PRODUCT DATA SHEET

Ebara EVMS-K3 16N5 Q1BEG E/1.5 TT Multistage Pump 28251000164

SKU	28251000164
Manufacturer	EBARA Pumps Europe S.p.A.
Configuration	EVMS vertical multistage pump with on-board E-SPD+ inverter and pressure transducer
Pump model (EBARA)	EVMS-K3 16N5 Q1BEG
Pipe connection	Oval flange (N)
Inverter	E-SPD+ TT inverter - 400 V three-phase supply

CONTENTS

2	Product specification - pump with inverter	Ebara Data Book EVMS-K 50Hz (rev.D), p.10
3	Type key	Ebara Data Book EVMS-K 50Hz (rev.D), p.8
4	Performance curve - EVMS-K3 16/1.5	Ebara Data Book EVMS-K 50Hz (rev.D), p.41
5	Overall dimensions - EVMS(L)-K3 *	Ebara Data Book EVMS-K 50Hz (rev.D), p.87
6	Construction - pump with inverter	Ebara Data Book EVMS-K 50Hz (rev.D), p.84
7	Pump technical data - materials	Ebara Data Book EVMS-K 50Hz (rev.D), p.11
8	Motor data	Ebara Data Book EVMS-K 50Hz (rev.D), p.12
9	Mechanical seal data	Ebara Data Book EVMS-K 50Hz (rev.D), p.13
10	E-SPD+ inverter specification	Ebara Data Book EVMS-K 50Hz (rev.D), p.100

* Rows or curves for this model are highlighted in yellow on these pages.

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Compiled by Anglian Pumping Services Ltd | anglianpumping.com | October 2026

