MICRO



Technical features

Power supply
Three-phase voltage from 24V to 480V (except M3/4), 50Hz or 60Hz or single phase 100-130V, 200-240V, 50/60Hz (in the standard single-phase version, the capacitor is already included in a case along the power supply cable); suitable for use with an inverter from 20 to 60Hz to the base frequency with constant torque load profile.

Polarity
2 poles.

Conformity with 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
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 to 65 Kgf. (638N), with centrifugal force adjustable by varying eccentric weight position.

Mechanical protection
IP 65 according to IEC/EN 60529.

Insulation class
Class F (155°C).

Tropicalization
Standard on all vibrators.

Ambient temperature
From -20°C to +40°C.

Fixing of the vibrator
In all positions and therefore without restriction.

Lubrication
Sealed ball bearings, lubricated “for life”.

Electric motor
Three-phase and single-phase asynchronous type. The M3/4 model can only be supplied in the single-phase version and does not require a capacitor. Models M3/20 and M3/45 can be supplied both in three-phase and single-phase versions. The capacitor is already included in a case along the power supply cable.

Casing
In high-tensile light aluminium alloy with polished surface. Different fixing holes available.

Eccentric weights
Thin plate-type, allow step-by-step adjustment through variation of the number of weights mounted or their rotation.

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS		
				Static moment* kgmm		Centrifugal force kg		Centrifugal force N		Weight kg		Max input power W		Max. current A
Code	Type	CSA	II3D Temp. class	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	380-480V 50-60Hz
600449	**M3/20-S02**	□	100°C	2,0	2,0	**20**	**29**	**196**	**284**	1,97	1,97	35	35	0,15
600450	**M3/45-S02**	□	100°C	4,5	4,5	**45**	**65**	**441**	**638**	2,20	2,20	45	45	0,16

Single-phase

				Static moment* kgmm		Centrifugal force kg		Centrifugal force N		Weight kg		Max input power W		Max. current A	
Code	Type	CSA	II3D Temp. class	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220-240V 50Hz	100-120V 60Hz
600448	**M3/4-S02**	-	100°C	0,4	0,4	**4**	**6**	**39**	**59**	0,92	0,92	24	24	0,13	0,30
600449	**M3/20-S02**	□	100°C	2,0	2,0	**20**	**29**	**196**	**284**	1,97	1,97	35	35	0,17	0,42
600450	**M3/45-S02**	□	100°C	4,5	4,5	**45**	**65**	**441**	**638**	2,20	2,20	45	45	0,20	0,46

* Working moment = 2 x static moment. □ CSA certification on request, with feeding line included.

The MICRO series has been designed for continual industrial service in processes where a reduced centrifugal force and reduced overall vibrator size are required.

MICRO vibrators are used in many applications in feeding, transport, screening, sizing, separation processes, compaction in the automatic machines used in the chemical industry, food industry, pharmaceuticals, packaging and automation in general.

The MICRO series has been conceived to guarantee higher performance in all conditions and environments and complies with the most recent EN international standards for use in atmospheres with potentially explosive powders. In particular, the MICRO series can be used in area 22.

Category: II 3 D

Level of protection:
Ex tc IIIC T100°C Dc

Temperature class:
T100°C

Zone of use:
22

Weight covers
In stainless steel AISI 304.

Other features
All Micro series standard models are supplied with a power supply cable (2 metres for M3/20-S02 and M3/45-S02, 1 metre for M3/4-S02) and, in the models requiring it, a capacitor inserted into a special enclosure in-line with the cable.
CSA certification can be supplied on request and the supplied product is not equipped with a capacitor (neither along the cable nor in other positions), therefore the user must install one as per Standard.

For further details please contact sales offices at Italvibras.
The technical data and models listed in this catalogue are not binding. Italvibras reserves the right to modify them without prior notice.

Certifications

Compliance with the applicable European Union directives.

II3D (2014/34/UE)
Ex tc IIIC T100°C Db
EN 60079-0
EN 60079-31

Standard CAN/CSA – C22.2, N°.100-95,
Certificate n° LR 100948
Class 4211 01 - Motors and generators
UL 1004-1 – Rotating Electrical Machines – General Requirements
Class II Div.2, Groups FG (T3B)

Certification for Eurasian Customs Union
N° TC N RU Д-IT.АЛ33.В.02527
N° TC RU C-IT.ГБ08.В.02190

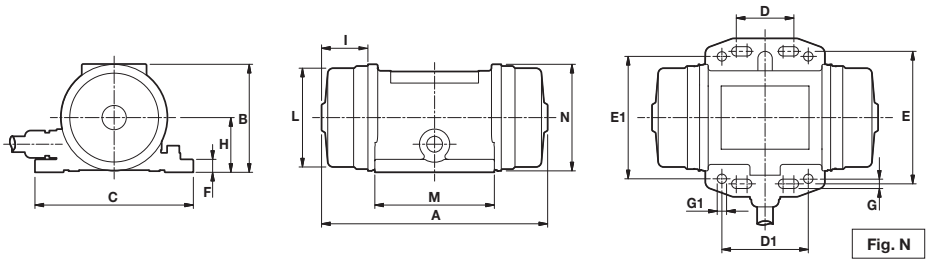

Fig. N

DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	D	D1	E	E1	F	G	Holes ØG1	Holes N°	H	I	L	M	N	Cable entry thread
M3/20-S02	**N**	157	75	110	**25-40**	**60**	**92**	**85**	**9**	**6,5**	**6,5**	**8**	38	33	69	83	74	M16x1,5
M3/45-S02	**N**	172	75	110	**25-40**	**60**	**92**	**85**	**9**	**6,5**	**6,5**	**8**	38	40,5	69	83	74	M16x1,5

Type	Fig.	A	B	C	D	D1	E	E1	F	G	Holes ØG1	Holes N°	H	I	L	M	N	Cable entry thread
M3/4-S02	**N**	113	66,5	90	**25-40**	**-**	**75**	**-**	**9**	**5,5**	**-**	**4**	34	25	60	59	65	M12x1,5
M3/20-S02	**N**	157	75	110	**25-40**	**60**	**92**	**85**	**9**	**6,5**	**6,5**	**8**	38	33	69	83	74	M16x1,5
M3/45-S02	**N**	172	75	110	**25-40**	**60**	**92**	**85**	**9**	**6,5**	**6,5**	**8**	38	40,5	69	83	74	M16x1,5