



# Product Catalogue



## VEGA 4 SDM Borehole Pump Kit

# 4 SD BOREHOLE RANGE (4")

## Applications

For water supply from boreholes, wells or reservoirs For domestic use, for civil and Industrial applications For garden use and irrigation

## Materials of Construction

Components	Material
<b>Wet End</b>	
Pump external casing	AISI 304 SS
Delivery casing	Cast-Cu ASTM C85500
Suction lantern	Cast-Cu ASTM C85500
Diffuser	Plastic.PC
Impeller	Plastic.POM
Shaft	AISI 304 SS
Shaft coupling	AISI 304 SS
Wear ring	AISI 304 SS
<b>Motor</b>	
Motor external casing	AISI 304 SS
Top chock	Cast-Cu ASTM C85500 Cast-Iron ASTM No.30
Bottom support	AISI 304 SS
Mechanical seal	Graphite - Ceramic
Shaft	AISI 304 SS - ASTM 5140
Bearing	NSK
Seal lubricant oil	Food grade oil

## Operating Conditions

Maximum fluid temperature: up to 35 °C

Maximum sand content: 0.25%

Minimum well diameter: 4"

## Warranty:

**1 year**

According to our general sales conditions

## Motor and Pump

Single-phase: 220-240V/50Hz

Three-phase: 380-415V/50Hz

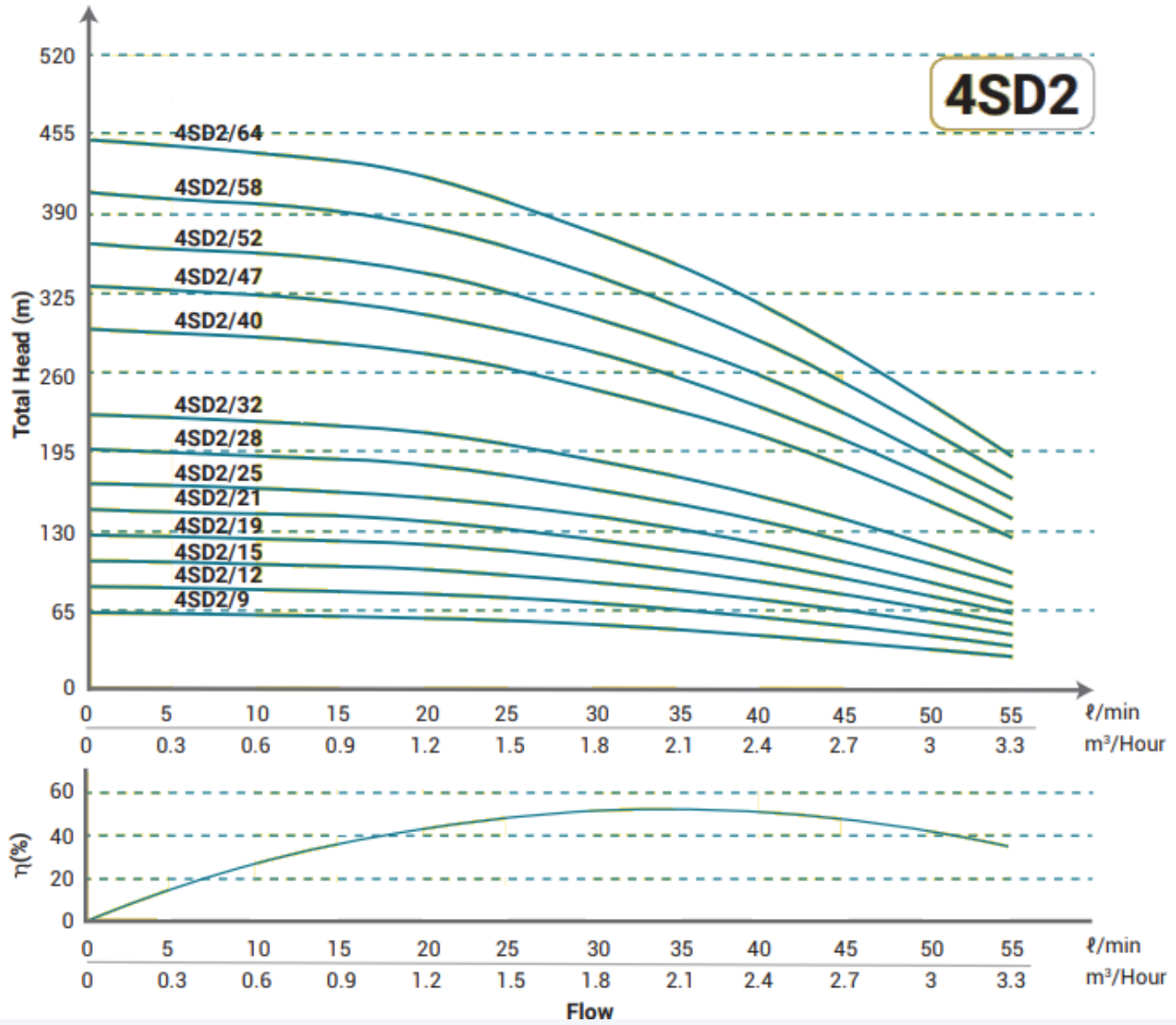
Solar: 220V-3 Phase

Equipped with start control box or digital auto-control box NEMA dimension standards