PRODUCT SPECIFICATIONS

PUMP WITH INVERTER

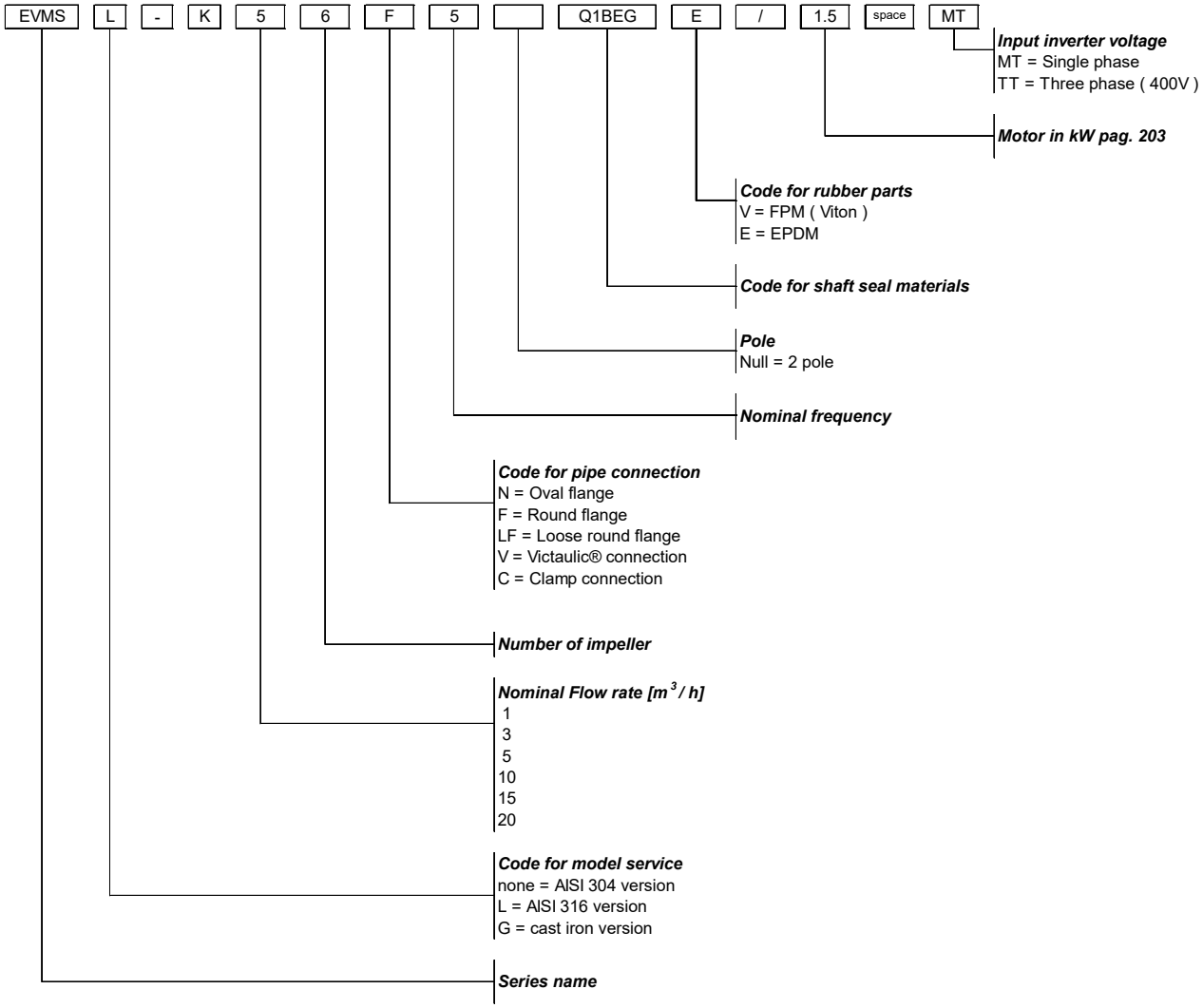
PUMP WITH INVERTER								
Version		EVMS(.)-K						
Operating range	Nominal flow rate (m3/h)	1	3	5	10	15	20	
	Maximum working pressure	16 bar / 25 bar			16 bar			
	Liquid temperature range	-30°C÷135°C						
	Ambient operating temperature (no higher than 1000 m above sea level)	-10°C÷40°C						
Pump	EVMS	•	•	•	•	•	•	
	EVMSL	○	○	○	○	○	○	
	EVMSG	○	○	○	○	○	○	
Motor	ETM	From 0.75 to 4 kW						
Control	Pressure transmitter	Up to 16 bar EN 10088-1.4301 (AISI 304) / 1.4404 (AISI 316L)						
		Upper 16 bar to 25 bar EN 10088-1.4301 (AISI 304) / 1.4404 (AISI 316L)			-			
Inverter	E-SPD+	Single-phase Supply inverter up to 2.2 kW						
		Three-phase Supply inverter up to 4 kW						

