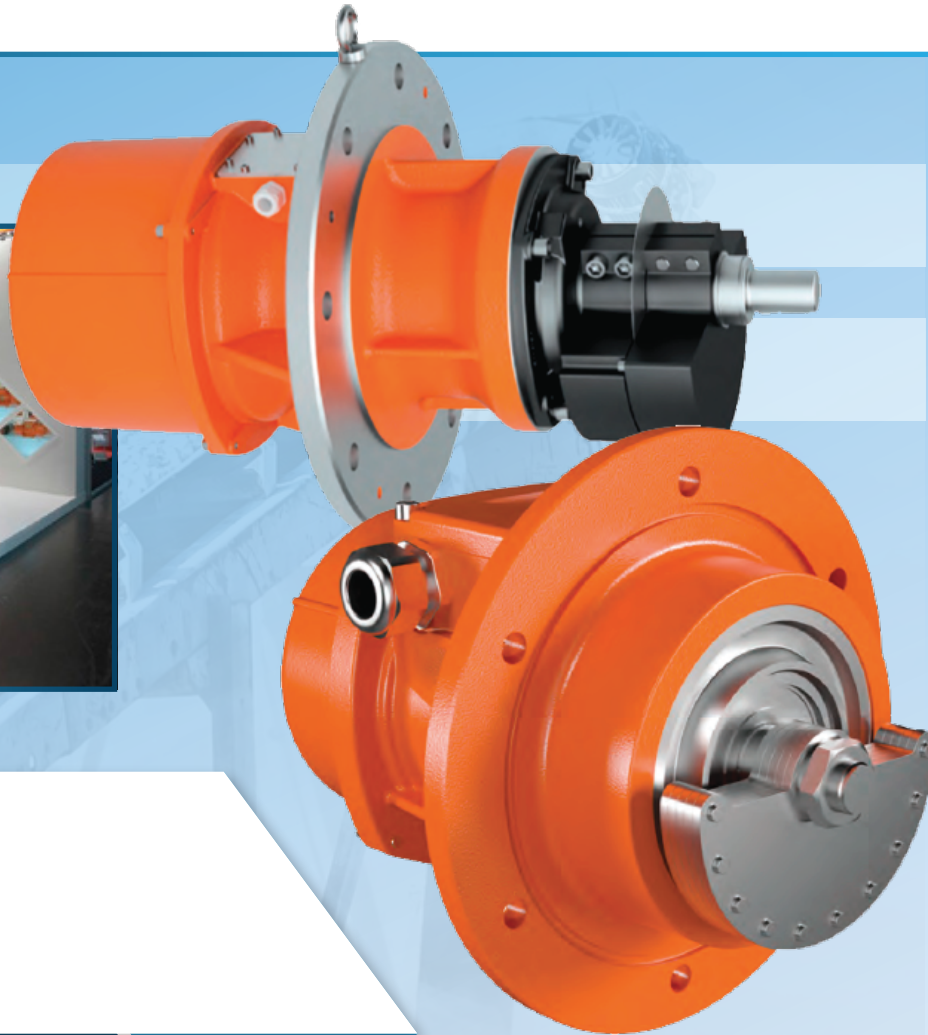


AIRMATIC®

WE'LL HANDLE IT.



MTF SERIES

Flange Mounted Electric Vibrators

AIRMATIC

284 Three Tun Rd. Malvern, PA 19355

215.333.5600

infocenter@airmatic.com

airmatic.com

MTF TECHNICAL FEATURES

Power supply

Three-phase voltage from 24V to 690V, 50Hz or 60Hz or single-phase 100-130V, 60Hz and 200-240V, 50Hz (single-phase types are supplied without capacitor); suitable for use with an inverter from 20Hz to the base frequency with constant torque load profile.

Polarity

2 or 4 poles, other polarities on request.

Standards and Regulations

Low Voltage Directive 2006/95/EC; ATEX Directive 2014/34/UE; EN/IEC 60034-1, EN/IEC 60079-0, EN/IEC 60079-31, UL 1004-1, CSA C22.2 No.100, NEMA MG-1.

Functioning

Continuous service (S1) at maximum declared centrifugal force and electric power. Intermittent services are also possible depending on the type of vibrator and the operating conditions. For detailed information, contact our technical assistance office.

Centrifugal force

Range extended up to 5750 lbs (25.7 kN), with centrifugal force adjustable by varying weights position.

Mechanical protection

IP 66 according to IEC/EN 60529. Mechanical protection is ensured in the mounting phase of the vibrator onto the vibrating machine, by introducing the special seal into the seat on the coupling flange. Protection against mechanical impacts IK 08 according to IEC/EN 62262.

Insulation class

Class F (155°C), class H (180°C) on request.

Tropicalization

Standard on all vibrators, with vacuum encapsulation up to size 30, with "drop by drop" trickle system for larger sizes.

Ambient temperature

From -4°F to +104°F (-20°C to +40°C). Versions for higher or lower temperatures are available on request.

Vibrator thermal protection

On demand with PTC rated thermistor heat detectors 266°F (130°C). Also on request thermistors with different temperatures and anti-condensation heaters.



Fixing of the vibrator

In all positions and therefore without restriction.

Lubrication

All vibrators are lubricated in the factory and do not require further lubrication at start-up.

Electrical connection box

The small size guarantees passage of tools used for fixing the vibrator to the vibrating machine. The electrical connection must be carried out using the relative connectors inserted inside the connection box. Special shaped terminals allow to fix the power supply cable, protecting it from loosening.

Electric motor

Three-phase asynchronous type. Designed for maximum starting torques and torque curves specific to requirements of vibrating machines. Insulated windings through vacuum encapsulating up to size 30; using "drop by drop" trickle system with class H resin for larger sizes. The rotor is die cast aluminum.

Casing

In high-tensile aluminum alloy up to size 50, in spheroidal cast iron for size 70.

Bearing flange

Constructed in cast iron (spheroidal or grey) or in aluminum with steel bearing seat. The geometry of the flange transmits the load to the casing uniformly.

Bearings

The lower and upper bearings have been studied to support the relative load and therefore they have a particular geometry, especially designed and made for Italvibras.

Motor shaft

In treated steel alloy (Isothermic hardening) resistant to stress.

The MTF series, made up of vertical vibrators with lateral flange and with weight protection covers fixed to the opposite part to the flange, adopts innovative technical solutions that increase performance and reliability.

Typically used in circular screens and in small and medium-size sieves, these vibrators are supplied with lamellar or clamped eccentric weights, with easy adjustability.

The MTF series complies with the most recent IEC and EN international standards for use in atmospheres with potentially explosive dust particles. In particular, the MTF series can be used in areas 21 and 22.

Category:

II2D

Level of protection:

Ex tD A21 T...°C IP66 (Ex tb IIIC T...°C Db)

Temperature class:

see tables

EC certificate:

LCIE 05 ATEX 6163 X

Zones of use:

21, 22

Eccentric weights

Allow greater adjustment of the centrifugal force, with phase shift of the lower weight assembly with respect to the upper group. This adjustment is eased by a graduated scale, which expresses the centrifugal force as a percentage of the maximum centrifugal force.