Curve tolerance according to ISO 9906



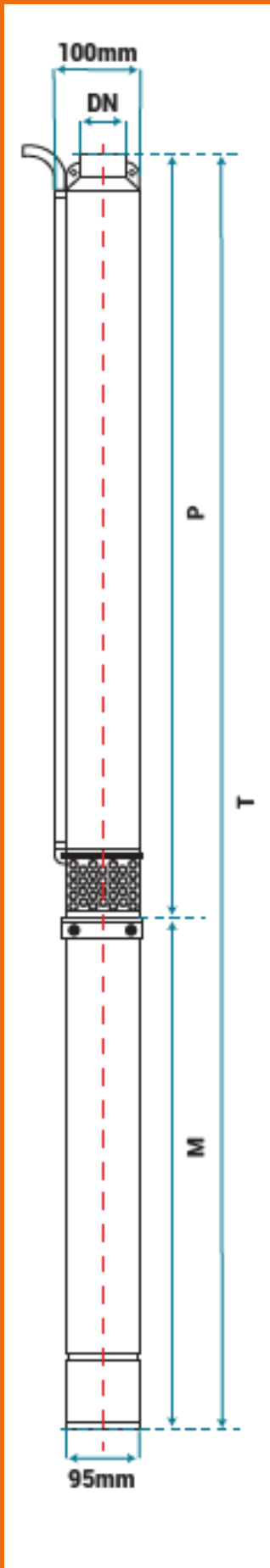
# 4SD2



## Performance Data 50Hz

MODEL (50Hz)		P2		Delivery												
				n≈2850 1/min												
1-220-240V	3-380-415V	kW	HP	m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.3
				l/min	0	5	10	15	20	25	30	35	40	45	50	55
4SDM2/9	4SD2/9	0.37	0.5	HEAD (m)	63	63	63	62	59	56	52	47	42	35	27	17
4SDM2/12	4SD2/12	0.55	0.75		84	84	84	82	79	75	69	63	56	47	36	23
4SDM2/15	4SD2/15	0.75	1		98	98	98	96	92	87	81	73	65	54	42	27
4SDM2/19	4SD2/19	1.1	1.5		134	134	132	130	125	118	109	100	88	74	57	36
4SDM2/21	4SD2/21	1.1	1.5		155	155	153	151	145	137	127	115	102	85	66	42
4SDM2/25	4SD2/25	1.5	2		176	176	174	171	164	155	144	131	116	97	75	48
4SDM2/28	4SD2/28	1.5	2		197	197	195	192	184	174	161	147	130	109	84	53
4SDM2/32	4SD2/32	2.2	3		239	239	237	233	223	211	196	178	157	132	102	65
4SDM2/40	4SD2/40	2.2	3		281	281	279	274	263	249	230	210	185	155	120	76
-	4SD2/47	3	4		323	323	321	315	302	286	265	241	213	178	138	88
-	4SD2/52	4	5.5		366	366	362	356	342	323	299	273	241	202	156	99
-	4SD2/58	4	5.5		408	408	404	397	381	360	334	304	269	225	174	111
-	4SD2/64	4	5.5	457	457	453	445	427	404	374	341	301	252	195	124	

