MULTIBLOC / LS, LSES

Geared motors with worm & wheel, right angle output

IE2 drive systems
Variable speed and fixed speed
Power 0.25 to 9 kW
Torque 20 to 1500 Nm

LEROY-SOMER™

Nidec
All for dreams

Contents

General information

Multibloc geared motors with worm and wheel gears are used to adapt the speed of the electric motor to that of the driven machine.
Their size is therefore determined by the motor power (P) expressed in kilowatts (kW) and the output rotation speed of the gear box (n_S) in revolutions per minute (min^{-1}).
The main characteristic of the speed reducers is the rated output torque (Mn_S) expressed in Newton-metres (N.m) :

$$M_{nS} = \frac{P \times 9550}{n_S} \times \text{efficiency}$$

A range of six sizes: 31, 22, 23, 24, 25, 26.
Rated output torque: from 20 N.m to 1500 N.m.
Power rating: from 0.18 to 9 kW.
Reduction ratios: from 5.2 to 100.
Efficiency: 55 % to 88 %.
Silent operation.

Construction

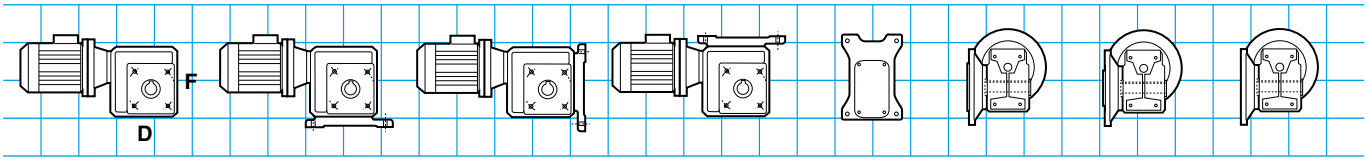
Description of Multibloc (Mb) gearboxes

Component	Materials	Remarks
Housing	Cast iron	- use of FGL cast iron (flake graphite: 150 MPa on breaking -Mb 31, 22, 23- and tensile strength 200 MPa -Mb 24, 25, 26-) single component perlite to ensure the complete sealing of the unit - monobloc with reinforced internal ribbing to absorb vibrations and noise and to increase rigidity - with **NU** housing, it becomes general by the adaptation of: • **R** torque arm kit, • **S** baseplate (Mb 31 excepted), • **BS**, **BD** or **BN** flanges. They are compact and meet industrial application related requirements.
Wheel Worm	Bronze Steel	- moulded around steel or cast iron inserts, blocked with respect to the worm, supported by two large diameter bearings without intermediate shields (excepting Mb 26) - cut on whirl lathe, tempered and ground
Shafts	Steel	- grinding of the sealing surfaces - hollow cylindrical or output with key in accordance with ISO R773 - diameter tolerance h6 for output shaft and H7 for hollow shaft - tapped holes at output shaft end in accordance with DIN 332 form DR for mounting connecting equipment
Seals	Nitrile	- anti-dust lipseals according to DIN 3760 form AS - ground sealing surfaces
End shields	Cast iron	- on size 26, reinforced by large ribs, ensuring ruggedness of the gearbox under heavy loads
Lubrication	Oil	- in accordance with ISO 6743 / 6 - delivered with the quantity of oil corresponding to a multi-position operation, it is fitted with drain, level and vent plugs (excepting Mb 31)
Mounting		AP : input shaft gearbox (excepting Mb 31) MU (FT or FF) : geared motor with IEC motor, with universal mounting
Standard motor		LS, LSES: multi-voltage 230/400 VY - 400 VΔ - composite material (80 to 100) pressed steel (≥ 112) ventilation cover, on request fitted with a drip cover for operation in vertical position (shaft facing down) - LS: metal terminal box fitted with cable gland - LSES: terminal box made of composite material (80 to 112) aluminium alloy (≥ 132) equipped with threaded plugs (without cable glands) - IP 55 standard protection
Brake motors		FCR: failsafe brake asynchronous motor,ranging from 0.18 to 9 kW, IP 55 protection
Finish	Paint	Shade: RAL 6000 (green), system I (1 couche polyurethane vinyl layer of 25/30 µm)

Mounting - Operating positions

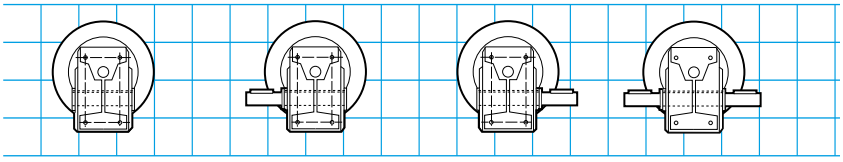
Standard position: gearbox seen from side F, motor to the rear, side D facing the ground.