Weight covers

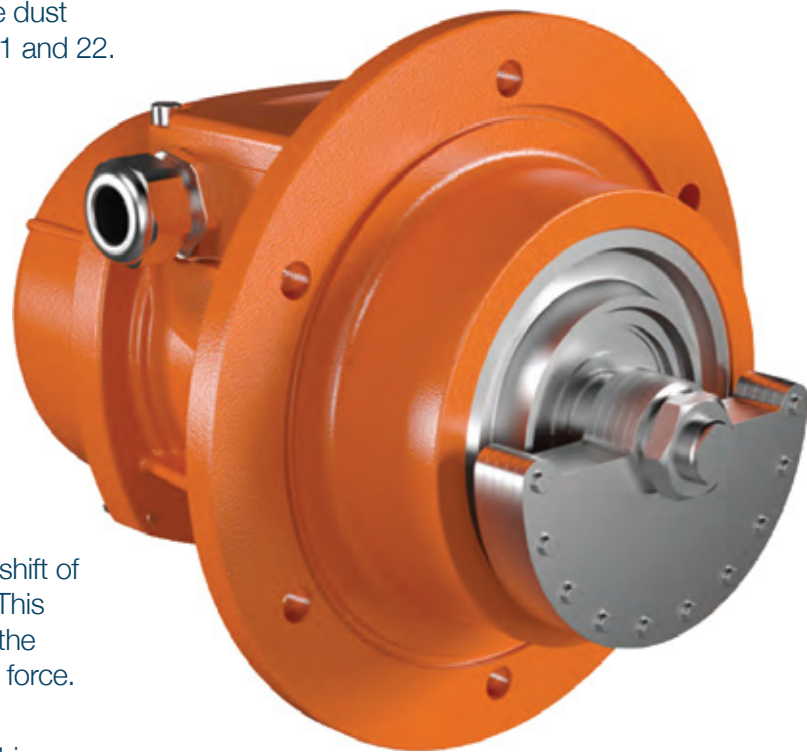
In aluminum alloy, on request stainless steel cover in AISI 304 is available.

Painting / Surface coating

Electrostatic surface treatment based on epoxy polyester powder polymerized in oven at 392°F (200°C). Tested in salt spray for 500 hours.

On request also on MTF series other surface coatings may be available. For further details please contact AIRMATIC.

The technical data and models listed in this catalogue are not binding. Italvibras reserves the right to modify them without prior notice.



MTF

2 poles - 3,000/3,600 rpm

Three-phase

DESCRIPTION						MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS					
Code	Type	Type (EU)	SIZE	SP	II2D Temp. class	Centrifugal force (A/B)*		Weight		Power Output		Max. current		Ia/In	
						lbs		lbs		HP		A			
						50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
600375	MTF 36-190	MTF 3/65-S02	00	-	120°C	68.2/68.2	96.8/96.8	11.9	11.9	0.12	0.11	0.27	0.23	3.43	3.90
600369	MTF 36-480	MTF 3/200-S02	01	•	120°C	224/224	257/257	16.6	16.1	0.18	0.18	0.35	0.30	2.68	3.00
600370	MTF 36-660	MTF 3/300-S02	10	•	120°C	332/332	359/359	24.8	24.1	0.24	0.26	0.60	0.50	3.47	4.20
600378	MTF 36-1050	MTF 3/500-S02	20	•	120°C	642/642	554/554	33.2	31.2	0.44	0.53	0.80	0.75	4.21	4.80
600456	MTF 36-1500	MTF 3/700-S02	20	•	120°C	770/770	739/739	33.6	31.6	0.44	0.53	0.80	0.75	4.21	4.80
600380	MTF 36-1680	MTF 3/800-S02	30	•	120°C	825/825	891/891	37.6	36.5	0.67	0.71	1.10	1.00	3.83	6.00
600285	MTF 36-2530	MTF 3/1100-S90	40	•	120°C	1217/1217	1166/1166	57.5	55.3	1.0	1.2	1.70	1.60	6.79	7.00

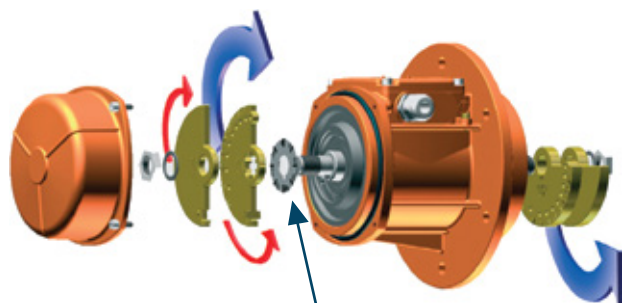
Single-phase

Code	Type	Type (EU)	SIZE	SP	II2D Temp. class	Centrifugal force (A/B)*		Weight		Power Output		Max. current		Ia/In	
						lbs		lbs		HP		A			
						50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
600375	MTF 36-190	MTF 3/65-S02	00	-	120°C	68.2/68.2	96.8/96.8	11.9	11.9	0.09	0.09	0.56	1.52	2.24	2.24
600369	MTF 36-480	MTF 3/200-S02	01	-	120°C	224/224	257/257	16.5	16.1	0.15	0.15	0.75	1.52	1.67	2.24
600370	MTF 36-660	MTF 3/300-S02	10	-	120°C	332/332	359/359	24.6	24.0	0.24	0.27	1.25	2.40	2.48	3.52
600378	MTF 36-1050	MTF 3/500-S02	20	-	120°C	642/642	554/554	33.0	31.0	0.46	0.48	2.30	4.50	3.35	4.22
600456	MTF 36-1500	MTF 3/700-S02	20	-	120°C	770/770	739/739	33.4	31.5	0.46	0.48	2.30	4.50	3.35	4.22
600380	MTF 36-1680	MTF 3/800-S02	30	-	120°C	825/825	891/891	37.4	36.3	0.60	0.68	3.25	7.00	4.00	4.14

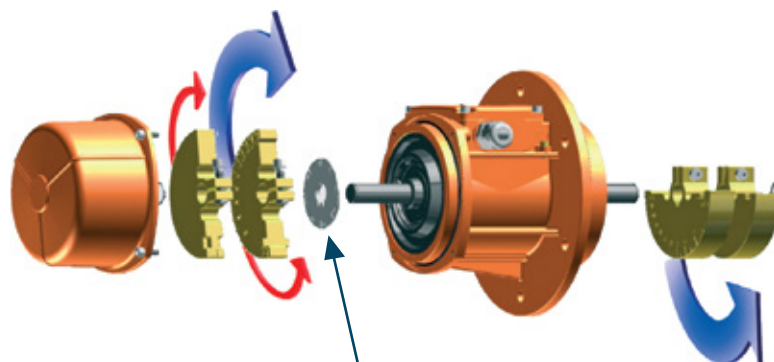
* Listed as A/B: total centrifugal force is the sum of centrifugal force of top weights (A) and centrifugal force of bottom weights (B).

Ia/In = ratio between start-up current and maximum current.

