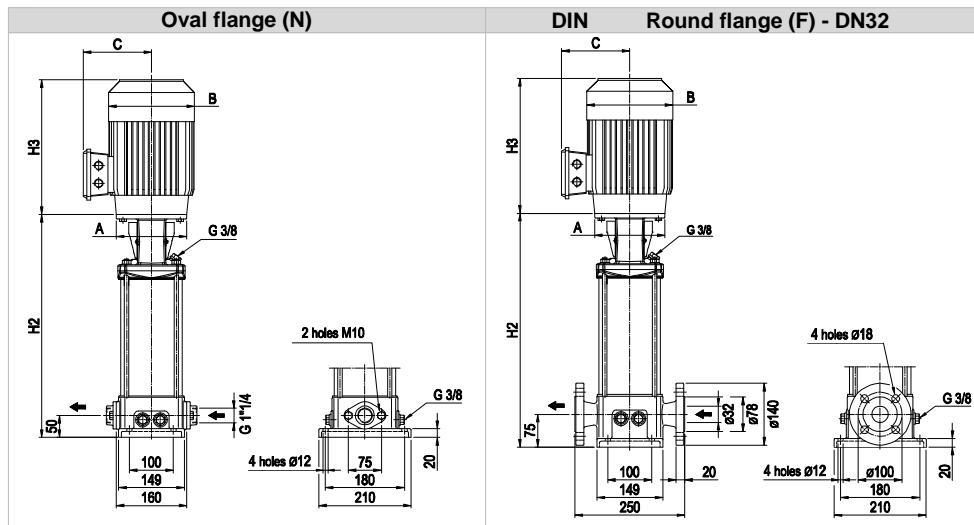
128-3: only for motor up to 5.5 kW (see drawing pag.247)

VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVE
EVMSG5

TECHNICAL DATA EVMG5

Dimensional sketch



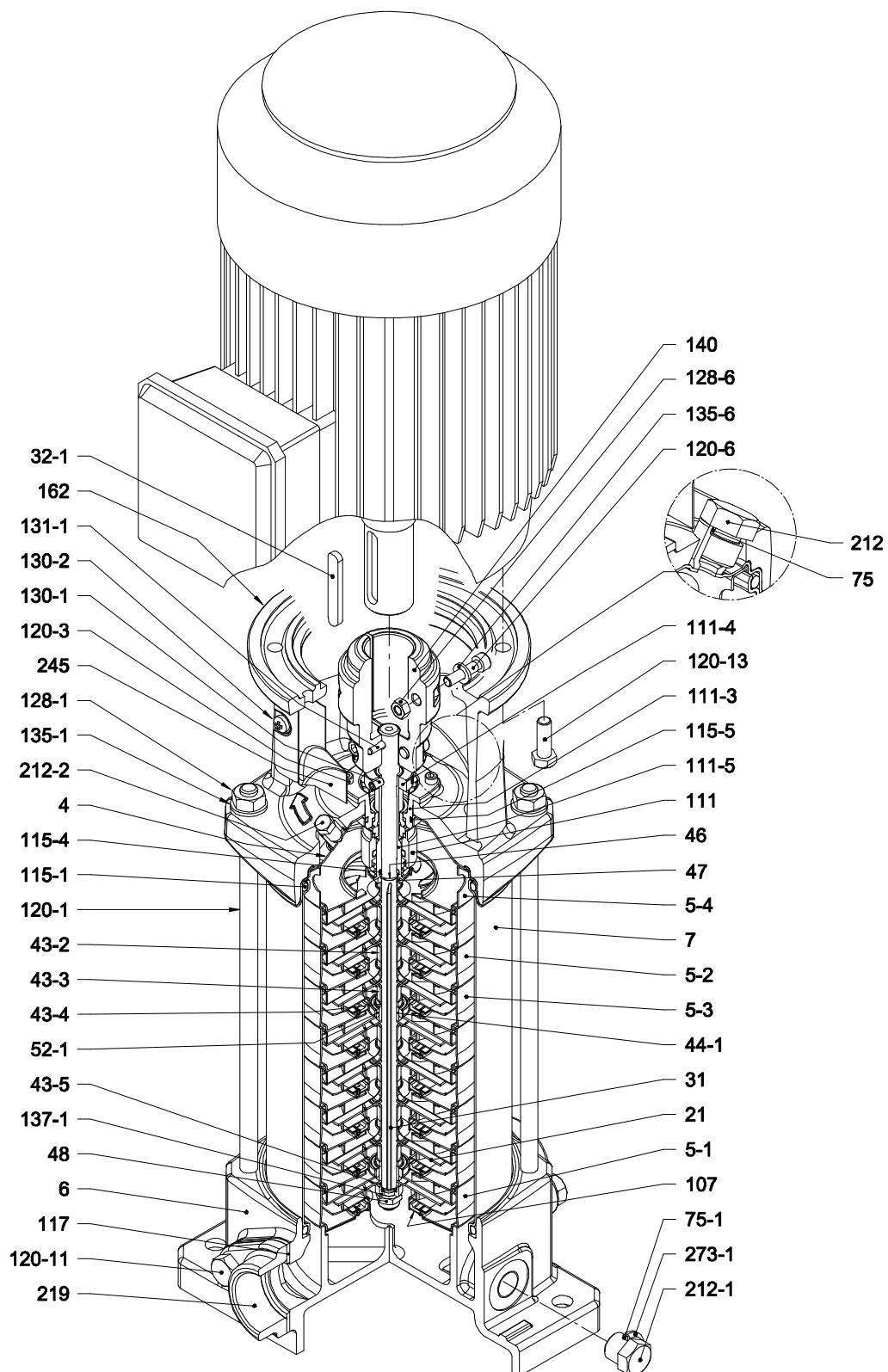
Dimensions [mm] and Weights [Kg]

Pump Type	P _{max} [MPa]	Motor					H2	Oval flange (N)		Round flange (F)			
		kW	Size	A	B	C		Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor	
EVMG5 2/0.75	1.6	0.75	80	ø120	160	139	232	274	10.9	20.4	299	15.9	25.4
EVMG5 3/1.1	1.6	1.1	80	ø120	160	139	232	302	11.4	22.5	327	16.4	27.5
EVMG5 4/1.5	1.6	1.5	90 S	ø140	180	148	267	340	12.1	26.1	365	17.1	31.1
EVMG5 5/2.2	1.6	2.2	90 L	ø140	180	148	267	368	12.6	28.6	393	17.6	33.6
EVMG5 6/2.2	1.6	2.2	90 L	ø140	180	148	267	396	13.1	29.1	421	18.1	34.1
EVMG5 7/3.0	1.6	3.0	100 L	ø160	196	155	306	434	13.8	36.6	459	18.8	41.6
EVMG5 8/3.0	1.6	3.0	100 L	ø160	196	155	306	462	14.1	36.9	487	19.1	41.9
EVMG5 9/3.0	1.6	3.0	100 L	ø160	196	155	306	490	14.6	37.4	515	19.6	42.4
EVMG5 10/4.0	1.6	4.0	112 M	ø160	196	155	306	518	15.1	41.6	543	20.1	46.6
EVMG5 11/4.0	1.6	4.0	112 M	ø160	196	155	306	546	15.8	42.3	571	20.8	47.3
EVMG5 12/4.0	1.6	4.0	112 M	ø160	196	155	306	574	16.9	43.4	599	21.9	48.4
EVMG5 13/5.5	2.5	5.5	132 S	ø300	225	160	328	-	-	-	721	29	67.6
EVMG5 14/5.5	2.5	5.5	132 S	ø300	225	160	328	-	-	-	749	29.5	68.1
EVMG5 15/5.5	2.5	5.5	132 S	ø300	225	160	328	-	-	-	777	30	68.6
EVMG5 16/5.5	2.5	5.5	132 S	ø300	225	160	328	-	-	-	805	30.6	69.2
EVMG5 17/7.5	2.5	7.5	132 S	ø300	225	160	350	-	-	-	833	31.2	71.6
EVMG5 19/7.5	2.5	7.5	132 S	ø300	225	160	350	-	-	-	889	32.1	72.5

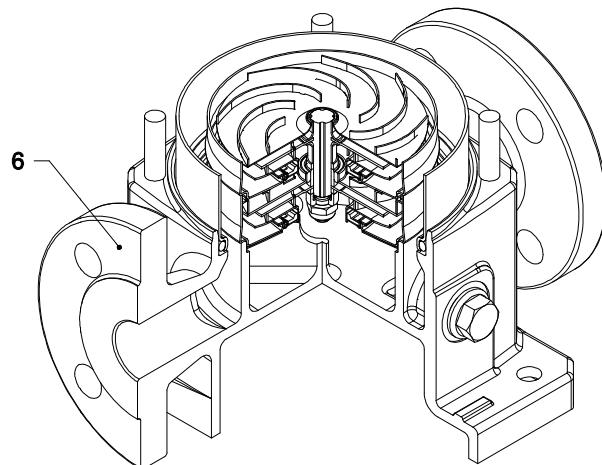
1.6 MPa=16 bar ; 2.5 MPa=25 bar

- not available model

VERTICAL MULTISTAGE PUMPS

SECTIONAL VIEW
EVMSG5

with Oval flange (N)

**PIPE CONNECTION
EVMSG5**

with Round flange (F)

EVMSG5

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VERTICAL MULTISTAGE PUMPS

SECTIONAL TABLE
EVMSG5

N°	PART NAME	MATERIAL EVMSG	DIMENSIONS	STANDARD
4	Casing cover	EN 1.4301 (AISI 304)		
5-1	Suction casing	EN 1.4301 (AISI 304)		
5-2	Intermediate Casing	EN 1.4301 (AISI 304)		
5-3	Intermediate casing bearing	EN 1.4301 (AISI 304)		
5-4	Discharge casing	EN 1.4301 (AISI 304)		
6	Bottom casing	Cast Iron EN GJL-250-EN1561		
7	Outer casing	EN 1.4301 (AISI 304)		
21	Impeller	EN 1.4301 (AISI 304)		
31	Shaft	EN 1.4301 (AISI 304) - EN 1.4462 (AISI 329A)		
32-1	Adjuster Key	EN 1.4301 (AISI 304)		
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)		
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)		
43-4	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)		
43-5	Shaft sleeve (last stage)	EN 1.4301 (AISI 304)		
44-1	Shaft sleeve bearing	Tungsten carbide		
46	Ring (mechanical seal)	EN 1.4301 (AISI 304)		
47	Ring Holder	EN 1.4301 (AISI 304)		
48	Impeller nut	A2-70 UNI 7323 with inox insert	M8	
52-1	Bearing	Tungsten carbide		
75	O-Ring (plug)	EPDM	D. 12.37x2.62	OR 3050
75-1	O-Ring (plug)	EPDM		
107	Liner ring	EN 1.4301 (AISI 304) + PPS		
111	Mechanical Seal	SiC/Carbon/EPDM		
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)		
111-4	Seal holder	EN 1.4301 (AISI 304)		
111-5	Mechanical seal cartridge	EN 1.4301 (AISI 304)		
115-1	O-Ring (outer casing)	EPDM	D. 129.54x5.34	OR 6510
115-4	O-Ring (cartridge sleeve)	EPDM	D. 11.91x2.62	OR 115
115-5	O-Ring (seal cover)	EPDM	D. 32.99x2.62	OR 3131
117	Flange gasket	EPDM		
120-1	Tie-rod	Galvanized steel 6.8 strenght class ISO 898/1	M10	
120-3	Screw	A2-70 UNI 7323	M4x10	ISO 4762
120-6	Screw for coupling	up to 4.0 kW above 5.5 kW	Galvanized steel	M6x25 ISO 4762 M8x20 ISO 4762
120-11	Screw for counterflange		A2-70 UNI 7323	
120-13	Screw for motor	MEC 80 MEC 90-100-112 MEC 132	Galvanized steel 8.8 strenght class ISO 898/1	M6x20 ISO 4017 M8x20 ISO 4017 M12x40 ISO 4017
128-1	Nut for tie rod		Galvanized steel	M10 UNI 5588
128-3	Nut (motor)	MEC 132	Galvanized steel	M12 ISO 4032
128-6	Nut for coupling		Galvanized steel	M6 ISO 4032
130-1	Set screw		A2-70 UNI 7323	M5x8 UNI 5923
130-2	Screw for coupling guard		A2-70 UNI 7323	M5x6 UNI 7687
131-1	Pin for shaft		Carbon Steel	D. 4x32 UNI 4838
135-1	Washer		Galvanized steel	D. 10.5x21x2 UNI 6592
135-6	Washer		Carbon Steel	Ø6
137-1	Impeller spacer		EN 1.4301 (AISI 304)	
140	Coupling	up to 4.0 kW above 5.5 kW	Die cast Aluminium EN AB-AISI11Cu2 (Fe) Cast Iron	
162	Motor bracket		Cast iron EN-GJL-200-EN 1561	
212	Plug		EN 1.4301 (AISI 304)	G 3/8
212-1	Plug		EN 1.4301 (AISI 304)	G 3/8
212-2	Venting plug		EN 1.4404 (AISI 316L)	
219	Counter flange		Galvanized steel	
245	Coupling guard		EN 1.4301 (AISI 304)	
273-1	Plug Washer		EN 1.4301 (AISI 304)	

QUANTITY FOR MODEL
EVMSG5

EVMSG5

Pump Type	Nº																														
	4	5-1	5-2	5-3	5-4	6	7	21	31***	32-1	43-2	43-3	43-4	43-5	44-1	46	47	48	52-1	75	75-1	107	111	111-3	111-4	111-5	115-1	115-4	115-5		
EVMSG5 2/0.55	1	1	/	1	1	1	1	1	2	1	1	/	1	1	2	1	1	1	1	4	2	1	1	1	1	1	2	1	1		
EVMSG5 3/1.1	1	1	1	1	1	1	1	1	3	1	1	3	1	1	1	1	2	1	1	1	1	4	3	1	1	1	1	2	1	1	
EVMSG5 4/1.5	1	1	2	1	1	1	1	1	4	1	1	5	1	1	1	/	1	2	1	1	1	1	4	4	1	1	1	1	2	1	1
EVMSG5 5/2.2	1	1	3	1	1	1	1	1	5	1	1	7	1	1	1	/	1	2	1	1	1	1	4	5	1	1	1	1	2	1	1
EVMSG5 6/2.2	1	1	4	1	1	1	1	1	6	1	1	9	1	1	1	1	1	2	1	1	1	1	4	6	1	1	1	1	2	1	1
EVMSG5 7/3.0	1	1	5	1	1	1	1	1	7	1	1	11	1	1	1	/	1	2	1	1	1	1	4	7	1	1	1	1	2	1	1
EVMSG5 8/3.0	1	1	6	1	1	1	1	1	8	1	1	13	1	1	1	/	1	2	1	1	1	1	4	8	1	1	1	1	2	1	1
EVMSG5 9/3.0	1	1	7	1	1	1	1	1	9	1	1	15	1	1	1	1	2	1	1	1	1	4	9	1	1	1	1	2	1	1	
EVMSG5 10/4.0	1	1	8	1	1	1	1	1	10	1	1	17	1	1	1	/	1	2	1	1	1	1	4	10	1	1	1	1	2	1	1
EVMSG5 11/4.0	1	1	8	2	1	1	1	1	11	1	1	17	2	2	/	2	2	1	1	2	1	4	11	1	1	1	1	2	1	1	
EVMSG5 12/4.0	1	1	9	2	1	1	1	1	12	1	1	19	2	2	1	2	2	1	1	2	1	4	12	1	1	1	1	2	1	1	
EVMSG5 13/5.5	1	1	10	2	1	1	1	1	13	1	1	21	2	2	/	2	2	1	1	2	1	4	13	1	1	1	1	2	1	1	
EVMSG5 14/5.5	1	1	11	2	1	1	1	1	14	1	1	23	2	2	/	2	2	1	1	2	1	4	14	1	1	1	1	2	1	1	
EVMSG5 15/5.5	1	1	12	2	1	1	1	1	15	1	1	25	2	2	1	2	2	1	1	2	1	4	15	1	1	1	1	2	1	1	
EVMSG5 16/5.5	1	1	13	2	1	1	1	1	16	1	1	27	2	2	/	2	2	1	1	2	1	4	16	1	1	1	1	2	1	1	
EVMSG5 17/7.5	1	1	14	2	1	1	1	1	17	1	1	29	2	2	/	2	2	1	1	2	1	4	17	1	1	1	1	2	1	1	
EVMSG5 19/7.5	1	1	16	2	1	1	1	1	19	1	1	33	2	2	/	2	2	1	1	2	1	4	19	1	1	1	1	2	1	1	

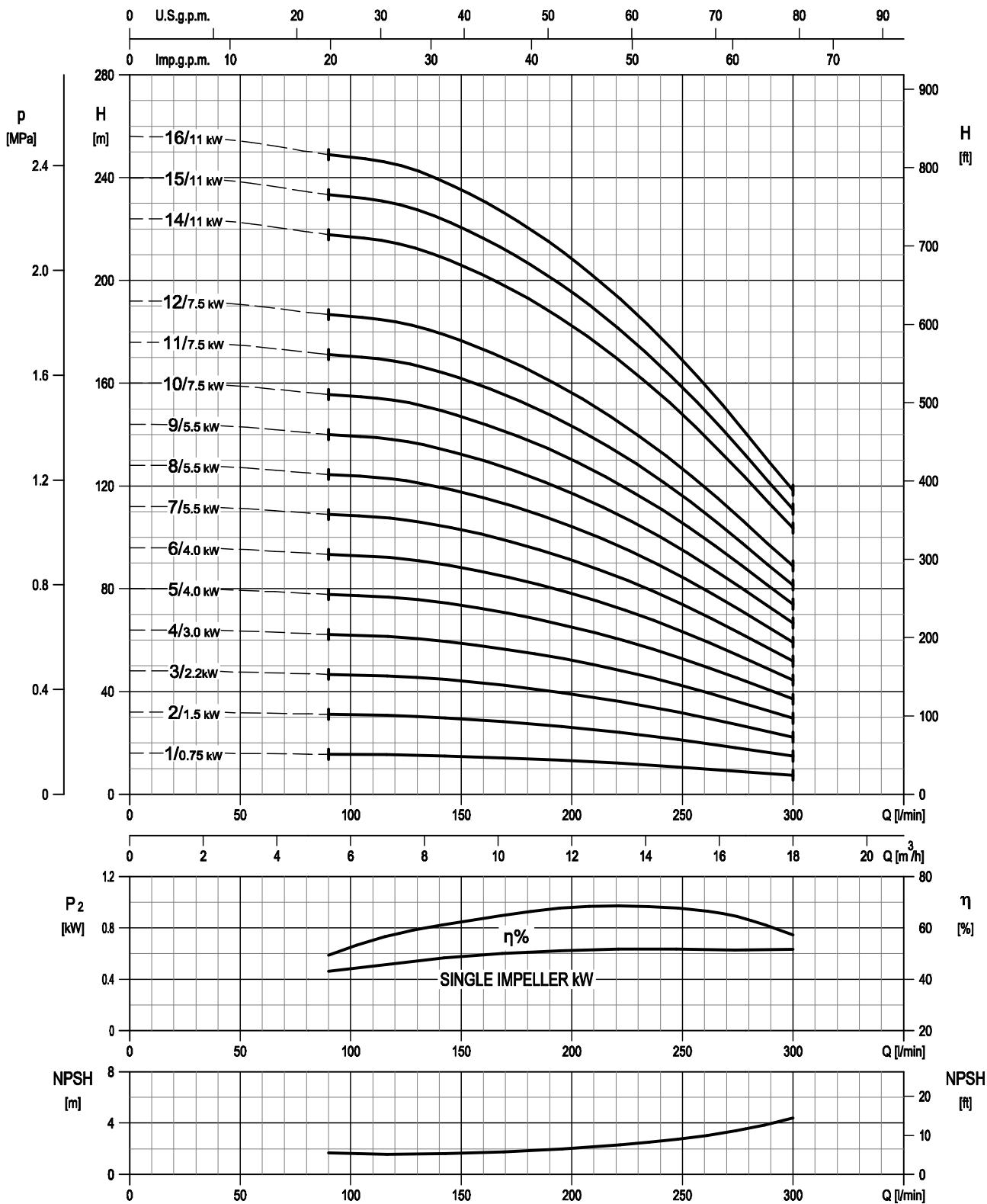
Pump Type	Nº																										
	117*	120-1	120-3	120-6	120-11*	120-13	128-1	128-3	128-6	130-1	130-2	131-1	135-1	135-6	137-1	140	162	212	212-1	212-2	219*	245	273-1				
EVMSG5 2/0.55	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4			
EVMSG5 3/1.1	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4			
EVMSG5 4/1.5	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4			
EVMSG5 5/2.2	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4			
EVMSG5 6/2.2	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4			
EVMSG5 7/3.0	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4			
EVMSG5 8/3.0	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4			
EVMSG5 9/3.0	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4			
EVMSG5 10/4.0	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4			
EVMSG5 11/4.0	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4			
EVMSG5 12/4.0	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4			
EVMSG5 13/5.5	/	4	4	4	4	/	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4			
EVMSG5 14/5.5	/	4	4	4	4	/	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4			
EVMSG5 15/5.5	/	4	4	4	4	/	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4			
EVMSG5 16/5.5	/	4	4	4	4	/	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4			
EVMSG5 17/7.5	/	4	4	4	4	/	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4			
EVMSG5 19/7.5	/	4	4	4	4	/	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	/	2	4			

* only for Oval flange (N)

***  shaft in EN 1.4462 (AISI 329A)

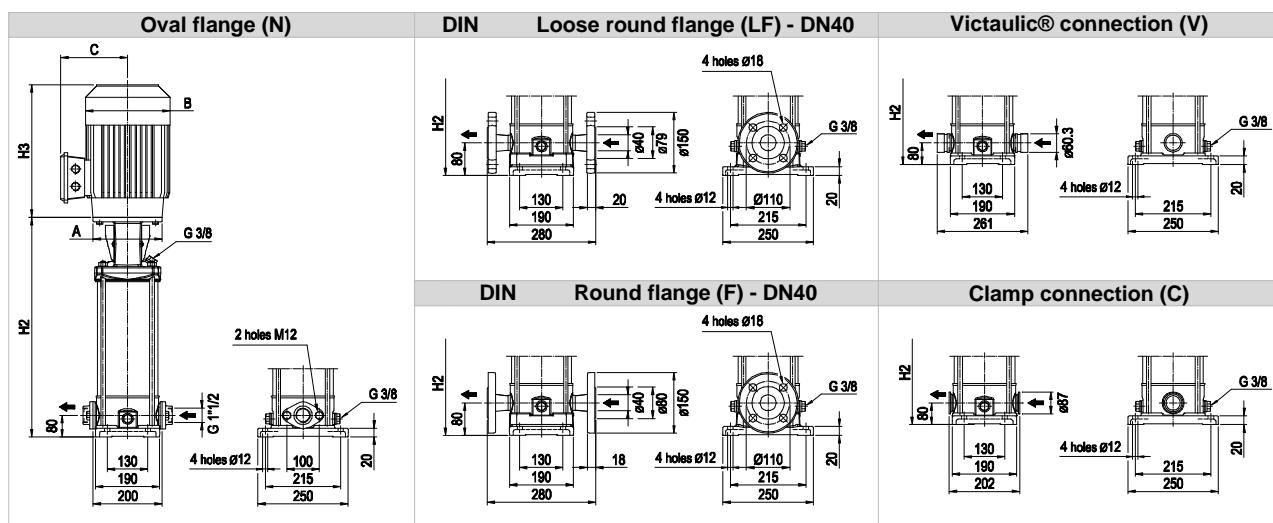
128-3: only for motor up to 5.5 kW (see drawing pag.247)

VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVE
EVMS(L)10

Rotation speed ≈ 3500 min $^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

Dimensional sketch



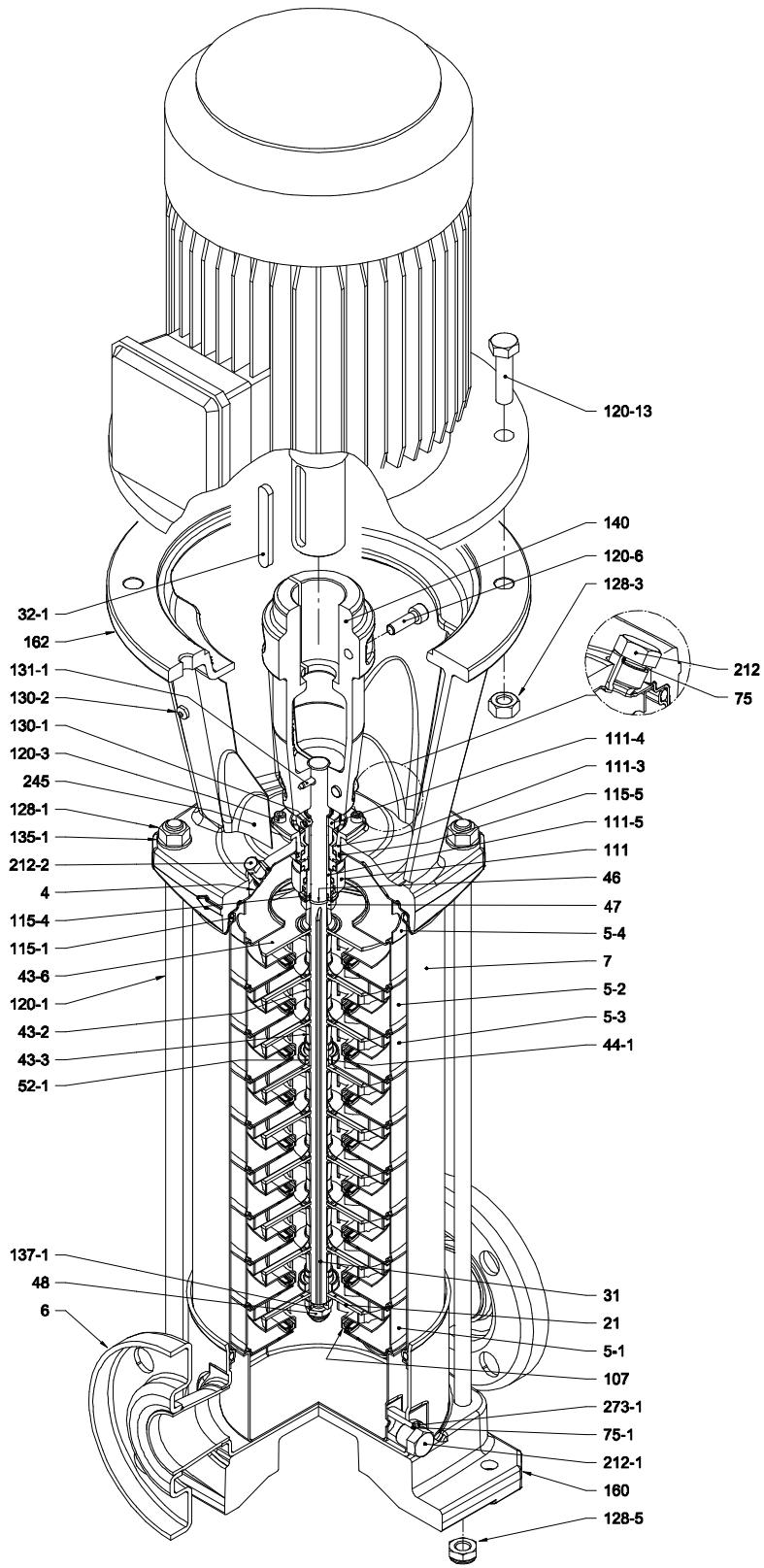
Dimensions [mm] and Weights [Kg]

Pump Type	P _{max} [MPa]	Motor				Oval flange (N)			Loose round flange (LF) Round flange (F)			Victaulic® connection (V) Clamp connection (C)		
		kW	Size	A	3 ~	H2	Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor
EVMS(L)10 1/0.75	1.6	0.75	80	ø120	160 139 232	343	19.7	29.2	343	20.7	30.2	343	19.6	29.1
EVMS(L)10 2/1.5	1.6	1.5	90 S	ø140	180 148 267	353	19.8	33.8	353	20.9	34.9	353	19.8	33.8
EVMS(L)10 3/2.2	1.6	2.2	90 L	ø140	180 148 267	383	20.7	36.7	383	21.7	37.7	383	20.7	36.7
EVMS(L)10 4/3.0	1.6	3.0	100 L	ø160	196 155 306	423	21.7	44.5	423	22.7	45.5	423	21.6	44.4
EVMS(L)10 5/4.0	1.6	4.0	112 M	ø160	196 155 306	453	22.5	49	453	23.5	50	453	22.5	49
EVMS(L)10 6/4.0	1.6	4.0	112 M	ø160	196 155 306	483	23.3	49.8	483	24.4	50.9	483	23.3	49.8
EVMS(L)10 7/5.5	1.6	5.5	132 S	ø300	225 160 328	611	31.2	69.8	611	32.3	70.9	611	31.2	69.8
EVMS(L)10 8/5.5	1.6	5.5	132 S	ø300	225 160 328	641	32.4	71	641	33.5	72.1	641	32.4	71
EVMS(L)10 9/5.5	1.6	5.5	132 S	ø300	225 160 328	671	33.3	71.9	671	34.3	72.9	671	33.2	71.8
EVMS(L)10 10/7.5	1.6	7.5	132 S	ø300	225 160 350	701	34.1	74.5	701	35.1	75.5	701	34.1	74.5
EVMS(L)10 11/7.5	2.5	7.5	132 S	ø300	225 160 350	-	-	-	731	36.8	77.2	731	35.7	76.1
EVMS(L)10 12/7.5	2.5	7.5	132 S	ø300	225 160 350	-	-	-	761	37.7	78.1	761	36.6	77
EVMS(L)10 14/11	2.5	11	160 M	ø350	248 194 476	-	-	-	851	47.7	110.2	851	46.6	109.1
EVMS(L)10 15/11	2.5	11	160 M	ø350	248 194 476	-	-	-	881	48.6	111.1	881	47.6	110.1
EVMS(L)10 16/11	2.5	11	160 M	ø350	248 194 476	-	-	-	911	49.5	112	911	48.5	111

1.6 MPa=16 bar ; 2.5 MPa=25 bar

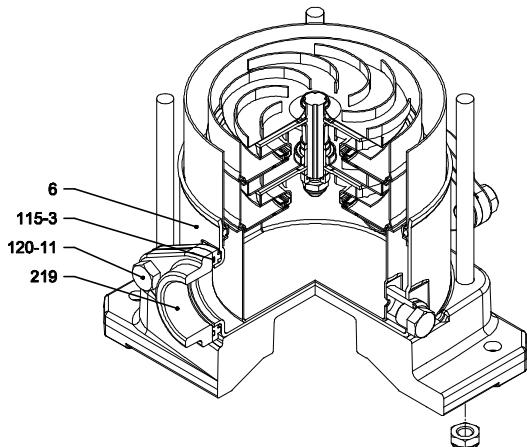
- not available model

VERTICAL MULTISTAGE PUMPS

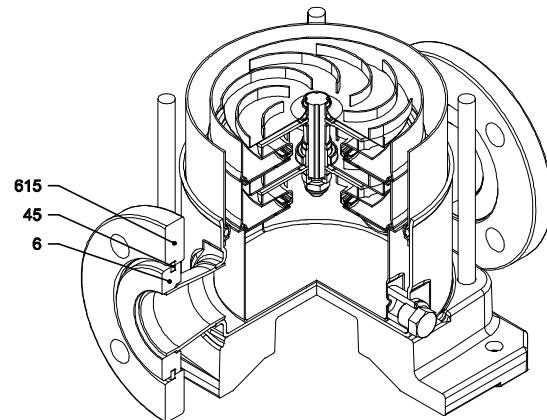
SECTIONAL VIEW
EVMS(L)10

with Round flange (F)

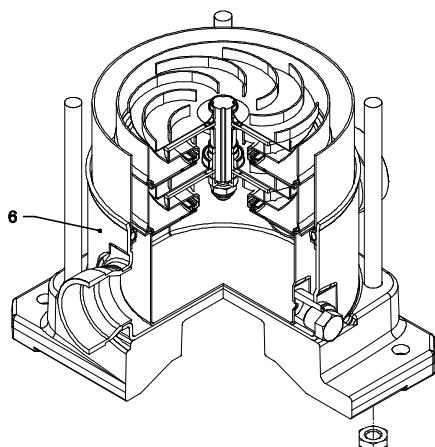
PIPE CONNECTION EVMS(L)10



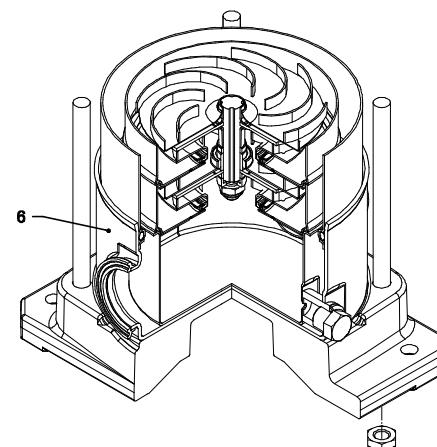
with Oval flange (N)



with Loose round flange (LF)



with Victaulic® connection (V)



with Clamp connection (C)

VERTICAL MULTISTAGE PUMPS

SECTIONAL TABLE
EVMS(L)10

Nº	PART NAME	MATERIAL	DIMENSIONS	STANDARD
		EVMS	EVMSL	
4	Casing cover	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
5-1	Suction casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
5-2	Intermediate Casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
5-3	Intermediate casing bearing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
5-4	Discharge casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
6	Bottom casing	EN 1.4308 (AISI 304)	EN 1.4408 (AISI 316)	
7	Outer casing	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)	
21	Impeller	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
31	Shaft	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)	
32-1	Adjuster Key		EN 1.4301 (AISI 304)	
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)	
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
43-6	Washer		EN 1.4404 (AISI 316L)	D. 26x1.2
44-1	Shaft sleeve bearing		Tungsten carbide	
45	Flange holder		EN 1.4301 (AISI 304)	
46	Ring (mechanical seal)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
47	Ring Holder	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
48	Impeller nut	A2-70 UNI 7323 with inox insert	A4-70 UNI 7323 with inox insert	M10
52-1	Bearing		Tungsten carbide	
75	O-Ring (plug)		EPDM	D. 12.37x2.62 OR 3050
75-1	O-Ring (plug)		EPDM	
107	Liner ring	EN 1.4301 (AISI 304) + PPS	EN 1.4401 (AISI 316) + PPS	
111	Mechanical Seal		SiC/Carbon/EPDM	
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
111-4	Seal holder		EN 1.4301 (AISI 304)	
111-5	Mechanical seal cartridge	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
115-1	O-Ring (outer casing)		EPDM	D. 164.46x5.34 OR 6645
115-3	O-Ring		EPDM	
115-4	O-Ring (cartridge sleeve)		EPDM	D. 15.88x2.62 OR 121
115-5	O-Ring (seal cover)		EPDM	D. 37.77x2.62 OR 3150
120-1	Tie-rod		Galvanized steel 6.8 strength class ISO 898/1	M12
120-3	Screw		A2-70 UNI 7323	M5x12 ISO 4762
120-6	Screw for coupling	up to 4.0 kW		M6x25 ISO 4762
		from 5.5 kW to 7.5 kW		M8x20 ISO 4762
		above 11 kW		M10x30 ISO 4762
120-11	Screw for counterflange		A2-70 UNI 7323	
120-13	Screw for motor	MEC 80		M6x20 ISO 4017
		MEC 90-100-112		M8x20 ISO 4017
		MEC 132		M12x40 ISO 4017
		MEC 160		M16x50 ISO 4017
128-1	Nut for tie rod		Galvanized steel	M12 UNI 5588
128-3	Nut (motor)	MEC 132	Galvanized steel	M12 ISO 4032
		MEC 160		M16 UNI 5588
128-5	Nut for tie rod		Galvanized steel	M12 UNI 7474
130-1	Set screw		A2-70 UNI 7323	M5x8 UNI 5923
130-2	Screw for coupling guard		A2-70 UNI 7323	M5x6 UNI 7687
131-1	Pin for shaft		Carbon Steel	D. 5x35 UNI 4838
135-1	Washer		Galvanized steel	D. 13x24x2.5 UNI 6592
137-1	Impeller spacer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
140	Coupling	up to 4.0 kW	Die cast Aluminium EN AB-AlSi11Cu2 (Fe)	
		above 5.5 kW	Cast Iron	
160	Base		Die cast Aluminium EN AB-AlSi11Cu2 (Fe)	
162	Motor bracket		Cast iron EN-GJL-200-EN 1561	
212	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	G 3/8
212-1	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	G 3/8
212-2	Venting plug		EN 1.4404 (AISI 316L)	
219	Counter flange	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
245	Coupling guard		EN 1.4301 (AISI 304)	
273-1	Plug Washer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
615	Flange		Nodular Cast Iron	

**QUANTITY FOR MODEL
EVMS(L)10**

Pump Type	Nº																														
	4	5-1	5-2	5-3	5-4	6	7	21	31	32-1	43-2	43-3	43-6	44-1	45**	46	47	48	52-1	75	75-1	107	111	111-3	111-4	111-5	115-1	115-3*	115-4	115-5	
EVMS(L)10 1/0.75	1	1	/	1	1	1	1	1	1	/	1	1	1	4	2	1	1	1	1	2	1	1	1	1	1	2	2	1	1	1	
EVMS(L)10 2/1.5	1	1	/	1	1	1	1	2	1	1	/	1	1	4	2	1	1	1	1	2	2	1	1	1	1	2	2	1	1	1	
EVMS(L)10 3/2.2	1	1	1	1	1	1	1	3	1	1	3	1	/	1	4	2	1	1	1	1	2	3	1	1	1	2	2	2	1	1	1
EVMS(L)10 4/3.0	1	1	2	1	1	1	1	4	1	1	5	1	/	1	4	2	1	1	1	1	2	4	1	1	1	1	2	2	1	1	1
EVMS(L)10 5/4.0	1	1	3	1	1	1	1	5	1	1	7	1	/	1	4	2	1	1	1	1	2	5	1	1	1	1	2	2	1	1	1
EVMS(L)10 6/4.0	1	1	4	1	1	1	1	6	1	1	9	1	/	1	4	2	1	1	1	1	2	6	1	1	1	1	2	2	1	1	1
EVMS(L)10 7/5.5	1	1	5	1	1	1	1	7	1	1	11	1	/	1	4	2	1	1	1	1	2	7	1	1	1	1	2	2	1	1	1
EVMS(L)10 8/5.5	1	1	5	2	1	1	1	8	1	1	11	2	/	2	4	2	1	1	2	1	2	8	1	1	1	1	2	2	1	1	1
EVMS(L)10 9/5.5	1	1	6	2	1	1	1	9	1	1	13	2	/	2	4	2	1	1	2	1	2	9	1	1	1	1	2	2	1	1	1
EVMS(L)10 10/7.5	1	1	7	2	1	1	1	10	1	1	15	2	/	2	4	2	1	1	2	1	2	10	1	1	1	1	2	2	1	1	1
EVMS(L)10 11/7.5	1	1	8	2	1	1	1	11	1	1	17	2	/	2	4	2	1	1	2	1	2	11	1	1	1	1	2	/	1	1	1
EVMS(L)10 12/7.5	1	1	9	2	1	1	1	12	1	1	19	2	/	2	4	2	1	1	2	1	2	12	1	1	1	1	2	/	1	1	1
EVMS(L)10 14/11	1	1	11	2	1	1	1	14	1	1	23	2	/	2	4	2	1	1	2	1	2	14	1	1	1	1	2	/	1	1	1
EVMS(L)10 15/11	1	1	12	2	1	1	1	15	1	1	25	2	/	2	4	2	1	1	2	1	2	15	1	1	1	1	2	/	1	1	1
EVMS(L)10 16/11	1	1	13	2	1	1	1	16	1	1	27	2	/	2	4	2	1	1	2	1	2	16	1	1	1	1	2	/	1	1	1

Pump Type	Nº																									
	120-1	120-3	120-6	120-11*	120-13	128-1	128-3	128-5	128-6	130-1	130-2	131-1	135-1	135-6	137-1	140	160	162	212	212-1	212-2	219*	245	273-1	615**	
EVMS(L)10 1/0.75	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	1	2	2	2	2
EVMS(L)10 2/1.5	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2	
EVMS(L)10 3/2.2	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2	
EVMS(L)10 4/3.0	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2	
EVMS(L)10 5/4.0	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2	
EVMS(L)10 6/4.0	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2	
EVMS(L)10 7/5.5	4	4	4	4	4	4	/	4	4	3	4	1	4	4	/	1	2	1	1	1	2	1	2	2	2	
EVMS(L)10 8/5.5	4	4	4	4	4	4	/	4	4	3	4	1	4	/	1	2	1	1	1	2	1	2	2	2		
EVMS(L)10 9/5.5	4	4	4	4	4	4	/	4	4	3	4	1	4	/	1	2	1	1	1	2	1	2	2	2		
EVMS(L)10 10/7.5	4	4	4	4	4	4	/	4	4	3	4	1	4	/	1	2	1	1	1	2	1	2	2	2		
EVMS(L)10 11/7.5	4	4	4	4	/	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	/	2	2	
EVMS(L)10 12/7.5	4	4	4	4	/	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	/	2	2	
EVMS(L)10 14/11	4	4	4	4	/	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	/	2	2	
EVMS(L)10 15/11	4	4	4	4	/	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	/	2	2	
EVMS(L)10 16/11	4	4	4	/	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	/	2	2	

* only for Oval flange (N)

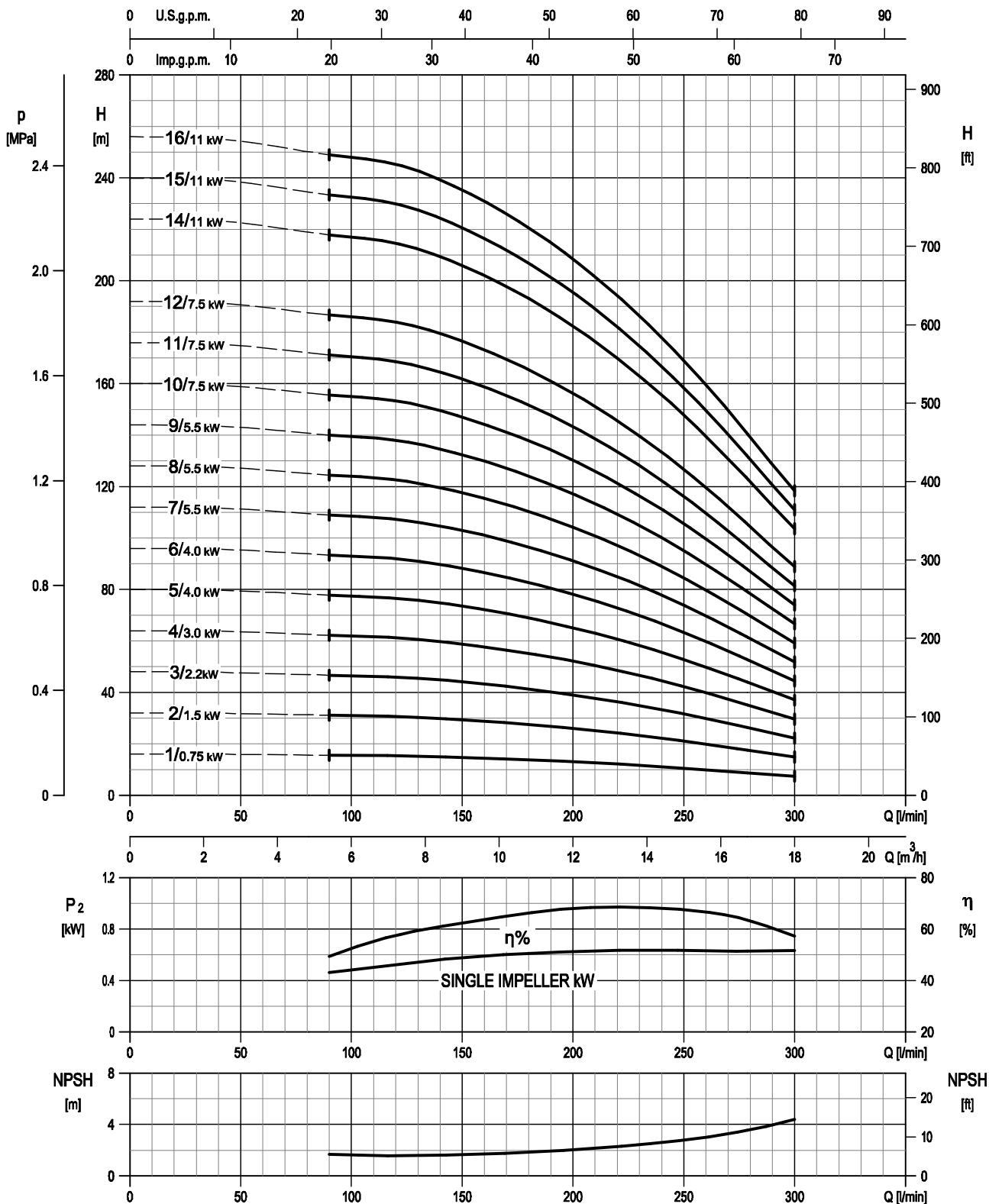
** only for Loose round flange (LF)

128-6 / 135-6: with Aluminium coupling (see drawing pag.211)

EVMS(L)10

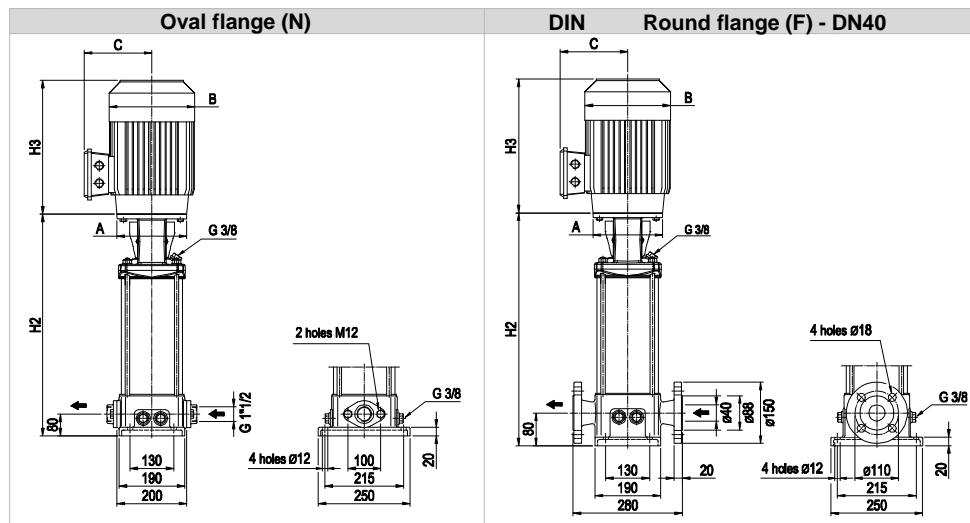
250

VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVE
EVMSG10

TECHNICAL DATA EVMMSG10

Dimensional sketch



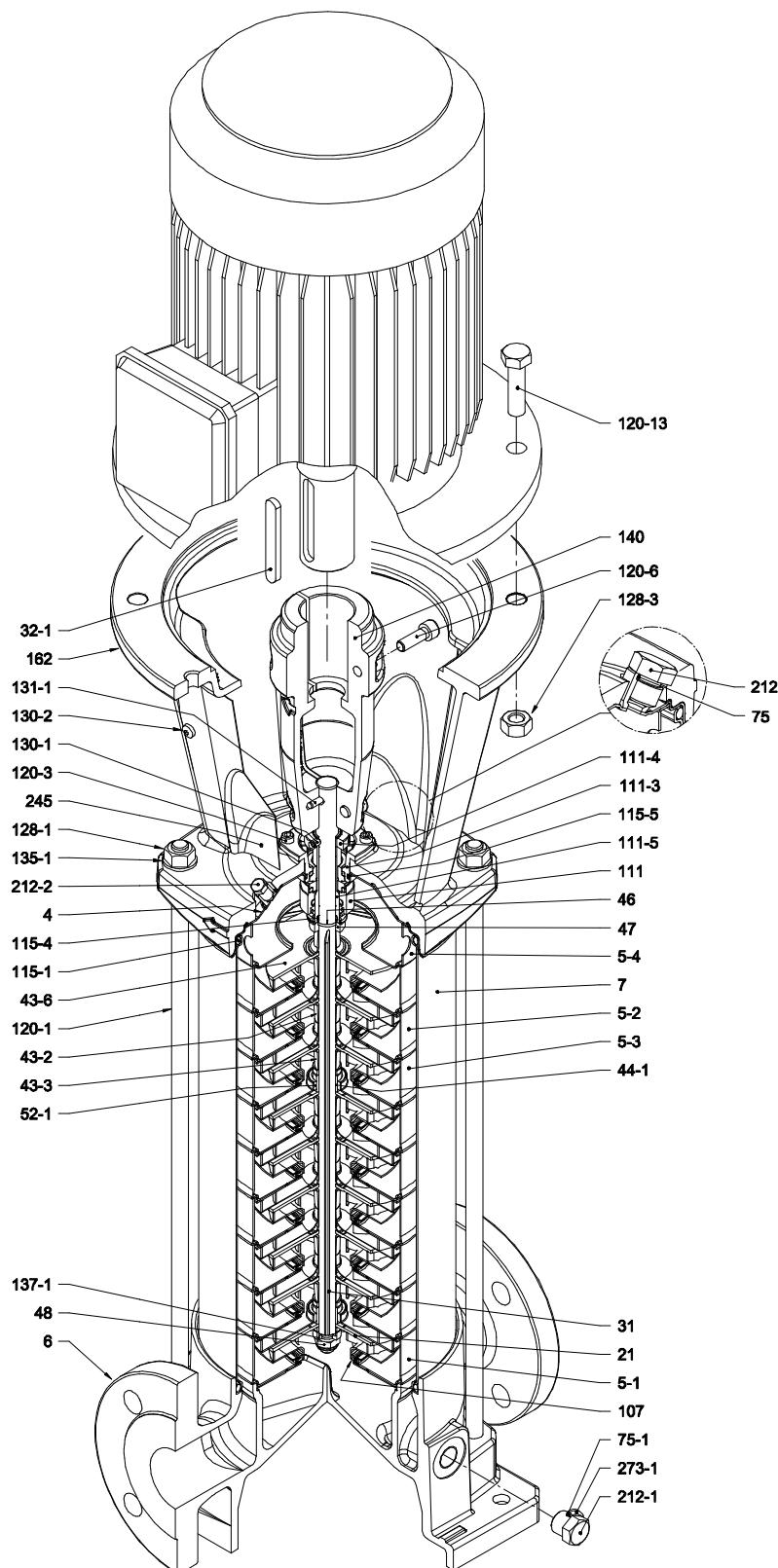
Dimensions [mm] and Weights [Kg]

Pump Type	Pmax [MPa]	Motor					H2	Oval flange (N)		Round flange (F)			
		kW	Size	A	3 ~	B	C	H3	Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor
EVMMSG10 1/0.75	1.6	0.75	80	ø120	160	139	232	343	20.3	29.8	343	24.1	33.6
EVMMSG10 2/1.5	1.6	1.5	90 S	ø140	180	148	267	353	20.5	34.5	353	24.3	38.3
EVMMSG10 3/2.2	1.6	2.2	90 L	ø140	180	148	267	383	21.4	37.4	383	25.2	41.2
EVMMSG10 4/3.0	1.6	3.0	100 L	ø160	196	155	306	423	22.3	45.1	423	26.1	48.9
EVMMSG10 5/4.0	1.6	4.0	112 M	ø160	196	155	306	453	23.2	49.7	453	27	53.5
EVMMSG10 6/4.0	1.6	4.0	112 M	ø160	196	155	306	483	24	50.5	483	27.8	54.3
EVMMSG10 7/5.5	1.6	5.5	132 S	ø300	225	160	328	611	31.9	70.5	611	35.7	74.3
EVMMSG10 8/5.5	1.6	5.5	132 S	ø300	225	160	328	641	33.1	71.7	641	36.9	75.5
EVMMSG10 9/5.5	1.6	5.5	132 S	ø300	225	160	328	671	33.9	72.5	671	37.7	76.3
EVMMSG10 10/7.5	1.6	7.5	132 S	ø300	225	160	328	701	34.8	75.2	701	38.6	79
EVMMSG10 11/7.5	2.5	7.5	132 S	ø300	225	160	328	-	-	-	731	40.2	80.6
EVMMSG10 12/7.5	2.5	7.5	132 S	ø300	225	160	328	-	-	-	761	41.1	81.5
EVMMSG10 14/11	2.5	11	160 M	ø350	248	194	476	-	-	-	851	51.1	113.6
EVMMSG10 15/11	2.5	11	160 M	ø350	248	194	476	-	-	-	881	52.1	114.6
EVMMSG10 16/11	2.5	11	160 M	ø350	248	194	476	-	-	-	911	53	115.5

1.6 MPa=16 bar ; 2.5 MPa=25 bar

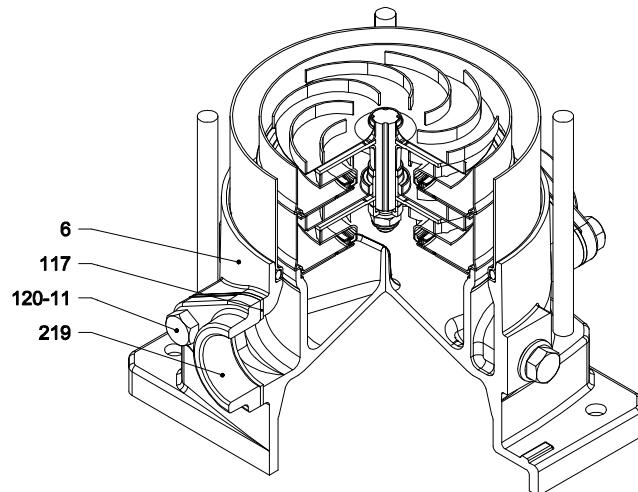
- not available model

VERTICAL MULTISTAGE PUMPS

SECTIONAL VIEW
EVMSG10

with Round flange (F)

PIPE CONNECTION EVMSG10



with Oval flange (N)

EVMSG10

VERTICAL MULTISTAGE PUMPS

SECTIONAL TABLE
EVMSG10

N°	PART NAME	MATERIAL EVMSG	DIMENSIONS	STANDARD	
4	Casing cover	EN 1.4301 (AISI 304)			
5-1	Suction casing	EN 1.4301 (AISI 304)			
5-2	Intermediate Casing	EN 1.4301 (AISI 304)			
5-3	Intermediate casing bearing	EN 1.4301 (AISI 304)			
5-4	Discharge casing	EN 1.4301 (AISI 304)			
6	Bottom casing	Cast Iron EN GJL-250-EN1561			
7	Outer casing	EN 1.4301 (AISI 304)			
21	Impeller	EN 1.4301 (AISI 304)			
31	Shaft	EN 1.4301 (AISI 304)			
32-1	Adjuster Key	EN 1.4301 (AISI 304)			
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)			
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)			
43-6	Washer	EN 1.4404 (AISI 316L)	D. 26x1.2		
44-1	Shaft sleeve bearing	Tungsten carbide			
46	Ring (mechanical seal)	EN 1.4301 (AISI 304)			
47	Ring Holder	EN 1.4301 (AISI 304)			
48	Impeller nut	A2-70 UNI 7323 with inox insert	M10		
52-1	Bearing	Tungsten carbide			
75	O-Ring (plug)	EPDM	D. 12.37x2.62	OR 3050	
75-1	O-Ring (plug)	EPDM			
107	Liner ring	EN 1.4301 (AISI 304) + PPS			
111	Mechanical Seal	SiC/Carbon/EPDM			
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)			
111-4	Seal holder	EN 1.4301 (AISI 304)			
111-5	Mechanical seal cartridge	EN 1.4301 (AISI 304)			
115-1	O-Ring (outer casing)	EPDM	D. 164.46x5.34	OR 6645	
115-4	O-Ring (cartridge sleeve)	EPDM	D. 15.88x2.62	OR 121	
115-5	O-Ring (seal cover)	EPDM	D. 37.77x2.62	OR 3150	
117	Flange gasket	EPDM			
120-1	Tie-rod	Galvanized steel 6.8 strength class ISO 898/1	M12		
120-3	Screw	A2-70 UNI 7323	M5x12	ISO 4762	
120-6	Screw for coupling	up to 4.0 kW from 5.5 kW to 7.5 kW above 11 kW	Galvanized steel	M6x25 M8x20 M10x30	ISO 4762 ISO 4762 ISO 4762
120-11	Screw for counterflange		A2-70 UNI 7323		
120-13	Screw for motor	MEC 80 MEC 90-100-112 MEC 132 MEC 160	Galvanized steel 8.8 strength class ISO 898/1	M6x20 M8x20 M12x40 M16x50	ISO 4017 ISO 4017 ISO 4017 ISO 4017
128-1	Nut for tie rod		Galvanized steel	M12	UNI 5588
128-3	Nut (motor)	MEC 132 MEC 160	Galvanized steel	M12 M16	ISO 4032 UNI 5588
130-1	Set screw		A2-70 UNI 7323	M5x8	UNI 5923
130-2	Screw for coupling guard		A2-70 UNI 7323	M5x6	UNI 7687
131-1	Pin for shaft		Carbon Steel	D. 5x35	UNI 4838
135-1	Washer		Galvanized steel	D. 13x24x2.5	UNI 6592
137-1	Impeller spacer		EN 1.4301 (AISI 304)		
140	Coupling	up to 4.0 kW above 5.5 kW	Die cast Aluminium EN AB-AISI11Cu2 (Fe) Cast Iron		
162	Motor bracket		Cast iron EN-GJL-200-EN 1561		
212	Plug		EN 1.4301 (AISI 304)	G 3/8	
212-1	Plug		EN 1.4301 (AISI 304)	G 3/8	
212-2	Venting plug		EN 1.4404 (AISI 316L)		
219	Counter flange		Galvanized steel		
245	Coupling guard		EN 1.4301 (AISI 304)		
273-1	Plug Washer		EN 1.4301 (AISI 304)		

