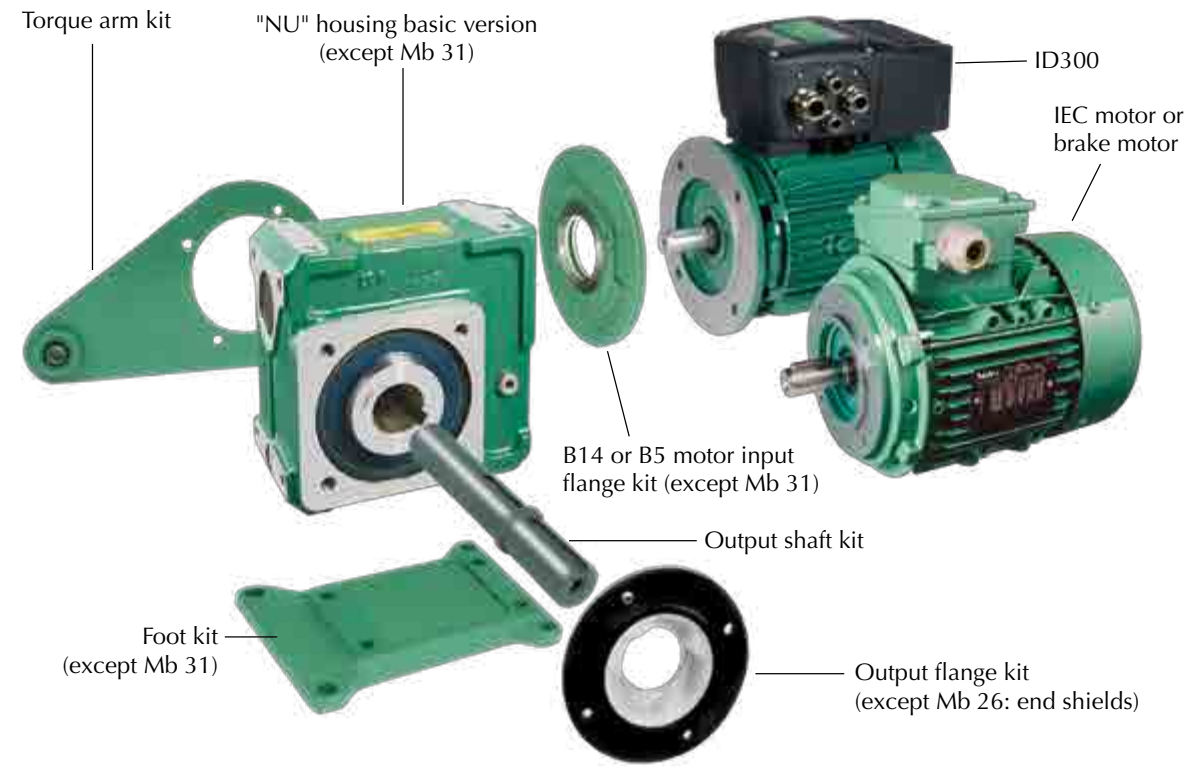


MULTIBLOC

Modular geared motor can be supplied in kit form for maximum adaptability with minimum stock...



Solutions designed and approved for all environments



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Nidec
All for dreams

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3625 en - 2017.11 / f



LEROY-SOMER™

Worm geared motor

Nidec
All for dreams

Multibloc



Available in 6 sizes up to 9 kW
13 reduction ratios, 1/5 to 1/100
(up to 2400 in combined gearbox)

Factory tested
Supplied ready to use

Deep groove or double row angular contact ball bearings (according to size)

Multiposition mounting on five faces as standard; foot, flange or torque arm as an option

Cast iron housing, very compact and rigid, integrated end shields (added-on end shields on Mb26)