# DIMENSIONS & WEIGHTS

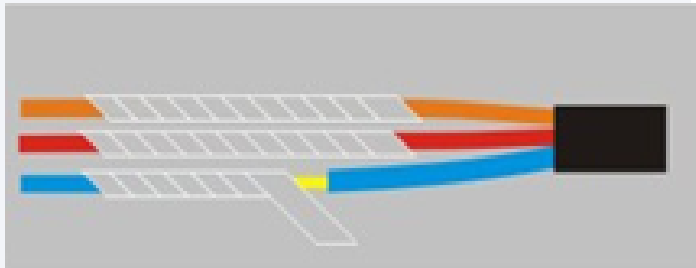
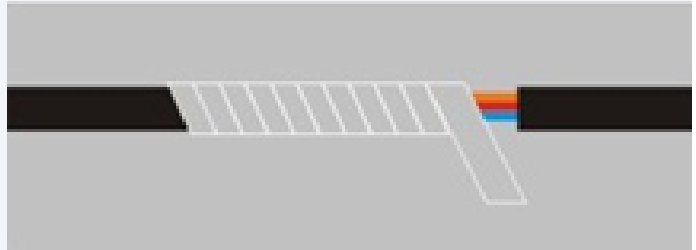
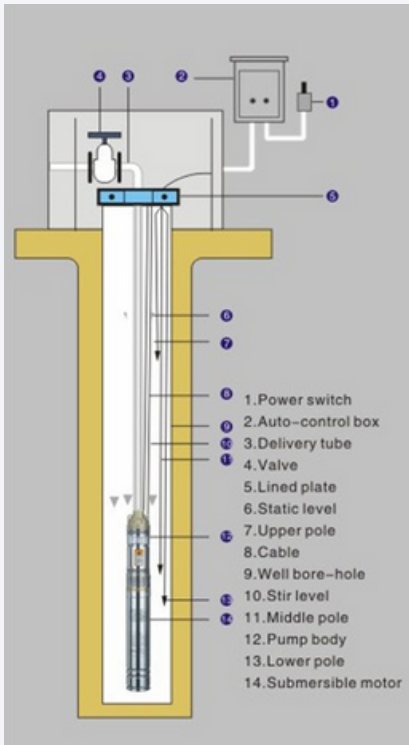


