

FMc Series



FMc Series

FMc Series reliable and highly efficient pumps have been designed for pumping of municipal and industrial wastewater, raw water, storm water, sewage and sludges etc. A single channel closed impeller design that offers reliability against clogging and good resistance to wear. It can handle the solids upto 4" in diameter.

Operating parameters

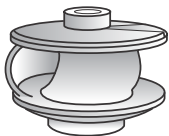
Max Flow	upto 504m ³ /hr
Max Head	upto 65.2m
Impeller Type	Mono Channel (Single Channel)
Outlet Size	80 - 150 mm
Max Solid Size	upto 90mm
Maximum Liquid Temperature	upto 40°C
Service	S1 Duty
No. of Starts / Per Hour	20
Max. immersion depth	20m
pH range	6 to 12
Liquid Viscosity	1 mm ² /s
Liquid Density	1kg/dm ³
Max. Noise level	≤ 70dB

Specifications

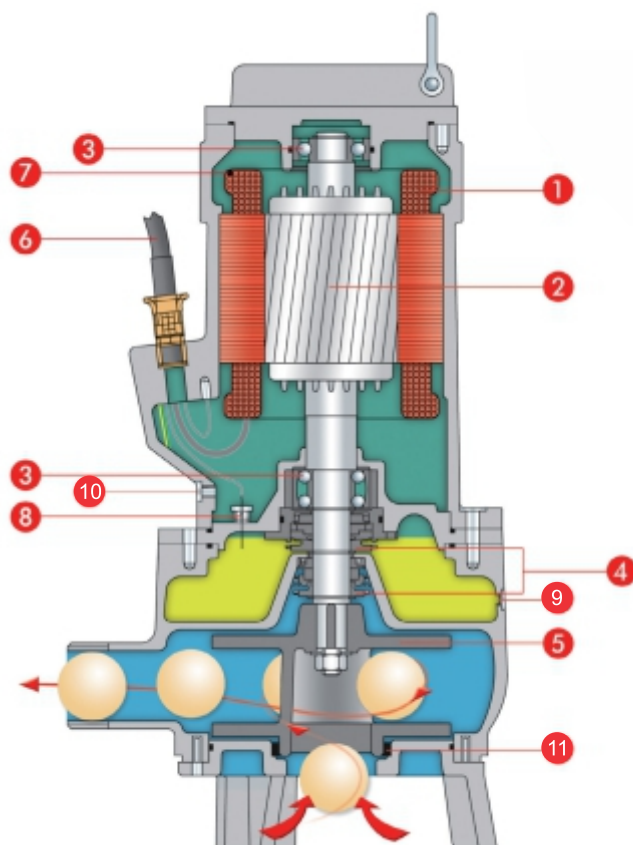
Power Range	1.85 to 34kW
Power Supply	380-415V - Three Phase, 50Hz, AC.
Ingress Protection	IP68
Motor	Dry Type Induction motor
Speed	1450 / 2850 rpm
Class of Insulation	H
Moisture sensor	# Available
Thermal Overload Protector	* Available
Starting Method	Three Phase - DOL & SD
Shaft Seal	Single / Double Mechanical seal
Mechanical Seal Face Combination	Motor Side : Graphite / Alumina Pump Side : Silicon Carbide / Silicon Carbide
Bearing Type	Shielded prelubricated bearing
Cable Type	HO7RNF
Standard Cable Length	10m

Material of Construction

Casing	Cast iron EN-GJL-260
Impeller	Cast iron EN-GJL-260
Motor Housing	Cast iron EN-GJL-260
Shaft	Stainless Steel X30 Cr13 (AISI 420)
Fasteners	Stainless Steel A2 (AISI 304)



Cross Sectional Drawing

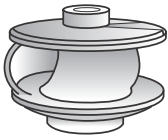


- | | |
|--|---|
| 1. Fully submersible pressure tight electric motor | 7. Thermal over load protector |
| 2. Rotor Shaft | 8. Oil chamber probe (optional) |
| 3. Bearing | 9. Oil inspection plug |
| 4. Mechanical seal | 10. Air plug hole for the motor water tightness control |
| 5. Closed single-channel impeller | 11. Bronze wear ring |
| 6. Cable | |

PRODUCTS IDENTIFICATION CODE

F	Mc	75.	1,85	-	2	/	114
• FIPS PRODUCTION	• IMPELLER DESIGN (SINGLE CHANNEL CLOSED)	• SERIES NAME	• P2 MOTOR NOMINAL POWER		• NO. OF POLES (MOTOR SPEED)		• IMPELLER DIAMETER