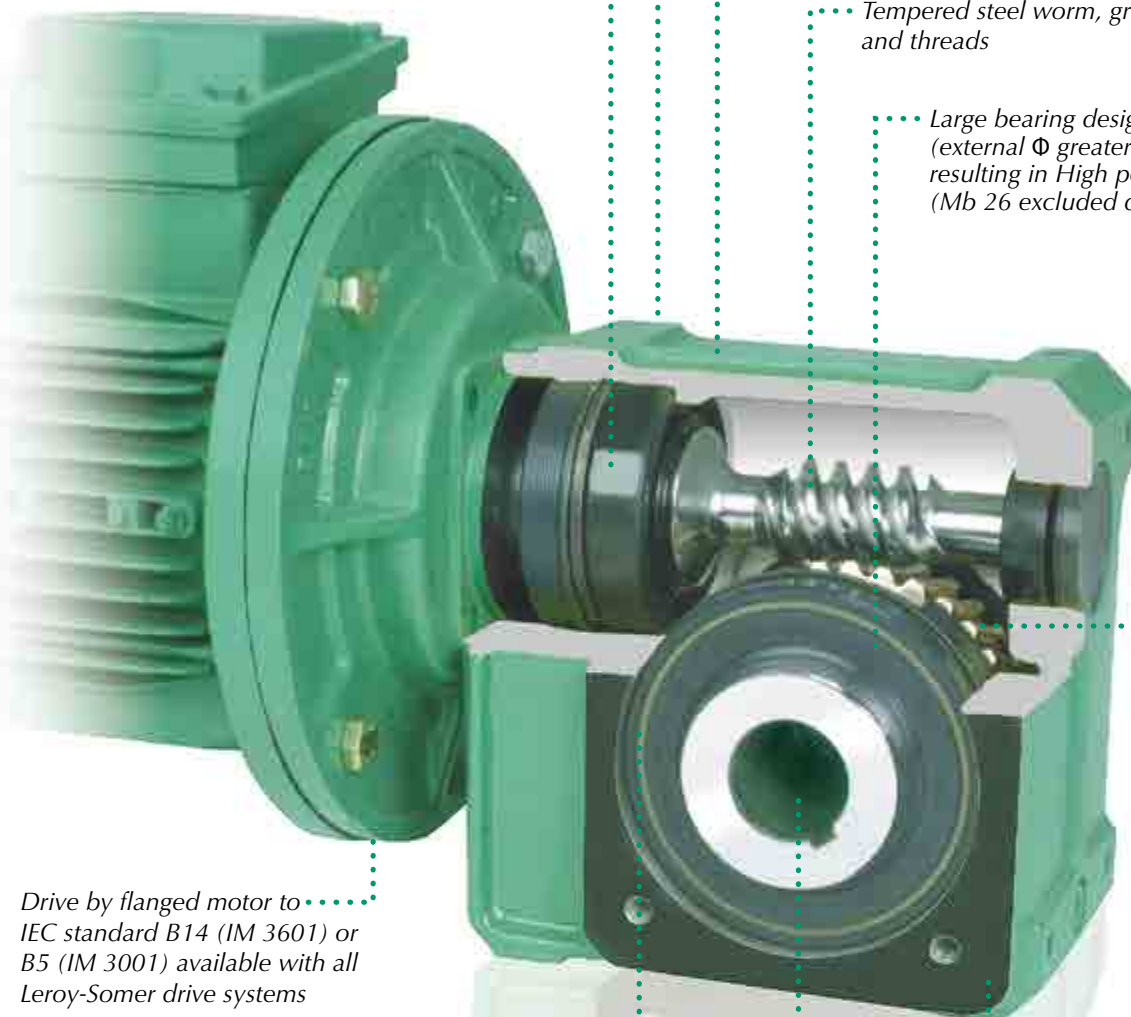
Tempered steel worm, ground sealing surfaces and threads

Large bearing design (external Φ greater than that of the wheel) resulting in High permissible radial loads (Mb 26 excluded due to bolt on endshield)

Die-cast phosphor bronze wheel inserted on steel hub (GS cast iron on Mb26)

Sealing tested in the factory
Long-lasting lubrication with synthetic oil

Through as standard



Drive by flanged motor to IEC standard B14 (IM 3601) or B5 (IM 3001) available with all Leroy-Somer drive systems

Dustproof lipseal on ground surface

Selection

Universal mounting MU
Input shaft mounting AP

Multibloc (Mb) gearbox: form NU, foot mounted NS, or flange mounted BS, BN, BD

IMfinity® induction motors: LS, LSES 4-pole, IP55, 50 Hz, class F

- multivoltage: 230V Δ / 380 V Y / 400 V Y / 415 V Y - 460 V Y or 400 V Δ

Moteurs asynchrones IMfinity® inductions brake motors FFB: LS, LSES 4-pole, IP55, 50 Hz, class F