FRONTAL FIXING WEIGHTS



CLAMP FIXING WEIGHTS



Graduated disks for upper and lower weight group phase shift

Regulation between upper and lower weight groups Single weight phase shift

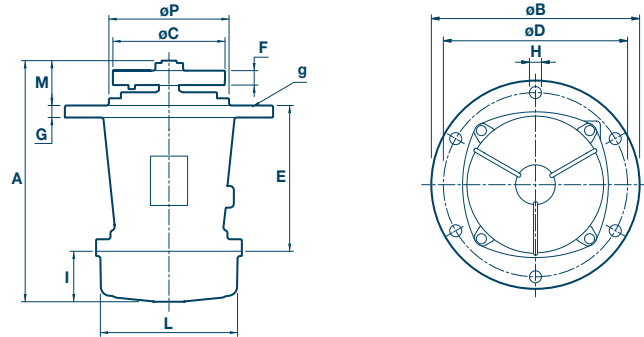


Fig. G

DIMENSIONAL SPECIFICATIONS (inches)

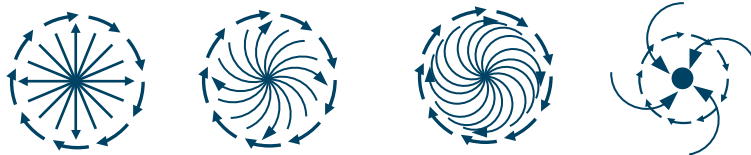
Type	Fig.	A	ØB	ØC	ØD	ØH	N°	Holes						ØP	Capacitor (µF)		Cable entry thread	Seal g
								E	F	G	I	L	M		220V 50Hz	115V 60Hz		
MTF 36-190	G	7.52	5.12	3.39	4.29	0.33	4	5.08	0.31	0.39	1.57	4.17	0.87	-	-	-	M20x1.5	OR 3350
MTF 36-480	G	8.90	8.33	3.66	7.40	0.47	4	5.67	0.79(50Hz) 0.63(60Hz)	0.39	2.28	4.06	0.93	-	-	-	M20x1.5	OR 4650
MTF 36-660	G	9.72	8.46	4.49	7.36	0.47	4	7.07	0.63(50Hz) 0.47(60Hz)	0.51	2.13	5.00	0.53	-	-	-	M20x1.5	OR 4625
MTF 36-1050	G	11.00	9.65	5.20	8.07	0.47	6	4.88	0.79(50Hz) 0.47(60Hz)	0.47	2.56	5.71	3.56	6.38	-	-	M25x1.5	OR 4700
MTF 36-1500	G	11.00	9.65	5.20	8.07	0.47	6	4.88	0.95(50Hz) 0.63(60Hz)	0.47	2.56	5.71	3.56	6.38	-	-	M25x1.5	OR 4700
MTF 36-1680	G	11.85	10.24	6.06	9.06	0.59	6	7.17	0.63(50Hz) 0.47(60Hz)	0.59	2.48	6.69	2.20	5.91	-	-	M25x1.5	OR 4800
MTF 36-2530	G	15.08	10.98	5.71	10.00	0.55	4	-	1.22(50Hz) 0.83(60Hz)	0.69	2.26	-	2.48	9.02	-	-	M25x1.5	-

Holes

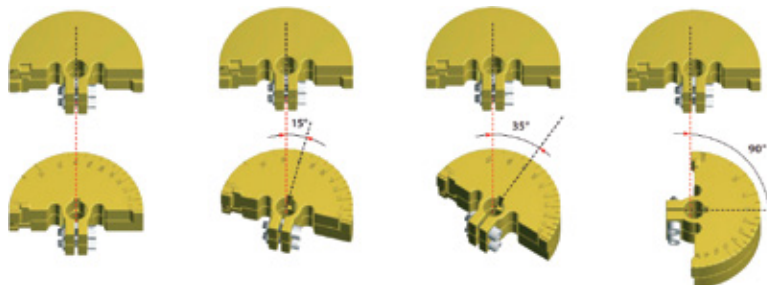
Capacitor (µF)

Type	Fig.	A	ØB	ØC	ØD	ØH	N°	Holes						ØP	Capacitor (µF)		Cable entry thread	Seal g
								E	F	G	I	L	M		220V 50Hz	115V 60Hz		
MTF 36-190	G	7.52	5.12	3.39	4.29	0.33	4	5.08	0.31	0.39	1.57	4.17	0.87	-	10	28	M20x1.5	OR 3350
MTF 36-480	G	8.90	8.33	3.66	7.40	0.47	4	5.67	0.79(50Hz) 0.63(60Hz)	0.39	2.28	4.06	0.93	-	10	35	M20x1.5	OR 4650
MTF 36-660	G	9.72	8.46	4.49	7.36	0.47	4	7.07	0.63(50Hz) 0.47(60Hz)	0.51	2.13	5.00	0.53	-	16	25	M20x1.5	OR 4625
MTF 36-1050	G	11.00	9.65	5.20	8.07	0.47	6	4.88	0.79(50Hz) 0.47(60Hz)	0.47	2.56	5.71	3.56	6.38	12.5	50	M25x1.5	OR 4700
MTF 36-1500	G	11.00	9.65	5.20	8.07	0.47	6	4.88	0.95(50Hz) 0.63(60Hz)	0.47	2.56	5.71	3.56	6.38	12.5	50	M25x1.5	OR 4700
MTF 36-1680	G	11.85	10.24	6.06	9.06	0.59	6	7.17	0.63(50Hz) 0.47(60Hz)	0.59	2.48	6.69	2.20	5.91	25	90	M25x1.5	OR 4800

FORCE LINE DIRECTION



MASS GROUP RELATIVE REGULATION



MTF

4 poles - 1,500/1,800 rpm

Three-phase

DESCRIPTION						MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS					
Code	Type	Type (EU)	SIZE	Ex	II2D Temp. class	Centrifugal force (A/B)*		Weight		Power Output		Max. current		Ia/In	
						lbs		lbs		HP		A		50Hz	60Hz
601446	MTF 18-170	MTF 15/80-S02	01	-	120°C	88/88	81.4/81.4	15.0	14.3	0.05	0.06	0.21	0.20	1.78	1.95
601403	MTF 18-480	MTF 15/200-S02	10	•	120°C	233/163	235/235	30.8	29.0	0.13	0.13	0.41	0.40	2.34	2.75
601405	MTF 18-920	MTF 15/400-S02	20	•	120°C	451/312	451/451	45.3	43.6	0.29	0.37	0.60	0.60	3.33	3.50
601406	MTF 18-1310	MTF 15/550-S02	20	•	120°C	607/451	649/649	48.4	45.3	0.29	0.37	0.60	0.60	3.33	3.50
601407	MTF 18-1690	MTF 15/700-S02	30	•	120°C	792/579	836/836	57.2	53.9	0.51	0.66	0.92	0.98	3.48	3.43
601280	MTF 18-2150	MTF 15/1100-S90	40	•	120°C	1109/1109	1080/1080	79.2	69.1	1.0	1.2	1.45	1.50	4.10	4.20
601379	MTF 18-2700	MTF 15/1710-S02-VRS	50	•	150°C	1967/708	1932/781	96.8	91.3	1.1	1.2	2.00	1.90	4.29	4.89
601380	MTF 18-3100	MTF 15/2000-S02-VRS	50	•	170°C	2246/785	2237/858	106	100	1.3	1.5	2.50	2.30	4.30	4.90
601381	MTF 18-5700	MTF 15/3810-S02-VRS	70	•	135°C	4198/1555	4118/1580	220	205	2.4	2.8	3.90	3.90	7.11	6.92

