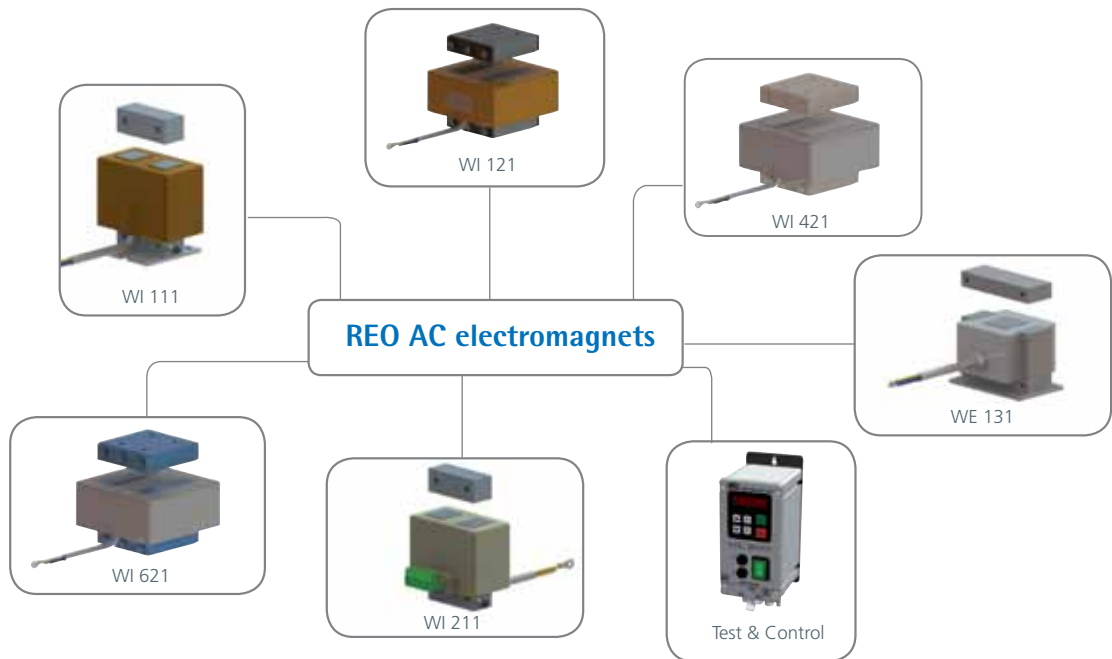


REO AC electromagnets Product catalogue

fully encapsulated • with corrosion protection • Nickel-plated • Conformity for food contact • Low frequency • with corrosion protection • Ni



Content **P. 2**

General overview **P. 3-4**

Overview of the series **P. 5**

| | |
|--|----------|
| REOVIB WI 111- Standard series | P. 6 -7 |
| REOVIB WI 121 - Standard series | P. 8-9 |
| REOVIB WI 321 - Low frequency electromagnets | P. 10-11 |
| REOVIB WI 421 - Nickel-plated electromagnets | P. 12-13 |
| REOVIB WI 621 - Powder-coated electromagnets | P. 14-15 |
| REOVIB WI 211 - Electromagnets with configurable voltage/frequency options | P. 16-17 |
| REOVIB WE 131 - Electromagnets with EI core | P. 18-19 |

Key Points **P. 20-22**

| | |
|--|-------|
| Low frequency vibration systems, vibration frequency | P. 20 |
| Structure, design of the electromagnets | P. 21 |
| Circuit examples | P. 22 |

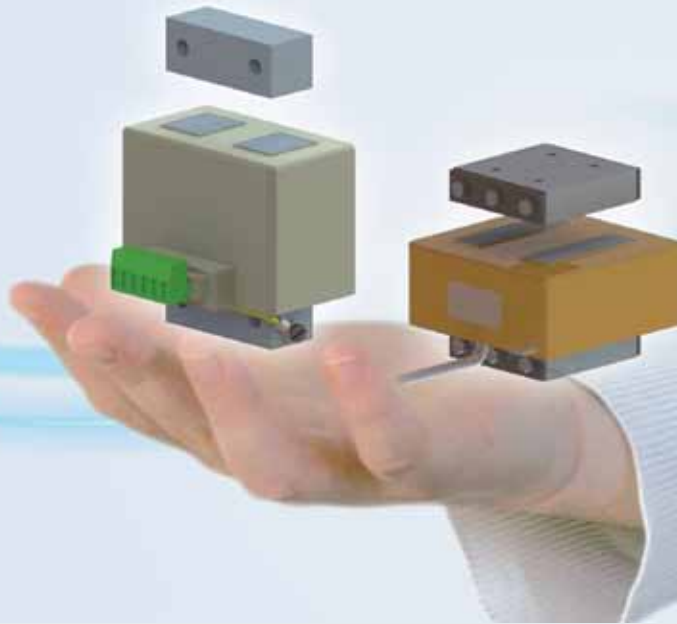
Our service **P. 23-24**

| | |
|-------------------------------|-------|
| Special solutions and options | P. 23 |
| Guide for your electromagnet | P. 24 |

More REO products for vibratory feeding **P. 25**

| | |
|--------------------|-------|
| REOVIB controllers | P. 25 |
| Meters | P. 25 |

Worldwide distribution **P. 27**



AC electromagnets

AC electromagnets

REO - more than 20 years of experience in the electromagnet sector

- Fully encapsulated AC electromagnets
- AC electromagnets with corrosion protection
- Use of FDA compliant materials
- Use of UL compliant materials
- The technical design of REO leads to an optimal size/performance ratio.
- Personal technical advice
- Customer-specific solutions
- Highest quality at optimal prices
- REOplus: REO speaks your language - with sales offices and production operators worldwide, REO is always highly customer-orientated and can react in a quick, efficient and cost-effective way
- All products were developed and tested according to DIN VDE 0580

Our strengths - your benefits

In addition to our standard product series from 5 VA to 4000 VA we also offer customer-specific options and special solutions. We can assist you from development to the finished product. We can meet your specific requirements thanks to our wide range of vibratory feeding products (AC electromagnets, controllers and accessories).

Optimisation of windings, air gap and the magnetic circuit can be carried out based on in-house calculations and endurance tests to ensure increased reliability.

We produce corrosion-resistant AC electromagnets in particular for the food processing industry and the pharmaceutical industry. The nickel-plated or powder-coated models correspond to the FDA approval FDA FCN 21 CFR 177.1680.

Through continuous improvement, REO has developed two corrosion-protection measures for AC electromagnets which have become widely accepted; the benefits for both methods are different:

Corrosion protection by means of nickel plating*

The magnet coils are nickel-plated for smaller AC electromagnets with a maximum power 1360 VA, in order to offer best possible corrosion protection in humid environment.

Corrosion protection by means of powder-coating

Corrosion protection by means of powder-coating is suitable for AC electromagnets with a maximum power of 3900 VA. The core is completely encapsulated with this new method. It allows feeders to be installed in humid environments and with high-pressure water jets; the material used is tested and proven for use in the food processing industry.

REVO

AC electromagnets, series Schwingmagnete

Series REOVIB WI 111

Standard series, fully encapsulated, maximum power of 350 VA at 3000 1/min or 6000 1/min

Mounting by means of standard round holes, base plate or slotted holes to allow more adjustment. Cable exit downwards or sideways

Series REOVIB WI 121

Standard series, fully encapsulated, maximum power 3900 VA at 3000 1/min or 6000 1/min

Mounting with blind tapped holes at the base of the magnet and armature
Cable exit downwards with unshielded cable or shielded cable

Series REOVIB WI 321

For use with lower operating frequencies (15 Hz and 25 Hz), fully encapsulated with a maximum power of 2200 VA.

Mounting with blind tapped holes at the base of the magnet and armature
Cable exit downwards with unshielded cable or shielded cable

Series REOVIB WI 421

Nickel-plated model, fully encapsulated at 900 1/min, 1500 1/min, 3000 1/min or 6000 1/min, maximum power 1265 VA.

Mounting with blind tapped holes at the base of the magnet and armature
Cable exit downwards with unshielded cable or shielded cable

Series REOVIB WI 621

Powder-coated model, fully encapsulated at 900 1/min, 1500 1/min, 3000 1/min or 6000 1/min, maximum power 3900 VA.

Mounting with blind tapped holes at the base of the magnet and armature
Cable exit downwards with unshielded cable or shielded cable

Series REOVIB WI 211

Series with configurable voltage/frequency options, fully encapsulated, maximum power 250 VA at 3000 1/min or 6000 1/min

Mounting by means of standard round holes, base plate or slotted holes to allow more adjustment. Cable exit downwards or sideways

Series REOVIB WE 131

Series in EI shape, maximum power 690 VA at 3000 1/min or 6000 1/min

Mounting with blind tapped holes at the base of the magnet and armature

Special solutions / customer-specific magnets

REOVIB WI 111

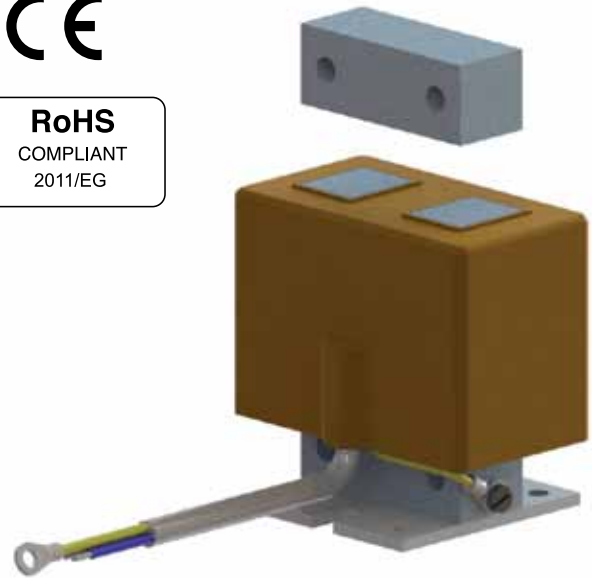
Standard series



RoHS
COMPLIANT
2011/EG

Benefits

- Optimal size/performance ratio
- Good adjustability
- Safe mounting by means of solid base plate/ mountings through core
- Compact and robust structure



Mounting by means of base plate (optional)

Technical data

Vibration frequency 3000 / 6000 1/min

| Types | Maximum rated air gap [mm] | Power at 3000 1/min [VA] | Rated current = thermal rated current at 230V [A] | Peak tensile force at nominal air gap [N] | Weight [kg] | |
|----------------------------|--|--------------------------|---|---|-------------|----------|
| | | 6000 1/min [VA] | | | Magnet | Armature |
| REOVIB WI 111/3 | 2 | 15 | 0,065 | 5 | 0,135 | 0,025 |
| REOVIB WI 111/5 | 1 | 60 | 0,26 | 38 | 0,405 | 0,085 |
| REOVIB WI 111/6 | 2,5 | 70 | 0,3 | 24 | 0,58 | 0,11 |
| REOVIB WI 111/7 | 3 | 140 | 0,6 | 45 | 1,15 | 0,165 |
| REOVIB WI 111/9 | 3 | 350 | 1,5 | 150 | 1,98 | 0,33 |
| Compatible REOVIB devices: | REOVIB SMART, REOVIB RTS, REOVIB MTS, REOVIB MFS | | | | | |