**QUANTITY FOR MODEL
EVMSG10**

EVMSG10

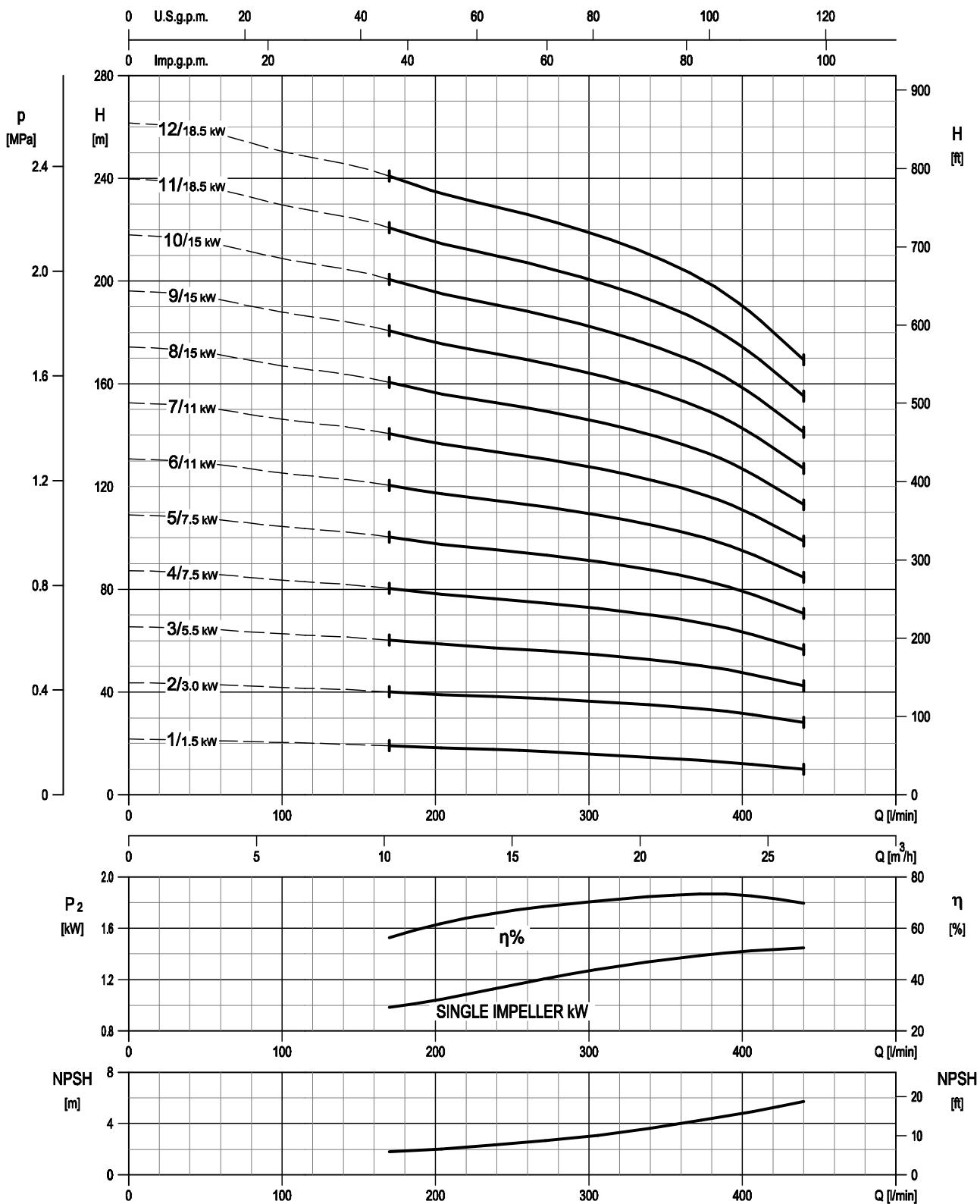
Pump Type	4	5-1	5-2	5-3	5-4	6	7	21	31	32-1	43-2	43-3	43-6	44-1	46	47	48	52-1	75	75-1	107	111	111-3	111-4	111-5	115-1	115-4	115-5	
EVMSG10 1/0.75	1	1	/	1	1	1	1	1	1	/	1	1	1	2	1	1	1	1	4	1	1	1	1	1	1	2	1	1	
EVMSG10 2/1.5	1	1	/	1	1	1	1	2	1	1	/	1	1	2	1	1	1	1	4	2	1	1	1	1	1	2	1	1	
EVMSG10 3/2.2	1	1	1	1	1	1	1	3	1	1	3	1	/	1	2	1	1	1	4	3	1	1	1	1	1	2	1	1	
EVMSG10 4/3.0	1	1	2	1	1	1	1	4	1	1	5	1	/	1	2	1	1	1	4	4	1	1	1	1	1	2	1	1	
EVMSG10 5/4.0	1	1	3	1	1	1	1	5	1	1	7	1	/	1	2	1	1	1	1	4	5	1	1	1	1	1	2	1	1
EVMSG10 6/4.0	1	1	4	1	1	1	1	6	1	1	9	1	/	1	2	1	1	1	1	4	6	1	1	1	1	1	2	1	1
EVMSG10 7/5.5	1	1	5	1	1	1	1	7	1	1	11	1	/	1	2	1	1	1	1	4	7	1	1	1	1	1	2	1	1
EVMSG10 8/5.5	1	1	5	2	1	1	1	8	1	1	11	2	/	2	2	1	1	2	1	4	8	1	1	1	1	1	2	1	1
EVMSG10 9/5.5	1	1	6	2	1	1	1	9	1	1	13	2	/	2	2	1	1	2	1	4	9	1	1	1	1	1	2	1	1
EVMSG10 10/7.5	1	1	7	2	1	1	1	10	1	1	15	2	/	2	2	1	1	2	1	4	10	1	1	1	1	1	2	1	1
EVMSG10 11/7.5	1	1	8	2	1	1	1	11	1	1	17	2	/	2	2	1	1	2	1	4	11	1	1	1	1	1	2	1	1
EVMSG10 12/7.5	1	1	9	2	1	1	1	12	1	1	19	2	/	2	2	1	1	2	1	4	12	1	1	1	1	1	2	1	1
EVMSG10 14/11	1	1	11	2	1	1	1	14	1	1	23	2	/	2	2	1	1	2	1	4	14	1	1	1	1	1	2	1	1
EVMSG10 15/11	1	1	12	2	1	1	1	15	1	1	25	2	/	2	2	1	1	2	1	4	15	1	1	1	1	1	2	1	1
EVMSG10 16/11	1	1	13	2	1	1	1	16	1	1	27	2	/	2	2	1	1	2	1	4	16	1	1	1	1	1	2	1	1

Pump Type	117*	120-1	120-3	120-6	120-11*	120-13	128-1	128-3	128-6	130-1	130-2	131-1	135-1	135-6	137-1	140	162	212	212-1	212-2	219*	245	273-1		
EVMSG10 1/0.75	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG10 2/1.5	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG10 3/2.2	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG10 4/3.0	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG10 5/4.0	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG10 6/4.0	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMSG10 7/5.5	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	/	1	2	1	1	4	1	2	2	4
EVMSG10 8/5.5	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	/	1	2	1	1	4	1	2	2	4
EVMSG10 9/5.5	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	/	1	2	1	1	4	1	2	2	4
EVMSG10 10/7.5	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	/	1	2	1	1	4	1	2	2	4
EVMSG10 11/7.5	/	4	4	4	4	/	4	4	4	/	3	4	1	4	4	/	1	2	1	1	4	1	/	2	4
EVMSG10 12/7.5	/	4	4	4	4	/	4	4	4	/	3	4	1	4	4	/	1	2	1	1	4	1	/	2	4
EVMSG10 14/11	/	4	4	4	4	/	4	4	4	/	3	4	1	4	4	/	1	2	1	1	4	1	/	2	4
EVMSG10 15/11	/	4	4	4	4	/	4	4	4	/	3	4	1	4	4	/	1	2	1	1	4	1	/	2	4
EVMSG10 16/11	/	4	4	4	4	/	4	4	4	/	3	4	1	4	4	/	1	2	1	1	4	1	/	2	4

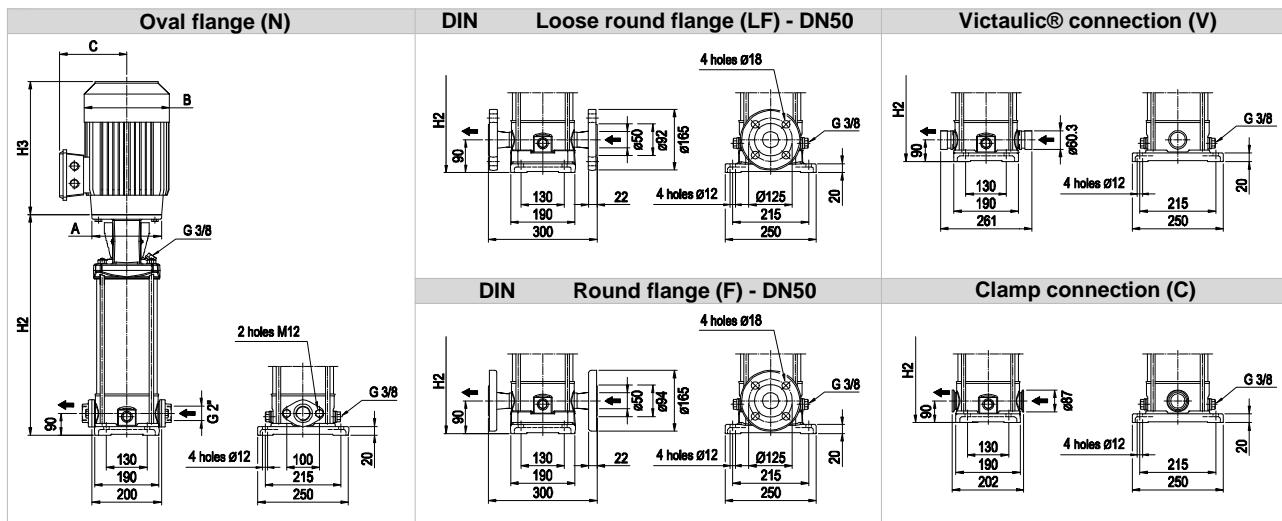
* only for Oval flange (N)

128-6 / 135-6: with Aluminium coupling (see drawing pag.211)

VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVE
EVMS(L)15

Rotation speed ≈ 3500 min $^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

**TECHNICAL DATA
EVMS(L)15**
Dimensional sketch

Dimensions [mm] and Weights [Kg]

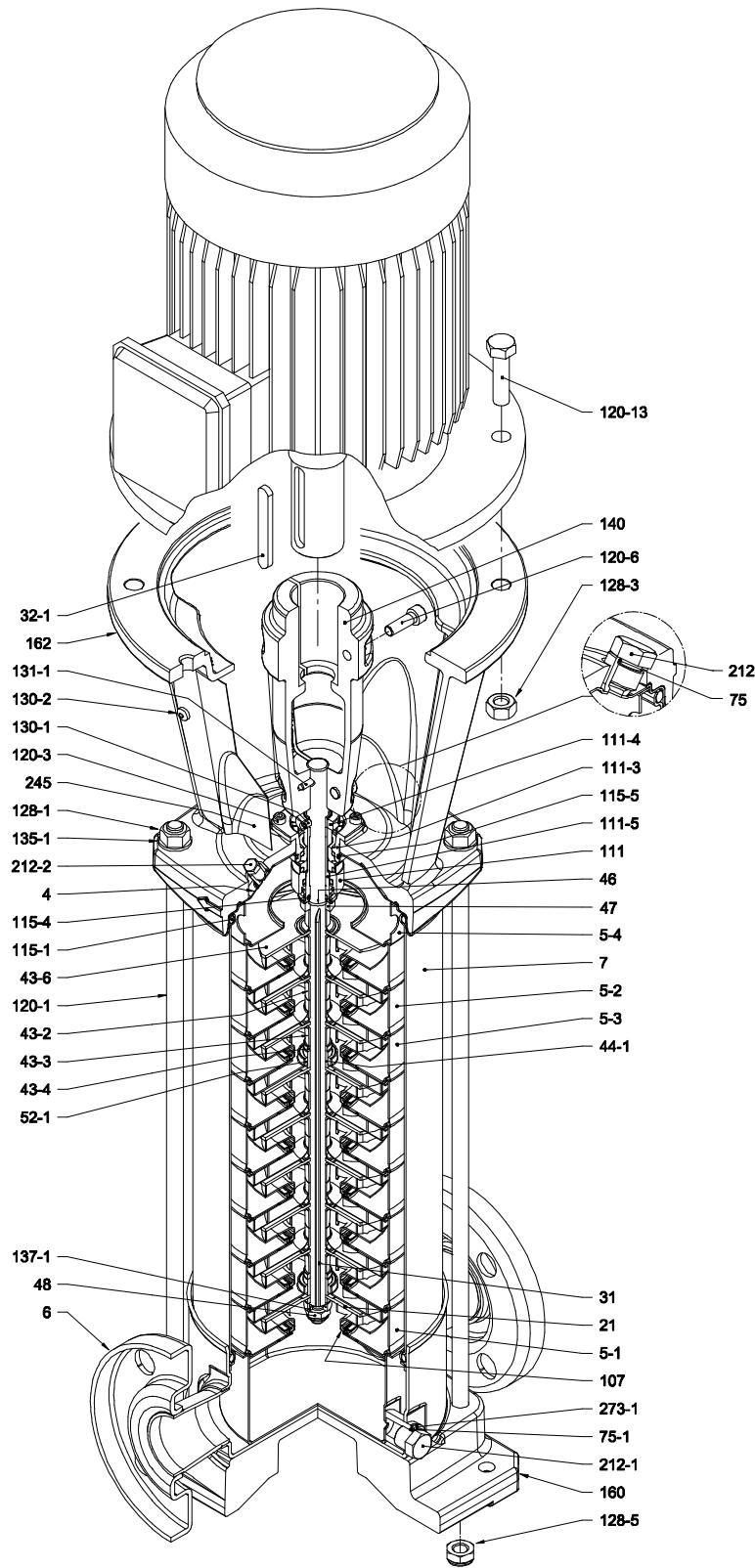
Pump Type	P _{max} [MPa]	Motor				Oval flange (N)			Loose round flange (LF) Round flange (F)			Victronic® connection (V) Clamp connection (C)		
		kW	Size	A	3 ~	H2	Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor
EVMS(L)15 1/1.5	1.6	1.5	90 S	ø140	180 148 267	387	16.9	29.6	387	18.8	31.5	387	16.9	29.6
EVMS(L)15 2/3	1.6	3.0	100 L	ø160	196 155 306	397	17.3	40.1	397	19.1	41.9	397	17.2	40
EVMS(L)15 3/5.5	1.6	5.5	132 S	ø300	225 160 328	534	25.5	64.1	534	27.4	66	534	25.5	64.1
EVMS(L)15 4/7.5	1.6	7.5	132 S	ø300	225 160 350	574	26.7	67.1	574	28.6	69	574	26.7	67.1
EVMS(L)15 5/7.5	1.6	7.5	132 S	ø300	225 160 350	614	27.8	68.2	614	29.7	70.1	614	27.8	68.2
EVMS(L)15 6/11	1.6	11	160 M	ø350	248 194 476	684	37.7	100.2	684	39.5	102	684	37.6	100.1
EVMS(L)15 7/11	1.6	11	160 M	ø350	248 194 476	724	39.5	102	724	41.4	103.9	724	39.5	102
EVMS(L)15 8/15	2.5	15	160 M	ø350	317 238 498	-	-	-	764	42.7	131.6	764	40.8	129.7
EVMS(L)15 9/15	2.5	15	160 M	ø350	317 238 498	-	-	-	804	44	132.9	804	42.1	131
EVMS(L)15 10/15	2.5	15	160 M	ø350	317 238 498	-	-	-	844	45.3	134.2	844	43.4	132.3
EVMS(L)15 11/18.5	2.5	18.5	160 L	ø350	317 238 542	-	-	-	884	46.6	150.6	884	44.7	148.7
EVMS(L)15 12/18.5	2.5	18.5	160 L	ø350	317 238 542	-	-	-	924	47.9	151.9	924	46	150

1.6 MPa=16 bar ; 2.5 MPa=25 bar

- not available model

SECTIONAL VIEW

EVMS(L)15

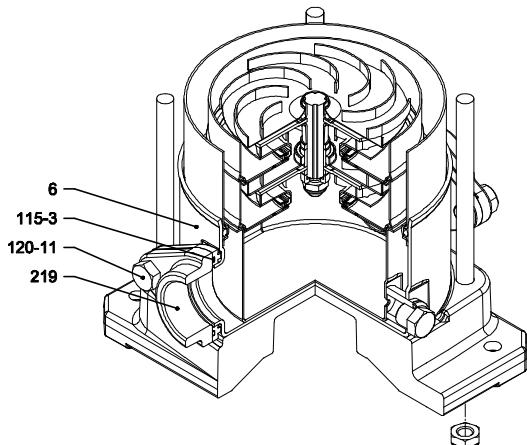


with Round flange (F)

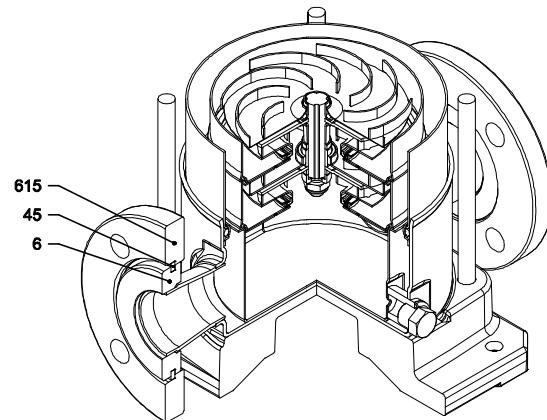
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EBARA Pumps Europe

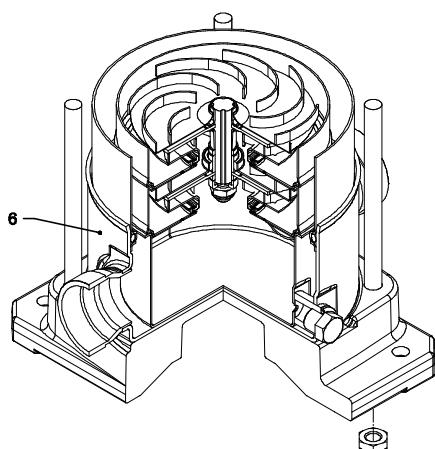
PIPE CONNECTION EVMS(L)15



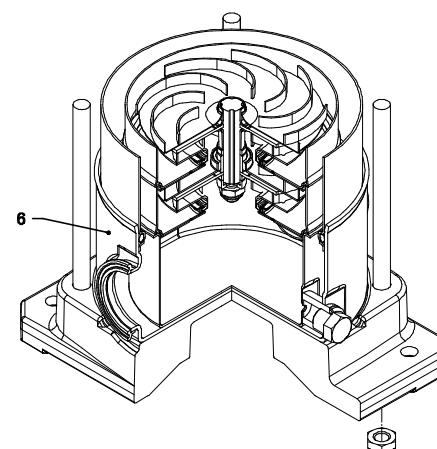
with Oval flange (N)



with Loose round flange (LF)



with Victaulic® connection (V)



with Clamp connection (C)

VERTICAL MULTISTAGE PUMPS

SECTIONAL TABLE
EVMS(L)15

Nº	PART NAME	MATERIAL		DIMENSIONS	STANDARD
		EVMS	EVMSL		
4	Casing cover	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-1	Suction casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-2	Intermediate Casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-3	Intermediate casing bearing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-4	Discharge casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
6	Bottom casing	EN 1.4308 (AISI 304)	EN 1.4408 (AISI 316)		
7	Outer casing	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		
21	Impeller	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
31	Shaft	EN 1.4301 (AISI 304) - EN 1.4462 (AISI 329A)	EN 1.4404 (AISI 316L) - EN 1.4462 (AISI 329A)		
32-1	Adjuster Key		EN 1.4301 (AISI 304)		
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316L)		
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-4	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-6	Washer		EN 1.4404 (AISI 316L)	D. 26x1.2	
44-1	Shaft sleeve bearing		Tungsten carbide		
45	Flange holder		EN 1.4301 (AISI 304)		
46	Ring (mechanical seal)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
47	Ring Holder	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
48	Impeller nut	A2-70 UNI 7323 with inox insert	A4-70 UNI 7323 with inox insert	M10	
52-1	Bearing		Tungsten carbide		
75	O-Ring (plug)		EPDM	D. 12.37x2.62	OR 3050
75-1	O-Ring (plug)		EPDM		
107	Liner ring	EN 1.4301 (AISI 304) + PPS	EN 1.4401 (AISI 316) + PPS		
111	Mechanical Seal		SiC/Carbon/EPDM		
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
111-4	Seal holder		EN 1.4301 (AISI 304)		
111-5	Mechanical seal cartridge	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
115-1	O-Ring (outer casing)		EPDM	D. 164.46x5.34	OR 6645
115-3	O-Ring		EPDM		
115-4	O-Ring (cartridge sleeve)		EPDM	D. 15.88x2.62	OR 121
115-5	O-Ring (seal cover)		EPDM	D. 37.77x2.62	OR 3150
120-1	Tie-rod		Galvanized steel 6.8 strength class ISO 898/1	M12	
120-3	Screw		A2-70 UNI 7323	M5x12	ISO 4762
120-6	Screw for coupling	up to 4.0 kW from 5.5 kW to 7.5 kW above 11 kW	Galvanized steel	M6x25 M8x20 M10x30	ISO 4762
120-11	Screw for counterflange		A2-70 UNI 7323		
120-13	Screw for motor	MEC 90-100-112 MEC 132 MEC 160	Galvanized steel 8.8 strength class ISO 898/1	M8x20 M12x40 M16x50	ISO 4017
128-1	Nut for tie rod		Galvanized steel	M12	UNI 5588
128-3	Nut (motor)	MEC 132 MEC 160	Galvanized steel	M12	ISO 4032
128-5	Nut for tie rod		Galvanized steel	M16	UNI 5588
130-1	Set screw		A2-70 UNI 7323	M12	UNI 7474
130-2	Screw for coupling guard		A2-70 UNI 7323	M5x8 M5x6	UNI 5923 UNI 7687
131-1	Pin for shaft		Carbon Steel	D. 5x35	UNI 4838
135-1	Washer		Galvanized steel	D. 13x24x2.5	UNI 6592
137-1	Impeller spacer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
140	Coupling	up to 4.0 kW above 5.5 kW	Die cast Aluminium EN AB-AISI11Cu2 (Fe) Cast Iron		
160	Base		Die cast Aluminium EN AB-AISI11Cu2 (Fe)		
162	Motor bracket		Cast iron EN-GJL-200-EN 1561		
212	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	G 3/8	
212-1	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	G 3/8	
212-2	Venting plug		EN 1.4404 (AISI 316L)		
219	Counter flange	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
245	Coupling guard		EN 1.4301 (AISI 304)		
273-1	Plug Washer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
615	Flange		Carbon steel		

QUANTITY FOR MODEL
EVMS(L)15

Pump Type	N°																																
	4	5-1	5-2	5-3	5-4	6	7	21	31***	32-1	43-2	43-3	43-4	43-6	44-1	45**	46	47	48	52-1	75	75-1	107	111	111-3	111-4	111-5	115-1	115-3*	115-4	115-5		
EVMS(L)15 1/1.5	1	1	/	1	1	1	1	1	1	1	1	1	1	1	1	4	2	1	1	1	1	2	1	1	1	1	1	1	2	2	1	1	
EVMS(L)15 2/3	1	1	/	1	1	1	1	2	1	1	/	1	1	1	1	4	2	1	1	1	1	2	1	1	1	1	1	1	2	2	1	1	
EVMS(L)15 3/5.5	1	1	1	1	1	1	1	3	1	1	3	1	1	1	/	1	4	2	1	1	1	1	2	3	1	1	1	1	2	2	1	1	
EVMS(L)15 4/7.5	1	1	2	1	1	1	1	4	1	1	5	1	1	1	/	1	4	2	1	1	1	1	2	4	1	1	1	1	1	2	2	1	1
EVMS(L)15 5/7.5	1	1	3	1	1	1	1	5	1	1	7	1	1	1	/	1	4	2	1	1	1	1	2	5	1	1	1	1	2	2	1	1	
EVMS(L)15 6/11	1	1	3	2	1	1	1	6	1	1	7	2	2	2	/	2	4	2	1	1	2	1	2	6	1	1	1	1	2	2	1	1	
EVMS(L)15 7/11	1	1	4	2	1	1	1	7	1	1	9	2	2	2	/	2	4	2	1	1	2	1	2	7	1	1	1	1	2	2	1	1	
EVMS(L)15 8/15	1	1	5	2	1	1	1	8	1	1	11	2	2	2	/	2	4	2	1	1	2	1	2	8	1	1	1	1	2	/	1	1	
EVMS(L)15 9/15	1	1	6	2	1	1	1	9	1	1	13	2	2	2	/	2	4	2	1	1	2	1	2	9	1	1	1	1	2	/	1	1	
EVMS(L)15 10/15	1	1	7	2	1	1	1	10	1	1	15	2	2	2	/	2	4	2	1	1	2	1	2	10	1	1	1	1	2	/	1	1	
EVMS(L)15 11/18.5	1	1	8	2	1	1	1	11	1	1	17	2	2	2	/	2	4	2	1	1	2	1	2	11	1	1	1	1	2	/	1	1	
EVMS(L)15 12/18.5	1	1	9	2	1	1	1	12	1	1	19	2	2	2	/	2	4	2	1	1	2	1	2	12	1	1	1	1	2	/	1	1	

Pump Type	N°																													
	120-1	120-3	120-6	120-11*	120-13	128-1	128-3	128-5	128-6	130-1	130-2	131-1	135-1	135-6	137-1	140	160	162	212	212-1	212-2	219*	245	273-1	615**					
EVMS(L)15 1/1.5	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2	2	2	2	2	2
EVMS(L)15 2/3	4	4	4	4	4	4	4	/	4	4	3	4	1	4	4	4	1	2	1	1	1	2	1	2	2	2	2	2	2	2
EVMS(L)15 3/5.5	4	4	4	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	2	2	2	2	2	2	2	2	2
EVMS(L)15 4/7.5	4	4	4	4	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	2	2	2	2	2	2	2	2
EVMS(L)15 5/7.5	4	4	4	4	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	2	2	2	2	2	2	2	2
EVMS(L)15 6/11	4	4	4	4	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	2	2	2	2	2	2	2	2
EVMS(L)15 7/11	4	4	4	4	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	2	2	2	2	2	2	2	
EVMS(L)15 8/15	4	4	4	4	/	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	2	1	2	2	2	2	2	
EVMS(L)15 9/15	4	4	4	4	/	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	2	1	2	2	2	2	2	
EVMS(L)15 10/15	4	4	4	4	/	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	2	1	2	2	2	2	2	
EVMS(L)15 11/18.5	4	4	4	4	/	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	2	1	2	2	2	2	2	
EVMS(L)15 12/18.5	4	4	4	4	/	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	2	1	2	2	2	2	2	

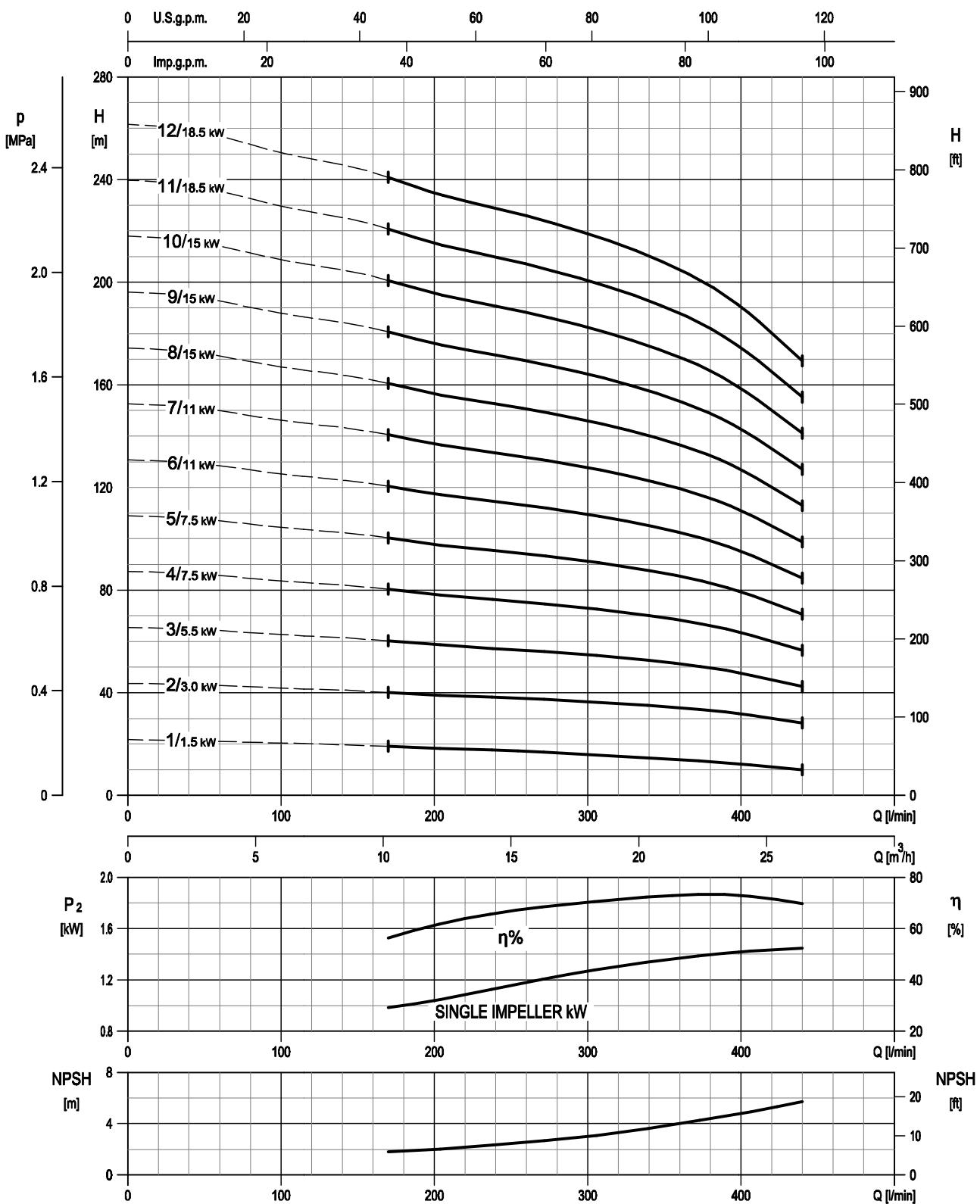
* only for Oval flange (N)

** only for Loose round flange (LF)

***  shaft in EN 1.4462 (AISI 329A)

128-6 / 135-6: with Aluminium coupling (see drawing pag.211)

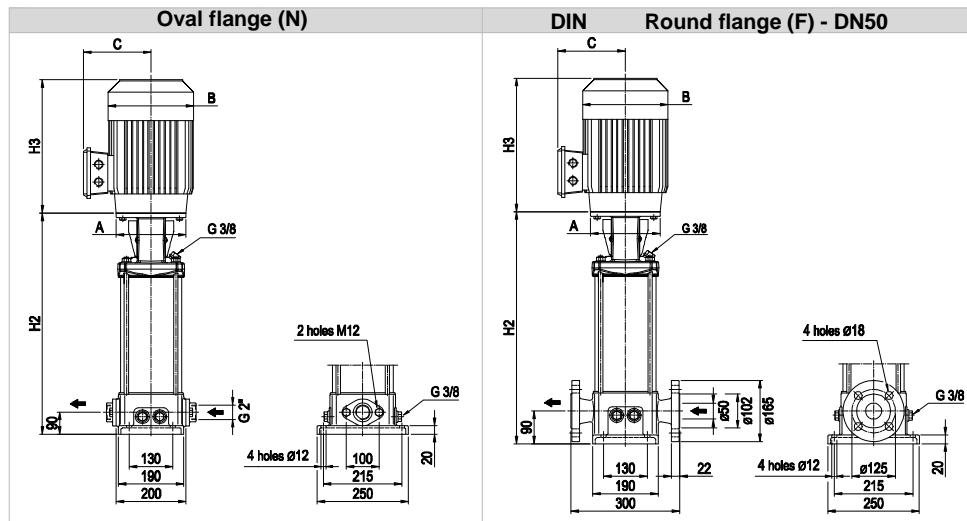
VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVE
EVMSG15

Rotation speed ≈ 3500 min⁻¹
Test standard: ISO 9906:2012 - Grade 3B

TECHNICAL DATA EVMG15

Dimensional sketch

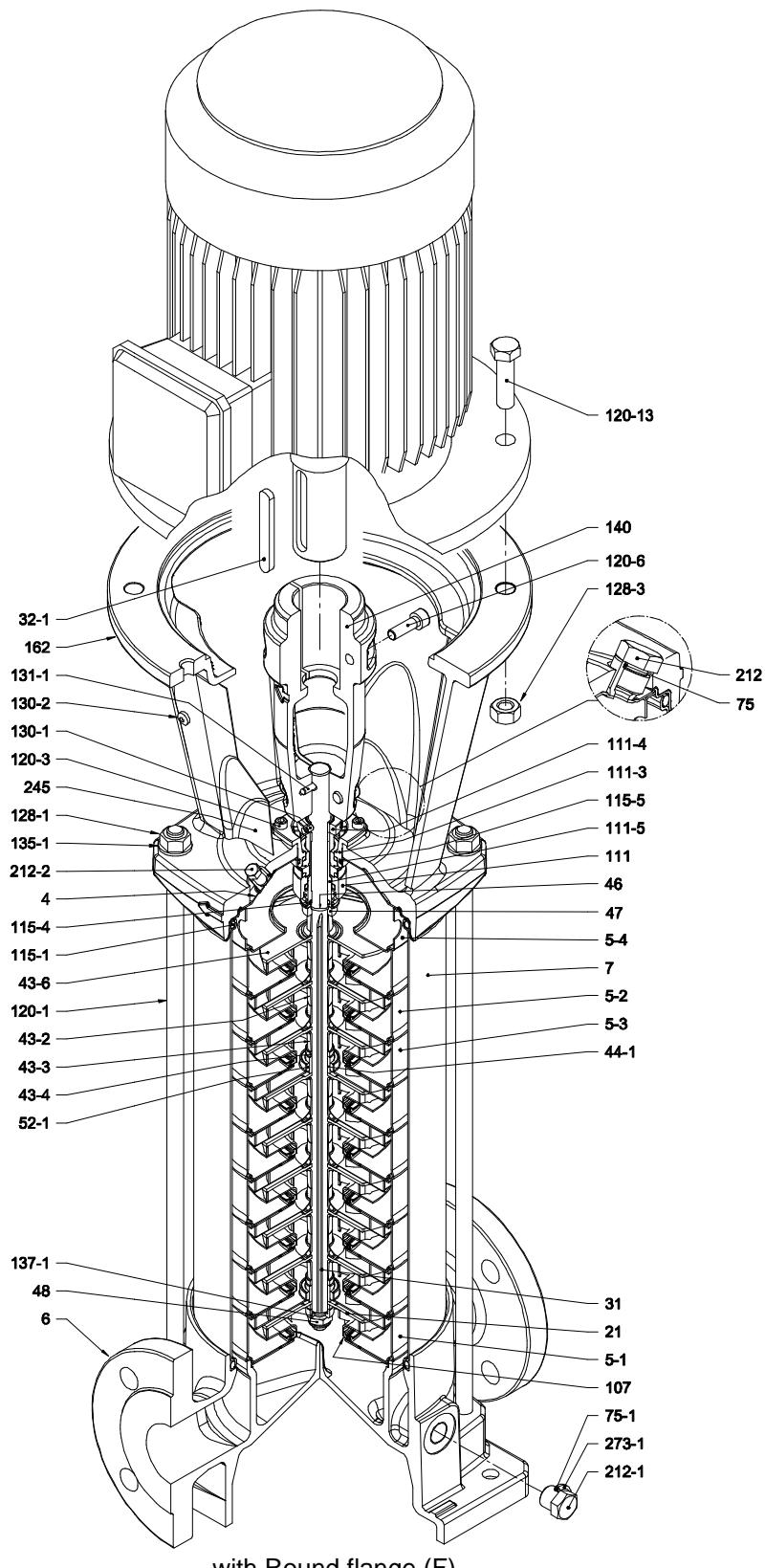


Dimensions [mm] and Weights [Kg]

Pump Type	Pmax [MPa]	Motor				H2	Oval flange (N)		Round flange (F)					
		KW	Size	A	3 ~		B	C	H3	Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor
EVMG15 1/1.5	1.6	1.5	90 S	Ø140	180	148	267		387	21.2	33.9	387	26.9	39.6
EVMG15 2/3	1.6	3.0	100 L	Ø160	196	155	306		397	21.6	44.4	397	27.3	50.1
EVMG15 3/5.5	1.6	5.5	132 S	Ø300	225	160	328		534	29.8	68.4	534	35.5	74.1
EVMG15 4/7.5	1.6	7.5	132 S	Ø300	225	160	350		574	31	71.4	574	36.7	77.1
EVMG15 5/7.5	1.6	7.5	132 S	Ø300	225	160	350		614	32.1	72.5	614	37.8	78.2
EVMG15 6/11	1.6	11	160 M	Ø350	248	194	476		684	42	104.5	684	47.7	110.2
EVMG15 7/11	1.6	11	160 M	Ø350	248	194	476		724	43.8	106.3	724	49.5	112
EVMG15 8/15	2.5	15	160 M	Ø350	317	238	498	-	-	-	-	764	50.8	139.7
EVMG15 9/15	2.5	15	160 M	Ø350	317	238	498	-	-	-	-	804	52.1	141
EVMG15 10/15	2.5	15	160 M	Ø350	317	238	498	-	-	-	-	844	53.4	142.3
EVMG15 11/18.5	2.5	18.5	160 L	Ø350	317	238	542	-	-	-	-	884	54.7	158.7
EVMG15 12/18.5	2.5	18.5	160 L	Ø350	317	238	542	-	-	-	-	924	56	160

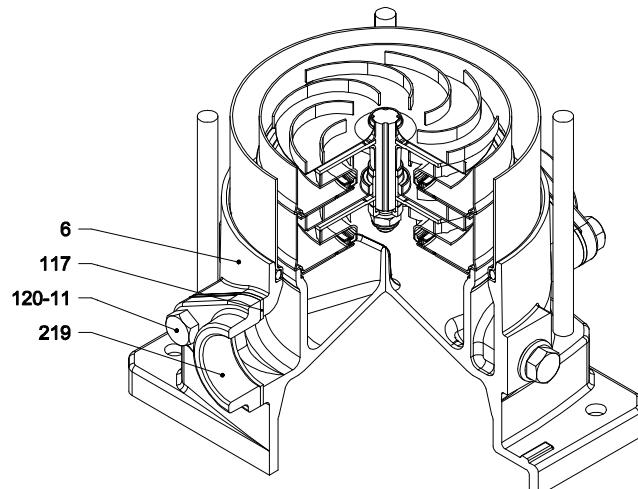
1.6 MPa=16 bar ; 2.5 MPa=25 bar
- not available model

VERTICAL MULTISTAGE PUMPS

SECTIONAL VIEW
EVMSG15

with Round flange (F)

PIPE CONNECTION EVMSG15



with Oval flange (N)

EVMSG15

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VERTICAL MULTISTAGE PUMPS

SECTIONAL TABLE
EVMSG15

N°	PART NAME	MATERIAL EVMSG	DIMENSIONS	STANDARD
4	Casing cover	EN 1.4301 (AISI 304)		
5-1	Suction casing	EN 1.4301 (AISI 304)		
5-2	Intermediate Casing	EN 1.4301 (AISI 304)		
5-3	Intermediate casing bearing	EN 1.4301 (AISI 304)		
5-4	Discharge casing	EN 1.4301 (AISI 304)		
6	Bottom casing	Cast Iron EN GJL-250-EN1561		
7	Outer casing	EN 1.4301 (AISI 304)		
21	Impeller	EN 1.4301 (AISI 304)		
31	Shaft	EN 1.4301 (AISI 304) - EN 1.4462 (AISI 329A)		
32-1	Adjuster Key	EN 1.4301 (AISI 304)		
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)		
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)		
43-4	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)		
43-6	Washer	EN 1.4404 (AISI 316L)	D. 26x1.2	
44-1	Shaft sleeve bearing	Tungsten carbide		
46	Ring (mechanical seal)	EN 1.4301 (AISI 304)		
47	Ring Holder	EN 1.4301 (AISI 304)		
48	Impeller nut	A2-70 UNI 7323 with inox insert	M10	
52-1	Bearing	Tungsten carbide		
75	O-Ring (plug)	EPDM	D. 12.37x2.62	OR 3050
75-1	O-Ring (plug)	EPDM		
107	Liner ring	EN 1.4301 (AISI 304) + PPS		
111	Mechanical Seal	Sic/Carbon/EPDM		
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)		
111-4	Seal holder	EN 1.4301 (AISI 304)		
111-5	Mechanical seal cartridge	EN 1.4301 (AISI 304)		
115-1	O-Ring (outer casing)	EPDM	D. 164.46x5.34	OR 6645
115-4	O-Ring (cartridge sleeve)	EPDM	D. 15.88x2.62	OR 121
115-5	O-Ring (seal cover)	EPDM	D. 37.77x2.62	OR 3150
117	Flange gasket	EPDM		
120-1	Tie-rod	Galvanized steel 6.8 strenght class ISO 898/1	M12	
120-3	Screw	A2-70 UNI 7323	M5x12	ISO 4762
120-6	Screw for coupling	up to 4.0 kW from 5.5 kW to 7.5 kW above 11 kW	Galvanized steel 6.8 strenght class ISO 898/1	M6x25 M8x20 M10x30
120-11	Screw for counterflange		A2-70 UNI 7323	
120-13	Screw for motor	MEC 90-100-112 MEC 132 MEC 160	Galvanized steel 8.8 strenght class ISO 898/1	M8x20 M12x40 M16x50
128-1	Nut for tie rod		Galvanized steel	M12 UNI 5588
128-3	Nut (motor)	MEC 132 MEC 160	Galvanized steel	M12 ISO 4032 M16 UNI 5588
130-1	Set screw		A2-70 UNI 7323	M5x8 UNI 5923
130-2	Screw for coupling guard		A2-70 UNI 7323	M5x6 UNI 7687
131-1	Pin for shaft		Carbon Steel	D. 5x35 UNI 4838
135-1	Washer		Galvanized steel	D. 13x24x2.5 UNI 6592
137-1	Impeller spacer	EN 1.4301 (AISI 304)		
140	Coupling	up to 4.0 kW above 5.5 kW	Die cast Aluminium EN AB-AISI11Cu2 (Fe) Cast Iron	
162	Motor bracket		Cast iron EN-GJL-200-EN 1561	
212	Plug		EN 1.4301 (AISI 304)	G 3/8
212-1	Plug		EN 1.4301 (AISI 304)	G 3/8
212-2	Venting plug		EN 1.4404 (AISI 316L)	
219	Counter flange		Galvanized steel	
245	Coupling guard		EN 1.4301 (AISI 304)	
273-1	Plug Washer		EN 1.4301 (AISI 304)	

QUANTITY FOR MODEL
EVMG15

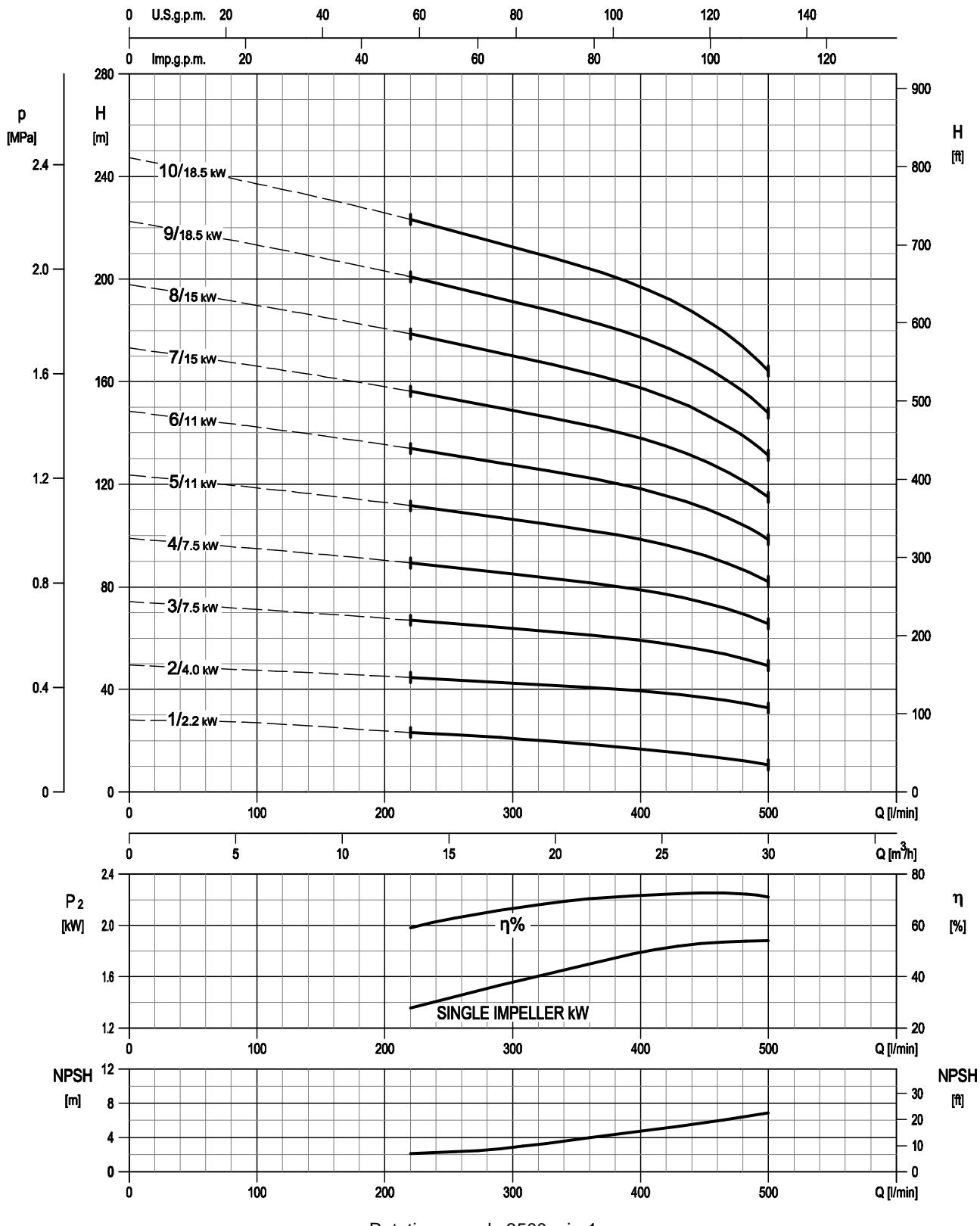
Pump Type	4	5-1	5-2	5-3	5-4	6	7	21	31***	32-1	43-2	43-3	43-4	43-6	44-1	46	47	48	52-1	75	75-1	107	111	111-3	111-4	111-5	115-1	115-4	115-5
EVMG15 1/1.5	1	1	/	1	1	1	1	1	1	1	/	1	1	1	1	2	1	1	1	1	4	1	1	1	1	1	2	1	1
EVMG15 2/3	1	1	/	1	1	1	1	2	1	1	/	1	1	1	1	2	1	1	1	1	4	2	1	1	1	1	2	1	1
EVMG15 3/5.5	1	1	1	1	1	1	1	3	1	1	3	1	1	1	1	2	1	1	1	1	4	3	1	1	1	1	2	1	1
EVMG15 4/7.5	1	1	2	1	1	1	1	4	1	1	5	1	1	1	1	2	1	1	1	1	4	4	1	1	1	1	2	1	1
EVMG15 5/7.5	1	1	3	1	1	1	1	5	1	1	7	1	1	1	1	2	1	1	1	1	4	5	1	1	1	1	1	2	1
EVMG15 6/11	1	1	3	2	1	1	1	6	1	1	7	2	2	1	1	2	1	1	1	1	4	6	1	1	1	1	1	2	1
EVMG15 7/11	1	1	4	2	1	1	1	7	1	1	9	2	2	1	1	2	1	1	1	1	4	7	1	1	1	1	1	2	1
EVMG15 8/15	1	1	5	2	1	1	1	8	1	1	11	2	2	1	1	2	1	1	1	1	4	8	1	1	1	1	1	2	1
EVMG15 9/15	1	1	6	2	1	1	1	9	1	1	13	2	2	1	1	2	1	1	1	1	4	9	1	1	1	1	1	2	1
EVMG15 10/15	1	1	7	2	1	1	1	10	1	1	15	2	2	1	1	2	1	1	1	1	4	10	1	1	1	1	1	2	1
EVMG15 11/18.5	1	1	8	2	1	1	1	11	1	1	17	2	2	1	1	2	1	1	1	1	4	11	1	1	1	1	1	2	1
EVMG15 12/18.5	1	1	9	2	1	1	1	12	1	1	19	2	2	1	1	2	1	1	1	1	4	12	1	1	1	1	1	2	1

Pump Type	Nº	117*	120-1	120-3	120-6	120-11*	120-13	128-1	128-3	128-6	130-1	130-2	131-1	135-1	135-6	137-1	140	162	212	212-1	212-2	219*	245	273-1	
EVMG15 1/1.5	2	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4	
EVMG15 2/3	2	4	4	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4
EVMG15 3/5.5	2	4	4	4	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	4	1	2	2	4	
EVMG15 4/7.5	2	4	4	4	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	4	1	2	2	4	
EVMG15 5/7.5	2	4	4	4	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	4	1	2	2	4	
EVMG15 6/11	2	4	4	4	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	4	1	2	2	4	
EVMG15 7/11	2	4	4	4	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	4	1	2	2	4	
EVMG15 8/15	/	4	4	4	4	/	4	4	4	/	3	4	1	4	/	1	2	1	1	4	1	/	2	4	
EVMG15 9/15	/	4	4	4	4	/	4	4	4	/	3	4	1	4	/	1	2	1	1	4	1	/	2	4	
EVMG15 10/15	/	4	4	4	4	/	4	4	4	/	3	4	1	4	/	1	2	1	1	4	1	/	2	4	
EVMG15 11/18.5	/	4	4	4	4	/	4	4	4	/	3	4	1	4	/	1	2	1	1	4	1	/	2	4	
EVMG15 12/18.5	/	4	4	4	4	/	4	4	4	/	3	4	1	4	/	1	2	1	1	4	1	/	2	4	

* only for Oval flange (N)

***  shaft in EN 1.4462 (AISI 329A)

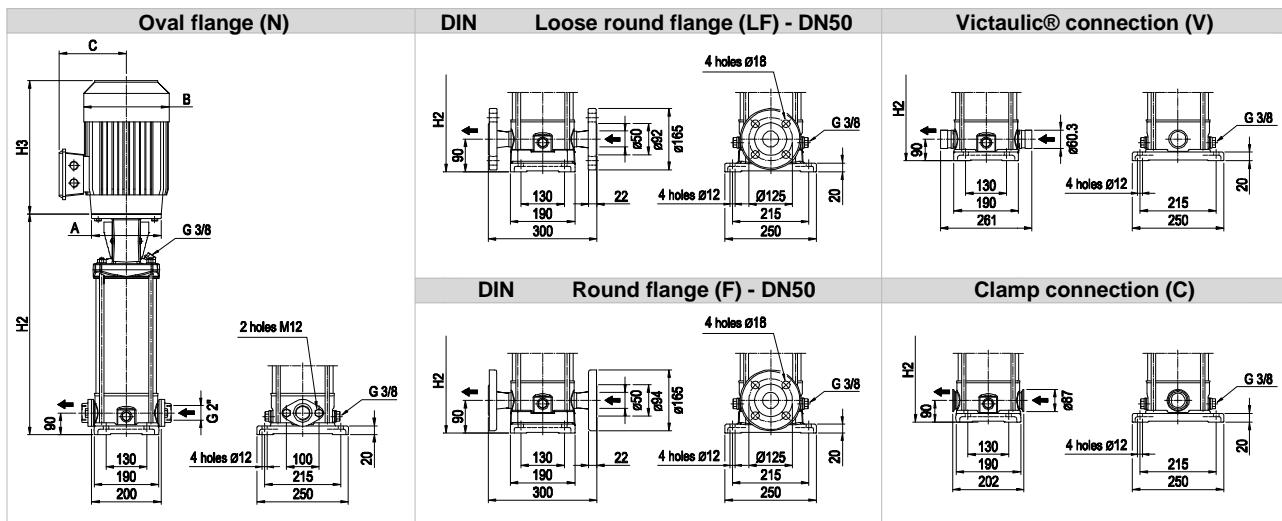
128-6 / 135-6: with Aluminium coupling (see drawing pag.211)

**PERFORMANCE CURVE
EVMS(L)20**


Rotation speed $\approx 3500 \text{ min}^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

TECHNICAL DATA EVMS(L)20

Dimensional sketch



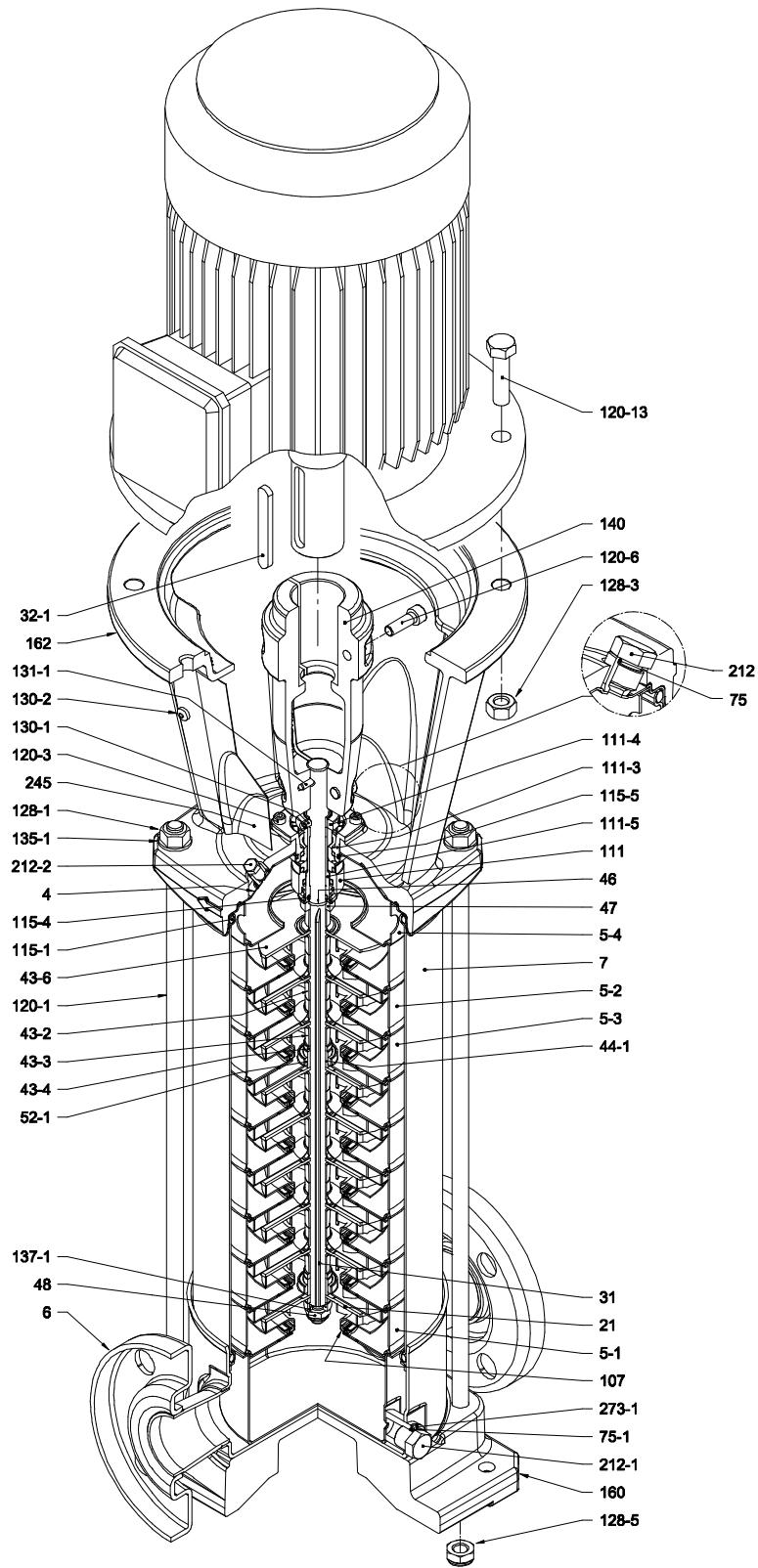
Dimensions [mm] and Weights [Kg]

Pump Type	P _{max} [MPa]	Motor					Oval flange (N)			Loose round flange (LF) Round flange (F)			Victaulic® connection (V) Clamp connection (C)			
		KW	Size	A	B	C	H3	H2	Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor	H2	Weight Pump	Weight Pump + Motor
EVMS(L)20 1/2.2	1.6	2.2	90 L	ø140	180	148	267	387	16.9	32.9	387	18.7	34.7	387	16.8	32.8
EVMS(L)20 2/4.0	1.6	4.0	112 M	ø160	196	155	306	397	17.3	43.8	397	19.1	45.6	397	17.2	43.7
EVMS(L)20 3/7.5	1.6	7.5	132 S	ø300	225	160	350	534	25.5	65.9	534	27.4	68	534	25.5	65.9
EVMS(L)20 4/7.5	1.6	7.5	132 S	ø300	225	160	350	574	26.8	67.2	574	28.6	69	574	26.7	67.1
EVMS(L)20 5/11	1.6	11	160 M	ø350	248	194	476	644	36.2	98.7	644	38	100.5	644	36.1	98.6
EVMS(L)20 6/11	1.6	11	160 M	ø350	248	194	476	684	36.4	98.9	684	38.3	100.8	684	36.4	98.9
EVMS(L)20 7/15	2.5	15	160 M	ø350	317	238	498	-	-	-	724	41.2	130.1	724	39.3	128.2
EVMS(L)20 8/15	2.5	15	160 M	ø350	317	238	498	-	-	-	764	42.5	131.4	764	40.6	129.5
EVMS(L)20 9/18.5	2.5	18.5	160 L	ø350	317	238	542	-	-	-	804	43.9	147.9	804	42	146
EVMS(L)20 10/18.5	2.5	18.5	160 L	ø350	317	238	542	-	-	-	844	45.2	149.2	844	43.3	147.3

1.6 MPa=16 bar ; 2.5 MPa=25 bar

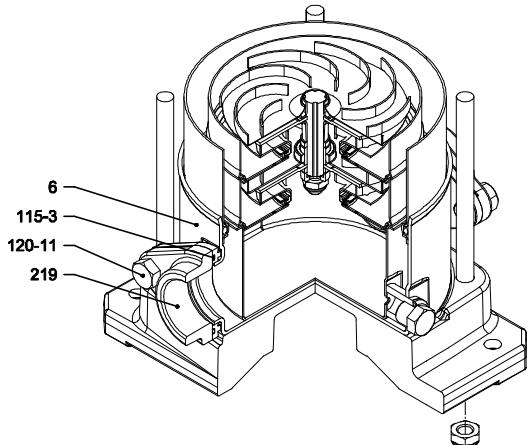
- not available model

VERTICAL MULTISTAGE PUMPS

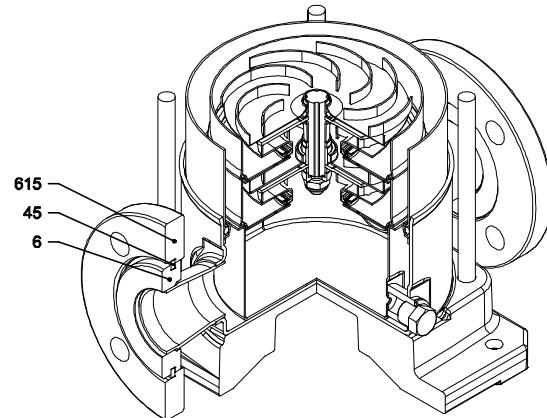
SECTIONAL VIEW
EVMS(L)20

with Round flange (F)

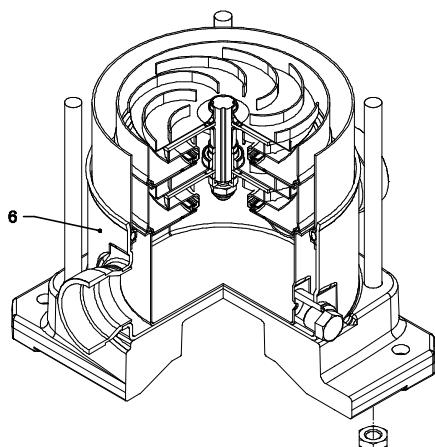
PIPE CONNECTION EVMS(L)20



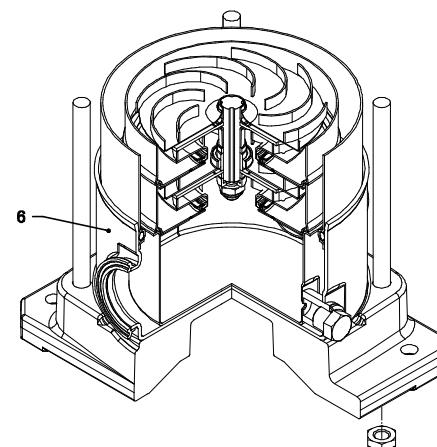
with Oval flange (N)



with Loose round flange (LF)



with Victaulic® connection (V)



with Clamp connection (C)