● : Standard ○ : Optional

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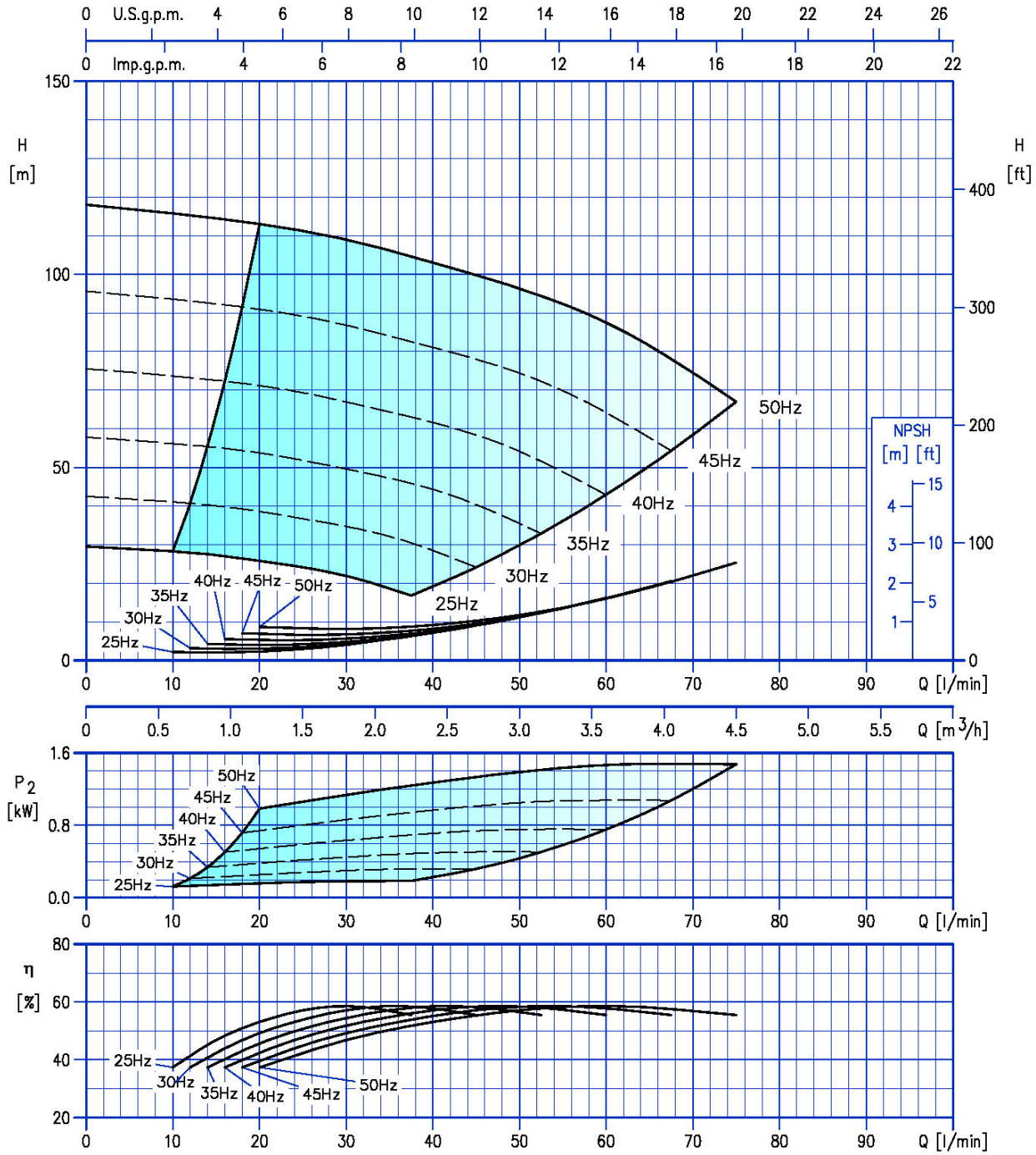
TYPE KEY