REOVIB WI 111

Typical applications

- Packaging industry and weighing sector for feeding and sorting processes
- Automation process and assembly equipment which utilises electromagnetic drives

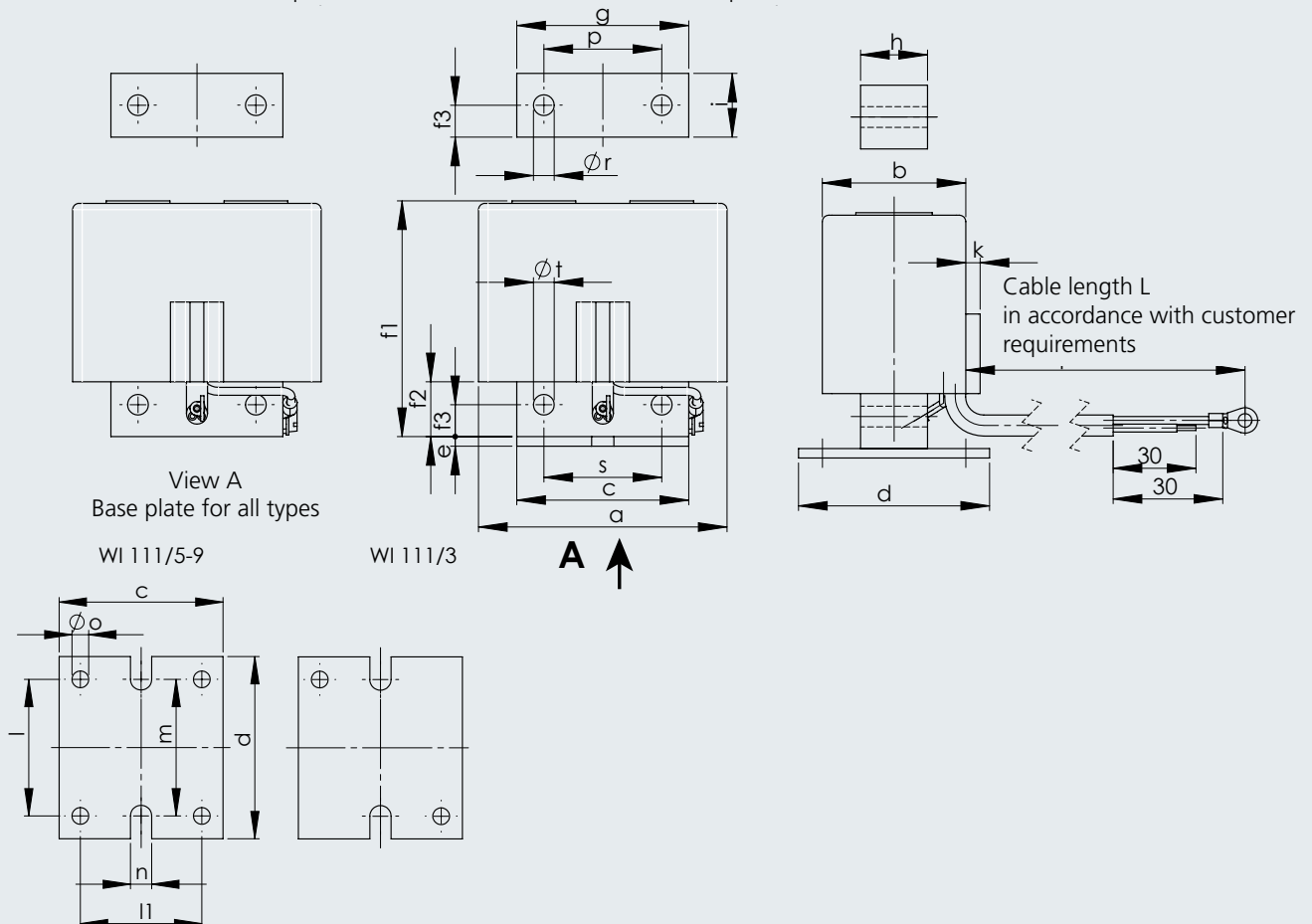
Dimensions in mm

| Types | a | b | c | d | e | f1 | f2 | f3 | g | h | i | k | l | l1 | m | ø n | ø o | p | ø r | s | ø t |
|-----------------|------|------|----|----|---|----|----|-----|----|------|----|-----|----|----|----|-----|-----|----|-----|----|-----|
| REOVIB WI 111/3 | 44 | 26 | 30 | 32 | 2 | 42 | 9 | 5 | 30 | 12 | 10 | 4 | 22 | 20 | 22 | 4,2 | 4,4 | - | 4,4 | 20 | 3,6 |
| REOVIB WI 111/5 | 61,5 | 31,5 | 45 | 50 | 3 | 63 | 14 | 7,5 | 45 | 16 | 15 | 3 | 43 | 35 | 36 | 4,2 | 4,4 | 15 | 5,1 | 28 | 5,1 |
| REOVIB WI 111/6 | 64 | 42 | 45 | 50 | 3 | 63 | 14 | 7,5 | 45 | 20,5 | 15 | - | 43 | 35 | 36 | 4,2 | 4,4 | 15 | 5,1 | 28 | 5,1 |
| REOVIB WI 111/7 | 78 | 47 | 54 | 60 | 3 | 77 | 17 | 10 | 54 | 21 | 20 | 4,5 | 45 | 40 | 45 | 7 | 5,5 | 20 | 6,5 | 37 | 6,5 |
| REOVIB WI 111/9 | 90 | 56 | 66 | 83 | 3 | 91 | 19 | 11 | 66 | 32,5 | 22 | - | 66 | 50 | 66 | 7 | 6,4 | 44 | 8,1 | 44 | 8,1 |

REOVIB WI 111

Standard: without base plate

with base plate

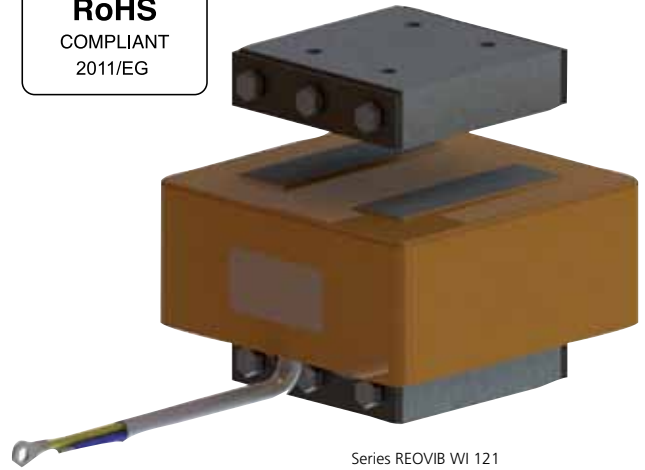


REOVIB WI 121

Standard series



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Series REOVIB WI 121

Benefits

- Optimal size/performance ratio
- Good adjustability
- Maximum power 3900 VA
- Maximum tractive power 6900 N
- Low Profile

Technical data

Vibration frequency 3000 / 6000 1/min

| Types | Maximum rated air gap [mm] | Power at 6000 1/min [VA] | Rated current = thermal rated current at 230V [A] | Peak tensile force at nominal air gap [N] | Power at 3000 1/min [VA] | therm. rated current at 230V [A] | Peak tensile force at nominal air gap [N] | Weight [kg] | |
|----------------------------|--|--------------------------|---|---|--------------------------|----------------------------------|---|-------------|----------|
| | | | | | | | | Magnet | Armature |
| REOVIB WI 121/10 | 3 | 320 | 1,4 | 142 | 280 | 1,2 | 229 | 2,1 | 0,34 |
| REOVIB WI 121/12 | 3 | 391 | 1,7 | 235 | 345 | 1,5 | 318 | 2,8 | 0,62 |
| REOVIB WI 121/14 | 3 | 1200 | 5,2 | 850 | 1200 | 5,2 | 1410 | 6,9 | 1,45 |
| REOVIB WI 121/16 | 3 | 2200 | 9,5 | 1590 | 1890 | 8,2 | 2620 | 10,5 | 2,6 |
| REOVIB WI 121/17 | 3 | 3000 | 13 | 1410 | 2760 | 12 | 2230 | 18 | 3,9 |
| REOVIB WI 121/18 | 3 | -- | -- | -- | 3900 | 16,9 | 6900 | 28 | 9 |
| Compatible REOVIB devices: | REOVIB SMART, REOVIB RTS, REOVIB MTS, REOVIB MFS | | | | | | | | |

REOVIB WI 121

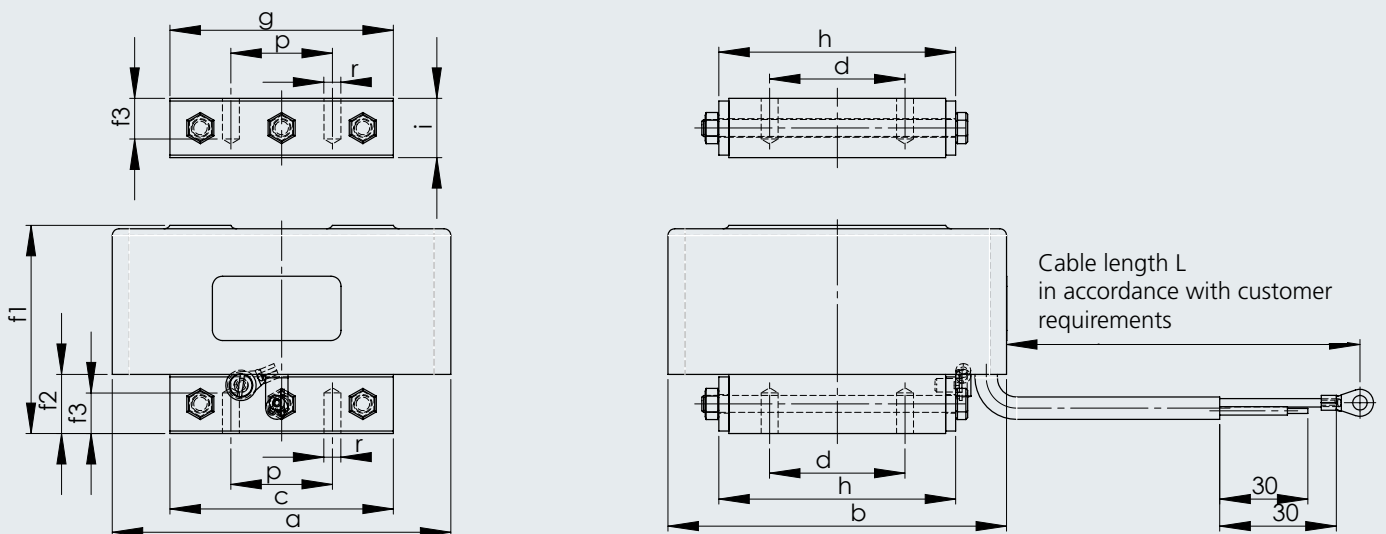
Typical applications

- Packaging industry and weighing sector for feeding and sorting processes
- Automation process and assembly equipment which utilises electromagnetic drives