VERTICAL MULTISTAGE PUMPS

SECTIONAL TABLE
EVMS(L)20

Nº	PART NAME	MATERIAL		DIMENSIONS	STANDARD
		EVMS	EVMSL		
4	Casing cover	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-1	Suction casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-2	Intermediate Casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-3	Intermediate casing bearing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-4	Discharge casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
6	Bottom casing	EN 1.4308 (AISI 304)	EN 1.4408 (AISI 316)		
7	Outer casing	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		
21	Impeller	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
31	Shaft	EN 1.4301 (AISI 304) - EN 1.4462 (AISI 329A)	EN 1.4404 (AISI 316L) - EN 1.4462 (AISI 329A)		
32-1	Adjuster Key		EN 1.4301 (AISI 304)		
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-4	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-6	Washer		EN 1.4404 (AISI 316L)	D. 26x1.2	
44-1	Shaft sleeve bearing		Tungsten carbide		
45	Flange holder		EN 1.4301 (AISI 304)		
46	Ring (mechanical seal)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
47	Ring Holder	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
48	Impeller nut	A2-70 UNI 7323 with inox insert	A4-70 UNI 7323 with inox insert	M10	
52-1	Bearing		Tungsten carbide		
75	O-Ring (plug)		EPDM	D. 12.37x2.62	OR 3050
75-1	O-Ring (plug)		EPDM		
107	Liner ring	EN 1.4301 (AISI 304) + PPS	EN 1.4401 (AISI 316) + PPS		
111	Mechanical Seal		SiC/Carbon/EPDM		
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
111-4	Seal holder		EN 1.4301 (AISI 304)		
111-5	Mechanical seal cartridge	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
115-1	O-Ring (outer casing)		EPDM	D. 164.46x5.34	OR 6645
115-3	O-Ring		EPDM		
115-4	O-Ring (cartridge sleeve)		EPDM	D. 15.88x2.62	OR 121
115-5	O-Ring (seal cover)		EPDM	D. 37.77x2.62	OR 3150
120-1	Tie-rod		Galvanized steel 6.8 strength class ISO 898/1	M12	
120-3	Screw		A2-70 UNI 7323	M5x12	ISO 4762
120-6	Screw for coupling	up to 4.0 kW from 5.5 kW to 7.5 kW above 11 kW		M6x25 M8x20 M10x30	ISO 4762
120-11	Screw for counterflange		A2-70 UNI 7323		
120-13	Screw for motor	MEC 90-100-112 MEC 132 MEC 160		M8x20 M12x40 M16x50	ISO 4017
128-1	Nut for tie rod		Galvanized steel	M12	UNI 5588
128-3	Nut (motor)	MEC 132 MEC 160	Galvanized steel	M12 M16	ISO 4032 UNI 5588
128-5	Nut for tie rod		Galvanized steel	M12	UNI 7474
130-1	Set screw		A2-70 UNI 7323	M5x8	UNI 5923
130-2	Screw for coupling guard		A2-70 UNI 7323	M5x6	UNI 7687
131-1	Pin for shaft		Carbon Steel	D. 5x35	UNI 4838
135-1	Washer		Galvanized steel	D. 13x24x2.5	UNI 6592
137-1	Impeller spacer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
140	Coupling	up to 4.0 kW above 5.5 kW	Die cast Aluminium EN AB-AISI11Cu2 (Fe) Cast Iron		
160	Base		Die cast Aluminium EN AB-AISI11Cu2 (Fe)		
162	Motor bracket		Cast iron EN GJL-200-EN 1561		
212	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	G 3/8	
212-1	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	G 3/8	
212-2	Venting plug		EN 1.4404 (AISI 316L)		
219	Counter flange	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
245	Coupling guard		EN 1.4301 (AISI 304)		
273-1	Plug Washer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
615	Flange		Carbon steel		

QUANTITY FOR MODEL
EVMS(L)20

Pump Type	4	5-1	5-2	5-3	5-4	6	7	21	31***	32-1	43-2	43-3	43-4	43-6	44-1	45**	46	47	48	52-1	75	75-1	107	111	111-3	111-4	111-5	115-1	115-3*	115-4	115-5		
EVMS(L)20 1/2.2	1	1	/	1	1	1	1	1	1	/	1	1	1	1	1	4	2	1	1	1	1	2	1	1	1	1	1	2	2	1	1		
EVMS(L)20 2/4.0	1	1	/	1	1	1	1	2	1	1	/	1	1	1	1	1	4	2	1	1	1	1	2	1	1	1	1	2	2	1	1		
EVMS(L)20 3/7.5	1	1	1	1	1	1	1	1	3	1	1	3	1	1	1	1	4	2	1	1	1	1	2	3	1	1	1	1	2	2	1	1	
EVMS(L)20 4/7.5	1	1	2	1	1	1	1	1	4	1	1	5	1	1	1	/	1	4	2	1	1	1	1	2	4	1	1	1	1	2	2	1	1
EVMS(L)20 5/11	1	1	2	2	1	1	1	5	1	1	5	2	2	2	/	2	4	2	1	1	2	1	2	5	1	1	1	1	2	2	1	1	
EVMS(L)20 6/11	1	1	3	2	1	1	1	6	1	1	7	2	2	2	/	2	4	2	1	1	2	1	2	6	1	1	1	1	2	2	1	1	
EVMS(L)20 7/15	1	1	4	2	1	1	1	7	1	1	9	2	2	2	/	2	4	2	1	1	2	1	2	7	1	1	1	1	2	/	1	1	
EVMS(L)20 8/15	1	1	5	2	1	1	1	8	1	1	11	2	2	2	/	2	4	2	1	1	2	1	2	8	1	1	1	1	1	2	/	1	1
EVMS(L)20 9/18.5	1	1	6	2	1	1	1	9	1	1	13	2	2	2	/	2	4	2	1	1	2	1	2	9	1	1	1	1	2	/	1	1	
EVMS(L)20 10/18.5	1	1	7	2	1	1	1	10	1	1	15	2	2	2	/	2	4	2	1	1	2	1	2	10	1	1	1	1	2	/	1	1	

Pump Type	N°																													
	120-1	120-3	120-6	120-11*	120-13	128-1	128-3	128-5	128-6	130-1	130-2	131-1	135-1	135-6	137-1	140	160	162	212	212-1	212-2	219*	245	273-1	615**					
EVMS(L)20 1/2.2	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2	2	2	2	2	2
EVMS(L)20 2/4.0	4	4	4	4	4	4	/	4	4	3	4	1	4	4	1	2	1	1	1	2	1	2	2	2	2	2	2	2	2	2
EVMS(L)20 3/7.5	4	4	4	4	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	2	2	2	2	2	2	2	2
EVMS(L)20 4/7.5	4	4	4	4	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	2	2	2	2	2	2	2	2
EVMS(L)20 5/11	4	4	4	4	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	2	2	2	2	2	2	2	2
EVMS(L)20 6/11	4	4	4	4	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	2	2	2	2	2	2	2	2
EVMS(L)20 7/15	4	4	4	/	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	/	2	2	2	2	2	2	
EVMS(L)20 8/15	4	4	4	/	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	/	2	2	2	2	2	2	
EVMS(L)20 9/18.5	4	4	4	4	/	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	/	2	2	2	2	2	2	
EVMS(L)20 10/18.5	4	4	4	/	4	4	4	4	4	/	3	4	1	4	/	1	2	1	1	1	2	1	/	2	2	2	2	2	2	

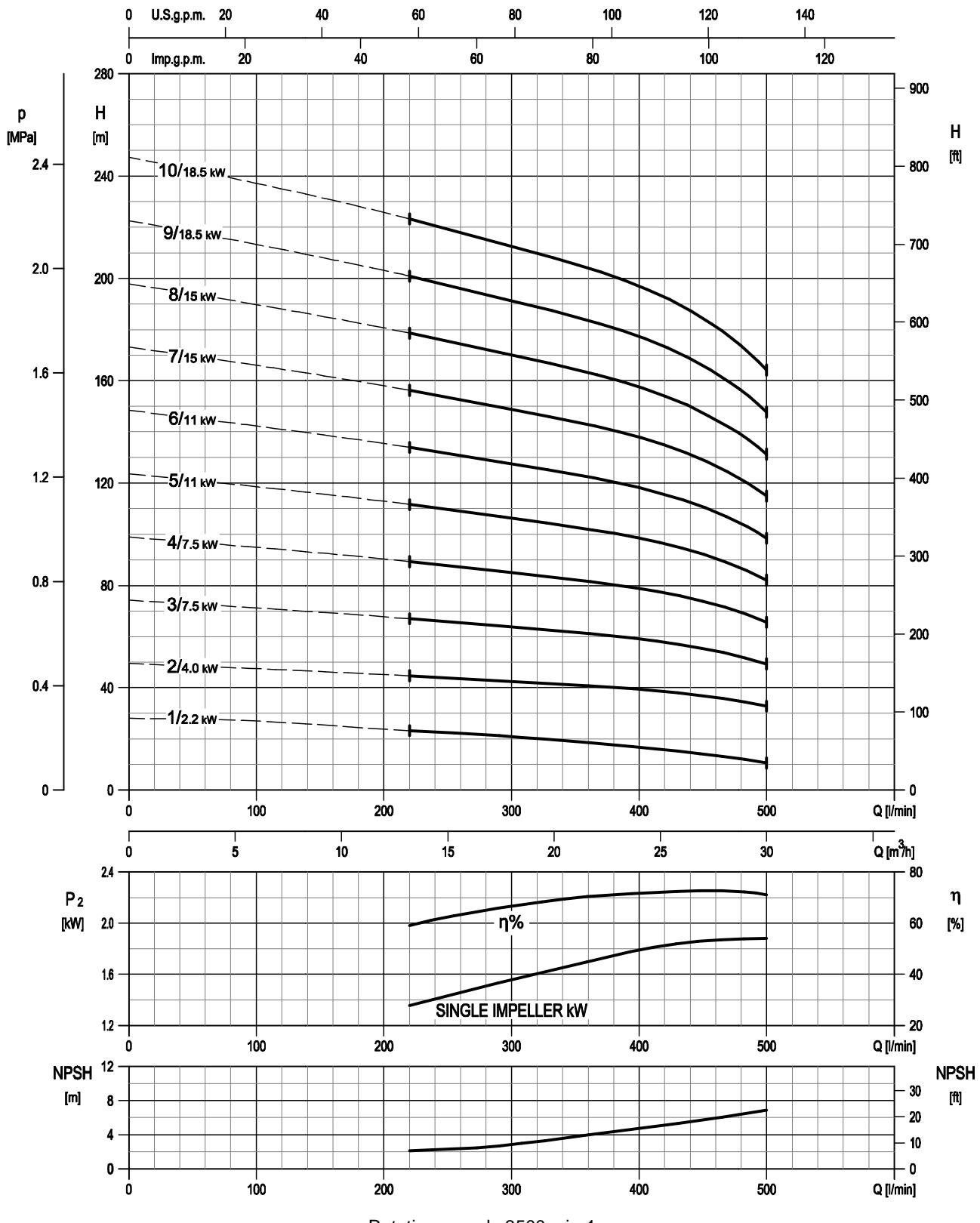
* only for Oval flange (N)

** only for Loose round flange (LF)

*** shaft in EN 1.4462 (AISI 329A)

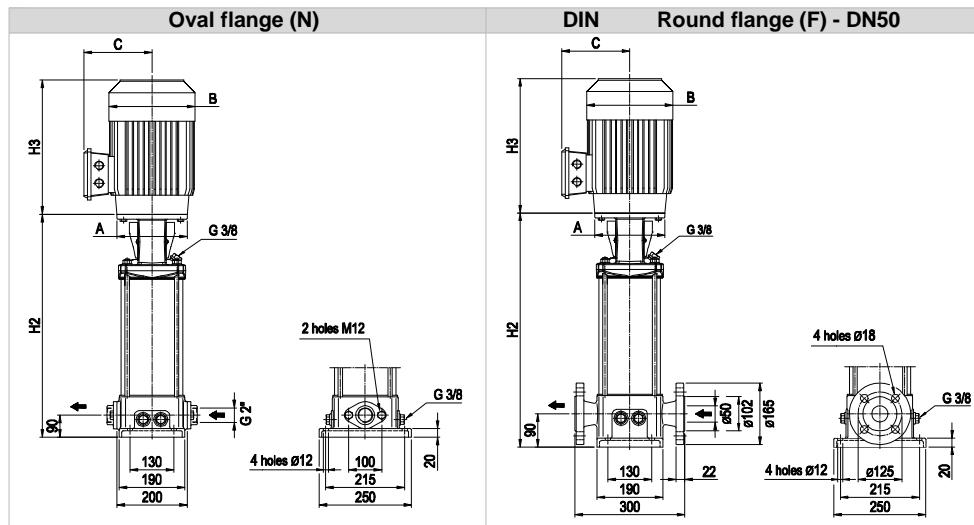
128-6 / 135-6: with Aluminium coupling (see drawing pag.211)

VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVE
EVMSG20

TECHNICAL DATA
EVMSG20

Dimensional sketch



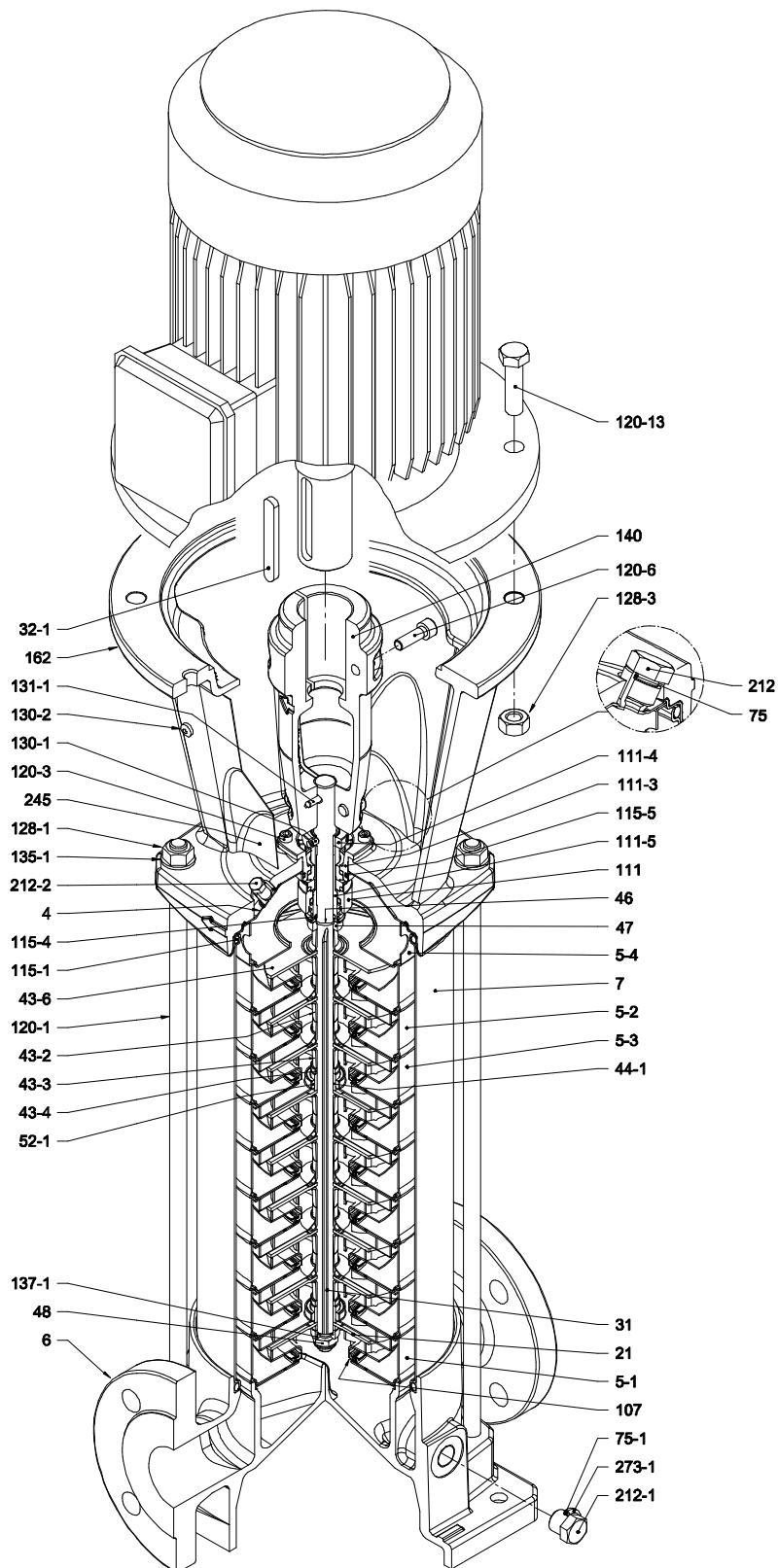
Dimensions [mm] and Weights [Kg]

Pump Type	P _{max} [MPa]	Motor				Oval flange (N)			Round flange (F)		
		kW	Size	A	3 ~	H2	Weight Pump	Weight Pump +	H2	Weight Pump	Weight Pump + Motor
EVMSG20 1/2.2	1.6	2.2	90 L	ø140	180 148 267	387	21.2	37.2	387	26.9	42.9
EVMSG20 2/4.0	1.6	4.0	112 M	ø160	196 155 306	397	21.6	48.1	397	27.3	53.8
EVMSG20 3/7.5	1.6	7.5	132 S	ø300	225 160 350	534	29.9	70.3	534	35.6	76
EVMSG20 4/7.5	1.6	7.5	132 S	ø300	225 160 350	574	31.1	71.5	574	36.8	77.2
EVMSG20 5/11	1.6	11	160 M	ø350	248 194 476	644	40.5	103	644	46.2	108.7
EVMSG20 6/11	1.6	11	160 M	ø350	248 194 476	684	40.7	103.2	684	46.4	108.9
EVMSG20 7/15	2.5	15	160 M	ø350	317 238 498	-	-	-	724	49.4	138.3
EVMSG20 8/15	2.5	15	160 M	ø350	317 238 498	-	-	-	764	50.7	139.6
EVMSG20 9/18.5	2.5	18.5	160 L	ø350	317 238 542	-	-	-	804	52	156
EVMSG20 10/18.5	2.5	18.5	160 L	ø350	317 238 542	-	-	-	844	53.4	157.4

1.6 MPa=16 bar ; 2.5 MPa=25 bar

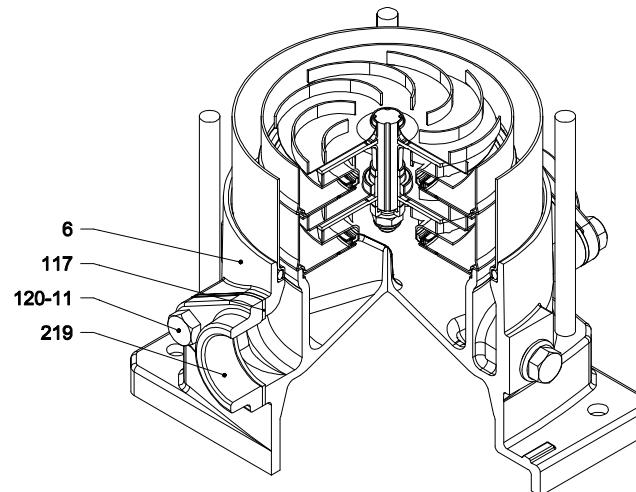
- not available model

VERTICAL MULTISTAGE PUMPS

SECTIONAL VIEW
EVMSG20

with Round flange (F)

PIPE CONNECTION EVMSG20



with Oval flange (N)

EVMSG20

VERTICAL MULTISTAGE PUMPS

SECTIONAL TABLE
EVMSG20

N°	PART NAME	MATERIAL EVMSG	DIMENSIONS	STANDARD
4	Casing cover	EN 1.4301 (AISI 304)		
5-1	Suction casing	EN 1.4301 (AISI 304)		
5-2	Intermediate Casing	EN 1.4301 (AISI 304)		
5-3	Intermediate casing bearing	EN 1.4301 (AISI 304)		
5-4	Discharge casing	EN 1.4301 (AISI 304)		
6	Bottom casing	Cast Iron EN GJL-250-EN1561		
7	Outer casing	EN 1.4301 (AISI 304)		
21	Impeller	EN 1.4301 (AISI 304)		
31	Shaft	EN 1.4301 (AISI 304) - EN 1.4462 (AISI 329A)		
32-1	Adjuster Key	EN 1.4301 (AISI 304)		
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)		
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)		
43-4	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)		
43-6	Washer	EN 1.4404 (AISI 316L)	D. 26x1.2	
44-1	Shaft sleeve bearing	Tungsten carbide		
46	Ring (mechanical seal)	EN 1.4301 (AISI 304)		
47	Ring Holder	EN 1.4301 (AISI 304)		
48	Impeller nut	A2-70 UNI 7323 with inox insert	M10	
52-1	Bearing	Tungsten carbide		
75	O-Ring (plug)	EPDM	D. 12.37x2.62	OR 3050
75-1	O-Ring (plug)	EPDM		
107	Liner ring	EN 1.4301 (AISI 304) + PPS		
111	Mechanical Seal	Sic/Carbon/EPDM		
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)		
111-4	Seal holder	EN 1.4301 (AISI 304)		
111-5	Mechanical seal cartridge	EN 1.4301 (AISI 304)		
115-1	O-Ring (outer casing)	EPDM	D. 164.46x5.34	OR 6645
115-4	O-Ring (cartridge sleeve)	EPDM	D. 15.88x2.62	OR 121
115-5	O-Ring (seal cover)	EPDM	D. 37.77x2.62	OR 3150
117	Flange gasket	EPDM		
120-1	Tie-rod	Galvanized steel 6.8 strength class ISO 898/1	M12	
120-3	Screw	A2-70 UNI 7323	M5x12	ISO 4762
120-6	Screw for coupling	up to 4.0 kW from 5.5 kW to 7.5 kW above 11 kW	Galvanized steel 6.8 strength class ISO 898/1	M6x25 M8x20 M10x30
120-11	Screw for counterflange		A2-70 UNI 7323	
120-13	Screw for motor	MEC 90-100-112 MEC 132 MEC 160		M8x20 M12x40 M16x50
128-1	Nut for tie rod		Galvanized steel	M12 UNI 5588
128-3	Nut (motor)	MEC 132 MEC 160	Galvanized steel	M12 ISO 4032 M16 UNI 5588
130-1	Set screw		A2-70 UNI 7323	M5x8 UNI 5923
130-2	Screw for coupling guard		A2-70 UNI 7323	M5x6 UNI 7687
131-1	Pin for shaft		Carbon Steel	D. 5x35 UNI 4838
135-1	Washer		Galvanized steel	D. 13x24x2.5 UNI 6592
137-1	Impeller spacer		EN 1.4301 (AISI 304)	
140	Coupling	up to 4.0 kW above 5.5 kW	Die cast Aluminium EN AB-AISI11Cu2 (Fe) Cast Iron	
162	Motor bracket		Cast iron EN-GJL-200-EN 1561	
212	Plug		EN 1.4301 (AISI 304)	G 3/8
212-1	Plug		EN 1.4301 (AISI 304)	G 3/8
212-2	Venting plug		EN 1.4404 (AISI 316L)	
219	Counter flange		Galvanized steel	
245	Coupling guard		EN 1.4301 (AISI 304)	
273-1	Plug Washer		EN 1.4301 (AISI 304)	

**QUANTITY FOR MODEL
EVMG20**

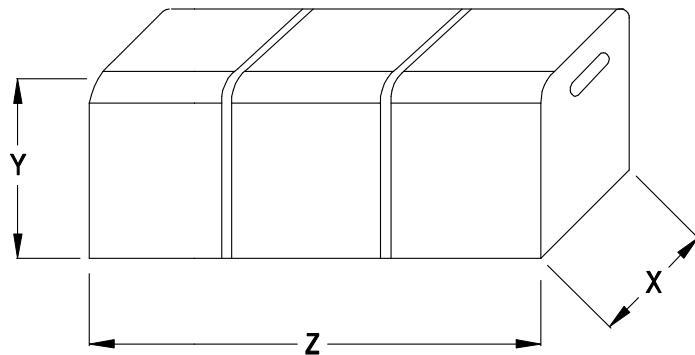
Pump Type	N°																													
	4	5-1	5-2	5-3	5-4	6	7	21	31***	32-1	43-2	43-3	43-4	43-6	44-1	46	47	48	52-1	75	75-1	107	111	111-3	111-4	111-5	115-4	115-5		
EVMG20 1/2.2	1	1	/	1	1	1	1	1	1	1	/	1	1	1	1	2	1	1	1	1	4	1	1	1	1	1	2	1	1	
EVMG20 2/4.0	1	1	/	1	1	1	1	2	1	1	/	1	1	1	1	1	2	1	1	1	1	4	2	1	1	1	1	2	1	1
EVMG20 3/7.5	1	1	1	1	1	1	1	3	1	1	3	1	1	1	1	1	2	1	1	1	1	4	3	1	1	1	1	2	1	1
EVMG20 4/7.5	1	1	2	1	1	1	1	4	1	1	5	1	1	1	1	1	2	1	1	1	1	4	4	1	1	1	1	2	1	1
EVMG20 5/11	1	1	2	2	1	1	1	5	1	1	5	2	2	2	1	2	2	1	1	2	1	4	5	1	1	1	1	2	1	1
EVMG20 6/11	1	1	3	2	1	1	1	6	1	1	7	2	2	2	1	2	2	1	1	2	1	4	6	1	1	1	1	2	1	1
EVMG20 7/15	1	1	4	2	1	1	1	7	1	1	9	2	2	2	1	2	2	1	1	2	1	4	7	1	1	1	1	2	1	1
EVMG20 8/15	1	1	5	2	1	1	1	8	1	1	11	2	2	2	1	2	2	1	1	2	1	4	8	1	1	1	1	2	1	1
EVMG20 9/18.5	1	1	6	2	1	1	1	9	1	1	13	2	2	2	1	2	2	1	1	2	1	4	9	1	1	1	1	2	1	1
EVMG20 10/18.5	1	1	7	2	1	1	1	10	1	1	15	2	2	2	1	2	2	1	1	2	1	4	10	1	1	1	1	2	1	1

* only for Oval flange (N)

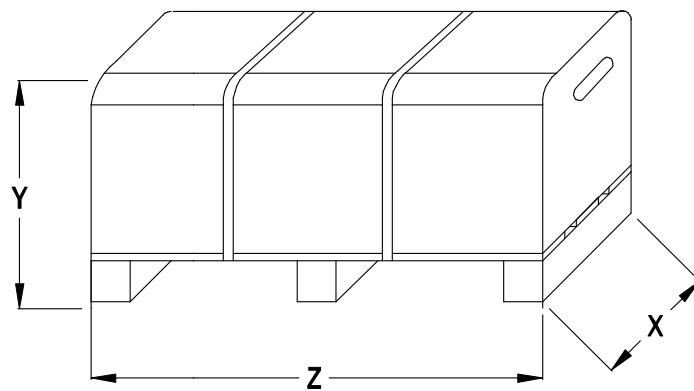
*** shaft in EN 1.4462 (AISI 329A)

128-6 / 135-6: with Aluminium coupling (see drawing pag.211)

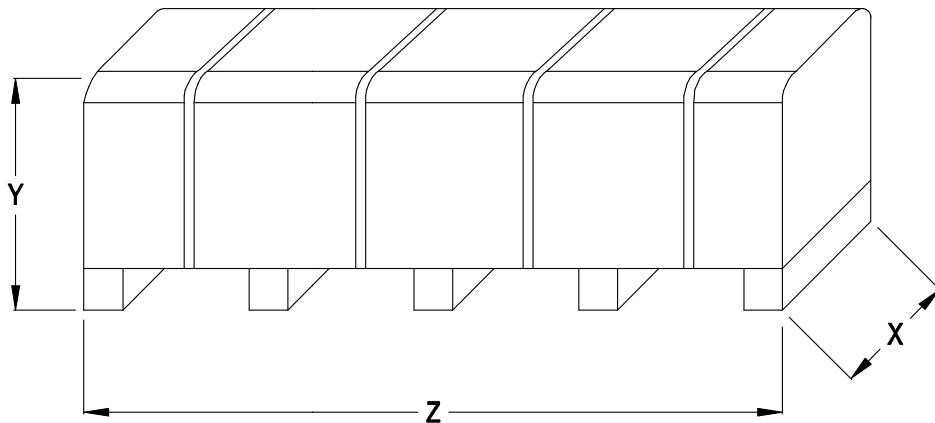
Pump Type	N°																										
	117*	120-1	120-3	120-6	120-11*	120-13	128-1	128-3	128-6	130-1	130-2	131-1	135-1	135-6	137-1	140	162	212	212-1	212-2	219*	245	273-1				
EVMG20 1/2.2	2	4	4	4	4	4	4	/	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4				
EVMG20 2/4.0	2	4	4	4	4	4	4	4	4	3	4	1	4	4	1	2	1	1	4	1	2	2	4				
EVMG20 3/7.5	2	4	4	4	4	4	4	4	4	3	4	1	4	/	1	2	1	1	4	1	2	2	4				
EVMG20 4/7.5	2	4	4	4	4	4	4	4	4	3	4	1	4	/	1	2	1	1	4	1	2	2	4				
EVMG20 5/11	2	4	4	4	4	4	4	4	4	3	4	1	4	/	1	2	1	1	4	1	2	2	4				
EVMG20 6/11	2	4	4	4	4	4	4	4	4	3	4	1	4	/	1	2	1	1	4	1	2	2	4				
EVMG20 7/15	/	4	4	4	4	/	4	4	4	4	/	3	4	1	4	/	1	2	1	1	4	1	/	2	4		
EVMG20 8/15	/	4	4	4	4	/	4	4	4	4	/	3	4	1	4	/	1	2	1	1	4	1	/	2	4		
EVMG20 9/18.5	/	4	4	4	4	/	4	4	4	4	/	3	4	1	4	/	1	2	1	1	4	1	/	2	4		
EVMG20 10/18.5	/	4	4	4	4	/	4	4	4	4	/	3	4	1	4	/	1	2	1	1	4	1	/	2	4		

PACKING DRAWING
EVMS(.)1-3-5-10-15-20

TYPE 1



TYPE 2



TYPE 3

**PACKING DATA
EVMS(.)1-3-5**

Pump type	Pumps						Pumps with motor ~3						
	Packing [mm]			Weight + Packing [kgf]		Pack Type	Packing [mm]			Weight + Packing [kgf]		Pack Type	
	X	Y	Z	EVMS(L)	EVMSG		X	Y	Z	EVMS(L)	EVMSG		
1	EVMS(.)1 2/0.37	385	400	385	12.6	19.6	1	385	400	585	19.2	26.2	1
	EVMS(.)1 3/0.37	385	400	385	13.1	20.0	1	385	400	585	19.7	26.6	1
	EVMS(.)1 4/0.37	385	400	385	13.5	20.5	1	385	400	770	20.4	27.4	1
	EVMS(.)1 5/0.37	385	400	585	14.5	21.4	1	385	400	770	20.9	27.8	1
	EVMS(.)1 6/0.55	385	400	585	14.9	21.8	1	385	400	770	21.7	28.7	1
	EVMS(.)1 7/0.55	385	400	585	15.6	22.5	1	385	400	770	22.4	29.4	1
	EVMS(.)1 8/0.75	385	400	585	16.0	22.9	1	385	400	770	26.1	33.1	1
	EVMS(.)1 9/0.75	385	400	585	16.4	23.4	1	385	400	770	26.6	33.5	1
	EVMS(.)1 10/0.75	385	400	585	16.9	23.8	1	385	400	770	27.0	33.9	1
	EVMS(.)1 11/1.1	385	400	585	17.3	24.3	1	385	400	970	29.7	36.7	1
	EVMS(.)1 12/1.1	385	400	585	17.7	24.7	1	385	400	970	30.1	37.1	1
	EVMS(.)1 13/1.1	385	400	585	18.4	25.4	1	385	400	970	30.8	37.8	1
	EVMS(.)1 14/1.1	385	400	770	19.3	26.3	1	385	400	970	31.2	38.2	1
	EVMS(.)1 16/1.5	385	400	770	20.3	27.3	1	385	400	970	33.8	40.8	1
	EVMS(.)1 18/1.5	385	400	770	21.2	28.2	1	385	400	970	34.7	41.7	1
	EVMS(.)1 20/1.5	385	400	770	22.1	29.1	1	385	400	1170	36.2	43.1	1
	EVMS(.)1 22/2.2	385	400	970	24.0	30.9	1	385	400	1170	40.9	47.9	1
	EVMS(.)1 24/2.2	385	400	970	24.9	31.9	1	385	400	1170	41.9	48.8	1
	EVMS(.)1 26/2.2	385	400	970	25.8	32.8	1	385	400	1170	42.8	49.7	1
	EVMS(.)1 27/2.2	385	400	970	26.3	33.3	1	385	400	1170	43.3	50.2	1
	EVMS(.)1 29/2.2	385	400	970	27.2	34.2	1	500	525	1350	64.1	71.0	3
3	EVMS(.)3 2/0.37	385	400	385	12.5	17.6	1	385	400	585	19.1	24.2	1
	EVMS(.)3 3/0.55	385	400	385	12.9	18.0	1	385	400	585	19.9	25.0	1
	EVMS(.)3 4/0.75	385	400	385	13.6	18.7	1	385	400	770	25.3	30.4	1
	EVMS(.)3 5/0.75	385	400	585	14.5	19.6	1	385	400	770	25.7	30.8	1
	EVMS(.)3 6/1.1	385	400	585	14.9	20.0	1	385	400	770	26.6	31.8	1
	EVMS(.)3 7/1.1	385	400	585	15.3	20.4	1	385	400	770	27.1	32.2	1
	EVMS(.)3 8/1.5	385	400	585	15.8	20.9	1	385	400	770	29.1	34.2	1
	EVMS(.)3 9/1.5	385	400	585	16.2	21.3	1	385	400	970	30.2	35.3	1
	EVMS(.)3 10/1.5	385	400	585	16.6	21.7	1	385	400	970	30.6	35.7	1
	EVMS(.)3 11/2.2	385	400	585	17.0	22.1	1	385	400	970	34.3	39.4	1
	EVMS(.)3 12/2.2	385	400	585	17.4	22.5	1	385	400	970	34.7	39.8	1
	EVMS(.)3 13/2.2	385	400	770	18.6	23.7	1	385	400	970	35.4	40.5	1
	EVMS(.)3 14/2.2	385	400	770	19.0	24.1	1	385	400	970	35.8	41.0	1
	EVMS(.)3 15/3.0	385	400	770	19.5	24.6	1	385	400	970	43.2	48.3	1
	EVMS(.)3 16/3.0	385	400	770	20.5	25.6	1	385	400	970	44.1	49.2	1
	EVMS(.)3 17/3.0	385	400	770	21.0	26.1	1	385	400	1170	45.1	50.0	1
5	EVMS(.)3 19/3.0	385	400	770	21.9	27.0	1	400	510	1200	46.0	60.1	1 2
	EVMS(.)3 20/3.0	385	400	770	22.3	27.4	1	400	510	1200	46.5	60.6	1 2
	EVMS(.)3 21/4.0	385	400	770	22.8	27.9	1	400	510	1200	63.3	68.4	2
	EVMS(.)3 22/4.0	385	400	970	23.6	28.8	1	400	510	1200	63.8	68.9	2
	EVMS(.)3 23/4.0	385	400	970	24.1	29.2	1	400	510	1200	64.2	69.3	2
	EVMS(.)5 2/0.75	385	400	385	12.7	17.8	1	385	400	770	24.4	29.6	1
	EVMS(.)5 3/1.1	385	400	585	13.7	18.8	1	385	400	770	25.4	30.5	1
	EVMS(.)5 4/1.5	385	400	585	14.4	19.5	1	385	400	770	27.8	32.9	1
	EVMS(.)5 5/2.2	385	400	585	14.9	20.0	1	385	400	770	31.5	36.6	1
	EVMS(.)5 6/2.2	385	400	585	15.4	20.5	1	385	400	770	32.0	37.1	1

VERTICAL MULTISTAGE PUMPS

PACKING DATA
EVMS(.)10-15-20

Pump type	Pumps						Pumps with motor ~3						
	Packing [mm]			Weight + Packing [kgf]		Pack Type	Packing [mm]			Weight + Packing [kgf]		Pack Type	
	X	Y	Z	EVMS(L)	EVMSG		X	Y	Z	EVMS(L)	EVMSG		
10	EVMS(.)10 1/0.75	385	400	585	23.1	26.6	1	385	400	770	34.4	37.8	1
	EVMS(.)10 2/1.5	385	400	585	23.3	26.7	1	385	400	970	37.3	40.7	1
	EVMS(.)10 3/2.2	385	400	585	24.2	27.6	1	385	400	970	41.5	44.9	1
	EVMS(.)10 4/3.0	385	400	585	25.1	28.6	1	400	510	1200	58.7	62.2	2
	EVMS(.)10 5/4.0	385	400	585	26.0	29.4	1	400	510	1200	67.0	70.5	2
	EVMS(.)10 6/4.0	385	400	585	26.8	30.2	1	400	510	1200	67.8	71.3	2
	EVMS(.)10 7/5.5	385	400	770	35.2	38.6	1	400	510	1200	75.1	78.6	2
	EVMS(.)10 8/5.5	385	400	770	36.4	39.8	1	400	510	1200	76.3	79.8	2
	EVMS(.)10 9/5.5	385	400	770	37.2	40.6	1	400	510	1200	77.2	80.6	2
	EVMS(.)10 10/7.5	385	400	770	38.0	41.5	1	400	510	1200	79.8	83.2	2
	EVMS(.)10 11/7.5	385	400	970	40.1	43.5	1	400	510	1200	81.4	84.9	2
	EVMS(.)10 12/7.5	385	400	970	41.0	44.5	1	500	525	1350	93.3	96.7	3
	EVMS(.)10 14/11	385	400	970	46.3	49.8	1	500	525	1540	136.9	140.4	3
	EVMS(.)10 15/11	385	400	970	47.8	50.8	1	500	525	1540	137.3	140.7	3
	EVMS(.)10 16/11	400	510	1200	62.4	65.8	2	500	525	1540	138.9	142.4	3
15	EVMS(.)15 1/1.5	385	400	585	21.2	29.3	1	385	400	770	34.5	42.7	1
	EVMS(.)15 2/3.0	385	400	585	21.6	29.7	1	385	400	770	44.0	49.6	1
	EVMS(.)15 3/5.5	385	400	770	30.3	38.4	1	400	510	1200	79.2	87.4	2
	EVMS(.)15 4/7.5	385	400	770	31.5	39.6	1	400	510	1200	82.2	90.4	2
	EVMS(.)15 5/7.5	385	400	770	32.6	40.7	1	400	510	1200	83.4	91.5	2
	EVMS(.)15 6/11	385	400	770	42.4	49.6	1	500	525	1350	126.2	134.3	3
	EVMS(.)15 7/11	400	510	1200	54.3	62.4	2	500	525	1350	128.1	136.2	3
	EVMS(.)15 8/15	400	510	1200	55.6	63.7	2	500	525	1350	157.6	165.7	3
	EVMS(.)15 9/15	400	510	1200	56.9	65.0	2	500	525	1540	160.9	169.0	3
	EVMS(.)15 10/15	400	510	1200	58.1	66.3	2	500	525	1540	162.9	171.0	3
20	EVMS(.)15 11/18.5	400	510	1200	59.4	67.6	2	500	525	1540	184.0	192.1	3
	EVMS(.)15 12/18.5	400	510	1200	60.7	68.9	2	500	525	1540	185.3	193.4	3
	EVMS(.)20 1/2.2	385	400	585	21.2	29.3	1	385	400	770	37.8	45.9	1
	EVMS(.)20 2/4.0	385	400	585	21.6	29.7	1	385	400	770	48.3	53.7	1
	EVMS(.)20 3/7.5	385	400	770	30.3	38.5	1	400	510	1200	81.1	89.3	2
	EVMS(.)20 4/7.5	385	400	770	31.5	39.7	1	400	510	1200	82.8	91.0	2
	EVMS(.)20 5/11	385	400	770	40.9	49.1	1	500	525	1350	124.7	132.9	3
	EVMS(.)20 6/11	385	400	970	41.6	49.8	1	500	525	1350	124.9	133.1	3
20	EVMS(.)20 7/15	385	400	1170	44.5	50.0	1	500	525	1350	156.1	164.2	3
	EVMS(.)20 8/15	400	510	1200	45.9	63.6	1 2	500	525	1540	172.2	181.4	3
	EVMS(.)20 9/18.5	400	510	1200	47.2	64.9	1 2	500	525	1540	182.3	190.4	3
	EVMS(.)20 10 /18.5	400	510	1200	48.5	66.2	1 2	500	525	1540	182.6	190.8	3

VERTICAL MULTISTAGE PUMPS

60Hz

EVM

EVM

300



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PRODUCT FEATURES

[General]

1. Pump Type

The EVM is Non-self-priming, vertical multistage in line, centrifugal pumps.

2. Model range

The EVM comes in **32,45 and 64 m³/h flow sizes** for the majority market needs.

3. Maximum operating pressure

The EVM can be operated at **16,25 or 30 bar as maximum**.

4. Operating temperature range

The EVM can be operated from **- 15 to + 120 °C** as the maximum.

5. Material options

AISI 304, AISI 316 and Cast iron versions are available.

6. Motor

The EVM can be coupled with **the commercial motors** that are acquired in the markets.

[Main Product Features]

1. Robust constructions

- **Commercial motors** can be fitted to all of the pump models with additional ball bearing on the bracket.
- **Stainless cast** bottom casing to ensure 30 bar working pressure.
- **Rolling groove pump shaft** for high torque transmissions.

2. Energy saving

- **High efficiency IE2 motor.**
- The **VFD (Variable frequency drive)** can be fitted on the motor for the pressure boosting systems.

3. Easy maintenance

The **cartridge shaft seal** enables **the plug in replacement** of the shaft seal without disassembling the motor bracket.

PRODUCT SPECIFICATIONS

EVM(.)32-45-64

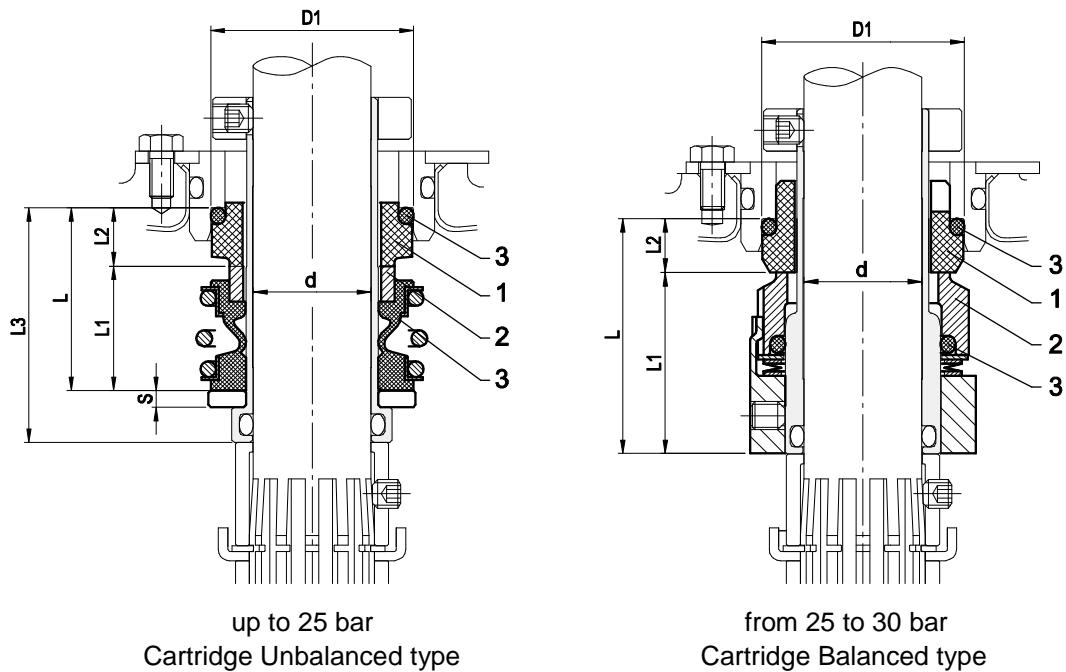
PUMP												
Version		EVMG			EVM			EVML				
Operating range	Nominal flow rate (m³/h)	32	45	64	32	45	64	32	45	64		
	Maximum working pressure	1.6 / 3.0 MPa (16 bar/ 30 bar)										
	Liquid temperature range	-15°C to 120°C										
Key Components Material	Impeller	EN 1.4301 (AISI 304)					EN 1.4401 (AISI 316)					
	Intermediate casing	EN 1.4301 (AISI 304)					EN 1.4401 (AISI 316)					
	EVM 32	EN 1.4301 (AISI 304) + PTFE					EN 1.4401 (AISI 316) + PTFE					
	EVM 45-64	EN 1.4401 (AISI 316) + PTFE										
	Bottom casing	Cast Iron			ASTMCF8		ASTMCF8M					
	Casing cover	Cast Iron			Cast Iron + EN 1.4301 (AISI 304)		Cast Iron + EN 1.4401 (AISI 316)					
	Shaft	EN 1.4401 (AISI 316)		●	●	●	●	●	●			
	Shaft sleeve bearing	Tungstene carbide										
	Shaft Seal type	Cartridge mechanical seal										
	material	Silicon Carbide/Carbon/FPM										
	O-ring	EPDM					FPM					
	Outer casing	EN 1.4301 (AISI 304)					EN 1.4404 (AISI 316L)					
	Motor Bracket	Cast Iron										
	Tie rod	Carbon Steel										
	Coupling	Carbon Steel										
	Base	Cast Iron										
Pipe connection	Round Flange (DIN)	●	●	●	●	●	●	●	●			

Legend: ● Standard

MOTOR		
Power Source	Frequency	60 Hz
	Phase	Three Phase
	Rotation speed	≈ 3500 min-1
	Power rating	4.0 ÷ 37 kW 5.5 ÷ 50 HP
	Voltage	220/380 ± 10% V (up to 4kW) 380/660 ± 10% V (above 5.5 kW) 265/460 ± 10% V (up to 4kW) 460 ± 10% V (above 5.5 kW)
Type	Type	Electric - TEFC
	Efficiency Level	IE2 to 4.0 kW (220-380V / 265-460V) IE2 above 5.5 kW (380-660V / 460V)
	No° of poles	2
	Protection degree	IP 55
Others	Insulation Class	F (temperature rise class B)
	Thermal Protection	PTC
	Casing Material	Aluminium
	Flange mount (IEC motor)	IM B14 (up to 4 kW) IM B5 (above 5.5 kW)

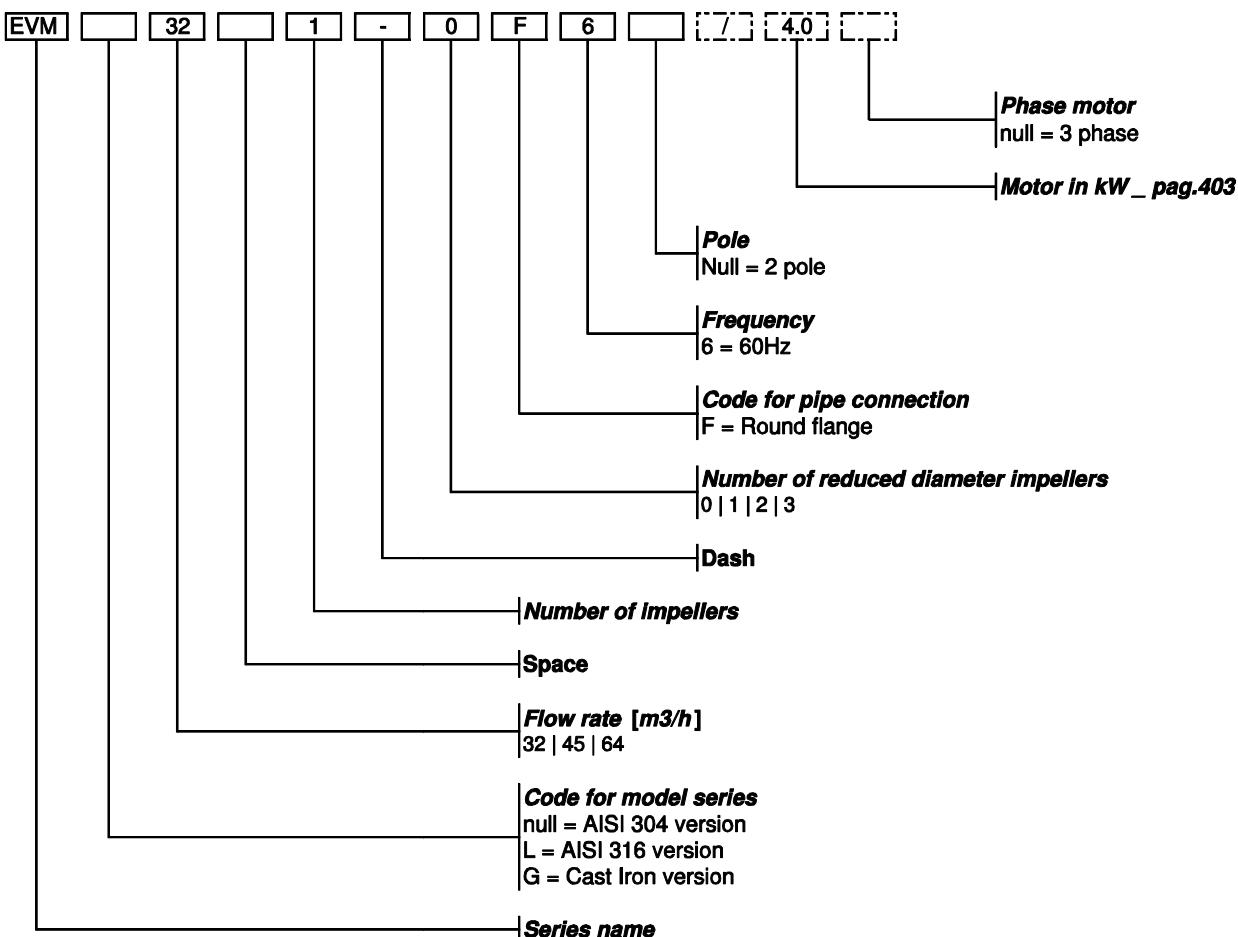
SHAFT SEAL
EVM(.)32-45-64

1. Shaft Seal



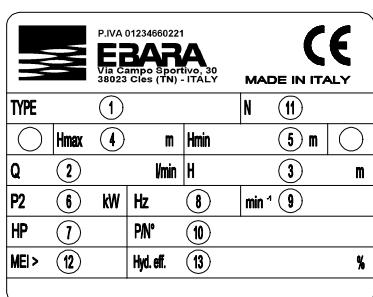
2. Type of Shaft Seal and Dimensions [mm]

Size [mm]	Max operating pressure [bar]	d [mm]	D ₁ [mm]	L [mm]	L ₁ [mm]	L ₂ [mm]	L ₃ [mm]	S [mm]	Material		
									1 Stationary Seal Ring	2 Rotary Seal Ring	3 Rubber
25	25	25	43	39	26.5	12.5	50	3.5	Carbon graphite	Silicon carbide	FPM
	30			50	38.5	11.5	-	-			

TYPE KEY
EVM(.)32-45-64


Example for **pump without motor**
EVM32 1-0F6

Example for **pump with motor**
EVM32 1-0F6/4.0

NAMEPLATE


- | | |
|-------------------------|--|
| 1) "TYPE" | Pump model |
| 2) "Q" | Indicates upper and lower flow rate limits |
| 3) "H" | Indicates head limits corresponding to minimum and maximum flow rate |
| 4) "H _{max} " | Maximum head |
| 5) "H _{min} " | Minimum head |
| 6) "P ₂ " | Rated power of the motor (output at shaft) |
| 7) "HP" | Rated power of the motor expressed in HP (Horse Power) |
| 8) "Hz" | Frequency |
| 9) "min ⁻¹ " | Speed of rotation |
| 10) "P/N°" | Pump item number |
| 11) "N" | Material code |
| 12) "MEI" | Index of the pump's quality in relation to its efficiency |
| 13) "Hyd. Eff. " | Hydraulic efficiency of the pump |

60Hz

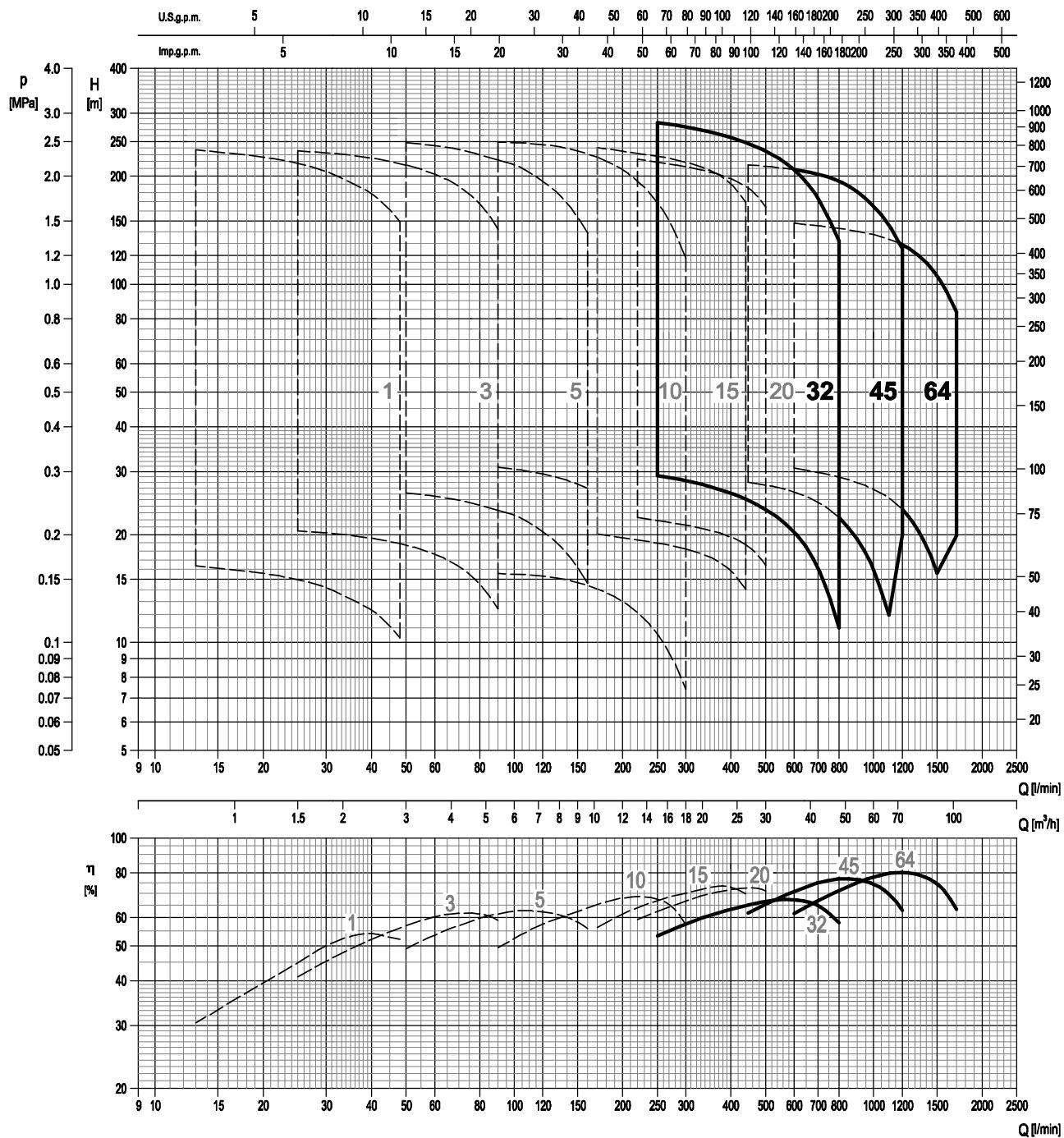
VERTICAL MULTISTAGE PUMPS

EVM

3.5

EVM _ PERFORMANCE RANGE

PERFORMANCE RANGE EVM(.32-45-64)



305

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CURVE SPECIFICATIONS

The specifications below qualify the curves shown on the following pages.

Tolerances according to ISO 9906:2012 - Grade 3B.

The curves refer to effective speed of asynchronous motors at 60 Hz, 2 poles.

Measurements were carried out with clean water at 20°C of temperature and with a kinematic viscosity of $\nu = 1 \text{ mm}^2/\text{s}$ (1 cSt).

The NPSH curve is an average curve obtained in the same conditions of performance curves.

During the pump selection, consider to get a safety margin of at least 0.5 m.

The continuous curves indicate the recommended working range. The dotted curve is only a guide.

In order to avoid the risk of over-heating, the pumps should not be used at a flow rate below 10% of best efficiency point.