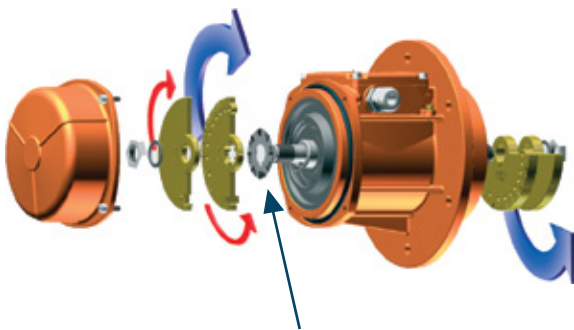
Single-phase

Code	Type	Type (EU)	SIZE	Ex	II2D Temp. class	Centrifugal force (A/B)*		Weight		Power Output		Max. current		Ia/In	
						lbs		lbs		HP		A		50Hz	60Hz
601446	MTF 18-170	MTF 15/80-S02	01	-	120°C	88/88	81.4/81.4	15.0	14.3	0.05	0.05	0.43	1.00	1.20	1.3
601403	MTF 18-480	MTF 15/200-S02	10	-	120°C	233/163	235/235	30.8	29.0	0.15	0.15	1.00	2.00	1.50	1.85
601405	MTF 18-920	MTF 15/400-S02	20	-	120°C	451/312	451/451	45.3	43.6	0.16	0.24	1.20	2.80	2.50	2.5
601406	MTF 18-1310	MTF 15/550-S02	20	-	120°C	607/451	649/649	48.4	45.3	0.16	0.24	1.20	2.80	2.50	2.5
601407	MTF 18-1690	MTF 15/700-S02	30	-	120°C	792/579	836/836	57.2	53.9	0.32	0.41	2.15	5.15	5.44	3.63

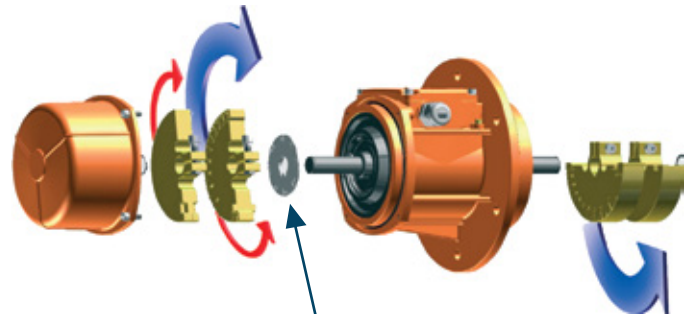
* Listed as A/B: total centrifugal force is the sum of centrifugal force of top weights (A) and centrifugal force of bottom weights (B).

Ia/In = ratio between start-up current and maximum current.

FRONTAL FIXING WEIGHTS



CLAMP FIXING WEIGHTS



Graduated disks for upper and lower weight group phase shift

Regulation between upper and lower weight groups

Single weight phase shift

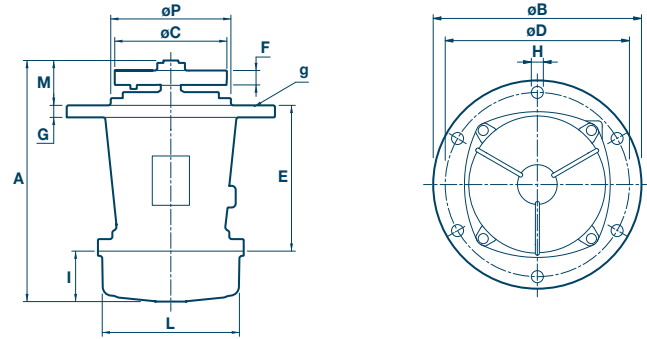


Fig. G

DIMENSIONAL SPECIFICATIONS (inches)

Holes														Capacitor (µF)						Cable entry thread	Seal g
Type	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	I	L	M	ØP	220V 50Hz	115V 60Hz					
MTF 18-170	G	9.49	8.33	3.66	7.40	0.47	4	5.67	1.26(50Hz) 0.79(60Hz)	0.39	2.56	4.06	1.26	-	-	-	M20x1.5	OR 4650			
MTF 18-480	G	11.52	8.46	4.49(50Hz) 4.25(60Hz)	7.36	0.47	4	7.07	1.89(50Hz) 1.58(60Hz)	0.51	3.03	5.00	1.42	-	-	-	M20x1.5	OR 4625			
MTF 18-920	G	13.21	9.65	5.12	8.07	0.47	6	4.88	2.32(50Hz) 1.65(60Hz)	0.47	3.66	5.71	4.67	6.38	-	-	M25x1.5	OR 4700			
MTF 18-1310	G	14.82	9.65	5.12	8.07	0.47	6	4.88	3.11(50Hz) 2.32(60Hz)	0.47	4.49	5.71	5.45	6.38	-	-	M25x1.5	OR 4700			
MTF 18-1690	G	14.98	10.24	6.06	9.06	0.59	6	7.17	2.32(50Hz) 1.81(60Hz)	0.59	4.17	6.69	3.64	5.91	-	-	M25x1.5	OR 4800			
MTF 18-2150	G	16.89	10.98	7.48	10.00	0.55	4	-	1.93	0.69	2.26	-	-	9.02	-	-	M25x1.5	-			
MTF 18-2700	G	19.21	13.78	7.48	11.42	0.67	6	9.13	3.31(50Hz) 2.24(60Hz)	0.98	5.28	8.23	4.80	6.77	-	-	M25x1.5	-			
MTF 18-3100	G	19.69(50Hz) 19.21(60Hz)	13.78	7.60	11.42	0.67	6	9.13	3.94(50Hz) 2.68(60Hz)	0.98	5.28	8.23	5.24(50Hz) 4.80(60Hz)	6.77	-	-	M25x1.5	-			
MTF 18-5700	G	24.17	16.14	9.84(50Hz) 9.61(60Hz)	13.78	0.87	6	12.20	3.07(50Hz) 2.24(60Hz)	1.06	7.01	11.02	4.96	9.21	-	-	M25x1.5	-			

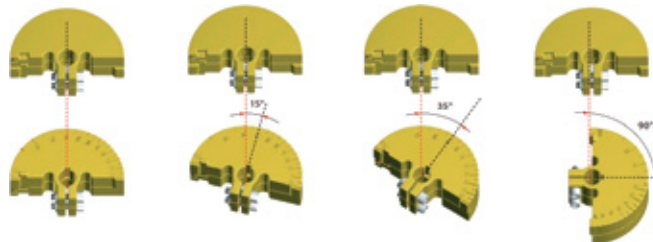
Holes															Capacitor (µF)				Cable entry thread	Seal g
Type	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	I	L	M	ØP	220V 50Hz	115V 60Hz				
MTF 18-170	G	9.49	8.33	3.66	7.40	0.47	4	5.67	1.26(50Hz) 0.79(60Hz)	0.39	2.56	4.06	1.26	-	3.15	25	M20x1.5	OR 4650		
MTF 18-480	G	11.52	8.46	4.49(50Hz) 4.25(60Hz)	7.36	0.47	4	7.07	1.89(50Hz) 1.58(60Hz)	0.51	3.03	5.00	1.42	-	5	25	M20x1.5	OR 4625		
MTF 18-920	G	13.21	9.65	5.12	8.07	0.47	6	4.88	2.32(50Hz) 1.65(60Hz)	0.47	3.66	5.71	4.67	6.38	12 ^o +20 ^o	35	M20x1.5	OR 4700		
MTF 18-1310	G	14.82	9.65	5.12	8.07	0.47	6	4.88	3.11(50Hz) 2.32(60Hz)	0.47	4.49	5.71	5.45	6.38	12 ^o +20 ^o	35 ^o +10 ^o	M20x1.5	OR 4700		
MTF 18-1690	G	14.98	10.24	6.06	9.06	0.59	6	7.17	2.32(50Hz) 1.81(60Hz)	0.59	4.17	6.69	3.64	5.91	16 ^o +80 ^o	40 ^o +120 ^o	M25x1.5	OR 4800		

○ Running capacitor / ● Additional capacitor only for start-up.

