

IWAKI

MTFO
Series

Metallic Centrifugal Magnet Drive Pumps



**Extensive Hydraulic Performance, Seal-less,
Corrosion Resistant , Leak Free**



MTFO

Open impeller, Close Coupled Standard Centrifugal Pumps

- » Wide range of application. Up to 22kW including 4 pole line up.
- » Back pullout system.
- » Open impeller.
- » Comply with international standard ISO2858.



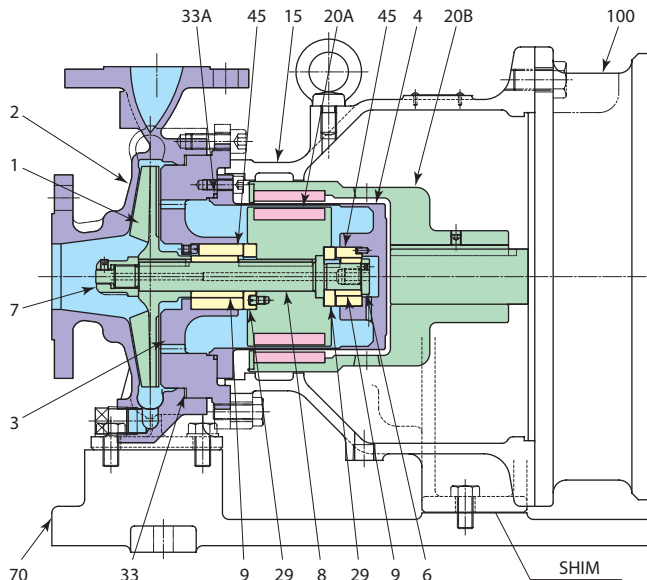
TYPE MTFO
Motor output :
2,2 kW to 22 kW



[SIMPLE STRUCTURE & EASY MAINTENANCE]

SiC bearing parts are virtually erosion / corrosion proof.
 Robust rear-casing shuts off leakage.

Construction and materials



- : Magnet
- : Pressure vessel
- : Rotating parts
- : Bearings
- : Liquid immersed portion