Symbols explanation:

Q	=	volume flow rate
H	=	total head
P_2	=	pump power input (shaft power)
η	=	pump efficiency
NPSH	=	net positive suction head required by the pump

VERTICAL MULTISTAGE PUMPS

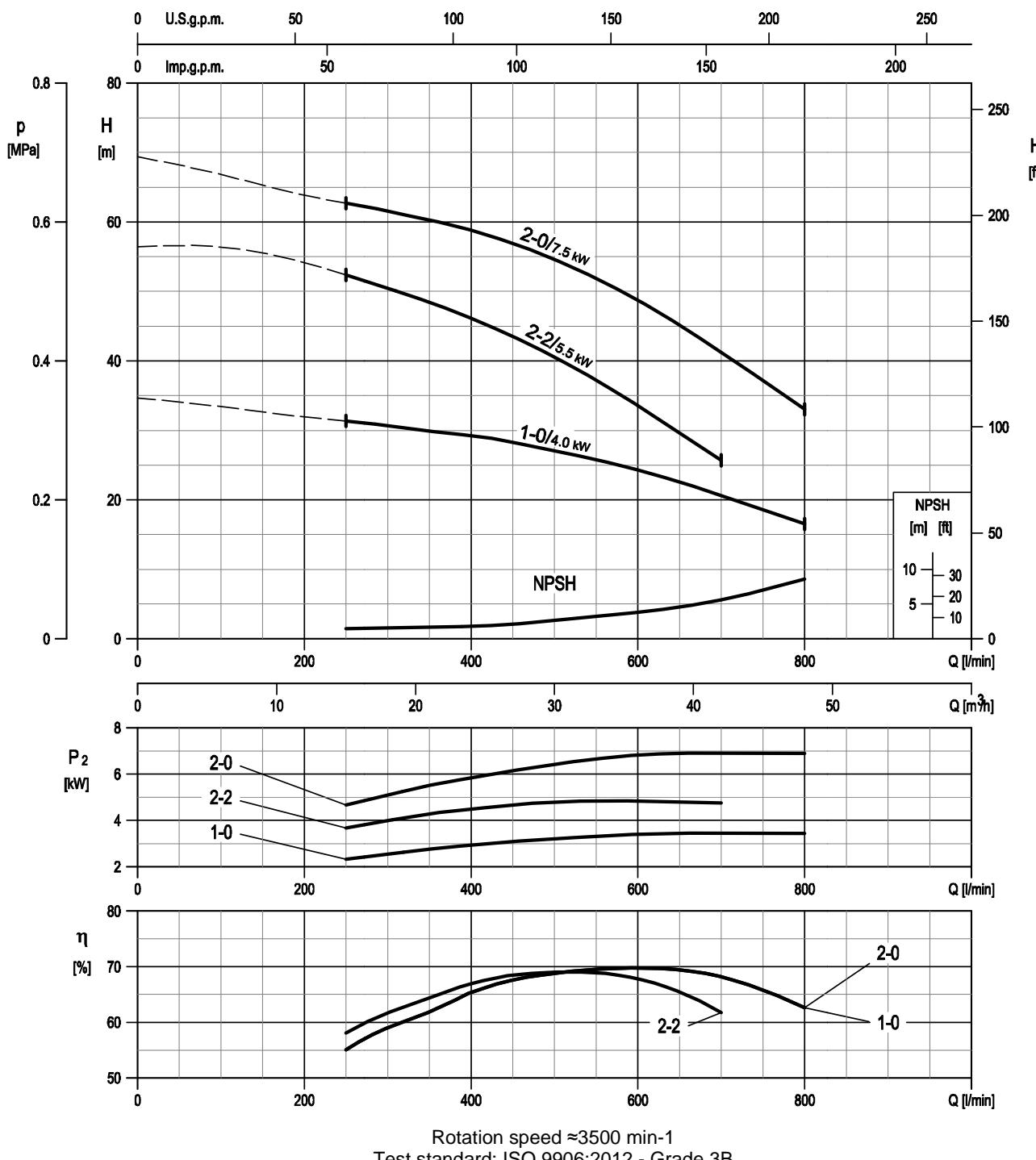
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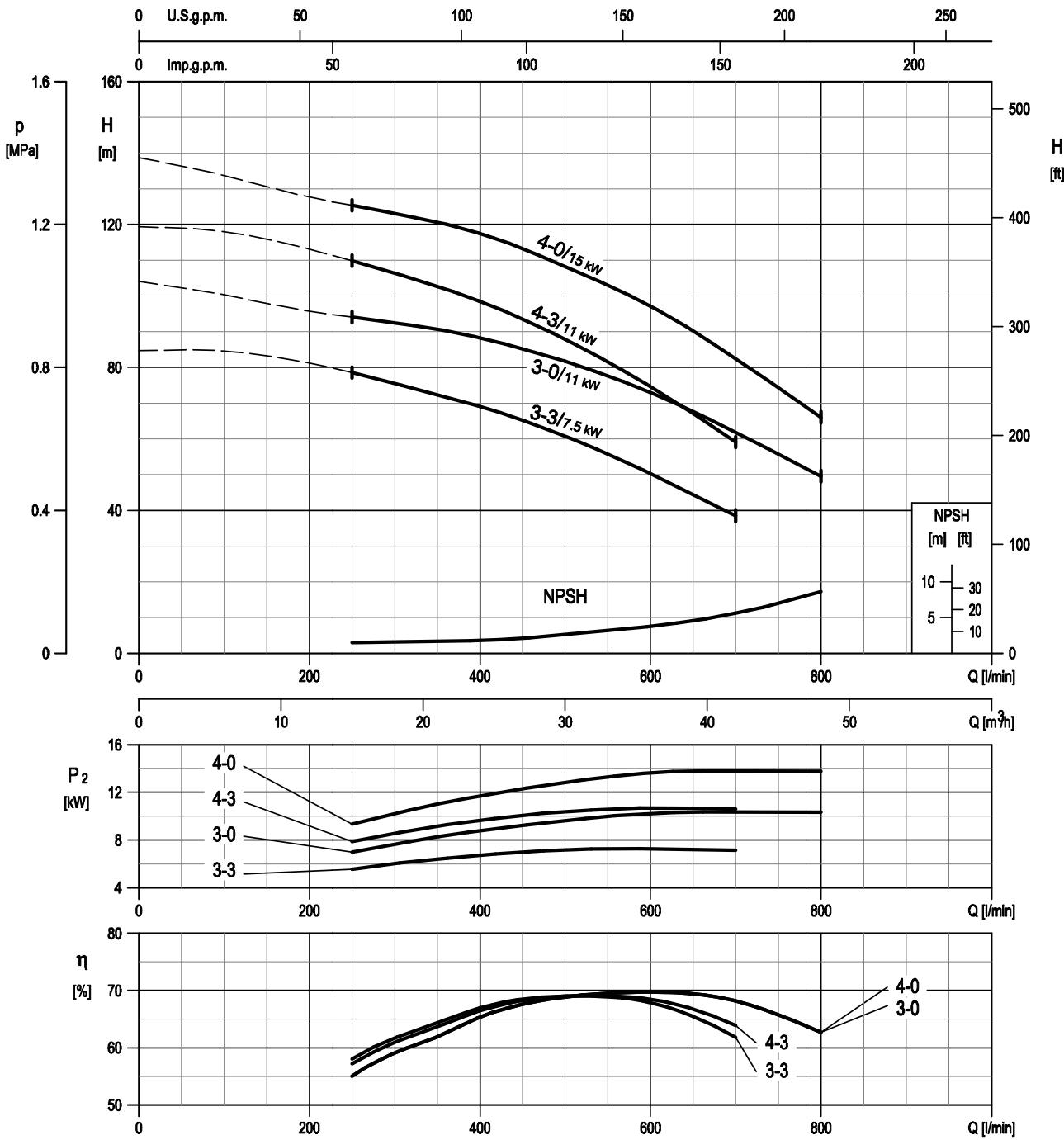
SELECTION CHART
EVM(.)32-45-64

Pump Type	Motor	Size	Maximum working pressure [MPa]	Q=Capacity												
				l/min	0	250	450	600	700	800	950	1100	1200	1500	1700	
				m³/h	0	15	27	36	42	48	57	66	72	90	102	
32	EVM(.)32 1-0F6/4.0	4.0	5.5	112 M	1.6	34.7	31.4	28.3	24.3	20.6	16.5	-	-	-	-	
	EVM(.)32 2-2F6/5.5	5.5	7.5	132 S		56.5	52.5	43.5	33.6	25.7	-	-	-	-	-	
	EVM(.)32 2-0F6/7.5	7.5	10	132 S		69.5	63	56.6	48.5	41	33.1	-	-	-	-	
	EVM(.)32 3-3F6/7.5	7.5	10	132 S		84.5	79	65.3	50.5	38.5	-	-	-	-	-	
	EVM(.)32 3-0F6/11	11	15	160 M		104	94	85	72.5	62	49.5	-	-	-	-	
	EVM(.)32 4-3F6/11	11	15	160 M		119	110	93.5	74.5	59	-	-	-	-	-	
	EVM(.)32 4-0F6/15	15	20	160 M		139	125	113	97	82.5	66	-	-	-	-	
	EVM(.)32 5-3F6/15	15	20	160 M		152	143	124	99.5	79.5	61.5	-	-	-	-	
	EVM(.)32 5-2F6/15	15	20	160 M		158	147	130	107	86.5	67.5	-	-	-	-	
	EVM(.)32 5-0F6/18.5	18.5	25	160 L		169	157	141	121	100	79.5	-	-	-	-	
	EVM(.)32 6-3F6/18.5	18.5	25	160 L	2.5	186	174	152	124	100	77.5	-	-	-	-	
	EVM(.)32 6-0F6/22	22	30	180 M		203	189	170	145	121	95.5	-	-	-	-	
	EVM(.)32 7-3F6/22	22	30	180 M		220	205	180	148	120	93	-	-	-	-	
	EVM(.)32 7-2F6/22	22	30	180 M		221	210	186	155	127	99.5	-	-	-	-	
	EVM(.)32 7-0F6/30	30	40	200 L		237	220	198	169	141	112	-	-	-	-	
	EVM(.)32 8-3F6/30	30	40	200 L		254	237	209	172	140	109	-	-	-	-	
45	EVM(.)32 8-0F6/30	30	40	200 L	3.0	271	252	226	194	161	127	-	-	-	-	
	EVM(.)32 9-3F6/30	30	40	200L		288	268	237	196	160	125	-	-	-	-	
	EVM(.)32 9-0F6/30	30	40	200 L		305	283	255	218	181	143	-	-	-	-	
	EVM(.)32 10-4F6/30	30	40	200 L		316	295	259	213	173	135	-	-	-	-	
	EVM(.)45 1-1F6/5.5	5.5	7.5	132 S	1.6	31	-	28	26.3	24.6	22.3	17.7	11.9	-	-	
	EVM(.)45 1-0F6/7.5	7.5	10	132 S		39.8	-	36.9	35.6	34.4	32.7	28.8	23.8	20	-	
	EVM(.)45 2-2F6/11	11	15	160 M		62	-	56.5	53.5	50.5	46	37.7	26.9	-	-	
	EVM(.)45 2-1F6/11	11	15	160 M		71	-	65.5	63	60	56.5	49	38.7	-	-	
	EVM(.)45 2-0F6/15	15	20	160 M		79.5	-	74.5	72	70	67	60	50.5	43.5	-	
	EVM(.)45 3-3F6/15	15	20	160 M		93	-	85	80.5	76.5	70	57.5	42	-	-	
	EVM(.)45 3-2F6/15	15	20	160 M		102	-	94	90	86	80.5	69	53.5	-	-	
	EVM(.)45 3-1F6/18.5	18.5	25	160 L		111	-	103	99.5	96	91	80	65.5	54.5	-	
	EVM(.)45 3-0F6/22	22	30	180 M		119	-	112	109	106	101	91	77.5	67	-	
	EVM(.)45 4-3F6/18.5	18.5	25	160 L		133	-	122	117	112	104	89	68.5	53	-	
	EVM(.)45 4-2F6/22	22	30	180 M		142	-	131	127	122	115	100	80.5	65.5	-	
	EVM(.)45 4-1F6/30	30	40	200 L		150	-	140	136	131	125	111	92.5	78	-	
	EVM(.)45 4-0F6/30	30	40	200 L		159	-	149	145	141	135	122	104	91	-	
	EVM(.)45 5-3F6/30	30	40	200 L	2.5	173	-	160	154	148	139	120	95	76.5	-	
	EVM(.)45 5-2F6/30	30	40	200 L		181	-	169	163	157	149	131	107	89	-	
	EVM(.)45 5-1F6/30	30	40	200 L		190	-	178	172	167	159	142	119	102	-	
	EVM(.)45 5-0F6/37	37	50	200 L		199	-	187	182	177	170	153	131	114	-	
	EVM(.)45 6-3F6/37	37	50	200 L		212	-	197	190	183	173	151	122	100	-	
	EVM(.)45 6-2F6/37	37	50	200 L		221	-	206	200	193	183	162	134	113	-	
	EVM(.)45 6-1F6/37	37	50	200 L		230	-	215	209	203	194	173	146	125	-	
64	EVM(.)64 1-1F6/7.5	7.5	10	132 S	1.6	33.9	-	-	30.7	29.8	28.9	27.4	25.3	23.5	15.6	
	EVM(.)64 1-0F6/11	11	15	160 M		42.5	-	-	38.5	37.7	36.8	35.6	33.9	32.5	26	19.9
	EVM(.)64 2-2F6/15	15	20	160 M		68	-	-	62	60.5	59	56.5	53	49.5	35.3	-
	EVM(.)64 2-1F6/18.5	18.5	25	160 L		76.5	-	-	70	68.5	67	64.5	61.5	58.5	45.5	33.4
	EVM(.)64 2-0F6/22	22	30	180 M		85	-	-	77.5	76	75	73	70	67.5	56	45
	EVM(.)64 3-3F6/22	22	30	180 M		102	-	-	93.5	91	89	85.5	80.5	76	55	-
	EVM(.)64 3-2F6/30	30	40	200 L		110	-	-	101	99	97	93.5	89	84.5	65.5	47
	EVM(.)64 3-1F6/30	30	40	200 L		119	-	-	109	107	105	102	97.5	93.5	75.5	58.5
	EVM(.)64 3-0F6/30	30	40	200 L		128	-	-	117	115	113	110	106	103	86	70
	EVM(.)64 4-3F6/30	30	40	200 L		144	-	-	132	130	127	123	116	111	85	60.5
	EVM(.)64 4-2F6/37	37	50	200 L		153	-	-	140	138	135	131	125	120	95.5	72
	EVM(.)64 4-1F6/37	37	50	200 L		162	-	-	148	146	143	139	134	129	106	83.5

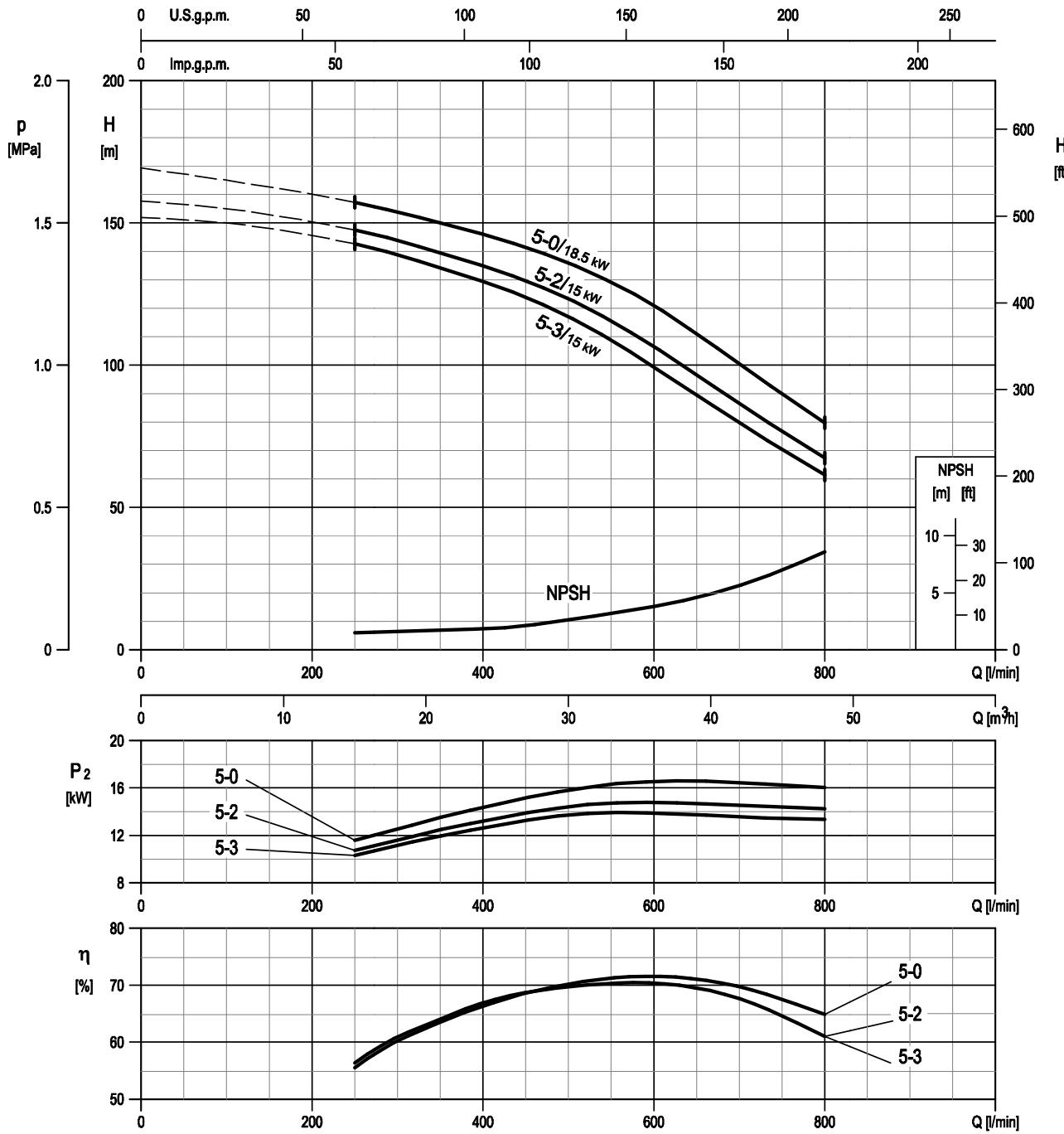
1.6 MPa=16 bar ; 2.5 MPa=25 bar ; 3.0 MPa=30 bar

**PERFORMANCE CURVE
EVM(L)32**

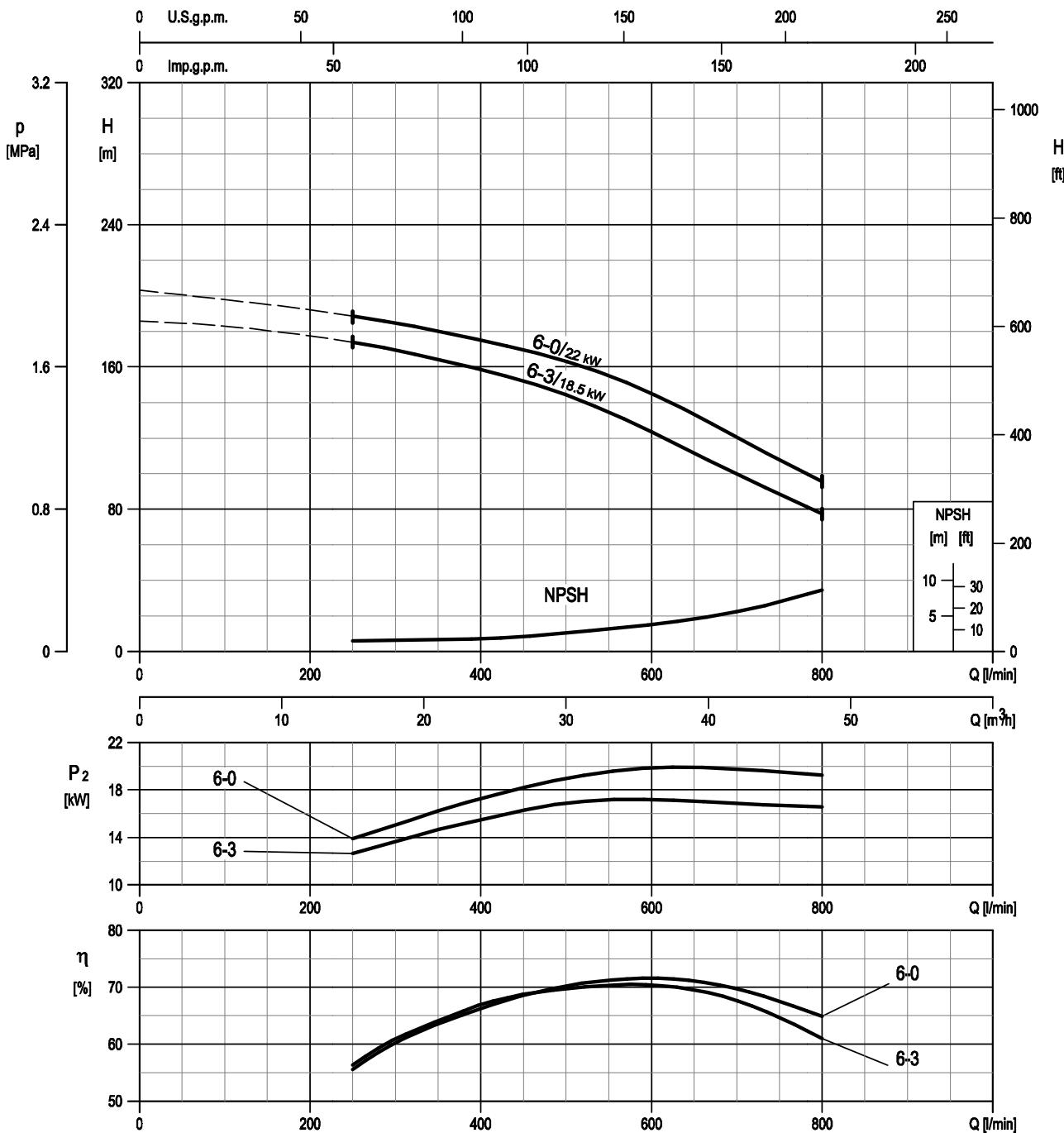


**PERFORMANCE CURVE
EVM(L)32**


**PERFORMANCE CURVE
EVM(L)32**

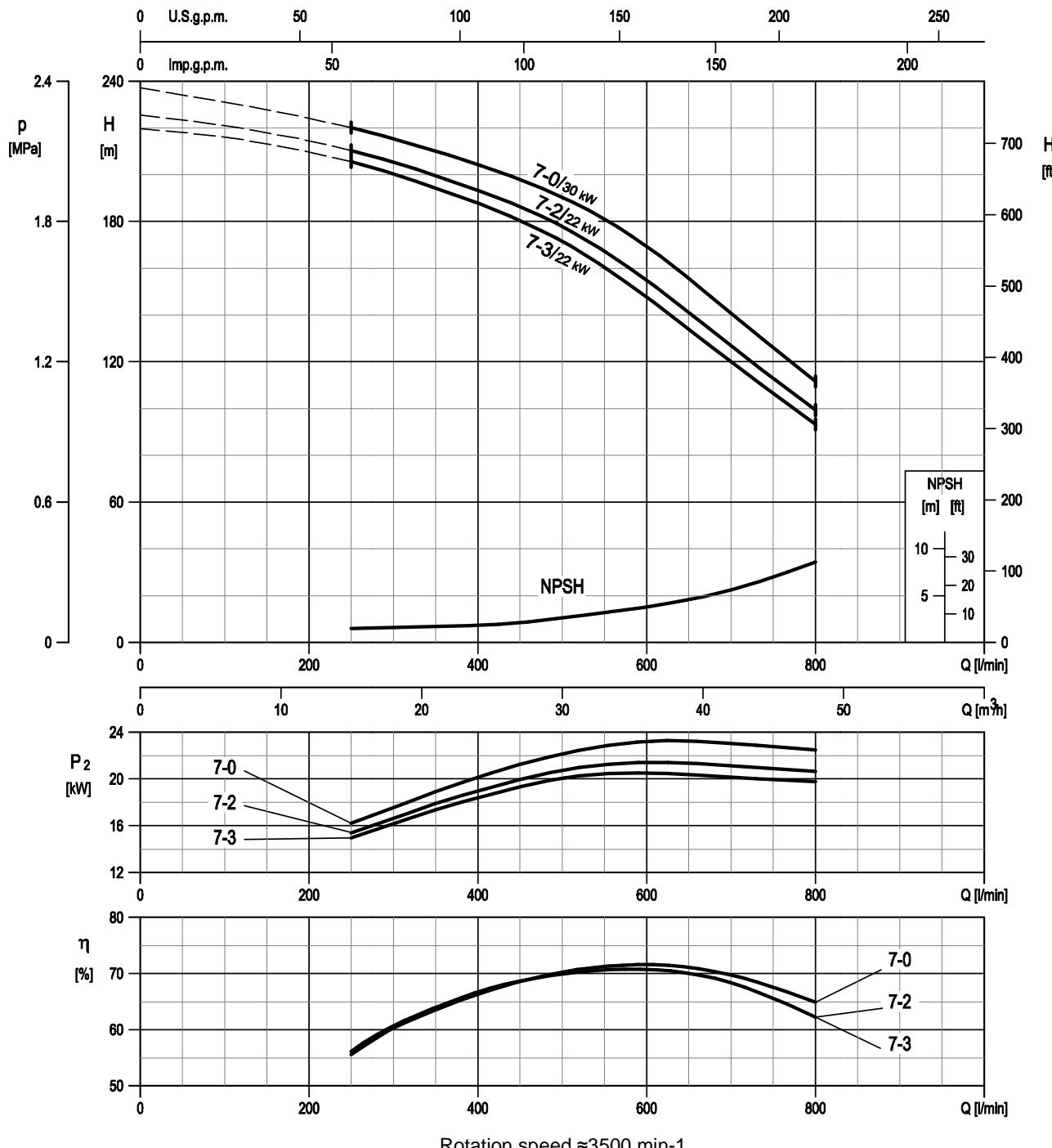


Rotation speed ≈ 3500 min⁻¹
Test standard: ISO 9906:2012 - Grade 3B

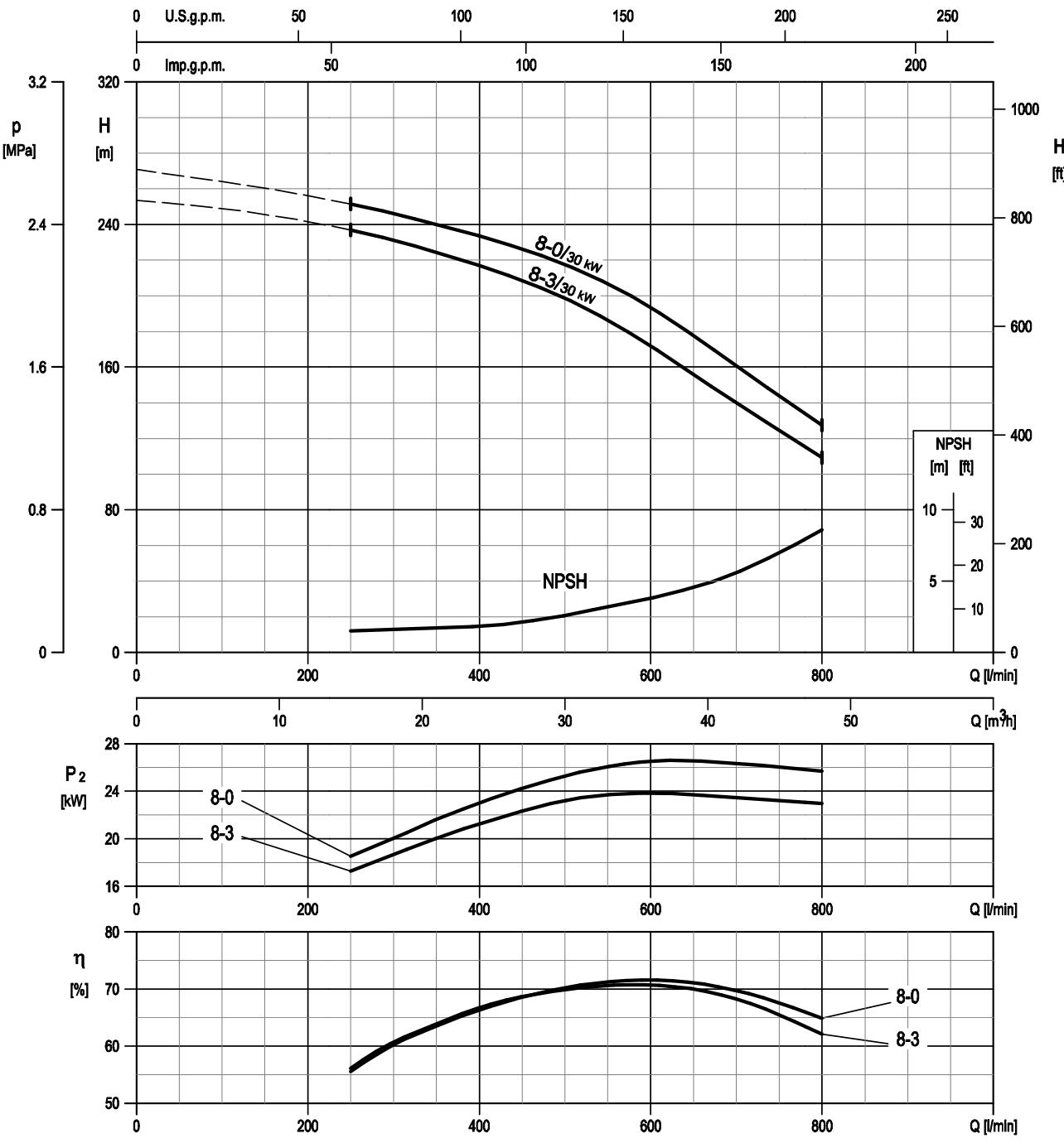
PERFORMANCE CURVE
EVM(L)32

Rotation speed ≈ 3500 min⁻¹
Test standard: ISO 9906:2012 - Grade 3B

**PERFORMANCE CURVE
EVM(L)32**

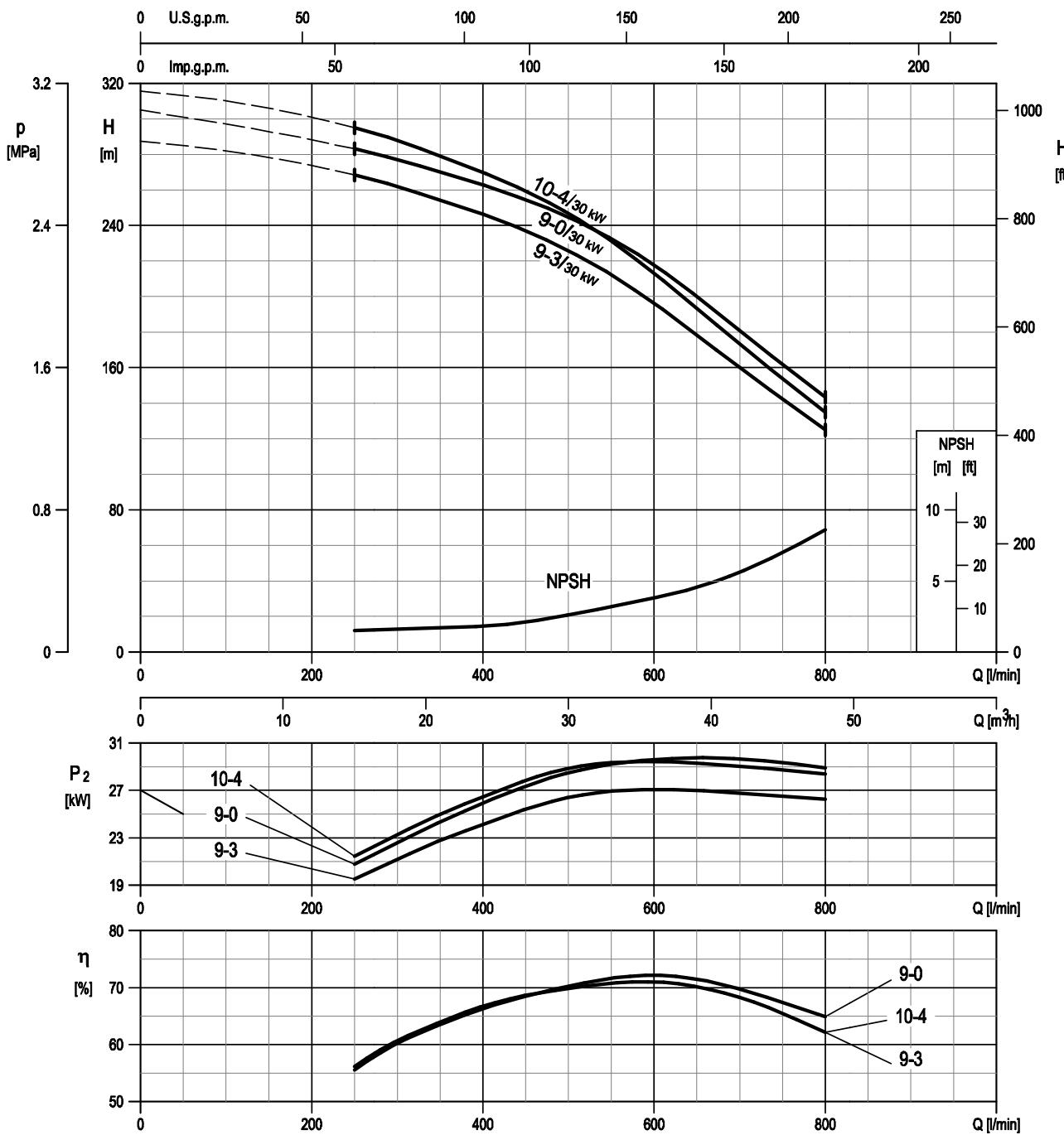


**PERFORMANCE CURVE
EVM(L)32**



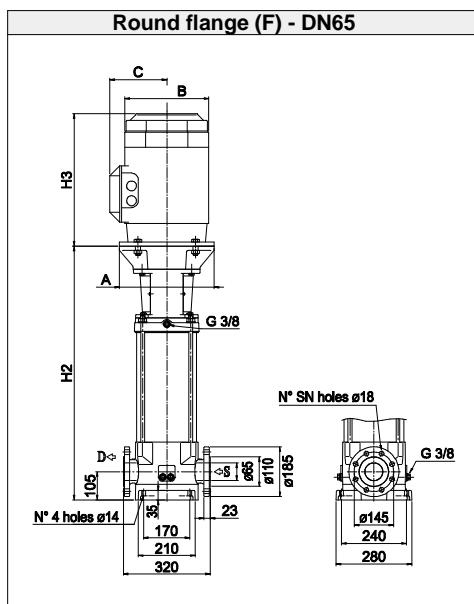
Rotation speed ≈ 3500 min⁻¹
Test standard: ISO 9906:2012 - Grade 3B

**PERFORMANCE CURVE
EVM(L)32**



Rotation speed ≈ 3500 min $^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

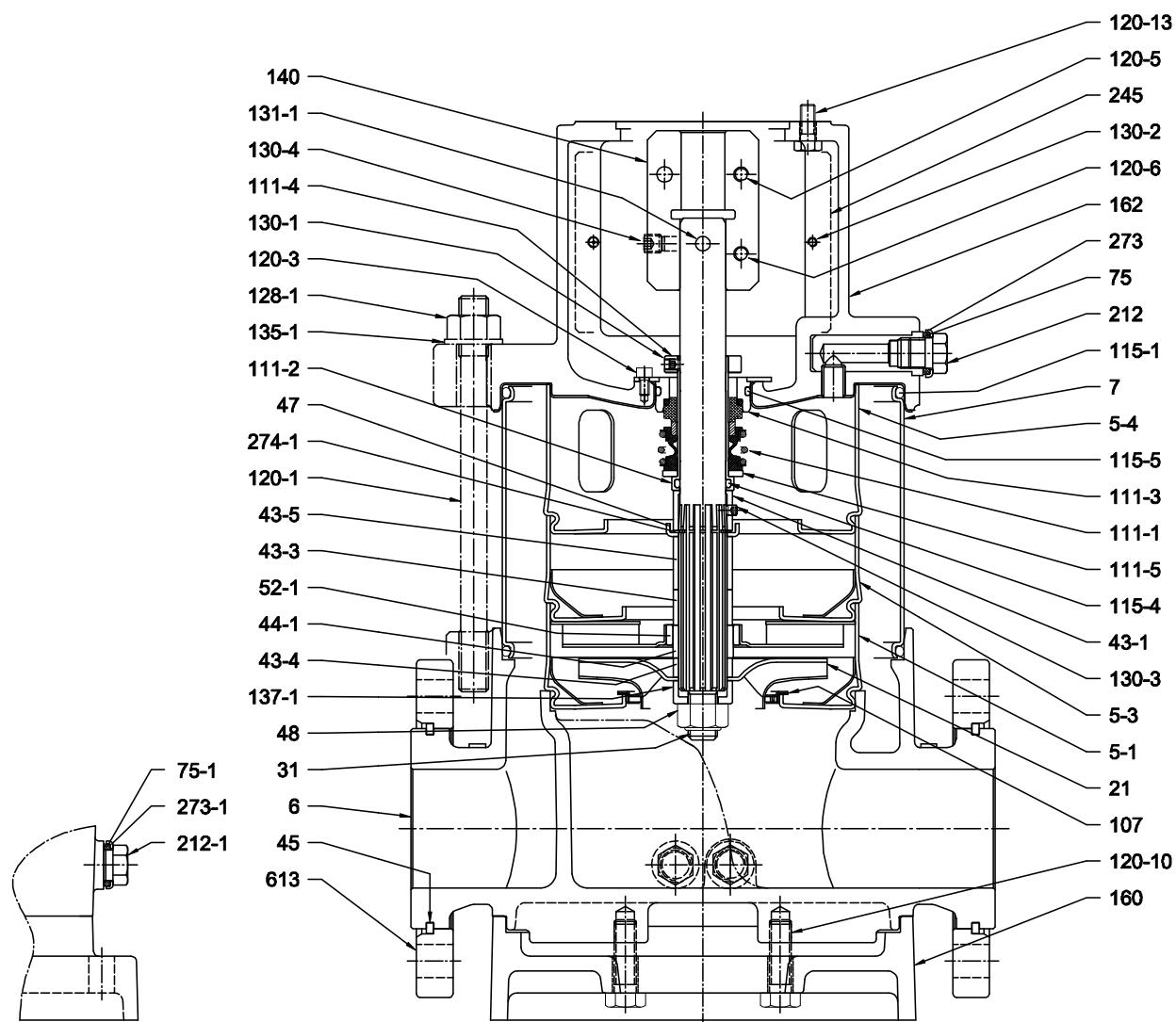
TECHNICAL DATA EVM(L)32



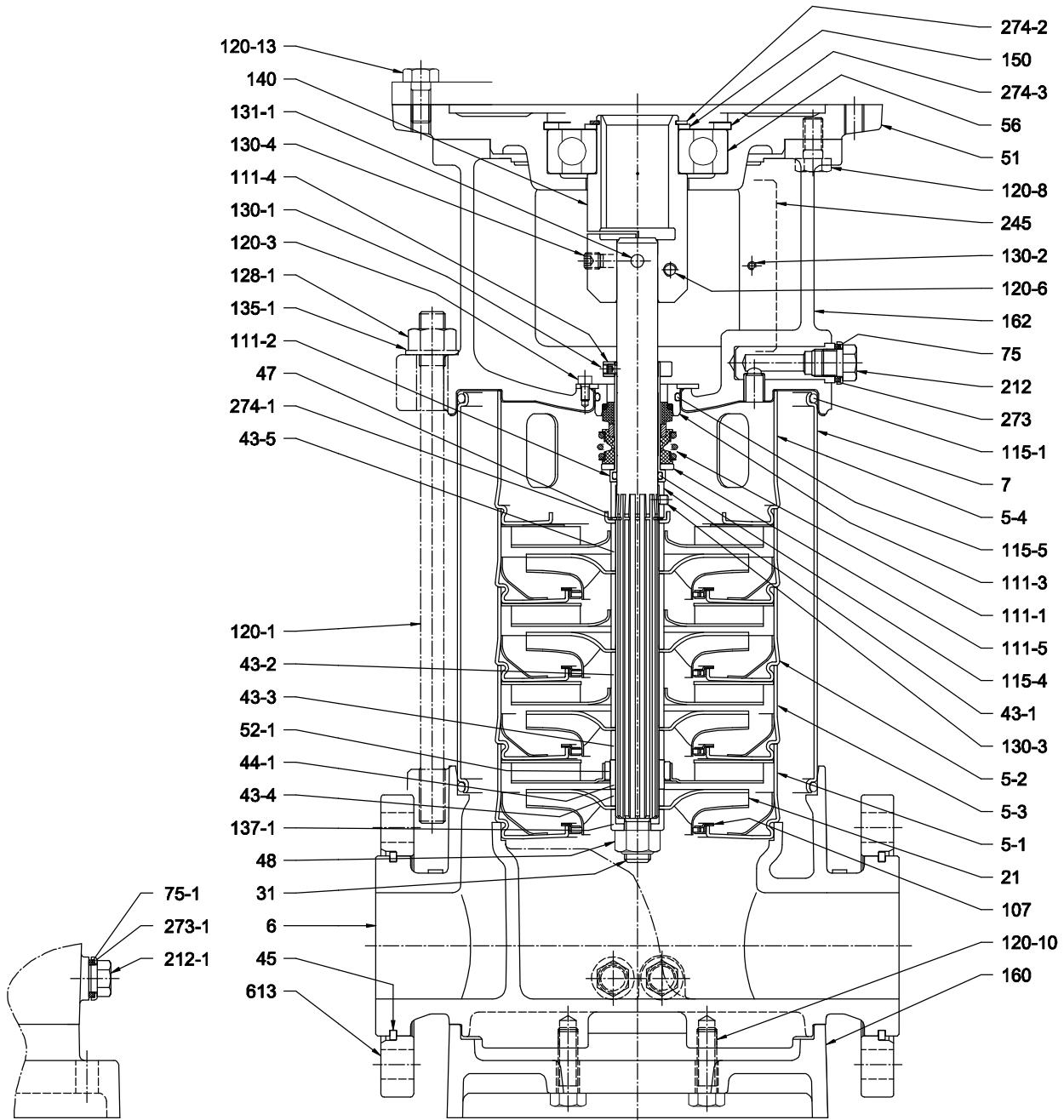
Dimensions [mm] and Weights [Kg]

Pump Type	Pmax [MPa]	Motor						Round flange (F)			
		kW	Size	A	3 ~			H2	SN	Weight Pump	Weight Pump + Motor
					B	C	H3				
EVM(L)32 1-0F6/4.0	1.6	4.0	112 M	160	196	155	306	503	4	56	#RIF!
EVM(L)32 2-2F6/5.5	1.6	5.5	132 S	300	225	160	328	524	4	58	96.6
EVM(L)32 2-0F6/7.5	1.6	7.5	132 S	300	225	160	350	524	4	58	98.4
EVM(L)32 3-3F6/7.5	1.6	7.5	132 S	300	225	160	350	572	4	74	114.4
EVM(L)32 3-0F6/11	1.6	11	160 M	350	248	194	476	703	4	74	136.5
EVM(L)32 4-3F6/11	1.6	11	160 M	350	248	194	476	751	4	77	139.5
EVM(L)32 4-0F6/15	1.6	15	160 M	350	317	238	498	751	4	77	165.9
EVM(L)32 5-3F6/15	1.6	15	160 M	350	317	238	498	799	4	96	184.9
EVM(L)32 5-2F6/15	1.6	15	160 M	350	317	238	498	799	4	96	184.9
EVM(L)32 5-0F6/18.5	1.6	18.5	160 L	350	317	238	542	799	4	96	200
EVM(L)32 6-3F6/18.5	2.5	18.5	160 L	350	317	238	542	847	8	99	203
EVM(L)32 6-0F6/22	2.5	22	180 M	350	360	268	577	847	8	99	262
EVM(L)32 7-3F6/22	2.5	22	180 M	350	360	268	577	895	8	102	265
EVM(L)32 7-2F6/22	2.5	22	180 M	350	360	268	577	895	8	102	265
EVM(L)32 7-0F6/30	2.5	30	200 L	400	399	300	658	910	8	105	333
EVM(L)32 8-3F6/30	2.5	30	200 L	400	399	300	658	958	8	105	333
EVM(L)32 8-0F6/30	3.0	30	200 L	400	399	300	658	958	8	105	333
EVM(L)32 9-3F6/30	3.0	30	200 L	400	399	300	658	1006	8	108	336
EVM(L)32 9-0F6/30	3.0	30	200 L	400	399	300	658	1006	8	108	336
EVM(L)32 10-4F6/30	3.0	30	200 L	400	399	300	658	1054	8	108	336

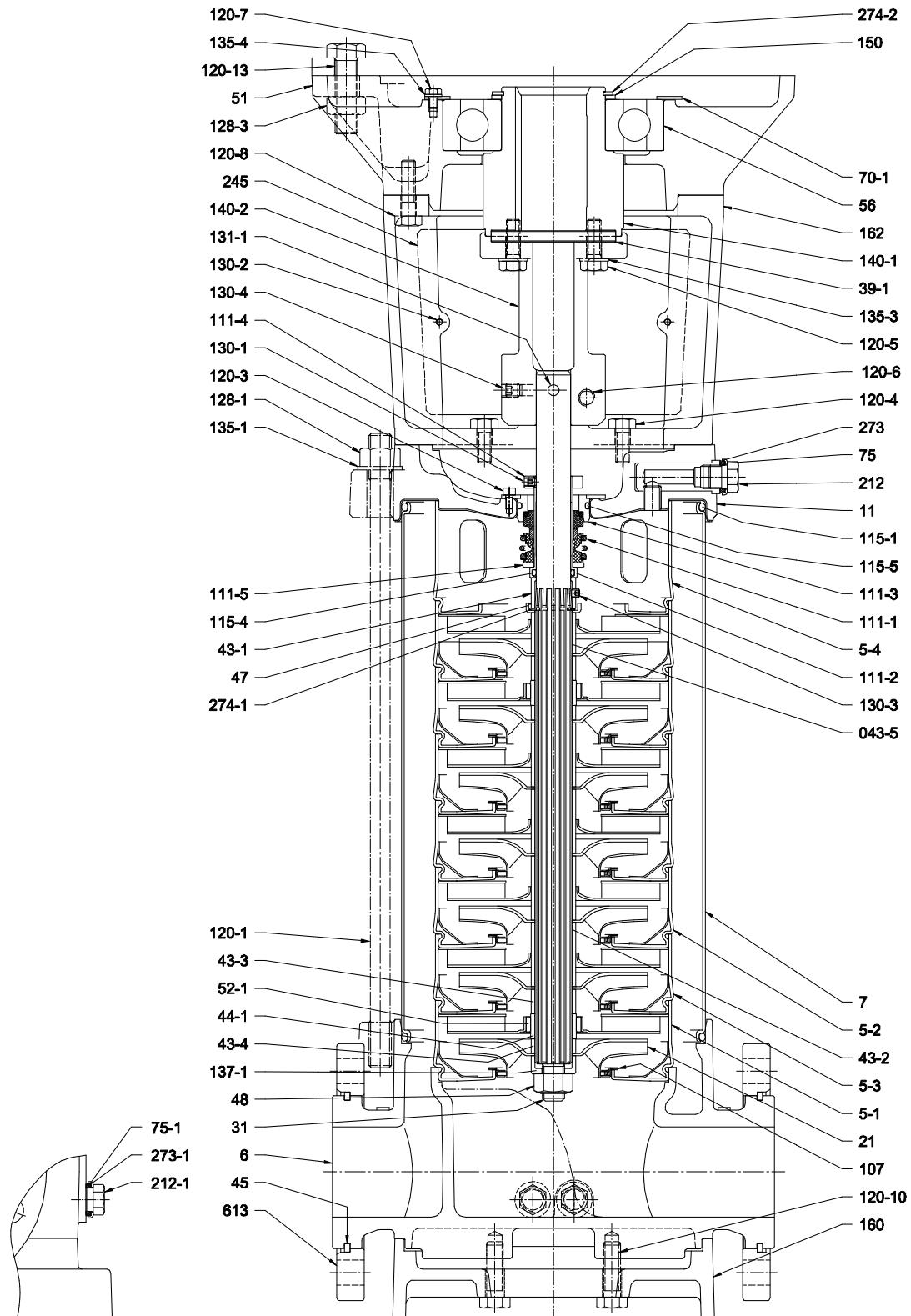
1.6 MPa=16 bar ; 2.5 MPa=25 bar; 3.0 MPa=30 bar

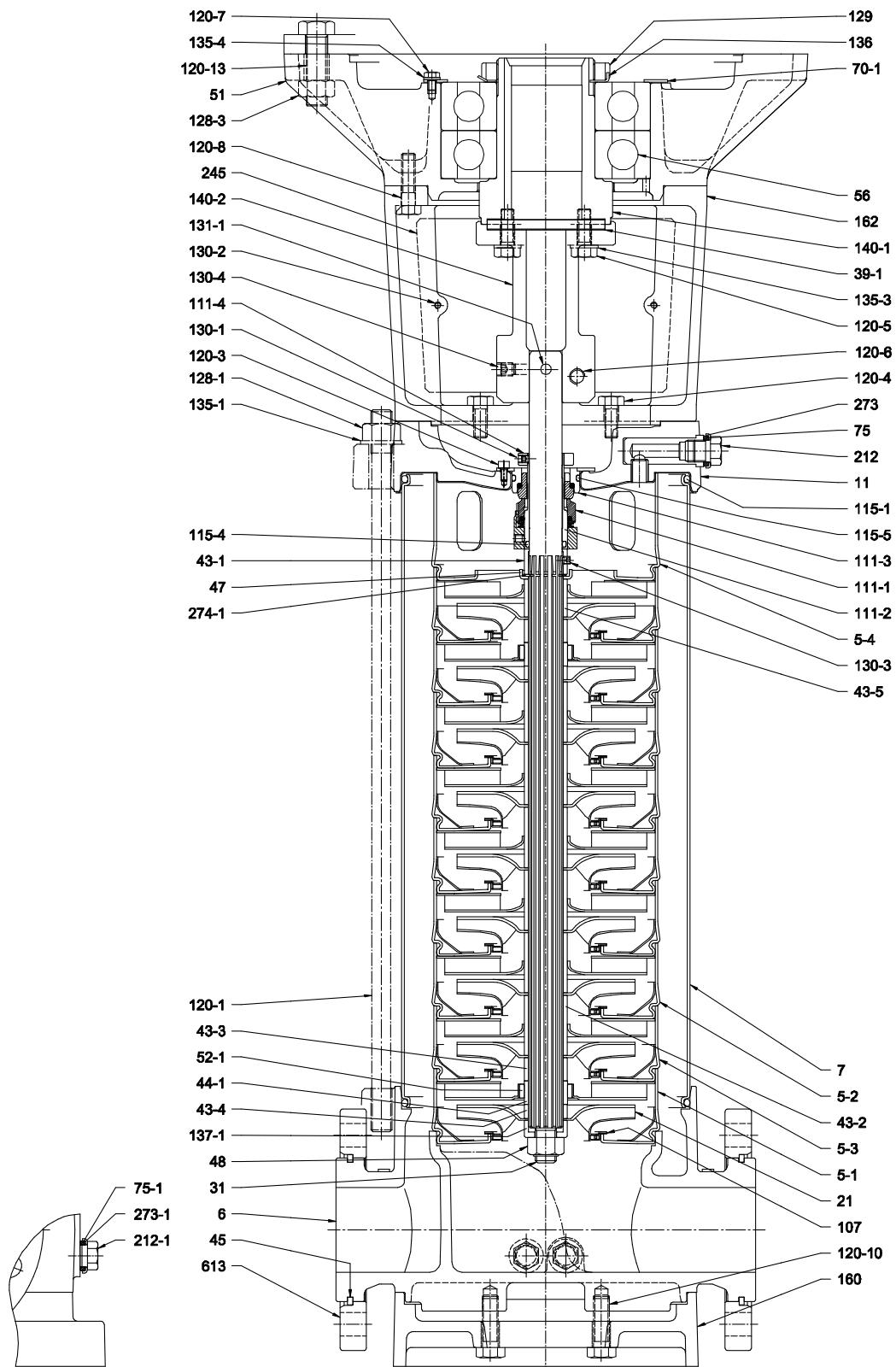
SECTIONAL VIEW
EVM(L)32

Pump without ball bearing

SECTIONAL VIEW
EVM(L)32

Pump with single ball bearing

SECTIONAL VIEW
EVM(L)32

SECTIONAL VIEW
EVM(L)32


Pump with double ball bearing

**SECTIONAL TABLE
EVM(L)32**

N°	PART NAME	MATERIAL		DIMENSIONS	STANDARD
		EVM	EVML		
5-1	Suction casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-2	Intermediate Casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-3	Intermediate casing bearing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-4	Discharge casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
6	Bottom casing	EN 1.4308 (ASTM CF8)	EN 1.4408 (ASTM CF8M)		
7	Outer casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
11	Casing cover	Cast iron+ EN 1.4301 (AISI 304)	Cast iron + EN 1.4401 (AISI 316)		
21	Impeller	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
21-1	Reduced impeller				
31	Shaft	EN 1.4401 (AISI 316)			
39-1	Key	Carbon Steel		12X8X90	UNI 6604
43-1	Shaft sleeve (mechanical seal)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-4	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-5	Shaft sleeve (last stage)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
44-1	Shaft sleeve bearing	Tungsten carbide			
45	Flange holder	EN 1.402 (AISI 420)			
47	Ring Holder	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
48	Impeller nut	A2-70 UNI 7323 with inox insert	A4-70 UNI 7323 with inox insert	M16	
51	Motor adapter	Cast iron EN-CJL-200-EN 1561			
52-1	Bearing	Tungsten carbide			
56	Ball bearing	see table page 322			
70-1	Ring for bearing	EN 1.4301 (AISI 304)			
75	O-Ring (plug)	EPDM	FPM		
75-1	O-Ring (plug)	EPDM	FPM		
107	Liner ring	PTFE / EN 1.4301 (AISI 304)	PTFE / EN 1.4401 (AISI 316)		
111-1	Mechanical seal	Silicon carbide / Carbon / FPM			
111-2	Mechanical seal cartridge	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
111-4	Seal holder	Brass OT 58 UNI 5705	EN 1.4401 (AISI 316)		
111-5	Adjusting ring	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
115-1	O-Ring (outer casing)	EPDM	FPM	D.208.91 X5.34	
115-4	O-Ring (cartridge sleeve)	EPDM	FPM	D. 24.99X3.53	
115-5	O-Ring (seal cover)	EPDM	FPM	D.44.04X3.53	
120-1	Tie-rod	Galvanized steel 6.8 strength class ISO 898/1			

VERTICAL MULTISTAGE PUMPS

SECTIONAL TABLE
EVM(L)32

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD
		EVM EVML		
120-3	Screw (mechanical seal)	A2-70 UNI 7323	M5X10	UNI 5731
120-4	Screw (casing cover)	Galvanized steel 8.8 strenght class ISO 898/1	M10X25	UNI 5793
120-5	Screw for coupling	EVM32 1 EVM32 3 to 10	Galvanized steel 8.8 strenght class ISO 898/1	M8X20 M10X30
120-6	Screw for coupling	EVM32 1 to 3-3 EVM32 3-0 to 10-3	Galvanized steel 8.8 strenght class ISO 898/1	M8X20 M12X30
120-7	Screw (bearing)		Galvanized steel 8.8 strenght class ISO 898/1	M6X10
120-8	Screw (bearing housing)	EVM32 3-0 to 10-3 EVM32 2-0 to 3-3	Galvanized steel 8.8 strenght class ISO 898/1	M10X30 M12X25
120-10	Screw (base plate)		Galvanized steel 8.8 strenght class ISO 898/1	M12X40
120-13	Screw for motor	EVM32 1 EVM32 2-0 to 3-3 EVM32 3-0 to 10-3	Galvanized steel 8.8 strenght class ISO 898/1	M8X20 M12X30 M16X65
128-1	Nut for tie rod		Galvanized steel	M 16
128-3	Nut (motor)		Galvanized steel	M16
129	Lock nut		Carbon Steel	
130-1	Set screw		A2-70 UNI 7323	M6X8
130-2	Screw for coupling guard		A2-70 UNI 7323	M5X6
130-3	Set screw (mechanical seal)		A2-70 UNI 7323	M6X6
130-4	Set screw (coupling pin)		Carbon steel	M 10X10
131-1	Pin for shaft		Carbon Steel	
135-1	Washer (Tie rod)		Galvanized steel	17X30X3
135-3	Washer (coupling)		Galvanized steel	10.5X17.5X2.2
135-4	Washer (bearing)		Carbon steel	6.4
136	Locking washer (coupling)		Carbon steel	
137-1	Impeller spacer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
140	Coupling		Brass OT 58 UNI 5705	
140-1	Coupling (motor side)		Carbon steel	
140-2	Coupling (pump side)		Carbon steel	
150	Spacer		carbon steel	
160	Base		Cast iron EN-GJL-200-EN 1561	
162	Motor bracket		Cast iron EN-GJL-200-EN 1561	
212	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
212-1	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
245	Coupling guard		EN 1.4301 (AISI 304)	
273	Plug Washer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
273-1	Plug Washer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
274-1	C-type snap ring (mechanical seal)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	Ø 26
274-2	C-type snap ring (coupling)		Carbon Steel TC 80	
274-3	C-type snap ring (bracket)		Carbon Steel TC 80	
613	Flange		Carbon steel	

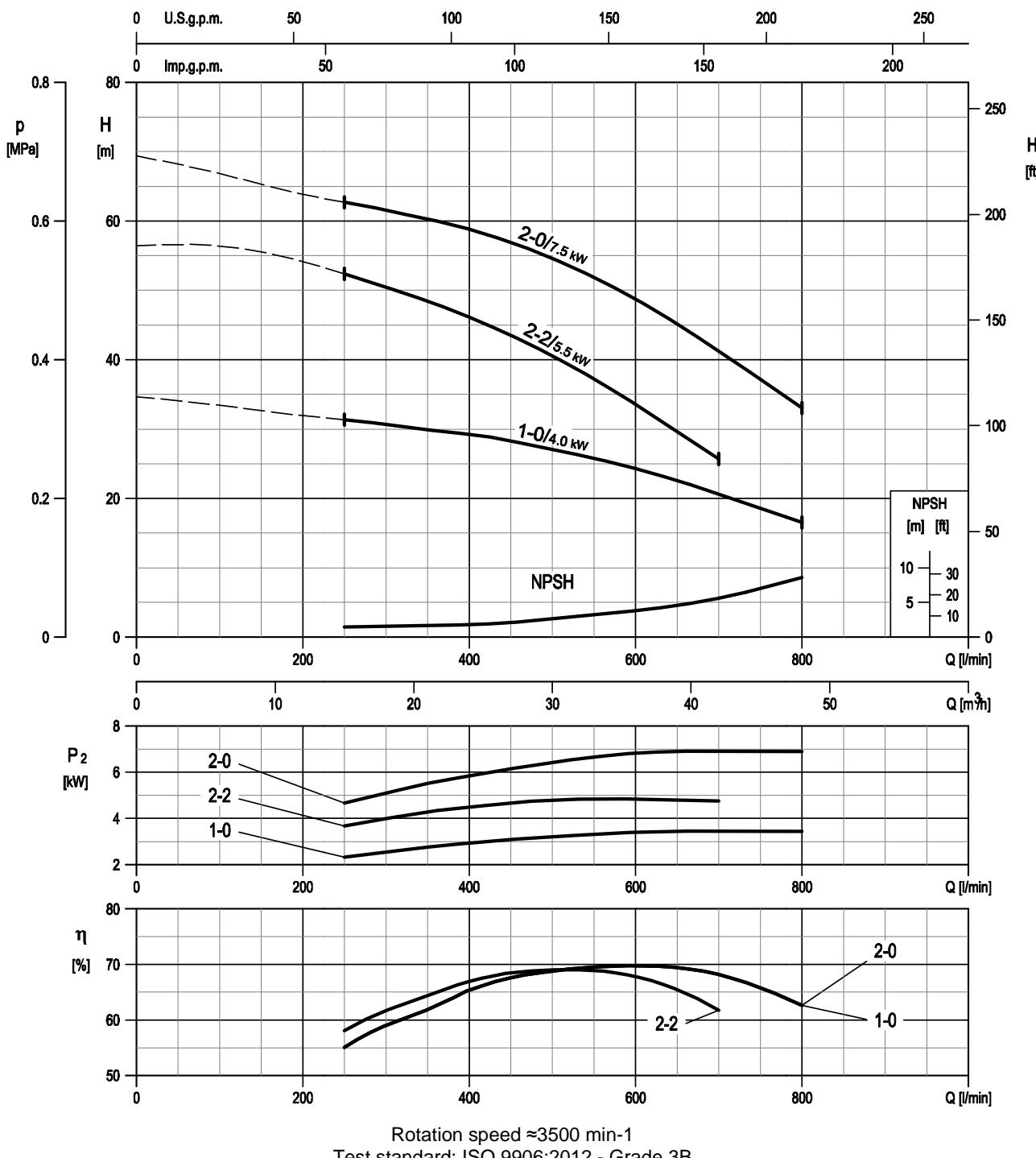
**QUANTITY FOR MODEL
EVM(L)32**

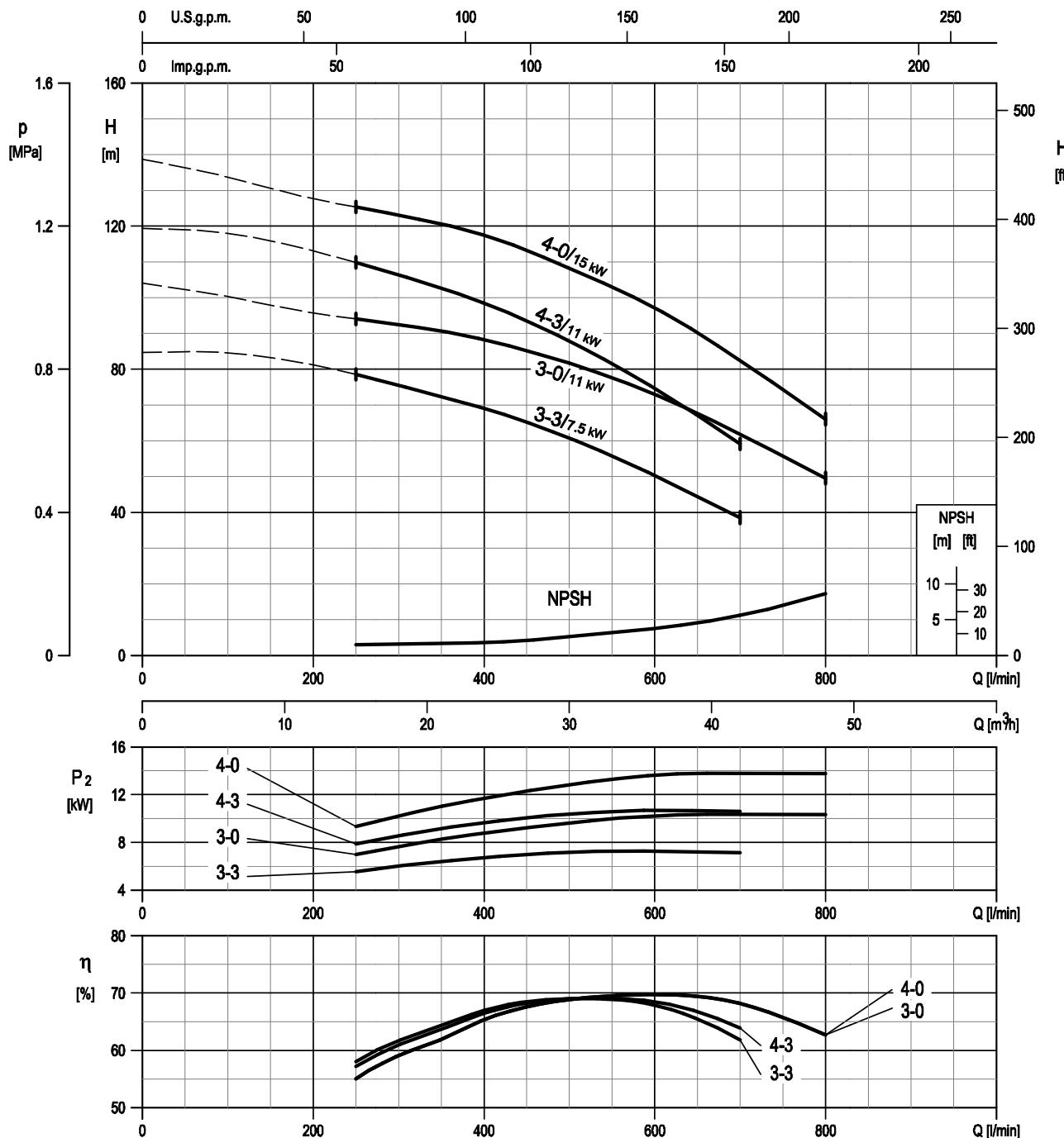
Pump Type	5-2	5-3	11	21	21-1	39-1	43-2	43-3	43-4	44-1	51	52-1	56	70-1	107	111-5	120-4	120-5	120-7	120-8	128-3	129	135-3	135-4	136	140	140-1	140-2	150	274-2	274-3
EVM(L)32 1-0F6/4.0	/	1	/	1	/	/	/	1	1	1	/	1	/	/	1	1	/	/	2	/	/	/	/	/	1	/	/	/	/	/	
EVM(L)32 2-2F6/5.5	/	1	/	2	/	/	/	1	1	1	1	1	/	2	1	/	/	4	/	/	/	/	1	/	1	1	1	1	1		
EVM(L)32 2-0F6/7.5	/	1	/	2	/	/	/	1	1	1	1	1	1	/	2	1	/	/	4	/	/	/	1	/	/	1	1	1	1	1	
EVM(L)32 3-3F6/7.5	1	1	/	3	/	1	1	1	1	1	1	1	1	/	3	1	/	/	4	/	/	/	1	/	/	1	1	1	1	1	
EVM(L)32 3-0F6/11	1	1	1	3	/	1	1	1	1	1	1	1	1	1	3	1	/	/	4	4	3	4	4	3	/	1	1	1	1	/	
EVM(L)32 4-3F6/11	2	1	1	1	3	1	2	1	1	1	1	1	1	1	4	1	4	4	3	4	4	4	4	3	/	1	1	1	1	/	
EVM(L)32 4-0F6/15	2	1	1	4	/	1	2	1	1	1	1	1	1	1	4	1	4	4	3	4	4	4	4	3	/	1	1	1	1	/	
EVM(L)32 5-3F6/15	3	1	1	2	3	1	3	1	1	1	1	1	1	1	5	1	4	4	3	4	4	4	4	3	/	1	1	1	1	/	
EVM(L)32 5-2F6/15	3	1	1	3	2	1	3	1	1	1	1	1	1	1	5	1	4	4	3	4	4	4	4	3	/	1	1	1	1	/	
EVM(L)32 5-0F6/18.5	3	1	1	5	/	1	3	1	1	1	1	1	1	1	5	1	4	4	3	4	4	4	4	3	/	1	1	1	1	/	
EVM(L)32 6-3F6/18.5	4	1	1	3	3	1	4	1	1	1	1	1	1	1	6	1	4	4	3	4	4	4	4	3	/	1	1	1	1	/	
EVM(L)32 6-0F6/22	4	1	1	5	1	1	4	1	1	1	1	1	1	1	6	1	4	4	3	4	4	4	4	3	/	1	1	1	1	/	
EVM(L)32 7-3F6/22	5	1	1	4	3	1	5	1	1	1	1	1	1	1	7	1	4	4	3	4	4	4	4	3	/	1	1	1	1	/	
EVM(L)32 7-2F6/22	5	1	1	5	2	1	5	1	1	1	1	1	1	1	7	1	4	4	3	4	4	4	4	3	/	1	1	1	1	/	
EVM(L)32 7-0F6/30	5	1	1	7	/	1	5	1	1	1	1	1	1	1	7	1	4	4	3	4	4	4	4	3	1	/	1	1	1	/	
EVM(L)32 8-3F6/30	6	1	1	5	3	1	6	1	1	1	1	1	1	1	8	1	4	4	3	4	4	4	4	1	4	3	1	/	1	/	
EVM(L)32 8-0F6/30	6	1	1	8	/	1	6	1	1	1	1	1	1	1	8	/	4	4	3	4	4	4	4	1	4	3	1	/	1	/	
EVM(L)32 9-3F6/30	7	1	1	6	3	1	7	1	1	1	1	1	1	1	9	/	4	4	3	4	4	4	4	1	4	3	1	/	1	/	
EVM(L)32 9-0F6/30	7	1	1	9	/	1	7	1	1	1	1	1	1	1	9	/	4	4	3	4	4	4	4	1	4	3	1	/	1	/	
EVM(L)32 10-4F6/30	7	2	1	6	4	1	7	2	2	2	1	2	1	1	10	/	4	4	3	4	4	4	4	1	4	3	1	/	1	/	