1 - Mounting

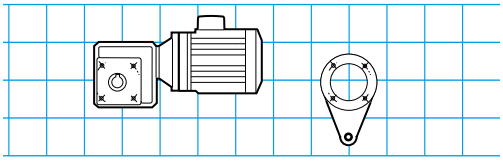


NU **NSD** **NSF** **NSU** **NSK** **BSL** **BDL** **BNL**

2 - Output shaft



H **H L** **H R** **H L R**

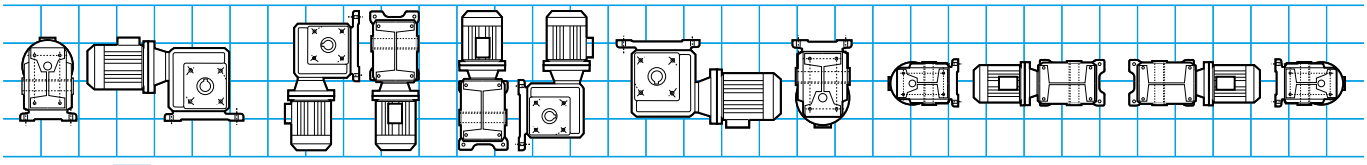


RK

3 - Option

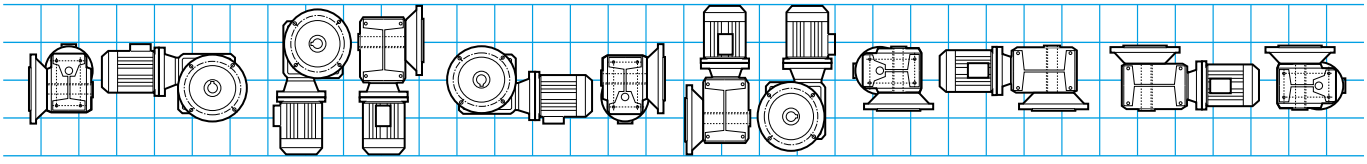
4 - Position

NU, NS, R mounting



B3 **B6** **B7** **B8** **V5** **V6**

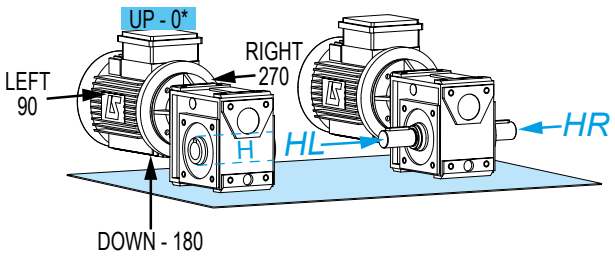
BS, BN, BD mounting



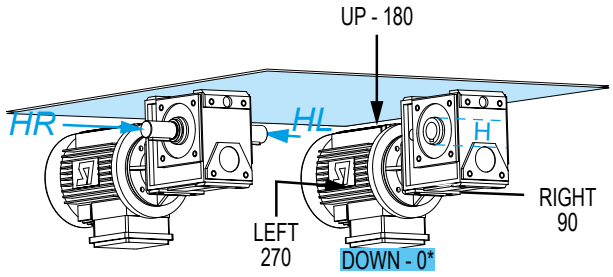
B5 **B52** **B53** **B54** **V1** **V3**

Mb NU, NS, R operating positions

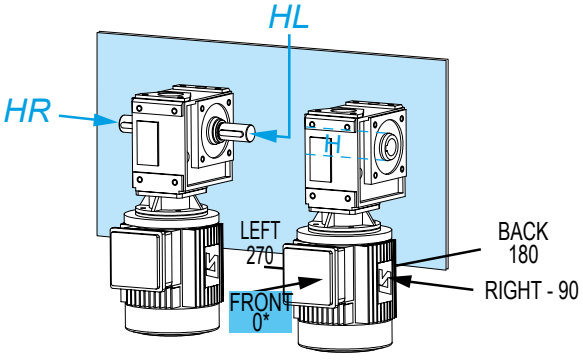
The absolute orientation of the connection (TB : Up, Down, Right, Left, Front, Back) is related to the chosen operating position.
The relative orientation (0-90-180-270, in the trigonometric direction), a consequence of the absolute position, is related to the base of the gearbox (real or imaginary) for an observer, facing the gearbox.