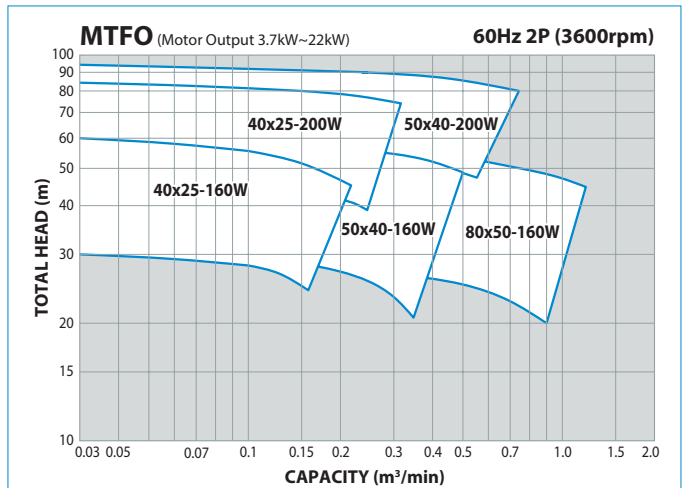
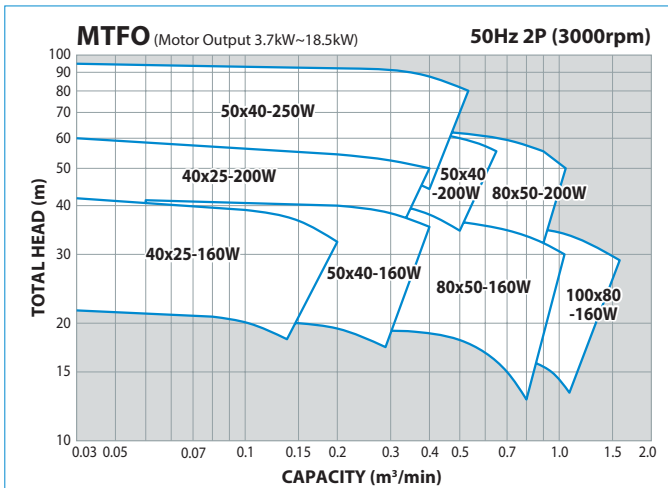
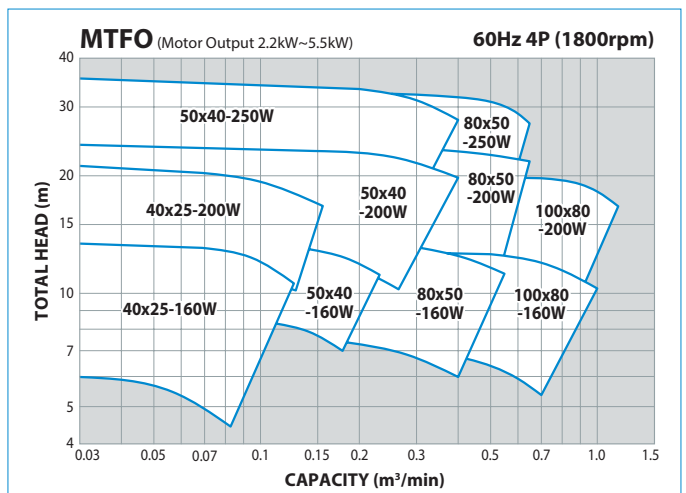
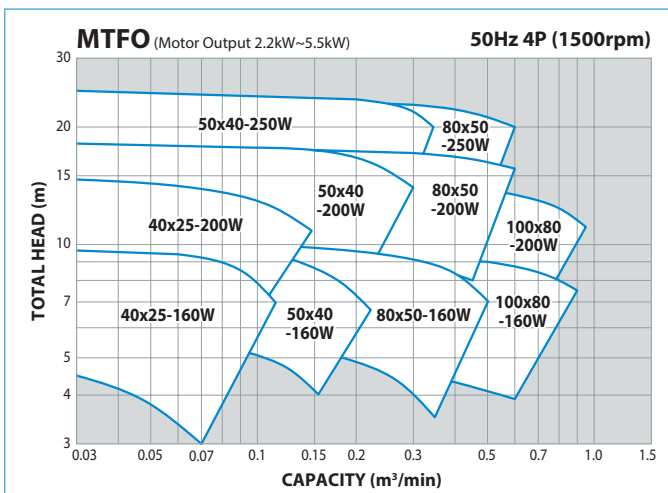
100	MOTOR	-	1
70	BASE PLATE	FC200	1
45	BUSHING	SiC	1+1
33A	O RING	PTFE	1
33	GASKET	PTFE	1
29	THRUST RING	SiC	1+1
20B	MAGNET COUPLING(M)	FCD400	1
20A	MAGNET COUPLING(P)	316SS	1
15	FRAME ADAPTER	FC200	1
9	SLEEVE	SiC	1+1
8	INNER MAGNET SHAFT	316SS	1
7	IMPELLER NUT	316SS	1
6	SLEEVE BOLT	316SS	1
4	REAR CASING	316SS	1
3	CASING COVER	316SS	1
2	CASING	316SS	1
1	IMPELLER	316SS	1
MARK	NAME OF PART	MAT'L	No.REQ'D

Specifications

Pump Type	MTFO	
Frequency Hz	50	60
Max. Head m (ft)	80 (262)	85 (279)
Max. Capacity LPM (GPM)	1600 (423)	1200 (317)
Operating Temperature °C (°F)	-80 (112) to 280 (536) See note below	
Maximum Specific Gravity	2	
Maximum Viscosity (mPa·s,cP)	300	
Design pressure (MPaG)	1,6	
Flange standard	ASME / JIS / DIN flange	
Impeller type	Open	
(Synchronized) rotation speed(rpm)	1500 / 1800 / 3000 / 3600	
Bore (Suction x Discharge) mm	40 x 25 to 100 x 80	
Motor Output kW	2,2 to 22	
Pump Material	Stainless Steel 316	

Note: Below -20°C or above 120°C please contact your dealer/distributor.

