



The new MTF (MTF-S02) 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, which regulation is particularly easy.

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

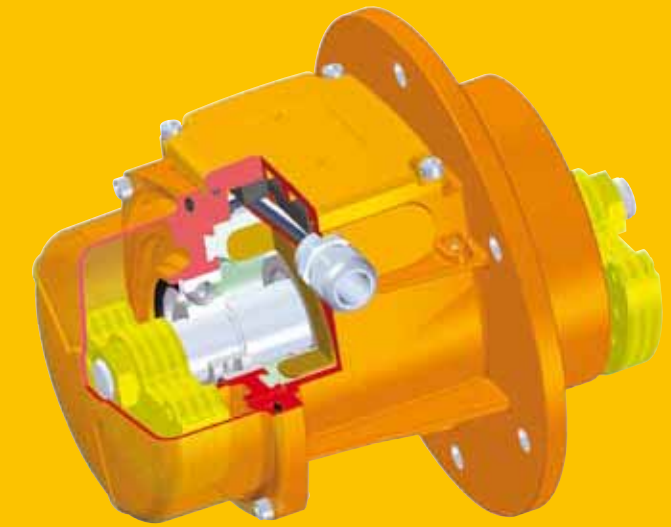
Category: II 2 D

Level of protection: tD A21 IP66

Temperature class: 120°C

EC certificate: LCIE 05 ATEX 6163 X

Areas of use: 21, 22



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.

Conformity with European Directives

Low voltage 73/23/CE; Electromagnetic Compatibility 89/336/CE, ATEX 94/9/CE.

Reference Regulations

EN 60034-1, EN 50081-1, EN 50081-2, EN 50082-1, EN 50082-2, IEC/EN 61241-0, IEC/EN 61241-1

Functioning

Continual 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 1180 Kgf. (11.6 KN), with centrifugal force adjustable from 0 to 100%.

Mechanical protection

IP 66 according to IEC 529, 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.

Shock-proof protection

IK 08 according to IEC 68, EN 50102.

Insulation class

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

Tropicalization

Standard on all vibrators, with vacuum impregnation up to size AF 30 and 35, with "drop by drop" trickle system for larger sizes.

Environmental temperature

From -30°C to +40°C. Versions for higher or lower temperatures are available on request.

Vibrator heat protection

On demand with PTC rated thermistor heat detectors 130°C (DIN 44081-44082). 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 if used in normal operating conditions. In heavy duty operating conditions periodical re-lubrication may be applied.

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. 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 size 40. The rotor is die cast aluminium.

Casing

In high-tensile aluminium alloy.

Bearing flange

Constructed in cast iron (ductile or grey) or in aluminium 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 Italtvibras.

Motor shaft

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

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 aluminium alloy, mounted only on the lower side. The flange side does not have weight cover. Size 40 is supplied without weights covers on both sides.

Painting

Electrostatic surface treatment based on polymerised epoxy polyester powder in oven at 200°C. Tested in salt spray for 500 hours.

Certifications



Regulation CAN/CSA - C22.2 N. 100-95, file n° LR100948 Class 4211 01 - Motors and generators.



Mechanical protection IP66 (EN 60529), shock-proof protection IK 08 (EN 50102)



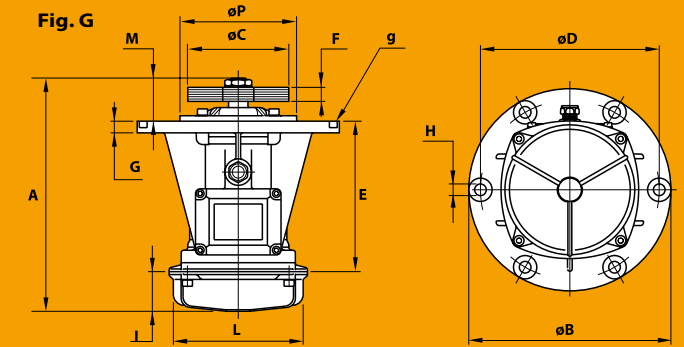
II 2 D, tD A21 IP66 IEC/EN 61241-0, IEC/EN 61241-1 Certificate n. LCIE 05 ATEX 6163X



Gost-R certificate for all models of vibrators: GOST 16264.1, GOST 16264.0, GOST R 51689.