- Brake torque : 3 up to 110 N.m

| P _n (kW) | MULTIBLOC Mb3101, Mb 2000 geared motors | | | | | | | | | | | | | | | |
|---------------------|--|-----------|-----------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| | 4p IMfinity® motors: 0,25 up to 9 kW IM B14 or IM B5 | | | | | | | | | | | | | | | |
| IE3 | 71 M | 71 M | 71 L | | 80 LG | | 90 SL | 90 LU | 100 L | 100 LR | 100 LG | 112 MU | 132 SM | 132 MU | 160 MR | |
| IE2 | 71 M | 71 M | 71 L | | 80 LG | | 90 SL | 90 L | 90 LU | 100 L | 100 LR | 112 MU | 132 SU | 132 M | 132 M | |
| la | | | | | | | | | | | | | | | | |
| 14,3 | | Mb 23 | Mb 24 | | | | | | | | | | | | | |
| 17,9 | | | | | | | | | | | | | | | | |
| 23,8 | | | | | | | | | | | | | | | | |
| 28,6 | | | | | | | | | | | | | | | | |
| 35,8 | | | | | | | | | | | | | | | | |
| 47,7 | | | | | | | | | | | | | | | | |
| 56,1 | | | | | | | | | | | | | | | | |
| 71,5 | | | | | | | | | | | | | | | | |
| 95,3 | | | | | | | | | | | | | | | | |
| 124 | | | | | | | | | | | | | | | | |
| 139 | | | | | | | | | | | | | | | | |
| 195 | | | | | | | | | | | | | | | | |
| 275 | | | | | | | | | | | | | | | | |
| P _n | 0,25 | 0,37 | 0,55 | 0,75 | 0,9 | 1,1 | 1,5 | 1,8 | 2,2 | 3 | 4 | 5,5 | 7,5 | 9 | | |
| Bake Motors | NIE FFB | 71 M FFB1 | 71 L FFB1 | 80 L FFB1 | 90 SL FFB2 | 90 LU FFB2 | 100 L FFB2 | 100L FFB3 | 112 MG FFB3 | 132 S FFB3 | 132 M FFB4 | 132 M FFB4 | 132 M FFB4 | 132 M FFB4 | 160 MR FFB4 | |
| | IE3 FFB | 71 M FFB1 | 71 L FFB1 | 80 LG FFB1 | 90 SL FFB2 | 90 LU FFB2 | 100 L FFB2 | 100 LG FFB3 | 112 MU FFB3 | 132 SM FFB4 | 132 MU FFB4 | 132 MU FFB4 | 132 MU FFB4 | 160 MR FFB4 | | |

Exact reductions

| | Reduction indices | | | | | | | | | | | | |
|---------|-------------------|----|----|----|----|----|------|------|------|------|------|------|-----|
| | 100 | 80 | 60 | 50 | 40 | 30 | 25,5 | 20 | 15 | 11,5 | 10,3 | 7,3 | 5,2 |
| Mb 2601 | 100 | 80 | 60 | 50 | 40 | 30 | 25,5 | 20,5 | 15,5 | 11,5 | 10,3 | 7,5 | |
| Mb 2501 | 100 | 80 | 60 | 50 | 40 | 30 | 25,5 | 20,5 | 15,5 | 11,5 | 10,3 | 7,25 | |
| Mb 2401 | 100 | 80 | 60 | 50 | 40 | 30 | 25,5 | 19,5 | 14,5 | 11,5 | 10,3 | 7,25 | |
| Mb 2301 | 100 | 80 | 60 | 50 | 40 | 30 | 25,5 | 20 | 15 | 11,5 | 10,3 | 7,5 | 5,2 |
| Mb 2201 | 100 | 80 | 60 | 50 | 40 | 30 | 25,5 | 20 | 15 | 11,5 | 10,3 | 7,33 | |
| Mb 3101 | 100 | 80 | 60 | 50 | 40 | 30 | 25 | 20 | 15 | 12,5 | 10 | 7,5 | |

Possible configurations

- Gearbox for IEC B5 (IM 3001) or B14 (IM 3601) flange mounted motor, or motor with AP input shaft
 - Geared motor with or without brake with 1 or 2 fixed speeds, configuration for motors of suitable series, combined gearbox for low speed
 - Variable speed geared motor
- Options**
- Torque arm
 - High speed shaft on gearbox