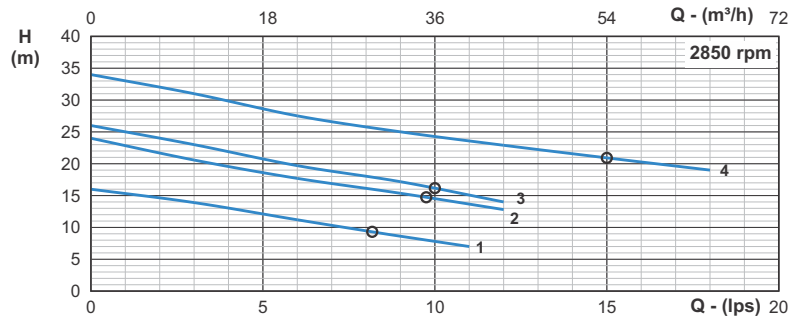
* The above diagram is only for illustration purpose the actual construction of the product may vary according to the model.



FMc 75-2



PERFORMANCE CURVES



PERFORMANCE TABLE

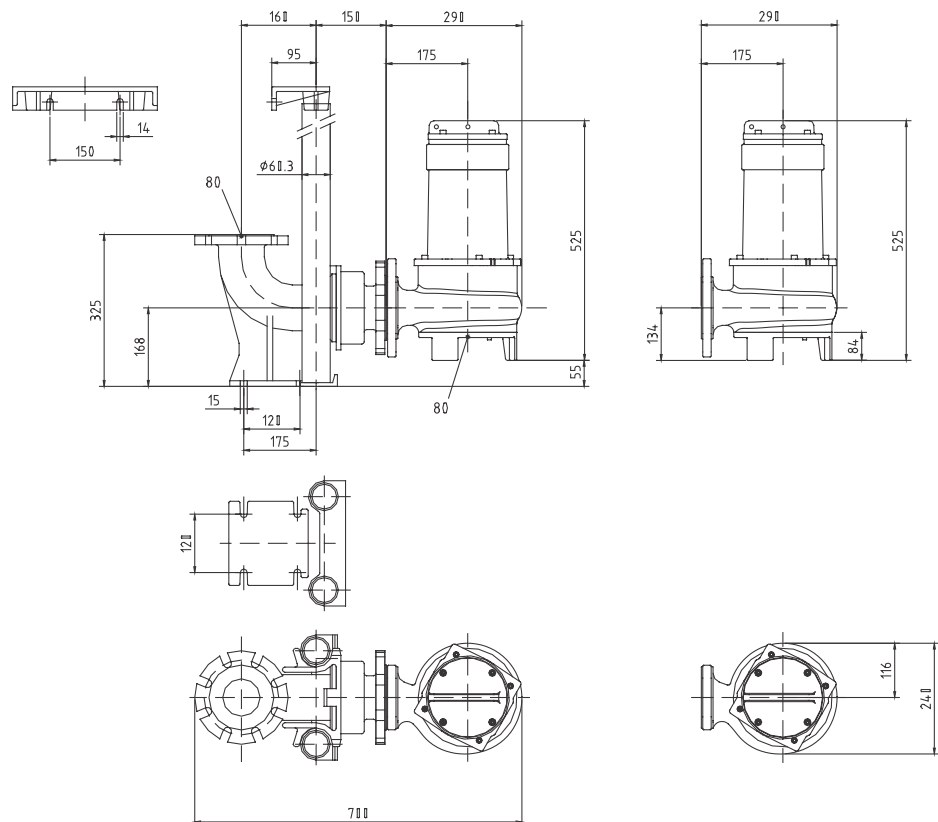
No	Model - Type	P1 kW	P2 kW	Volt	Amp	rpm	Delivery size (mm)	Max. Solid size (mm)	l/sec m³/h	0	3	6	9	12	15	18
1	FMc 75.1,85-2/114*#	2.2	1.85	400	4	2850	80	50	Head in m	16	13.9	11.2	8.6	-	-	-
2	FMc 75.3-2/128*	3.7	3	400	6.8	2850	80	50		24	20.6	17.7	15.4	12.8	-	-
3	FMc 75.4-2/138*	5	4	400	8.6	2850	80	50		26	23	19.7	17.2	14	-	-
4	FMc 75.5,5-2/152*#	6.2	5.5	400	10	2850	80	50		34	31	27.5	25	22.9	20.9	19

* Inbuilt with TOP / # Moisture sensor available

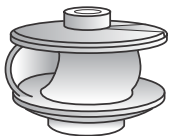
ACCESSORIES DETAILS & IDENTIFICATION CODE