**BEARINGS
EVM(L)32**

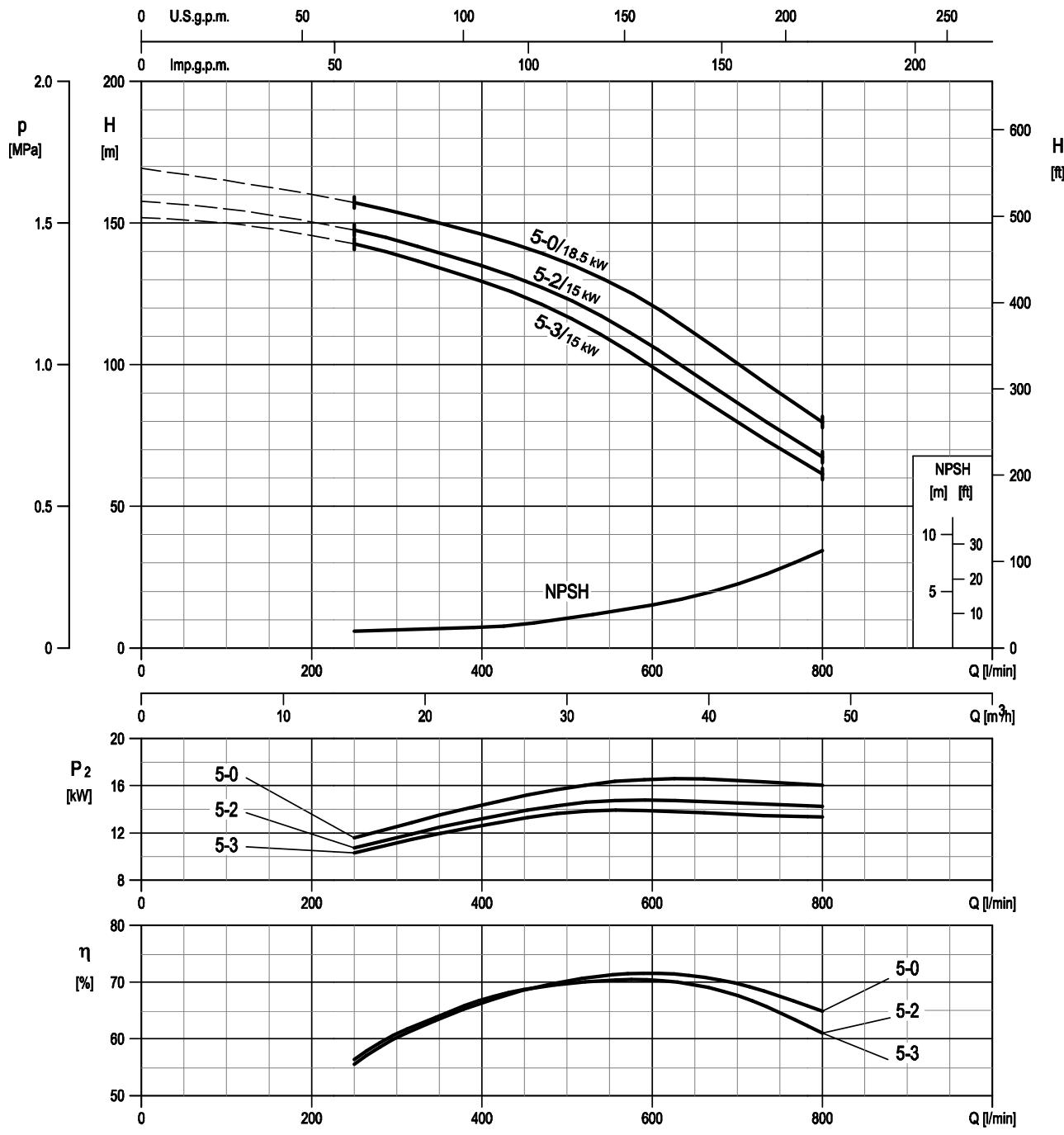
Pump Type	Nº 56
EVM(L)32 1-0F6/4.0	/
EVM(L)32 2-2F6/5.5	6310 ZZ C3
EVM(L)32 2-0F6/7.5	6310 ZZ C3
EVM(L)32 3-3F6/7.5	6310 ZZ C3
EVM(L)32 3-0F6/11	6313 ZZ C3
EVM(L)32 4-3F6/11	6313 ZZ C3
EVM(L)32 4-0F6/15	6313 ZZ C3
EVM(L)32 5-3F6/15	6313 ZZ C3
EVM(L)32 5-2F6/15	6313 ZZ C3
EVM(L)32 5-0F6/18.5	6313 ZZ C3
EVM(L)32 6-3F6/18.5	6313 ZZ C3
EVM(L)32 6-0F6/22	6315 ZZ C3
EVM(L)32 7-3F6/22	6315 ZZ C3
EVM(L)32 7-2F6/22	6315 ZZ C3
EVM(L)32 7-0F6/30	6315 ZZDT C3*
EVM(L)32 8-3F6/30	6315 ZZDT C3*
EVM(L)32 8-0F6/30	6315 ZZDT C3*
EVM(L)32 9-3F6/30	6315 ZZDT C3*
EVM(L)32 9-0F6/30	6315 ZZDT C3*
EVM(L)32 10-4F6/30	6315 ZZDT C3*

*DT=Two single row deep groove ball bearings matched for paired mounting in a tandem arrangement.

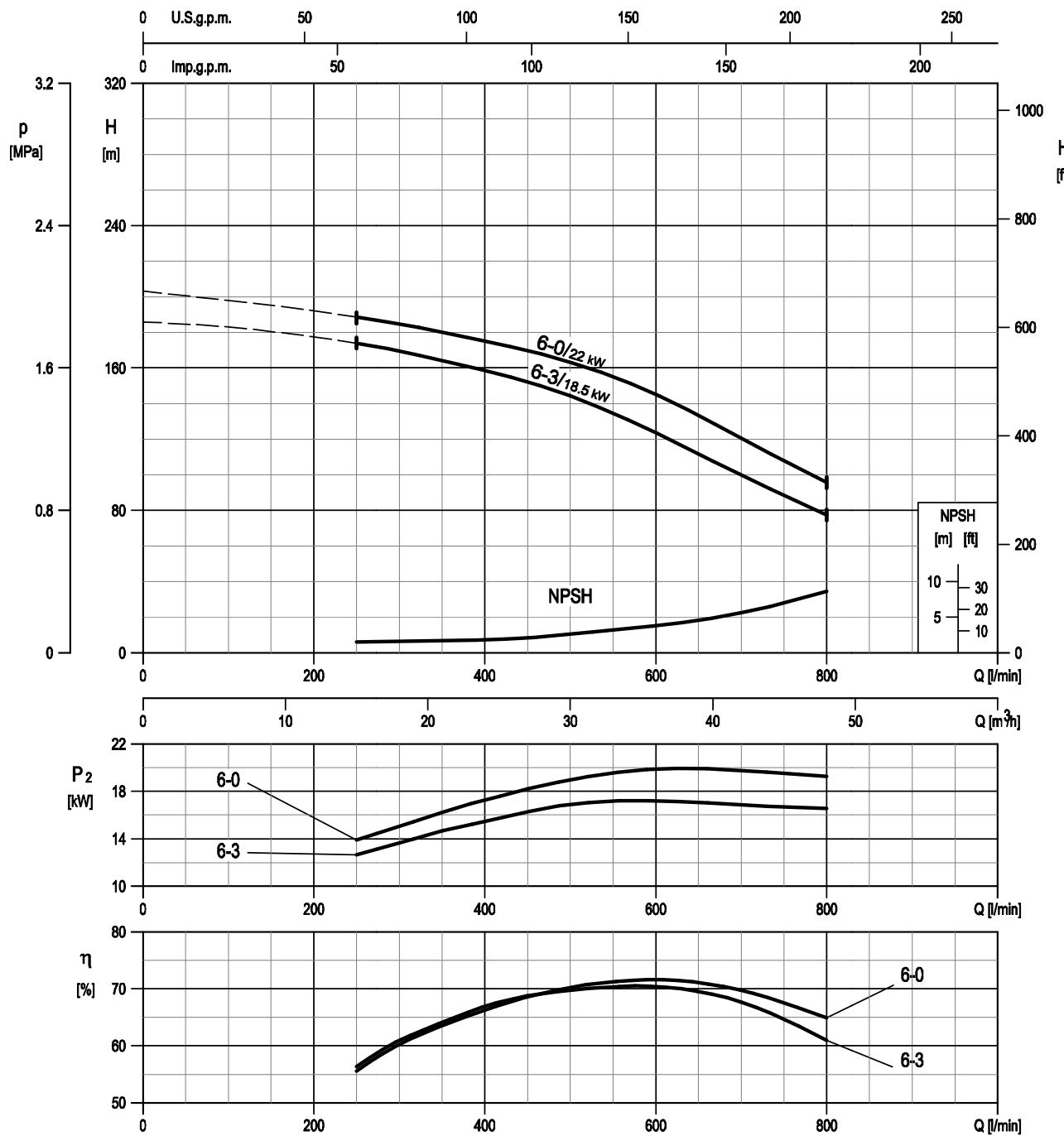
PERFORMANCE CURVE
EVMG32

PERFORMANCE CURVE
EVMG32

Rotation speed ≈3500 min⁻¹
Test standard: ISO 9906:2012 - Grade 3B

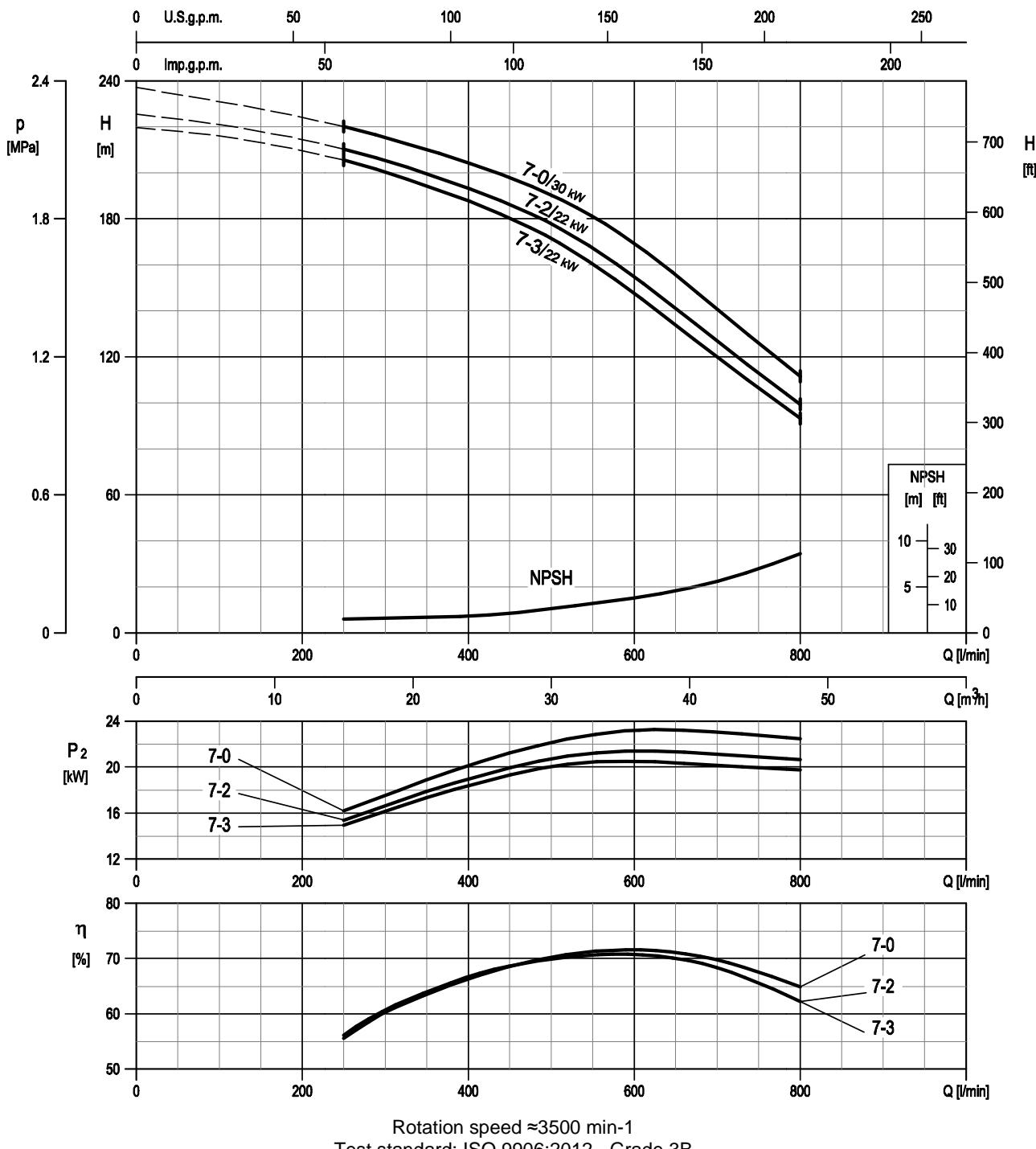
PERFORMANCE CURVE
EVMG32

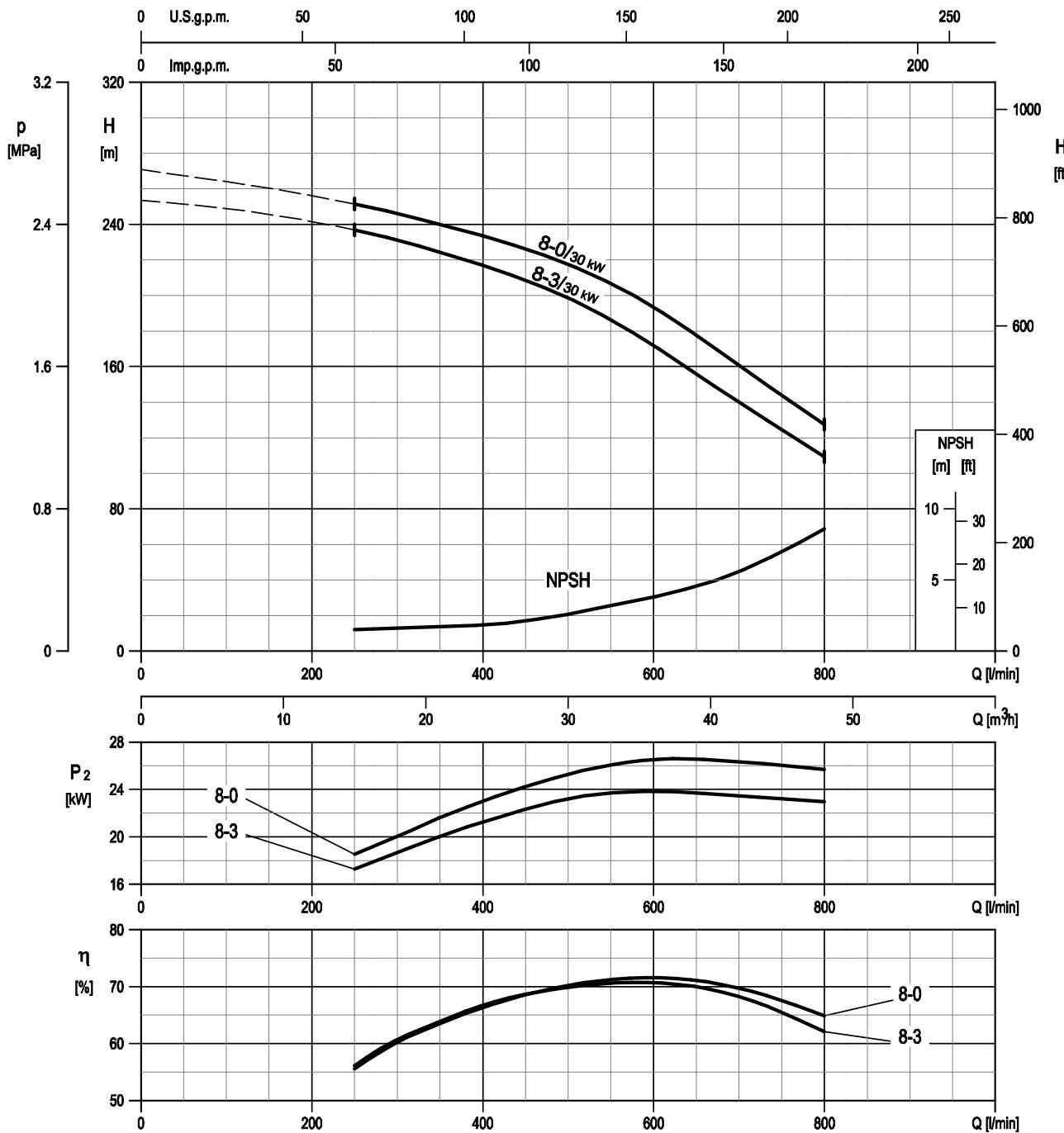
Rotation speed $\approx 3500 \text{ min}^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

PERFORMANCE CURVE
EVMG32

Rotation speed $\approx 3500 \text{ min}^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

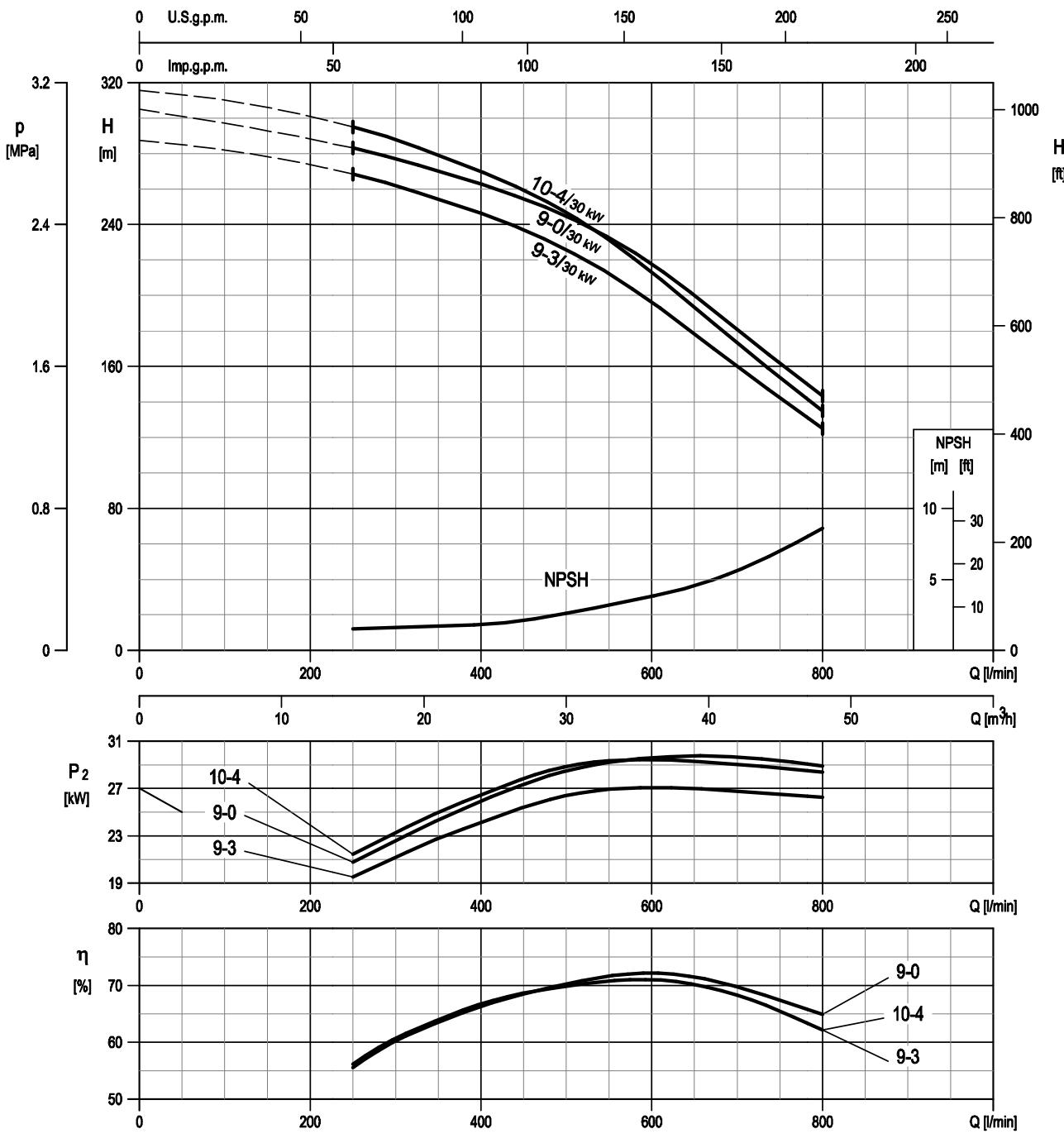
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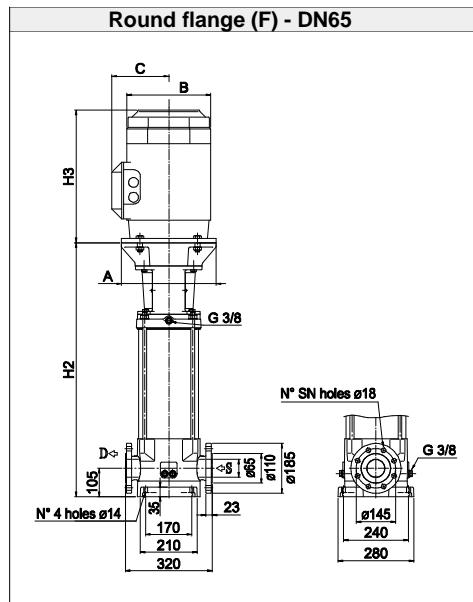
PERFORMANCE CURVE
EVMG32

**PERFORMANCE CURVE
EVMG32**


Rotation speed $\approx 3500 \text{ min}^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

328

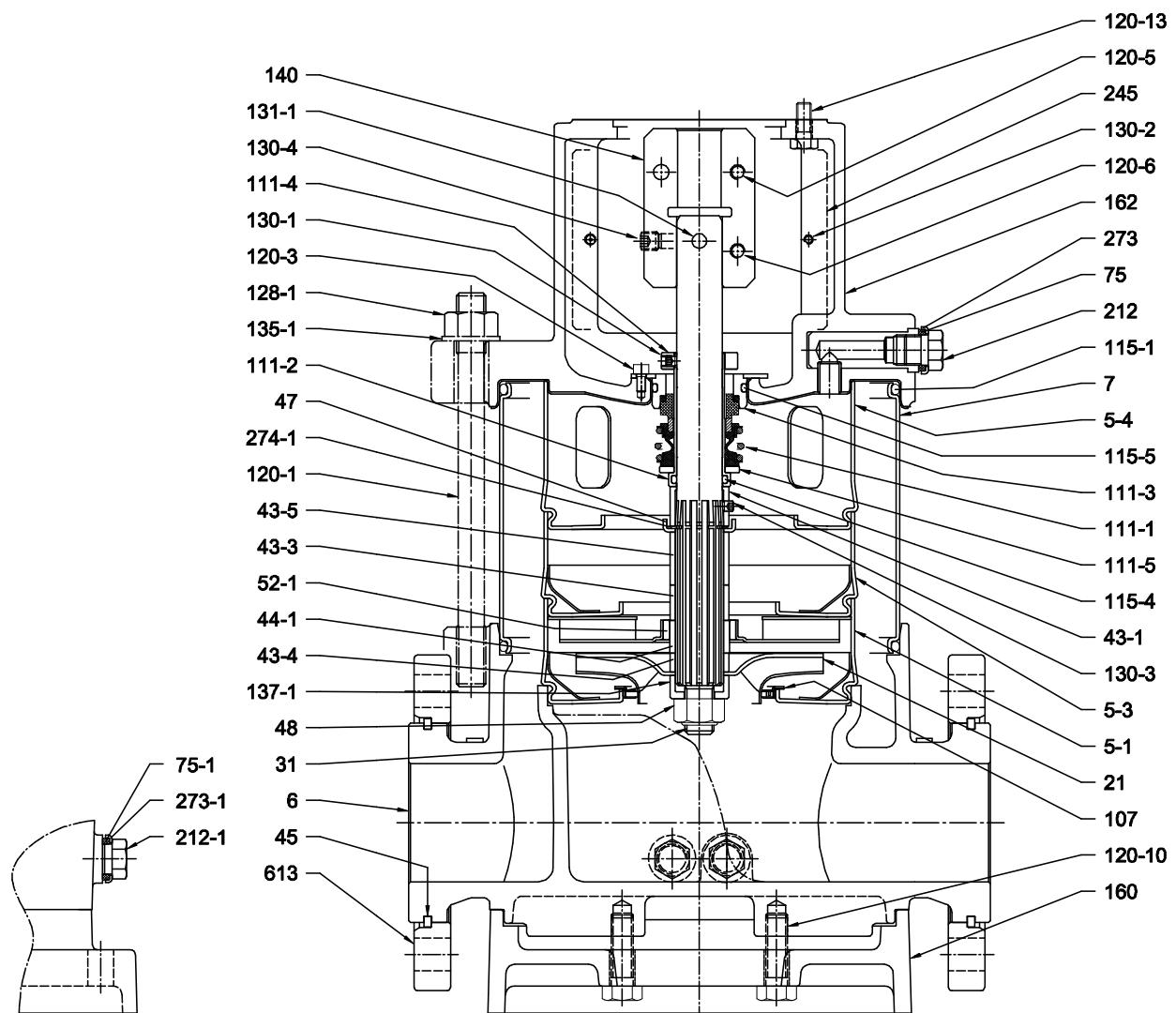
PERFORMANCE CURVE
EVMG32

**TECHNICAL DATA
EVMG32**
Dimensional sketch

Dimensions [mm] and Weights [Kg]

Pump Type	P _{max} [MPa]	Motor					Round flange (F)			
		kW	Size	A	3 ~			H2	SN	Weight Pump
EVMG32 1-0F6/4.0	1.6	4.0	112 M	160	196	155	306	503	4	56
EVMG32 2-2F6/5.5	1.6	5.5	132 S	300	225	160	328	524	4	58
EVMG32 2-0F6/7.5	1.6	7.5	132 S	300	225	160	350	524	4	58
EVMG32 3-3F6/7.5	1.6	7.5	132 S	300	225	160	350	572	4	74
EVMG32 3-0F6/11	1.6	11	160 M	350	248	194	476	703	4	74
EVMG32 4-3F6/11	1.6	11	160 M	350	248	194	476	751	4	77
EVMG32 4-0F6/15	1.6	15	160 M	350	317	238	498	751	4	77
EVMG32 5-3F6/15	1.6	15	160 M	350	317	238	498	799	4	96
EVMG32 5-2F6/15	1.6	15	160 M	350	317	238	498	799	4	96
EVMG32 5-0F6/18.5	1.6	18.5	160 L	350	317	238	542	799	4	96
EVMG32 6-3F6/18.5	2.5	18.5	160 L	350	317	238	542	847	8	99
EVMG32 6-0F6/22	2.5	22	180 M	350	360	268	577	847	8	99
EVMG32 7-3F6/22	2.5	22	180 M	350	360	268	577	895	8	102
EVMG32 7-2F6/22	2.5	22	180 M	350	360	268	577	895	8	102
EVMG32 7-0F6/30	2.5	30	200 L	400	399	300	658	910	8	105
EVMG32 8-3F6/30	2.5	30	200 L	400	399	300	658	958	8	105
EVMG32 8-0F6/30	3.0	30	200 L	400	399	300	658	958	8	105
EVMG32 9-3F6/30	3.0	30	200 L	400	399	300	658	1006	8	108
EVMG32 9-0F6/30	3.0	30	200 L	400	399	300	658	1006	8	108
EVMG32 10-4F6/30	3.0	30	200 L	400	399	300	658	1054	8	108

1.6 MPa=16 bar ; 2.5 MPa=25 bar ; 3.0 MPa=30 bar

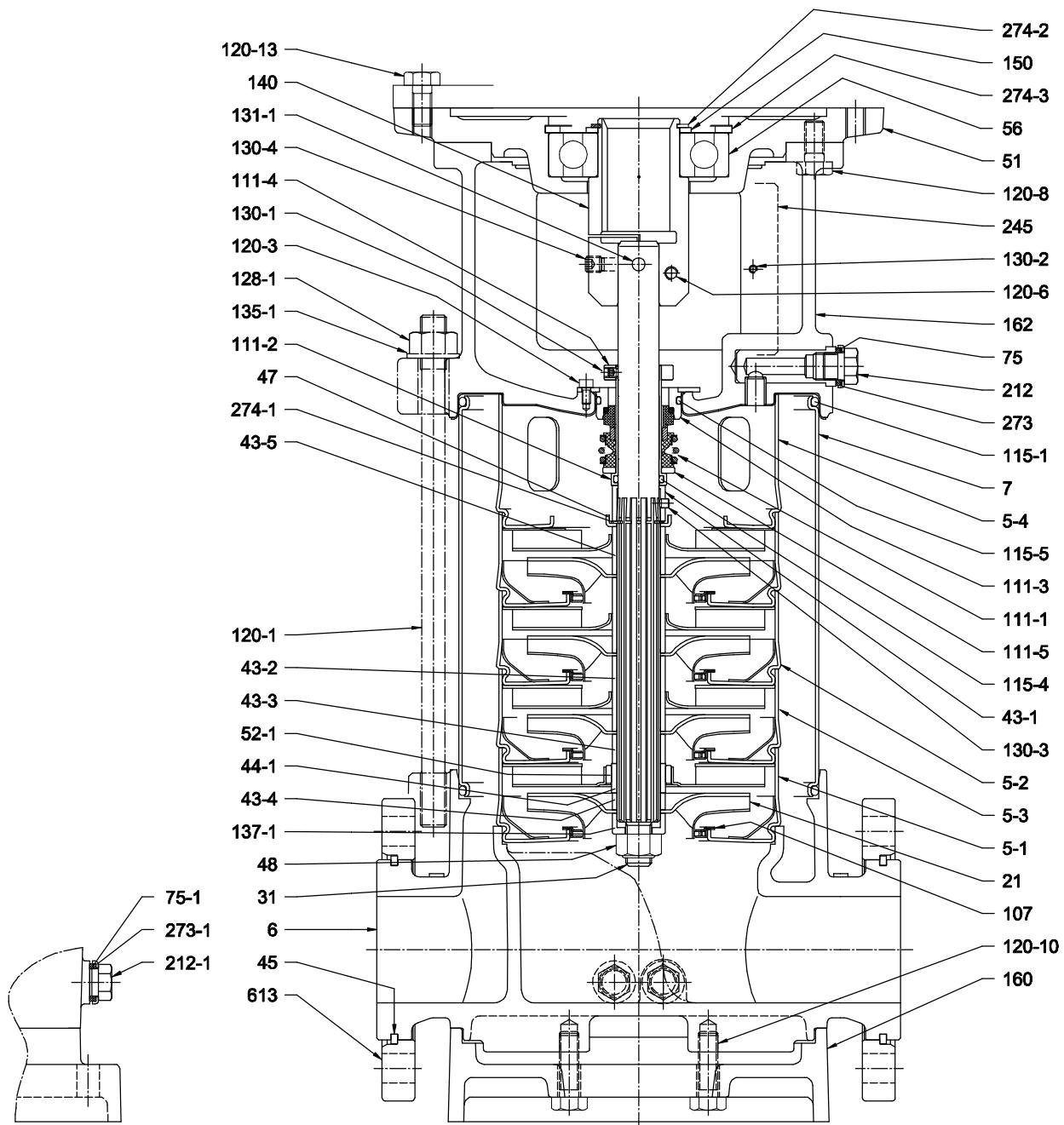
330

SECTIONAL VIEW
EVMG32

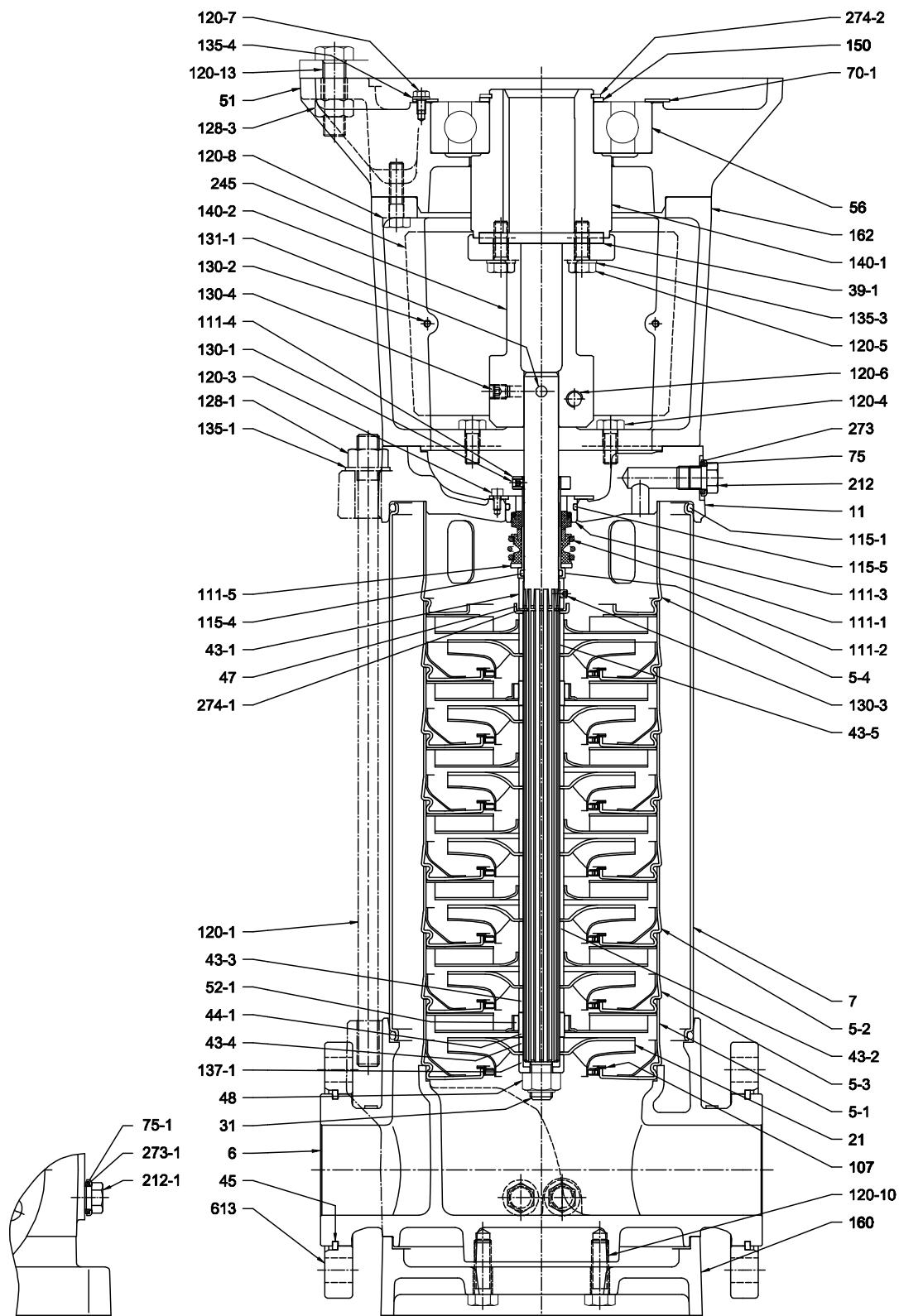
Pump without ball bearing

SECTIONAL VIEW

EVMG32

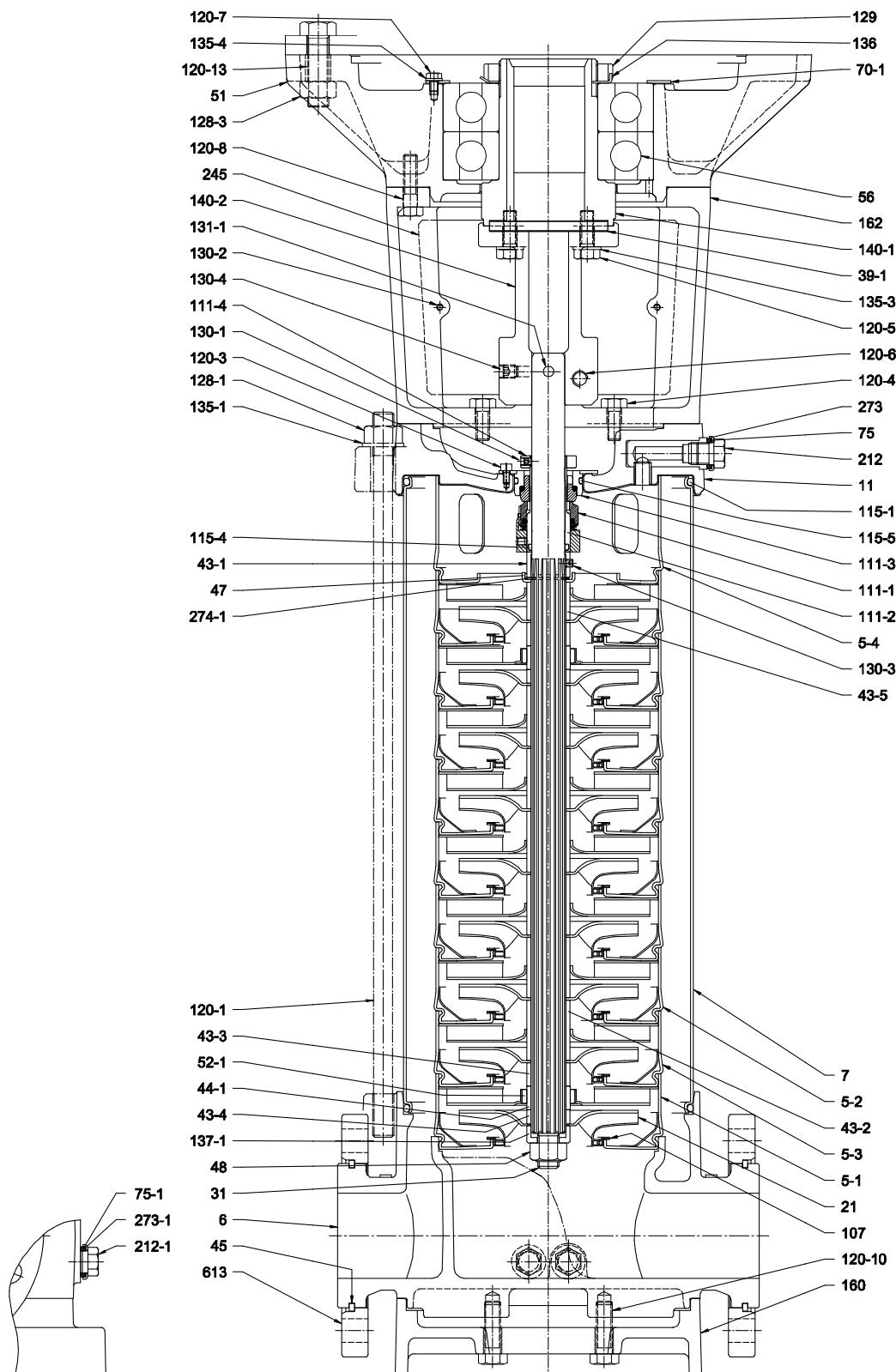


Pump with single ball bearing

SECTIONAL VIEW
EVMG32

SECTIONAL VIEW

EVMG32



Pump with double ball bearing

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VERTICAL MULTISTAGE PUMPS

SECTIONAL TABLE
EVMG32

N°	PART NAME	MATERIAL EVMG	DIMENSIONS	STANDARD
5-1	Suction casing	EN 1.4301 (AISI 304)		
5-2	Intermediate Casing	EN 1.4301 (AISI 304)		
5-3	Intermediate casing bearing	EN 1.4301 (AISI 304)		
5-4	Discharge casing	EN 1.4301 (AISI 304)		
6	Bottom casing	Cast Iron EN GJL-250-EN1561		
7	Outer casing	EN 1.4301 (AISI 304)		
11	Casing cover	Cast Iron EN GJL-250-EN1561		
21	Impeller	EN 1.4301 (AISI 304)		
21-1	Reduced impeller			
31	Shaft	EN 1.4401 (AISI 316)		
39-1	Key	Carbon Steel	12X8X90	UNI 6604
43-1	Shaft sleeve (mechanical seal)	EN 1.4301 (AISI 304)		
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)		
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)		
43-4	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)		
43-5	Shaft sleeve (last stage)	EN 1.4301 (AISI 304)		
44-1	Shaft sleeve bearing	Tungsten carbide		
45	Flange holder	EN 1.402 (AISI 420)		
47	Ring Holder	EN 1.4301 (AISI 304)		
48	Impeller nut	A2-70 UNI 7323 with inox insert	M16	
51	Motor adapter	Cast iron EN-GJL-200-EN 1561		
52-1	Bearing	Tungsten carbide		
56	Ball bearing	see table page 337		
70-1	Ring for bearing	EN 1.4301 (AISI 304)		
75	O-Ring (plug)	EPDM		
75-1	O-Ring (plug)	EPDM		
107	Liner ring	PTFE / EN 1.4301 (AISI 304)		
111-1	Mechanical seal	Silicon carbide / Carbon / FPM		
111-2	Mechanical seal cartridge	EN 1.4301 (AISI 304)		
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)		
111-4	Seal holder	Brass OT 58 UNI 5705		
111-5	Adjusting ring	EN 1.4301 (AISI 304)		
115-1	O-Ring (outer casing)	EPDM	D.208.91 X5.34	
115-4	O-Ring (cartridge sleeve)	EPDM	D. 24.99X3.53	
115-5	O-Ring (seal cover)	EPDM	D.44.04X3.53	
120-1	Tie-rod	Galvanized steel 6.8 strength class ISO 898/1		

**SECTIONAL TABLE
EVMG32**

N°	PART NAME	MATERIAL EVMG	DIMENSIONS	STANDARD
120-3	Screw (mechanical seal)	A2-70 UNI 7323	M5X10	UNI 5731
120-4	Screw (casing cover)	Galvanized steel 8.8 strenght class ISO 898/1	M10X25	UNI 5793
120-5	Screw for coupling	EVM32 1 EVM32 3 to 10	Galvanized steel 8.8 strenght class ISO 898/1	M8X20 M10X30 UNI 5931 UNI 5739
120-6	Screw for coupling	EVM32 1 to 3-3 EVM32 3-0 to 10-3	Galvanized steel 8.8 strenght class ISO 898/1	M8X20 M12X30 UNI 5931 UNI 5931
120-7	Screw (bearing)		Galvanized steel 8.8 strenght class ISO 898/1	M6X10 UNI 5739
120-8	Screw (bearing housing)	EVM32 3-0 to 10-3 EVM32 2-0 to 3-3	Galvanized steel 8.8 strenght class ISO 898/1	M10X30 M12X25 UNI 5739 UNI 5739
120-10	Screw (base plate)		Galvanized steel 8.8 strenght class ISO 898/1	M12X40 UNI 5739
120-13	Screw for motor	EVM32 1 EVM32 2-0 to 3-3 EVM32 3-0 to 10-3	Galvanized steel 8.8 strenght class ISO 898/1	M8X20 M12X30 M16X65 UNI 5739 UNI 5739
128-1	Nut for tie rod		Galvanized steel	M 16 UNI 5588
128-3	Nut (motor)		Galvanized steel	M16 UNI 5588
129	Lock nut		Carbon Steel	
130-1	Set screw		A2-70 UNI 7323	M6X8 UNI 5923
130-2	Screw for coupling guard		A2-70 UNI 7323	M5X6 UNI 7687
130-3	Set screw (mechanical seal)		A2-70 UNI 7323	M6X6 UNI 5923
130-4	Set screw (coupling pin)		Carbon steel	M 10X10 UNI 5923
131-1	Pin for shaft		Carbon Steel	
135-1	Washer (Tie rod)		Galvanized steel	17X30X3 UNI 6592
135-3	Washer (coupling)		Galvanized steel	10.5X17.5X2.2 UNI 1751
135-4	Washer (bearing)		Carbon steel	6.5 UNI 1751
136	Locking washer (coupling)		Carbon steel	
137-1	Impeller spacer		EN 1.4301 (AISI 304)	
140	Coupling		Brass OT 58 UNI 5705	
140-1	Coupling (motor side)		Carbon steel	
140-2	Coupling (pump side)		Carbon steel	
150	Spacer		carbon steel	
160	Base		Cast iron EN-GJL-200-EN 1561	
162	Motor bracket		Cast iron EN-GJL-200-EN 1561	
212	Plug		EN 1.4301 (AISI 304)	
212-1	Plug		EN 1.4301 (AISI 304)	
245	Coupling guard		EN 1.4301 (AISI 304)	
273	Plug Washer		EN 1.4301 (AISI 304)	
273-1	Plug Washer		EN 1.4301 (AISI 304)	
274-1	C-type snap ring (mechanical seal)		EN 1.4301 (AISI 304)	Ø 26 UNI 7435
274-2	C-type snap ring (coupling)		Carbon Steel TC 80	
274-3	C-type snap ring (bracket)		Carbon Steel TC 80	
613	Flange		Carbon steel	

VERTICAL MULTISTAGE PUMPS

QUANTITY FOR MODEL
EVMG32

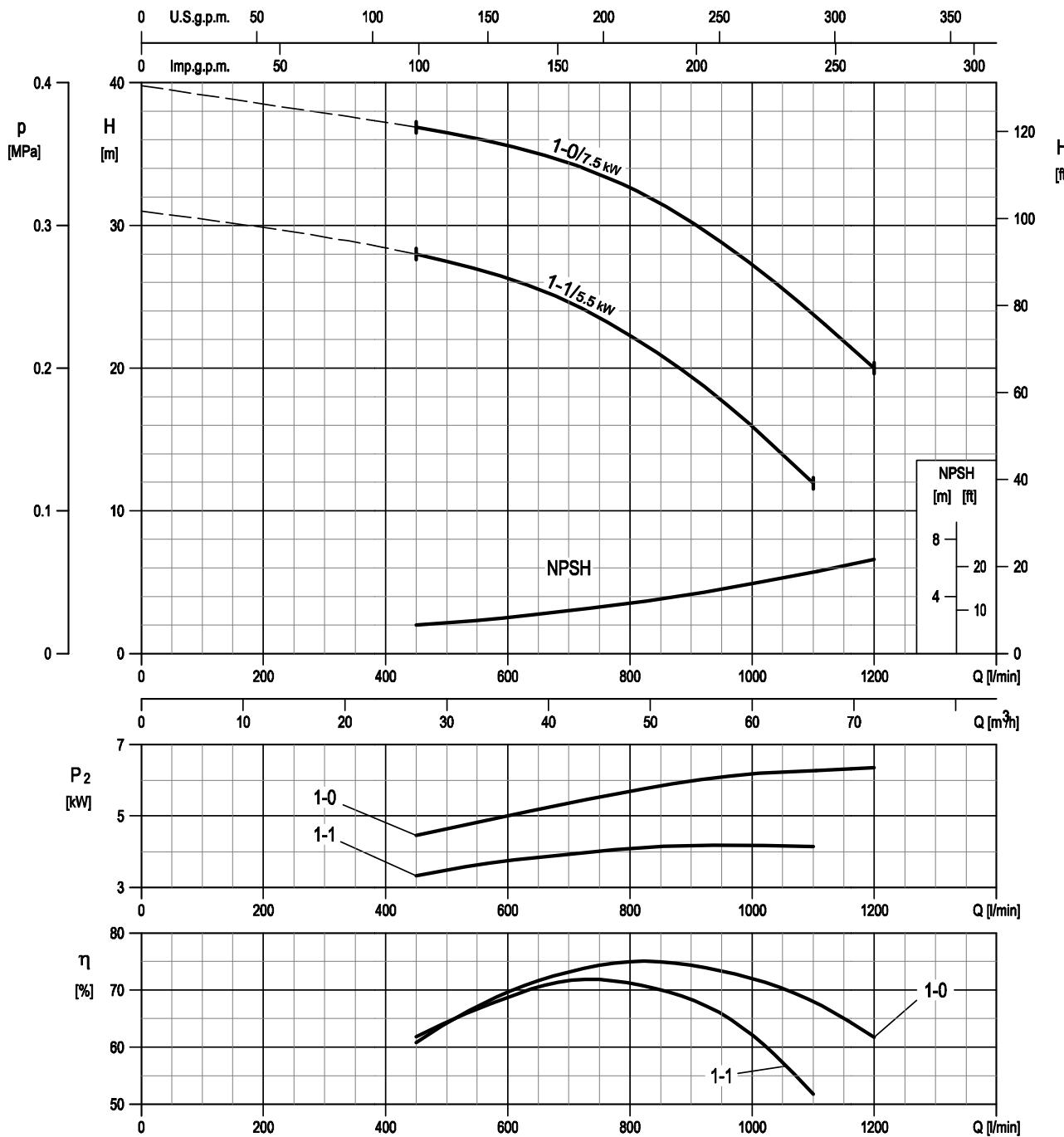
Pump Type	Nº																														
	5-2	5-3	11	21	21-1	39-1	43-2	43-3	43-4	44-1	51	52-1	56	70-1	107	111-5	120-4	120-5	120-7	120-8	128-3	129	135-3	135-4	136	140	140-1	140-2	150	274-2	274-3
EVMG32 1-0F6/4.0	/	1	/	1	/	/	/	1	1	1	/	1	/	1	1	/	2	/	/	/	/	/	/	/	1	/	/	/	/	/	
EVMG32 2-2F6/5.5	/	1	/	2	/	/	1	1	1	1	1	/	2	1	/	/	/	4	/	/	/	/	1	/	1	/	1	1	1		
EVMG32 2-0F6/7.5	/	1	/	2	/	/	1	1	1	1	1	/	2	1	/	/	4	/	/	/	/	1	/	1	/	1	1	1	1		
EVMG32 3-3F6/7.5	1	1	/	3	/	1	1	1	1	1	1	/	3	1	/	/	4	/	/	/	/	1	/	1	/	1	1	1			
EVMG32 3-0F6/11	1	1	1	3	/	1	1	1	1	1	1	1	3	1	4	4	3	4	4	4	/	4	3	/	1	1	1	1			
EVMG32 4-3F6/11	2	1	1	1	3	1	2	1	1	1	1	1	4	1	4	4	3	4	4	4	/	4	3	/	1	1	1	1			
EVMG32 4-0F6/15	2	1	1	4	/	1	2	1	1	1	1	1	4	1	4	4	3	4	4	4	/	4	3	/	1	1	1	1			
EVMG32 5-3F6/15	3	1	1	2	3	1	3	1	1	1	1	1	5	1	4	4	3	4	4	4	/	4	3	/	1	1	1	1			
EVMG32 5-2F6/15	3	1	1	3	2	1	3	1	1	1	1	1	5	1	4	4	3	4	4	4	/	4	3	/	1	1	1	1			
EVMG32 5-0F6/18.5	3	1	1	5	/	1	3	1	1	1	1	1	5	1	4	4	3	4	4	4	/	4	3	/	1	1	1	1			
EVMG32 6-3F6/18.5	4	1	1	3	3	1	4	1	1	1	1	1	6	1	4	4	3	4	4	4	/	4	3	/	1	1	1	1			
EVMG32 6-0F6/22	4	1	1	5	1	1	4	1	1	1	1	1	6	1	4	4	3	4	4	4	/	4	3	/	1	1	1	1			
EVMG32 7-3F6/22	5	1	1	4	3	1	5	1	1	1	1	1	7	1	4	4	3	4	4	4	/	4	3	/	1	1	1	1			
EVMG32 7-2F6/22	5	1	1	5	2	1	5	1	1	1	1	1	7	1	4	4	3	4	4	4	/	4	3	/	1	1	1	1			
EVMG32 7-0F6/30	5	1	1	7	/	1	5	1	1	1	1	1	7	1	4	4	3	4	4	4	1	4	3	1	/	1	1	/			
EVMG32 8-3F6/30	6	1	1	5	3	1	6	1	1	1	1	1	8	1	4	4	3	4	4	4	1	4	3	1	/	1	1	/			
EVMG32 8-0F6/30	6	1	1	8	/	1	6	1	1	1	1	1	8	/	4	4	3	4	4	4	1	4	3	1	/	1	1	/			
EVMG32 9-3F6/30	7	1	1	6	3	1	7	1	1	1	1	1	9	/	4	4	3	4	4	4	1	4	3	1	/	1	1	/			
EVMG32 9-0F6/30	7	1	1	9	/	1	7	1	1	1	1	1	9	/	4	4	3	4	4	4	1	4	3	1	/	1	1	/			
EVMG32 10-4F6/30	7	2	1	6	4	1	7	2	2	2	1	2	1	10	/	4	4	3	4	4	4	1	4	3	1	/	1	1	/		

BEARINGS
EVMG32

Pump Type	Nº
EVMG32 1-0F6/4.0	/
EVMG32 2-2F6/5.5	6310 ZZ C3
EVMG32 2-0F6/7.5	6310 ZZ C3
EVMG32 3-3F6/7.5	6310 ZZ C3
EVMG32 3-0F6/11	6313 ZZ C3
EVMG32 4-3F6/11	6313 ZZ C3
EVMG32 4-0F6/15	6313 ZZ C3
EVMG32 5-3F6/15	6313 ZZ C3
EVMG32 5-2F6/15	6313 ZZ C3
EVMG32 5-0F6/18.5	6313 ZZ C3
EVMG32 6-3F6/18.5	6313 ZZ C3
EVMG32 6-0F6/22	6315 ZZ C3
EVMG32 7-3F6/22	6315 ZZ C3
EVMG32 7-2F6/22	6315 ZZ C3
EVMG32 7-0F6/30	6315 ZZDT C3*
EVMG32 8-3F6/30	6315 ZZDT C3*
EVMG32 8-0F6/30	6315 ZZDT C3*
EVMG32 9-3F6/30	6315 ZZDT C3*
EVMG32 9-0F6/30	6315 ZZDT C3*
EVMG32 10-4F6/30	6315 ZZDT C3*

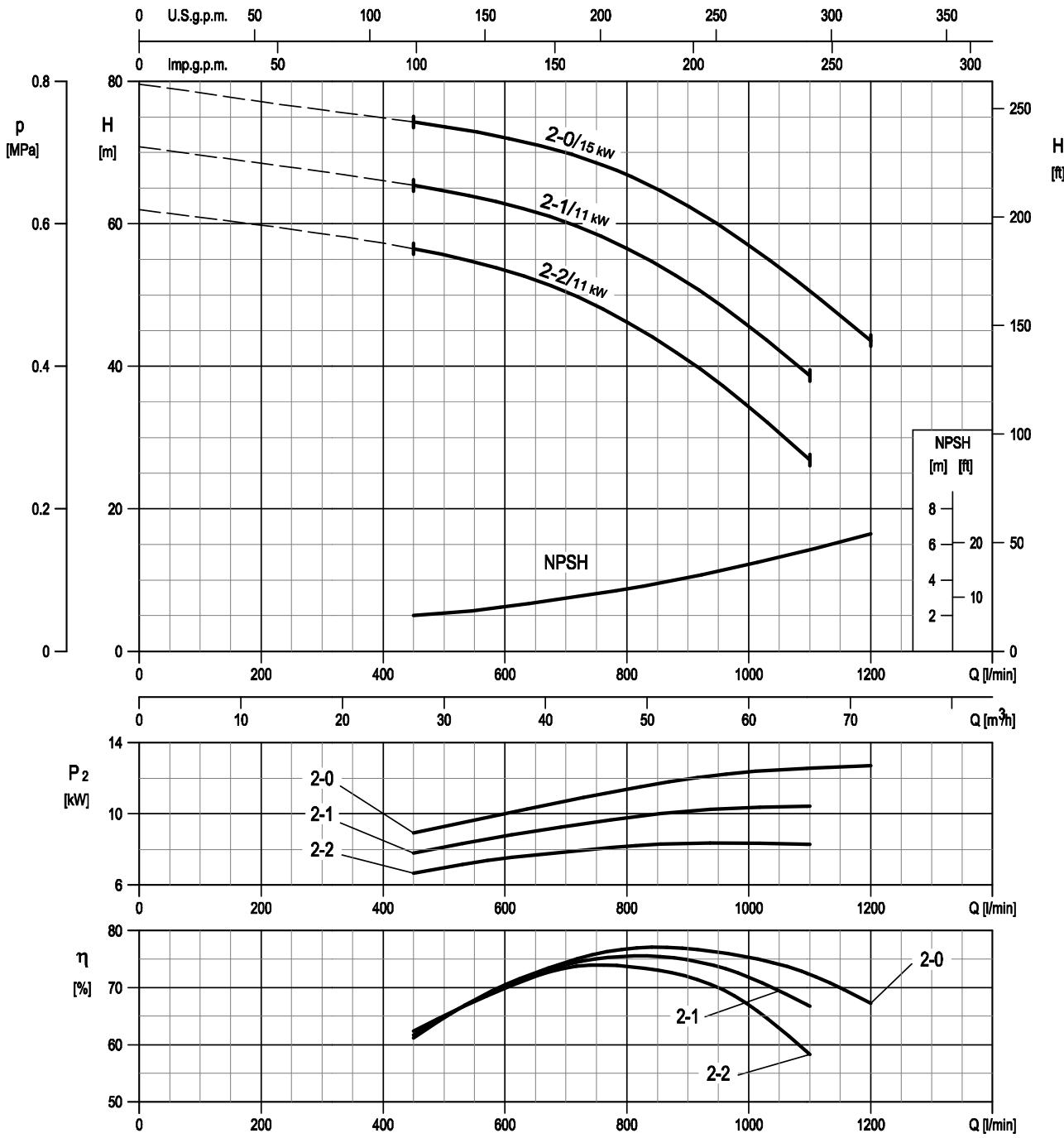
*DT=Two single row deep groove ball bearings matched for paired mounting in a tandem arrangement.