MODEL		DN	DIMENSIONS (mm)					WEIGHTS (kg)				
1 - 220-240V	3 - 380 - 415V		P	M(S)	M(T)	T(S)	T(T)	P	M(S)	M(T)	T(S)	T(T)
4SDM2/7	4SD2/7	1 1/2"	392	299	299	691	691	3.3	5.5	5.8	8.8	9.1
4SDM2/9	4SD2/9	1 1/2"	440	314	314	754	754	3.8	6.7	6.7	10.5	10.5
4SDM2/12	4SD2/12	1 1/2"	514	329	329	843	843	4.6	7.3	7.3	11.9	11.9
4SDM2/14	4SD2/14	1 1/2"	562	344	344	906	906	5.0	8.0	8.0	13.0	13.0
4SDM2/16	4SD2/16	1 1/2"	611	359	344	970	955	5.5	8.7	8.0	14.2	13.5
4SDM2/19	4SD2/19	1 1/2"	684	379	379	1063	1063	6.2	9.8	9.8	16.0	16.0
4SDM2/22	4SD2/22	1 1/2"	789	399	379	1188	1168	7.0	10.6	9.8	17.6	16.8
4SDM2/25	4SD2/25	1 1/2"	862	424	424	1286	1286	7.7	11.7	11.7	19.4	19.4
4SDM2/28	4SD2/28	1 1/2"	936	449	424	1385	1360	8.4	12.9	11.7	21.3	20.1
4SDM2/34	4SD2/34	1 1/2"	1082	502	514	1584	1596	9.7	15.7	15.7	25.4	25.4
4SDM2/40	4SD2/40	1 1/2"	1228	542	514	1770	1742	10.9	17.7	15.7	28.6	26.6
4SDM2/46	4SD2/46	1 1/2"	1406	594	554	2000	1960	12.4	19.8	17.7	32.2	30.1
-	4SD2/52	1 1/2"	1553	-	594	-	2147	13.9	-	19.8	-	33.7
-	4SD2/58	1 1/2"	1699	-	658	-	2357	15.8	-	21.4	-	37.2
-	4SD2/65	1 1/2"	1901	-	698	-	2599	17.5	-	23.7	-	41.2
4SDM3/5	4SD3/5	1 1/2"	355	299	299	654	654	2.8	5.5	5.8	8.3	8.6
4SDM3/7	4SD3/7	1 1/2"	409	314	314	723	723	3.4	6.7	6.7	10.1	10.1
4SDM3/10	4SD3/10	1 1/2"	490	329	329	814	819	4.1	7.3	7.3	11.4	11.4
4SDM3/11	4SD3/11	1 1/2"	517	344	344	861	861	4.4	8.0	8.0	12.4	12.4
4SDM3/13	4SD3/13	1 1/2"	571	359	344	930	915	4.9	8.7	8.0	13.6	12.9
4SDM3/15	4SD3/15	1 1/2"	624	379	379	1003	1003	5.4	9.8	9.8	15.2	15.2
4SDM3/18	4SD3/18	1 1/2"	737	399	379	1136	1116	6.2	10.6	9.8	16.8	16.0
4SDM3/20	4SD3/20	1 1/2"	790	424	424	1214	1214	6.7	11.7	11.7	18.4	18.4
4SDM3/22	4SD3/22	1 1/2"	844	449	424	1293	1268	7.3	12.9	11.7	20.2	19.0
4SDM3/26	4SD3/26	1 1/2"	952	502	514	1454	1466	8.3	15.7	15.7	24.0	24.0
4SDM3/30	4SD3/30	1 1/2"	1059	542	514	1601	1573	9.3	17.7	15.7	27.0	25.0
4SDM3/35	4SD3/34	1 1/2"	1194	594	554	1664	1748	10.6	19.8	17.7	30.4	28.3
-	4SD3/40	1 1/2"	1360	-	594	-	1954	11.9	-	19.8	-	31.7
-	4SD3/45	1 1/2"	1494	-	658	-	2152	13.2	-	21.4	-	34.6
-	4SD3/50	1 1/2"	1629	-	698	-	2327	14.5	-	23.7	-	38.2
-	4SD3/56	1 1/2"	1790	-	738	-	2528	16.1	-	25.5	-	41.6
-	4SD3/62	1 1/2"	1983	-	788	-	2771	17.6	-	28.0	-	45.6
4SDM4/6	4SD4/6	1 1/2"	396	314	314	710	710	3.2	6.7	6.7	9.9	9.9
4SDM4/8	4SD4/8	1 1/2"	454	329	329	783	783	3.7	7.3	7.3	11.0	11.0
4SDM4/9	4SD4/9	1 1/2"	484	344	344	828	828	4.0	8.0	8.0	12.0	12.0
4SDM4/10	4SD4/10	1 1/2"	513	359	344	872	857	4.3	8.7	8.0	13.0	12.3
4SDM4/12	4SD4/12	1 1/2"	571	379	379	950	950	4.8	9.8	9.8	14.6	14.6
4SDM4/14	4SD4/14	1 1/2"	630	399	379	1029	1009	5.3	10.6	9.8	15.9	15.1
4SDM4/16	4SD4/16	1 1/2"	688	424	424	1112	1112	5.9	11.7	11.7	17.6	17.6
4SDM4/18	4SD4/18	1 1/2"	778	449	424	1227	1202	6.4	12.9	11.7	19.3	18.1
4SDM4/21	4SD4/21	1 1/2"	866	502	514	1368	1380	7.2	15.7	15.7	22.9	22.9
4SDM4/24	4SD4/24	1 1/2"	953	542	514	1495	1467	8.1	17.7	15.7	25.8	23.8
4SDM4/28	4SD4/28	1 1/2"	1070	594	554	1664	1624	9.1	19.8	17.7	28.9	25.8
-	4SD4/32	1 1/2"	1167	-	594	-	1781	10.2	-	19.8	-	30.0
-	4SD4/36	1 1/2"	1335	-	658	-	1993	11.3	-	21.4	-	32.7
-	4SD4/40	1 1/2"	1452	-	698	-	2150	12.4	-	23.7	-	36.1
-	4SD4/45	1 1/2"	1598	-	738	-	2336	13.7	-	25.5	-	39.2
-	4SD4/50	1 1/2"	1744	-	788	-	2532	15.1	-	26.0	-	43.1
-	4SD4/56	1 1/2"	1951	-	848	-	2799	16.7	-	30.0	-	46.7
-	4SD4/62	1 1/2"	2126	-	908	-	3034	18.4	-	34.0	-	52.4