Comply with the applicable European Union directives



2 poles - 3000/3600 rpm

	Description					Mechanical specifications				Electrical specifications				Type	Dimensional specifications (mm)																						
	Code	Type	SIZE	IP	I12D Temp. class	Centrifugal force		Weight		Max input power		Max. current			Ia/In		Fig.	A	øB	øC	Holes				E	F	G	I	L	M	øP	Capacitor (µF)		Cable entry thread	Seal g		
						50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz		400 V 50 Hz	460 V 60 Hz					50 Hz	60 Hz	øD	øH								N°	220 V 50 Hz			115 V 60 Hz	
three-phase	600375	MTF 3/65-S02	00	-	120°C	62	88	0.61	0.86	5.40	5.40	120	120	0.27	0.23	3.43	3.90	MTF 3/65-S02	G	189	130	86	109	8.5	4	132	7.5	10	36	96	22	-	-	-	M20x1,5	OR 3350	
	600369	MTF 3/200-S02	01	•	120°C	212	221	2.08	2.17	7.50	7.30	180	180	0.35	0.30	2.68	3.00	MTF 3/200-S02	G	224.5	211.5	100	188	12	4	150	21 (50Hz) 18 (60Hz)	10	58	103	22.5	-	-	-	M20x1,5	OR 4650	
	600370	MTF 3/300-S02	10	•	120°C	303	296	2.97	2.90	11.2	10.9	260	270	0.60	0.50	3.47	4.20	MTF 3/300-S02	G	247	215	110	187	12	4	177	18 (50Hz) 12 (60Hz)	13	54	127	22	-	-	-	M20x1,5	OR 4625	
	600378	MTF 3/500-S02	20	•	120°C	643	602	6.31	5.91	15.0	14.1	450	500	0.80	0.75	4.21	4.80	MTF 3/500-S02	G	279.5	245	150	205	12	6	130	18 (50Hz) 12 (60Hz)	12	65	145	90.5	162	-	-	-	M25x1,5	OR 4700
	600380	MTF 3/800-S02	30	•	120°C	785	754	7.70	7.40	17.0	16.5	650	685	1.10	1.00	3.83	6.00	MTF 3/800-S02	G	301	260	150 (50Hz) 132 (60Hz)	230	15	6	182	18	15	63	170	56	150	-	-	-	M25x1,5	OR 4800
	600285	MTF 3/1100-S90 Δ	40	-	120°C	1180	1132	11.6	11.1	26.0	25.0	940	1130	1.70	1.60	6.79	7.00	MTF 3/1100-S90 Δ	G	383	279	145	254	14	4	-	31 (50Hz) 21 (60Hz)	17.5	57.5	-	63	229	-	-	-	M25x1,5	-
single-phase	600375	MTF 3/65-S02	00	-	120°C	62	88	0.61	0.86	5.40	5.40	110	110	0.56	1.52	2.24	2.24	MTF 3/65-S02	G	189	130	86	109	8.5	4	132	7.5	10	36	96	22	-	-	-	M20x1,5	OR 3350	
	600369	MTF 3/200-S02	01	-	120°C	212	221	2.08	2.17	7.50	7.30	165	165	0.75	1.52	1.67	2.24	MTF 3/200-S02	G	224.5	211.5	100	188	12	4	150	21 (50Hz) 18 (60Hz)	10	58	103	22.5	-	-	-	M20x1,5	OR 4650	
	600370	MTF 3/300-S02	10	-	120°C	303	296	2.97	2.90	11.2	10.9	280	280	1.25	2.40	2.48	3.52	MTF 3/300-S02	G	247	215	110	187	12	4	177	18 (50Hz) 12 (60Hz)	13	54	127	22	-	-	-	M20x1,5	OR 4625	
	600378	MTF 3/500-S02	20	-	120°C	643	602	6.31	5.91	15.0	14.1	500	500	2.30	4.50	3.35	4.22	MTF 3/500-S02	G	279.5	245	150	205	12	6	130	18 (50Hz) 12 (60Hz)	12	65	145	90.5	162	-	-	-	M25x1,5	OR 4700
	600380	MTF 3/800-S02	30	-	120°C	785	754	7.0	7.0	17.0	16.5	700	750	3.25	7.00	4.00	4.14	MTF 3/800-S02	G	301	260	150 (50Hz) 132 (60Hz)	230	15	6	182	18	15	63	170	56	150	-	-	-	M25x1,5	OR 4800