**PERFORMANCE CURVE
EVM(L)45**



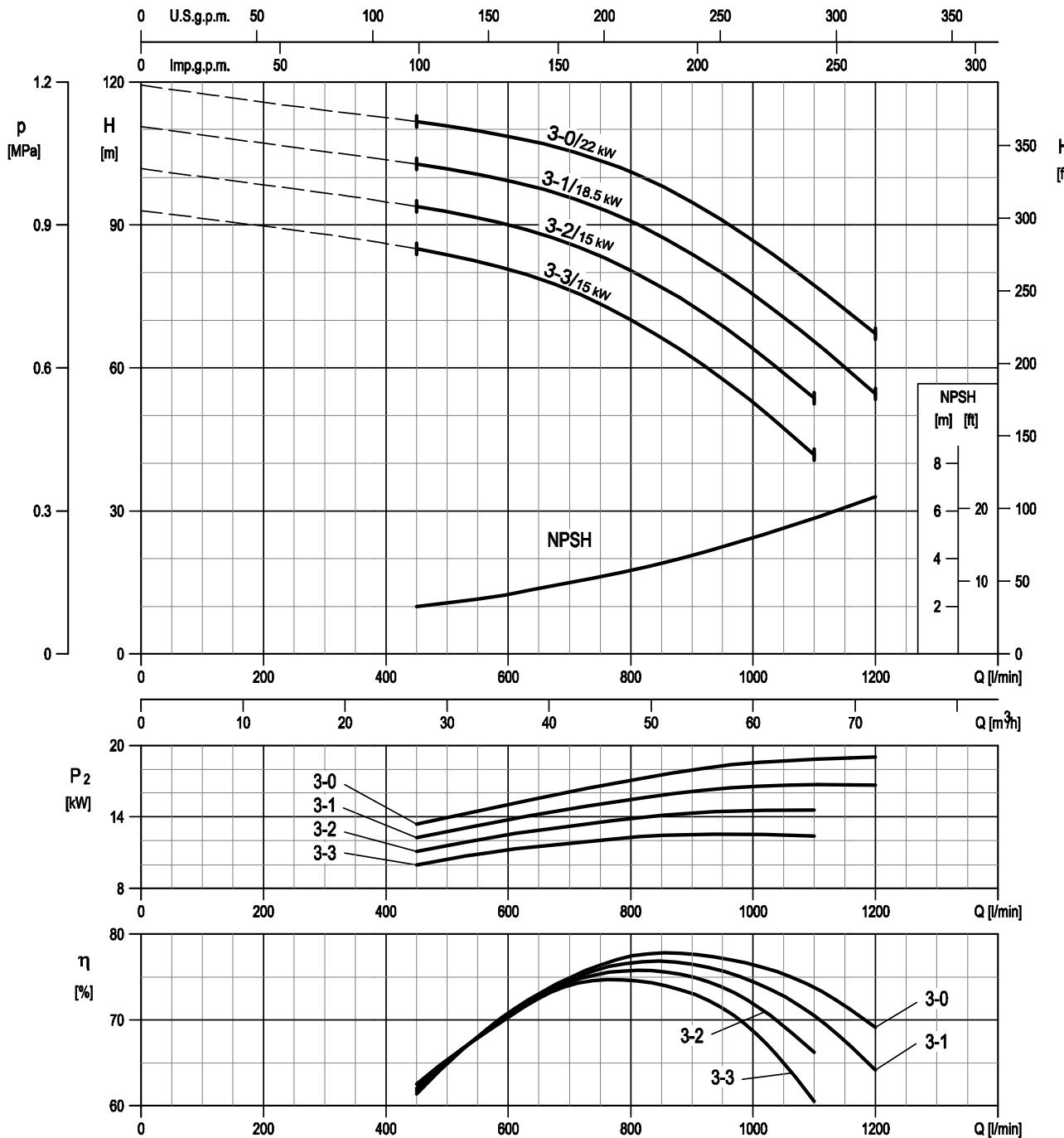
Rotation speed ≈ 3500 min⁻¹
Test standard: ISO 9906:2012 - Grade 3B

**PERFORMANCE CURVE
EVM(L)45**



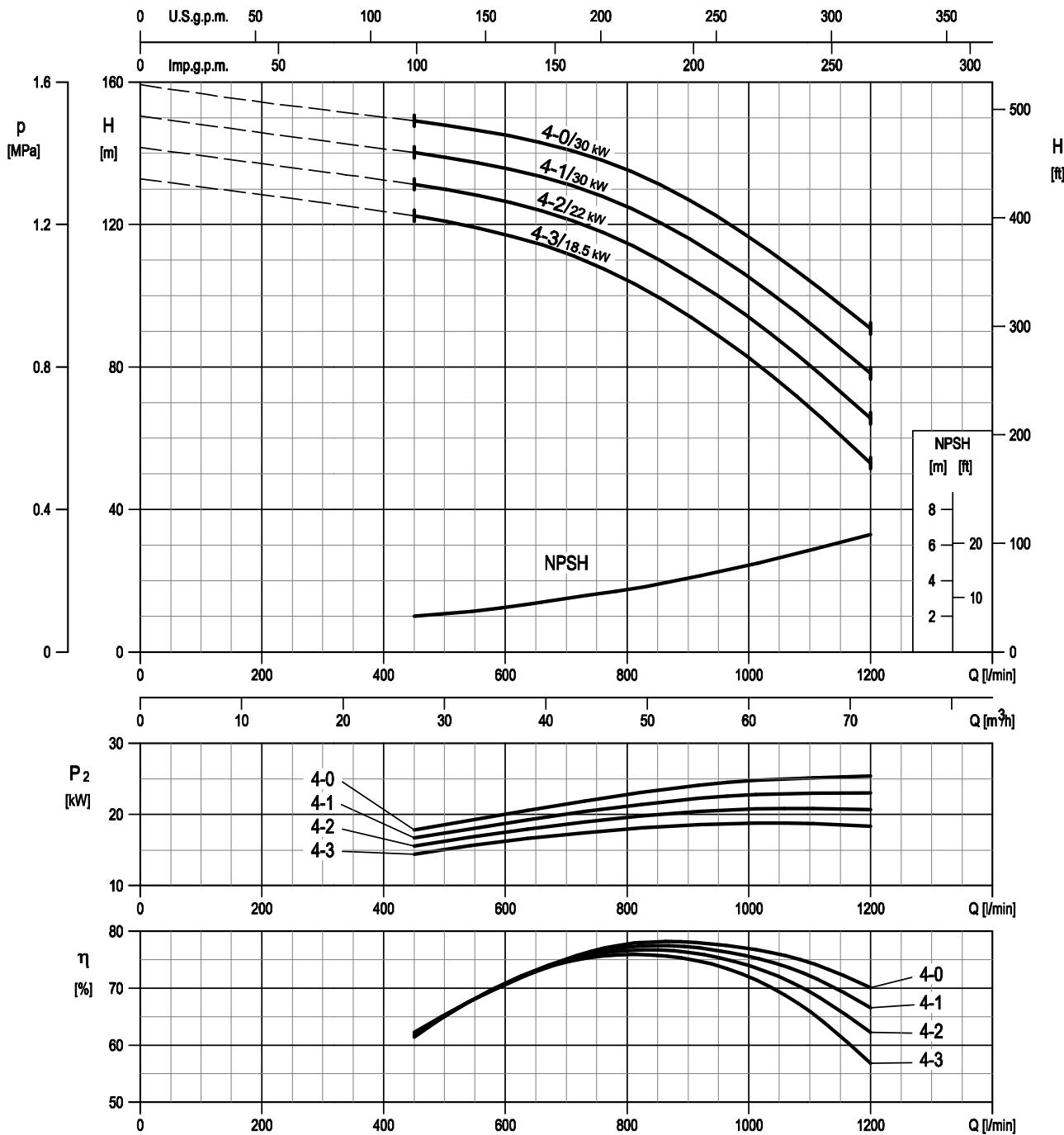
Rotation speed $\approx 3500 \text{ min}^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

**PERFORMANCE CURVE
EVM(L)45**



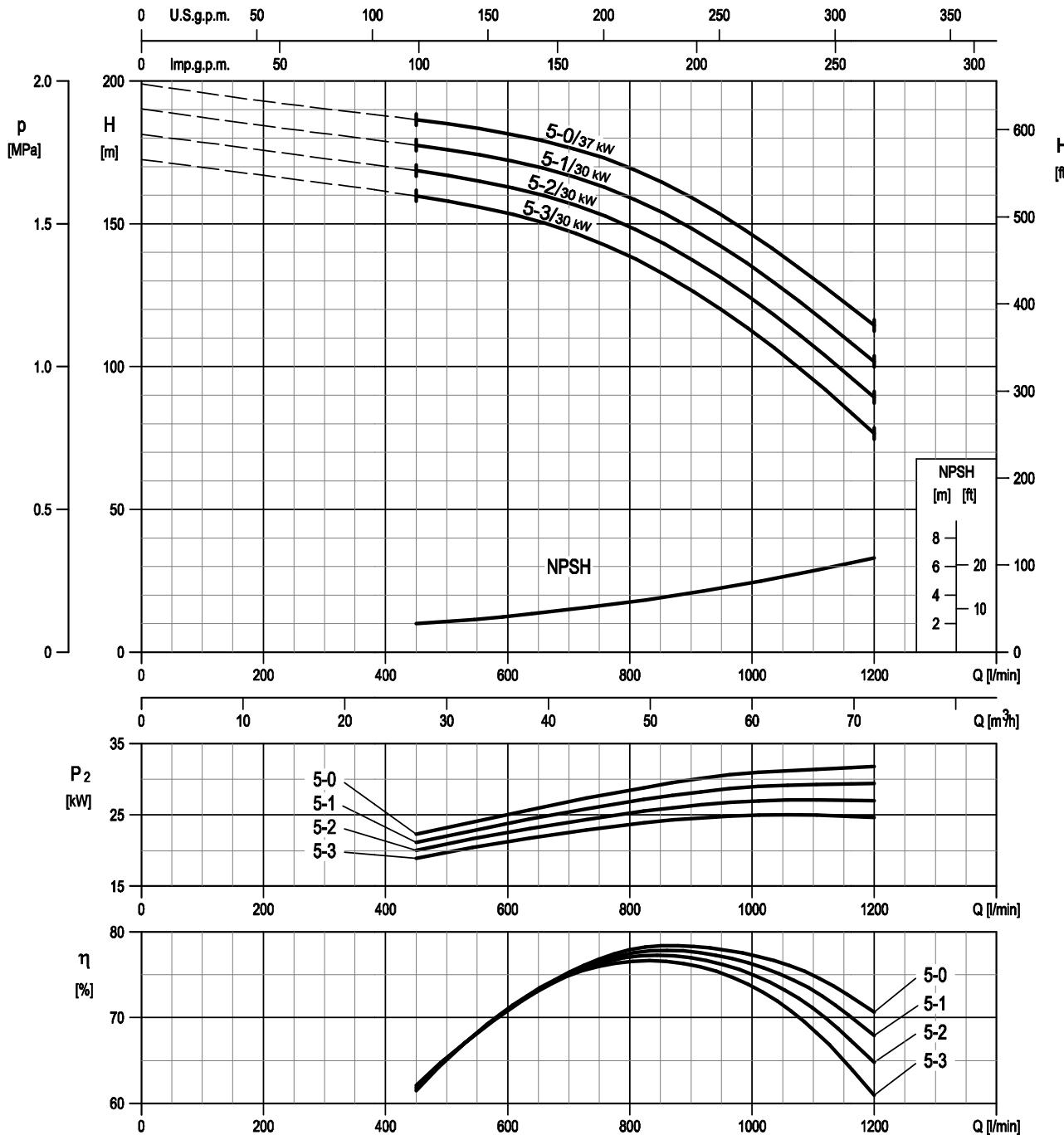
Rotation speed ≈3500 min⁻¹
Test standard: ISO 9906:2012 - Grade 3B

340

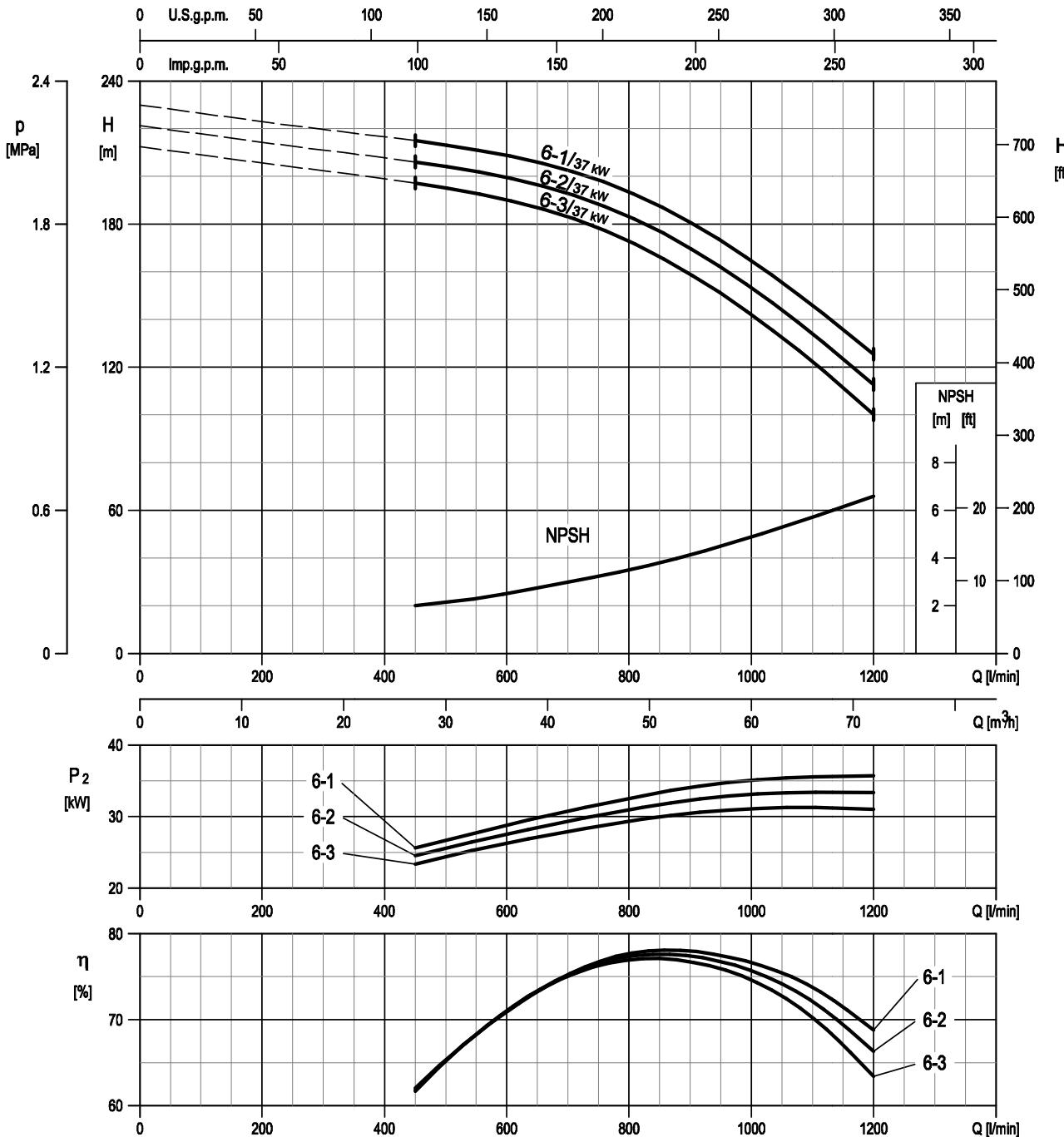
PERFORMANCE CURVE
EVM(L)45

Rotation speed ≈ 3500 min $^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

**PERFORMANCE CURVE
EVM(L)45**



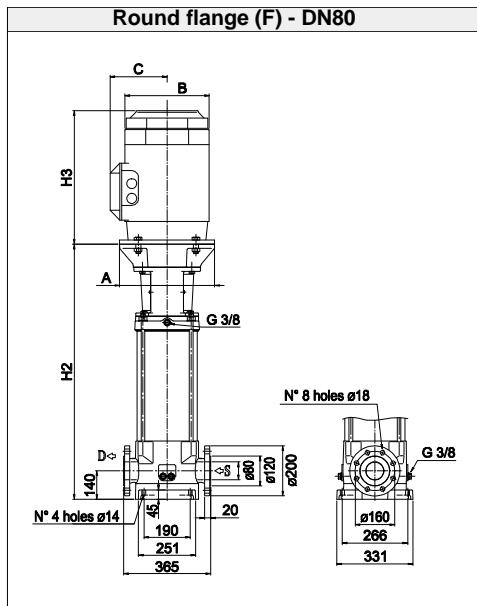
Rotation speed $\approx 3500 \text{ min}^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

**PERFORMANCE CURVE
EVM(L)45**


Rotation speed ≈ 3500 min $^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

TECHNICAL DATA EVM(L)45

Dimensional sketch

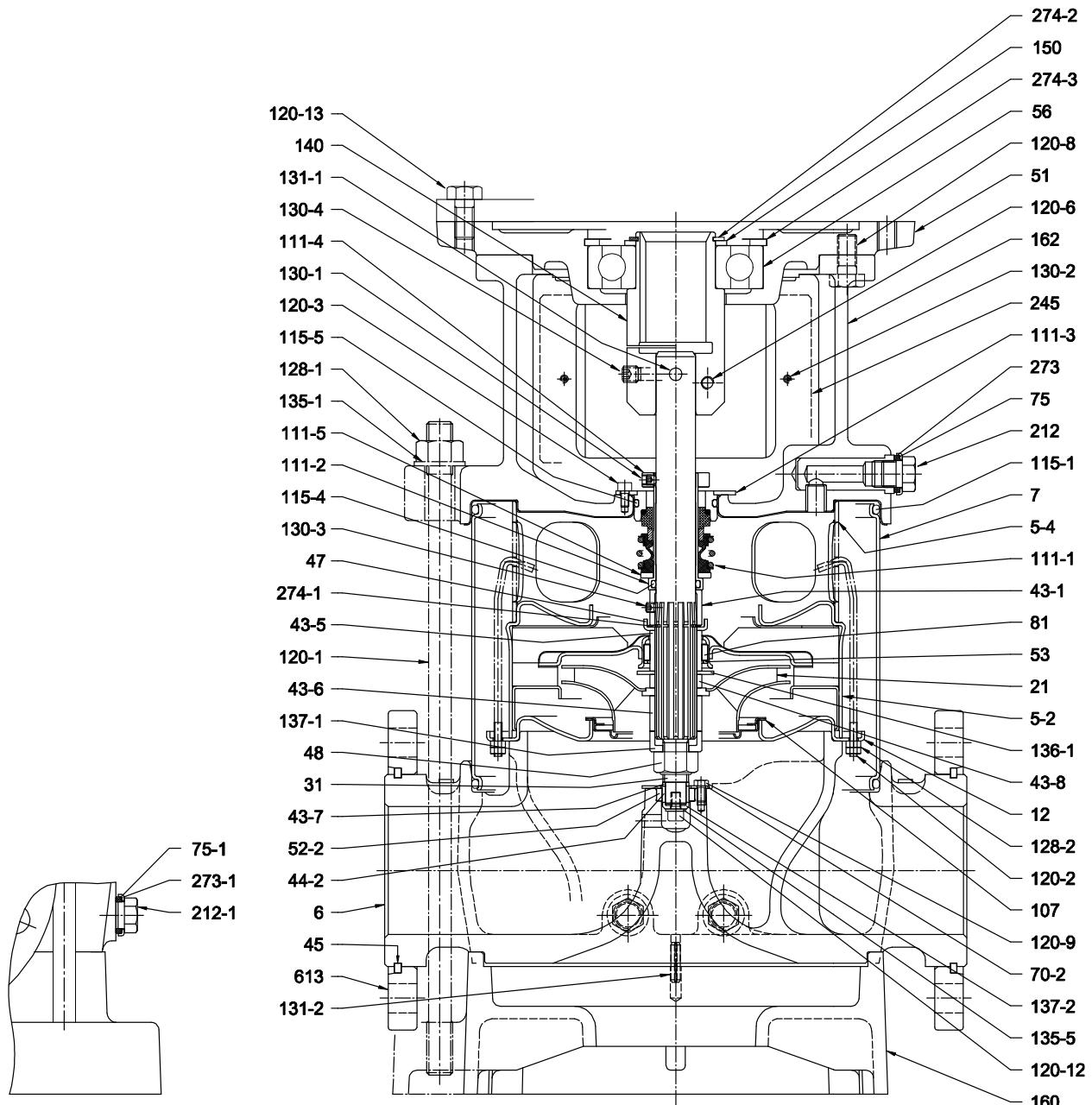


Dimensions [mm] and Weights [Kg]

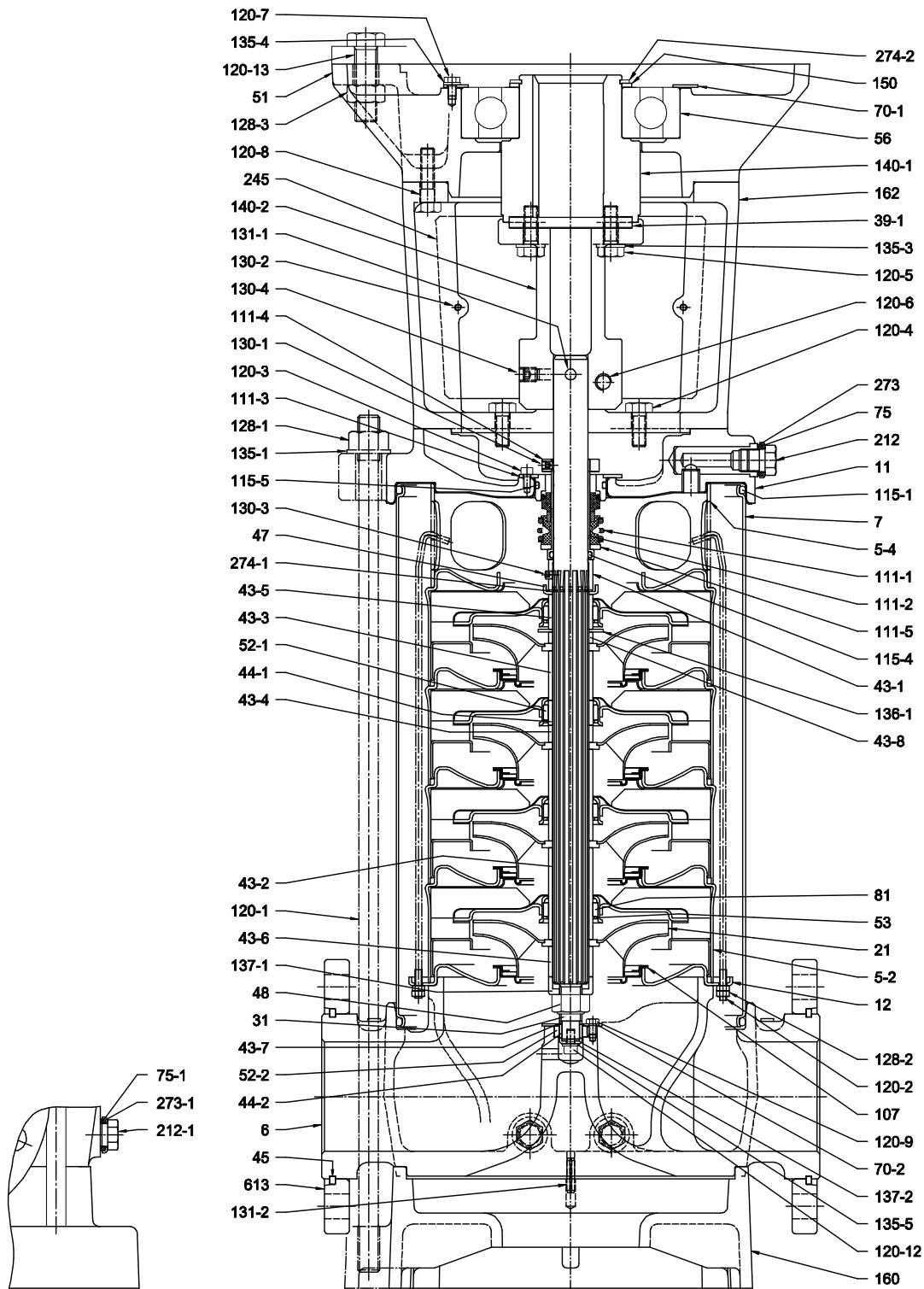
Pump Type	P _{max} [MPa]	Motor					H2	Round flange (F)	
		kW	Size	A	B	C		Weight Pump	Weight Pump + Motor
EVM(L)45 1-1F6/5.5	1.6	5.5	132 S	300	225	160	328	546	56
EVM(L)45 1-0F6/7.5	1.6	7.5	132 S	300	225	160	350	546	56
EVM(L)45 2-2F6/11	1.6	11	160 M	350	248	194	476	749	58
EVM(L)45 2-1F6/11	1.6	11	160 M	350	248	194	476	749	58
EVM(L)45 2-0F6/15	1.6	15	160 M	350	317	238	498	749	58
EVM(L)45 3-3F6/15	1.6	15	160 M	350	317	238	498	822	74
EVM(L)45 3-2F6/15	1.6	15	160 M	350	317	238	498	822	74
EVM(L)45 3-1F6/18.5	1.6	18.5	160 L	350	317	238	542	822	74
EVM(L)45 3-0F6/22	1.6	22	180 M	350	360	268	577	822	74
EVM(L)45 4-3F6/18.5	1.6	18.5	160 L	350	317	238	542	894	77
EVM(L)45 4-2F6/22	1.6	22	180 M	350	360	268	577	894	77
EVM(L)45 4-1F6/30	1.6	30	200 L	400	399	300	658	909	77
EVM(L)45 4-0F6/30	1.6	30	200 L	400	399	300	658	909	77
EVM(L)45 5-3F6/30	2.5	30	200 L	400	399	300	658	981	96
EVM(L)45 5-2F6/30	2.5	30	200 L	400	399	300	658	981	96
EVM(L)45 5-1F6/30	2.5	30	200 L	400	399	300	658	981	96
EVM(L)45 5-0F6/37	2.5	37	200 L	400	399	300	658	981	96
EVM(L)45 6-3F6/37	2.5	37	200 L	400	399	300	658	1053	99
EVM(L)45 6-2F6/37	2.5	37	200 L	400	399	300	658	1053	99
EVM(L)45 6-1F6/37	2.5	37	200 L	400	399	300	658	1053	99

1.6 MPa=16 bar ; 2.5 MPa=25 bar ; 3.0 MPa=30 bar

**SECTIONAL VIEW
EVM(L)45**

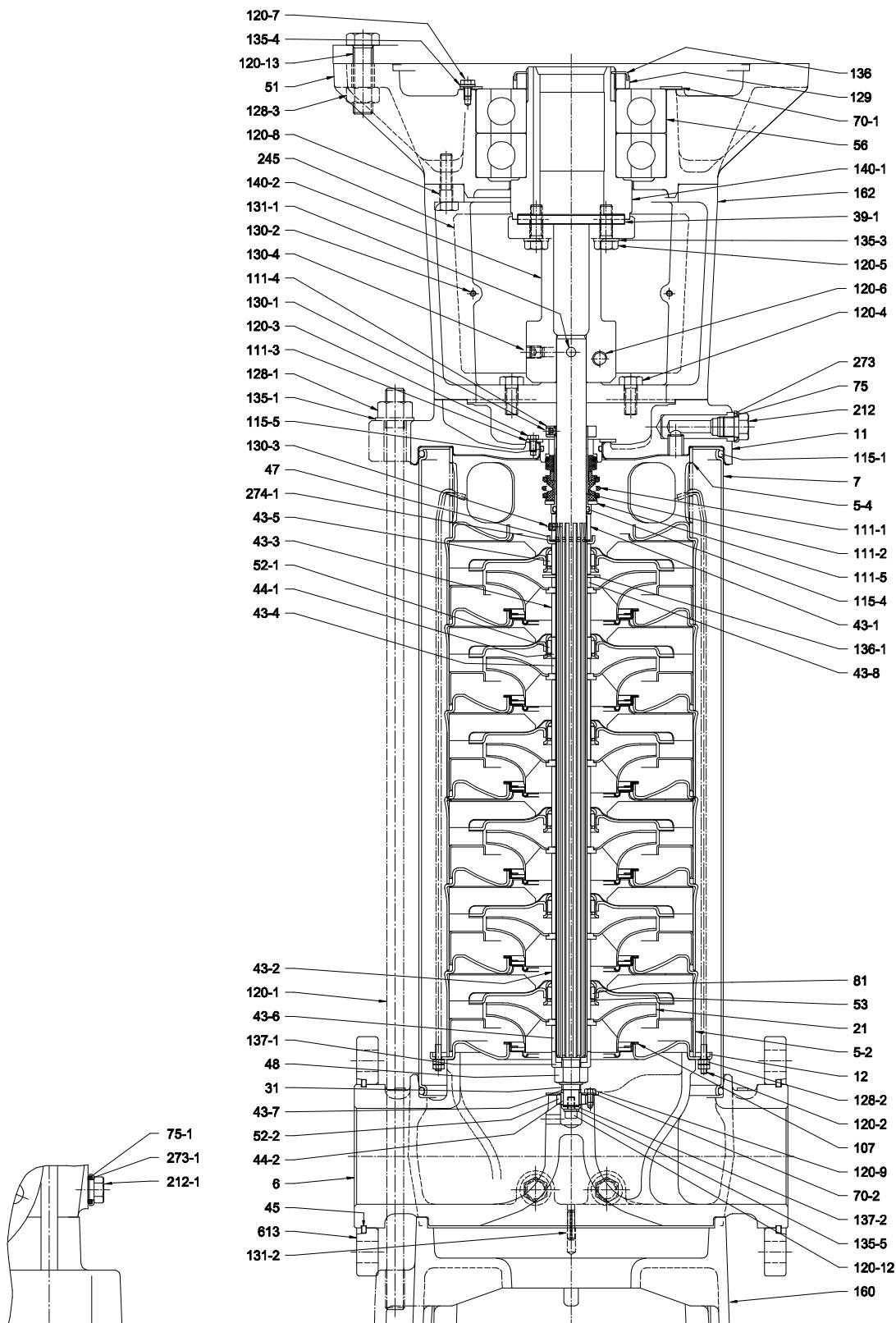


Pump with single ball bearing

SECTIONAL VIEW
EVM(L)45

Pump with single ball bearing

SECTIONAL VIEW
EVM(L)45



Pump with double ball bearing

SECTIONAL TABLE
EVM(L)45

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	
		EVM	EVML		
5-2	Intermediate casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
5-4	Discharge casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
6	Bottom casing	EN. 1.4308 (ASTM CF8)	EN. 1.4408 (ASTM CF8M)		
7	Outer casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
11	Casing cover	Cast iron + EN 1.4301 (AISI 304)	Cast iron + EN 1.4401 (AISI 316)		
12	Suction cover	EN. 1.1301 (AISI304)	EN 1.4401 (AISI 316)		
21	Impeller	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
21-1	Reduced impeller				
31	Shaft	EN 1.4401 (AISI 316)			
39-1	Key	Carbon steel	12X8X90	UNI 6604	
43-1	Shaft sleeve (mechanical seal)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-4	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-5	Shaft sleeve (last stage)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-6	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-7	Shaft sleeve	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
43-8	Shaft sleeve (discharge-lower)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
44-1	Shaft sleeve bearing	Tungsten carbide			
44-2	Bearing sleeve (bottom bearing)	Tungsten carbide			
45	Flange holder	EN 1.402 (AISI 420)			
47	Ring holder	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
48	Impeller nut	A2-70 UNI 7323 with inox insert	A4-70 UNI 7323 with inox insert	M16	
51	Motor adapter	Cast iron EN-GJL-200-EN 1561			
52-1	Bearing	Tungsten carbide			
52-2	Bearing	Tungsten carbide			
53	Bush holder	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
56	Ball bearing	see table page 349			
70-1	Ring for bearing	EN 1.4301 (AISI 304)			
70-2	Ring for bearing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
75	O-Ring (plug)	EPDM	FPM		
75-1	O-Ring (plug)	EPDM	FPM		
81	Bush	PTFE			
107	Liner ring	PTFE / EN 1.4401 (AISI316)			
111-1	Mechanical seal	Silicon carbide/Carbon/FPM			
111-2	Mechanical seal cartridge	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
111-4	Seal holder	Brass OT 58 UNI 5705	EN 1.4401 (AISI 316)		
111-5	Adjusting ring	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
115-1	O-Ring (outer casing)	EPDM	FPM	D.24.66X5.34	
115-4	O-Ring (cartridge sleeve)	EPDM	FPM	D.24.99X3.53	
115-5	O-Ring (seal cover)	EPDM	FPM	D.44.04X3.53	
120-1	Tie Rod	Galvanized steel 6.8 strength class ISO 898/1			
120-2	Tie Rod	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
120-3	Screw	A2-70 UNI 7323	M5X10	UNI 5931	
120-4	Screw	Galvanized steel 8.8 strength class ISO 898/1	M10X25	UNI 5739	
120-5	Screw for coupling	Galvanized steel 8.8 strength class ISO 898/1	M10X30	UNI 5739	
120-6	Screw for coupling	EN 1.4301 (AISI 304)	Galvanized steel 8.8 strength class ISO 898/1	M6X20	UNI 5931
120-6		EN 1.4301 (AISI 304)		M12X30	UNI 5931
120-7	Screw	Galvanized steel 8.8 strength class ISO 898/1	M6X10	UNI 5739	
120-8	Screw	EN 1.4301 (AISI 304)	Galvanized steel 8.8 strength class ISO 898/1	M12X25	UNI 5739
120-8		EN 1.4301 (AISI 304)		M10X30	UNI 5739
120-9	Screw	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	M5X8	UNI 5737
120-12	Screw	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	M6X20	UNI 5931
120-13	Screw for motor	EN 1.4301 (AISI 304)	Galvanized steel 8.8 strength class ISO 898/1	M12X30	UNI 5739
120-13		EN 1.4301 (AISI 304)		M16X55	UNI 5737
120-13		EN 1.4301 (AISI 304)		M16X65	UNI 5739
128-1	Nut for tie rod	Galvanized steel	M16	UNI 5588	
128-2	Nut	Carbon steel	EN 1.4401 (AISI 316)	M5	UNI 5588
128-3	Nut	Galvanized steel	M16	UNI 5588	
129	Lock nut	Carbon steel	M75X2		
130-1	Set screw	A2- 70 UNI 7323	M6X8	UNI 5923	
130-2	Screw for coupling guard	A2-70 UNI 7323	M5X6	UNI 7687	
130-3	Set screw	A2- 70 UNI 7323	M6X6	UNI 5923	
130-4	Set screw	Carbon steel	M10X10	UNI 5923	
131-1	Pin for shaft	Carbon steel			
131-2	Elastic pin	Galvanized steel	6X25	UNI 6873	
135-1	Washer	Galvanized steel	17X30X3	UNI 6592	
135-3	Washer	Galvanized steel	10.5X17.5X2.2	UNI 1751	
135-4	Washer	Plated carbon steel	6.4	UNI 1751	
135-5	Washer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
136	Bearing washer	Carbon steel			
136-1	Stopper ring	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
137-1	Impeller spacer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
137-2	Shaft spacer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
140	Coupling	Brass OT 58 UNI 5705			
140-1	Motor coupling	Carbon steel			
140-2	Coupling (pump side)	Carbon steel			
150	Spacer	Carbon steel			
160	Base	Cast iron EN-GJL-200 EN1561			
162	Motor bracket	Cast iron EN-GJL-200 EN1561			
212	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
212-1	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
245	Coupling guard	EN 1.4301 (AISI 304)			
273	Plug washer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
273-1	Plug washer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)		
274-1	C-type snap ring	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	D.26	UNI 7435
274-2		EVM45 1-0, 1-1		D.50	UNI 7435
274-2		EVM45 2 to 4-3		D.65	UNI 7435
274-2		EVM45 4-2		D.75	UNI 7535
274-3	C-Typr snap ring	Carbon steel TC80		D.110	UNI 7437
613	Flange	Carbon steel			

VERTICAL MULTISTAGE PUMPS

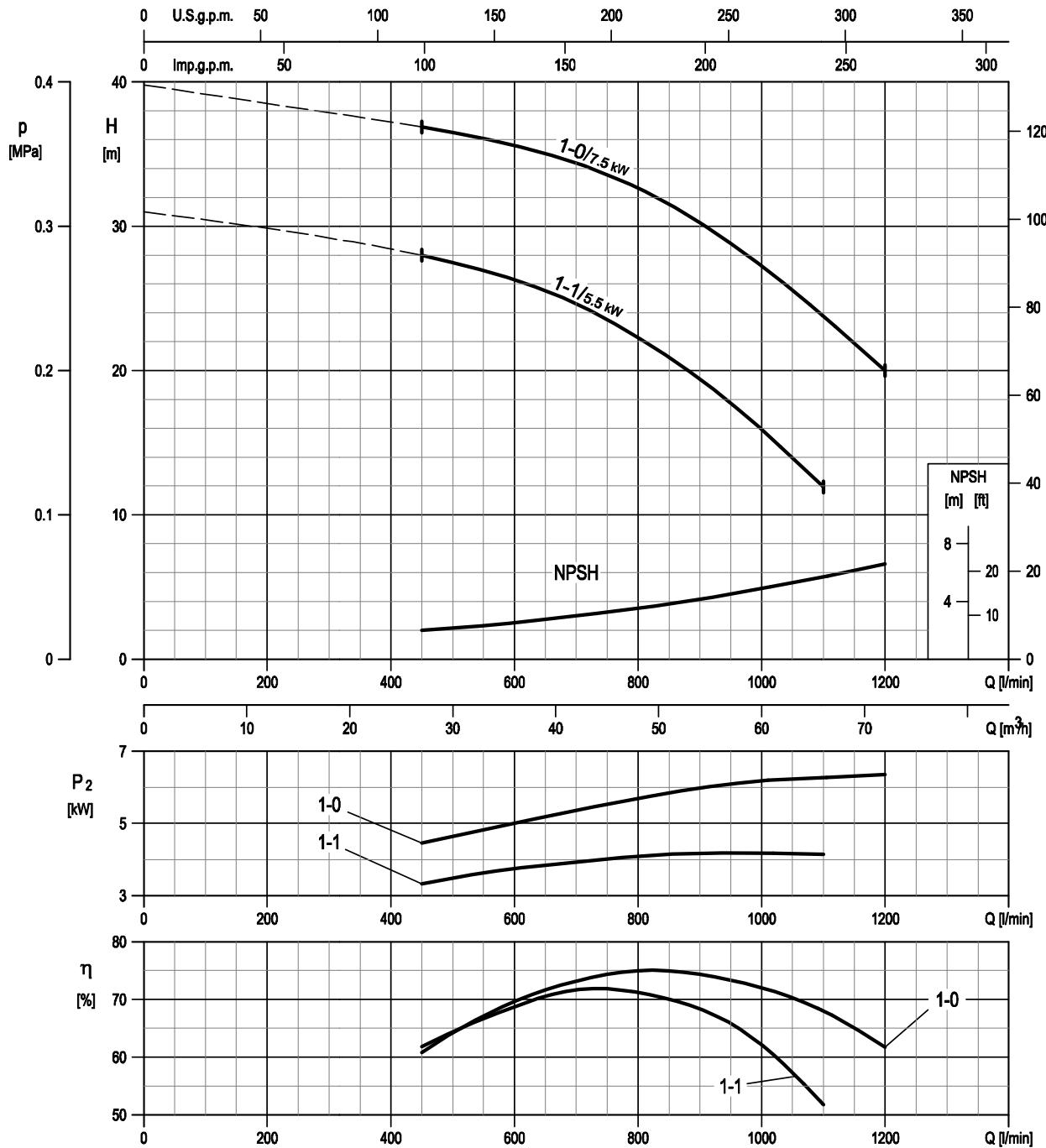
QUANTITY FOR MODEL
EVM(L)45

Pump Type	Nº																												
	5-2	11	21	21-1	39-1	43-2	43-3	43-4	44-1	52-1	53	56	70-1	81	107	120-4	120-5	120-7	128-3	129	135-3	135-4	136	140	140-1	140-2	150	274-2	274-3
EVM(L)45 1-1F6/5.5	1	/	/	1	/	/	/	/	/	1	1	/	1	1	/	/	/	/	/	/	/	1	/	/	1	1	1	1	
EVM(L)45 1-0F6/7.5	1	/	1	/	/	/	/	/	/	1	1	1	1	1	/	/	/	/	/	/	1	/	/	1	1	1	1		
EVM(L)45 2-2F6/11	2	1	/	2	1	1	/	/	/	2	1	1	2	2	4	4	3	4	/	4	3	/	1	1	1	1			
EVM(L)45 2-1F6/11	2	1	1	1	1	1	/	/	/	2	1	1	2	2	4	4	3	4	/	4	3	/	1	1	1	1			
EVM(L)45 2-0F6/15	2	1	2	/	1	1	/	/	/	2	1	1	2	2	4	4	3	4	/	4	3	/	1	1	1	1			
EVM(L)45 3-3F6/15	3	1	/	3	1	2	/	/	/	3	1	1	3	3	4	4	3	4	/	4	3	/	1	1	1	1			
EVM(L)45 3-2F6/15	3	1	1	2	1	2	/	/	/	3	1	1	3	3	4	4	3	4	/	4	3	/	1	1	1	1			
EVM(L)45 3-1F6/18.5	3	1	2	1	1	2	/	/	/	3	1	1	3	3	4	4	3	4	/	4	3	/	1	1	1	1			
EVM(L)45 3-0F6/22	3	1	3	/	1	2	/	/	/	3	1	1	3	3	4	4	3	4	/	4	3	/	1	1	1	1			
EVM(L)45 4-3F6/18.5	4	1	1	3	1	2	1	1	1	1	4	1	1	3	4	4	4	3	4	/	4	3	/	1	1	1	1		
EVM(L)45 4-2F6/22	4	1	2	2	1	2	1	1	1	1	4	1	1	3	4	4	4	3	4	/	4	3	/	1	1	1	1		
EVM(L)45 4-1F6/30	4	1	3	1	1	2	1	1	1	1	4	1	1	3	4	4	4	3	4	1	4	3	1	1	1	1			
EVM(L)45 4-0F6/30	4	1	4	/	1	2	1	1	1	1	4	1	1	3	4	4	4	3	4	1	4	3	1	1	1	1			
EVM(L)45 5-3F6/30	5	1	2	3	1	3	1	1	1	1	5	1	1	4	5	4	4	3	4	1	4	3	1	1	1	1			
EVM(L)45 5-2F6/30	5	1	3	2	1	3	1	1	1	1	5	1	1	4	5	4	4	3	4	1	4	3	1	1	1	1			
EVM(L)45 5-1F6/30	5	1	4	1	1	3	1	1	1	1	5	1	1	4	5	4	4	3	4	1	4	3	1	1	1	1			
EVM(L)45 5-0F6/37	5	1	5	/	1	3	1	1	1	1	5	1	1	4	5	4	4	3	4	1	4	3	1	1	1	1			
EVM(L)45 6-3F6/37	6	1	3	3	1	4	1	1	1	1	6	1	1	5	6	4	4	3	4	1	4	3	1	1	1	1			
EVM(L)45 6-2F6/37	6	1	4	2	1	4	1	1	1	1	6	1	1	5	6	4	4	3	4	1	4	3	1	1	1	1			
EVM(L)45 6-1F6/37	6	1	5	1	1	4	1	1	1	1	6	1	1	5	6	4	4	3	4	1	4	3	1	1	1	1			

BEARINGS
EVM(L)45

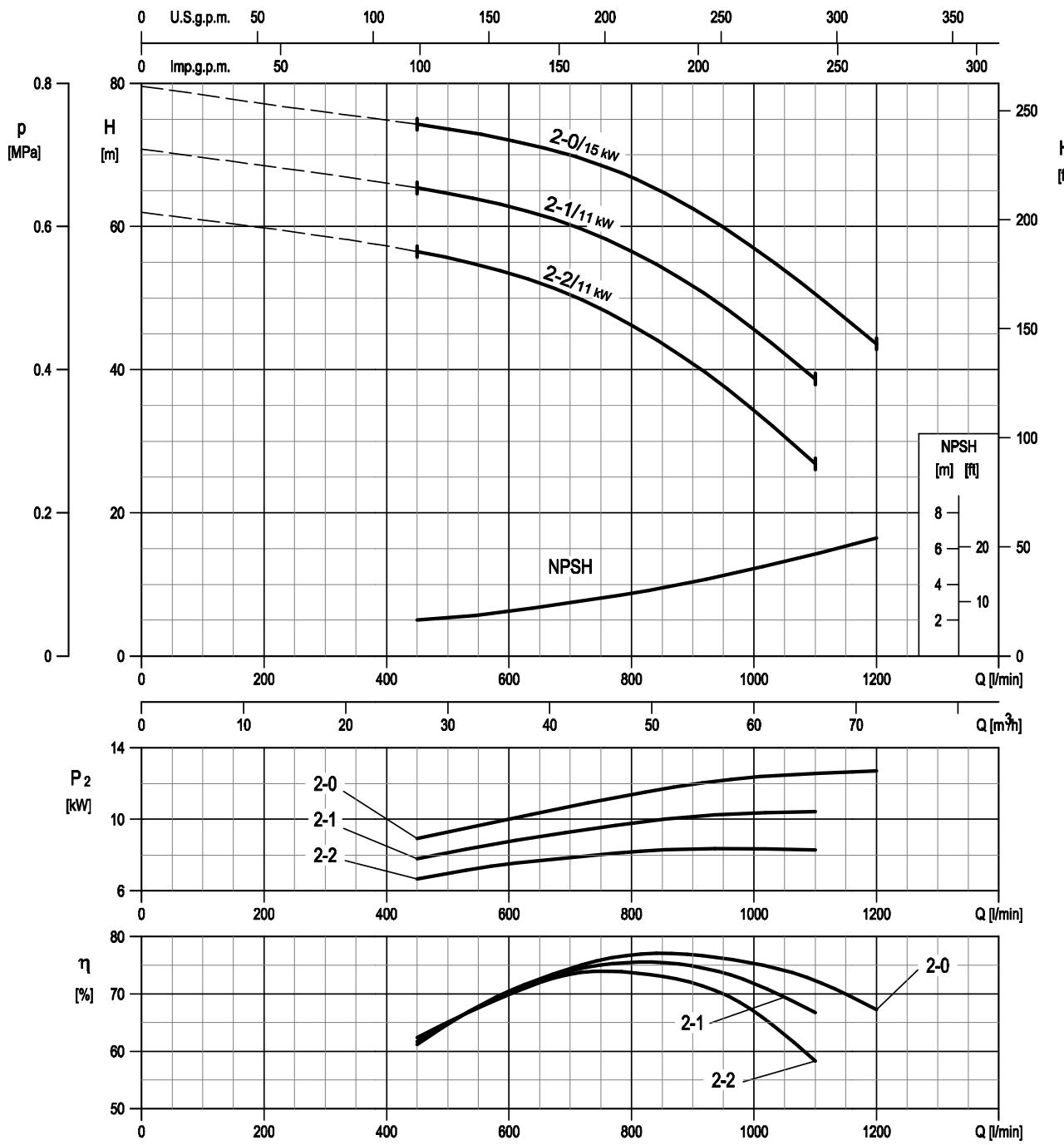
Pump Type	Nº
	56
EVM(L)45 1-1F6/5.5	6310 ZZ C3
EVM(L)45 1-0F6/7.5	6310 ZZ C3
EVM(L)45 2-2F6/11	6313 ZZ C3
EVM(L)45 2-1F6/11	6313 ZZ C3
EVM(L)45 2-0F6/15	6313 ZZ C3
EVM(L)45 3-3F6/15	6313 ZZ C3
EVM(L)45 3-2F6/15	6313 ZZ C3
EVM(L)45 3-1F6/18.5	6313 ZZ C3
EVM(L)45 3-0F6/22	6313 ZZ C3
EVM(L)45 4-3F6/18.5	6313 ZZ C3
EVM(L)45 4-2F6/22	6315 ZZ C3
EVM(L)45 4-1F6/30	6315 ZZDT C3 *
EVM(L)45 4-0F6/30	6315 ZZDT C3 *
EVM(L)45 5-3F6/30	6315 ZZDT C3 *
EVM(L)45 5-2F6/30	6315 ZZDT C3 *
EVM(L)45 5-1F6/30	6315 ZZDT C3 *
EVM(L)45 5-0F6/37	6315 ZZDT C3 *
EVM(L)45 6-3F6/37	6315 ZZDT C3 *
EVM(L)45 6-2F6/37	6315 ZZDT C3 *
EVM(L)45 6-1F6/37	6315 ZZDT C3 *

*DT=Two single row deep groove ball bearings matched for paired mounting in a tandem arrangement.

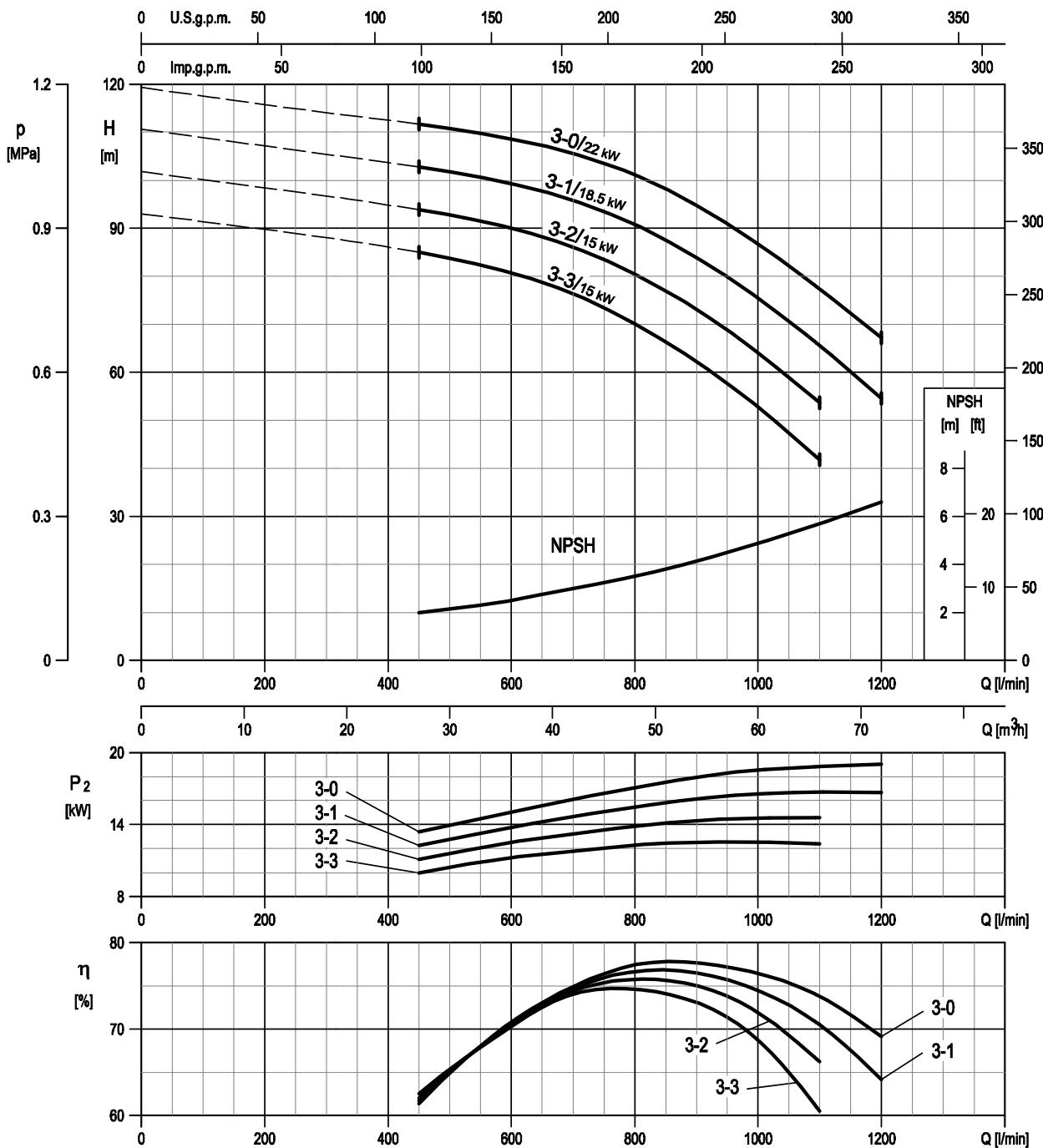
**PERFORMANCE CURVE
EVMG45**


Rotation speed ≈ 3500 min⁻¹
Test standard: ISO 9906:2012 - Grade 3B

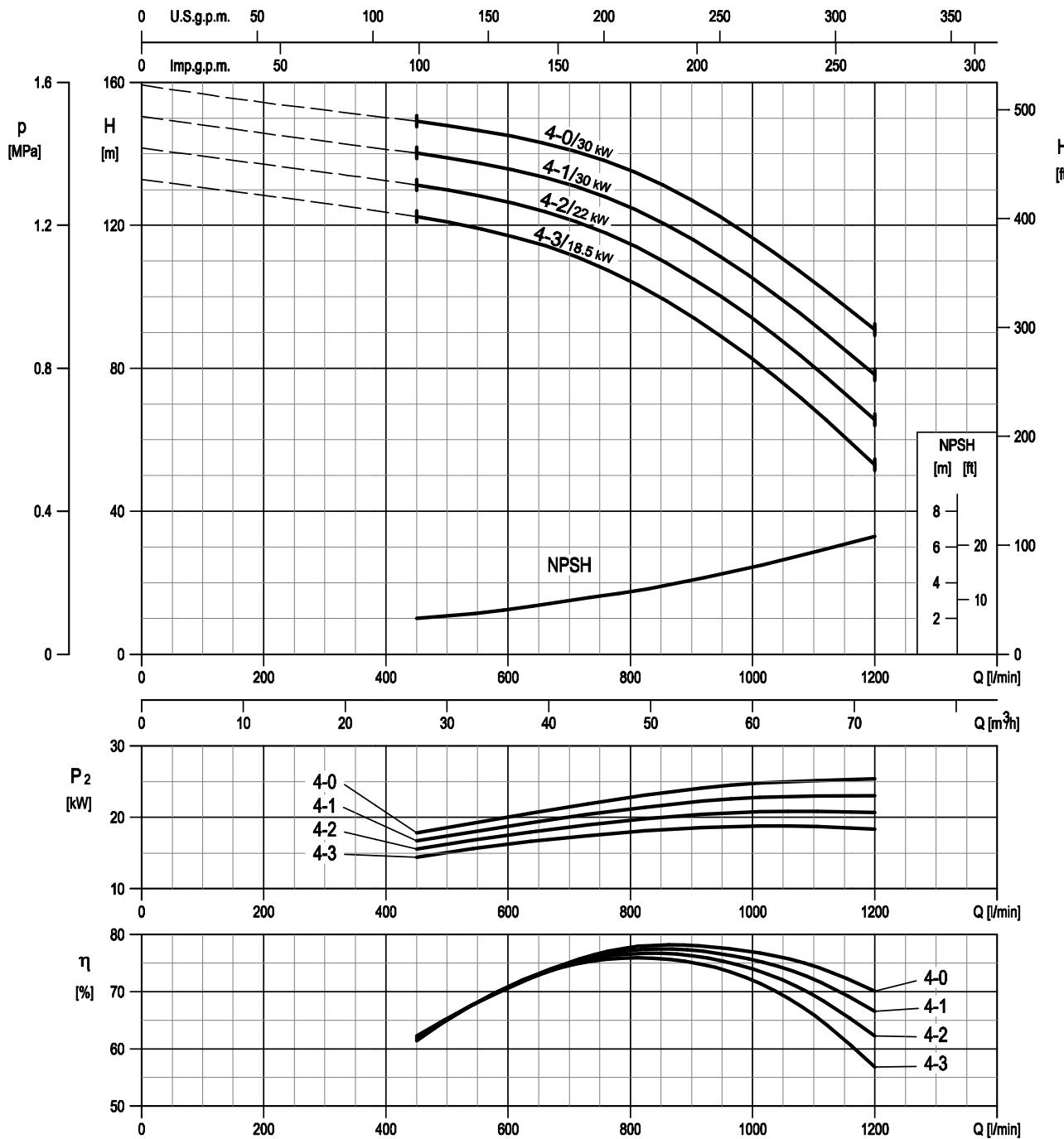
350

PERFORMANCE CURVE
EVMG45

Rotation speed ≈ 3500 min⁻¹
Test standard: ISO 9906:2012 - Grade 3B

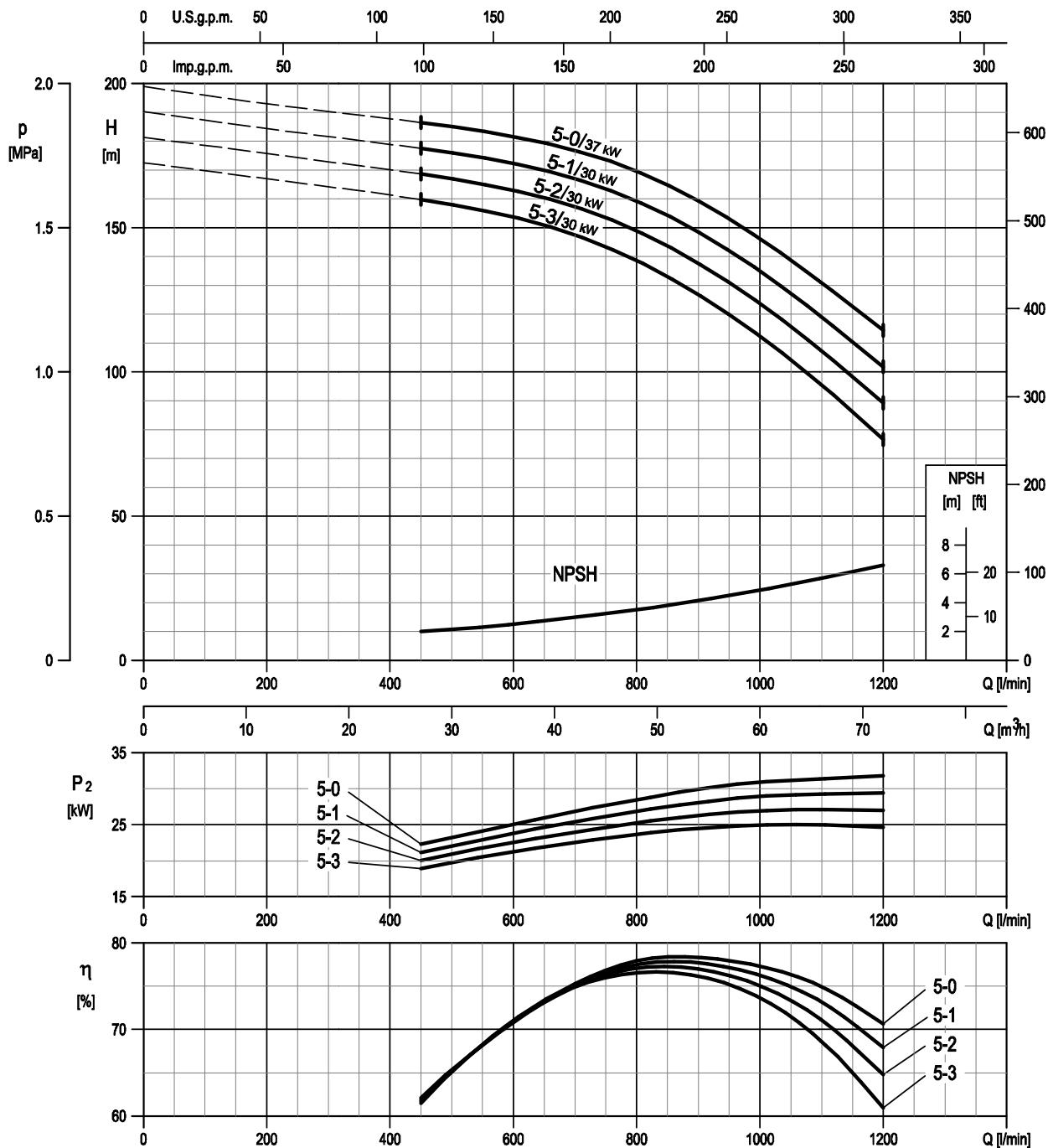
**PERFORMANCE CURVE
EVMG45**


Rotation speed ≈ 3500 min $^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

