

# Concrete technology



**WACKER  
NEUSON**  
*all it takes!*



# These reasons speak for the concrete technology of Wacker Neuson.

## 1. Best quality guaranteed – all components made in Germany!

Make no compromises in terms of quality with your projects related to concrete processing. You can rely on the concrete technology equipment from Wacker Neuson in any situation: All components are made in Germany – and, in addition to their performance, also impress with their long service life and highest quality down to the last detail.

## 2. Uncompromising performance – with powerful motors that impress.

The concrete technology equipment by Wacker Neuson is fitted with powerful motors developed predominantly by Wacker Neuson that are specifically tailored to the demands of the products. So you can master any challenge!

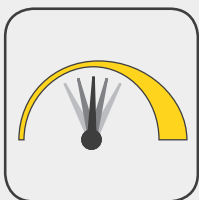
## 3. Concentrated expertise – our concrete specialists are there for you.

You can rely on our expertise for optimal results when processing your concrete because we are well-versed in the highly complex field of concrete compaction – and are thus there for you with advice and assistance with our concrete specialists from Wacker Neuson Concrete Solutions. So that you always get the best out of your projects.

### Wacker Neuson – all it takes!

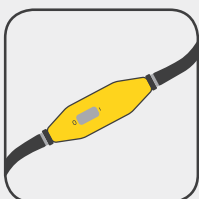
We offer products and services rendered that meet your high requirements and diverse applications. Wacker Neuson stands for reliability. This of course also applies to all of our solutions in concrete technology. We do our best every day to ensure your success. And we do this full of passion for our jobs.

# Concrete expertise to the last detail.



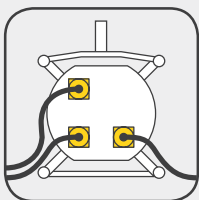
### RPM-stable motors

Our motors yield maximum performance – regardless of concrete consistency or current and power fluctuations.



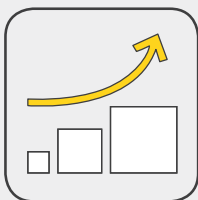
### Integrated converters

For a self-contained application: Some of our models have integrated converters, which make the acquisition of external converters unnecessary.



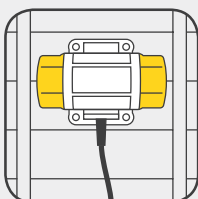
### External converters

Precisely configured: In order to connect multiple devices, you can use a variety of external converters.



### Finely tiered model selection

The right solution for every challenge: Choose the model that is right for you from among various, finely-coordinated model sizes and different revolutions per minute (RPM).



### Ideally suited for quality exposed concrete surfaces

AR26 is convincing due to particularly high compaction performance. The result: perfect concrete surfaces. It is also available with an integrated converter.



### Concrete Solutions

Our concrete specialists will support you, if necessary, in all matters relating to concrete compaction, as well as in planning of optimum technical and economic solutions.

# All concrete technology products in an overview.

## Internal vibrators (selection):



HMS

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IE

> Page 06



IEC



IREN

> Page 07



IRSEN

## Rebar tier:



IRFU



IRSE-FU

> Page 07



IRFuflex



DF16

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## External vibrators (selection):



AR26



AR34



AR43



AR54

> Page 08



AR64



AR75

## Frequency converters:



FUH20



FUE4

> Page 10



KTU2



FUE6



# Internal vibrator systems for any requirement

THE  
ORIGINAL  
since 1937!