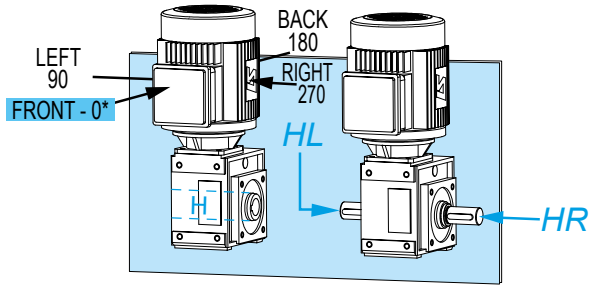
B3



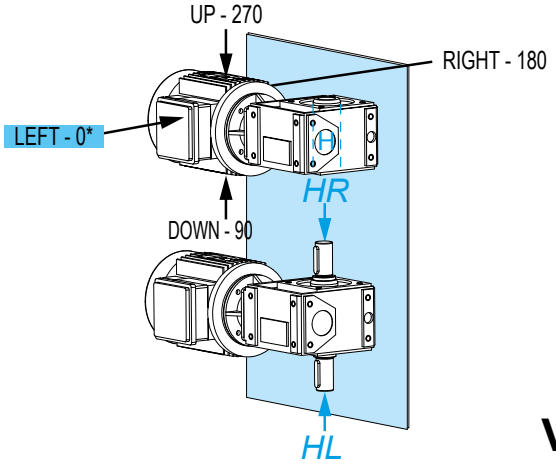
B8



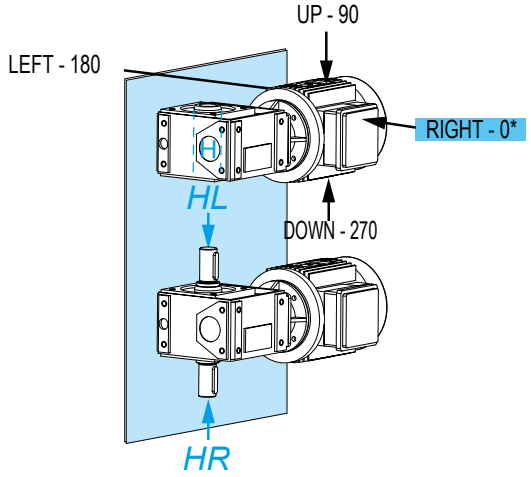
B6



B7



V5



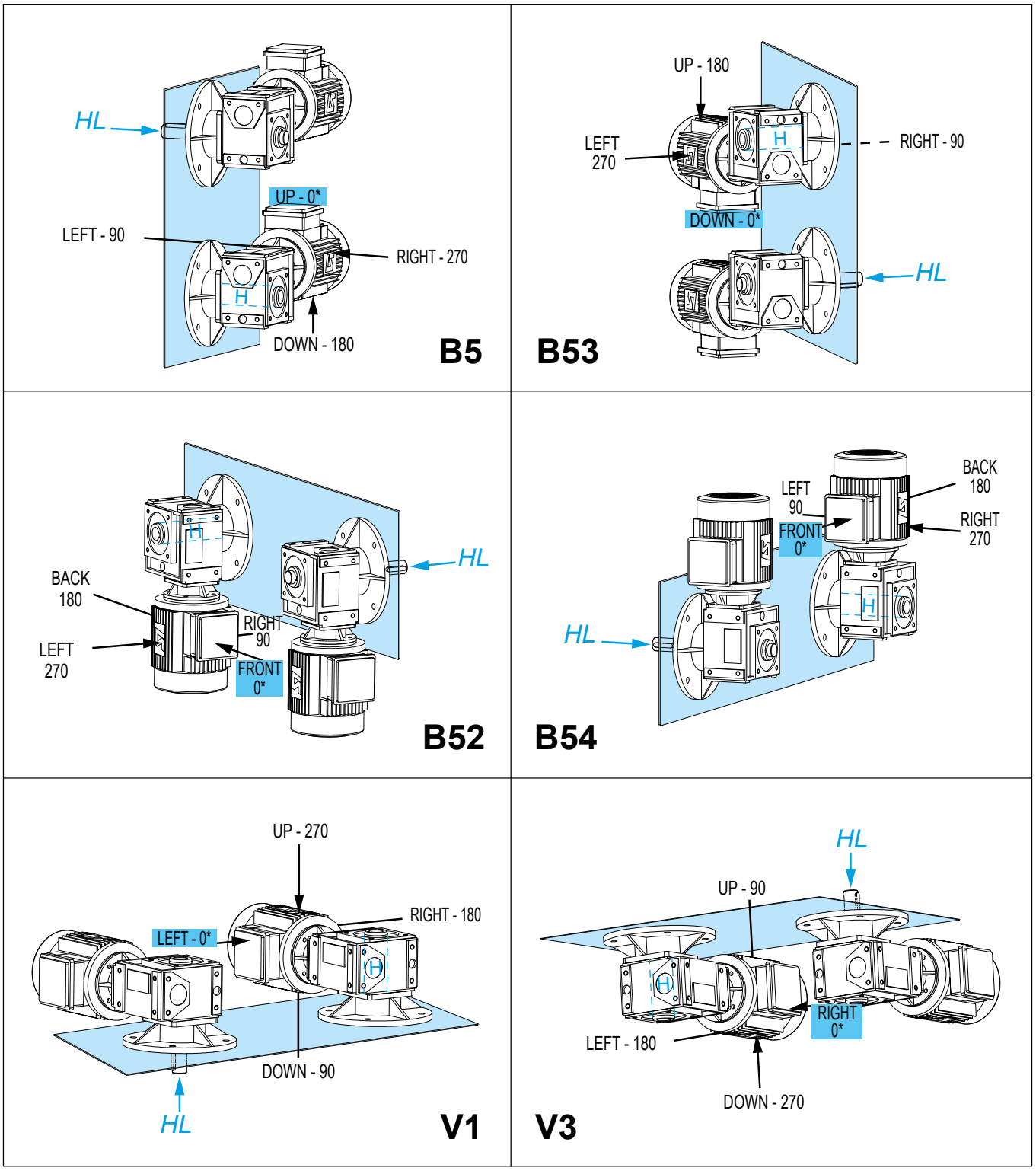
V6

**** Std terminal box***

*Output shaft on left **HL**, right **HR**, hollow **H**.*

Mb BSL, BDL, BNL operating positions

The absolute orientation of the connection (TB : Up, Down, Right, Left, Front, Back) is related to the chosen operating position.
The relative orientation (0-90-180-270, in the trigonometric direction), a consequence of the absolute position, is related to the base of the gearbox (real or imaginary) for an observer, facing the gearbox.