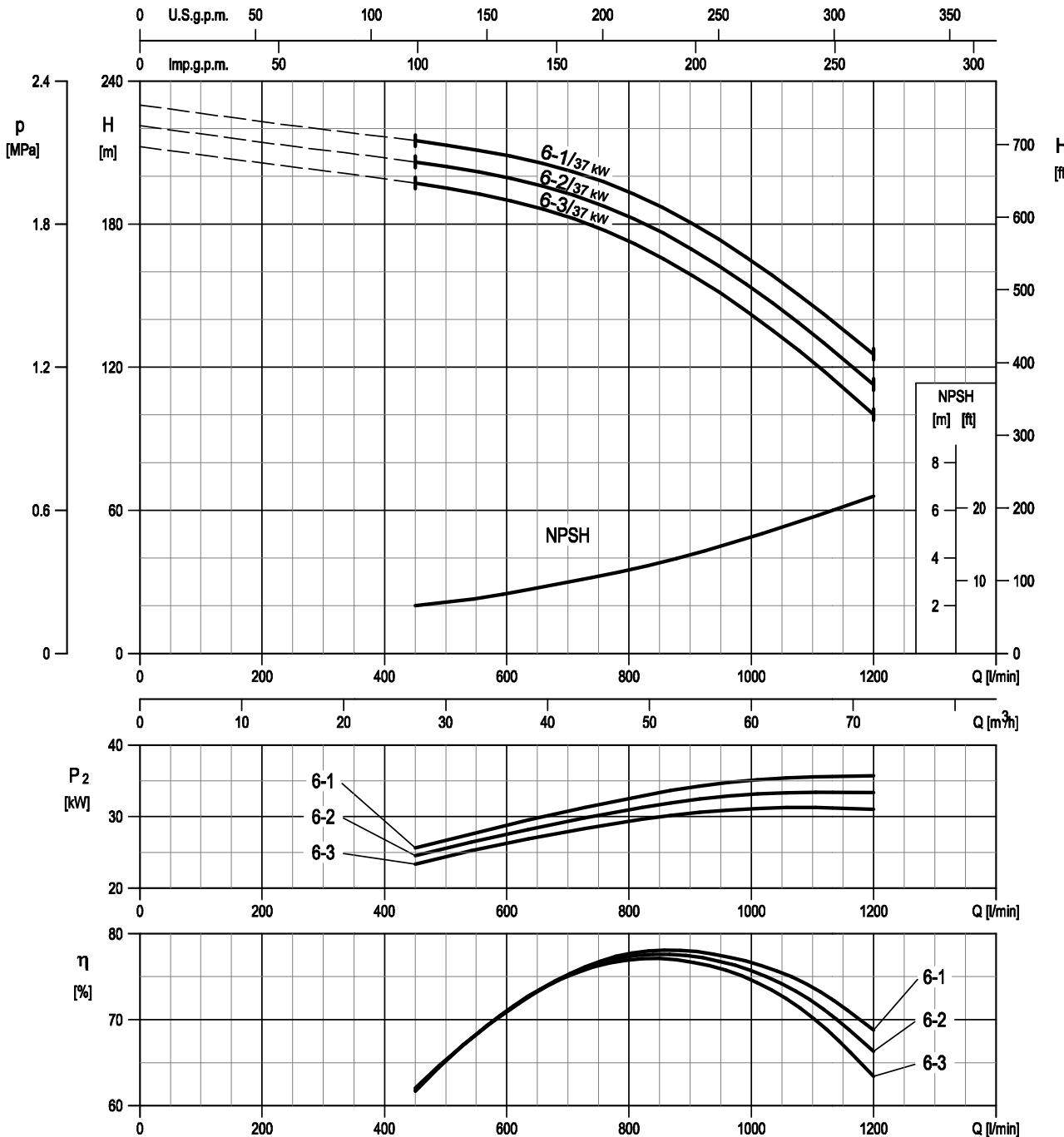
PERFORMANCE CURVE
EVMG45

Rotation speed ≈ 3500 min⁻¹
Test standard: ISO 9906:2012 - Grade 3B

**PERFORMANCE CURVE
EVMG45**



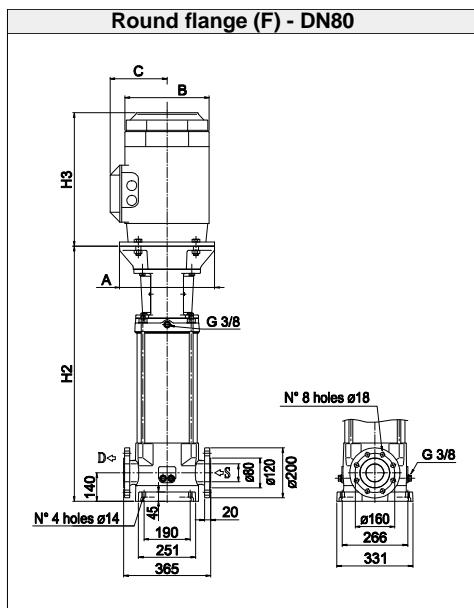
Rotation speed ≈ 3500 min $^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

PERFORMANCE CURVE
EVMG45

Rotation speed $\approx 3500 \text{ min}^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

TECHNICAL DATA EVMG45

Dimensional sketch

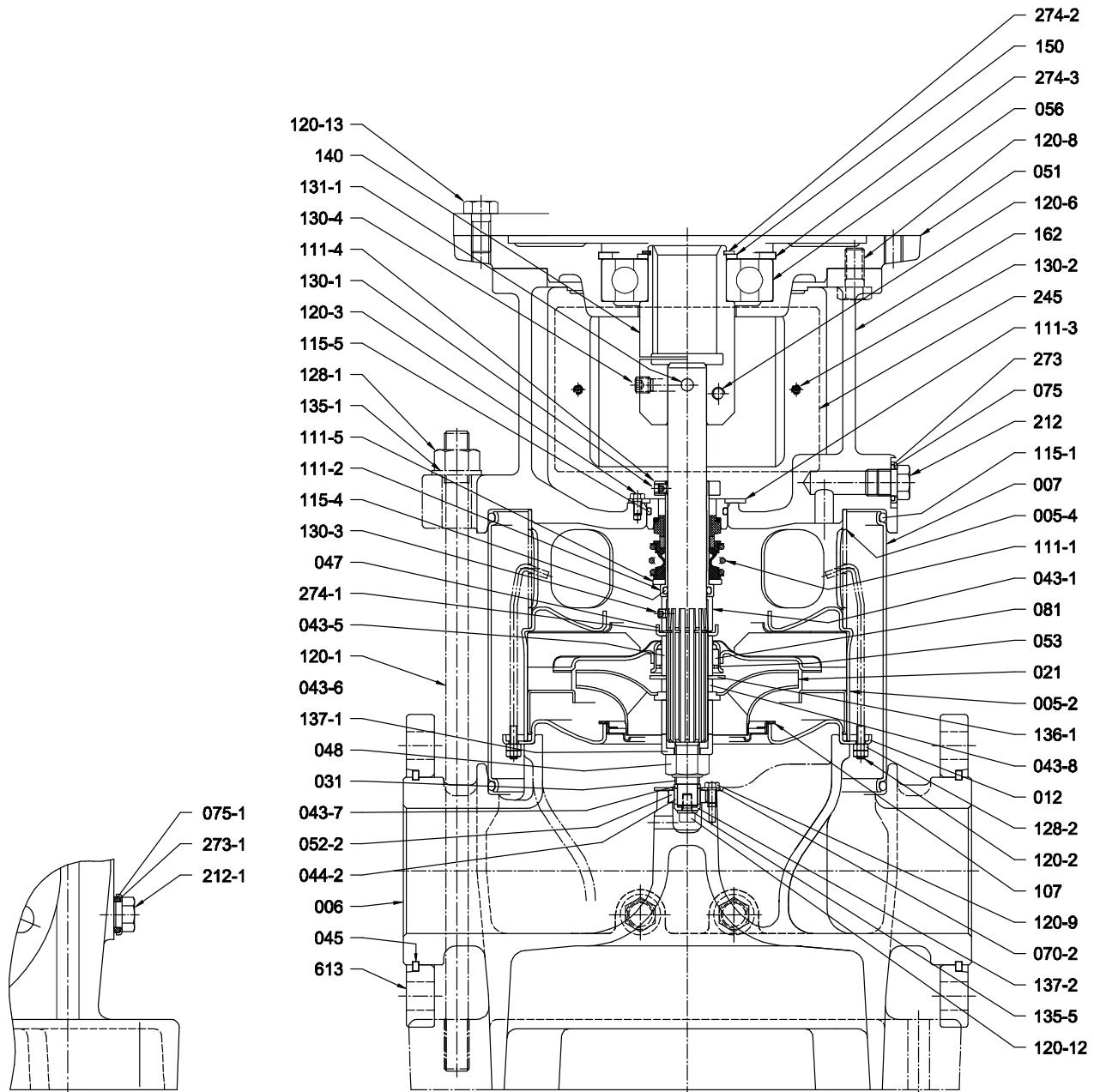


Dimensions [mm] and Weights [Kg]

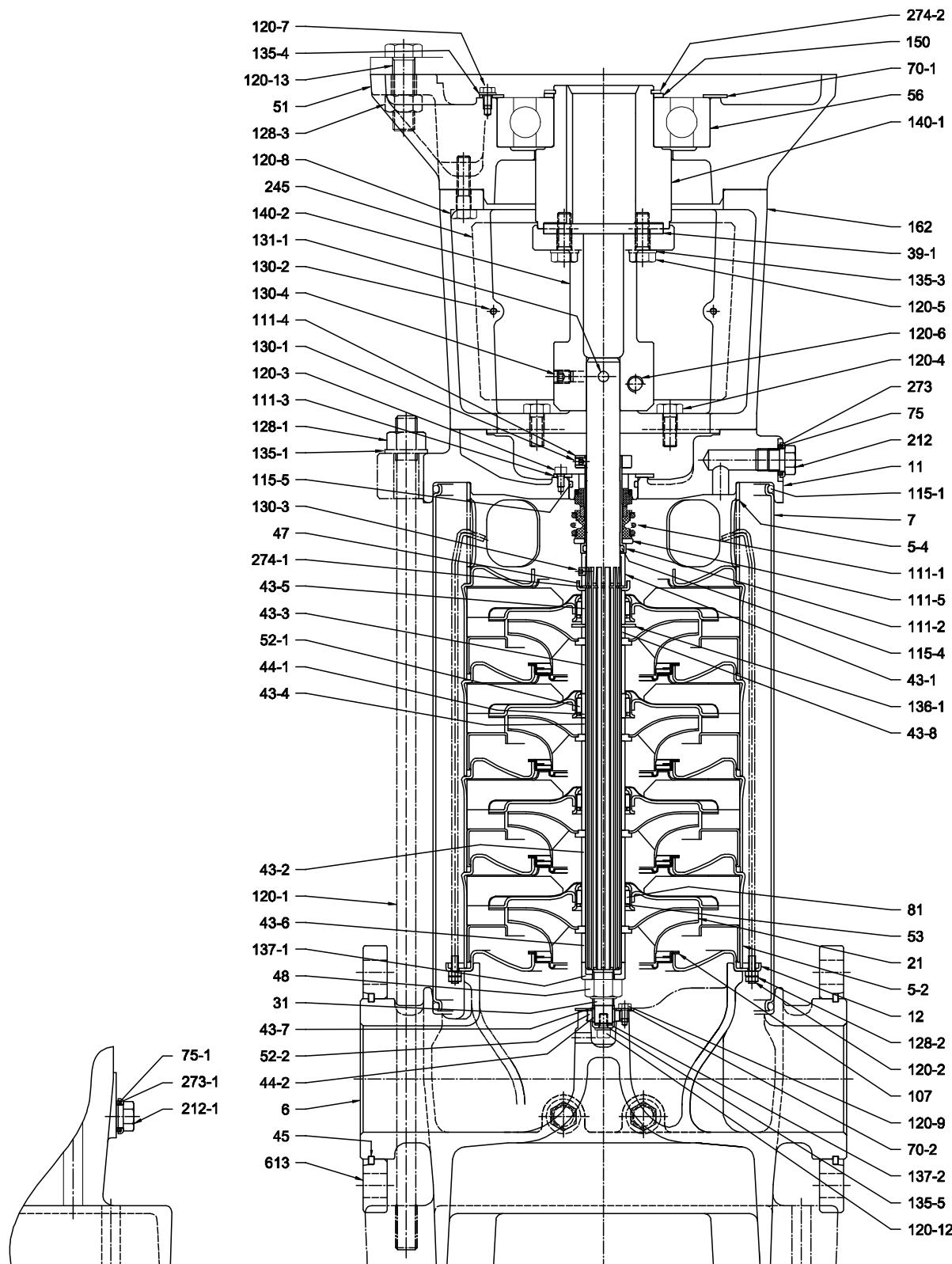
Pump Type	Pmax [MPa]	Motor						Round flange (F)		
		kW	Size	A	3 ~			H2	Weight Pump	Weight Pump + Motor
				B	C	H3				
EVMG45 1-1F6/5.5	1.6	5.5	132 S	300	225	160	328	546	56	94.6
EVMG45 1-0F6/7.5	1.6	7.5	132 S	300	225	160	350	546	56	96.4
EVMG45 2-2F6/11	1.6	11	160 M	350	248	194	476	749	58	120.5
EVMG45 2-1F6/11	1.6	11	160 M	350	248	194	476	749	58	120.5
EVMG45 2-0F6/15	1.6	15	160 M	350	317	238	498	749	58	146.9
EVMG45 3-3F6/15	1.6	15	160 M	350	317	238	498	822	74	162.9
EVMG45 3-2F6/15	1.6	15	160 M	350	317	238	498	822	74	162.9
EVMG45 3-1F6/18.5	1.6	18.5	160 L	350	317	238	542	822	74	178
EVMG45 3-0F6/22	1.6	22	180 M	350	360	268	577	822	74	237
EVMG45 4-3F6/18.5	1.6	18.5	160 L	350	317	238	542	894	77	181
EVMG45 4-2F6/22	1.6	22	180 M	350	360	268	577	894	77	240
EVMG45 4-1F6/30	1.6	30	200 L	400	399	300	658	909	77	305
EVMG45 4-0F6/30	1.6	30	200 L	400	399	300	658	909	77	305
EVMG45 5-3F6/30	2.5	30	200 L	400	399	300	658	981	96	324
EVMG45 5-2F6/30	2.5	30	200 L	400	399	300	658	981	96	324
EVMG45 5-1F6/30	2.5	30	200 L	400	399	300	658	981	96	324
EVMG45 5-0F6/37	2.5	37	200 L	400	399	300	658	981	96	338
EVMG45 6-3F6/37	2.5	37	200 L	400	399	300	658	1053	99	341
EVMG45 6-2F6/37	2.5	37	200 L	400	399	300	658	1053	99	341
EVMG45 6-1F6/37	2.5	37	200 L	400	399	300	658	1053	99	341

1.6 MPa=16 bar ; 2.5 MPa=25 bar ; 3.0 MPa=30 bar

356

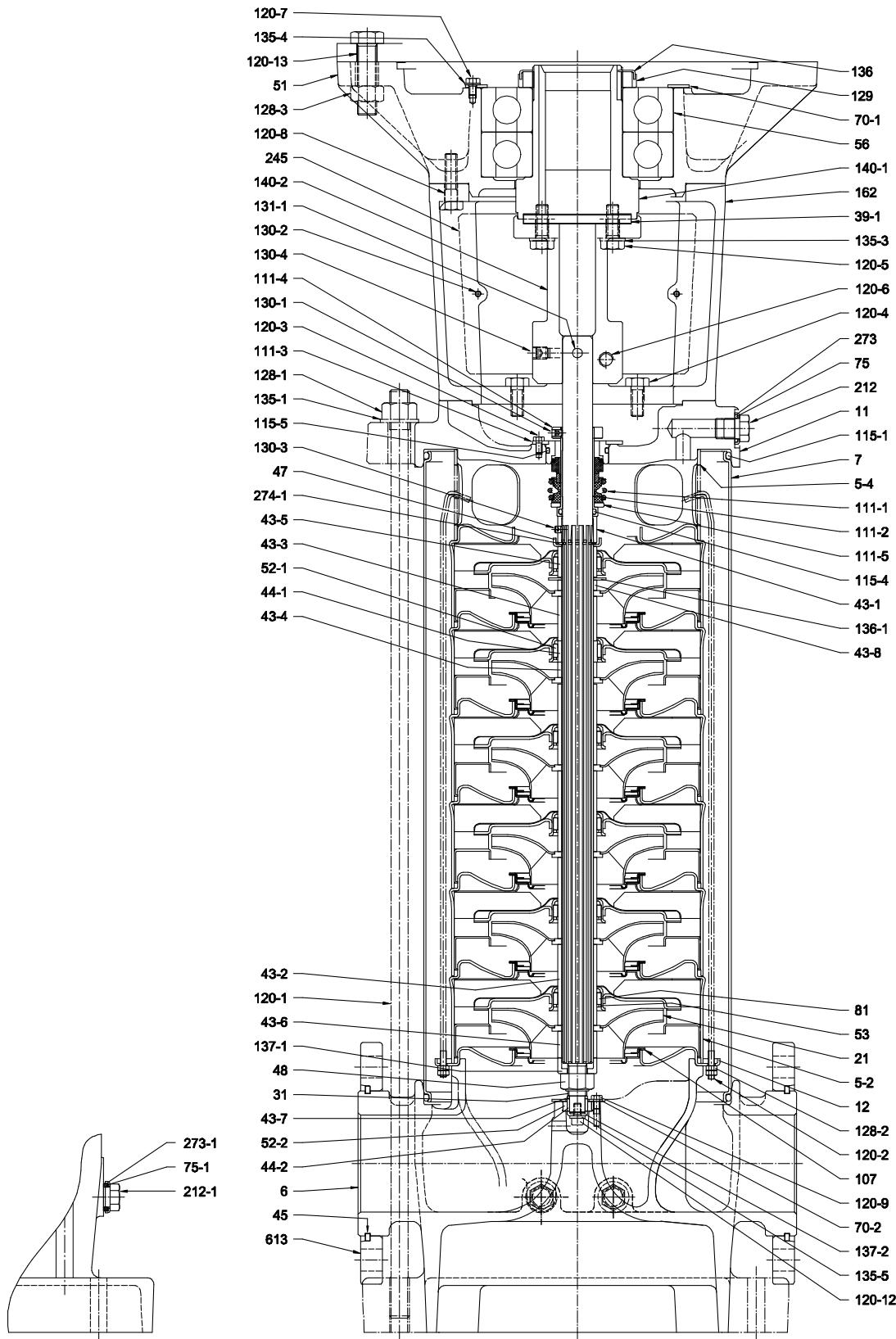
SECTIONAL VIEW
EVMG45

Pump with single ball bearing

SECTIONAL VIEW
EVMG45

Pump with single ball bearing

358

**SECTIONAL VIEW
EVMG45**


Pump with double ball bearing

**SECTIONAL TABLE
EVMG45**

N°	PART NAME	MATERIAL EVMG	DIMENSIONS	STANDARD
5-2	Intermediate casing	EN 1.4301 (AISI 304)		
5-4	Discharge casing	EN 1.4301 (AISI 304)		
6	Bottom casing	Cast iron EN GJL 250 EN 1561		
7	Outer casing	EN 1.4301 (AISI 304)		
11	Casing cover	Cast iron EN GJL 250 EN 1561		
12	Suction cover	EN. 1.1301 (AISI304)		
21	Impeller			
21-1	Reduced impeller	EN 1.4301 (AISI 304)		
31	Shaft	EN 1.4401 (AISI 316)		
39-1	Key	Carbon steel	12X8X90	UNI 6604
43-1	Shaft sleeve (mechanical seal)	EN 1.4301 (AISI 304)		
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)		
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)		
43-4	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)		
43-5	Shaft sleeve (last stage)	EN 1.4301 (AISI 304)		
43-6	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)		
43-7	Shaft sleeve	EN 1.4301 (AISI 304)		
43-8	Shaft sleeve (discharge-lower)	EN 1.4301 (AISI 304)		
44-1	Shaft sleeve bearing	Tungsten carbide		
44-2	Bearing sleeve (bottom bearing)	Tungsten carbide		
45	Flange holder	EN 1.402 (AISI 420)		
47	Ring holder	EN 1.4301 (AISI 304)		
48	Impeller nut	A2-70 UNI 7323 with inox insert	M16	
51	Motor adapter	Cast iron EN-GJL-200-EN 1561		
52-1	Bearing	Tungsten carbide		
52-2	Bearing	Tungsten carbide		
53	Bush holder	EN 1.4301 (AISI 304)		
56	Ball bearing	see table page 361		
70-1	Ring for bearing	EN 1.4301 (AISI 304)		
70-2	Ring for bearing	EN 1.4301 (AISI 304)		
75	O-Ring (plug)	EPDM		
75-1	O-Ring (plug)	EPDM		
81	Bush	PTFE		
107	Liner ring	PTFE /EN 1.4401 (AISI316)		
111-1	Mechanical seal	Silicon carbide /Carbon/FPM		
111-2	Mechanical seal cartridge	EN 1.4301 (AISI 304)		
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)		
111-4	Seal holder	Brass OT 58 UNI 5705		
111-5	Adjusting ring	EN 1.4301 (AISI 304)		
115-1	O-Ring (outer casing)	EPDM	D.240.66X5.34	
115-4	O-Ring (cartridge sleeve)	EPDM	D.24.99X3.53	
115-5	O-Ring (seal cover)	EPDM	D.44.04X3.53	
120-1	Tie Rod	Galvanized steel 6.8 strength class ISO 898/1		
120-2	Tie Rod	EN 1.4301 (AISI 304)		
120-3	Screw	A2-70 UNI 7323	M5X10	UNI 5931
120-4	Screw	Galvanized steel 8.8 strength class ISO 898/1	M10X25	UNI 5739
120-5	Screw for coupling	Galvanized steel 8.8 strength class ISO 898/1	M10X30	UNI 5739
120-6	Screw for coupling EVM 45 1 EVM 45 2 to 6	Galvanized steel 8.8 strength class ISO 898/1	M6X20	UNI 5931
120-7	Screw	Galvanized steel 8.8 strength class ISO 898/1	M12X30	UNI 5931
120-8	Screw EVM 45 1 EVM 45 2 to 6	Galvanized steel 8.8 strength class ISO 898/1	M6X10	UNI 5739
120-9	Screw EVML EVM, EVMG	EN 1.4301 (AISI 304)	M5X8	UNI 5737
120-12	Screw	EN 1.4301 (AISI 304)	M6X20	UNI 5931
120-13	Screw for motor EVM45 1-0, 1-1 EVM45 6 EVM45 2 to 5-3	Galvanized steel 8.8 strength class ISO 898/1	M12X30	UNI 5739
128-1	Nut for tie rod	Galvanized steel	M16	UNI 5588
128-2	Nut	Carbon steel	M5	UNI 5588
128-3	Nut	Galvanized steel	M16	UNI 5588
129	Lock nut	Carbon steel	M7X2	
130-1	Set screw	A2- 70 UNI 7323	M6X8	UNI 5923
130-2	Screw for coupling guard	A2-70 UNI 7323	M5X6	UNI 7687
130-3	Set screw	A2- 70 UNI 7323	M6X6	UNI 5923
130-4	Set screw	Carbon steel	M10X10	UNI 5923
131-1	Pin for shaft	Carbon steel		
131-2	Elastic pin	-	6X25	UNI 6873
135-1	Washer	Galvanized steel	17X30X3	UNI 6592
135-3	Washer	Galvanized steel	10.5X17.5X2.2	UNI 1751
135-4	Washer	Plated carbon steel	6.4	UNI 1751
135-5	Washer	EN 1.4301 (AISI 304)		
136	Bearing washer	Carbon steel		
136-1	Stopper ring	EN 1.4301 (AISI 304)		
137-1	Impeller spacer	EN 1.4301 (AISI 304)		
137-2	Shaft spacer	EN 1.4301 (AISI 304)		
140	Coupling	Brass OT 58 UNI 5705		
140-1	Motor coupling	Carbon steel		
140-2	Coupling (pump side)	Carbon steel		
150	Spacer	Carbon steel		
160	Base	-		
162	Motor bracket	Cast iron EN-GJL-200 EN1561		
212	Plug	EN 1.4301 (AISI 304)		
212-1	Plug	EN 1.4301 (AISI 304)		
245	Coupling guard	EN 1.4301 (AISI 304)		
273	Plug washer	EN 1.4301 (AISI 304)		
273-1	Plug washer	EN 1.4301 (AISI 304)		
274-1	C-type snap ring	EN 1.4301 (AISI 304)	D.26	UNI 7435
274-2	C-Typr snap ring EVM45 1-0, 1-1 EVM45 2 to 4-3 EVM45 4-2	Carbon steel TC80	D.50	UNI 7435
274-3	C-Typr snap ring	Carbon steel TC80	D.65	UNI 7435
274-3	C-Typr snap ring	Carbon steel TC80	D.75	UNI 7535
613	Flange	Carbon steel	D.110	UNI 7437

VERTICAL MULTISTAGE PUMPS

QUANTITY FOR MODEL
EVMG45

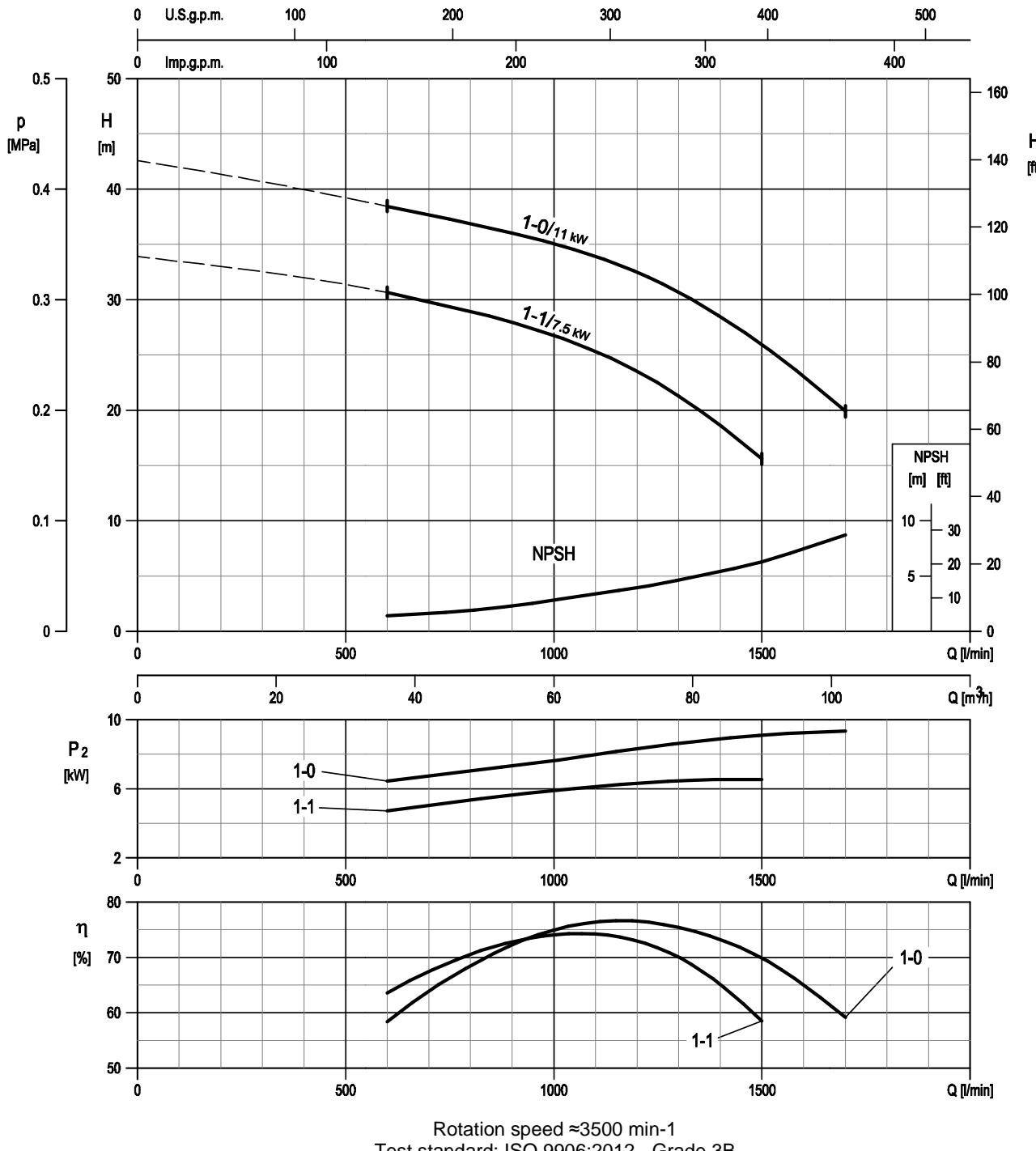
Pump Type	5-2	11	21	21-1	39-1	43-2	43-3	43-4	44-1	52-1	53	56	70-1	81	107	120-4	120-5	120-7	128-3	129	135-3	135-4	136	140	140-1	140-2	150	274-2	274-3
EVMG45 1-1F6/5.5	1	/	/	1	/	/	/	/	/	1	1	/	1	1	/	/	/	/	/	/	/	/	1	/	/	1	1	1	1
EVMG45 1-0F6/7.5	1	/	1	/	/	/	/	/	/	1	1	/	1	1	/	/	/	/	/	/	/	/	1	/	/	1	1	1	1
EVMG45 2-2F6/11	2	1	/	2	1	1	1	/	/	/	2	1	1	2	2	4	4	3	4	/	4	3	/	/	1	1	1	1	/
EVMG45 2-1F6/11	2	1	1	1	1	1	1	/	/	2	1	1	2	2	4	4	3	4	/	4	3	/	/	1	1	1	1	1	
EVMG45 2-0F6/15	2	1	2	/	1	1	/	/	/	2	1	1	2	2	4	4	3	4	/	4	3	3	/	/	1	1	1	1	/
EVMG45 3-3F6/15	3	1	/	3	1	2	/	/	/	3	1	1	3	3	4	4	3	4	/	4	3	/	/	1	1	1	1	/	
EVMG45 3-2F6/15	3	1	1	2	1	2	/	/	/	3	1	1	3	3	4	4	3	4	/	4	3	3	/	/	1	1	1	1	/
EVMG45 3-1F6/18.5	3	1	2	1	1	2	/	/	/	3	1	1	3	3	4	4	3	4	/	4	3	/	/	1	1	1	1	/	
EVMG45 3-0F6/22	3	1	3	/	1	2	/	/	/	3	1	1	3	3	4	4	3	4	/	4	3	/	/	1	1	1	1	/	
EVMG45 4-3F6/18.5	4	1	1	3	1	2	1	1	1	1	4	1	1	3	4	4	4	3	4	/	4	3	/	/	1	1	1	1	/
EVMG45 4-2F6/22	4	1	2	2	1	2	1	1	1	1	4	1	1	3	4	4	4	3	4	/	4	3	/	/	1	1	1	1	/
EVMG45 4-1F6/30	4	1	3	1	2	1	1	1	1	4	1	1	3	4	4	4	3	4	1	4	3	1	/	1	1	1	1	/	
EVMG45 4-0F6/30	4	1	4	/	1	2	1	1	1	1	4	1	1	3	4	4	4	3	4	1	4	3	1	/	1	1	1	1	
EVMG45 5-3F6/30	5	1	2	3	1	3	1	1	1	1	5	1	1	4	5	4	4	3	4	1	4	3	1	/	1	1	1	/	
EVMG45 5-2F6/30	5	1	3	2	1	3	1	1	1	1	5	1	1	4	5	4	4	3	4	1	4	3	1	/	1	1	1	/	
EVMG45 5-1F6/30	5	1	4	1	1	3	1	1	1	1	5	1	1	4	5	4	4	3	4	1	4	3	1	/	1	1	1	/	
EVMG45 5-0F6/37	5	1	5	/	1	3	1	1	1	1	5	1	1	4	5	4	4	3	4	1	4	3	1	/	1	1	1	/	
EVMG45 6-3F6/37	6	1	3	3	1	4	1	1	1	1	6	1	1	5	6	4	4	3	4	1	4	3	1	/	1	1	1	/	
EVMG45 6-2F6/37	6	1	4	2	1	4	1	1	1	1	6	1	1	5	6	4	4	3	4	1	4	3	1	/	1	1	1	/	
EVMG45 6-1F6/37	6	1	5	1	1	4	1	1	1	1	6	1	1	5	6	4	4	3	4	1	4	3	1	/	1	1	1	/	

BEARINGS
EVMG45

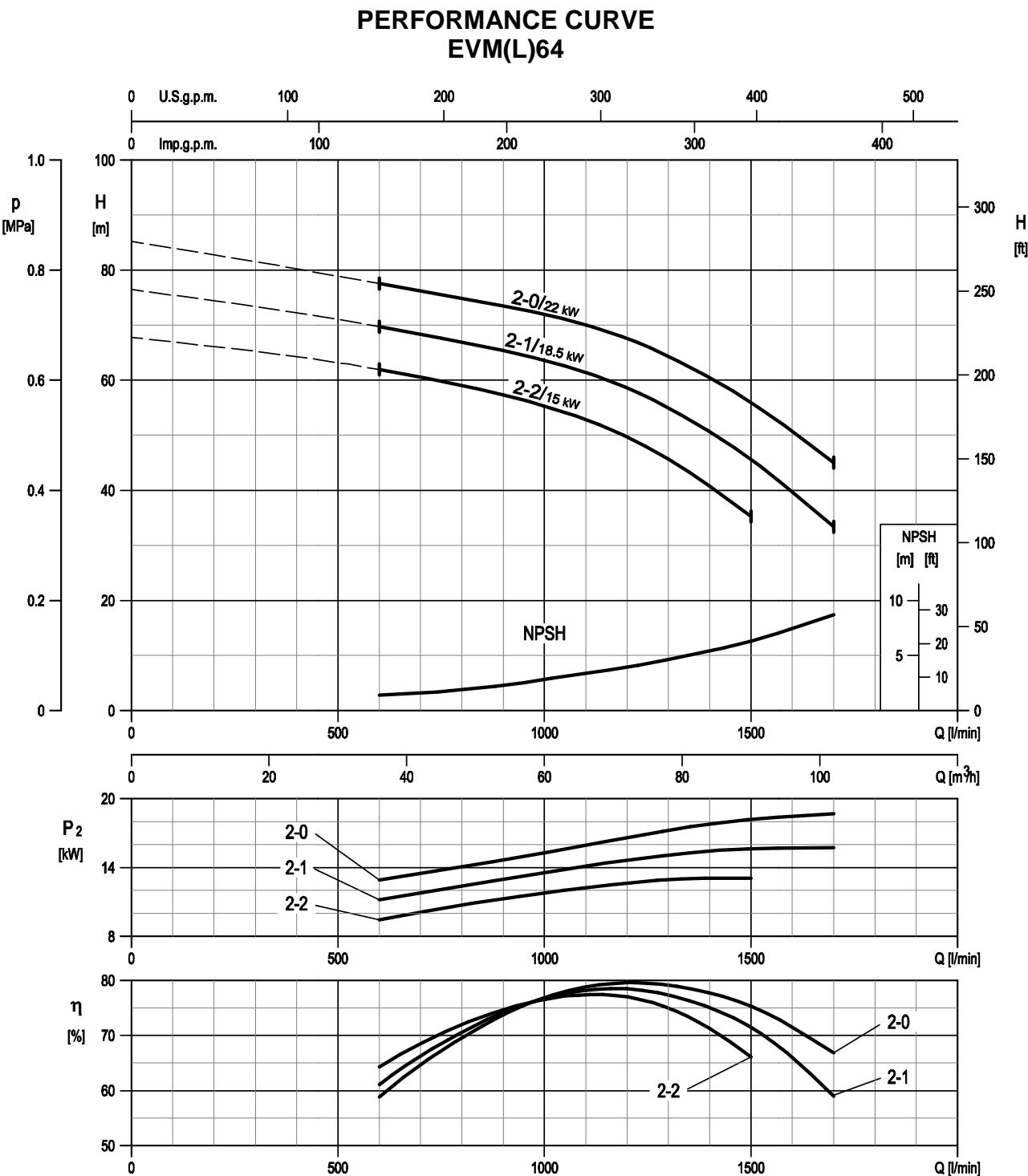
Pump Type	N° 56
EVMG45 1-1F6/5.5	6310 ZZ C3
EVMG45 1-0F6/7.5	6310 ZZ C3
EVMG45 2-2F6/11	6313 ZZ C3
EVMG45 2-1F6/11	6313 ZZ C3
EVMG45 2-0F6/15	6313 ZZ C3
EVMG45 3-3F6/15	6313 ZZ C3
EVMG45 3-2F6/15	6313 ZZ C3
EVMG45 3-1F6/18.5	6313 ZZ C3
EVMG45 3-0F6/22	6313 ZZ C3
EVMG45 4-3F6/18.5	6313 ZZ C3
EVMG45 4-2F6/22	6315 ZZ C3
EVMG45 4-1F6/30	6315 ZZDT C3 *
EVMG45 4-0F6/30	6315 ZZDT C3 *
EVMG45 5-3F6/30	6315 ZZDT C3 *
EVMG45 5-2F6/30	6315 ZZDT C3 *
EVMG45 5-1F6/30	6315 ZZDT C3 *
EVMG45 5-0F6/37	6315 ZZDT C3 *
EVMG45 6-3F6/37	6315 ZZDT C3 *
EVMG45 6-2F6/37	6315 ZZDT C3 *
EVMG45 6-1F6/37	6315 ZZDT C3 *

*DT=Two single row deep groove ball bearings matched for paired mounting in a tandem arrangement.

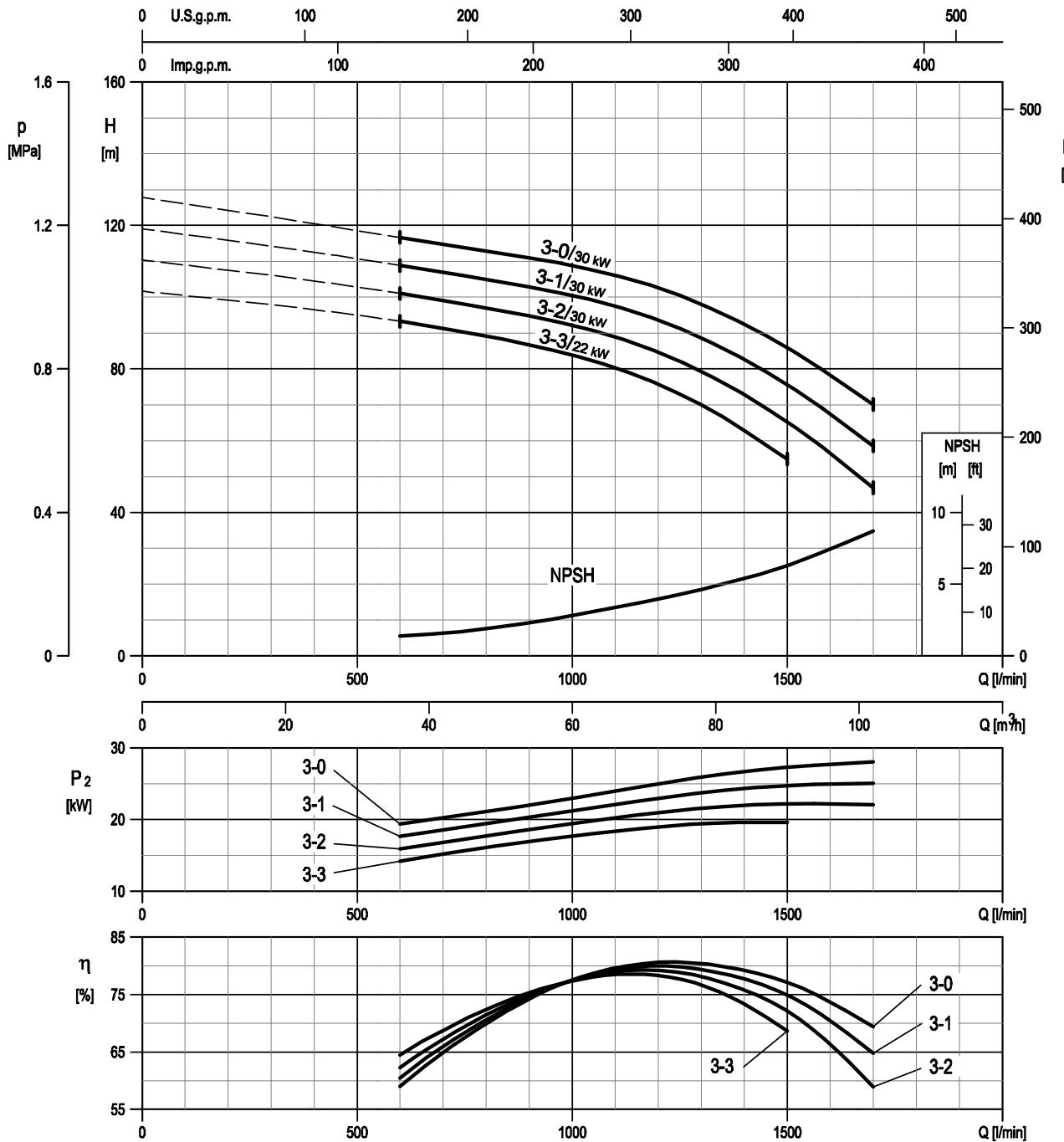
**PERFORMANCE CURVE
EVM(L)64**



Rotation speed $\approx 3500 \text{ min}^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

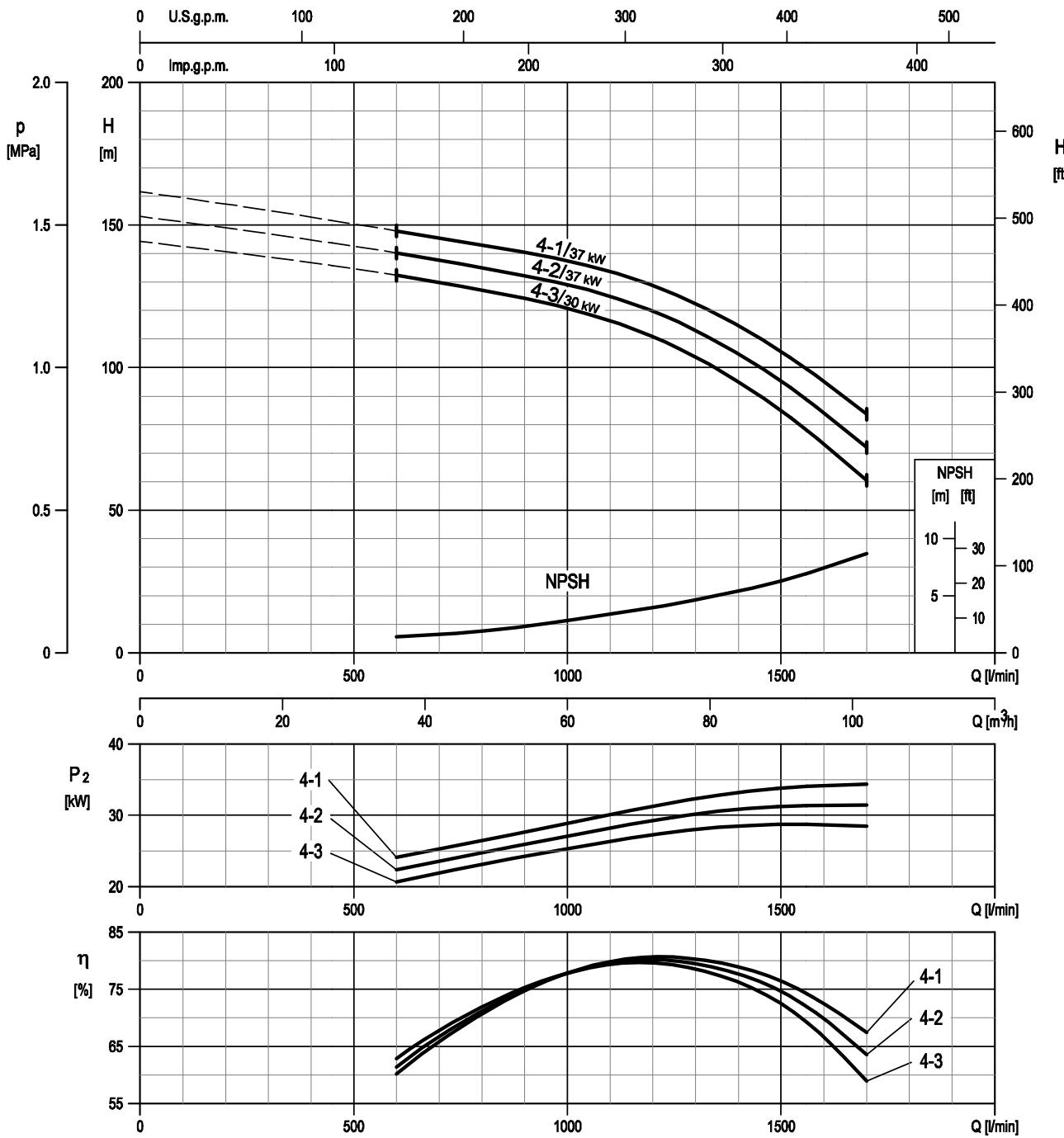


Rotation speed ≈ 3500 min $^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

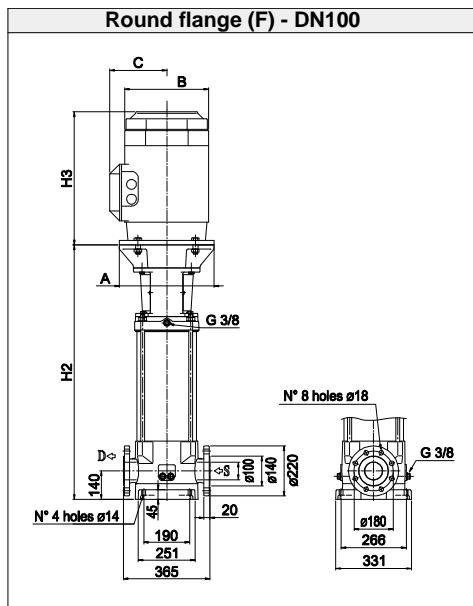
PERFORMANCE CURVE
EVM(L)64

Rotation speed $\approx 3500 \text{ min}^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

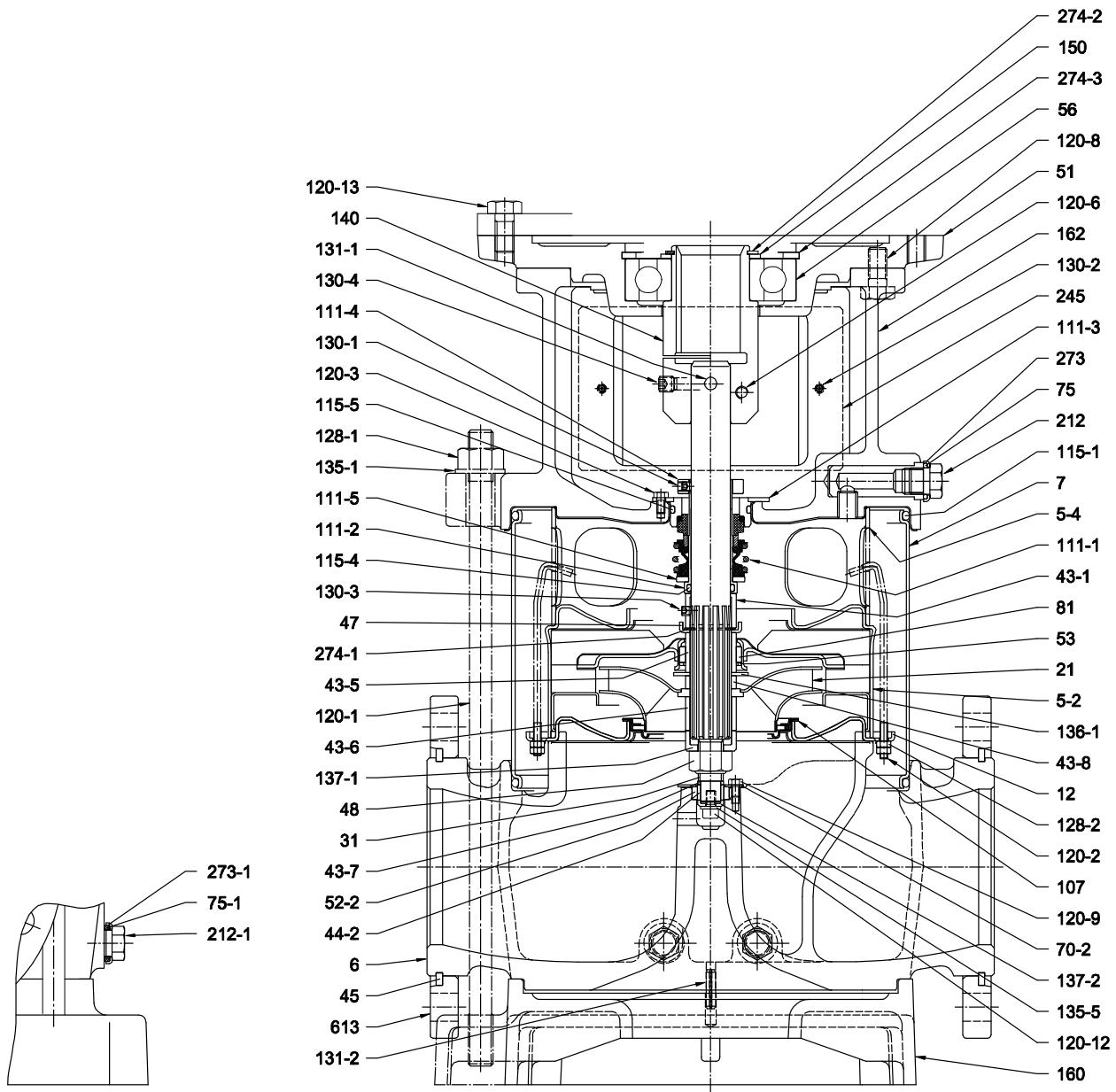
364

**PERFORMANCE CURVE
EVM(L)64**


Rotation speed ≈ 3500 min⁻¹
Test standard: ISO 9906:2012 - Grade 3B

TECHNICAL DATA
EVM(L)64
Dimensional sketch

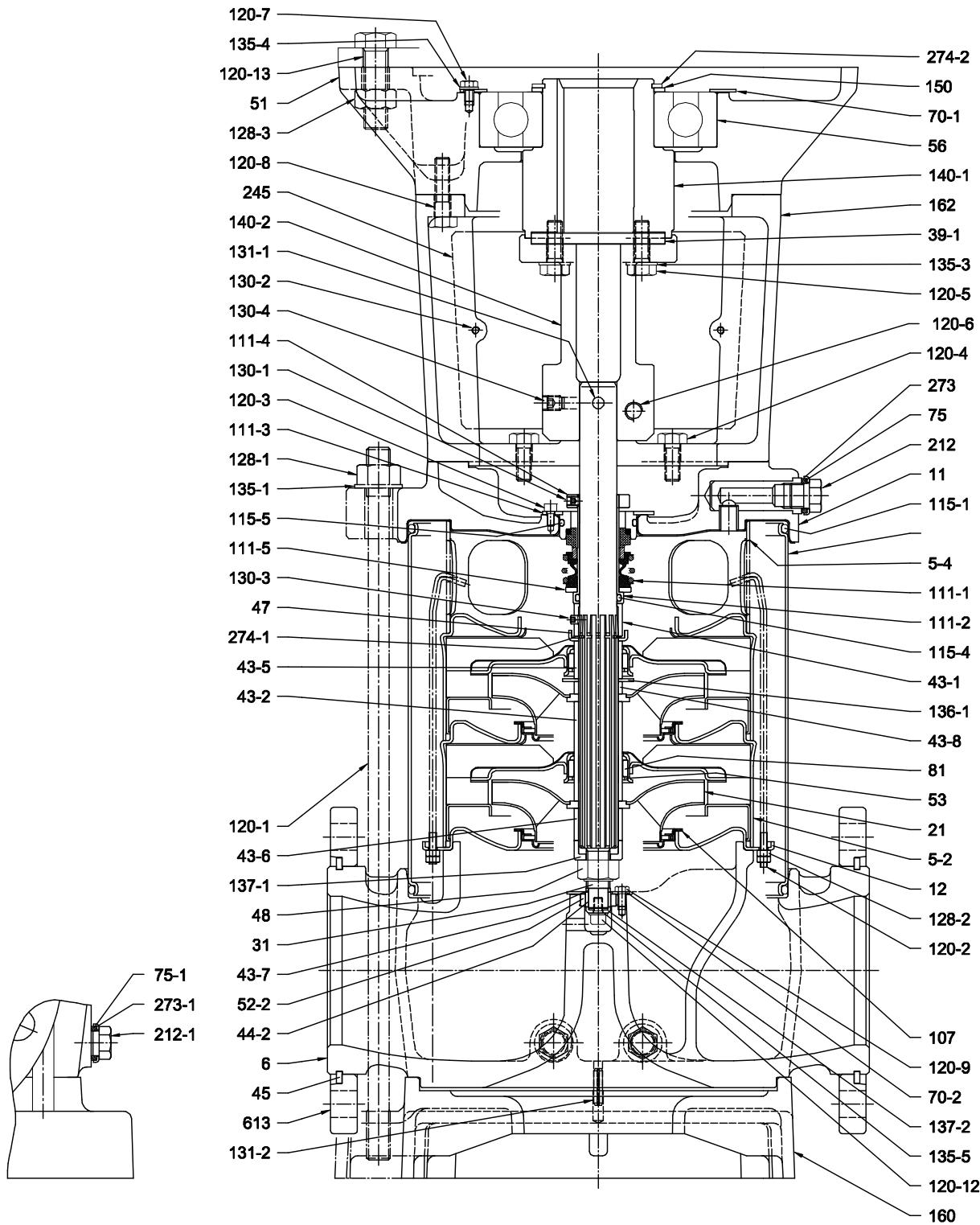
**SECTIONAL VIEW
EVM(L)64**



Pump with single ball bearing

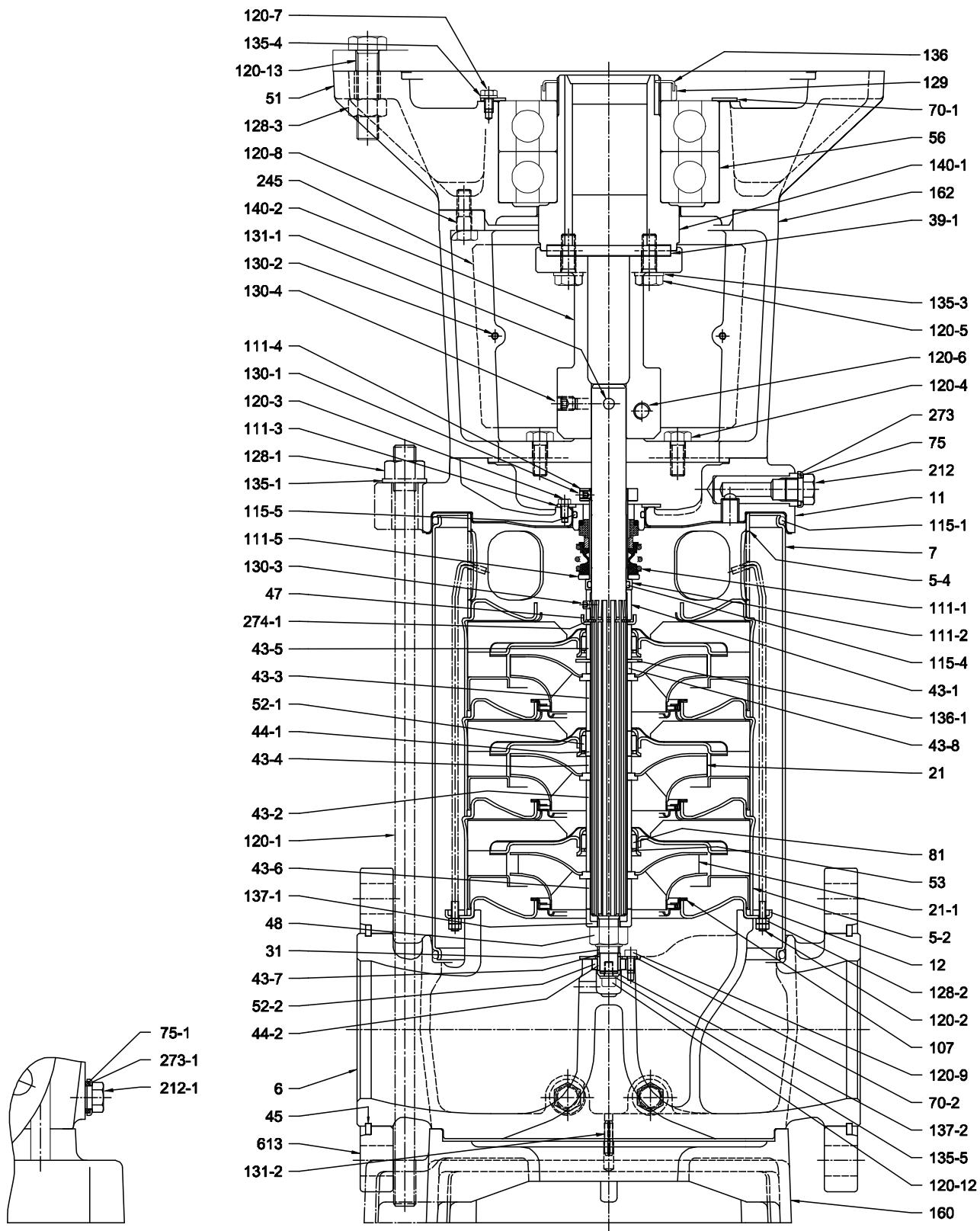
SECTIONAL VIEW

EVM(L)64



Pump with single ball bearing

**SECTIONAL VIEW
EVM(L)64**



Pump with double ball bearing

**SECTIONAL TABLE
EVM(L)64**

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD
	EVM	EVML		
5-2	Intermediate casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
5-4	Discharge casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
6	Bottom casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
7	Outer casing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
11	Casing cover	Cast iron + EN 1.4301 (AISI 304)	Cast iron + EN 1.4401 (AISI 316)	
12	Suction cover	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
21	Impeller			
21-1	Reduced impeller	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
31	Shaft	EN 1.4401 (AISI 316)		
39-1	Key	Carbon steel	12X8X90	UNI 6604
43-1	Shaft sleeve (mechanical seal)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
43-4	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
43-5	Shaft sleeve (last stage)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
43-6	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
43-7	Shaft sleeve (bottom bearing)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
43-8	Shaft sleeve (discharge/lower)	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
44-1	Shaft sleeve bearing	Tungsten carbide		
44-2	Bearing sleeve	Tungsten carbide		
45	Flange holder	EN 1.402 (AISI 420)		
47	Ring holder	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
48	Impeller nut	A2-70 UNI 7323 with inox insert	A4-70 UNI 7323 with inox insert	M16
51	Motor adapter	Cast iron EN-GJL-200-EN 1561		
52-1	Bearing	Tungsten carbide		
52-2	Bearing	Tungsten carbide		
53	Bush holder	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
56	Ball bearing	see table page 371		
70-1	Ring for bearing	EN 1.4301 (AISI 304)		
70-2	Ring for bearing	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
75	O-Ring (plug)	EPDM	FPM	
75-1	O-Ring (plug)	EPDM	FPM	
81	Bush	PTFE		
107	Liner ring	PTFE / EN 1.4401 (AISI 316)		
111-1	Mechanical seal	Silicon carbide / Carbon /FPM		
111-2	Mechanical seal cartridge	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
111-4	Seal holder	Brass OT 58 UNI 5705	EN 1.4401 (AISI 316)	
111-5	Adjusting ring	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
115-1	O-Ring (outer casing)	EPDM	FPM	D.240,66X6,34
115-4	O-Ring (cartridge sleeve)	EPDM	FPM	D.24,99X3,53
115-5	O-Ring (seal cover)	EPDM	FPM	D.44,04X3,53
120-1	Tie-rod	Galvanized steel 6.8 Strength class ISO 898/1		
120-2	Tie-rod	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
120-3	Screw (mechanical seal)	A2-70 UNI 7323	M5X10	UNI 5931
120-4	Screw (casing cover)	Galvanized steel 8.8 Strength class ISO 898/1	M10X25	UNI 5739
120-5	Screw for coupling	Galvanized steel 8.8 Strength class ISO 898/1	M10X30	UNI 5739
120-6	Screw for coupling	EVM64 1-1 EVM64 1-0 and higher	Galvanized steel 8.8 Strength class ISO 898/1	M12X30 UNI 5931
120-7	Screw		Galvanized steel	M 6X10 UNI 5739
120-8	Screw	EVM 64 1-0 to 4-3 EVM64 1-1	Galvanized steel 8.8 Strength class ISO 898/1	M10X30 UNI 5739
120-9	Screw	EVM, EVMG	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)
120-12	Screw	EVM 64 1-1	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)
120-13	Screw	EVM 64 4-1, 4-2 EVM 64 1-0 to 4-3	Galvanized steel 8.8 Strength class ISO 898/1	M12X30 M16X55 M16X65 UNI 5739
128-1	Nut for tie rod		Galvanized steel	M16 UNI 5588
128-2	Nut	Carbon steel	EN 1.4401 (AISI 316)	M5 UNI 5588
128-3	Nut	Galvanized steel		M16 UNI 5588
129	Lock nut	Carbon steel		
130-1	Set screw	A2-70 UNI 7323	M6X8 UNI 5923	
130-2	Screw for coupling guard	A2-70 UNI 7323	M5X6 UNI 7687	
130-3	Set screw	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	M6X6 UNI 5923
130-4	Set screw	Galvanized steel		M10X10 UNI 5923
131-1	Pin for shaft	Carbon steel		
131-2	Elastic pin	Galvanized steel	6X25 UNI 6873	
135-1	Washer	Galvanized steel	17x30x3 UNI 6592	
135-3	Washer	Galvanized steel	10,5X17,5X2,2 UNI 1751	
135-4	Washer	Plated carbon steel	6,4 UNI 1751	
135-5	Washer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	D.6
136	Bearing washer	Carbon steel		
136-1	Stopper ring	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
137-1	Impeller spacer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
137-2	Shaft spacer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
140	Coupling	Brass OT 58 UNI 5705		
140-1	Motor coupling	Carbon steel		
140-2	Coupling (pump side)	Carbon steel		
150	Spacer	Carbon steel		
160	Base	Cast iron EN-GJL-200 EN 1561		
162	Motor bracket	Cast iron EN-GJL-200-EN 1561		
212	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
212-1	Plug	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
245	Coupling guard	EN 1.4301 (AISI 304)		
273	Plug washer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
273-1	Plug washer	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	
274-1	C-Type snap ring	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	D.26 D.50 D.65 D.75 D.110 UNI 7437
274-2	C-Type snap ring	EVM64 1-1 EVM64 1-0 to 2-2 EVM64 2-0, 3-3	Carbon steel TC80	UNI 7435 UNI 7435 UNI 7435 UNI 7535
274-3	C-Type snap ring		Carbon steel TC80	UNI 7535
613	Flange	Carbon steel		