Functionality & operating comfort

## >> Basic



HMS

### The Basic line for simple working comfort

- Individually configurable: Flexible shafts, vibratory heads and motors in various performance classes
- High wear resistance due to the induction hardened vibrator head
- Quick disconnect coupling for easy handling

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## >> Advanced



IE, IEC

### The Advanced line for all standard applications

- 2 model series available: IEC with converter, IE without converter
- Sturdy quality with a good cost/benefit ratio
- High-frequency technology for good results in concrete compaction

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## >> Premium



IREN, IRFuflex, IRFU

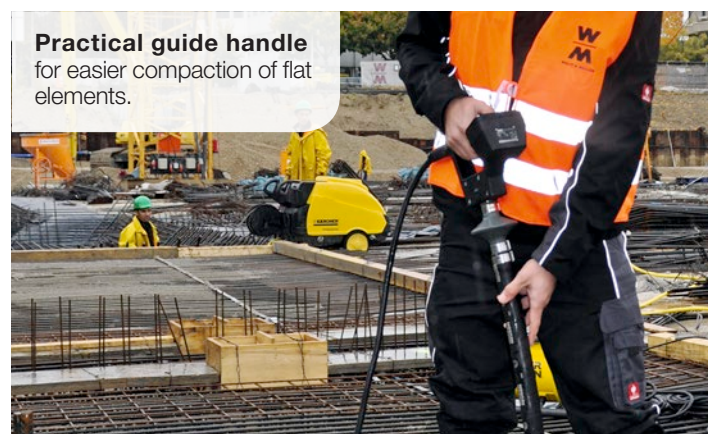
### The Premium lines for comprehensive comfort and maximum flexibility

- 2 model series available with wide range of sizes: IRFU with converter, IREN without converter
- Modular system with IRFuflex with 1 converter part and 4 different vibrator head parts
- For a long service life, all components are processed at a very high quality and are sturdy

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04



**Practical guide handle**  
for easier compaction of flat elements.



**Saves time and money:** Rubber nose cap can be replaced on the construction site without tools.



05



# Modular internal vibrator system HMS

Basic <<

Flexibility and economic efficiency that will convince you:  
The modular HMS series can be matched to meet your needs exactly.

- Individually adjustable flexible shafts, vibrator heads, and motors or engines
- Quick disconnect coupling for easy handling
- Internal combustion engines and electric motors in various performance ranges
- High wear resistance due to the induction hardened vibrator head

## The flexible HMS system

- 1. Flexible shaft:** Steel mesh and spiral steel protection provide for a high kink resistance.
- 2. Vibrator head:** Perfect compaction performance with high wear resistance and long service life.
- 3. Drive motor:** high-performance combustion engine or electric motor (optionally) drives with a quick disconnect coupling and high-performance air filter.



# Internal vibrator IE and IEC

A sophisticated machine concept in a robust design:  
The model lines IE and IEC by Wacker Neuson offer reliable concrete compaction performance.

- High frequency technology for good results in concrete compaction
- Sturdy quality with a good cost/benefit ratio
- Durable and low-wear vibrators, additionally tempered in the bottom third
- 2 model lines available: with (IEC) and without an converter (IE)
- Sturdy polyurethane power cable

You can find additional details about all internal vibrator systems at: [www.wackerneuson.com/innenruettler](http://www.wackerneuson.com/innenruettler)

RPM-STABLE  
ENGINE  
made in Germany

Advanced <<

IEC



**Reduce equipment:**  
The IEC series has an integrated frequency converter, which makes additional units superfluous.

IE



**Sturdy high-frequency internal vibrator for optimum results,**  
with an attractive cost/benefit ratio.

The IEC series models are fitted with a ground fault interrupter.



# Internal vibrators IREN and IRSEN

Premium <<

Even under tough conditions, these high-frequency internal vibrators boast an all-round consistently high compaction performance.

- Speed-stable and high-performance electric motor designed, developed and produced in Germany
- Integrated thermal overload protection breaker
- Entire vibrator head body hardened
- Extremely durable vulcanized rubber cap for the protection of the formwork, optional



IREN

IRSEN

# Internal vibrator IRFU and IRSE-FU

Premium <<

Due to an integrated frequency converter, these high-frequency internal vibrators of the IRFU series are best suited for independent application. Simply connect to the single-phase power supply and off you go.

- Built-in frequency converter
- Trouble-free service, even with generators and fluctuating input voltages
- Potted electronic components make the converter wear-free
- Available in different hose lengths, vibrator sizes and voltages
- Developed and produced in Germany according to the highest quality standards



IRFU

IRSE-FU

All components  
of the Premium models  
MADE IN  
GERMANY!