EVMS-K



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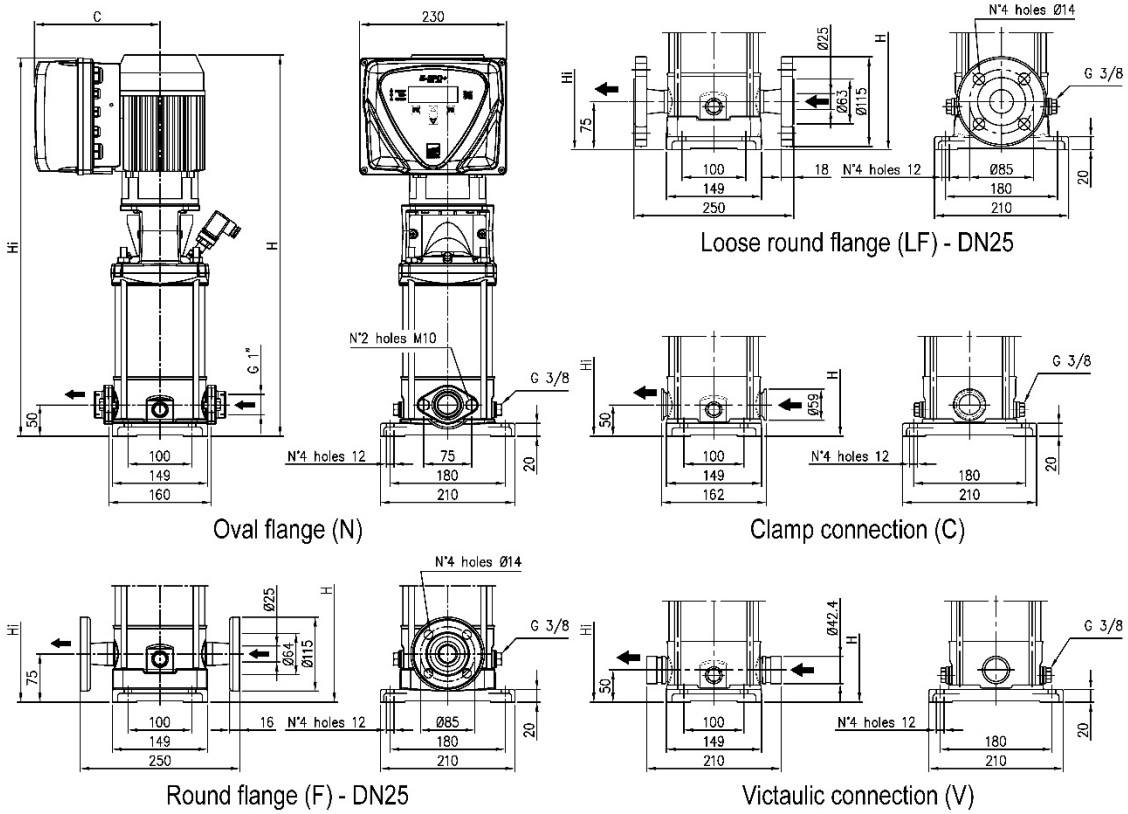
EVMS(.)-K3 16/1.5