M(S) is single phase motor, M(T) is three phase motor.  
T(S) is single phase motor, T(T) is three phase motor

# TECHNICAL DATA

## INSTALLING A BOREHOLE PUMP AND MOTOR



## MAXIMUM CABLE LENGTH FROM PUMP TO STARTER

Type	kW	$i_n$ (A)	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4 mm <sup>2</sup>	6 mm <sup>2</sup>	10 mm <sup>2</sup>	16 mm <sup>2</sup>	25 mm <sup>2</sup>
220V~/50H	0.37	4.2	111	185	295				
	0.55	4.5	80	133	211	315			
	0.75	6	58	96	153	229	377		
	1.1	9	48	79	153	190	316		
	1.5	10.3	34	57	92	137	228		
	2.2	14.6		43	68	102	169		
380V~/50H	0.37	1.4	768						
	0.55	2.2	489	811					
	0.75	2.3	416	691					
	1.1	3.4	281	467	744				
	1.5	4.2	219	363	579	862			
	2.2	5.5	153	254	405	605	997		
	3	7.9	113	188	300	447	736		
	4	9.6	89	147	235	350	578	909	
	5.5	13.6	66	109	174	260	427	671	
	7.5	17.6	49	81	130	193	319	501	746

# 4" OIL FILLED MOTOR

## 20 Bar Single Phase

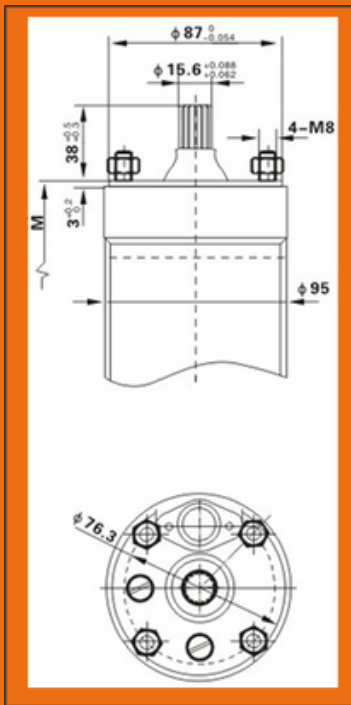
### Motor Technical Data



Single phase power:	0.37 to 2.2 kW
Speed:	2850 rpm
Voltage:	220 ~ 240V/50Hz
Insulation class:	B
Protection grade:	IP 68
Highest temperature of Liquid:	35oC
Maximum solid handling:	40g/m3
Motor casing:	stainless steel
Maximum diameter:	Φ 95 mm

With sand proof cover/pressure balance membrane/mechanical seal for high performance. Flange and coupling according to NEMA standard.