FORCE LINE DIRECTION



MASS GROUP RELATIVE REGULATION



MTF-E TECHNICAL FEATURES

Power supply

Three-phase voltage from 120V to 690V, 50Hz or 60Hz; variable frequency (in presence of PTC thermistor) from 20Hz to the base frequency with constant torque load profile type PWM.

Polarity

2 and 4 poles.

Standards and Regulations

ATEX Directive 2014/34/UE; EN/IEC 60079-0, EN/IEC 60079-7, EN/IEC 60079-31, EN/IEC 60034-1.

Quality Controls

The components that affect protection are 100% accurately controlled and recorded.

Functioning

Continuous service (S1) at maximum declared centrifugal force and electric power.

Centrifugal force

Range extended up to 5750 lbs (25.7 kN), with centrifugal force adjustable for varying weights position.

Mechanical protection

IP 66 according to IEC/EN 60529; mechanical protection is ensured in the mounting phase of the vibrator onto the vibrating machine, by introducing the special seal into the seat on the coupling flange. Protection against mechanical impacts IK 08 according to IEC/EN 62262.

Insulation class

Class F (155°C).

Tropicalization

Standard on all vibrators, with vacuum encapsulation up to size 30, with "drop by drop" trickle system for larger sizes.

Ambient temperature

From -4°F to +104°F (-20°C to +40°C), on re-request it is possible to have vibrators for max. ambient temperatures of +55°C.

Vibrator thermal protection

On demand with PTC rated thermistor heat detectors 266°F (130°C). Also on request thermistors with different temperatures and anti-condensation heaters.



Fixing of the vibrator

In all positions and therefore without restriction.

Lubrication

All vibrators are lubricated in the factory and do not require further lubrication at start-up.

Electrical connection box

The size guarantees passage of tools used for fixing the vibrator to the vibrating machine.

The electrical connection must be carried out using the relative connectors inserted inside the connection box and filling with insulating compound.

Electric motor

Three-phase asynchronous type. Designed for maximum starting torques and torque curves adapt for the specific requirements of vibrating machines. Insulated windings using vacuum encapsulating up to size 30; using the "drop by drop" trickle system with class H resin for larger sizes. The rotor is die cast aluminum.

Casing

In high-tensile aluminum alloy up to size 50, in spheroidal cast iron for size 70.

Bearing flange

In cast iron (spheroidal or grey). The geometry of the flange transmits the load to the casing uniformly.

Bearings

The lower and upper bearings have been studied to support the relative load and therefore they have a particular geometry, especially designed and made for Italvibras.

Motor shaft

In treated steel alloy (Isothermic hardening) resistant to stress.

The MTF-E series has been designed for use in industrial processes where explosive gas and dust particles are present. In compliance with ATEX Directive (2014/34/UE) and in compliance with IECEx Scheme.

In particular, the MTF-E series can be used in areas 1 and 2 (gas) and areas 21 and 22 (dusts) according to the layout and following features:

Category:

II2D & II2G

Level of protection:

Ex tb IIIC T...°C Db

Temperature class:

see tables

EC certificate:

LCIE 05 ATEX 6163 X

Zones of use:

21, 22

Eccentric weights

Allow greater adjustment of the centrifugal force, with phase shift of the lower weight assembly with respect to the upper group. This adjustment is eased by a graduated scale, which expresses the centrifugal force as a percentage of the maximum centrifugal force.

Weight covers

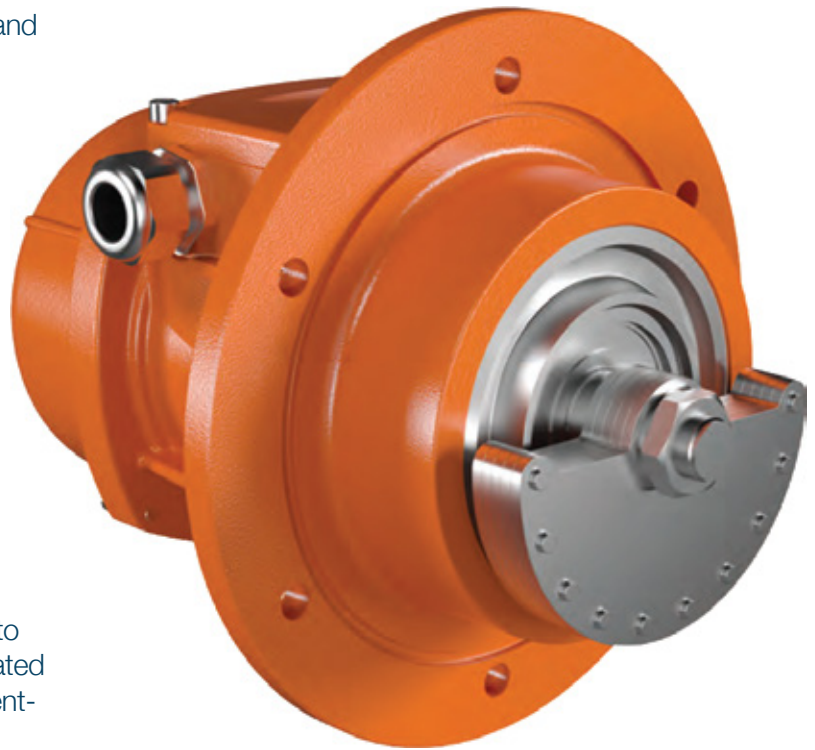
In aluminum alloy.

Painting

Electrostatic surface treatment based on polymerized epoxy polyester powder in oven at 392°F (200°C). Tested in salt spray for 500 hours.

For further details please contact AIRMATIC.

The technical data and models listed in this catalogue are not binding. Italvibras reserves the right to modify them without prior notice.



MTF-E

2 poles - 3,000/3,600 rpm



Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS									
Code	Type	Type (EU)	SIZE	Centrifugal force (A/B)*		Weight		Temp. class (G)	Temp. class (D)	Power Input		Power Output		Max. current		tE (s)	Ia/In
				50Hz	60Hz	50Hz	60Hz			W		HP		A			
										50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz		
6E0369	MTF 36-480E-S02 ○	MTF 3/200E-S02 ○	01	224/224	257/257	16.5	16.1	T3	120°C	180	180	0.16	0.16	-	-	30	2.68
6E0370	MTF 36-660E-S02	MTF 3/300E-S02	10	332/332	359/359	24.6	24.0	T3	120°C	260	270	0.28	0.28	0.57	0.50	18	3.50
								T4		230	230	0.23	0.23	0.48	0.41	12	4.20
6E0378	MTF 36-1050E-S02	MTF 3/500E-S02	20	642/642	554/554	33.0	31.0	T3	120°C	500	500	0.40	0.40	0.76	0.67	12	4.20
								T4		350	360	0.28	0.28	0.57	0.50	8	5.60
6E0456	MTF 36-1500E-S02	MTF 3/700E-S02	20	770/770	739/739	33.4	31.5	T3	120°C	500	500	0.40	0.40	0.76	0.67	12	4.20
								T4		350	360	0.28	0.28	0.57	0.50	8	5.60
6E0380	MTF 36-1680E-S02	MTF 3/800E-S02	30	825/825	891/891	37.4	36.3	T3	120°C	550	570	0.54	0.54	0.95	0.83	12	4.20
								T4		390	400	0.39	0.39	0.72	0.64	8	5.52
6E0285	MTF 36-2530E-S90	MTF 3/1100E-S90	40	1217/1217	1166/1166	57.2	55.0	T4	120°C	830	910	0.88	0.88	1.43	1.25	6	7.30