Dimensions in mm

| Typen | a | b | c | d | f1 | f2 | f3 | g | h | i | p | r |
|------------------|-----|-----|-----|-----|-------|----|----|-----|-----|------|----|-----|
| REOVIB WI 121/10 | 100 | 68 | 66 | - | 61,5 | 12 | 9 | 66 | 38 | 17,5 | 30 | M6 |
| REOVIB WI 121/12 | 100 | 100 | 66 | 40 | 61,5 | 15 | 9 | 66 | 70 | 17,5 | 30 | M6 |
| REOVIB WI 121/14 | 155 | 110 | 108 | - | 90,5 | 23 | 15 | 108 | 68 | 26,5 | 50 | M10 |
| REOVIB WI 121/16 | 155 | 168 | 108 | 80 | 90,5 | 23 | 15 | 108 | 126 | 26,5 | 50 | M10 |
| REOVIB WI 121/17 | 155 | 230 | 108 | 110 | 90,5 | 23 | 15 | 108 | 180 | 26,5 | 50 | M10 |
| REOVIB WI 121/18 | 230 | 170 | 169 | 65 | 128,5 | 42 | 18 | 169 | 120 | 47,5 | 75 | M12 |

REOVIB WI 121



REOVIB WI 321

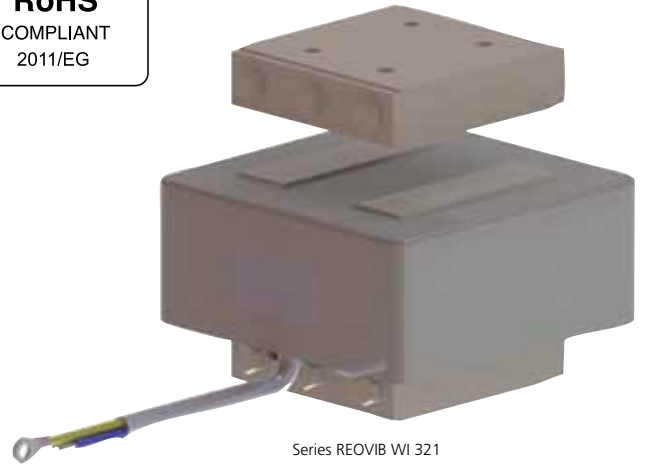
Low frequency AC electromagnets



RoHS
COMPLIANT
2011/EG

Benefits

- Optimal size/performance ratio
- Good adjustability
- Maximum power 2200 VA for low frequency applications
- Maximum tractive power 8580 N
- Low Profile



Series REOVIB WI 321

Technical data

Vibration frequency 900 / 1500 1/min

| Types | Maximum rated air gap [mm] | Power at 1500 1/min [VA] | Rated current = thermal rated current at 200 V/ 25 Hz [A] | Peak tensile force at nominal air gap [N] | Power at 900 1/min [VA] | therm. rated current at 200 V/ 15 Hz [A] | Peak tensile force at nominal air gap [N] | Weight [kg] | |
|----------------------------|----------------------------|--------------------------|---|---|-------------------------|--|---|-------------|----------|
| | | | | | | | | Magnet | Armature |
| REOVIB WI 321/10 | 3 | 104 | 0,52 | 286 | 80 | 0,4 | 229 | 2,1 | 0,34 |
| REOVIB WI 321/12 | 3 | 160 | 0,8 | 381 | 116 | 0,58 | 468 | 2,8 | 0,62 |
| REOVIB WI 321/14 | 3 | 640 | 3,2 | 1460 | 320 | 1,6 | 1330 | 6,9 | 1,45 |
| REOVIB WI 321/16 | 3 | 1040 | 5,2 | 3070 | 580 | 2,9 | 1870 | 10,5 | 2,6 |
| REOVIB WI 321/17 | 3 | 1440 | 7,2 | 2440 | 780 | 3,9 | 2090 | 18 | 3,9 |
| REOVIB WI 321/18 | 3 | 2200 | 11 | 7890 | 1600 | 8 | 8580 | 28 | 9 |
| Compatible REOVIB devices: | REOVIB MFS | | | | | | | | |

REOVIB WI 321

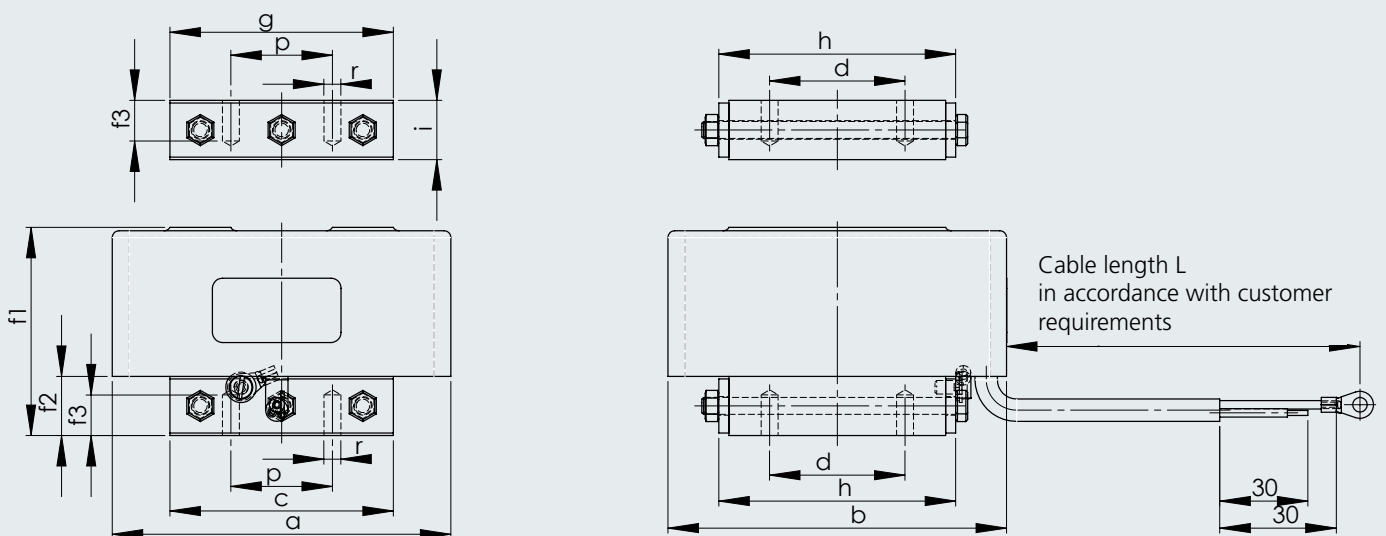
Typical applications

- Packaging industry and weighing sector for feeding and sorting processes
- Automation process and assembly equipment which utilises electromagnetic drives.

Dimensions in mm

| Typen | a | b | c | d | f1 | f2 | f3 | g | h | i | p | r |
|------------------|-----|-----|-----|-----|-------|----|----|-----|-----|------|----|-----|
| REOVIB WI 321/10 | 100 | 68 | 66 | - | 61,5 | 12 | 9 | 66 | 38 | 17,5 | 30 | M6 |
| REOVIB WI 321/12 | 100 | 100 | 66 | 40 | 61,5 | 15 | 9 | 66 | 70 | 17,5 | 30 | M6 |
| REOVIB WI 321/14 | 155 | 110 | 108 | - | 90,5 | 23 | 15 | 108 | 68 | 26,5 | 50 | M10 |
| REOVIB WI 321/16 | 155 | 168 | 108 | 80 | 90,5 | 23 | 15 | 108 | 126 | 26,5 | 50 | M10 |
| REOVIB WI 321/17 | 155 | 230 | 108 | 110 | 90,5 | 23 | 15 | 108 | 180 | 26,5 | 50 | M10 |
| REOVIB WI 321/18 | 230 | 170 | 169 | 65 | 128,5 | 42 | 18 | 169 | 120 | 47,5 | 75 | M12 |

REOVIB WI 321

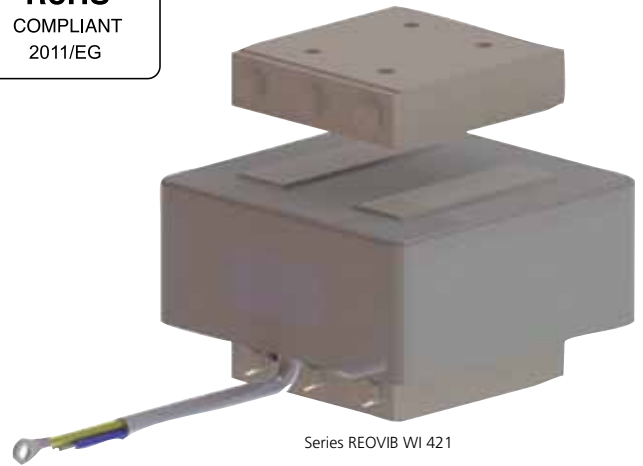


REOVIB WI 421

Nickel-plated model



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2011/EG



Series REOVIB WI 421

Benefits

- Corrosion protection by means of nickel plating
- Optimal size/performance ratio
- Good adjustability
- Maximum power 1360 VA
- Also for low frequency applications
- Maximum tractive power 8000 N
- Low Profile

Technical data

Vibration frequency 3000 / 6000 1/min

| Types | Maximum rated air gap [mm] | Power at 6000 1/min [VA] | Rated current = thermal rated current at 230V [A] | Peak tensile force at nominal air gap [N] | Power at 3000 1/min [VA] | therm. rated current at 230V [A] | Peak tensile force at nominal air gap [N] | Weight [kg] | |
|----------------------------|--|--------------------------|---|---|--------------------------|----------------------------------|---|-------------|----------|
| | | | | | | | | Magnet | Armature |
| REOVIB WI 421/10 | 3 | 276 | 1,2 | 110 | 156 | 0,68 | 128 | 2,1 | 0,34 |
| REOVIB WI 421/12 | 3 | 414 | 1,8 | 150 | 300 | 1,3 | 264 | 2,8 | 0,62 |
| REOVIB WI 421/14 | 3 | 495 | 2,15 | 250 | 748 | 3,25 | 570 | 6,9 | 1,45 |
| REOVIB WI 421/16 | 3 | 920 | 4 | 820 | 1265 | 5,5 | 1400 | 10,5 | 2,6 |
| Compatible REOVIB devices: | REOVIB SMART, REOVIB RTS, REOVIB MTS, REOVIB MFS | | | | | | | | |