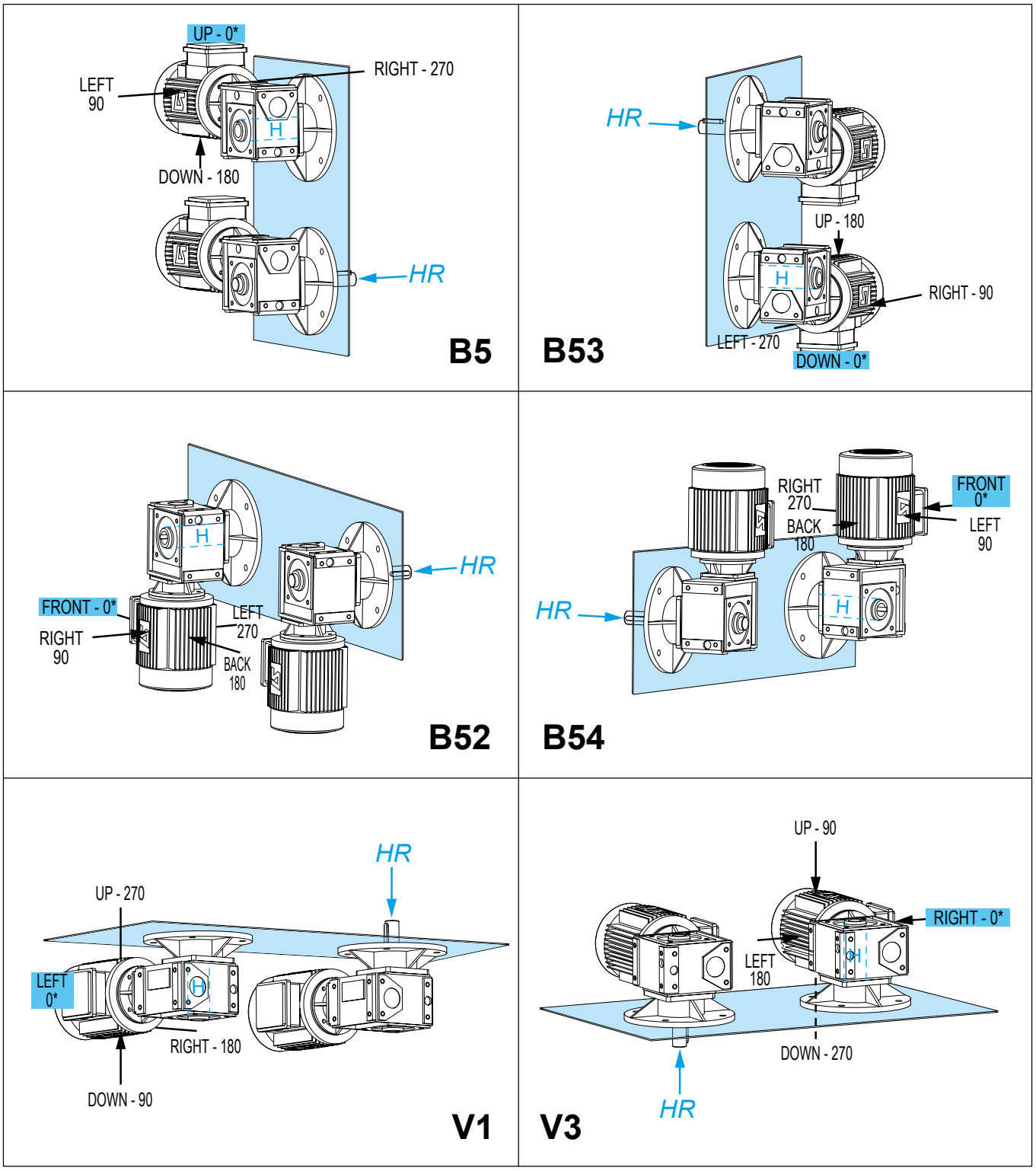


Std terminal box

*Output shaft on left **HL**, right **HR**, hollow **H**.*

Mb BSR, BDR, BNR operating positions

The absolute orientation of the connection (TB : Up, Down, Right, Left, Front, Back) is related to the chosen operating position.
The relative orientation (0-90-180-270, in the trigonometric direction), a consequence of the absolute position, is related to the base of the gearbox (real or imaginary) for an observer, facing the gearbox.



Std terminal box

*Output shaft on left **HL**, right **HR**, hollow **H**.*

Selection

The selection of a gearbox or of a geared motor should take account of the application. Some of these applications are listed in the indicative “AGMA” load classification.