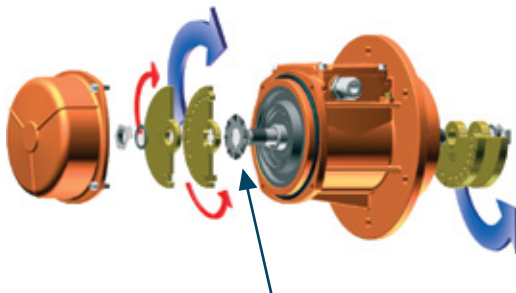
4 poles - 1,500/1,800 rpm

Code	Type	Type (EU)	SIZE	Centrifugal force (A/B)*		Weight		Temp. class (G)	Temp. class (D)	Power Input		Power Output		Max. current		tE (s)	Ia/In
				50Hz	60Hz	50Hz	60Hz			W		HP		A			
										50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz		
6E1403	MTF 18-480E-S02	MTF 15/200E-S02	10	233/163	235/235	30.8	29.0	T3	120°C	203	-	0.12	-	0.45	-	35	2.04
								T4		170	175	0.13	0.13	0.39	0.40	28	2.34
6E1405	MTF 18-920E-S02	MTF 15/400E-S02	20	451/312	451/451	45.3	43.6	T3	120°C	300	320	0.27	0.31	0.57	0.52	18	3.33
								T4		285	270	0.24	0.27	0.52	0.46	16	3.63
6E1406	MTF 18-1310E-S02	MTF 15/550E-S02	20	607/451	649/649	48.4	45.3	T3	120°C	300	320	0.27	0.31	0.57	0.52	18	3.33
								T4		285	270	0.24	0.27	0.52	0.46	16	3.63
6E1407	MTF 18-1690E-S02	MTF 15/700E-S02	30	792/579	836/836	57.2	53.9	T3	120°C	460	500	0.42	0.51	0.86	0.85	17	3.50
								T4		360	420	0.32	0.28	0.72	0.70	12	4.20
6E1280	MTF 18-2150E-S90	MTF 15/1100E-S90	40	1109/1109	1080/1080	79.2	69.1	T3	120°C	900	950	0.88	0.98	1.38	1.32	13	4.00
								T4		630	700	0.62	0.68	1.05	1.00	8	5.36
6E1379	MTF 18-2700E-S02	MTF 15/1710E-S02-VRS	50	1967/708	1932/781	96.8	91.3	T3	150°C	1100	1150	0.98	1.07	1.90	1.82	9	4.95
								T4		630	700	0.64	0.71	1.33	1.27	6	7.00
6E1380	MTF 18-3100E-S02	MTF 15/2000E-S02-VRS	50	2246/785	2237/858	106	100	T3	150°C	1100	1150	0.98	1.07	1.90	1.82	9	4.95
								T4		630	700	0.64	0.71	1.33	1.27	6	7.00
6E1381	MTF 18-8700E-S02	MTF 15/3810E-S02-VRS	70	4198/1555	4118/1580	220	205	T3	135°C	2200	2400	2.39	2.63	3.71	3.50	6	7.17
								T4		1850	1950	2.01	2.21	3.14	3.00	6	8.42

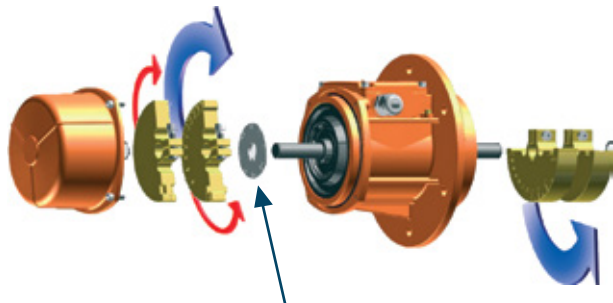
* Listed as A/B: total centrifugal force is the sum of centrifugal force of top weights (A) and centrifugal force of bottom weights (B).

○ Available only in versions 127/220V 50Hz three-phase, 200/346V 50Hz three-phase and 210/363V 60Hz three-phase.

FRONTAL FIXING WEIGHTS



CLAMP FIXING WEIGHTS



Graduated disks for upper and lower weight group phase shift

Regulation between upper and lower weight groups

Single weight phase shift

DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	I	L	M	ØP	Cable entry thread	Seal g
MTF 36-480E-S02 ○	G	8.90	8.33	3.66	7.40	0.47	4	5.67	0.79(50Hz) 0.63(60Hz)	0.39	2.28	4.06	0.93	-	M20x1.5	OR 4650
MTF 36-660E-S02	G	9.72	8.46	4.49	7.36	0.47	4	7.07	0.63(50Hz) 0.47(60Hz)	0.51	2.13	5.00	0.53	-	M20x1.5	OR 4625
MTF 36-1050E-S02	G	11.00	9.65	5.20	8.07	0.47	6	4.88	0.79(50Hz) 0.47(60Hz)	0.47	2.56	5.71	3.56	6.38	M25x1.5	OR 4700
MTF 36-1500E-S02	G	11.00	9.65	5.20	8.07	0.47	6	4.88	0.95(50Hz) 0.63(60Hz)	0.47	2.56	5.71	3.56	6.38	M25x1.5	OR 4700
MTF 36-1680E-S02	G	11.85	10.24	6.06	9.06	0.59	6	7.17	0.63(50Hz) 0.47(60Hz)	0.59	2.48	6.69	2.20	5.91	M25x1.5	OR 4800
MTF 36-2530E-S90	G	15.08	10.98	5.71	10.00	0.55	4	-	1.22(50Hz) 0.83(60Hz)	0.69	2.26	-	2.48	9.02	M25x1.5	-

Holes

Type	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	I	L	M	ØP	Cable entry thread	Seal g
MTF 18-480E-S02	G	11.52	8.46	4.49(50Hz) 4.25(60Hz)	7.36	0.47	4	7.07	1.89(50Hz) 1.58(60Hz)	0.51	3.03	5.00	1.42	-	M20x1.5	OR 4625
MTF 18-920E-S02	G	13.21	9.65	5.12	8.07	0.47	6	4.88	2.32(50Hz) 1.65(60Hz)	0.47	3.66	5.71	4.67	6.38	M25x1.5	OR 4700
MTF 18-1310E-S02	G	14.82	9.65	5.12	8.07	0.47	6	4.88	3.11(50Hz) 2.32(60Hz)	0.47	4.49	5.71	5.45	6.38	M25x1.5	OR 4700
MTF 18-1690E-S02	G	14.98	10.24	6.06	9.06	0.59	6	7.17	2.32(50Hz) 1.81(60Hz)	0.59	4.17	6.69	3.64	5.91	M25x1.5	OR 4800
MTF 18-2150E-S90	G	16.89	10.98	7.48	10.00	0.55	4	-	1.93	0.69	2.26	-	-	9.02	M25x1.5	-
MTF 18-2700E-S02	G	19.21	13.78	7.48	11.42	0.67	6	9.13	3.31(50Hz) 2.24(60Hz)	0.98	5.28	8.23	4.80	6.77	M25x1.5	-
MTF 18-3100E-S02	G	19.69(50Hz) 19.21(60Hz)	13.78	7.60	11.42	0.67	6	9.13	3.94(50Hz) 2.68(60Hz)	0.98	5.28	8.23	5.24(50Hz) 4.80(60Hz)	6.77	M25x1.5	-
MTF 18-8700E-S02	G	614	16.14	9.84(50Hz) 9.61(60Hz)	13.78	0.87	6	12.20	3.07(50Hz) 2.24(60Hz)	1.06	7.01	11.02	4.96	9.21	M25x1.5	-

tE (s) = set time tE from IEC/EN 60079-7. Ia/In = ratio between start-up current and maximum current.