No	Model - Type	Power Cable		Control Cable	Auto coupling Model	Auto coupling Code	Base Frame Model	Pump Outlet flange type (inch)
		No. of Core	Size in Sq.mm					
1	FMc 75.1,85-2/114	7	1.5	NA	V80N	121059	NA	SEMI CIRCLE FLANGE 3"
2	FMc 75.3-2/128	7	1.5	NA	V80N	121059	NA	SEMI CIRCLE FLANGE 3"
3	FMc 75.4-2/138	7	1.5	NA	V80N	121059	NA	SEMI CIRCLE FLANGE 3"
4	FMc 75.5,5-2/152	12	1.5	NA	V80N	121059	NA	SEMI CIRCLE FLANGE 3"

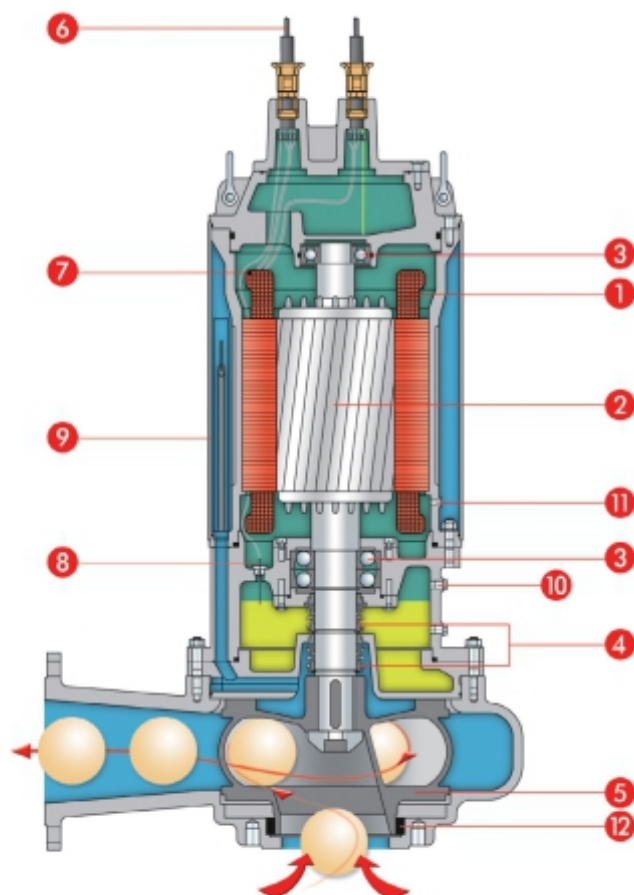
DIMENSION DRAWING



* In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.



Cross Sectional Drawing

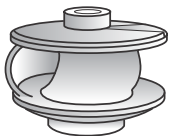


- | | |
|--|---|
| 1. Fully submersible pressure tight electric motor | 7. Thermal over load protector |
| 2. Rotor Shaft | 8. Oil chamber probe |
| 3. Bearing | 9. Cooling jacket (optional) |
| 4. Mechanical seal | 10. Oil inspection plug |
| 5. Closed single-channel impeller | 11. Air plug Hole for the motor water tightness control |
| 6. Cable | 12. Bronze wear ring |

PRODUCTS IDENTIFICATION CODE

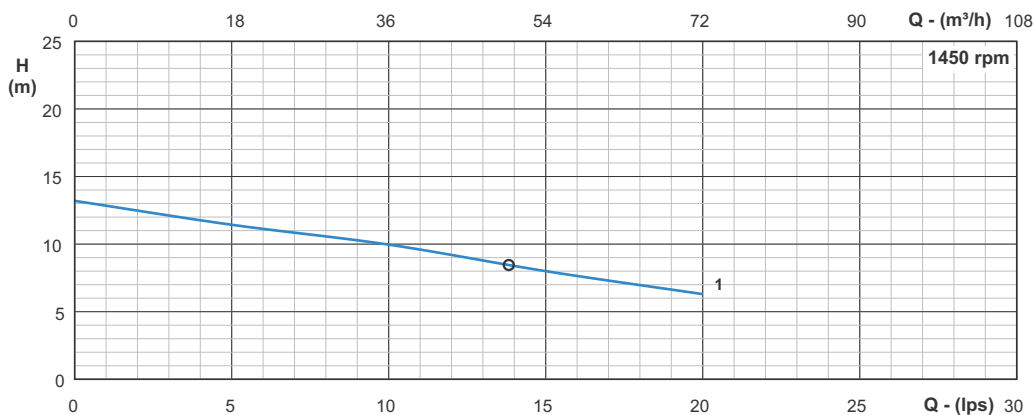
F	Mc	80.	1,6	-	4	/	191
• FIPS PRODUCTION	• IMPELLER DESIGN (SINGLE CHANNEL CLOSED)	• SERIES NAME	• P2 MOTOR NOMINAL POWER		• NO. OF POLES (MOTOR SPEED)		• IMPELLER DIAMETER

* The above diagram is only for illustration purpose the actual construction of the product may vary according to the model.



