

# MD - MMD

## MONOBLOC CENTRIFUGAL ELECTRIC PUMP IN COMPLIANCE WITH EN 733

in cast iron



Cast iron monobloc centrifugal electric pumps in compliance with EN 733.

### APPLICATIONS

- Moving clean water for civil, agricultural, industrial use, pressure boosting units, heating and air conditioning plants
- Farming irrigation
- Sport centres
- Washing plants

### TECHNICAL DETAILS

- Available in "H" version (Ceramic/Graphite/FPM)
- Available in "HS" version (SiC/SiC/FPM)
- Available in "HW" version (Widia/Widia/FPM)

### TECHNICAL DATA

- Maximum temperature of the liquid: 90°C (MD), 130°C (MMD)
- Maximum working pressure: 10 bar
- Self-ventilated 2 and 4 pole asynchronous motor
- Class of insulation F
- IP55 Protection rating
- 230V ±10%, 50Hz single phase voltage three phase voltage 230/400V ±10% 50Hz up to 4 kW included, three phase voltage 400/690V ± 10% 5.5 kW and over
- Permanent capacitor inserted and thermo-amperometric protection with automatic rearm incorporated for the single phase motor
- Protection under user's responsibility for the three phase version

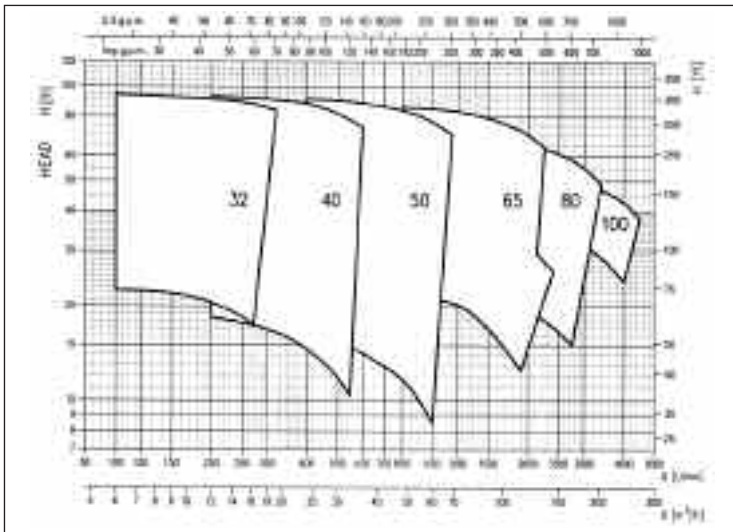
### MATERIALS

- Cast iron pump body and support
- Shaft in AISI 304 (MD), in AISI 406 (MMD)
- Mechanical seal in Carbon/Ceramic/NBR (MD), in SiC/SiC/EPDM (MMD)
- Impeller in cast iron and bronze B10

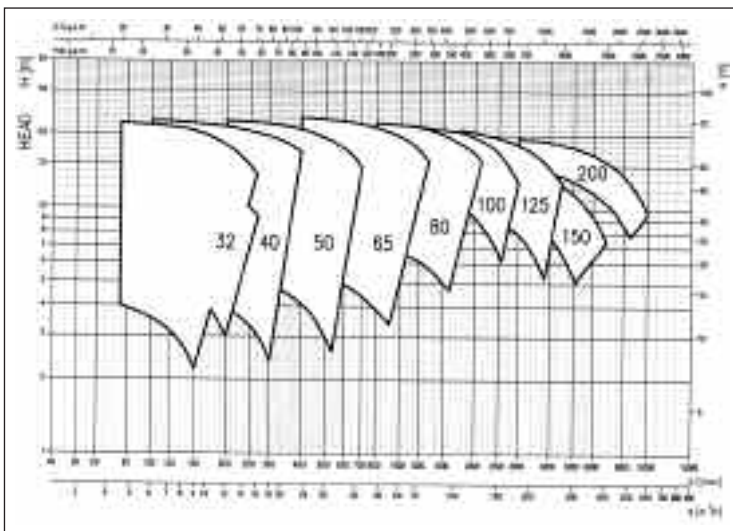
### ACCESSORIES (on request)