REOVIB WI 421

Vibration frequency 900 / 1500 1/min

| Types | Maximum rated air gap [mm] | Power at 1500 1/min [VA] | Rated current = thermal rated current at 200 V/ 25 Hz [A] | Peak tensile force at nominal air gap [N] | Power at 900 1/min [VA] | therm. rated current at 200 V/ 15 Hz [A] | Peak tensile force at nominal air gap [N] | Weight [kg] | |
|----------------------------|----------------------------|--------------------------|---|---|-------------------------|--|---|-------------|----------|
| | | | | | | | | Magnet | Armature |
| REOVIB WI 421/10 | 3 | 124 | 0,62 | 218 | 78 | 0,39 | 271 | 2,1 | 0,34 |
| REOVIB WI 421/12 | 3 | 190 | 0,95 | 540 | 100 | 0,5 | 356 | 2,8 | 0,62 |
| REOVIB WI 421/14 | 3 | 520 | 2,6 | 1180 | 310 | 1,55 | 1100 | 6,9 | 1,45 |
| REOVIB WI 421/16 | 3 | 860 | 4,3 | 2540 | 580 | 2,9 | 2830 | 10,5 | 2,6 |
| REOVIB WI 421/17 | 3 | 1360 | 6,8 | 5030 | 1160 | 5,8 | 6170 | 18 | 3,9 |
| REOVIB WI 421/18 | 3 | -- | -- | -- | 1160 | 8 | 8000 | 28 | 9 |
| Compatible REOVIB devices: | REOVIB MFS | | | | | | | | |

REOVIB WI 421

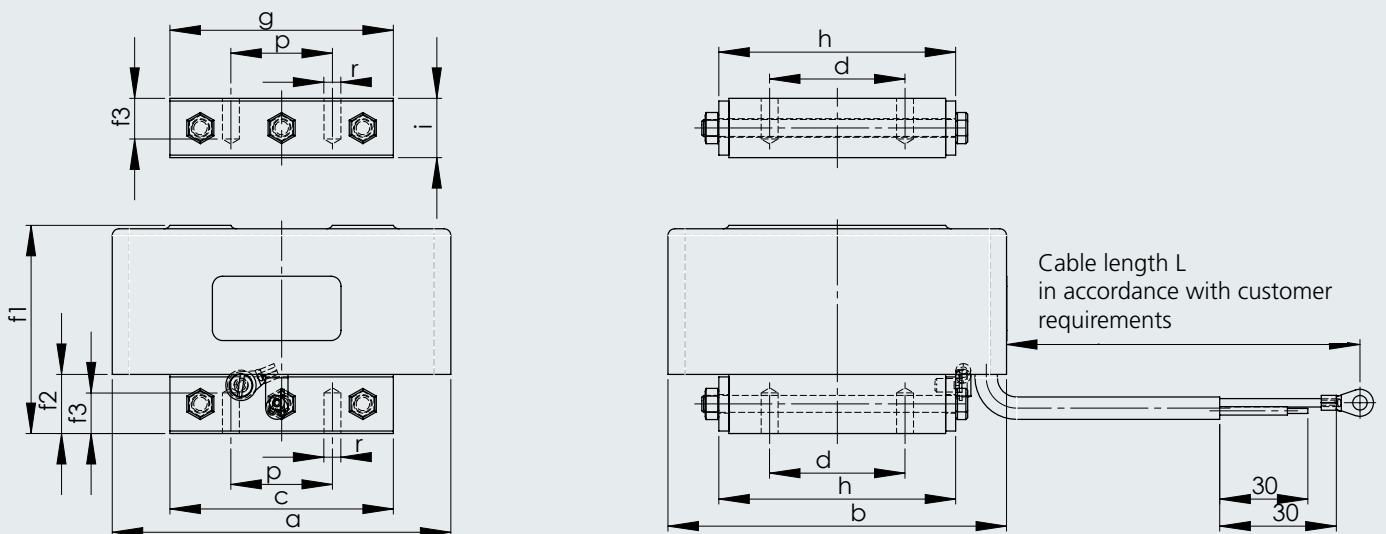
Typical applications

- Packaging industry and weighing sector for feeding and sorting processes
- Automation process and assembly equipment which utilises electromagnetic drives.
- Particularly suited for the food processing sector and the pharmaceutical sector

Dimensions in mm

| Typen | a | b | c | d | f1 | f2 | f3 | g | h | i | p | r |
|------------------|-----|-----|-----|-----|-------|----|----|-----|-----|------|----|-----|
| REOVIB WI 421/10 | 100 | 68 | 66 | - | 61,5 | 12 | 9 | 66 | 38 | 17,5 | 30 | M6 |
| REOVIB WI 421/12 | 100 | 100 | 66 | 40 | 61,5 | 15 | 9 | 66 | 70 | 17,5 | 30 | M6 |
| REOVIB WI 421/14 | 155 | 110 | 108 | - | 90,5 | 23 | 15 | 108 | 68 | 26,5 | 50 | M10 |
| REOVIB WI 421/16 | 155 | 168 | 108 | 80 | 90,5 | 23 | 15 | 108 | 126 | 26,5 | 50 | M10 |
| REOVIB WI 421/17 | 155 | 230 | 108 | 110 | 90,5 | 23 | 15 | 108 | 180 | 26,5 | 50 | M10 |
| REOVIB WI 421/18 | 230 | 170 | 169 | 65 | 128,5 | 42 | 18 | 169 | 120 | 47,5 | 75 | M12 |

REOVIB WI 421

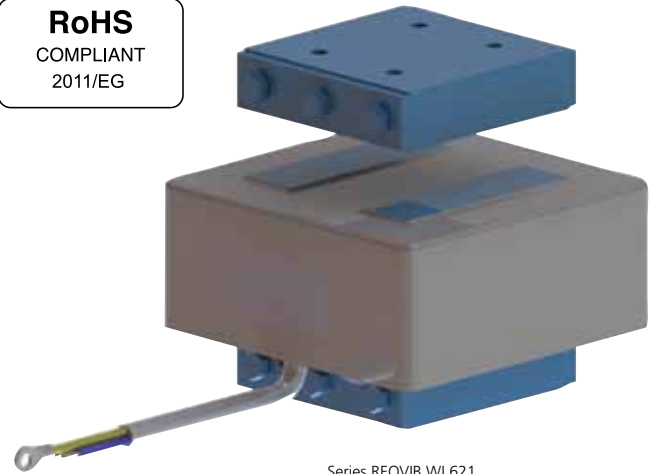


REOVIB WI 621

Powder-coated model



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2011/EG



Series REOVIB WI 621

Benefits

- Corrosion protection by means of powder-coating
- FDA compliant
- Optimal size/performance ratio
- Good adjustability
- Maximum power 3900 VA
- Also for low frequency applications
- Maximum tractive power 8580 N
- Low Profile

Technical data

Vibration frequency 3000 / 6000 1/min

| Types | Maximum rated air gap [mm] | Working air gap [mm] | Power at 6000 1/min [VA] | Rated current = thermal rated current at 230V [A] | Peak tensile force at nominal air gap [N] | Power at 3000 1/min [VA] | therm. rated current at 230V [A] | Peak tensile force at nominal air gap [N] | Weight [kg] | |
|----------------------------|--|----------------------|--------------------------|---|---|--------------------------|----------------------------------|---|-------------|----------|
| | | | | | | | | | Magnet | Armature |
| REOVIB WI 621/10 | 3 | 2* | 320 | 1,4 | 142 | 280 | 1,2 | 229 | 2,1 | 0,34 |
| REOVIB WI 621/12 | 3 | 2* | 391 | 1,7 | 235 | 345 | 1,5 | 318 | 2,8 | 0,62 |
| REOVIB WI 621/14 | 3 | 2* | 1200 | 5,2 | 850 | 1200 | 5,2 | 1410 | 6,9 | 1,45 |
| REOVIB WI 621/16 | 3 | 2* | 2200 | 9,5 | 1590 | 1890 | 8,2 | 2620 | 10,5 | 2,6 |
| REOVIB WI 621/17 | 3 | 2* | 3000 | 13 | 1410 | 2760 | 12 | 2230 | 18 | 3,9 |
| REOVIB WI 621/18 | 3 | 2* | -- | -- | -- | 3900 | 16,9 | 6900 | 28 | 9 |
| Compatible REOVIB devices: | REOVIB SMART, REOVIB RTS, REOVIB MTS, REOVIB MFS | | | | | | | | | |

REOVIB WI 621

Vibration frequency 900 / 1500 1/min

| Types | Maximum rated air gap [mm] | Working air gap [mm] | Power at 1500 1/min [VA] | Rated current = thermal rated current at 230V [A] | Peak tensile force at nominal air gap [N] | Power at 900 1/min [VA] | therm. rated current at 230V [A] | Peak tensile force at nominal air gap [N] | Weight [kg] | |
|----------------------------|----------------------------|----------------------|--------------------------|---|---|-------------------------|----------------------------------|---|-------------|----------|
| | | | | | | | | | Magnet | Armature |
| REOVIB WI 621/10 | 3 | 2* | 104 | 0,52 | 286 | 80 | 0,4 | 229 | 2,1 | 0,34 |
| REOVIB WI 621/12 | 3 | 2* | 160 | 0,8 | 381 | 116 | 0,58 | 468 | 2,8 | 0,62 |
| REOVIB WI 621/14 | 3 | 2* | 640 | 3,2 | 1460 | 320 | 1,6 | 1330 | 6,9 | 1,45 |
| REOVIB WI 621/16 | 3 | 2* | 1040 | 5,2 | 3070 | 580 | 2,9 | 1870 | 10,5 | 2,6 |
| REOVIB WI 621/17 | 3 | 2* | 1440 | 7,2 | 2440 | 780 | 3,9 | 2090 | 18 | 3,9 |
| REOVIB WI 621/18 | 3 | 2* | 2200 | 11 | 7890 | 1600 | 8 | 8580 | 28 | 9 |
| Compatible REOVIB devices: | REOVIB MFS | | | | | | | | | |