FMc 80-4

PERFORMANCE CURVES



PERFORMANCE TABLE

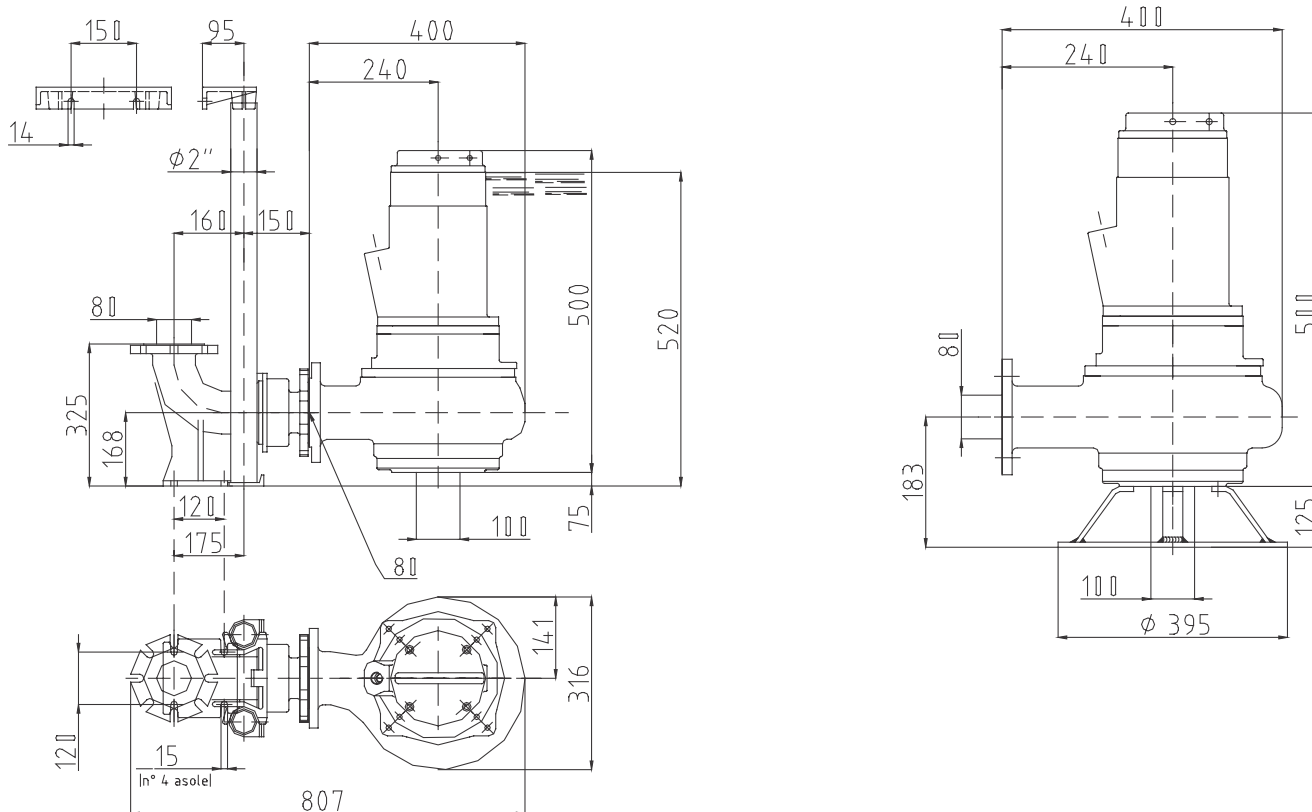
No	Model - Type	P1 kW	P2 kW	Volt	Amp	rpm	Delivery size (mm)	Max.Solid size (mm)	Auto coupling V	Weight (kg)	l/sec m³/h	0	5	10	15	20
1	FMc 80.2.2-4/212#	2.9	2.2	400	4.8	1450	80	70	80N	63	Head in m	13.2	11.4	10	8	6.3

* Inbuilt with TOP / # Moisture sensor available

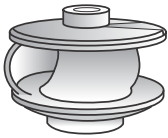
ACCESSORIES DETAILS & IDENTIFICATION CODE