- Galvanised counter-flange

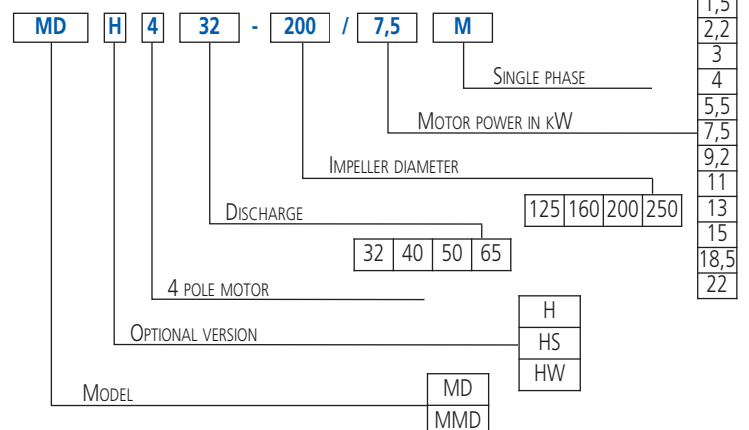
2 Pole - PERFORMANCE RANGE (according to ISO 9906 Attachment A)



4 Pole - PERFORMANCE RANGE (according to ISO 9906 Attachment A)



### IDENTIFICATION CODE



# MD - MMD

## MONOBLOC CENTRIFUGAL ELECTRIC PUMP IN COMPLIANCE WITH EN 733

in cast iron

MD PERFORMANCE TABLE

2 Poles

Model	P <sub>2</sub>		Q=Flow rate																					
	[HP]	[kW]	l/min m <sup>3</sup> /h	100	200	250	280	320	400	550	600	667	800	1000	1100	1150	1200	1400	1900	2000	2200	2300	2400	
				6	12	15	17	19	24	33	36	40	48	60	66	69	72	84	114	120	132	138	144	
H=Head [m]																								
MD 32-125/1.1 (M)	1,5	1,1	22,5	20,5	18,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-125/1.1 (M)	1,5	1,5	23,5	21,5	19,7	18,5	16,6	12,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-125/1.1 (M)	1,5	1,5	27,0	24,0	22,0	20,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-125/1.1 (M)	1,5	2,2	34,5	32,0	30,0	28,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-200/3.0	4	3	41,0	36,5	33,0	30,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-200/4.0	5,5	4	50,5	47,0	44,5	42,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-250/5.5	7,5	5,5	57,0	54,0	51,0	49,0	45,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-250/7.5	10	7,5	70,0	67,0	64,0	62,0	58,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-250/9.2	12,5	9,2	83,0	80,0	78,0	76,0	73,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-250/11	15	11	94,0	91,0	89,0	87,0	84,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-125/1.1 (M)	1,5	1,5	19,5	18,4	17,7	17,2	16,5	14,6	10,3	8,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-125/1.1 (M)	1,5	2,2	25,0	23,5	23,0	22,5	22,0	20,5	16,9	15,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-160/3.0	4	3	30,5	29,0	28,0	27,5	26,5	25,0	21,0	19,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-160/4.0	5,5	4	38,0	36,5	36,0	35,5	35,0	33,0	29,5	28,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-200/5.5	7,5	5,5	48,0	47,0	46,0	45,5	44,5	42,5	37,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-200/7.5	10	7,5	57,5	56,5	55,5	55,0	54,5	52,5	47,5	45,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-250/11	15	11	-	73,0	72,0	71,5	70,0	66,5	58,5	55,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-250/13	17,5	13	-	84,0	83,5	82,5	81,5	78,0	69,0	65,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-250/15	20	15	-	93,0	92,0	91,5	90,5	88,0	78,0	74,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-125/1.1 (M)	1,5	2,2	-	-	-	-	-	16,0	14,8	14,3	13,5	11,7	8,5	-	-	-	-	-	-	-	-	-	-	-
MD 50-125/3.0	4	3	-	-	-	-	-	19,5	18,6	18,2	17,6	16,1	13,0	-	-	-	-	-	-	-	-	-	-	-
MD 50-125/4.0	5,5	4	-	-	-	-	-	24,0	23,0	23,0	22,0	21,0	17,8	16,0	-	-	-	-	-	-	-	-	-	-
MD 50-160/5.5	7,5	5,5	-	-	-	-	-	32,5	31,0	30,5	30,0	28,0	24,5	22,5	-	-	-	-	-	-	-	-	-	-
MD 50-160/7.5	10	7,5	-	-	-	-	-	38,0	37,0	36,5	35,5	34,0	31,0	29,0	28,0	27,0	-	-	-	-	-	-	-	-
MD 50-200/9.2	12,5	9,2	-	-	-	-	-	48,0	46,0	45,0	44,0	41,0	36,0	33,0	-	-	-	-	-	-	-	-	-	-
MD 50-200/11	15	11	-	-	-	-	-	54,5	53,0	52,0	51,0	48,5	43,5	40,5	39,0	37,0	-	-	-	-	-	-	-	-
MD 50-250/15	20	15	-	-	-	-	-	69,0	67,0	66,0	64,0	60,5	52,5	47,0	-	-	-	-	-	-	-	-	-	-
MD 50-250/18.5	25	18,5	-	-	-	-	-	80,0	78,5	77,5	76,0	72,5	65,0	60,0	57,0	-	-	-	-	-	-	-	-	-
MD 50-250/22	30	22	-	-	-	-	-	91,0	89,5	88,5	87,0	84,0	77,0	72,5	70,0	-	-	-	-	-	-	-	-	-
MD 65-125/5.5	7,5	5,5	-	-	-	-	-	-	-	23,2	23,0	22,5	21,5	20,5	20,5	20,0	18,2	12,5	-	-	-	-	-	-
MD 65-125/7.5	10	7,5	-	-	-	-	-	-	-	26,5	26,0	25,5	24,5	24,0	23,5	23,0	21,5	16,3	15,0	-	-	-	-	-
MD 65-160/11	15	11	-	-	-	-	-	-	-	-	34,0	33,5	33,0	32,5	32,0	32,0	30,5	26,5	25,5	23,0	22,0	-	-	-
MD 65-160/15	20	15	-	-	-	-	-	-	-	-	-	38,0	37,5	37,0	36,5	36,5	35,0	31,0	30,5	28,5	27,0	26,0	-	-
MD 65-200/18.5	25	18,5	-	-	-	-	-	-	-	-	-	53,5	52,5	51,5	51,0	50,5	48,5	42,0	40,5	37,0	-	-	-	-
MD 65-200/22	30	22	-	-	-	-	-	-	-	-	-	59,5	58,5	58,0	57,5	57,0	55,5	50,0	49,0	46,0	-	-	-	-

