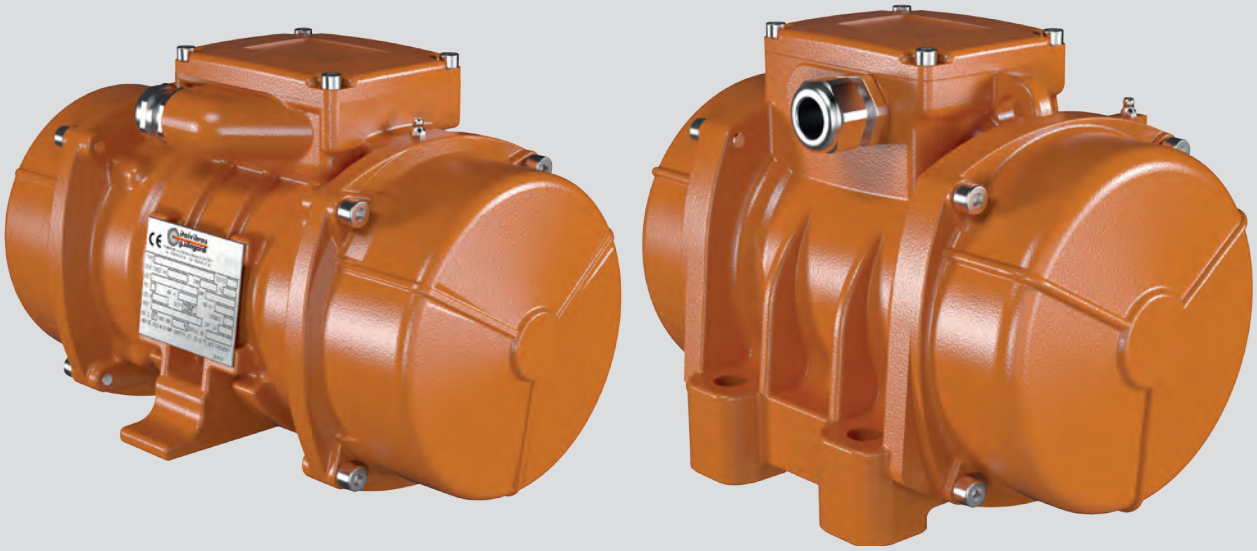
ITV-VR / ITVAF



Technical features

Power supply
Three-phase voltage from 24V to 690V at the various frequencies, depending on the type and series. For the power supply of the vibrators it is possible to use electronic frequency drives or electromechanical frequency converters.

Conformity with Standards and Regulations
Low Voltage Directive 2014/35/UE;
EN/IEC 60034-1; UL 1004-1, CSA C22.2 No.100, NEMA MG-1.

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

Centrifugal force
Range extended up to 5300 kgf (52 kN) with force output adjustable by varying weights position.

Mechanical protection
IP 66 according to IEC/EN 60529.

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 AF33 and for frame size AF70, with “drop by drop” trickle system for sizes AF50 and AF68. (on request vacuum encapsulated winding may be supplied for these two frame sizes).

Ambient temperature
To operate correctly, from -20°C to +40°C.

Vibrator thermal protection
With PTC rated thermistor heat detectors 130°C installed as part of the standard assembly size AF70 onwards.
Also on request thermistors with different temperatures and anti-condensation heaters can be assembled on the lower sizes.

Fixing of the vibrator
In all positions and therefore without restriction. Two different types of connection are available for the ITV-VR and ITVAF series: fixed connection, where the electric vibrators are connected to the structure by bolts through fixing holes and the RS cradle connection, where the electric vibrators are connected to the structure with the standardized cradle type RS2 except for frame size AF10, for this the cradle fixing is type RS1.

Lubrication
All the electric vibrators are correctly lubricated in our factory and need no further lubrication at start-up.

Terminal box
Generously sized to make the electrical connections easier. Special shaped terminals allow to fix the power supply cable.

Electric motor
Three-phase asynchronous type. Insulated windings using vacuum encapsulating up to size AF33 and for AF70; using the “drop by drop” trickle system with class H resin for frame sizes AF50 and AF68. The rotor is die cast aluminium.

Casing
In high tensile strength aluminium alloy for frame sizes AF10 and AF33. In spheroidal cast iron for sizes AF33 (600245), AF50, AF68 and AF70, designed to optimize strength and performance at high speeds.

Bearings
A special shape, exclusively designed and made for Italvibras and able to bear strong loads at high speeds.

Motor shaft
in treated steel alloy (isothermic hardering) able to withstand high stress.

Eccentric weights
Specially shaped lamellar type that can be easily adjusted.

The ITV-VR and ITVAF electric vibrators series are suitable to be applied in plants and machines in the concrete and prefabrication fields, and in all sectors where high speeds are required.