FORCE LINE DIRECTION



MASS GROUP RELATIVE REGULATION

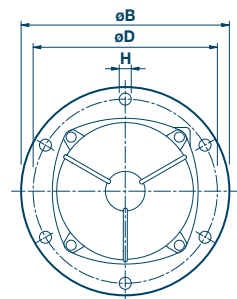
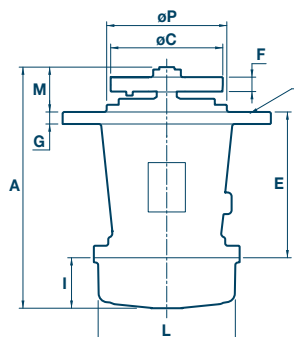
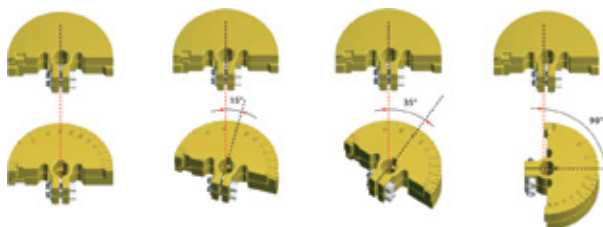


Fig. G

MTF-ACC TECHNICAL FEATURES

Power supply

Three phase tension from 220V to 690V at 50Hz or 60Hz; variable frequency from 20Hz to the nameplate frequency, at constant torque, with frequency inverter.

Polarities

6 pole standard, 4 & 8 pole on request, depending on frame size.

Regulations and Directives

Low Voltage Directive 2006/95/CE; EN/IEC 60034-1.

Functioning

Continuous service (S1) at maximum declared centrifugal force and electric power. Intermittent services are also possible depending on the type of vibrator and on the operating conditions. For detailed information, contact our technical assistance office.

Centrifugal force

Range extended to 44000 lbs (197 kN), adjustable varying the position of eccentric weights.

Mechanical protection

IP66 according to IEC/EN 60529. Protection against mechanical impacts IK 08 according to IEC/EN 62262.

Insulation class

Class F (155°C).

Topicalization

Standard on all vibrators, with "drop by drop" trickle system.

Ambient temperature

From -4°F to +104°F (-20°C to +40°C); higher or lower temperatures are possible on request.

Vibrator thermal protection

With thermal detectors with thermistors PTC 266°F (130°C). Upon request different temperatures thermistors are available and anti-condensation heaters.

Fixing of the vibrator

Typical fixing of these vibrators on inclined screens is horizontal, with connecting shaft and joints between the two motor-vibrators in order to keep the weights synchronized. The joints and the connecting shaft are not part of the standard supply but on demand only.



Lubrication

All vibrators are correctly lubricated at the factory and do not require further lubrication at their start-up in normal operating conditions.

Terminal box

Large terminal box to facilitate electrical connection. Special shaped terminals allow for the power supply cable to be secured, whilst protecting it from loosening.

Electric motor

Three-phase asynchronous type. Designed for obtaining maximum torque values both at starting to respond to the requirements of vibrating machines. Insulated windings by means of the "drop by drop" trickle system with class H resin. The rotor is die cast aluminum (squirrel cage).

Casing

In spheroidal cast iron, with connecting flange for a solid connection to the vibrating machine.

Bearing flange

Carried out in spheroidal graphite cast iron. Relevant design was studied to convey the load to the casing in a uniform way

Bearings

Custom made with special profile especially designed for Italvibras, suitable to withstand both high radial and axial loads

Motor shaft

In treated steel alloy (isothermal hardening) resistant to high stresses. One side extension to allow linear coupling through joint. The new MTF-ACC Series consists of flange mounted electric vibrators with shaft extension on one side and weight protection cover on the opposite side. This vibrator is designed for use on horizontal or inclined screens of medium and large dimensions.

The MTF-ACC vibrators are easy to install, they are normally fixed to the sides of the screen by means of a side flange and the two shafts are mechanically connected in-line through a shaft and dynamic elastic joints.

With two MTF-ACC motor-vibrators coupled in-line up to 88000 lbs (394kN) of centrifugal force can be reached.

AIRMATIC's technical staff can assist with the selection of the connecting shaft as well of the dynamic joints coupling and of course with the application of the motor-vibrators.

Eccentric weights

Allow adjustment of the centrifugal force. It is achieved by means of a graduated scale expressing it as a percentage of the maximum centrifugal force.

Weight covers

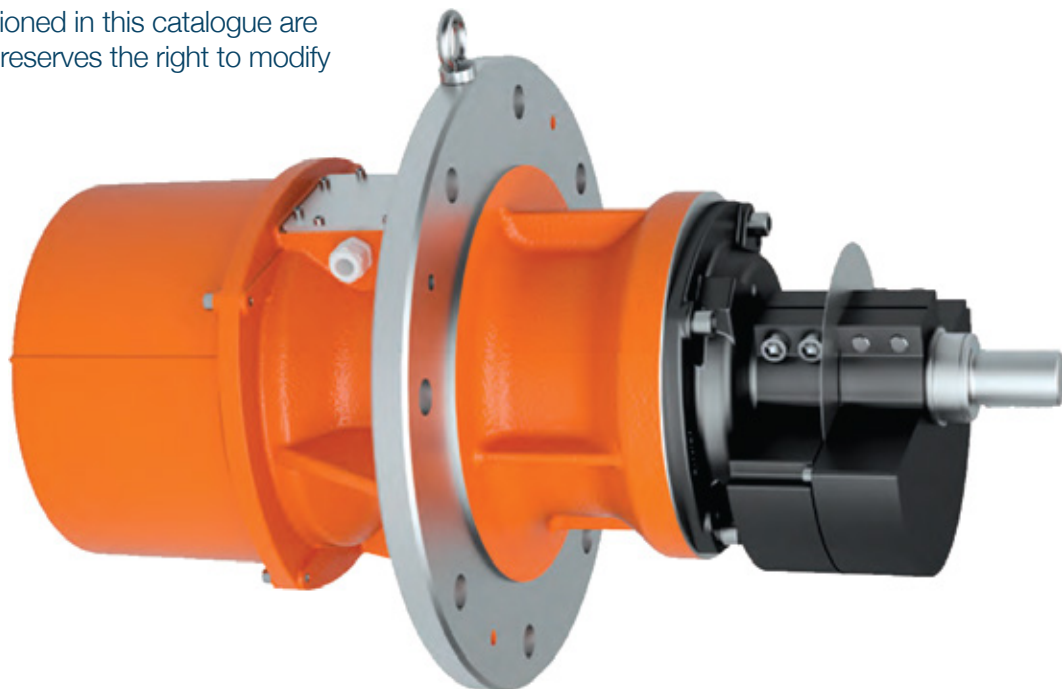
In aluminum alloy. On several sizes split covers are also available to enable opening in radial direction.

Painting

Electrostatic surface treatment based on polymerized epoxy polyester powder in oven at 392°F (200°C). Tested in salt spray for 500 hours

For further details please contact AIRMATIC.

Technical features and models mentioned in this catalogue are indicative and not binding. Italvibras reserves the right to modify them without any obligation.