MMD PERFORMANCE TABLE

2 Poles

Model	P <sub>2</sub>		Q=Flow rate													
	[HP]	[kW]	l/min m <sup>3</sup> /h	800	1000	1250	1500	1750	2000	2250	2500	2750	3000	3500	4000	4500
				48	60	75	90	105	120	135	150	165	180	210	240	270
H=Head [m]																
MMD 65-250/22	30	22	64,0	63,0	61,0	57,0	53,0	-	-	-	-	-	-	-	-	-
MMD 65-250/30	40	30	77,0	76,0	74,0	70,0	66,0	60,0	53,0*	-	-	-	-	-	-	-
MMD 65-250/37	55	37	86,0	85,0	83,0	79,0	75,0	70,0	64,0*	-	-	-	-	-	-	-
MMD 80-160/10	13,6	10	-	24,0	23,0	22,0	21,0	19,5	18,0	16,5	15,0*	-	-	-	-	-
MMD 80-160/12.5	17	12,5	-	28,5	28,0	27,0	26,0	24,5	23,0	21,5	20,0	18,5*	-	-	-	-
MMD 80-160/15	20	15	-	34,0	33,3	32,5	31,8	31,0	29,0	27,5	26,0	24,3	-	-	-	-
MMD 80-200/18.5	25	18,5	-	42,0	41,0	40,0	38,5	37,0	35,0	33,0	30,5	28,0	-	-	-	-
MMD 80-200/22	30	22	-	47,0	46,5	45,5	44,5	43,0	41,0	39,0	37,0	34,0	-	-	-	-
MMD 80-200/30	40	30	-	55,0	54,0	53,0	52,0	51,0	49,0	47,0	45,0	43,0	37,0	-	-	-
MMD 80-200/37	55	37	-	57,0	56,8	56,5	56,0	55,0	54,0	52,5	51,0	48,0	42,0	-	-	-
MMD 80-250/37	55	37	-	-	67,5	67,0	66,2	65,0	63,3	61,0	58,3	55,0	47,0	-	-	-
MMD 100-200/22	30	22	-	-	-	38,5	38,0	37,0	36,0	34,5	33,0	31,5	28,0	24,0	-	-
MMD 100-200/30	40	30	-	-	-	47,0	46,3	45,6	44,8	43,7	42,4	41,0	38,0	34,6*	30,0**	-
MMD 100-200/37	55	37	-	-	-	53,7	53,3	53,0	52,0	51,0	50,0	49,0	46,0	43,0*	38,0**	-

\* The suction manometric height must not exceed 2 m

\*\* Suction with positive head of 1 m