No	Model - Type	Power Cable		Control Cable	Auto coupling Model	Auto coupling Code	Base Frame Model	Base Frame Code	Pump Outlet flange type (inch)
		No. of Core	Size in Sq.mm						
1	FMc 80.2.2-4/212	7	1.5	NA	V80N	121059	BAP80-100	117184	ROUND FLANGE 3"

DIMENSION DRAWING

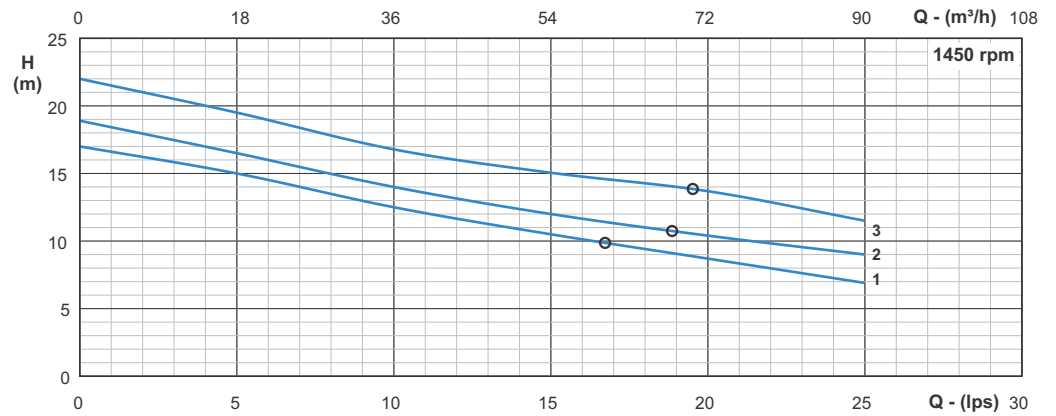


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FMc 80-4

PERFORMANCE CURVES



PERFORMANCE TABLE

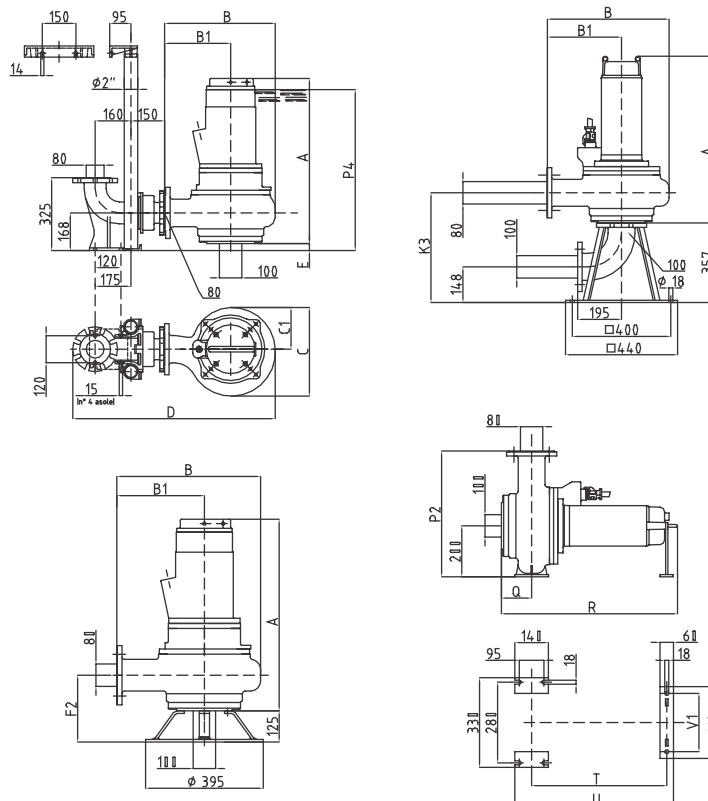
No	Model - Type	P1 kW	P2 kW	Volt	Amp	rpm	Delivery size (mm)	Max. Solid size (mm)	l/sec m³/h	0	5	10	15	20	25
1	FMc 80.3,5-4/218*	3.8	3.5	400	6.6	1450	80	70	Head in m	17	15	12.5	10.5	8.7	6.9
2	FMc 80.4,2-4/228	5	4.2	400	9.9	1450	80	70		18.9	16.5	14	12	10.4	9
3	FMc 80.6,5-4/250#	7.6	6.5	400	13	1450	80	70		22	19.5	16.8	15	13.7	11.5