# Modular internal vibrator system IRFUflex

Premium <<

Maximum flexibility in job site applications, as well as reduced costs: In the IRFUflex series, the vibrator head can be easily replaced in a few simple steps. The modular system with an easy to use, but extremely sturdy coupling makes this possible. Due to the easily replaceable vibrator heads, you are optimally equipped for almost any task.

- Reduced acquisition and maintenance costs due to interchangeable parts
- Full flexibility for frequently changing applications: thanks to the coupling point for quick screwing on and screwing off of the vibrator part
- 1 converter part can be combined with 4 different parts of the vibrator part (diameter 30 - 58 mm)
- Vibrator head options with and without rubber nose cap available

## The flexible modular series

For optimal compaction performance, there are 4 vibrator head diameters each with protection hose lengths up to 10 m.



# External vibrators

Whether for in-situ formwork or for light to heavy concrete component formwork, whether for use in concrete and precast factories, material transport or further industrial applications: Wacker Neuson offers over 40 powerful external vibrators with various speed and voltage versions. This allows an optimum application for your specific area of application.

- RPM-stable asynchronous motor
- Finely adjustable centrifugal forces via adjustable eccentric weight discs
- Different voltage and RPM versions
- Made in Germany design and development and production
- Diverse bore patterns and fastening options for optimum attachment to formwork

Perfect for  
in-situ concrete  
formwork and  
quality exposed  
concrete surface  
applications.



The concrete specialists of Wacker Neuson Concrete Solutions will support you in optimizing your compaction results.



AR34

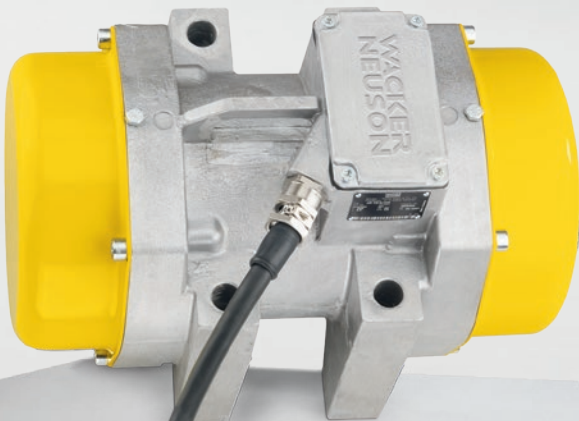


AR26



AR54

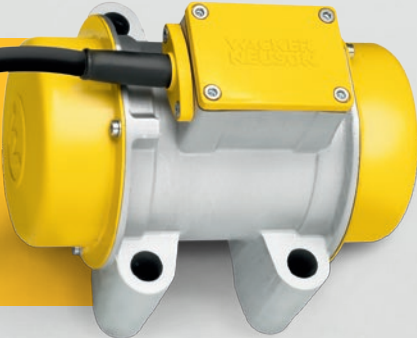
Ideal for application  
in standard formwork  
in concrete and  
precast factories.



AR75

The right choice  
for heavy precast  
formwork and mate-  
rial transportation.

Ideally suited for  
application with light  
and medium formwork  
in concrete and  
precast factories.



AR43



AR63

## Flexible for in-situ concrete applications

There is a large selection of fastening clamps available from Wacker Neuson for the AR26. These can be attached to all common formwork.



Ideal flowability  
of bulk materials in silos.



Perfectly suited for job site  
application: The ARFU26 is fitted  
with an integrated converter.



## The practical helper: The quality exposed concrete kit

With the exposed concrete kit you are best equipped for the compaction of high-quality exposed concrete surfaces. The sturdy wooden box mounted on a steel plate comprises a frequency converter, external vibrators and mounting brackets.





High-frequency converter

The FUH20 weighs just 8.9 kilograms. The frequency converter is easy to transport on the job site and therefore flexible in application. Wacker Neuson was the first company to implement the high-frequency technology that has been time-tested and proven in other industries.