In detail

- ITV-VR variable frequency series: the vibrators are able to supply up to 5300 kgf (52kN) of centrifugal force at frequencies variable from 0 to 6000rpm.
- ITVAF fixed frequency series: fixed frequency vibrators (6000 or 9000 rpm) provide centrifugal force up to 2800 Kgf (27.5 kN).

Both are available with either fixed or cradle connection.

Upon request Italvibras can supply solutions to supply ITVAF and ITV-VR vibrators: frequency drives, control panels, fixed or movable, electromechanical or electronic control panels, manually controlled or via radio control, etc., depending on the needs of the plant.

Weight covers
In aluminium alloy except for frame size AF10 where covers are in stainless steel AISI 304.

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

Upon request Italvibras can supply solutions to supply ITVAF and ITV-VR vibrators: frequency drives, control panels, fixed or movable, electromechanical or electronic control panels, manually controlled or via radio control, etc., depending on the needs of the plant.

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

CE
Compliance with the applicable European Union directives.

c SA US
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

EAC
Certification for Eurasian Customs Union
N° TC N RU Д-IT.АЛ33.B.02527

ITV-VR / ITVAF

ITV-VR fixed connection

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS			
				Plage vibrat.	Centrifugal force		Weight	Max input power	Max. current (A) 100Hz		
Code	Type	SIZE		(vibr./min)	kg	kN	kg	W	42V	400V	Ia/In
600500	**ITV-VR/1210-S08**	AF33	•	0-6000	**1569**	**15,4**	23	1200	21,0	2,30	4,48
600247	**ITV-VR/2010**	AF33	•	0-6000	**2000**	**19,6**	27	1700	27,0	2,90	5,00
600248	**ITV-VR/2510**	AF50	-	0-6000	**2500**	**24,5**	42	2200	35,0	3,90	6,15
600249	**ITV-VR/2510-V***	AF50	-	4500-6000	**2500**	**24,5**	42	2200	35,0	3,90	6,15
600208	**ITV-VR/3300***	AF68	-	4500-6000	**3300**	**32,3**	74	4000	-	7,20	5,10
600514	**ITV-VR/5000-S02**	AF70	-	0-4500	**5300**	**52,0**	105	5000	-	8,00	5,30

ITV-VR RS cradle connection

				Plage vibrat.	Centrifugal force		Weight	Max input power	Max. current (A) 100Hz		
Code	Type	SIZE		(vibr./min)	kg	kN	kg	W	42V	400V	Ia/In
600508	**ITV-VR/1210-RS-S08**	AF33	•	0-6000	**1569**	**15,4**	21	1200	21	2,3	4,48
600245	**ITV-VR/2010-RS**	AF33	•	0-6000	**2000**	**19,6**	28	1700	27	2,9	5,00

* Special ventilated type for heavy service.

ITVAF fixed connection

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS						
				Plage vibrat. (vibr./min)	Centrifugal force		Weight	Max input power	Max. current (A) 200Hz		150Hz		100Hz	
Code	Type	SIZE			kg	kN	kg	W	42V	250V	42V	250V	400V	Ia/In
603050	**ITVAF 6/600-S02**	AF10	-	6000	**610**	**5,98**	8	500	9,50	1,60	-	-	1,60	4,50
603053	**ITVAF 6/1220-S08**	AF33	-	6000	**1095**	**10,7**	23	1200	23,0	3,85	-	-	3,90	6,04
603054	**ITVAF 6/1510-S08**	AF33	-	6000	**1484**	**14,6**	25	1700	29,0	4,90	-	-	4,80	7,10
603037	**ITVAF 6/2010-S90**	AF50	-	6000	**1978**	**19,4**	41	2000	35,0	5,90	-	-	5,90	8,00
603010	**ITVAF 6/3300 o**	AF68	-	6000	**2800**	**27,5**	74	4000	-	-	-	-	11,0	5,10
604041	**ITVAF 9/1110-S08**	AF33	-	9000	**1230**	**12,0**	22	1150	-	-	18	-	1,85	8,52
604042	**ITVAF 9/1510-S08**	AF33	-	9000	**1484**	**14,6**	24	1600	-	-	24	4,0	2,50	10,40

ITVAF RS cradle connection

				Plage vibrat. (vibr./min)	Centrifugal force		Weight	Max input power	Max. current (A) 200Hz		150Hz		100Hz	
Code	Type	SIZE			kg	kN	kg	W	42V	250V	42V	250V	400V	Ia/In
603055	**ITVAF 6/1220-RS-S08**	AF33	-	6000	**1095**	**10,7**	21	1200	23	3,85	-	-	3,9	6,04
603056	**ITVAF 6/1510-RS-S08**	AF33	-	6000	**1484**	**14,6**	23	1700	29	4,90	-	-	4,8	7,10
604043	**ITVAF 9/1110-RS-S08**	AF33	-	9000	**1230**	**12,0**	20	1150	-	-	18	-	1,85	8,52
604044	**ITVAF 9/1510-RS-S08**	AF33	-	9000	**1484**	**14,6**	22	1600	-	-	24	4,0	2,50	10,40

o Only supplied at 250V-100Hz, ventilated type, IP44 protection. Ia/In = ratio between start-up current and maximum current.