* Inbuilt with TOP / # Moisture sensor available

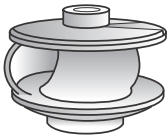
DIMENSION & WEIGHT DATA

No	Model - Type	A max	B	B1	C	C1	D	E	F2	P2	P4	V1	V2	T	U	DN1	Auto coupling V	Weight (kg)	Power Cable		Base Frame Model
																			No. of Core	Size in Sq.mm	
1	FMc 80.3,5-4/218	587	465	283	366	167	872	45	239	483	592	280	240	550	650	80	80N	66	7	1.5	BAP80-100
2	FMc 80.4,2-4/228	636	465	283	366	167	872	45	239	483	641	280	240	550	650	100	80N	102	12	1.5	BAP80-100
3	FMc 80.6,5-4/250	636	465	283	366	167	872	45	239	483	641	280	240	550	650	100	80N	108	12	1.5	BAP80-100

DIMENSION DRAWING



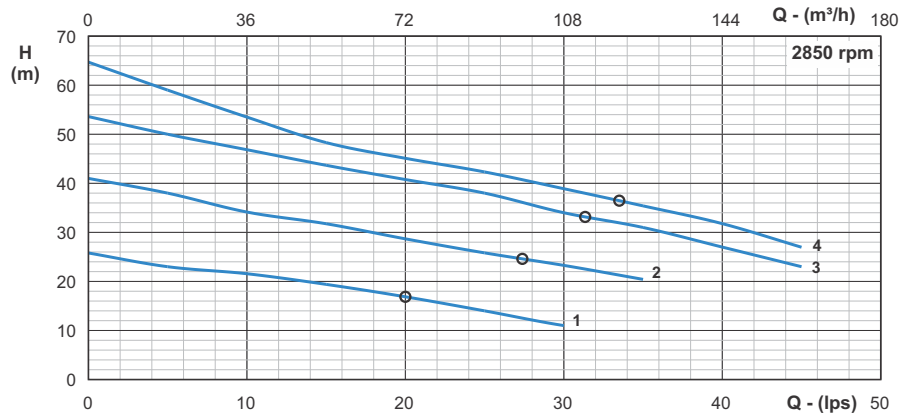
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FMc 80-2



PERFORMANCE CURVES



PERFORMANCE TABLE

No	Model - Type	P1 kW	P2 kW	Volt	Amp	rpm	Delivery size (mm)	Max.Solid size (mm)	l/sec m³/h	0	5	10	15	20	25	30	35	40	45	50
1	FMc 80.9-2/150 *#	10.5	9	400	18	2850	80	70	Head in m	25.8	23	36	54	72	90	108	126	144	162	180
2	FMc 80.15-2/175 *#	17	15	400	30	2850	80	70		41	38	34.1	31.8	28.7	25.8	23.3	20.4	-	-	-
3	FMc 80.22-2/195 *#	25	22	400	42	2850	80	70		53.6	50	46.9	43.7	40.8	38	34	31	27	23	-
4	FMc 80.28-2/218 *#	31	28	400	46	2850	80	70		64.7	59	53.5	48.3	45.1	42.3	38.9	35.4	31.8	26.9	-