- Frequency converter with a 20-amps plug receptacle
- Innovative high-frequency technology — top performance with compact dimensions and low weight
- Long service life, thanks to the extremely durable aluminum housing
- Ideally suited for operation of Wacker Neuson internal vibrators with a vibrator head diameter of up to 58 mm, as well as for AR26/6/042

FUH20



**Efficient design** of cooling fins, absolutely reliable operation, also when contaminated by concrete.

Mechanical frequency converters

The mechanical frequency converters from Wacker Neuson are compact powerhouses and are ideal for long-time application.

- Very robust and long service life
- Maintenance-free asynchronous motor and extremely durable carbon brushes in the generator part
- Immune to overheating: The windings are made of heat-resistant Class H material and can withstand temperatures of up to 180°C

FU4/  
200W



**Simple design** combined with user-friendly and safe operation.

Electronic frequency converter

Impressive performance, even during continuous application: These converters meet the highest demands with their high quality electronics and the active cooling system.

- Light and compact design
- Good handling thanks to the sophisticated aluminum design
- The intelligent load and voltage management compensates for fluctuating mains input voltages, incorrectly sized extensions or consumers with greatly varying uses of power
- FUE model with single-phase mains connection 230 V: Can be used on pulse-sensitive and all current sensitive protective ground fault interrupters
- FUE models with three-phase mains connection 400 V: Can be used on all current sensitive protective ground fault interrupters
- Maximum safety: internally galvanic isolation
- Maintenance-free



**Flexible use** due to the 25-m power cable and low weight.

KTU2



FUE6

**Compelling:** high-quality electronics and active cooling system.

Number of connectible internal and external vibrators to frequency converter

	Rated current A	KTU2	FUE1
Rated current A		35.0	25.0
Number of plug receptacles (32A)		2	1
IREN30, IE38	3.5/5	2	1
IREN38, IE45	7.5/8	2	1
IREN45, IE58	10.0/12.2	2	1
IREN57	17.3	2	1
IREN65	25.0	1	1
AR26/6/042	9.0	2	1

FUE2	FUE6	FUE-M/S75A	FUE-M/S85A	FU1.5/ 200W	FU1.8/ 200W	FU4/ 200W	FU52/ 200W
35.0	52.0	75.0	85.0	20.6	27.0	52	69.0
2	3/4	4/6	4	–	–	–	–
2	3–4	4–6	4	2	2	3	4
2	3–4	4–6	4	2	2	3	4
2	3–4	4–6	4	2	2	3	4
2	3	4	4	1	1	3	4
1	2	2–3	0	–	1	2	24
2	3–4	4–6	4	2	2	3	2



**Transport conveniently** thanks to practical handle in combination with just 8.9 kg of weight.

Technical data

INTERNAL VIBRATORS			IE38	IE45	IE58	IEC38	IEC45	IEC58	IREN30	IREN38	IREN45	IREN57	IREN65
	with integrated converter												
	SPECIFICATION	UNIT	» Advanced «						» Premium «				
	Vibrator head diameter	mm	38	45	58	38	45	58	30	38	45	57	65
	Effective compaction diameter*	cm	–	–	–	–	–	–	40	50	60	85	100
	Voltage	V	42	42	42	220–240	220–240	220–240	42	42/250	42/250	42/250	42
	Current	A	5	8	12	3	4	5	3.5	7/1.4	10/1.85	17.3/3	25
	Frequency	Hz	200	200	200	50–60	50–60	50–60	200	200	200	200	200
	Protective hose**/power cable	m	10/15	10/15	10/15	10/15	10/15	10/15	18/15	18/15	18/15	18/15	18/15