Test standard: ISO 9906: 2012 - Grade 3B

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EVMS(L)-K3

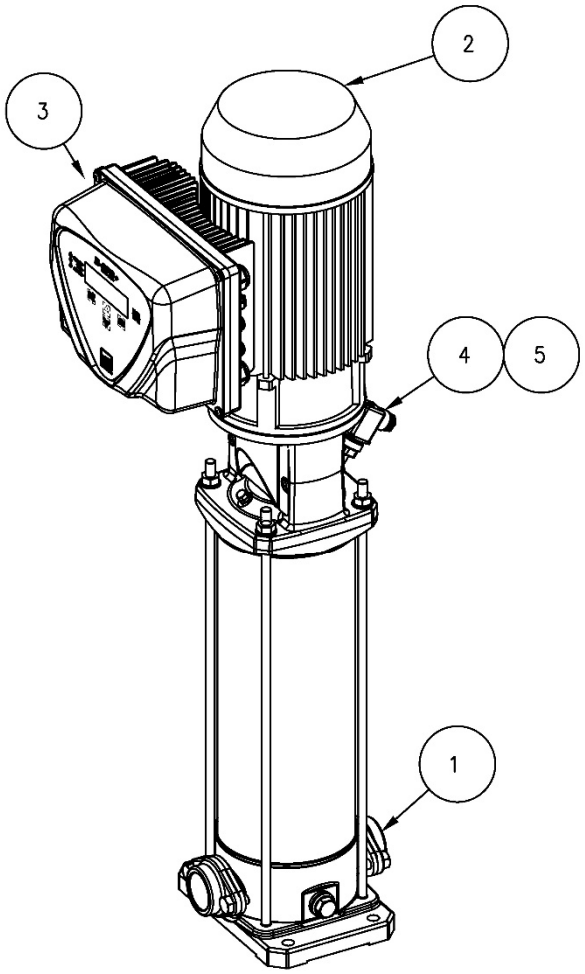


Pump with Inverter	kW	C	Dimensions [mm]								
			Oval flange (N)			Victaulic® connection (V) Clamp connection (C)			Loose Round flange (LF) Round flange (F)		
			H	Hi	Weight [kg]	H	Hi	Weight [kg]	H	Hi	Weight [kg]
EVMS(L)-K3 7/0.75 (.)T	0.75	191	598	593	23.6	598	593	23.6	623	618	24.3
EVMS(L)-K3 8/0.75 (.)T	0.75	191	619	614	24	619	614	24	644	639	24.8
EVMS(L)-K3 9/1.1 (.)T	1.1	191	651	635	25.9	651	635	25.9	676	660	26.7
EVMS(L)-K3 10/1.1 (.)T	1.1	191	672	656	26.4	672	656	26.4	697	681	27.2
EVMS(L)-K3 11/1.1 (.)T	1.1	191	693	677	26.8	693	677	26.8	718	702	27.6
EVMS(L)-K3 12/1.1 (.)T	1.1	191	714	698	27.3	714	698	27.3	739	723	28.1
EVMS(L)-K3 13/1.5 (.)T	1.5	203	792	747	31.5	792	747	31.5	817	772	32.3
EVMS(L)-K3 14/1.5 (.)T	1.5	203	813	768	31.9	813	768	31.9	838	793	32.7
EVMS(L)-K3 15/1.5 (.)T	1.5	203	834	789	32.4	834	789	32.4	859	814	33.2
EVMS(L)-K3 16/1.5 (.)T	1.5	203	855	810	33.5	855	810	33.5	880	835	34.2
EVMS(L)-K3 17/2.2 (.)T	2.2	203	876	831	35.4	876	831	35.4	901	856	36.2
EVMS(L)-K3 19/2.2 (.)T	2.2	203	918	873	36.4	918	873	36.4	943	898	37.2
EVMS(L)-K3 21/2.2 (.)T	2.2	203	960	915	37.3	960	915	37.3	985	940	38.1
EVMS(L)-K3 23/2.2 (.)T	2.2	203	-	-	-	1002	957	38.3	1027	982	39.1
EVMS(L)-K3 24/2.2 (.)T	2.2	203	-	-	-	1023	978	38.8	1048	1003	39.5
EVMS(L)-K3 25/3.0 TT	3.0	210	-	-	-	1105	1009	46.4	1130	1034	47.1
EVMS(L)-K3 27/3.0 TT	3.0	210	-	-	-	1147	1051	47.3	1172	1076	48.1
EVMS(L)-K3 29/3.0 TT	3.0	210	-	-	-	1189	1093	48.3	1214	1118	49
EVMS(L)-K3 31/3.0 TT	3.0	210	-	-	-	1231	1135	49.3	1256	1160	50
EVMS(L)-K3 33/3.0 TT	3.0	210	-	-	-	1273	1177	50.1	1298	1202	50.8

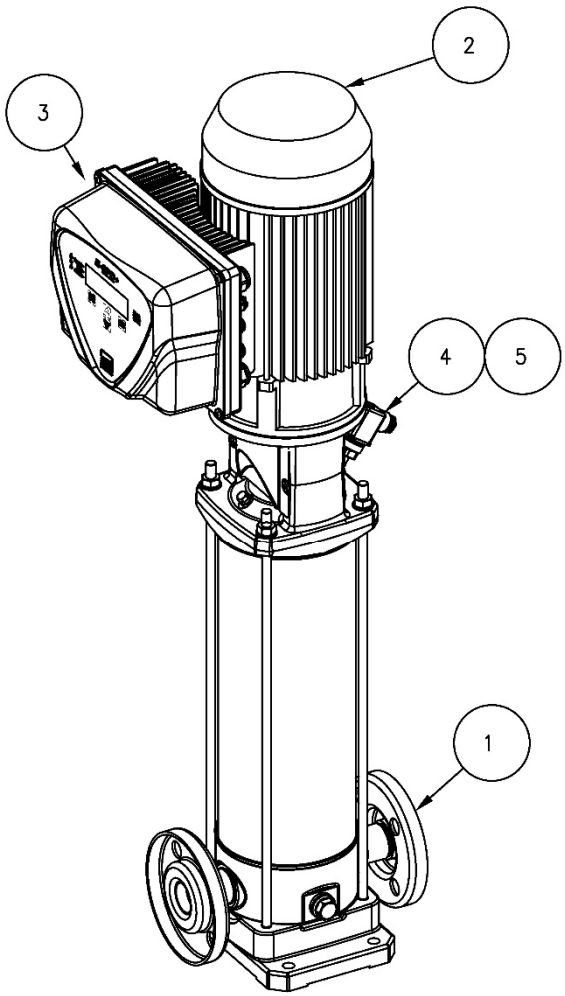
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PUMP WITH INVERTER CONSTRUCTION