* Inbuilt with TOP / # Moisture sensor available

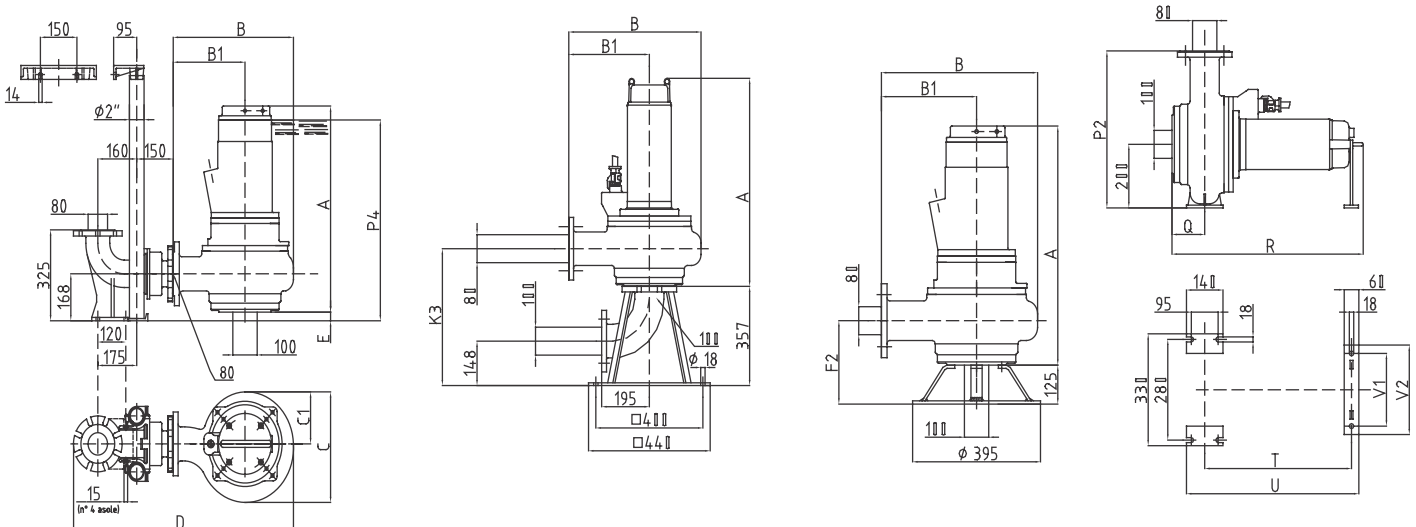
DIMENSION & WEIGHT DATA

No	Model - Type	A max	B	B1	C	C1	D	E	F2	P2	P4	K3	Q	T	U	V1	V2	Auto coupling V	Weight (kg)
1	FMc 80.9-2/150	673	357	202	307	149	764	72	213	402	695	450	92	548	648	260	320	80N	105
2	FMc 80.15-2/175	749	357	202	307	149	764	72	213	402	771	450	92	796	896	310	370	80N	175
3	FMc 80.22-2/195	749	357	202	307	149	764	72	213	402	771	450	92	796	896	310	370	80N	180
4	FMc 80.28-2/218	1051	459	280	363	365	869	49	243	480	1085	476	119	886	986	310	370	80N	205

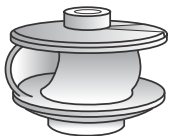
ACCESSORIES DETAILS & IDENTIFICATION CODE

No	Model - Type	Power Cable		Control Cable		Auto coupling Model	Auto coupling Code	Base Frame Model	Base Frame Code	Pump Outlet flange type (inch)
		No. of Core	Size in Sq.mm	No. of Core	Size in Sq.mm					
1	FMc 80.9-2/150	7	2.5	4	1.5	V80N	121059	BAP80-100	117184	ROUND FLANGE 3"
2	FMc 80.15-2/175	4	4	4	1.5	V80N	121059	BAP80-100	117184	ROUND FLANGE 3"
3	FMc 80.22-2/195	4	6	4	1.5	V80N	121059	BAP80-100	117184	ROUND FLANGE 3"
4	FMc 80.28-2/218	4	6	4	1.5	V80N	121059	BAP80-100	117184	ROUND FLANGE 3"

DIMENSION DRAWING

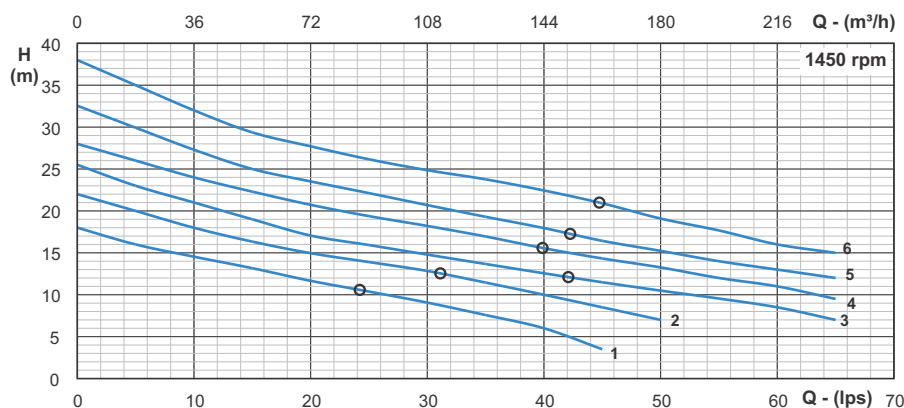


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FMc 100-4

PERFORMANCE CURVES



PERFORMANCE TABLE

No	Model - Type	P1 kW	P2 kW	Volt	Amp	rpm	Delivery size (mm)	Max.Solid size (mm)	I/sec m³/h	0	5	10	15	20	25	30	35	40	45	50	55	60	65
1	FMc 100.5-4/230 *#	6	5	400	11	1450	100	90	Head in m	18	16	14.5	13.2	11.7	10.4	9	7.6	6	3.5	-	-	-	-
2	FMc 100.7,5-4/246 *#	9	7.5	400	16	1450	100	90		22	20	18	16.3	15	13.9	12.8	11.4	10	8.5	7	-	-	-
3	FMc 100.9-4/263 *#	11	9	400	20	1450	100	90		25.5	23	21	19	17	15.9	14.8	13.6	12.6	11.5	10.5	9.5	8.5	7
4	FMc 100.12-4/280 *#	14	12	400	24	1450	100	90		28	26	24	22.3	20.7	19.4	18.2	16.9	15.5	14.3	13.3	12	11	9.5
5	FMc 100.14-4/298 *#	17	14	400	30	1450	100	90		32.55	30	27.3	25	23.5	22.1	20.7	19.3	18	16.4	15.2	14	13	12
6	FMc 100.17,5-4/313 *#	20	17.5	400	36	1450	100	90		38	35	32	29.37	27.7	26.2	24.9	23.8	22.4	20.9	19	17.7	16	15