Selection charts



Pump Type Identification

MTFO 40 x 25 - 160 W

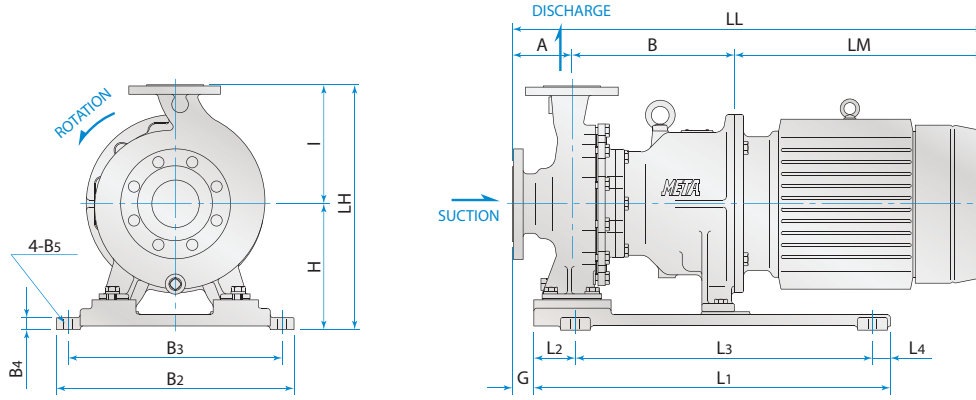
[1] [2] [3] [4] [5]

[1] PUMP TYPE
[2] SUCTION BORE
[3] DISCHARGE BORE

... MTFO
... 40 ~ 100 (mm)
... 25 ~ 80 (mm)

[4] IMPELLER NOMINAL DIAMETER ... 160, 200, 250
[5] DRIVE UNIT TYPE ... TYPE-W

Outline dimension



(Dimensions in mm)

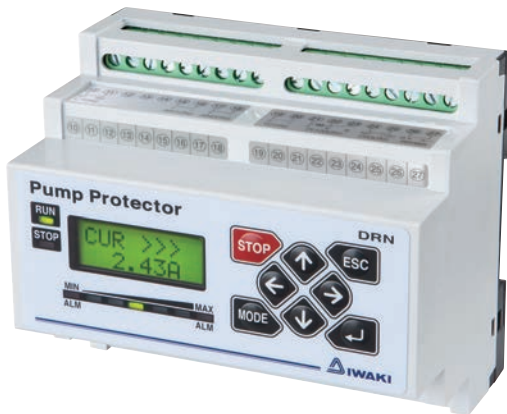
PUMP SIZE	MOTOR FRAME	PUMP						BASE PLATE & MOTOR										MASS APPROX(kg)		
		A	B	I	H	LH	G	L1	L2	L3	L4	B2	B3	B4	B5	LM	LL	PUMP	MOTOR	TOTAL
40x25-160W	112M	80	238	150	210	360	0	600	70	500	30	400	360	20	ø15	355	673	59	40	99
	132S,132M	80	258	150	210	360	0	600	70	500	30	400	360	20	ø15	400	738	66	80	146
	160M,160L	80	288	150	210	360	0	600	70	500	30	400	360	20	ø15	485	853	73	110	183
	180M,180L	80	288	150	235	385	0	660	70	550	40	420	370	22	ø19	575	943	76	195	271
40x25-200W	112M	80	238	180	210	390	0	600	70	500	30	400	360	20	ø15	355	673	64	40	104
	132S,132M	80	258	180	210	390	0	600	70	500	30	400	360	20	ø15	400	738	71	80	151
	160M,160L	80	288	180	210	390	0	600	70	500	30	400	360	20	ø15	485	853	78	110	188
	180M,180L	80	288	180	235	415	0	660	70	550	40	420	370	22	ø19	575	943	81	195	276
50x40-160W	112M	80	238	160	210	370	0	600	70	500	30	400	360	20	ø15	355	673	62	40	102
	132S,132M	80	258	160	210	370	0	600	70	500	30	400	360	20	ø15	400	738	70	80	150
	160M,160L	80	288	160	210	370	0	600	70	500	30	400	360	20	ø15	485	853	77	110	187
	180M,180L	80	288	160	235	395	0	660	70	550	40	420	370	22	ø19	575	943	80	195	275
50x40-200W	112M	80	238	180	210	390	0	600	70	500	30	400	360	20	ø15	355	673	67	40	107
	132S,132M	80	258	180	210	390	0	600	70	500	30	400	360	20	ø15	400	738	75	80	155
	160M,160L	80	288	180	210	390	0	600	70	500	30	400	360	20	ø15	485	853	81	110	191
	180M,180L	80	288	180	235	415	0	660	70	550	40	420	370	22	ø19	575	943	84	195	279
50x40-250W	112M	100	254	225	210	435	36	600	70	500	30	400	360	20	ø15	355	709	86	40	126
	132S,132M	100	274	225	210	435	36	600	70	500	30	400	360	20	ø15	400	774	94	80	174
	160M,160L	100	304	225	210	435	36	600	70	500	30	400	360	20	ø15	485	889	100	110	210
	180M,180L	100	304	225	235	460	36	660	70	550	40	420	370	22	ø19	575	979	103	195	298
80x50-160W	112M	100	238	180	210	390	20	600	70	500	30	400	360	20	ø15	355	693	66	40	106
	132S,132M	100	258	180	210	390	20	600	70	500	30	400	360	20	ø15	400	758	74	80	154
	160M,160L	100	288	180	210	390	20	600	70	500	30	400	360	20	ø15	485	873	81	110	191
	180M,180L	100	288	180	235	415	20	660	70	550	40	420	370	22	ø19	575	963	84	195	279
80x50-200W	112M	100	254	200	210	410	36	600	70	500	30	400	360	20	ø15	355	709	75	40	115
	132S,132M	100	274	200	210	410	36	600	70	500	30	400	360	20	ø15	400	774	82	80	162
	160M,160L	100	304	200	210	410	36	600	70	500	30	400	360	20	ø15	485	889	89	110	199
	180M,180L	100	304	200	235	435	36	660	70	550	40	420	370	22	ø19	575	979	92	195	287
80x50-250W	112M	125	254	225	210	435	61	600	70	500	30	400	360	20	ø15	355	734	90	40	130
	132S,132M	125	274	225	210	435	61	600	70	500	30	400	360	20	ø15	400	799	98	80	178
	160M,160L	125	304	225	210	435	61	600	70	500	30	400	360	20	ø15	485	914	104	110	214
	180M,180L	125	304	225	235	460	61	660	70	550	40	420	370	22	ø19	575	1004	107	195	302
100x80-160W	112M	100	254	200	210	410	36	600	70	500	30	400	360	20	ø15	355	709	80	40	120
	132S,132M	100	274	200	210	410	36	600	70	500	30	400	360	20	ø15	400	774	88	80	168
	160M,160L	100	304	200	210	410	36	600	70	500	30	400	360	20	ø15	485	889	95	110	205
	180M,180L	100	304	200	235	435	36	660	70	550	40	420	370	22	ø19	575	979	98	195	293
100x80-200W	112M	100	254	225	210	435	36	600	70	500	30	400	360	20	ø15	355	709	79	40	119
	132S,132M	100	274	225	210	435	36	600	70	500	30	400	360	20	ø15	400	774	87	80	167
	160M,160L	100	304	225	210	435	36	600	70	500	30	400	360	20	ø15	485	889	93	110	203
	180M,180L	100	304	225	235	460	36	660	70	550	40	420	370	22	ø19	575	979	96	195	291