Oval flange (N)



Round flange (F)

N°	PART NAME	Quantity
1	Pump	1
2	Electric motor	1
3	E-SPD+	1
4	Pressure transducer [1]	1
5	Stainless steel reducer [2]	1

[1] Only electrically connected
[2] Not assembled

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TECHNICAL PUMP DATA

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		16 bar / 25 bar																	
	Liquid temperature range		-30°C÷140°C [1]																	
Key Components Material	Impeller		EN 1.4301 (AISI 304)												EN 1.4404 (AISI 316L)					
	Intermediate casing		EN 1.4301 (AISI 304)												EN 1.4404 (AISI 316L)					
	Liner ring		EN 1.4301 (AISI 304) + PPS												EN 1.4301 (AISI 304) + PPS					
	Bottom casing		Cast iron						EN 1.4301 (AISI 304)						EN 1.4404 (AISI 316L)					
	Casing cover		EN 1.4301 (AISI 304)												EN 1.4404 (AISI 316L)					
	Shaft	EN 1.4301 (AISI 304)	EVMSG / EVMS 1-3-10 . EVMSG / EVMS 5-15-20 (depend on models)																	
		EN 1.4404 (AISI 316L)	EVMSL 1-3-10 . EVMSL 5-15-20 (depend on models)																	
		EN 1.4462 (AISI 329A)	EVMSG / EVMS / EVMSL 5-15-20 (depend on models)																	
	Shaft sleeve bearing		Tungsten carbide																	
	Shaft seal		See the shaft seal options																	
	O-ring	EPDM	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		FPM	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Outer casing		EN 1.4301 (AISI 304)												EN 1.4404 (AISI 316L)					
	Motor Bracket		Cast iron																	
	Tie rod		Galvanized steel 6.8 strenght class ISO 898/1																	
	Coupling		Die cast aluminium																	
	Base		Cast Iron						Die cast aluminium											
Pipe Connetion	Oval Flange	Up to 16 bar	○	○	○	○	○	○	●	●	●	●	●	●	○	○	○	○	○	○
	Round Flange (DIN)	Up to 16 bar	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
		From 16 bar to 25 bar	○	○	○	○	○	○	●	●	●	●	●	●	○	○	○	○	○	○
	Loose round Flange (DIN)	Up to 16 bar	-	-	-	-	-	○	○	○	○	○	○	○	○	○	○	○	○	○
		From 16 bar to 25 bar	-	-	-	-	-	○	○	○	○	○	○	○	○	○	○	○	○	○
	Victaulic®	Up to 16 bar	-	-	-	-	-	○	○	○	○	○	○	○	○	○	○	○	○	○
	Clamp	Up to 16 bar	-	-	-	-	-	○	○	○	○	○	○	○	○	○	○	○	○	○

● : Standard ○ : Optional
[1] : Verify the compatibly with the pressure trasmitter used.
- : Not available

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TECHNICAL MOTOR DATA

ETM MOTOR

ETM MOTOR		
Version		**EVMS(.)**
Power source	Frequency	50 Hz
	Phase	Three-phase
	Rotation speed	2900 min-1
	Power rating	0.75 ÷ 4 kW
		1.0 ÷ 5.5 HP
	Voltage	230/400 ± 10% V
Type	Type	Electric - TEFC
	Efficiency level	IE3
	N°of poles	2
	Protection degree	IP 55
	Insulation class	F (temperature rise class B)
Others	Thermal Protection	PTC sensor pre-installed for motors of 1.5 kW and above
	Casing Material	Aluminium
	Flange mount (IEC motor)	IM B14 (up to 4 kW)
	Terminal Box fixing	Unlosable screw and sealing from 0.75 ÷ 4 kW