4 poles - 1500/1800 rpm

	Description					Mechanical specifications				Electrical specifications				Type	Dimensional specifications (mm)																						
	Code	Type	SIZE	IP	I12D Temp. class	Centrifugal force		Weight		Max input power		Max. current			Ia/In		Fig.	A	øB	øC	Holes				E	F	G	I	L	M	øP	Capacitor (µF)		Cable entry thread	Seal g		
						50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz		400 V 50 Hz	460 V 60 Hz					50 Hz	60 Hz	øD	øH								N°	220 V 50 Hz			115 V 60 Hz	
three-phase	601403	MTF 15/200-S02	10	•	120°C	212	213	2.08	2.09	14.0	13.2	170	170	0.41	0.40	2.34	2.75	MTF 15/200-S02	G	292.5	215	114	187	12	4	177	48 (50Hz) 40 (60Hz)	13	77	127	44.5	-	-	-	M20x1,5	OR 4625	
	601405	MTF 15/400-S02	20	•	120°C	412	411	4.04	4.03	20.6	19.8	300	350	0.60	0.60	3.33	3.50	MTF 15/400-S02	G	335.5	245	130	205	12	6	130	59 (50Hz) 42 (60Hz)	12	93	145	118.5	162	-	-	-	M25x1,5	OR 4700
	601406	MTF 15/550-S02	20	•	120°C	552	592	5.42	5.81	22.0	20.6	300	350	0.60	0.60	3.33	3.50	MTF 15/550-S02	G	376.5	245	130	205	12	6	130	79 (50Hz) 59 (60Hz)	12	114	145	138.5	162	-	-	-	M25x1,5	OR 4700
	601407	MTF 15/700-S02	30	•	120°C	720	759	7.06	7.45	24.2	22.7	525	665	0.92	0.98	3.48	3.43	MTF 15/700-S02	G	380.5	260	154	230	15	6	182	59 (50Hz) 46 (60Hz)	15	106	170	92.5	150	-	-	-	M25x1,5	OR 4800
	601280	MTF 15/1100-S90 Δ	40	-	120°C	1045	982	10.3	9.63	36.0	31.4	900	1050	1.45	1.50	4.10	4.20	MTF 15/1100-S90 Δ	G	426	279	190	254	14	4	-	49	17.5	57.5	-	84.5	229	-	-	-	M25x1,5	-
single-phase	601403	MTF 15/200-S02	10	-	120°C	212	213	2.08	2.09	14.0	13.2	210	230	1.00	2.00	1.50	1.85	MTF 15/200-S02	G	292.5	215	114	187	12	4	177	48 (50Hz) 40 (60Hz)	13	77	127	44.5	-	5	25	M20x1,5	OR 3350	
	601405	MTF 15/400-S02	20	-	120°C	412	411	4.04	4.03	20.6	19.8	240	320	1.20	2.80	2.50	2.50	MTF 15/400-S02	G	335.2	245	130	205	12	6	130	59 (50Hz) 42 (60Hz)	12	93	145	118.5	162	32/12 ◐	35	M20x1,5	OR 4650	
	601406	MTF 15/550-S02	20	-	120°C	552	592	5.42	5.81	22.0	20.6	240	320	1.20	2.80	2.50	2.50	MTF 15/550-S02	G	376.5	245	130	205	12	6	130	79 (50Hz) 59 (60Hz)	12	114	145	138.5	162	32/12 ◐	40/35 ◐	M20x1,5	OR 4625	
	601407	MTF 15/700-S02	30	-	120°C	720	759	7.06	7.45	24.2	22.7	450	550	2.15	5.15	5.44	3.63	MTF 15/700-S02	G	380.5	260	154	230	15	6	182	59 (50Hz) 46 (60Hz)	15	106	170	92.5	150	96/16 ◐	160/40 ◐	M25x1,5	OR 4700	

* Working moment = 2 x static moment. Ia/In = ratio between start-up current and maximum current.

Δ Shaft extension. ◐ Start-up capacitor / Running capacitor.

Weight adjustment, see page 78