Iwaki pump protector - DRN series

Detects unusual pump operating conditions including dry-running and overload

The DRN pump protector is an electric current sensing dry running protector.

It decreases load current (lower limit) to stop the pump when it runs dry or runs with air sucking. The DRN pump protector detects over-load as well.



Specifications

Model	DRN-01	DRN-02
Amperometric range	0-30.00A	0-200.0A
Unit's source voltage	AC100-240V 50/60Hz 10VA	
Operating temperature	0-40°C	
Operating humidity	35-85%RH	
Current sensor	JS10FL	JS24FL
Analog input 1	0-20mA or 0-5V	
Analog input 2	0-20mA or 0-5V	
Temperature range	-50-200°C (Pt100, K thermocouple)	
Digital contact input	No-voltage contact signal (also for external reset)	
Contact output	For pre-alarm: AC250V 8A (load resistance) 1c For pump-stopping: AC250V 8A (load resistance) 1a	
Logging capability	Past records (with the calendar)	
Communication	RS485 incorporated	
Supported models	MX, SMX, MXM, MDM, MDE, MDW, MP, MTFO*	
External dimension in mm	D71 x W108 x H90	

*: For other models please contact your local distributor

Not used as an inverter.

Safety: UL 61010-1

CAN/CSA-C22.2 No. 61010-1-12
EN61010-1 EN61326-1, EN50581

EMC: EN61326-1

RoHS: EN50581



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