REOVIB WI 621

*Rated air gap, is reduced by 1 mm, for this design due to the powder-coating

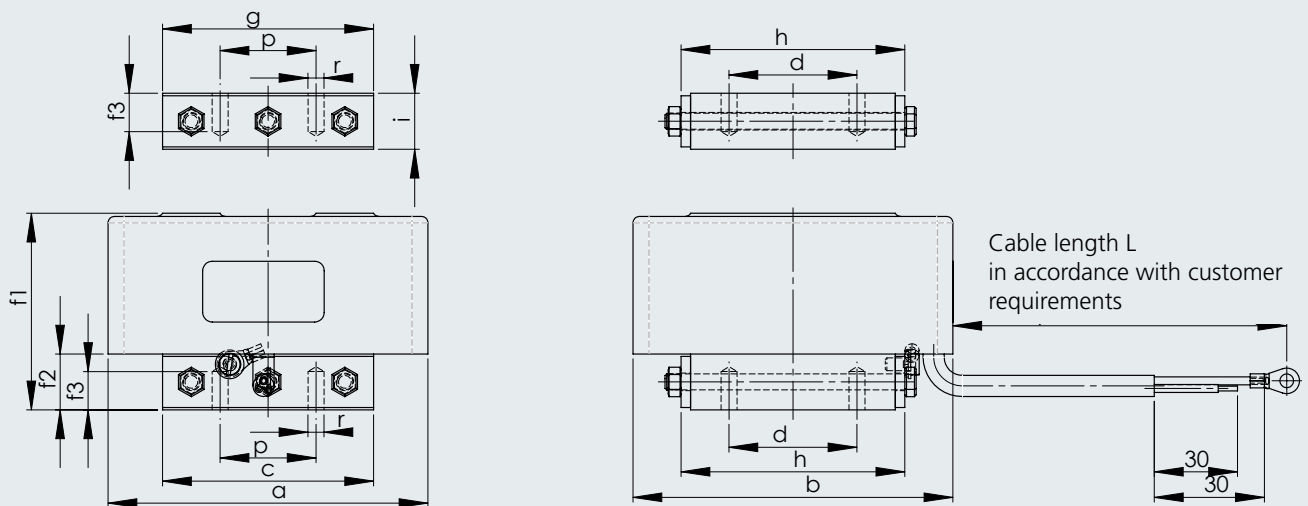
Typical applications

- Packaging industry and weighing sector for feeding and sorting processes
- Automation process and assembly equipment which utilises electromagnetic drives.
- Particularly suited for the food processing sector and the pharmaceutical sector (FDA compliant)

Dimensions in mm

| Typen | a | b | c | d | f1 | f2 | f3 | g | h | i | p | r |
|------------------|-----|-----|-----|-----|-------|------|----|-----|-----|------|----|-----|
| REOVIB WI 621/10 | 100 | 68 | 67 | - | 62,5 | 12,5 | 9 | 67 | 39 | 18,5 | 30 | M6 |
| REOVIB WI 621/12 | 100 | 100 | 67 | 40 | 62,5 | 15,5 | 9 | 67 | 71 | 18,5 | 30 | M6 |
| REOVIB WI 621/14 | 155 | 110 | 109 | - | 91,5 | 23,5 | 15 | 109 | 69 | 27,5 | 50 | M10 |
| REOVIB WI 621/16 | 155 | 168 | 109 | 80 | 91,5 | 23,5 | 15 | 109 | 127 | 27,5 | 50 | M10 |
| REOVIB WI 621/17 | 155 | 230 | 109 | 110 | 91,5 | 23,5 | 15 | 109 | 181 | 27,4 | 50 | M10 |
| REOVIB WI 621/18 | 230 | 170 | 170 | 65 | 129,5 | 42,5 | 18 | 170 | 121 | 48,5 | 75 | M12 |

REOVIB WI 621



REOVIB WI 211

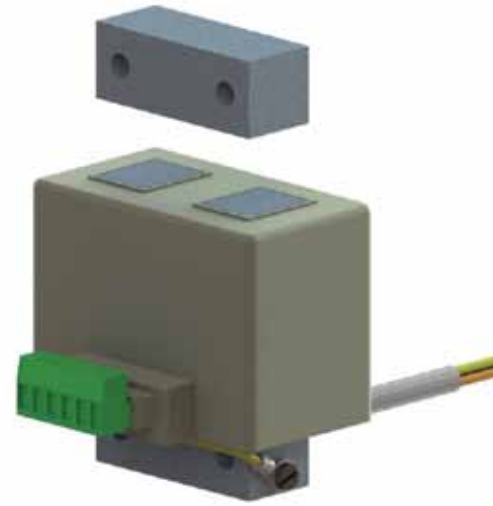
AC electromagnets with configurable voltage/frequency options



RoHS
COMPLIANT
2011/EG

Benefits

- Maximum power 250 VA
- configurable voltage/frequency options increases flexibility
- Quick change of the connection voltage by using the appropriate selector key



Series REOVIB WI 211

Technical data

Vibration frequency 3000 / 6000 1/min

| Types | Maximum rated air gap [mm] | Power at 3000 1/min [VA] | Rated current = thermal rated current at 230V [A] | Peak tensile force at nominal air gap [N] | Weight [kg] | |
|----------------------------|--|--------------------------|---|---|-------------|----------|
| | | 6000 1/min [VA] | | | Magnet | Armature |
| REOVIB WI 211/7 | 1 | 175 | 0,75 | 40 | 1,15 | 0,165 |
| REOVIB WI 211/9 | 1 | 210 | 0,9 | 105 | 1,96 | 0,33 |
| REOVIB WI 211/10 | 1 | 250 | 1,1 | 210 | 2,1 | 0,34 |
| Compatible REOVIB devices: | REOVIB SMART, REOVIB RTS, REOVIB MTS, REOVIB MFS | | | | | |

REOVIB WI 211

Typical applications

- Packaging industry and weighing sector for feeding and sorting processes
- Automation process and assembly equipment which utilises electromagnetic drives.

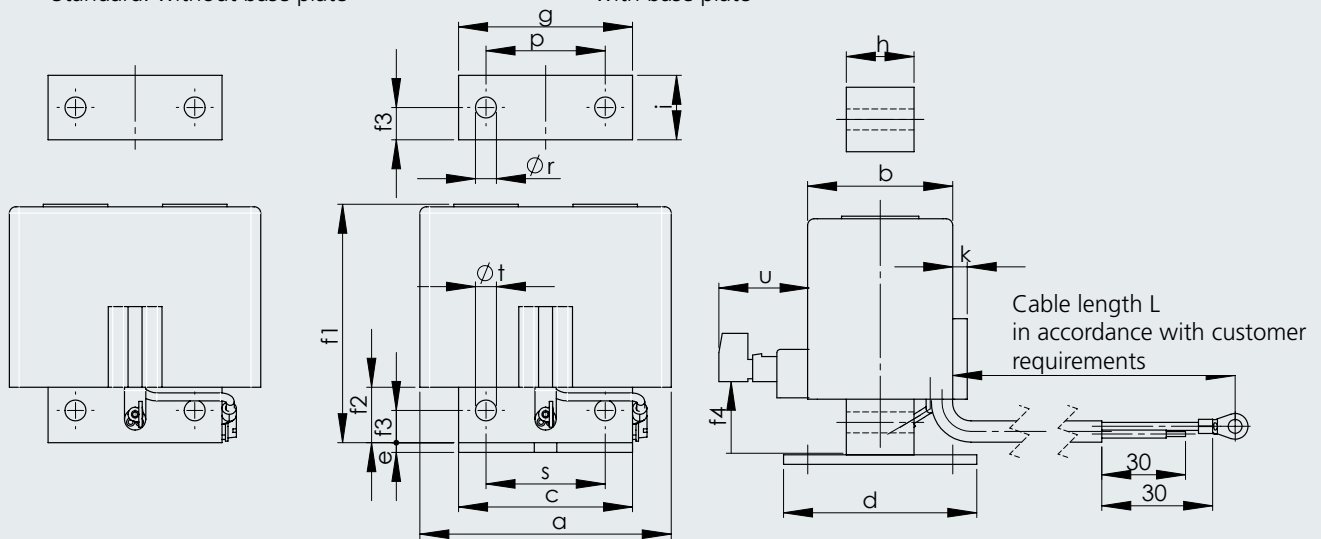
Dimensions in mm

| Type | a | b | c | d | e | f | f1 | f2 | f3 | f4 | g | h | i | k | p | r | s | øt | u |
|------------------|-----|----|----|----|---|----|------|----|----|----|----|------|------|----|----|-----|----|-----|----|
| REOVIB WI 211/7 | 78 | 47 | 54 | 60 | 3 | 77 | 74 | 17 | 10 | 22 | 54 | 21 | 20 | 31 | 20 | 6,5 | 37 | 6,5 | 28 |
| REOVIB WI 211/9 | 90 | 56 | 66 | 83 | 3 | 91 | 88 | 19 | 11 | 24 | 66 | 32,5 | 22 | 31 | 44 | 8,1 | 44 | 8 | 28 |
| REOVIB WI 211/10 | 100 | 68 | 66 | - | - | - | 61,5 | 12 | 9 | 48 | 66 | 38 | 17,5 | 31 | 30 | M6 | - | - | 26 |