INTERNAL VIBRATORS	IRSEN30    IRSEN38    IRSEN45    IRSEN57    IRFU30    IRFU38    IRFU45    IRFU57    IRFU65    IRSE-FU45    IRSE-FU57												
	with integrated converter												
	SPECIFICATION		UNIT		» Premium «				» Premium «				
	Vibrator head diameter	mm	30	38	45	57	30	38	45	57	65	45	57
	Effective compaction diameter*	cm	40	50	60	85	40	50	60	85	100	60	85
	Voltage	V	42	42	42	42/250	220–240, 1~	220–240, 1~	220–240, 1~	220–240, 1~	220–240, 1~	220–240, 1~	220–240, 1~
	Current	A	3.5	7	10	17.3/3	2.2	3.5	4.8	6	10	4.8	6
	Frequency	Hz	200	200	200	200	50–60	50–60	50–60	50–60	50–60	50–60	50–60
Protective hose**/power cable	m	0.8/15	0.8/15	0.8/15	0.8/15	10/15	10/15	10/15	10/15	10/15	0.8/15	0.8/15	

\* This is a non-binding specification based on practical experiences of our customers under certain operating conditions. Please note that under specific boundary conditions, these specifications may vary. We recommend always beginning by carrying out a test pour under operating conditions.  
\*\* Maximum protection hose lengths, various lengths available.

Rebar tier DF16

The mechanically functioning rebar tier from Wacker Neuson puts an end to tying reinforcing steel with pliers in a bent position. Perfect for traditional work on reinforcement and for securing plastic pipes.

- Equally suitable for horizontal applications (ceilings and floor plates) as well as for vertical application (walls, columns)
- Uniformly drilled, fixed knots
- Easy to operate with just one hand and in an anatomically correct, upright posture
- The practical holster can be attached to your waistband



VIBRATOR HEADS	H25    H25S   H25HA   H35    H35S   H35HA   H45    H45S   H45HA   H50HA   H55    H65													
	SPECIFICATION	UNIT	» Basic «											
	Diameter	mm	25	25	26	35	35	36	45	45	45	50	57	65
	Length	mm	440	295	380	410	310	405	385	305	390	395	410	385
	Weight	kg	1.3	0.8	1.3	2.1	1.6	2.3	3.4	2.8	3.3	3.9	5.3	6.2

FLEXIBLE SHAFT	SM1-E   SM2-E   SM4-E   SMO-S   SM1-S   SM2-S   SM3-S   SM4-S   SM5-S   SM7-S   SM9-S												
	SPECIFICATION	UNIT	» Basic «										
	Length	m	1	2	4	0.5	1	2	3	4	5	7	9
	Weight	kg	1.5	2.5	4.3	1.3	2.7	4.3	5.9	7.1	9.3	12.9	15.1

\* Awarded for excellent performances in occupational health and safety protection by the Trade Association of the Construction Industry

FUFLEX	FUFlex4/230			IRFLEX	IRflex30   IRflex38   IRflex45   IRflex57						
	SPECIFICATION		UNIT		SPECIFICATION		UNIT				
	Weight	kg	9.4		Weight	kg	6.7	10.7	12	17	
	Output voltage	V	220		Vibrator head diameter	mm	30	38	45	57	
	Rated current	A	6		Length of protection hose max.	m	10	10	10	10	
	Output current	A	3.5		Frequency	Hz	200	200	200	200	
	Power cable	m	15		Oscillations	rpm	12,000	12,000	12,000	12,000	

DRIVE SYSTEM			M1500	M2500	A5000/160	L5000/225
	SPECIFICATION	UNIT	» Basic «			
	Drive system		Double insulated universal motor	Double insulated universal motor	Air-cooled, one-cylinder, four-cycle, Honda gasoline engine	Air-cooled, one-cylinder, four-cycle, Kohler diesel engine
	Voltage	V	230	230	–	–
	Current	A	6.5	7.8	–	–
	Performance	kW	1.5	1.8	4	3.3
	Weight	kg	5.3	5.9	23.7	35.6