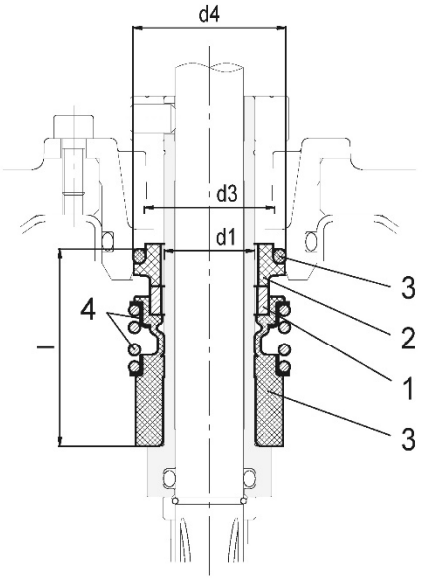
Motor Model	Size	Motor Coupling Flange Size	Power [kW]	Power [HP]	Eff.	Load efficency and power-factor (400V) η% 50%	η% 75%	η% 100%	cos-ϕ 100%	Full load current [A] 230 V	Full load current [A] 400V	Locked rotor current [A] 230 V	Locked rotor current [A] 400V	Rotation speed min-1	Input [kW]
ETM 3 71-0,75-2	71	80	0,75	1	IE3	80,2	82,5	82,1	0,76	3,0	1,7	19,7	11,4	2845	0,92
ETM 3 71-1,1-2		80	1,1	1,5	IE3	81,3	82,8	82,7	0,77	4,3	2,5	28,8	16,6	2830	1,35
ETM 3 80-1,5-2	80	90	1,5	2	IE3	83,5	84,3	84,6	0,77	5,8	3,3	44,1	25,5	2885	1,77
ETM 3 80-2,2-2		90	2,2	3	IE3	85,7	86,8	86	0,78	8,2	4,7	63,3	36,6	2875	2,59
ETM 3 90-3-2	90	100	3,0	4	IE3	85,9	87,5	87,1	0,78		6,4		51,8	2890	3,43
ETM 3 100-4-2	100	112	4,0	5,5	IE3	86	88,3	88,1	0,75		8,7		76,1	2920	4,65

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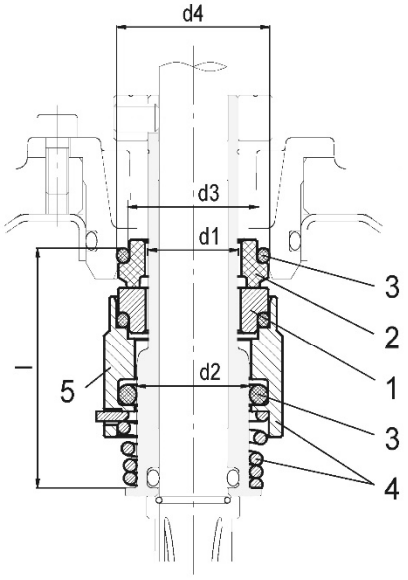
MECHANICAL SEAL DATA