REOVIB WI 211

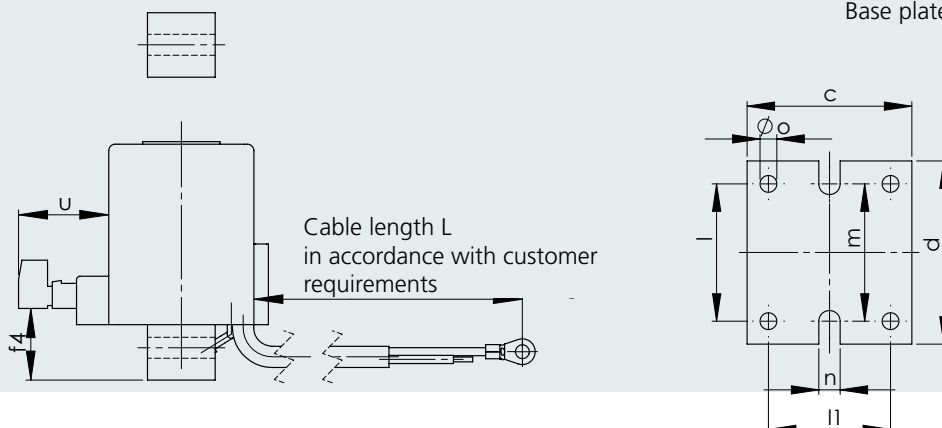
Standard: without base plate

with base plate



with voltage/frequency selector

View A
Base plate for all types

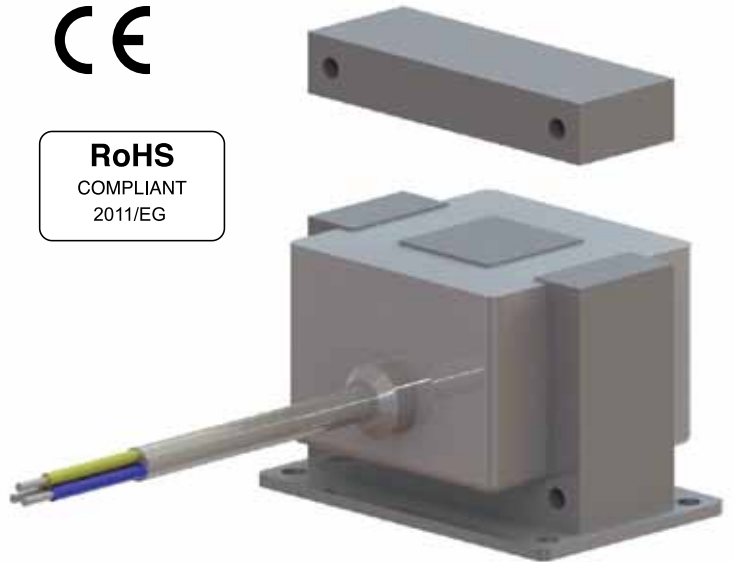


REOVIB WE 131

AC electromagnets with EI core



RoHS
COMPLIANT
2011/EG



Series REOVIB WE 131

Benefits

- Maximum power 600 VA
- Low Profile
- Particularly suited for small air gaps

Technical data

Vibration frequency 3000 / 6000 1/min

| Types | Maximum rated air gap [mm] | Power at | | Rated current = thermal rated current at 230V [A] | Weight [kg] | |
|----------------------------|--|-----------------|-----------------|---|-------------|----------|
| | | 3000 1/min [VA] | 6000 1/min [VA] | | Magnet | Armature |
| REOVIB WE 131/54 | 0,6 | 42 | | 0,18 | 0,4 | 0,065 |
| REOVIB WE 131/60 | 1 | 50 | | 0,22 | 0,6 | 0,12 |
| REOVIB WE 131/75 | 0,5 | 110 | | 0,5 | 1,4 | 0,27 |
| REOVIB WE 131/96a | 3 | 253 | | 1,1 | 2,5 | 0,35 |
| REOVIB WE 131/96b | 3 | 330 | | 1,45 | 3,3 | 0,65 |
| REOVIB WE 131/135 | 0,8 | 460 | | 2 | 7,2 | 1,6 |
| REOVIB WE 131/136 | 0,6 | 690 | | 3 | 8,7 | 2,2 |
| Compatible REOVIB devices: | REOVIB SMART, REOVIB RTS, REOVIB MTS, REOVIB MFS | | | | | |

REOVIB WE 131

Typical applications

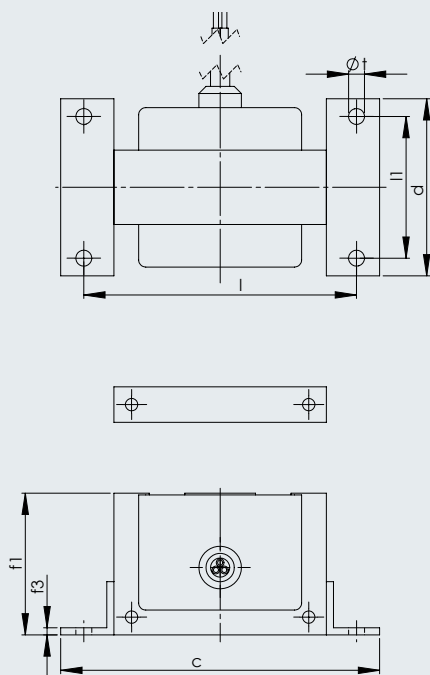
- Packaging industry and weighing sector for feeding and sorting processes
- Automation process and assembly equipment which utilises electromagnetic drives

Dimensions in mm

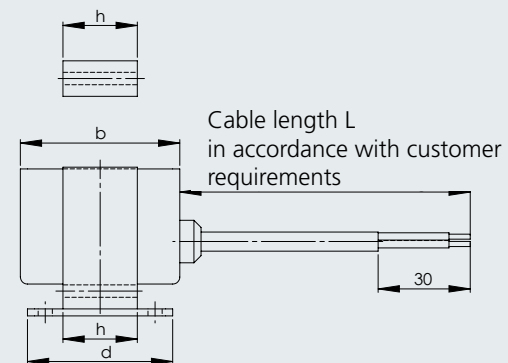
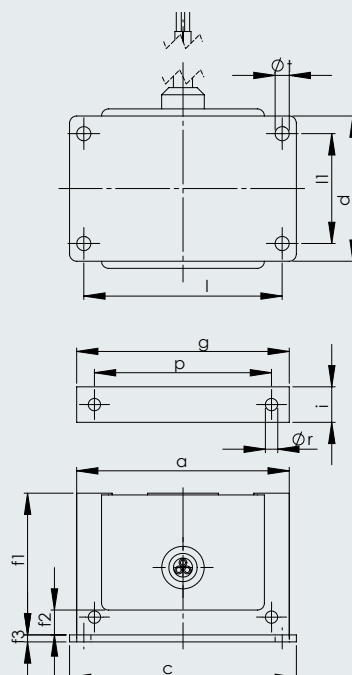
| Typen | a | b | c | d | f1 | f2 | f3 | g | h | i | l | l1 | p | or | ot | View |
|-------------------|-----|-----|-----|-----|----|----|----|-----|------|------|----|-----|-------|-----|-----|------|
| REOVIB WE 131/54 | 54 | 54 | 54 | 45 | 39 | 8 | 3 | 54 | 18 | 9 | 41 | 35 | 45 | 3,5 | 5 | P |
| REOVIB WE 131/60 | 60 | 63 | 60 | 60 | 43 | 9 | 3 | 60 | 20 | 10 | 42 | 54 | 50 | 4,5 | 5 | P |
| REOVIB WE 131/75 | 75 | 88 | 115 | 80 | 50 | 11 | 3 | 75 | 40 | 12,5 | 56 | 98 | 62,5 | 4,5 | 7 | W |
| REOVIB WE 131/96a | 96 | 67 | 96 | 64 | 66 | 13 | 2 | 96 | 35 | 16 | 80 | 52 | 80 | 5,5 | 6,5 | P |
| REOVIB WE 131/96b | 96 | 98 | 96 | 89 | 67 | 13 | 3 | 96 | 60 | 16 | 80 | 77 | 80 | 5,5 | 6,5 | P |
| REOVIB WE 131/135 | 135 | 125 | 175 | 110 | 90 | 18 | 3 | 135 | 70 | 22,5 | 90 | 155 | 112,5 | 7,5 | 7 | W |
| REOVIB WE 131/136 | 135 | 150 | 175 | 110 | 90 | 18 | 3 | 135 | 95,5 | 22,5 | 90 | 155 | 112,5 | 7,5 | 7 | W |

REOVIB WE 131

View W - Mounting via angle brackets



View P - Mounting via ground plate



Key Points about AC electromagnets

General overview

The complete electromagnet consists of the core bearing the winding and the corresponding armature (l Piece). The electromagnet, the armature and the leaf springs form the drive system of the vibratory feeder. The weight differential between the resting mass, the oscillating mass and the spring force result in a resonant vibration system.

Vibratory feeders can therefore only work in a relatively small frequency range around the resonance point. All components of the entire drive system must be adjusted to this frequency. It is therefore important that the electromagnet is constructed for the correct frequency otherwise the total power of the magnet cannot be utilised or it could become overheated due to increased losses.

Due to conventional control systems, most vibratory feeders work with the same or double vibration frequency of the connection power. 50 Hz or 100 Hz in the European region and the Asian region, 60 Hz or 120 Hz in the American region.

Low frequency vibration systems

Low frequency systems with vibration frequencies of approximately 15 Hz and 25 Hz are used for particular applications (bulk conveying or product with special feeding characteristics); these systems must be operated with special frequency converters (REOVIB MFS).

Vibration frequency

In addition to the frequency specification in Hz, also the terms "full wave" (6000 vibrations/minute) or "half-wave" (3000 vibrations/minute) have become customary for specification of the vibration frequency.

The terms "full wave" and "half-wave" are derived from the sinusoidal wave of the power frequency:

With half-wave = 50 Hz (60 Hz) a sinusoidal half-wave is blocked by a diode or a triac.

With a full wave = 100 Hz (120 Hz) the positive and negative half-waves each produce vibration.

3000 vibrations/min = 50 Hz (50 x 60 sec), or

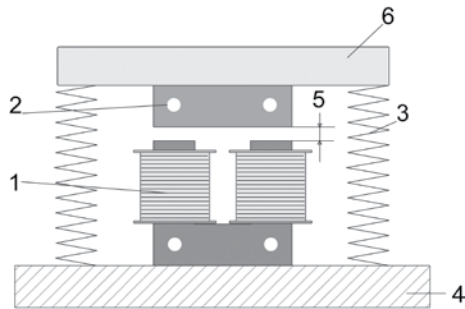
6000 vibrations/min = 100 Hz (100 x 60 sec)

are comparable with the specification of revolutions per minute (rpm) for a motor.

It is important that the mechanical vibration frequency of the feeder system, the air gap as well as the type of drive control (output voltage and output frequency) are considered in the electrical design of the electromagnets.

Key Points about AC electromagnets

Principle of operation



- 1 Core with excitation winding
- 2 Armature
- 3 Spring system
- 4 Fixed counterweight
- 5 Air gap
- 6 Vibrating tray

Structure of the electromagnets

The structure of the REO electromagnets consists usually of a UI core. The U core bears a winding on each limb and is completely encapsulated, the corresponding armature (I Piece) does not contain a winding. Depending on the model, the connecting cables are available as standard sheathed cables or shielded cables; cable exit downwards or sideways. The mounting of the electromagnets is carried out via tapped blind holes in the core, or via welded base plates.

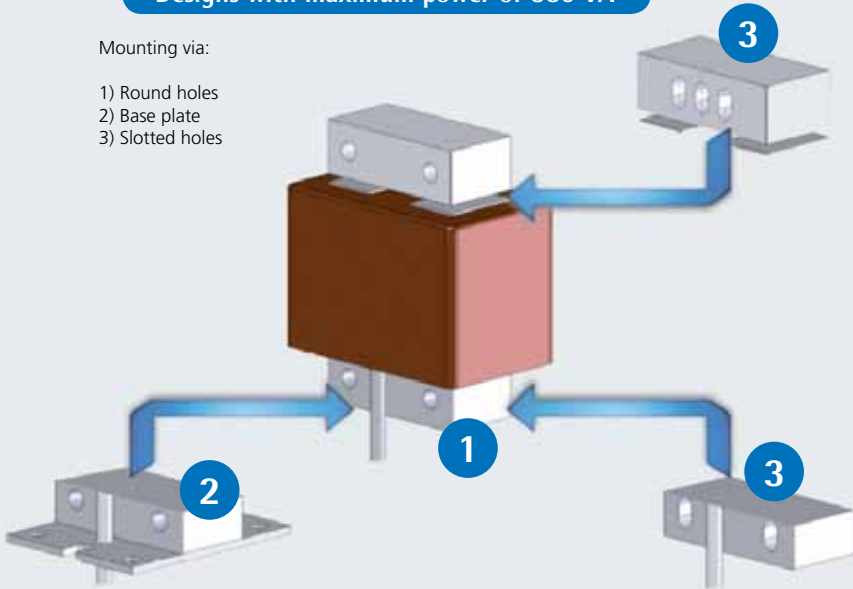
Our electromagnets are available with protection classes from IP00 to IP54.