* Inbuilt with TOP / # Moisture sensor available

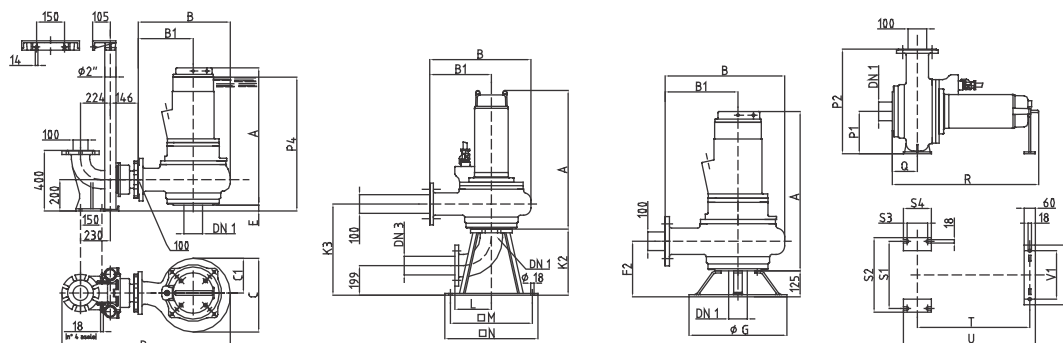
DIMENSION & WEIGHT DATA

No	Model - Type	A max	B	B1	C	C1	D	E	F2	P2	P4	P1	G	K1	K2	K3	L	M	N	S1	S2	S3	S4	T	U	V1	V2	DN1	DN3	kg	Auto coupling V	Weight (kg)
1	FMc 100.5-4/230	659	462	282	361	166	939	70	256	482	689	200	395	151	345	468	195	380	440	280	330	95	140	651	751	260	320	100	100	109	100N	106.5
2	FMc 100.7,5-4/246	675	462	282	361	166	939	70	256	482	703	250	450	199	470	605	271	440	500	350	410	120	160	902	1012	310	370	150	150	118	100N	111
3	FMc 100.9-4/263	742	584	333	480	214	1061	65	254	584	757	250	450	199	470	605	271	440	500	350	410	120	160	902	1012	310	370	150	150	184	100N	207
4	FMc 100.12-4/280	742	584	333	480	214	1061	65	254	584	757	250	450	199	470	605	271	440	500	350	410	120	160	902	1012	310	370	150	150	200	100N	210
5	FMc 100.14-4/298	818	584	333	480	214	1061	65	260	584	833	250	450	199	470	605	271	440	500	350	410	120	160	902	1012	310	370	150	150	212	100N	226.5
6	FMc 100.17,5-4/313	818	584	333	480	214	1061	65	260	584	833	250	450	199	470	605	271	440	500	350	410	120	160	902	1012	310	370	150	150	231	100N	232

ACCESSORIES DETAILS & IDENTIFICATION CODE

No	Model - Type	Power Cable		Control Cable		Auto coupling Model	Auto coupling Code	Base Frame Model	Base Frame Code	Pump Outlet flange type (inch)
		No. of Core	Size in Sq.mm	No. of Core	Size in Sq.mm					
1	FMc 100.5-4/230	12	1.5	NA	NA	V100N	121061	BAP80-100	117184	ROUND FLANGE 4"
2	FMc 100.7,5-4/246	12	1.5	NA	NA	V100N	121061	BAP80-100	117184	ROUND FLANGE 4"
3	FMc 100.9-4/263	7	2.5	4	1.5	V100N	121061	BAP150-1	117186	ROUND FLANGE 4"
4	FMc 100.12-4/280	7	2.5	4	1.5	V100N	121061	BAP150-1	117186	ROUND FLANGE 4"
5	FMc 100.14-4/298	4	4	4	1.5	V100N	121061	BAP150-1	117186	ROUND FLANGE 4"
6	FMc 100.17,5-4/313	4	4	4	1.5	V100N	121061	BAP150-1	117186	ROUND FLANGE 4"

DIMENSION DRAWINGS



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