SHAFT SEAL
EVMS(.)1-3-5-10-15-20

1. Shaft Seal



up to 16 bar
Cartridge Unbalanced type



up to 25 bar
Cartridge Balanced type

2. Type of Shaft Seal and Dimensions [mm]

Type key	Availability	Max operating pressure	Max operating temperature	Shaft seal type		Shaft seal material								
				Cartridge		1		2		3		4	5	
				Type	Code	Rotating part	Code	Stationary part	Code	Elastomers	Code	Compression spring	Collar	Code
Q1BEG	●	16 bar	- 30°C to + 120°C	Unbalanced	(-)	SiC	(Q1)	Carbon	(B)	EPDM	(E)	AISI 316		(G)
BQ1VG	○	16 bar	- 30°C to + 80°C	Unbalanced	(-)	Carbon	(B)	SiC	(Q1)	FPM	(V)	AISI 316		(G)
HQ1BEG	●	25 bar	- 30°C to + 140°C	Balanced	(H)	SiC	(Q1)	Carbon	(B)	EPDM	(E)	AISI 316		(G)
HQ1BVG	○	25 bar	- 30°C to + 80°C	Balanced	(H)	SiC	(Q1)	Carbon	(B)	FPM	(V)	AISI 316		(G)
HQgQ1EG	○	25 bar	- 30°C to + 140°C	Balanced	(H)	SiC with graphite	(Qg)	SiC	(Q1)	EPDM	(E)	AISI 316		(G)
HQgQ1VG	○	25 bar	- 30°C to + 80°C	Balanced	(H)	SiC with graphite	(Qg)	SiC	(Q1)	FPM	(V)	AISI 316		(G)

● Standard ○ On request

Pump model	Shaft seal type		Max operating pressure	d1 [mm]	d2 [mm]	d3 [mm]	d4 [mm]	l [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

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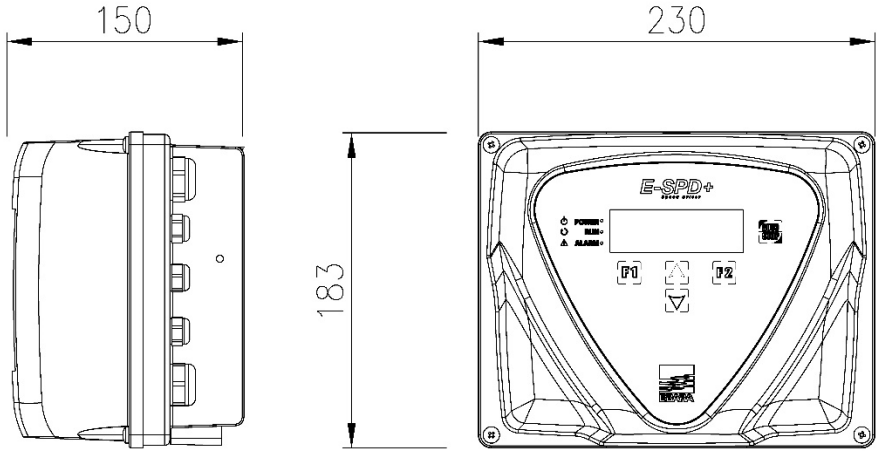
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CONTROL PANEL VARIABLE SPEED

E-SPD+ SPECIFICATION

In-line electronic device for controlling electropumps, employing inverter technology. Starts and stops the pump and modulates the speed of the motor in relation to the water demand on the system, to maintain the operating pressure setting. Provides excellent comfort for the end user, significant energy savings and increased service life, the typical advantages of inverter controlled systems. E-SPD+ is an inverter that could be installed on the terminal box. It can be adapted on horizontal and vertical pumps. E-SPD+ can protect the system against overpressure, overcurrent, voltage fluctuation, dry run and water leak. The connection for this mode is made by communication line ON/OFF.

E-SPD+			
Power	Version	MT	TT
	Power Voltage	Single-phase 230 V	Three-phase 400 V
	Output Voltage (pump)	Three-phase 230 V	Three-phase 400 V
	Output frequence	50 ÷ 60Hz	
	Maximum pump power	2.2 kW	4 kW
	Max I in	20 A	12 A
	Max I out	11 A	11 A
Others	Pressure setpoint	0.5 ÷ 25 bar	
	Protection degree	IP 55	
	Ambient Temperature	-10 ÷ 40°C	
	Pressurisation units	2-3 pumps	
	Weight	2,7 Kg	
	Protection	Dry-running	
		Over/under voltage	
		Short-circuit	
		Overload	
		Overtemperature	
		Low pressure	
		Pressure sensor fault	
Directives	2014/35/EU (LVD), 2014/30/EU (EMC), 2011/65/EU (RoHS II)		



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