With more than 20 years of experience REO is one of the leading suppliers in the vibratory feeding sector. REO electromagnets are reliable and field proven, and are suitable for industrial operation and laboratory operation as well as for food applications or pharmaceutical applications.

Designs with maximum power of 350 VA

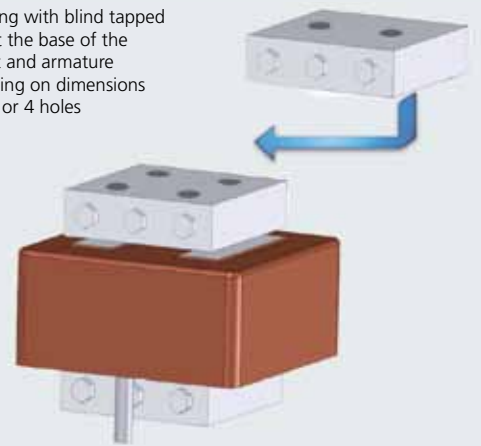
Mounting via:

- 1) Round holes
- 2) Base plate
- 3) Slotted holes

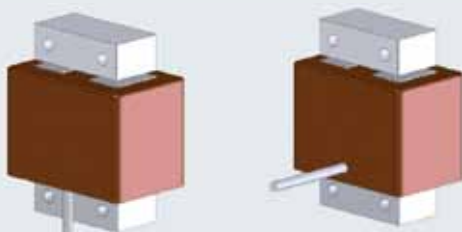


Designs with maximum power of 4000 VA

Mounting with blind tapped holes at the base of the magnet and armature depending on dimensions 2 holes or 4 holes



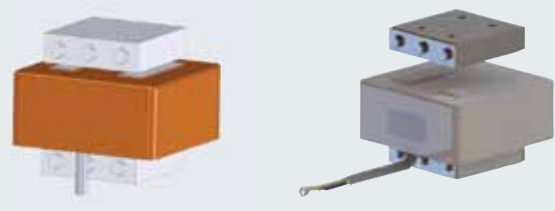
Cable models up to 350 VA



Standard, downwards

Sideways

Cable models up to 4000 VA

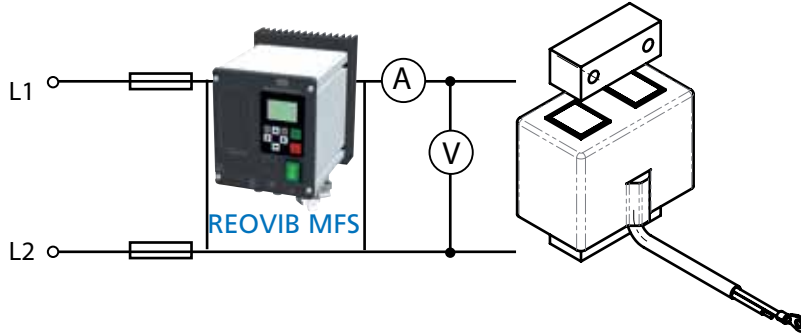


Standard, downwards, unshielded cable

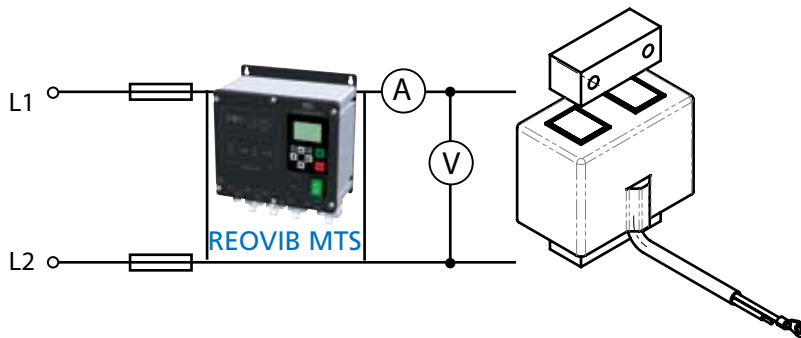
Shielded cable

Key Points about AC electromagnets

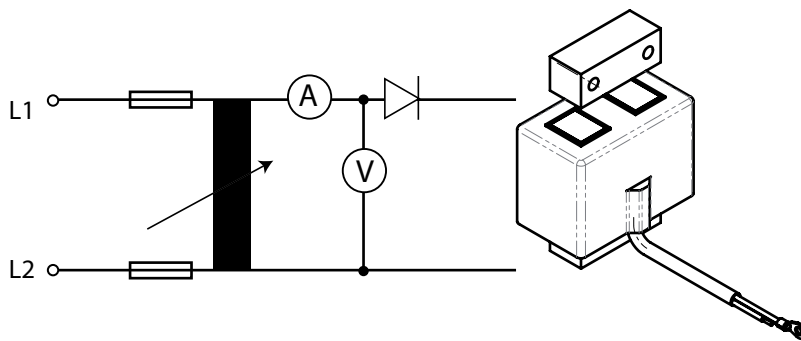
Circuit examples



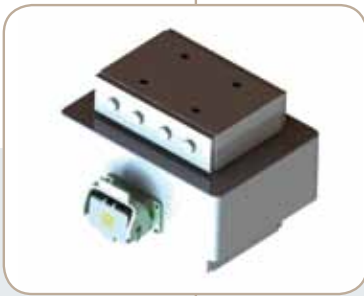
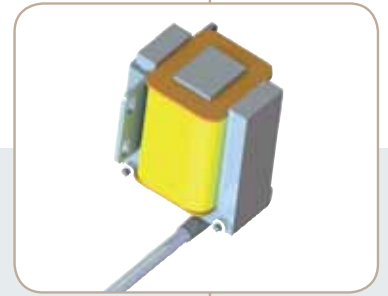
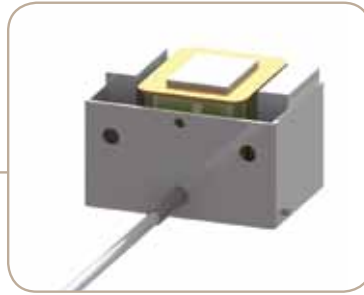
Measurement of the rated voltage and the continuous rated current on the electromagnet or directly with the frequency controller MFS, display via the appropriate menu.



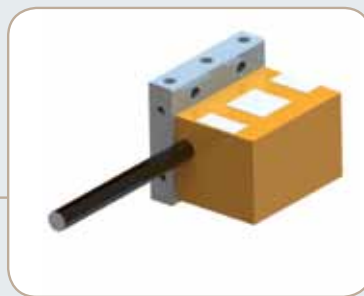
Measurement of the rated voltage and the continuous rated current on the electromagnet or directly via the programmable phase-angle controller MTS, display via the appropriate menu.



Measurement of the rated voltage and the continuous rated current on the electromagnet.



In addition to the standard electromagnets, REO has developed a range of special solutions - for example water-cooled electromagnets which are used in very hot ambient temperatures. Are you also looking for a special requirement? Our team members are happy to assist - please contact us!



If you did not find a suitable electromagnet here? No problem! Simply complete the guide below, detach it and send it to us via email or fax to info@reo.de - +49 (0) 33971 485 90.

Guide for your electromagnets

| | | | |
|---|---|---------------------------------------|---|
| Application | <input type="checkbox"/> Linear feeder | <input type="checkbox"/> Bowl feeder | <input type="checkbox"/> Food processing industry |
| | <input type="checkbox"/> _____ | | |
| Technical parameters | | | |
| *Supply voltage $U_N =$ | _____ V | *Magnet voltage $U =$ | _____ V |
| *Power frequency $f_N =$ | _____ Hz | *Operating frequency $f =$ | _____ Hz |
| *Magnet power $P =$ | _____ VA | *Vibration frequency = | _____ 1 / min |
| Solenoid current $I =$ | _____ A | *Rated air gap $LS =$ | _____ mm |
| Maximum tractive power $F =$ | _____ N | | |
| Temperature transmitter | <input type="checkbox"/> yes, °C | <input type="checkbox"/> no | |
| Plug connection | <input type="checkbox"/> yes | <input type="checkbox"/> no | |
| Switching | <input type="checkbox"/> yes <input type="checkbox"/> Voltage _____ V <input type="checkbox"/> Frequency _____ Hz | <input type="checkbox"/> no | |
| Corrosion protection | <input type="checkbox"/> yes, <input type="checkbox"/> Nickel plating or <input type="checkbox"/> Powder-coating | | <input type="checkbox"/> no |
| Mechanical parameters | | | |
| Shape | <input type="checkbox"/> WI (U- Core) | <input type="checkbox"/> WE (E- Core) | |
| Base plate | <input type="checkbox"/> yes | <input type="checkbox"/> no | |
| Dimensions <input type="checkbox"/> Reference values <input type="checkbox"/> must be met | Length: $L1 =$ _____ mm | Length: $B1 =$ _____ mm | Height: $H1 =$ _____ mm |
| Mounting dimensions | Length: $L2 =$ _____ mm | Length: $B2 =$ _____ mm | |
| Cable length | Length: $L =$ _____ mm | | |
| Other specifications (for example test criteria, test voltage, standards, UL, mountings, cooling, mechanical requirements) | | | |
| Requirements planning (for example samples, pre-series, series, expected quantities) | | | |
| Company | | Contact person | |
| | | Department | |
| Street | | Telephone | |
| City | | Fax | |
| Postcode | | Email | |
| Internet | | Date | |

More REO products for the vibratory feeder

Controllers for the vibratory feeder

Each vibratory feeder requires a controller for an adjustable throughput. The 'REOVIB' range of controllers, provide control solutions for all requirements. No matter, the voltage, frequency, current or application, there is a controller in the 'REOVIB' range which is suitable for you. Please see below for a small selection of our controllers:

| Controllers | Function |
|--|---|
| <p>REOVIB SMART</p>  | <p>REOVIB SMART phase-angle controllers</p> <p>This range of devices provide the main functions commonly required in vibratory feeding applications and represent a cost-effective option for the control of vibratory feeders – and with the addition of REO's customary high quality.</p> <p>The devices are available in protection classes from IP00 to IP 54 - the series REOVIB SMART provide cost-effective controllers for many applications.</p> |
| <p>REOVIB RTS</p>  | <p>REOVIB RTS Phase-angle controllers</p> <p>In addition to the main functions, the REOVIB RTS devices offer enhanced functionality, such as adjustable soft start and also further control functions, like the implementation of a level scanning system.</p> <p>The devices are available in protection classes from IP00 to IP54.</p> |
| <p>REOVIB MTS</p>  | <p>REOVIB MTS Programmable phase-angle controllers</p> <p>The series REOVIB MTS comprise 1-channel, 2-channel and 3-channel control units. These are phase angle-controllers with a triac as the power element.</p> <p>The vibration frequency of the conveyor devices can therefore be the same or twice the size of the power frequency of the input voltage. Connectors for all inputs and outputs allow for quick installation and facilitate the combination of several devices with one another or with external control systems. The devices use digital technology and are operated via an LED display or LCD display and keypad.</p> |
| <p>REOVIB MFS</p>  | <p>REOVIB MFS frequency converters for vibratory feeders</p> <p>The REOVIB MFS series for vibratory feeding, produce an output voltage and frequency to the vibratory feeder which is independent of the frequency of the connected power voltage.</p> <p>REO MFS is available as device in protection class IP 54 for the direct mounting onto a feeder system but also as a model in protection class IP 20 for housing within control cabinets.</p> <p>The devices use digital technology and are operated via an LED display (optional with LCD-Display) and buttons. All settings can be adjusted externally without the need for opening the case.</p> |

Please refer to our catalogue for controllers for vibratory feeders or www.reo.de for a wider selection.