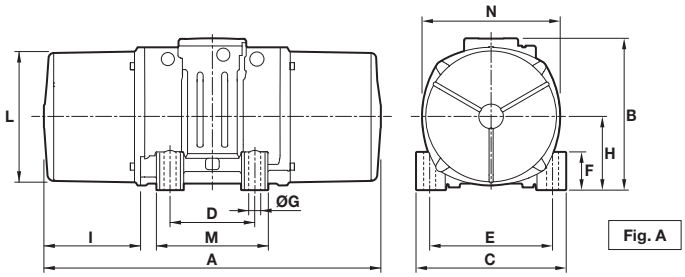


Fig. A

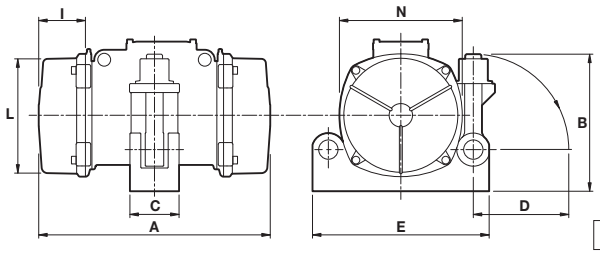


Fig. D

DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	Holes D	Holes E	Holes ØG	Holes N°	F	H	I	L	M	N
ITV-VR/1210-S08	**A**	289	217	215	**100**	**180**	**17**	**4**	47	93,5	63	170	145	182
ITV-VR/2010	**A**	375	217	215	**100**	**180**	**17**	**4**	47	93,5	106	170	145	182
ITV-VR/2510	**A**	458	232	230	**140**	**190**	**17**	**4**	49	104	101,5	183	180	200
ITV-VR/2510-V*	**A**	467	232	230	**140**	**190**	**17**	**4**	49	104	106	240	180	248
ITV-VR/3300*	**A**	528	267	310	**155**	**255**	**23,5**	**4**	122	115	140	265	215	275
ITV-VR/5000-S02	**A**	560	290	310	**155**	**255**	**25**	**4**	90	130	137	238	210	253

Type	Fig.	A	B	C	Holes D	Holes E	Holes ØG	Holes N°	F	H	I	L	M	N
ITV-VR/1210-RS-S08	**D**	289	189	83	**140**	**240**	**-**	**-**	-	-	63	170	-	182
ITV-VR/2010-RS	**D**	355	189	83	**140**	**240**	**-**	**-**	-	-	81,5	164	-	-

CARATTERISTICHE DIMENSIONALI (mm)

Type	Fig.	A	B	C	Holes D	Holes E	Holes ØG	Holes N°	F	H	I	L	M	N
ITVAF 6/600-S02	**A**	255	179	152	**90**	**125**	**13**	**4**	28	73	54	124	128	141
ITVAF 6/1220-S08	**A**	289	216,5	215	**100**	**180**	**17**	**4**	47	93,5	63	170	145	182
ITVAF 6/1510-S08	**A**	375	216,5	215	**100**	**180**	**17**	**4**	47	93,5	106	170	145	182
ITVAF 6/2010-S90 o	**A**	458	232	230	**140**	**190**	**17**	**4**	49	104	101,5	183	180	200
ITVAF 6/3300 o	**A**	528	267	310	**155**	**255**	**23,5**	**4**	122	115	140	265	215	275
ITVAF 9/1110-S08	**A**	289	216,5	215	**100**	**180**	**17**	**4**	47	93,5	63	170	145	182
ITVAF 9/1510-S08	**A**	375	216,5	215	**100**	**180**	**17**	**4**	47	93,5	106	170	145	182

Type	Fig.	A	B	C	Holes D	Holes E	Holes ØG	Holes N°	F	H	I	L	M	N
ITVAF 6/1220-RS-S08	**D**	289	189	83	**140**	**240**	**-**	**-**	-	-	63	170	-	182
ITVAF 6/1510-RS-S08	**D**	375	189	83	**140**	**240**	**-**	**-**	-	-	106	170	-	182
ITVAF 9/1110-RS-S08	**D**	289	189	83	**140**	**240**	**-**	**-**	-	-	63	170	-	182
ITVAF 9/1510-RS-S08	**D**	375	189	83	**140**	**240**	**-**	**-**	-	-	106	170	-	182