FREQUENCY CONVERTER			FUH20	FU1.5	FU1.8	FU4	FU5z	FUE1	FUE2	FUE2	KTU2	FUE6	FUE10	FUE10	FUE-M/513	FUE-M/575	FUE-M/585
	SPECIFICATION	UNIT															
	Weight	kg	8.9	27	26	64	75	25	26.4	26.4	34.4	32.5	87	87	29	29.5	42
	Input/output voltage	V	230, 1~/42, 3~	230, 1~/42, 3~	400, 3~/42, 3~	400, 3~/42, 3~	400, 3~/42, 3~	230, 1~/42, 3~	230, 1~/42, 3~	230, 1~/250, 3~	230, 1~/250~	230, 1~/42, 3~	400, 3~/42, 3~	400, 3~/250, 3~	400, 3~/42, 3~	400, 3~/42, 3~	400, 3~/42, 3~
	Input/output frequency	Hz	50/200	50–60/200	50–60/200	50–60/200	50–60/200	50/200	50/200	50–60/200	50–60/200	50/200	50–60/0–200	50–60/0–200	50–60/0–200	50–60/0–200	50–60/0–200
	Input/output current	A	7.8/20	9/20.6	5/27	10/52	13.2/69	9.6/25	13/35	13/6	13/35	14.8/53	24.5/145	24.5/25	29/13	13/75	13.7/85
	Power cable	m	1.5	2	2	2	2	2.5	2.5	2.5	25	2.5	3	3	2.5	2.5	2.5
	Number of plug receptacles	Pieces	1	2	2	3	4	1	2	2	2	3	–	–	4	4	4

\* Versions with 0–200 Hz available    \*\* Versions with 2 plug receptacles available    \*\*\* Version with 2 or 6 plug receptacles available

Technical data

EXTERNAL VIBRATOR	AR26/3/230wAR26/3/400AR26/3.6/230AR26/6/042AR26/6/0423.5 HNAR26/6/042csAR26/6/250ARFU26/6/115UKARFU26/6/230AR 34/3/230v*AR34/3/400											
	SPECIFICATION	UNIT										
	Speed	rpm	3,000	3,000	3,600	6,000	6,000	6,000	6,000	6,000	0–5,220	3,000
	Max. centrifugal force	kN	3.00	3.00	3.47	3.47	3.47	3.47	3.47	3.47	0-6.93	3.47
	Voltage	V	230, 3~	400, 3~	230, 3~	42, 3~	42, 3~	42, 3~	250, 3~	110–130, 3~	220–240, 3~	0–400, 3~
	Current	A	1.75	0.57	1.1	8.0	8.0	8.0	1.35	12.0	6.0	1.3
	Weight	kg	7.0	6.2	5.5	6.3	6.5	7.5	4.6	18.0	18.0	6.3
	Fastening (Length x width)	mm	90x125	90x125	90x125	90x125	90x125	90x125	90x125	90x125	90x125	120x120

EXTERNAL VIBRATOR	AR34/6/042AR34/6/250AR43/3/230v*AR43/3/400AR43/6/042AR43/6/250AR52/6/042AR52/6/250AR52/9/042AR53/3/400											
	SPECIFICATION	UNIT										
	Speed	rpm	6,000	6,000	0–5,220	3,000	6,000	6,000	6,000	6,000	9,000	3,000
	Max. centrifugal force	kN	6.98	6.98	10.42	10.02	10.02	10.02	14.14	14.14	13.77	14.14
	Voltage	V	42, 3~	250, 3~	0–400, 3~	400, 3~	42, 3~	250, 3~	42, 3~	250, 3~	42, 3~	400, 3~
	Current	A	9.0	1.7	1.5	0.6	12.0	2.0	18.2	2.7	14.0	1.7
	Weight	kg	5.9	5.9	8.8	12.2	8.4	8.4	18.6	18.6	17.9	16.8
	Fastening (Length x width)	mm	120x120	120x120	90x154	90x154	90x154	90x154	120x120	120x120	120x120	90x154