Meters for vibratory feeders

The REOVIB range of measuring and monitoring equipment has been specially developed for use in vibratory conveyor technology. The range includes equipment designed for monitoring of the current and voltage values, measurement data for the design and development of vibratory feeders and performance monitoring of the conveyor during operation. Whatever the requirement, REOVIB measuring and monitoring devices can provide the necessary data.

REOVIB measurement unit 122



REOVIB 6050



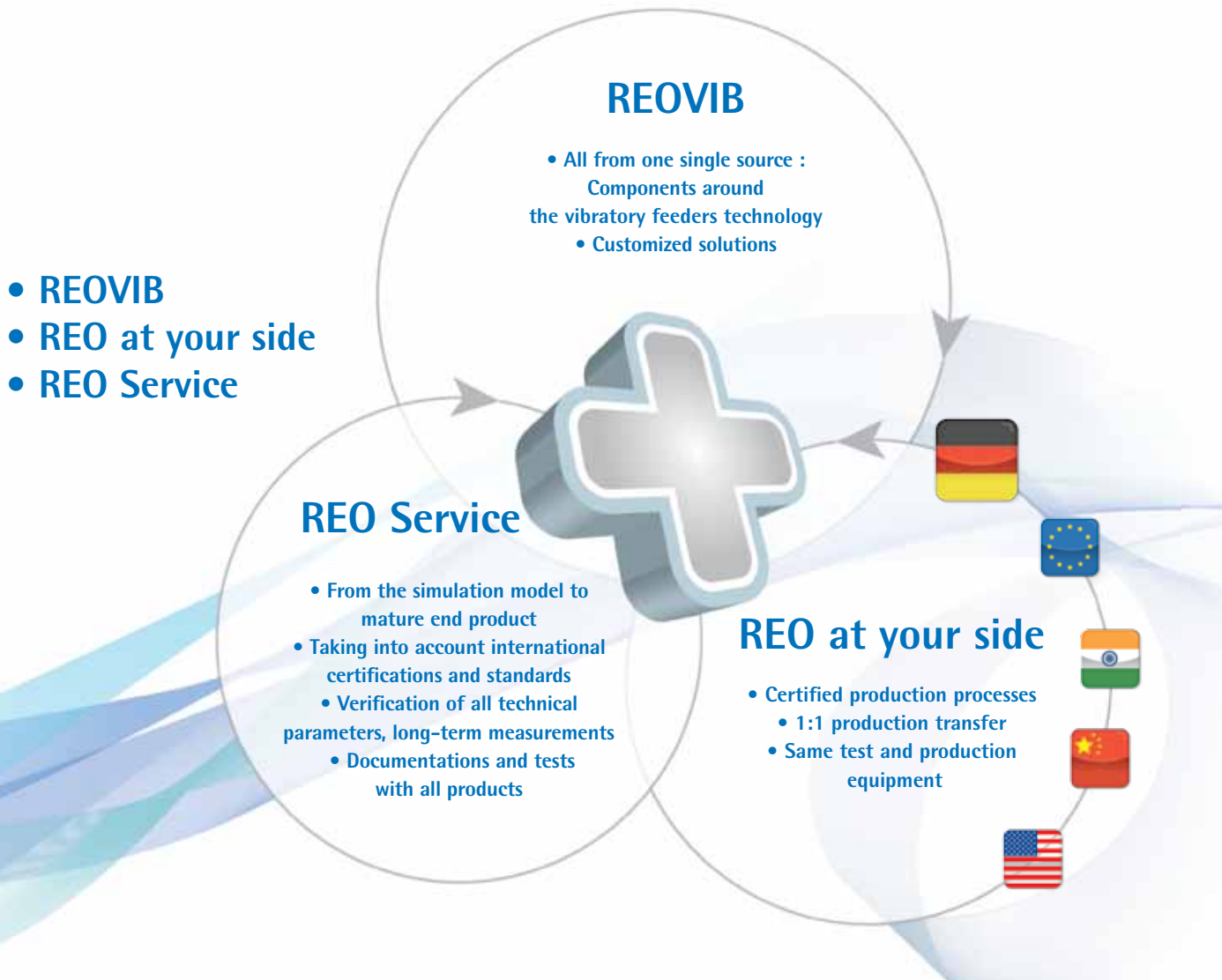
REOVIB 6100



REOVIB SWM 3000







Worldwide Sales Network

With a worldwide sales network and comprehensive product portfolio, REO can react rapidly to your wishes anywhere in the world - no matter what language you speak. Besides our wide selection of standard products, we can of course offer you tailor-made solutions, developed specially to meet your wishes. Our production facilities in China, India and the USA are equipped in exactly the same way as those in Germany, and designed to provide the same product at the same quality. Using the same software and with development and design in Germany we ensure that REO products are always up to the latest state of the art.

Wherever you are, even after the 1000th production run, a REO product always has the same quality.



REO AG

Brühler Straße 100 · D-42657 Solingen
Tel.: +49 (0)212 8804 0 · Fax: +49 (0)212 8804 188

E-Mail: info@reo.de
Internet: www.reo.de

■ Divisions:

REO Vibratory Feeding and Power Electronics Division

REO Vibratory Feeding and Power Electronics Division
Brühler Straße 100 · D-42657 Solingen
Tel.: +49 (0)212 8804 0 · Fax: +49 (0)212 8804 188
E-Mail: info@reo.de

REO Train Technologies Division

REO Train Technologies Division
Erasmusstraße 14 · D-10553 Berlin
Tel.: +49 (0)30 3670236 0 · Fax: +49 (0)30 3670236 10
E-Mail: zentrale.berlin@reo.de

REO Drives Division

REO Drives Division
Holzhausener Straße 52
D-16866 Kyritz
Tel.: +49 (0)33971 485 0 · Fax: +49 (0)33971 485 90
E-Mail: info@reo.de

REO Medical and Current Transformer Division

REO Medical and Current Transformer Division
Schuldholzinger Weg 7 · D-84347 Pfarrkirchen
Tel.: +49 (0)8561 9886 0 · Fax: +49 (0)8561 9886 40
E-Mail: info@reo.de

REO Test and PowerQuality Division

REO Test and PowerQuality Division
Brühler Straße 100 · D-42657 Solingen
Tel.: +49 (0)212 8804 0 · Fax: +49 (0)212 8804 188
E-Mail: info@reo.de

PRODUCTION + SALES:

■ China

REO Shanghai Inductive Components Co., Ltd
No. 536 ShangFeng Road · Pudong, 201201 Shanghai · China
Tel.: +86 (0)21 5858 0686 · Fax: +86 (0)21 5858 0289
E-Mail: info@reo.cn · Internet: www.reo.cn

■ India

REO GPD INDUCTIVE COMPONENTS PVT. LTD
2/202 Luna Road · Village Luna · Taluka Padra
Vadodara - 391440 · India
Tel.: +91 (2662) 221723, +91 (265) 2396148 · Fax: +91 (265) 2396971
E-Mail: info@reogpd.com · Internet: www.reo-ag.in

■ USA

REO-USA, Inc.
8450 E. 47th St · USA-Indianapolis, IN 46226
Tel.: +1 (317) 899 1395 · Fax: +1 (317) 899 1396
E-Mail: info@reo-usa.com · Internet: www.reo-usa.com

SALES:

■ France

REO VARIAC S.A.R.L.
ZAC Du Clos aux Pois 1 - 6/8 rue de la Closerie-LISSES· F-91048 Evry Cédex
Tel.: +33 (0)1 6911 1898 · Fax: +33 (0)1 6911 0918
E-Mail: reovariac@reo.fr · Internet: www.reo.fr

■ Great Britain

REO (UK) Ltd.
Units 2-4 Callow Hill Road · Craven Arms · Shropshire SY7 8NT · UK
Tel.: +44 (0)1588 673 411 · Fax: +44 (0)1588 672 718
E-Mail: main@reo.co.uk · Internet: www.reo.co.uk

■ Italy

REO ITALIA S.r.l.
Via Trepointi, 29 · I-25086 Rezzato (BS)
Tel.: +39 030 279 3883 · Fax: +39 030 279 0600
E-Mail: info@reoitalia.it · Internet: www.reoitalia.com

■ Poland

REO CROMA Sp.zo.o
ul. Pozaryskiego 28, bud 20 · PL-04-703 Warszawa
Tel.: +48 (0)22 812 3066 · Fax: +48 (0)22 815 6906
E-Mail: croma@croma.com.pl · Internet: www.croma.com.pl

■ Spain

REO ESPAÑA 2002 S.A.
C/Curt, 25-25 bis · 08340 Vilassar de Mar · Barcelona
Tel.: +34 937 509 994
E-Mail: info@reospain.com · Internet: www.reospain.com

■ Switzerland

REO ELEKTRONIK AG
Im Halbiacker 5a · CH-8352 Elsau
Tel.: +41 (0)52 363 2820 · Fax: +41 (0)52 363 1241
E-Mail: info@reo.ch · Internet: www.reo.ch

■ Turkey

REOTURKEY ELEKTRONIK San. ve Tic. Ltd. Şti.
Halil Rifatpasa Mah. · Darülcenze CD Perpa Tic Merkezi
B Blok Kat 11 No:1833 · TR-34384 Sisli – Istanbul
Tel.: +90 (0)212 2215 118 · Fax: +90 (0)212 2215 119
E-Mail: info@reo-turkey.com · Internet: www.reo-turkey.com