Servo gearbox for application requiring highly compact design and high dynamics



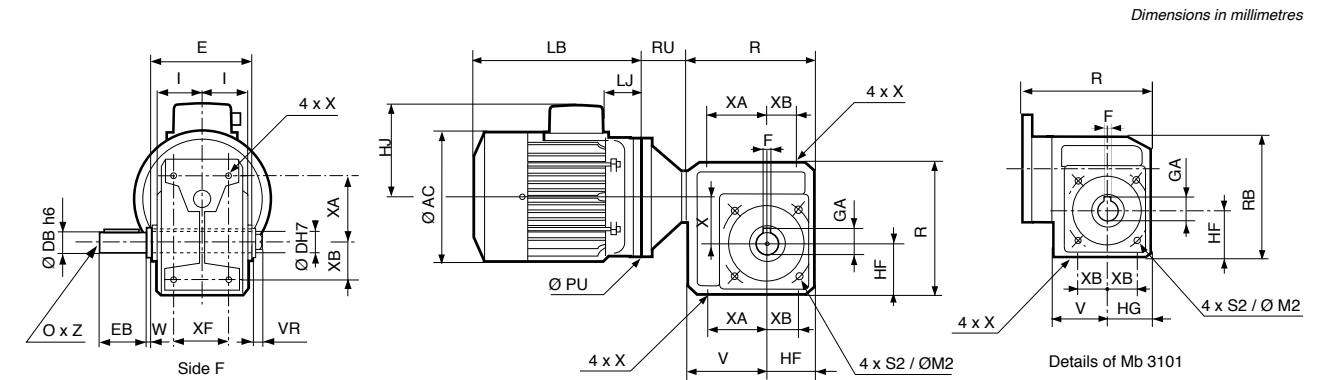
Drive system with ID300 integrated variable speed drive



Drive system with LSMV variable speed motor and centralised control with variable speed drive

Dimensions

Multibloc geared motors (Mb), MU universal mounting with IM 3601 (IMB14) or IM 3001 (IMB5) motor
NU standard form, H hollow shaft, HL, HR or HLR solid shaft, Mb 3101, Mb 2201 to Mb 2601



| Type | Gearboxes NU | | | | | | | | | | | | | Weight kg | | |
|----------------------|--------------|-----|----|------|-----|------|-----|-----|----------|------|-----|----------|----------------|-----------|-----|------|
| | D | E | F | GA | HF | I | M2 | R | S2 | V | x | X | XA | | XB | XF |
| Mb 2601 | 50 | 188 | 14 | 53,8 | 100 | 93,5 | -7 | 260 | -7 | 160 | 100 | M14 x 20 | 125 | 65 | 100 | 37 |
| Mb 2501 | 45 | 168 | 14 | 48,8 | 90 | 78 | 180 | 225 | M12 x 20 | 135 | 80 | M12 x 20 | 110 | 65 | 90 | 31 |
| Mb 2401 | 35 | 138 | 10 | 38,3 | 75 | 64 | 130 | 190 | M10 x 15 | 115 | 63 | M10 x 15 | 101 | 61 | 86 | 17,5 |
| Mb 2301 | 30 | 118 | 8 | 33,3 | 63 | 54 | 115 | 160 | M8 x 12 | 97 | 55 | M8 x 12 | 77 | 43 | 70 | 10,5 |
| Mb 2201 | 25 | 108 | 8 | 28,3 | 56 | 49 | 105 | 140 | M8 x 12 | 84 | 45 | M8 x 12 | 67 | 38 | 60 | 8 |
| Mb 3101 ² | 20 | 90 | 6 | 22,8 | 50 | 41 | 85 | 120 | M8 x 12 | 54,5 | 40 | M8 x 12 | - ² | 31,5 | 63 | 5 |

1. Option for Mb 26 BT : M2 = 165, S2 = 6 x M10 x 15. 2. See details of Mb 3101 : HG = 45 and RB = 127 (drilled on front face F (S3) on request), XA does not exist

| Type | Solid output shaft: HR, HL | | | | | | | Hollow output shaft: H | | | | | | |
|---------|----------------------------|---|------|-----|-----|----|------|------------------------|----|---|-----|-----|----|------|
| | VR | W | DBh6 | EB | EC | F | GA | O | Z | W | DH7 | E | F | GA |
| Mb 2601 | 16 | 5 | 50 | 100 | 105 | 14 | 53,5 | M16 | 36 | 5 | 50 | 188 | 14 | 53,8 |
| Mb 2501 | 16 | 5 | 45 | 90 | 95 | 14 | 48,5 | M16 | 36 | 5 | 45 | 168 | 14 | 48,8 |
| Mb 2401 | 12 | 5 | 35 | 70 | 75 | 10 | 38 | M12 | 28 | 5 | 35 | 138 | 10 | 38,3 |
| Mb 2301 | 10 | 5 | 30 | 60 | 65 | 8 | 33 | M10 | 22 | 5 | 30 | 118 | 8 | 33,3 |
| Mb 2201 | 10 | 5 | 25 | 50 | 55 | 8 | 28 | M10 | 22 | 5 | 25 | 108 | 8 | 28,3 |
| Mb 3101 | 6,5 | 5 | 20 | 40 | 45 | 6 | 22,5 | M6 | 16 | 5 | 20 | 90 | 6 | 22,8 |