### Motor Dimensions



TYPE	MOTOR POWER		CAP μf	RUNNING Amps	DIMENSIONS	
	kW	HP			Length (mm)	Weight (kg)
Single Phase 220V~/50HZ						
4SDm-0.37	0.37	0.5	20	3.7	314	6.7
4SDm-0.55	0.55	0.75	25	4.7	329	7.3
4SDm-0.75	0.75	1.0	35	6.2	344	8.0
4SDm-1.1	1.1	1.5	45	8.0	399	10.6
4SDm-1.5	1.5	2.0	55	10.5	424	11.7
4SDm-2.2	2.2	3.0	60	15	502	15.7

### Motor Wiring

- Wiring diagram of motor



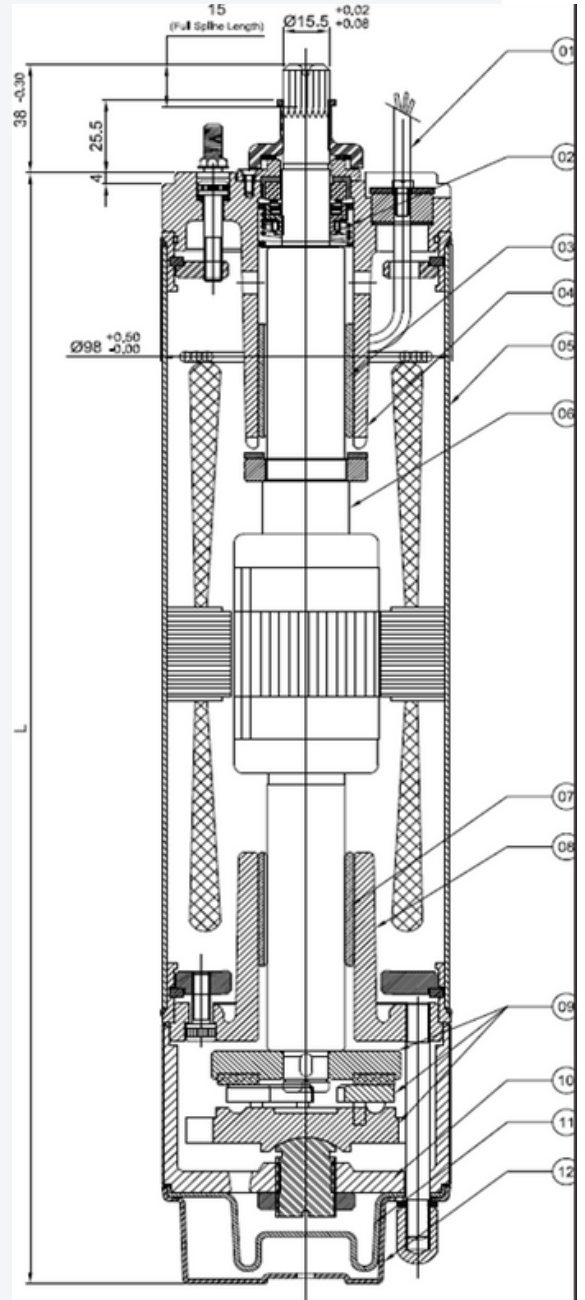
- Each single phase three wires motor should equip a control box