MTF-ACC

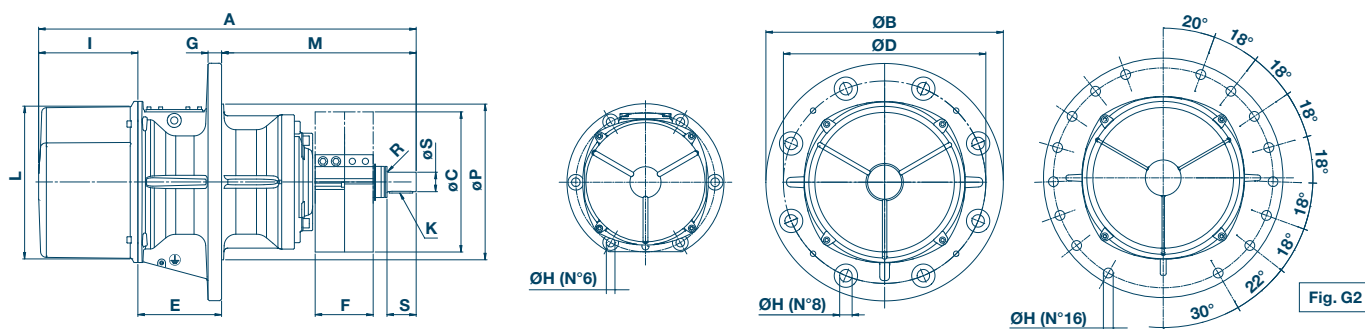
6 poles - 1,000/1,200 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS					
Code	Type	Type (UE)	SIZE	Static moment		Centrifugal force		Weight		Power Output		Max current		Ia/In	
				in-lbs	in-lbs	lbs	lbs	lbs	lbs	HP	HP	A	A	50Hz	60Hz
602013	MTF 12-11400-ACC	MTF 10/5150-S02-ACC	80	407	281	11506	11440	506	451	3.50	3.90	6.50	6.00	5.24	5.50
602001	MTF 12-14500-ACC	MTF 10/6600-S02-ACC	97	529	346	14960	14091	695	634	5.60	6.70	10.0	9.80	5.61	5.82
602498	MTF 12-20100-ACC	MTF 10/10000-S02-ACC	97	754	492	21331	20057	924	838	8.40	9.00	13.5	12.4	4.72	4.92
602305	MTF 12-24400-ACC	MTF 10/11200-S02-ACC	97	868	600	24552	24420	961	884	8.40	9.00	13.5	12.4	4.72	4.92
602217	MTF 12-26500-ACC	MTF 10/12000-S09-RF-ACC	105	930	652	26319	26558	1463	1342	10.1	11.0	16.3	15.0	5.21	5.73
602101	MTF 12-29000-ACC	MTF 10/13000-S02-ACC	97	1001	709	28307	28886	1067	902	10.6	11.4	17.0	16.0	4.98	5.00
602002	MTF 12-31000-ACC	MTF 10/15000-S09-RF-ACC	105	1101	756	31141	30809	1518	1430	12.1	13.4	19.0	18.0	5.88	5.78
602218	MTF 12-37000-ACC	MTF 10/17500-S09-RF-ACC	105	1348	908	38119	36969	1650	1540	14.7	15.4	24.5	23.0	5.71	5.96
602009	MTF 12-40000-ACC	MTF 10/19500-S09-RF-ACC	105	1560	994	44136	40480	1672	1562	14.7	15.4	24.5	23.0	5.71	5.96

* Working moment = 2 x static moment

RF = Water circulation cooling possibility in high temperature environments.



DIMENSIONAL FEATURES (inches)

Holes

Type	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	I	L	M	ØP	ØS	S	R	K _{key}
MTF 12-11400-ACC	G2	34.06	15.75	11.02	13.98	0.87	6	8.46	6.77 (50Hz) 4.72 (60Hz)	0.91	9.76	11.97	15.83	11.89	1.57	2.13	-	0.47x0.31x0.79
MTF 12-14500-ACC	G2	32.09	24.02	14.17	20.47	1.26	8	8.46	4.09 (50Hz) 2.87 (60Hz)	1.34	6.85	15.24	16.77	15.75	1.97	3.15	-	0.55x0.35x2.36
MTF 12-20100-ACC	G2	38.19	24.02	14.17	20.47	1.26	8	8.46	5.79 (50Hz) 3.78 (60Hz)	1.34	10.04	15.24	19.69	15.75	1.97	2.95	-	0.55x0.35x2.36
MTF 12-24400-ACC	G2	38.19	24.02	14.17	20.47	1.26	8	8.46	6.77 (50Hz) 4.80 (60Hz)	1.34	10.04	15.24	19.69	15.75	1.97	2.95	-	0.55x0.35x2.36
MTF 12-26500-ACC	G2	43.11	24.02	17.48	22.05	0.98	16	11.02	4.21 (50Hz) 3.74 (60Hz)	1.57	7.87	19.13	24.21	17.52	2.56	5.51	-	0.79x0.47x3.54
MTF 12-29000-ACC	G2	41.73	24.02	13.98	20.47	1.26	8	8.46	8.27 (50Hz) 6.38 (60Hz)	1.34	11.81	15.24	21.46	15.75	1.97	2.95	-	0.55x0.35x2.36
MTF 12-31000-ACC	G2	44.61	24.02	17.48 (50Hz) 16.54 (60Hz)	22.05	0.98	16	11.02	4.57 (50Hz) 3.74 (60Hz)	1.57	7.87	19.13	25.71	17.52	3.15	7.60	0.43	0.87x0.55x2.76
MTF 12-37000-ACC	G2	46.42	24.02	17.48 (50Hz) 16.54 (60Hz)	22.05	0.98	16	11.02	5.59 (50Hz) 4.49 (60Hz)	1.57	9.45	19.13	25.94	17.52	3.15	6.65	0.43	0.87x0.55x2.76
MTF 12-40000-ACC	G2	47.99	24.02	17.48	22.05	0.98	16	11.02	6.61 (50Hz) 4.17 (60Hz)	1.57	11.02	19.13	25.94	17.52	3.15	6.65	0.43	0.87x0.55x2.76

Ia/I_n = ratio between start-up current and max current.



AIRMATIC founded in 1944, is a woman-owned Industrial Distributor, with installation and maintenance capabilities, offering equipment, machinery, and shop supplies to the Industrial, Construction, Utility, Government, and Commercial Markets. Our products and services are sold through three business units:

The **MATERIALS MANAGEMENT GROUP** provides products and services to industries that convey, store, transport, and process powders and bulk solids from aggregates, cement, and chemicals to foods, grains, metals, power generation, and waste water treatment applications;

The **SERVICE GROUP** provides fabrication, installation, and maintenance services to improve bulk materials handling efficiency; mechanical clean-out services for silos and hoppers to eliminate material flow problems; and shop repair/rebuilding and modifications services of products sold by the Company.

The **TOOL GROUP** provides power tools, personal protective equipment, materials-handling equipment, shop equipment and MRO supplies used for production, fabrication, assembly, metal removal, maintenance, and storage in manufacturing, construction, utility, and commercial applications.

Our Customers tell us that by choosing AIRMATIC to solve their problems, they gain increased productivity, decreased costs, and a safer, cleaner work environment.



ITALVIBRAS is an Italian company with more than 50 years of experience in electric vibrators. Designing and manufacturing its full range of products internally, and focusing relentlessly on quality, Italvibras has come to be recognized as a world leader in the industry. The company maintains facilities in France, Germany, Spain, and the United States. Its U.S. headquarters are in Princeton, Illinois.

AIRMATIC

284 Three Tun Rd. Malvern, PA 19355

215.333.5600

infocenter@airmatic.com

airmatic.com