EXTERNAL VIBRATOR	AR53/6/042AR53/6/250AR53/9/042AR53/9/250AR54/6/250AR62/6/042AR62/6/250AR63/6/250AR64/1.5/400AR64/3/230AR64/3/400											
	SPECIFICATION	UNIT										
	Speed	rpm	6,000	6,000	9,000	9,000	6,000	6,000	6,000	6,000	1,500	3,000
	Max. centrifugal force	kN	14.14	14.14	13.77	13.77	14.23	19.03	19.03	19.03	5.05	16.05
	Voltage	V	42, 3~	250, 3~	42, 3~	250	250, 3~	42, 3~	250, 3~	250, 3~	400, 3~	230, 3~
	Current	A	18.2	2.7	14	2.4	3.1	21.5	3.3	3.3	1.4	3.0
	Weight	kg	12.3	11.6	11.6	11.6	13.4	20.2	20.2	13.9	21.0	18.7
	Fastening (Length x width)	mm	90x154	90x154	90x154	90x154	120x120	120x120	120x120	90x154	120x120	120x120

EXTERNAL VIBRATOR	AR64/6/042AR64/6/250AR64/9/042AR75/1.5/400AR75/3/230v*AR75/3/400AR75/6/042AR75/6/250AR75/9/042AR75/9/250											
	SPECIFICATION	UNIT										
	Speed	rpm	6,000	6,000	9,000	1,500	0–5,220	3,000	6,000	6,000	9,000	9,000
	Max. centrifugal force	kN	19.03	19.03	18.14	10.29	24.12	25.23	26.56	26.56	26.38	26.38
	Voltage	V	42, 3~	250, 3~	42, 3~	400, 3~	0–400, 3~	400, 3~	42, 3~	250, 3~	42, 3~	250, 3~
	Current	A	21.5	3.1	16.0	3.4	3.8	2.4	32.0	7.5	28.0	4.3
	Weight	kg	13.8	13.8	12.9	36.5	30.5	33.0	26.8	26.8	27.5	27.5
	Fastening (Length x width)	mm	120x120	120x120	120x120	95x180	95x180	95x180	95x180	95x180	95x180	95x180

\* The external vibrator has a variable drill speed of 0–5,220 rpm.

REINFORCEMENT REBAR TIER	DF16	
	SPECIFICATION	UNIT
	Operating weight	kg
	Number of tie wires per tie wire strip (magazine)	pieces
	Tie speed	knots/h
	Tie speed	sec/knot
	Exterior diameter of the round materials to be tied	mm
	Rebar tier order sizes (copper-coated steel wire)	

The data shown refer to the standard equipment.  
Data may vary depending on selection of further options.  
Errors and omissions are reserved.

We retain the right to make changes without prior notice. No liability is assumed for the accuracy of this information.  
The provisions of the contractual agreement are binding.

The product range of Wacker Neuson includes over 300 different product groups with different variations – resulting from different voltage and frequency conditions, local regulations, market conditions and application conditions. Not all Wacker Neuson products listed or shown here can therefore be delivered or approved in all countries. Changes are reserved in the interest of continuous product development. Wacker Neuson accepts no liability for the accuracy and completeness of the information in this brochure. Reproduction only with the written approval of Wacker Neuson.  
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Your everyday work day is full of challenges. We have the right solutions and help you to be ahead of the competition. We offer you everything you need for this purpose:

**Wacker Neuson – all it takes!**

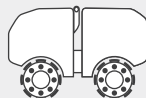


**WACKER  
NEUSON**  
*all it takes!*

## Products



Concrete technology



Compression



Demolition technology



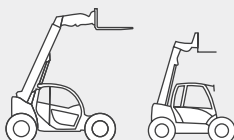
Excavators



Wheel loaders



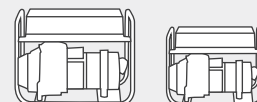
Skid steer loaders



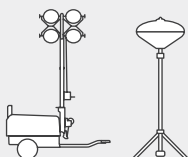
Telehandlers



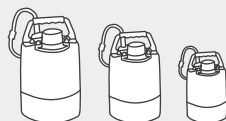
Dumpers



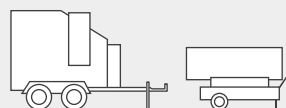
Generators



Lighting



Pumps



Heaters



Used equipment

## Services rendered



Financing



Repair & maintenance



Academy



Rental



Telematics



The concrete specialists

## Spare parts



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