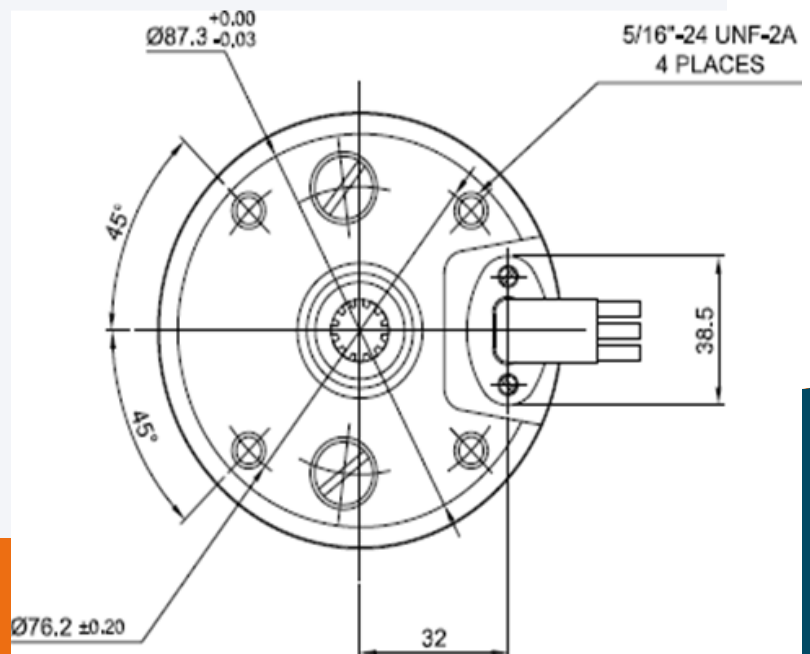
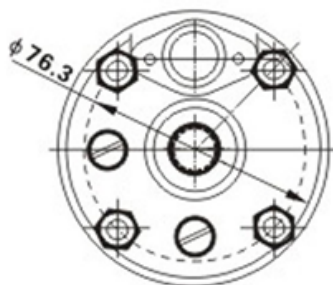
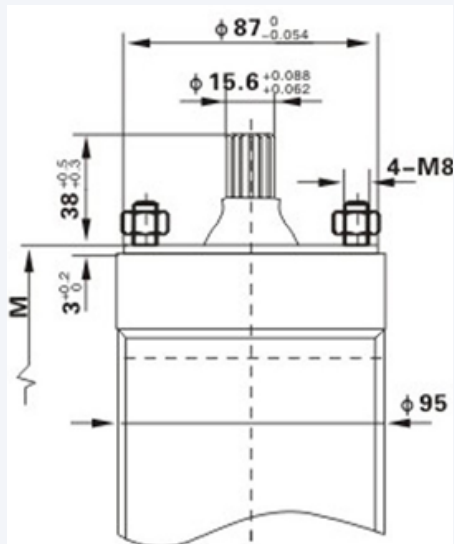
# TECHNICAL DATA

## Motor Parts

SERIAL NO.	PART NAME	MATERIAL
01	Cable 3 Core/ 4 Core	EPR
02	Mechanical Seal	Ceramic/Carbon
03	Bearing Bush	Carbon
04	Upper Housing	CI (FG-200)/S.S.304
05	Motor Pipe	Stainless Steel
06	Rotor shaft	S.S.420
07	Bearing Bush	Carbon
08	Lower Housing	CI (FG-200)
09	Thrust Bearing set	Carbon/S.S. 420
10	Lower Part - 2	CI (FG-200)
11	Pressure Cup	N.B.R.
12	Motor Base	S.S.304
13	All Hardware	S.S.316



## Dimensional Drawings



# PUMP CONTROLLER

## MA ANALOGUE CONTROL BOX SINGLE PHASE

### Technical data

This single phase control box is equipped with a capacitor and thermal over-load protector.



### Application range

Type of motor: Single phase motor

Motor power: 0.37-2.2kW

Voltage: 220V ~ 240V

Frequency: 50Hz

### Product functions

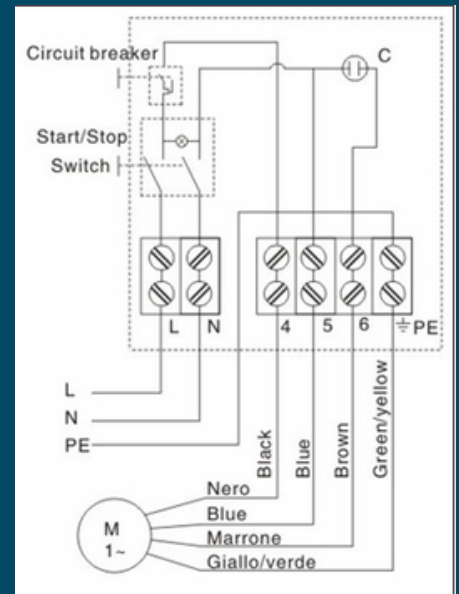
Provides basic protection against short circuiting and over current.

### Installation environment index

Grade protection: IP44

Environment temperature: -25°C to +55°C

Environment humidity: (20-90)%RH



### Operating method

Manual control

POWER		RUNNING CAPACITOR	MCB
kW	HP	Microfarad (µF)	Amp
0.37	0.50	20	8
0.55	0.75	30	10
0.75	1.00	40	15
1.1	1.50	50	15
1.5	2.00	65	20
2.2	3.00	80	25





**+27 62 375 5088**

**+27 65 321 5803**

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