| Frame size | Induction motors, IEC B14 (IM 3601) brake and gearboxes | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|-----|-----|------|-----------|----------------------|-----|-----|-----|------|-----------|------|-----|------|-----|------|-----|------|-----|------|-----|-----|-----|
| | IMfinity® 4-pole 3ph MUT induction motors | | | | | FFB MUT brake motors | | | | | Gearboxes | | | | | | | | | | | | |
| | AC | HJ | LB | LJ | Weight kg | Brake type | AC | HJ | LB | LJ | Weight kg | 3101 | | 2201 | | 2401 | | 2501 | | 2601 | | | |
| LS 71 L | 140 | 109 | 194 | 23,5 | 8,3 | FFB1 | 140 | 130 | 286 | 12 | 11,3 | - | 105 | 31 | 105 | 35 | 105 | 50 | 120 | 50 | 120 | - | - |
| LSES 80 LG | 189 | 135 | 247 | 26 | 14,1 | FFB1 | 189 | 151 | 389 | 13,5 | 17,1 | - | 105 | 33 | 120 | 36 | 120 | 50 | 120 | 50 | 120 | - | - |
| LSES 90 LU | 189 | 135 | 276 | 26 | 20,4 | FFB2 | 189 | 151 | 389 | 13,5 | 26,6 | - | - | 33 | 120 | 38 | 140 | 50 | 140 | 50 | 140 | - | - |
| LSES 100 LR | 200 | 140 | 309 | 27 | 25,8 | FFB2 | 200 | 156 | 437 | 13,5 | 32 | - | - | - | - | 35 | 140 | 50 | 160 | 50 | 160 | - | - |
| LSES 112 MU | 235 | 149 | 332 | 36 | 37 | FFB3 | 235 | 165 | 448 | 23,5 | 43,6 | - | - | - | - | 38 | 140 | 50 | 160 | 50 | 160 | - | - |
| LSES 132 MU | 272 | 190 | 412 | 17 | 62,6 | FFB4 | 272 | 186 | 596 | 25,5 | 77,1 | - | - | - | - | - | 50 | 160 | 50 | 160 | 51 | 250 | |
| LSES 160 MR | 272 | 190 | 495 | 59 | 77,8 | FFB4 | 272 | 186 | 671 | 67,5 | 92,3 | - | - | - | - | - | - | 50 | 160 | 50 | 160 | 50 | 160 |

Values given for information

| Frame size | Induction motors, IEC B5 (IM 3001) brake and gearboxes | | | | | | | | | | | | | | | | | | | | |
|-------------|--|-----|-----|------|-----------|----------------------|-----|-----|-----|------|-----------|------|-----|------|-----|------|-----|------|-----|------|-----|
| | IMfinity® 4-pole 3ph MUT induction motors | | | | | FFB MUT brake motors | | | | | Gearboxes | | | | | | | | | | |
| | AC | HJ | LB | LJ | Weight kg | Brake type | AC | HJ | LB | LJ | Weight kg | 2201 | | 2301 | | 2401 | | 2501 | | 2601 | |
| LS 71 L | 140 | 109 | 194 | 23,5 | 8,3 | FFB1 | 140 | 130 | 286 | 12 | 11,3 | 24 | 160 | 24 | 160 | 50 | 200 | 50 | 200 | - | - |
| LSES 80 LG | 189 | 135 | 267 | 26 | 14,1 | FFB1 | 189 | 151 | 409 | 33,5 | 17,1 | 31 | 200 | 31 | 200 | 50 | 200 | 50 | 200 | 50 | 200 |
| LSES 90 LU | 189 | 135 | 296 | 26 | 20,4 | FFB2 | 189 | 151 | 409 | 33,5 | 26,6 | 31 | 200 | 31 | 200 | 50 | 200 | 50 | 200 | 50 | 200 |
| LSES 100 LG | 235 | 149 | 352 | 36 | 37 | FFB3 | 235 | 165 | 413 | 23,5 | 37,6 | - | - | 31 | 200 | 50 | 250 | 50 | 250 | 51 | 250 |
| LSES 112 MU | 235 | 149 | 336 | 36 | 37 | FFB3 | 235 | 165 | 448 | 23,5 | 43,6 | - | - | 31 | 200 | 50 | 250 | 50 | 250 | 51 | 250 |
| LSES 132 MU | 272 | 190 | 452 | 57 | 62,6 | FFB4 | 272 | 186 | 636 | 65,5 | 77,1 | - | - | - | - | 50 | 250 | 50 | 250 | - | - |

Values given for information