VERTICAL MULTISTAGE PUMPS

QUANTITY FOR MODEL
EVM(L)64

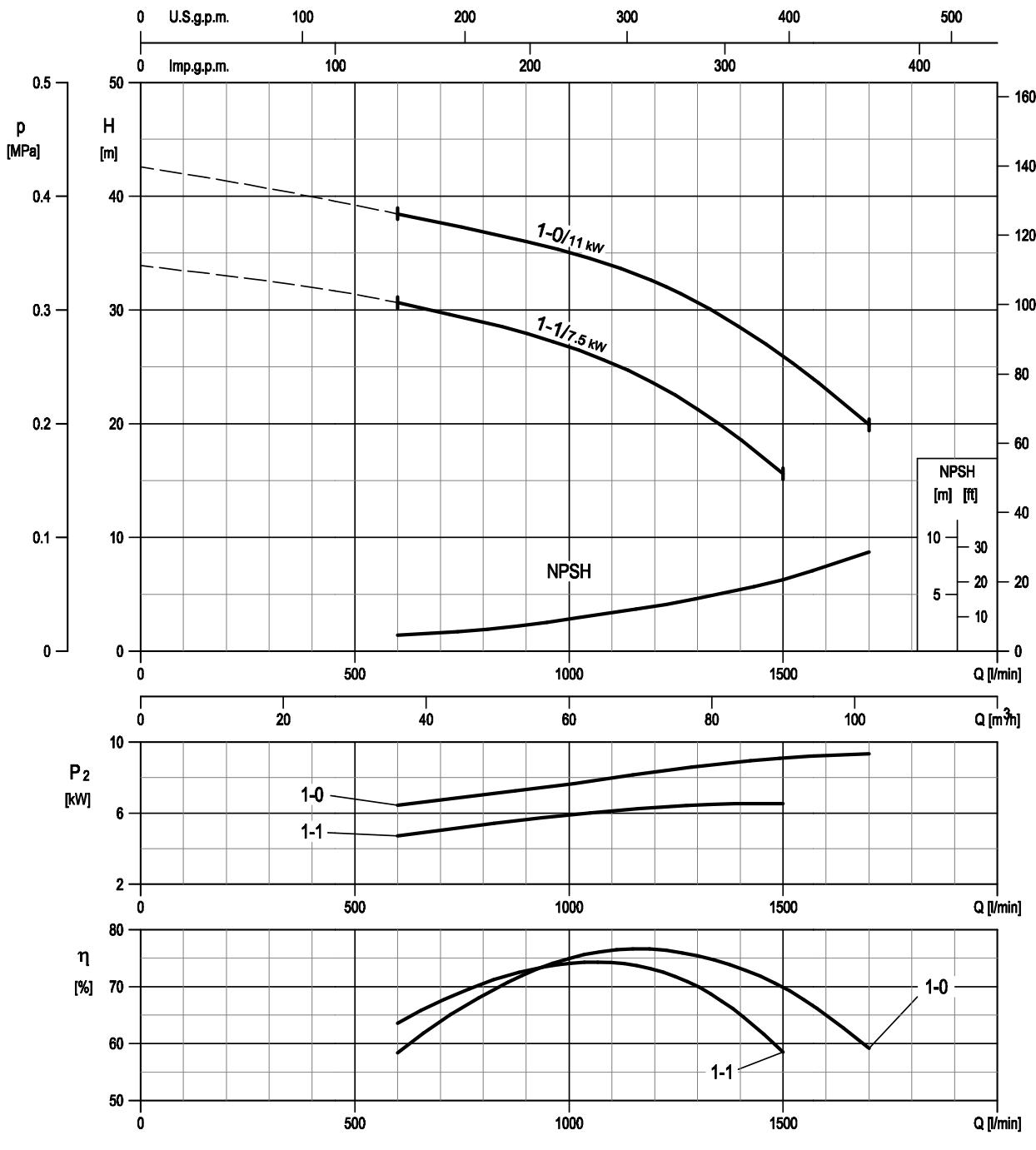
Pump Type	5-2	11	21	21-1	39-1	43-2	43-3	43-4	44-1	52-1	53	56	70-1	81	107	120-4	120-5	120-7	128-3	129	135-3	135-4	136	140	140-1	140-2	150	274-2	274-3
EVM(L)64 1-1F6/7.5	1	/	/	1	/	/	/	/	/	1	1	/	1	1	/	/	/	/	/	/	/	1	/	/	1	1	1	1	
EVM(L)64 1-0F6/11	1	1	1	/	1	/	/	/	/	1	1	1	1	1	4	4	3	4	/	4	3	/	1	1	1	1	1	/	
EVM(L)64 2-2F6/15	2	1	/	2	1	1	/	/	/	2	1	1	2	2	4	4	3	4	/	4	3	/	1	1	1	1	1	/	
EVM(L)64 2-1F6/18.5	2	1	1	1	1	1	/	/	/	2	1	1	2	2	4	4	3	4	/	4	3	/	1	1	1	1	1	/	
EVM(L)64 2-0F6/22	2	1	2	/	1	1	/	/	/	2	1	1	2	2	4	4	3	4	/	4	3	/	1	1	1	1	1	/	
EVM(L)64 3-3F6/22	3	1	/	3	1	2	/	/	/	3	1	1	3	3	4	4	3	4	/	4	3	/	1	1	1	1	1	/	
EVM(L)64 3-2F6/30	3	1	1	2	1	2	/	/	/	3	1	1	3	3	4	4	3	4	1	4	3	1	/	1	1	1	1	/	
EVM(L)64 3-1F6/30	3	1	2	1	1	2	/	/	/	3	1	1	3	3	4	4	3	4	1	4	3	1	/	1	1	1	1	/	
EVM(L)64 3-0F6/30	3	1	3	/	1	2	/	/	/	3	1	1	3	3	4	4	3	4	1	4	3	1	/	1	1	1	1	/	
EVM(L)64 4-3F6/30	4	1	1	3	1	2	1	1	1	1	4	1	1	3	4	4	4	3	4	1	4	3	1	/	1	1	1	1	/
EVM(L)64 4-2F6/37	4	1	2	2	1	2	1	1	1	1	4	1	1	3	4	4	4	3	4	1	4	3	1	/	1	1	1	1	/
EVM(L)64 4-1F6/37	4	1	3	1	1	2	1	1	1	4	1	1	3	4	4	4	3	4	1	4	3	1	/	1	1	1	1	/	

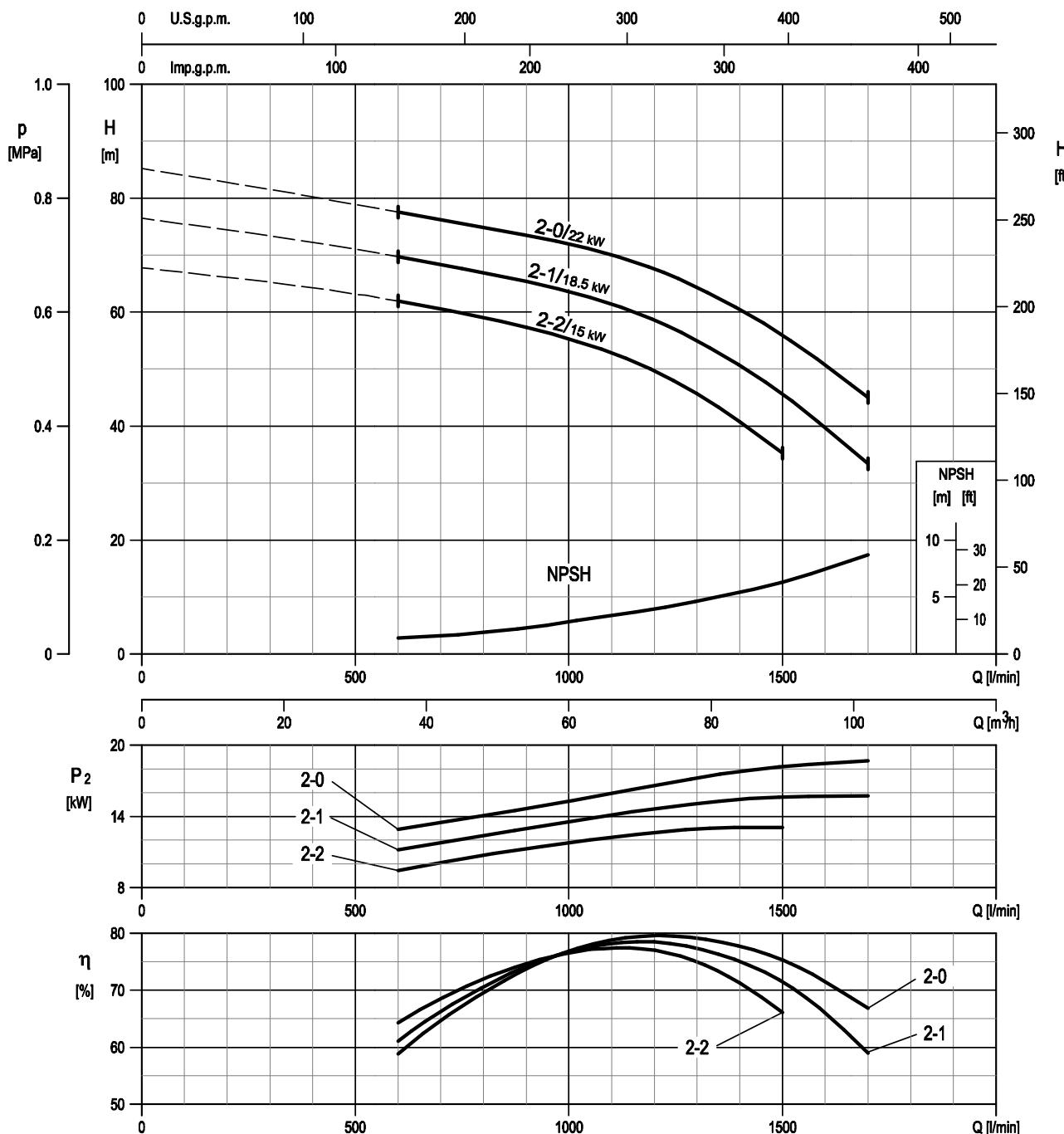
BEARINGS
EVM(L)64

Pump Type	Nº
	56
EVM(L)64 1-1F6/7.5	6310 ZZ C3
EVM(L)64 1-0F6/11	6313 ZZ C3
EVM(L)64 2-2F6/15	6313 ZZ C3
EVM(L)64 2-1F6/18.5	6313 ZZ C3
EVM(L)64 2-0F6/22	6315 ZZ C3
EVM(L)64 3-3F6/22	6315 ZZ C3
EVM(L)64 3-2F6/30	6315 ZZDT C3*
EVM(L)64 3-1F6/30	6315 ZZDT C3*
EVM(L)64 3-0F6/30	6315 ZZDT C3*
EVM(L)64 4-3F6/30	6315 ZZDT C3*
EVM(L)64 4-2F6/37	6315 ZZDT C3*
EVM(L)64 4-1F6/37	6315 ZZDT C3*

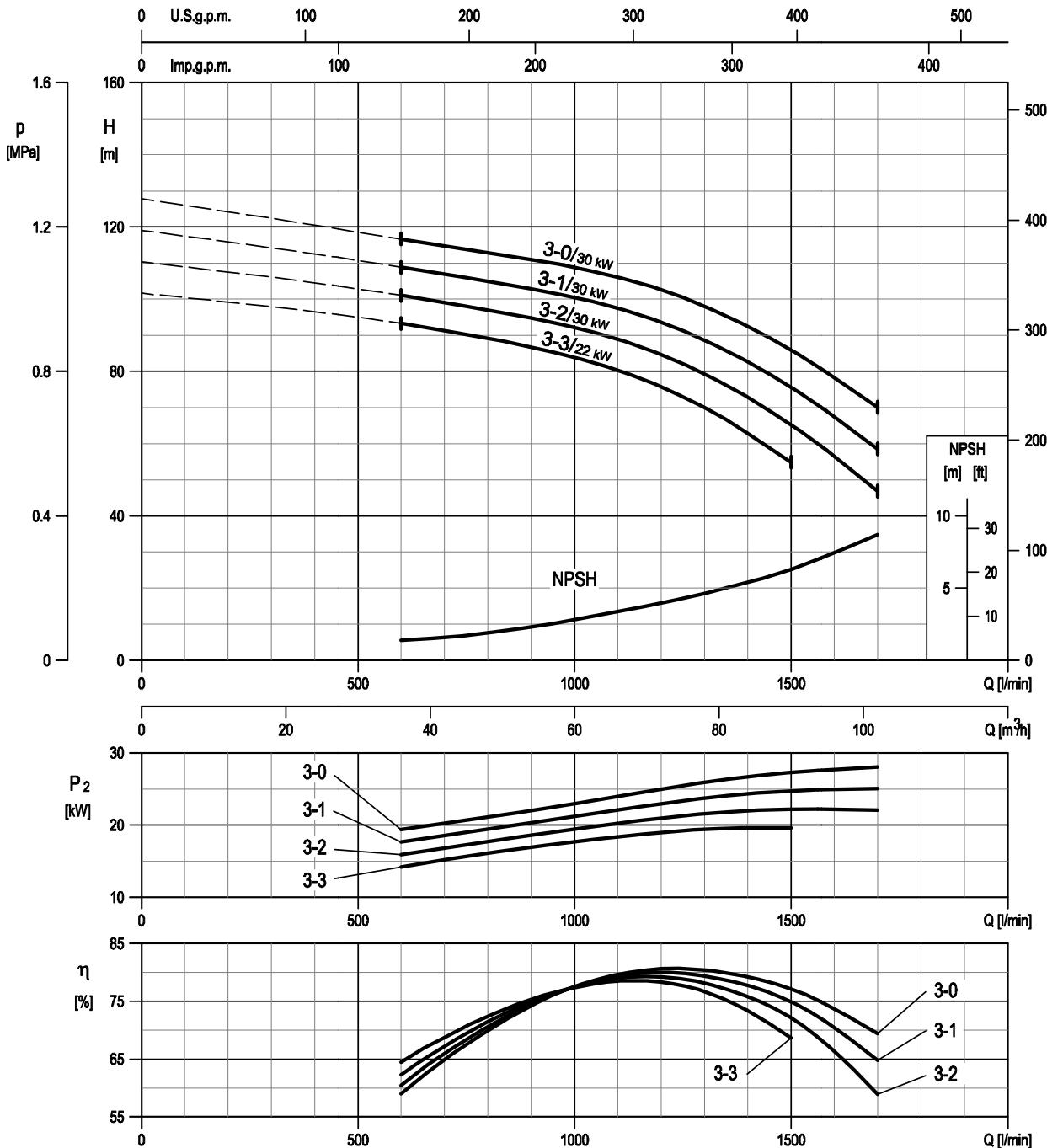
*DT=Two single row deep groove ball bearings matched for paired mounting in a tandem arrangement.

**PERFORMANCE CURVE
EVMG64**

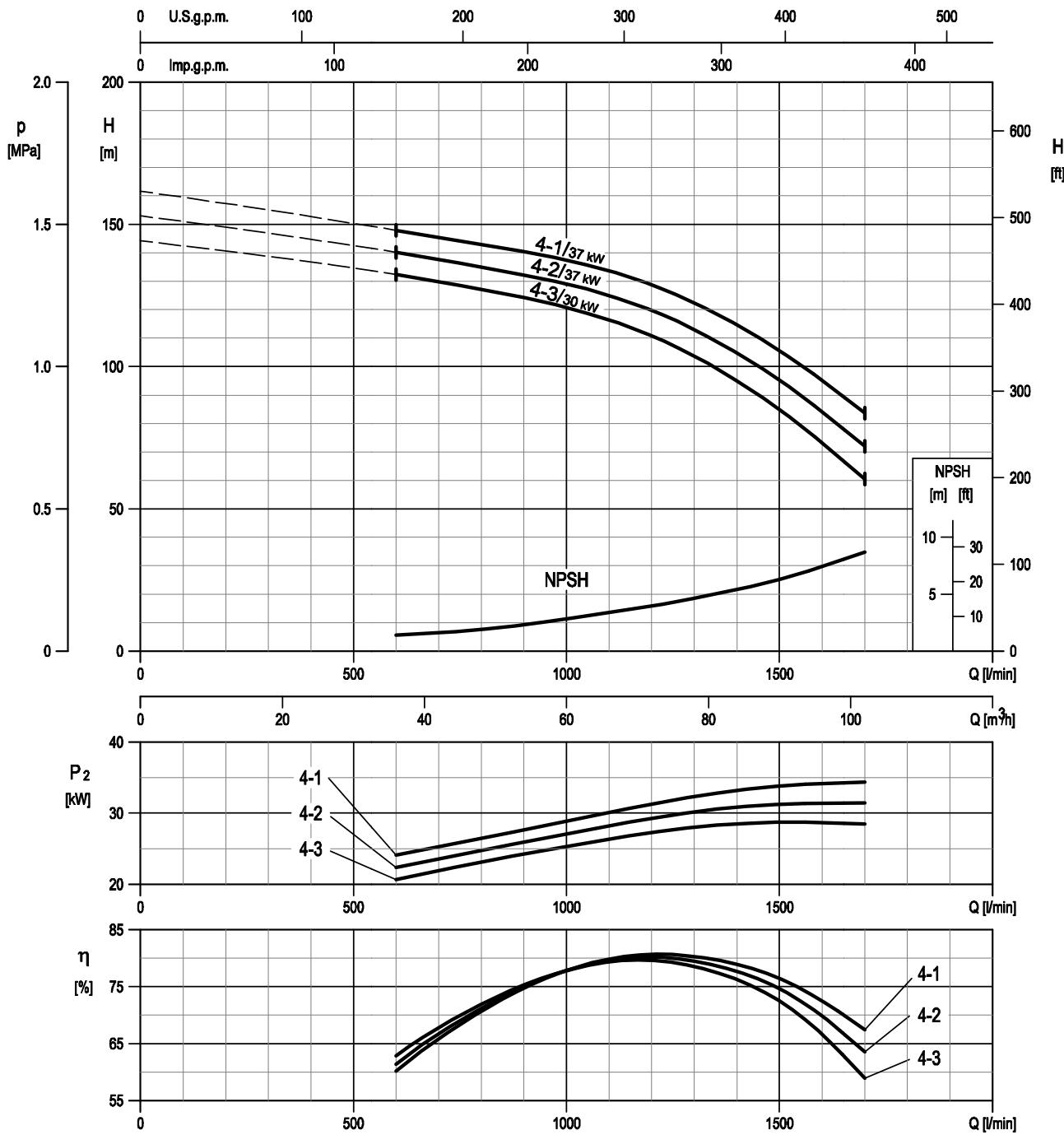


PERFORMANCE CURVE
EVMG64

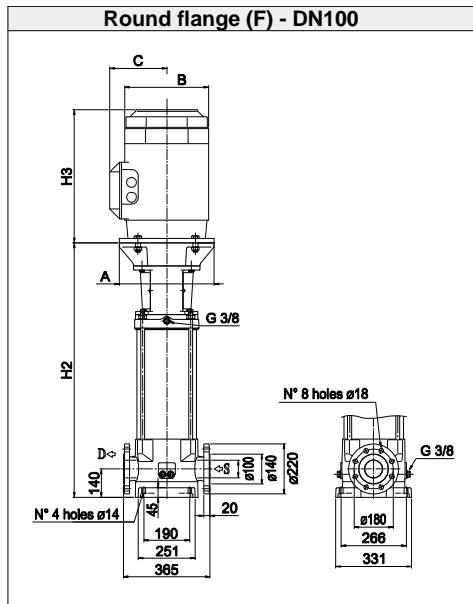
Rotation speed $\approx 3500 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 - Grade 3B

**PERFORMANCE CURVE
EVMG64**


Rotation speed $\approx 3500 \text{ min}^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

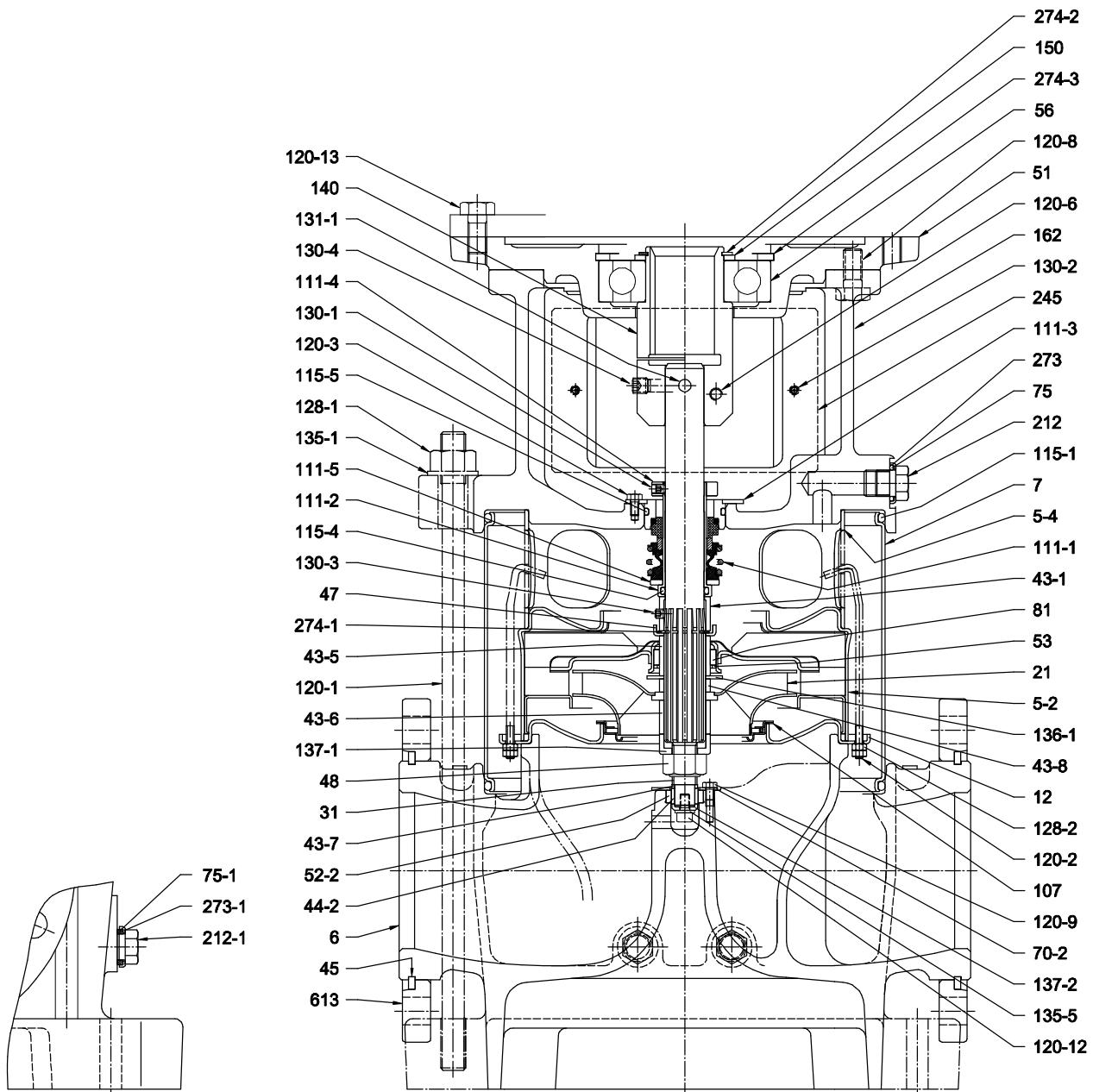
**PERFORMANCE CURVE
EVMG64**


Rotation speed ≈ 3500 min $^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

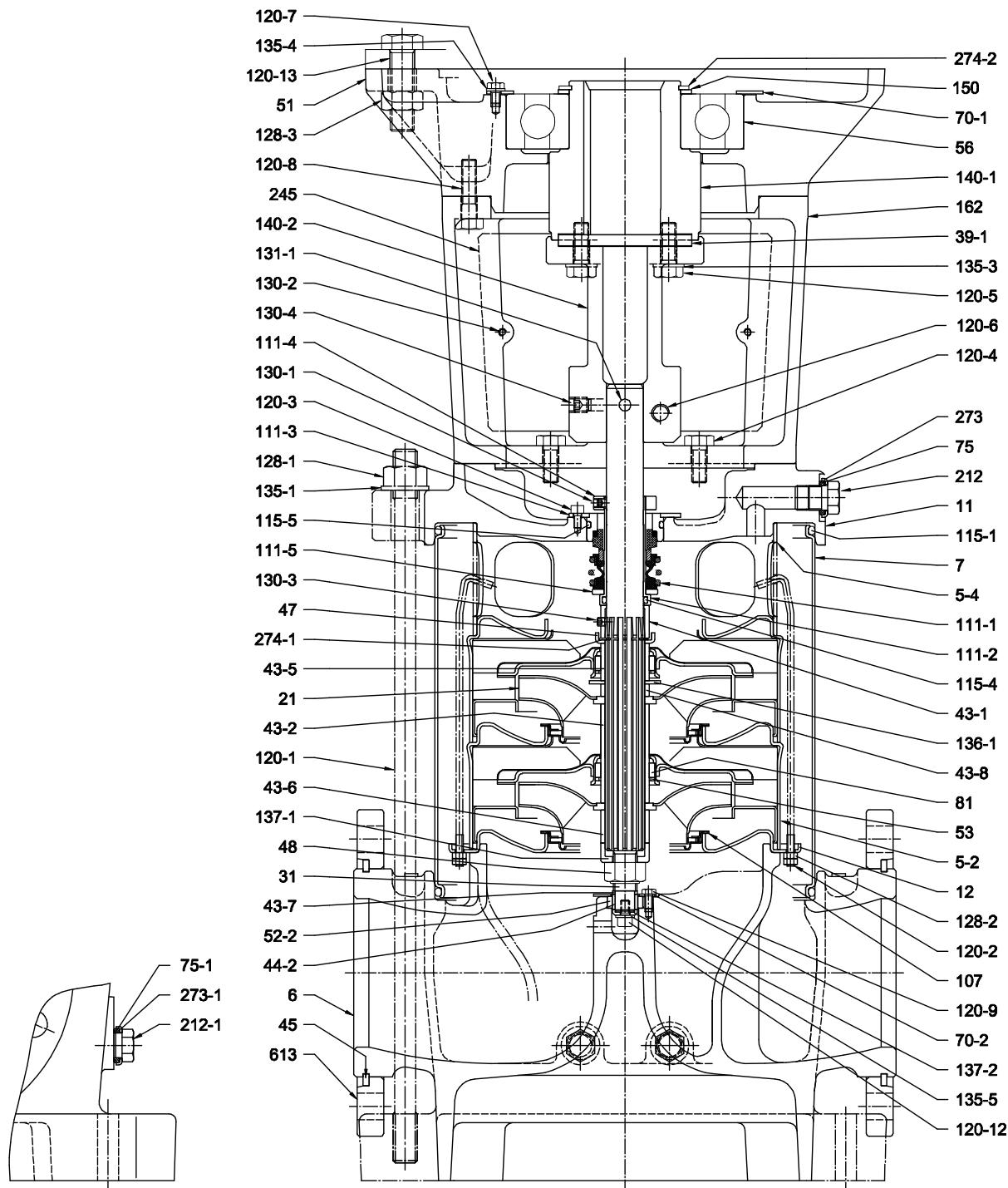
**TECHNICAL DATA
EVMG64**
Dimensional sketch

Dimensions [mm] and Weights [Kg]

Pump Type	Pmax [MPa]	Motor					H2	Round flange (F)		
		kW	Size	A	B	C		Weight Pump	Weight Pump + Motor	
EVMG64 1-1F6/7.5	1.6	7.5	132 S	300	225	160	350	546	70	110.4
EVMG64 1-0F6/11	1.6	11	160 M	350	248	194	476	677	77	139.5
EVMG64 2-2F6/15	1.6	15	160 M	350	317	238	498	749	81	169.9
EVMG64 2-1F6/18.5	1.6	18.5	160 L	350	317	238	542	749	94	198
EVMG64 2-0F6/22	1.6	22	180 M	350	360	268	577	749	94	257
EVMG64 3-3F6/22	1.6	22	180 M	350	360	268	577	821	99	262
EVMG64 3-2F6/30	1.6	30	200 L	400	399	300	658	837	99	327
EVMG64 3-1F6/30	1.6	30	200 L	400	399	300	658	837	99	327
EVMG64 3-0F6/30	1.6	30	200 L	400	399	300	658	837	99	327
EVMG64 4-3F6/30	1.6	30	200 L	400	399	300	658	909	108	336
EVMG64 4-2F6/37	1.6	37	200 L	400	399	300	658	909	108	350
EVMG64 4-1F6/37	1.6	37	200 L	400	399	300	658	909	108	350

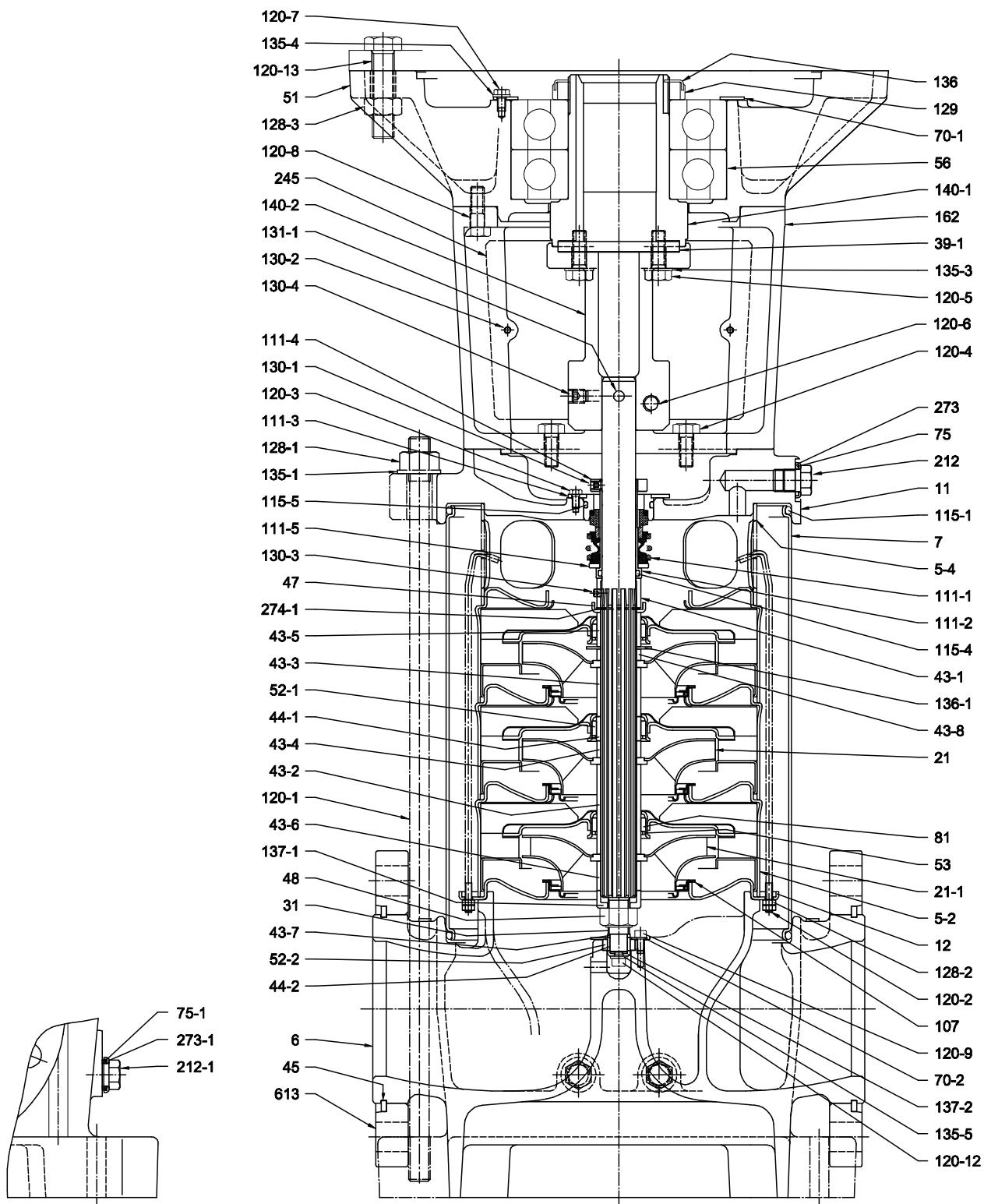
1.6 MPa=16 bar ; 2.5 MPa=25 bar

SECTIONAL VIEW
EVMG64

Pump with single ball bearing

SECTIONAL VIEW
EVMG64

Pump with single ball bearing

SECTIONAL VIEW
EVMG64

Pump with double ball bearing

**SECTIONAL TABLE
EVMG64**

N°	PART NAME	MATERIAL EVMG	DIMENSIONS	STANDARD
5-2	Intermediate casing	EN 1.4301 (AISI 304)		
5-4	Discharge casing	EN 1.4301 (AISI 304)		
6	Bottom casing	Cast iron EN GJL-250- EN 1561		
7	Outer casing	EN 1.4301 (AISI 304)		
11	Casing cover	Cast iron EN GJL-250- EN 1561		
12	Suction cover	EN 1.4301 (AISI 304)		
21	Impeller	EN 1.4301 (AISI 304)		
21-1	Reduced impeller	EN 1.4301 (AISI 304)		
31	Shaft	EN 1.4401 (AISI 316)		
39-1	Key	Carbon steel	12X8X90	UNI 6604
43-1	Shaft sleeve (mechanical seal)	EN 1.4301 (AISI 304)		
43-2	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)		
43-3	Shaft sleeve (bearing)	EN 1.4301 (AISI 304)		
43-4	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)		
43-5	Shaft sleeve (last stage)	EN 1.4301 (AISI 304)		
43-6	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)		
43-7	Shaft sleeve (bottom bearing)	EN 1.4301 (AISI 304)		
43-8	Shaft sleeve (discharge/lower)	EN 1.4301 (AISI 304)		
44-1	Shaft sleeve bearing	Tungsten carbide		
44-2	Bearing sleeve	Tungsten carbide		
45	Flange holder	EN 1.402 (AISI 420)		
47	Ring holder	EN 1.4301 (AISI 304)		
48	Impeller nut	A2-70 UNI 7323 with inox insert	M16	
51	Motor adapter	Cast iron EN-GJL-200-EN 1561		
52-1	Bearing	Tungsten carbide		
52-2	Bearing	Tungsten carbide		
53	Bush holder	EN 1.4301 (AISI 304)		
56	Ball bearing	see table page 381		
70-1	Ring for bearing	EN 1.4301 (AISI 304)		
70-2	Ring for bearing	EN 1.4301 (AISI 304)		
75	O-Ring (plug)	EPDM		
75-1	O-Ring (plug)	EPDM		
81	Bush	PTFE		
107	Liner ring	PTFE / EN 1.4401 (AISI 316)		
111-1	Mechanical seal	Silicon carbide / Carbon /FPM		
111-2	Mechanical seal cartridge	EN 1.4301 (AISI 304)		
111-3	Mechanical seal seat	EN 1.4301 (AISI 304)		
111-4	Seal holder	Brass OT 58 UNI 5705		
111-5	Adjusting ring	EN 1.4301 (AISI 304)		
115-1	O-Ring (outer casing)	EPDM	D.240,66X5,34	
115-4	O-Ring (cartridge sleeve)	EPDM	D.24,99X3,53	
115-5	O-Ring (seal cover)	EPDM	D.44,04X3,53	
120-1	Tie-rod	Galvanized steel 6.8 Strenght class ISO 898/1		
120-2	Tie-rod	EN 1.4301 (AISI 304)		
120-3	Screw (mechanical seal)	A2-70 UNI 7323	M5X10	UNI 5931
120-4	Screw (casing cover)	Galvanized steel 8.8 Strenght class ISO 898/1	M10X25	UNI 5739
120-5	Screw for coupling	Galvanized steel 8.8 Strenght class ISO 898/1	M10X30	UNI 5739
120-6	Screw for coupling	EVM64 1-1 EVM64 1-0 and higher	Galvanized steel 8.8 Strenght class ISO 898/1	M8X20 M12X30 UNI 5931
120-7	Screw		Galvanized steel	M 6X10 UNI 5739
120-8	Screw	EVM 64 1-0 to 4-3 EVM64 1-1	Galvanized steel 8.8 Strenght class ISO 898/1	M10X30 M12X35 UNI 5739
120-9	Screw	EVML EVM, EVMG	EN 1.4301 (AISI 304)	M5X8 M5X8 UNI 5739
120-12	Screw		EN 1.4301 (AISI 304)	M 6X20 UNI 5931
120-13	Screw	EVM 64 1-1 EVM 64 4-1, 4-2 EVM 64 1-0 to 4-3	Galvanized steel 8.8 Strenght class ISO 898/1	M12X30 M16X55 M16X65 UNI 5739
128-1	Nut for tie rod		Galvanized steel	M16 UNI 5588
128-2	Nut		Carbon steel	M5 UNI 5588
128-3	Nut		Galvanized steel	M16 UNI 5588
129	Lock nut		Carbon steel	
130-1	Set screw	A2-70 UNI 7323	M6X8	UNI 5923
130-2	Screw for coupling guard	A2-70 UNI 7323	M5X6	UNI 7687
130-3	Set screw	EN 1.4301 (AISI 304)	M6X6	UNI 5923
130-4	Set screw		Galvanized steel	M10X10 UNI 5923
131-1	Pin for shaft		Carbon steel	
131-2	Elastic pin	-		6X25 UNI 6873
135-1	Washer	Galvanized steel		17X30x3 UNI 6592
135-3	Washer	Galvanized steel		10,5X17,5X2,2 UNI 1751
135-4	Washer	Plated carbon steel		6,4 UNI 1751
135-5	Washer	EN 1.4301 (AISI 304)		D.6
136	Bearing washer	Carbon steel		
136-1	Stopper ring	EN 1.4301 (AISI 304)		
137-1	Impeller spacer	EN 1.4301 (AISI 304)		
137-2	Shaft spacer	EN 1.4301 (AISI 304)		
140	Coupling	Brass OT 58 UNI 5705		
140-1	Motor coupling	Carbon steel		
140-2	Coupling (pump side)	Carbon steel		
150	Spacer	Carbon steel		
160	Base			
162	Motor bracket	Cast iron EN-GJL-200-EN 1561		
212	Plug	EN 1.4301 (AISI 304)		
212-1	Plug	EN 1.4301 (AISI 304)		
245	Coupling guard	EN 1.4301 (AISI 304)		
273	Plug washer	EN 1.4301 (AISI 304)		
273-1	Plug washer	EN 1.4301 (AISI 304)		
274-1	C-Type snap ring	EN 1.4301 (AISI 304)		D.26 UNI 7435
274-2	C-Type snap ring	EVM64 1-1 EVM64 1-0 to 2-2 EVM64 2-0, 3-3	Carbon steel TC80	D.50 D.65 D.75 UNI 7435 UNI 7535
274-3	C-Type snap ring		Carbon steel TC80	D.110 UNI 7437
613	Flange	Carbon steel		

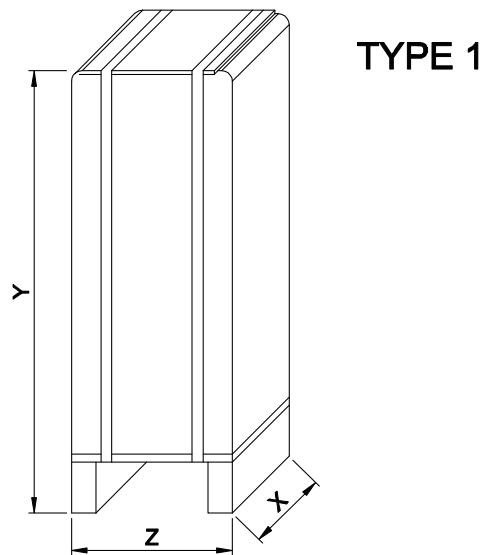
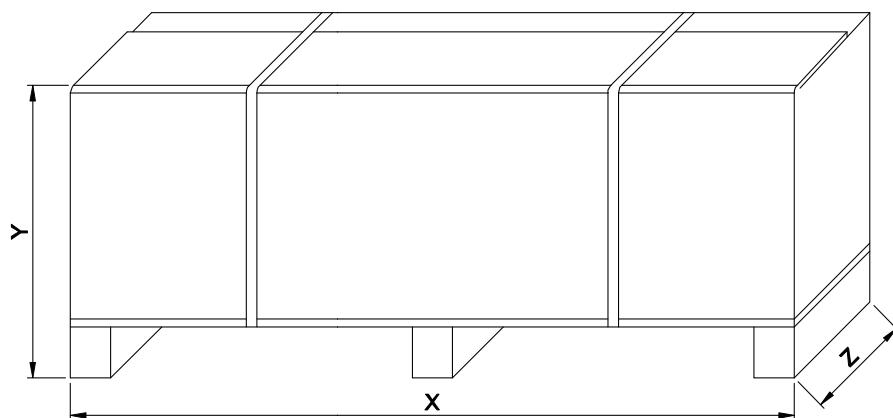
QUANTITY FOR MODEL
EVMG64

Pump Type	5-2	11	21	21-1	39-1	43-2	43-3	43-4	44-1	52-1	53	56	70-1	81	107	120-4	120-5	120-7	128-3	129	135-3	135-4	136	140	140-1	140-2	150	274-2	274-3
EVMG64 1-1F6/7.5	1	/	/	1	/	/	/	/	/	1	1	/	1	1	/	/	/	/	/	/	/	1	/	/	1	1	1	1	
EVMG64 1-0F6/11	1	1	1	/	1	/	/	/	/	1	1	1	1	1	1	4	4	3	4	/	4	3	/	/	1	1	1	1	
EVMG64 2-2F6/15	2	1	/	2	1	1	/	/	/	2	1	1	2	2	4	4	4	3	4	/	4	3	/	/	1	1	1	1	
EVMG64 2-1F6/18.5	2	1	1	1	1	1	/	/	/	2	1	1	2	2	4	4	4	3	4	/	4	3	/	/	1	1	1	1	
EVMG64 2-0F6/22	2	1	2	/	1	1	/	/	/	2	1	1	2	2	4	4	4	3	4	/	4	3	/	/	1	1	1	1	
EVMG64 3-3F6/22	3	1	/	3	1	2	/	/	/	3	1	1	3	3	4	4	4	3	4	/	4	3	/	/	1	1	1	1	
EVMG64 3-2F6/30	3	1	1	2	1	2	/	/	/	3	1	1	3	3	4	4	4	3	4	1	4	3	1	/	1	1	/	/	
EVMG64 3-1F6/30	3	1	2	1	1	2	/	/	/	3	1	1	3	3	4	4	4	3	4	1	4	3	1	/	1	1	/	/	
EVMG64 3-0F6/30	3	1	3	/	1	2	/	/	/	3	1	1	3	3	4	4	4	3	4	1	4	3	1	/	1	1	/	/	
EVMG64 4-3F6/30	4	1	1	3	1	2	1	1	1	1	4	1	1	3	4	4	4	3	4	1	4	3	1	/	1	1	/	/	
EVMG64 4-2F6/37	4	1	2	2	1	2	1	1	1	1	4	1	1	3	4	4	4	3	4	1	4	3	1	/	1	1	/	/	
EVMG64 4-1F6/37	4	1	3	1	1	2	1	1	1	1	4	1	1	3	4	4	4	3	4	1	4	3	1	/	1	1	/	/	

BEARINGS
EVMG64

Pump Type	Nº
	56
EVMG64 1-1F6/7.5	6310 ZZ C3
EVMG64 1-0F6/11	6313 ZZ C3
EVMG64 2-2F6/15	6313 ZZ C3
EVMG64 2-1F6/18.5	6313 ZZ C3
EVMG64 2-0F6/22	6315 ZZ C3
EVMG64 3-3F6/22	6315 ZZ C3
EVMG64 3-2F6/30	6315 ZZDT C3*
EVMG64 3-1F6/30	6315 ZZDT C3*
EVMG64 3-0F6/30	6315 ZZDT C3*
EVMG64 4-3F6/30	6315 ZZDT C3*
EVMG64 4-2F6/37	6315 ZZDT C3*
EVMG64 4-1F6/37	6315 ZZDT C3*

*DT=Two single row deep groove ball bearings matched for paired mounting in a tandem arrangement.

**PACKING DRAWING
EVM(.)32-45-64****TYPE 1****TYPE 2****382**

PACKING DATA
EVM(.)32-45-64

Pump type	Pumps					Pumps with motor ~3							
	Packing [mm]			Weight + Packing [kg]		Pack Type	Packing [mm]			Weight + Packing [kg]		Pack Type	
	X	Z	Y	EVM(G)	EVM(L)		X	Z	Y	EVM(G)	EVM(L)		
32	EVM(.)32 1-0F6/4.0	400	780	400	61	66	1	400	1047	400	97	102	1
	EVM(.)32 2-2F6/5.5	400	780	400	65	71	1	400	1047	400	106	111	1
	EVM(.)32 2-0F6/7.5	400	780	400	68	73	1	400	1047	400	109	115	1
	EVM(.)32 3-3F6/7.5	400	780	400	72	79	1	400	1047	400	113	121	1
	EVM(.)32 3-0F6/11	1047	400	400	84	91	1	500	545	1350	154	161	2
	EVM(.)32 4-3F6/11	1047	400	400	87	94	1	500	545	1350	157	164	2
	EVM(.)32 4-0F6/15	1047	400	400	87	94	1	500	545	1350	182	189	2
	EVM(.)32 5-3F6/15	1047	400	400	94	103	1	500	540	1540	189	198	2
	EVM(.)32 5-2F6/15	1047	400	400	94	103	1	500	540	1540	189	198	2
	EVM(.)32 5-0F6/18.5	1047	400	400	97	103	1	500	540	1540	199	208	2
	EVM(.)32 6-3F6/18.5	1047	400	400	97	106	1	500	540	1540	202	211	2
	EVM(.)32 6-0F6/22	1047	400	400	97	106	1	610	593	1750	249	258	2
	EVM(.)32 7-3F6/22	1047	400	400	110	119	1	610	593	1750	262	271	2
	EVM(.)32 7-2F6/22	1047	400	400	110	119	1	610	593	1750	262	271	2
	EVM(.)32 7-0F6/30	1147	480	480	116	125	1	610	593	1750	315	324	2
	EVM(.)32 8-3F6/30	1147	480	480	115	125	1	610	593	1750	314	324	2
	EVM(.)32 8-0F6/30	1147	480	480	115	125	1	610	593	1750	314	324	2
	EVM(.)32 9-3F6/30	1297	480	480	125	135	1	610	593	1750	317	327	2
	EVM(.)32 9-0F6/30	1297	480	480	125	135	1	610	593	1750	317	327	2
	EVM(.)32 10-4F6/30	1297	480	480	124	135	1	635	607	2130	377	388	2
45	EVM(.)45 1-1F6/5.5	400	780	400	62	69	1	400	1047	400	102	95	1
	EVM(.)45 1-0F6/7.5	400	780	400	64	71	1	400	1047	400	106	109	1
	EVM(.)45 2-2F6/11	1047	400	400	68	75	1	500	545	1350	138	134	2
	EVM(.)45 2-1F6/11	1047	400	400	68	75	1	500	545	1350	138	134	2
	EVM(.)45 2-0F6/15	1047	400	400	68	75	1	500	545	1350	163	170	2
	EVM(.)45 3-3F6/15	1047	400	400	72	81	1	500	540	1540	167	176	2
	EVM(.)45 3-2F6/15	1047	400	400	72	81	1	500	540	1540	167	176	2
	EVM(.)45 3-1F6/18.5	1047	400	400	72	81	1	500	540	1540	177	186	2
	EVM(.)45 3-0F6/22	1047	400	400	82	91	1	500	540	1540	227	236	2
	EVM(.)45 4-3F6/18.5	1047	400	400	74	84	1	500	540	1540	179	189	2
	EVM(.)45 4-2F6/22	1047	400	400	84	94	1	610	593	1750	236	146	2
	EVM(.)45 4-1F6/30	1147	480	480	87	97	1	610	593	1750	286	296	2
	EVM(.)45 4-0F6/30	1147	480	480	87	97	1	610	593	1750	286	296	2
	EVM(.)45 5-3F6/30	1147	480	480	104	116	1	610	593	1750	303	315	2
	EVM(.)45 5-2F6/30	1147	480	480	104	116	1	610	593	1750	303	315	2
	EVM(.)45 5-1F6/30	1147	480	480	104	116	1	610	593	1750	303	315	2
64	EVM(.)45 5-0F6/37	1147	480	480	104	116	1	610	593	1750	317	329	2
	EVM(.)45 6-3F6/37	1297	480	480	103	116	1	635	607	2130	370	383	2
	EVM(.)45 6-2F6/37	1297	480	480	103	116	1	635	607	2130	370	383	2
	EVM(.)45 6-1F6/37	1297	480	480	103	116	1	635	607	2130	370	383	2

60Hz

VERTICAL MULTISTAGE PUMPS

MOTOR

MOTOR

400



EBARA Pumps Europe

EBARA Pumps Europe reserves the right to make changes without prior notice

VERTICAL MULTISTAGE PUMPS

GENERAL

Various regulatory authorities in many countries have introduced or are planning legislation to encourage the manufacture and use of higher efficiency motors, as part of a concerted effort worldwide to reduce energy consumption.

IEC 60034-30 defines new efficiency classes for motors and harmonizes the currently different requirements for induction motor efficiency levels around the world.

		MOTOR EVMS	MOTOR EVM
Power Source	Frequency	60 Hz	60 Hz
	Phase	Three Phase	Three Phase
	Rotation speed	≈ 3500 min-1	≈ 3500 min-1
	Power rating	0.37 ÷ 18.5 kW 0.5 ÷ 25 HP	4.0 ÷ 37 kW 5.5 ÷ 50 HP
	Voltage	220/380 ± 10% V (up to 4kW) 380/660 ± 10% V (above 5.5 kW)	265/460 ± 10% V (up to 4kW) 460 ± 10% V (above 5.5 kW)
Type	Type	Electric - TEFC	Electric - TEFC
	Efficiency Level	- from 0.37 up to 0.55 kW IE2 from 0.75 up to 4.0 kW (220-380V / 265-460V) IE2 above 5.5 kW (380-660V / 460V)	IE2 to 4.0 kW (220-380V / 265-460V) IE2 above 5.5 kW (380-660V / 460V)
	No° of poles	2	2
	Protection degree	IP 55	IP 55
Others	Insulation Class	F (temperature rise class B)	F (temperature rise class B)
	Thermal Protection	PTC is available for the above 1.5 kW	PTC
	Casing Material	Aluminium	Aluminium
	Flange mount (IEC motor)	IM B14 (up to 4 kW) IM B5 (above 5.5 kW)	IM B14 (up to 4 kW) IM B5 (above 5.5 kW)

NOISE DATA

Coupling Flange Size (MEC)	Power		Noise LpA - dB(A) *
	[kW]	[HP]	
71	0.37	0.5	<70
	0.55	0.75	
80	0.75	1	<70
	1.1	1.5	
90 S	1.5	2	<70
90 L	2.2	3	
100 L	3.0	4	71
112 M	4.0	5.5	73
132 S	5.5	7.5	77
	7.5	10	
160 M	11	15	79
	15	20	
160 L	18.5	25	
180 M	22	30	82
200 L	30	40	83
	37	50	

TECHNICAL MOTOR DATA
EVMS 1-3-5-10-15-20

- Three Phase Motor at 60Hz, 2 poles

Coupling Flange Size (MEC)	Motor		Efficiency	Load efficiency and power-factor				Full load current [A]				Locked rotor current [A]				
	Power			50%	η %	100%	cos-φ	220V	265V	380V	460V	220 V	265 V	380V	460V	
	[kW]	[HP]		75%	100%	100%										
71	0.37	0.5	-	-	-	67.7	0.72	2.1	1.7	1.2	1	8.8	9.6	5.1	5.6	
71	0.55	0.75	-	-	-	72.4	0.72	2.9	2.4	1.7	1.4	12.7	15.1	7.3	8.7	

IE2 Three Phase Motor at 60Hz, 2 poles

Coupling Flange Size (MEC)	Motor		Efficiency	Load efficiency and power-factor				Full load current [A]					Locked rotor current [A]					
	Power			50%	η %	75%	100%	cos-φ	220V	265V	380V	460V	660V	220V	265V	380V	460V	
	[kW]	[HP]		100%	100%	100%												
80	0.75	1	IE2	82.9	84.2	82.6	0.74	3.1	2.6	1.8	1.5	1.0	32.9	27.3	19.0	15.8	11.0	
80	1.1	1.5	IE2	76.1	80.4	82.5	0.75	4.3	3.6	2.5	2.1	1.5	43.8	36.4	25.5	21.2	14.8	
90 S	1.5	2	IE2	80.1	83.2	85.3	0.84	5.7	4.7	3.3	2.7	1.9	46.4	38.5	26.6	22.1	15.4	
90 L	2.2	3	IE2	86.0	86.4	86.5	0.82	8.2	6.8	4.7	3.9	2.7	77.8	64.6	44.7	37.1	25.9	
100 L	3.0	4	IE2	86.4	87.8	87.5	0.90	10.0	8.3	5.8	4.8	3.3	114.2	94.8	65.9	54.7	38.1	
112 M	4.0	5.5	IE2	86.4	87.8	87.5	0.80	15.1	12.5	8.7	7.2	5.0	180.4	149.8	104.2	86.5	60.3	
132 S	5.5	7.5	IE2	85.0	88.6	88.5	0.87	-	-	10.7	8.9	6.2	-	-	131.3	109	76.0	
132 S	7.5	10	IE2	87.8	89.5	89.7	0.88	-	-	14.5	12	8.4	-	-	171.0	142	99.0	
160 M	11	15	IE2	88.6	90.4	90.7	0.89	-	-	20.7	17.2	12.0	-	-	198.8	165	115.1	
160 M	15	20	IE2	90.9	92.3	91.8	0.89	-	-	28.1	23.3	16.2	-	-	272.2	226	157.6	
160 L	18.5	25	IE2	90.3	92.0	91.6	0.88	-	-	34.7	28.8	20.1	-	-	409.5	340	237.1	

TECHNICAL MOTOR DATA

EVM 32-45-64

IE2 Three Phase Motor at 60Hz, 2 poles

Coupling Flange Size (MEC)	Motor			Load efficiency and power-factor				Full load current [A]					Locked rotor current [A]					
	Power		Efficiency	50%	η %	75%	100%	$\cos\phi$ 100%	220V	265V	380V	460V	660V	220V	265V	380V	460V	660V
	[kW]	[HP]																
112 M	4.0	5.5	IE2	86.4	87.8	87.5	0.80	15.1	12.5	8.7	7.2	5.0	180.4	149.8	104.2	86.5	60.3	
132 S	5.5	7.5	IE2	85.0	88.6	88.5	0.87	-	-	10.7	8.9	6.2	-	-	131.3	109	76.0	
132 S	7.5	10	IE2	87.8	89.5	89.7	0.88	-	-	14.5	12	8	-	-	171.0	142	99.0	
160 M	11	15	IE2	88.6	90.4	90.7	0.89	-	-	20.7	17.2	12.0	-	-	198.8	165	115.1	
160 M	15	20	IE2	90.9	92.3	91.8	0.89	-	-	28.1	23.3	16.2	-	-	272.2	226	157.6	
160 L	18.5	25	IE2	90.3	92.0	91.6	0.88	-	-	34.7	28.8	20.1	-	-	409.5	340	237.1	
180 M	22	30	IE2	91.8	92.6	92.5	0.88	-	-	41.2	34	23.7	-	-	417.6	345	240.5	
200 L	30	40	IE2	92.7	94.0	94.2	0.87	-	-	55.7	46	32.1	-	-	496.3	410	285.8	
200 L	37	50	IE2	93.0	94.3	94.5	0.88	-	-	66.6	55	38.3	-	-	568.9	470	327.6	

EVMS

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60Hz

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60_{Hz}

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EVMS

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