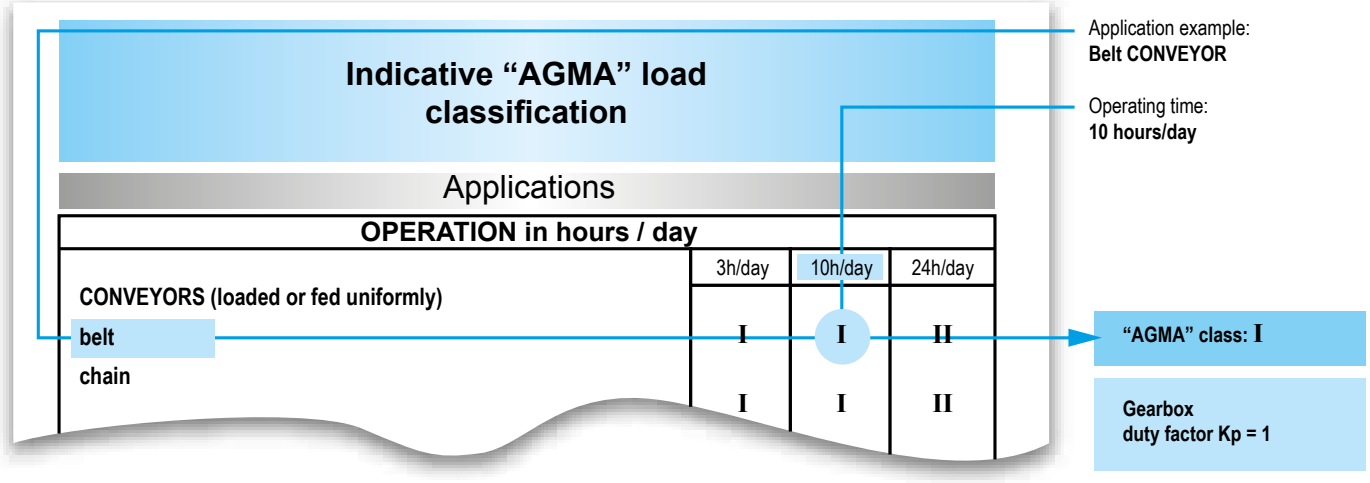
The opposite table summarises the relationship between the “AGMA” class and the gearbox duty factor K_p.

“AGMA” class	Gearbox duty factor K_p
I	1
II	1.4
III	2

NB: In the case of worm and wheel gearboxes such as Multibloc, the operating factor must be taken into account, that is the operating time at full load in relation to the total daily operating time of the gearbox.
In this catalogue, selection is made for an operating factor of 50 %.
For an operating factor of 100 %, class **I** becomes class **II**, and class **II** becomes class **III**. (Kp multiplied by 1.4)

1st case – Your application is listed

Follow the indicative “AGMA” load classification table, page 9 of this catalogue. ▼



2nd case – Your application is not listed

The “AGMA” selection class is defined by the daily operating time and by the application operating type, according to the table below ▼

Type of application	Daily operating time	“AGMA” class
Shock-free, few starts	10 hours/day	I
Damped shocks	10 hours/day	II
Shock-free, few starts	24 hours/day	
Violent shocks, many starts	10 hours/day	III
Damped shocks	24 hours/day	

List of applications

OPERATION in hours/day	3 h/day	10 h/day	24 h/day
COOLING TOWERS	-	-	-
AGITATORS			
liquids with variable density	II	II	II
liquids and solids	II	II	II
pure liquids	I	I	II
semi-liquids, variable density	II	II	II*
FOOD AND BEVERAGE INDUSTRY			
cereal cookers	I	I	II
beet choppers	II	II	II
meat choppers	II	II	II
dough mixers	I	II	II
extruding machines	I	II	III
FEEDING (attachment)			
reciprocating	III	III	III*
disks	I	I	II
lattice	I	II	II
belt	I	II	II
screw	I	II	II
TRANSMISSION SHAFT			
loads with moderate shocks	I	II	II
loads with severe shocks	III	III	III*
constant loads	I	I	II
CLAY (industry)			
brick machines	III	III	III*
processing machines	II	II	II
mixers	II	II	II
brick presses	III	III	III*
TIPPERS	III	III	
TIMBER (industry)			
supplying:			
saws in series	III	III	III*
shape-cutting machines	II	II	III
planers	II	II	III
cutting	II	II	III
chains	II	II	III
turntable control	I	II	III
main conveyors	I	II	III
ball conveyors	III	III	III*
circular feed conveyors	I	II	III
burner conveyors	I	II	III
waste conveyors	I	II	II
plank conveyors	III	III	III*
transfer conveyors	I	II	III
devices:			
for planer inclination	I	II	III
for ball turning	III	III	III*
barking machine, feeder	II	II	III
main drive system barking machine	III	III	III*
roller drive system	III	III	III*
haulage of balls:			
inclined	III	III	III*
well	III	III	III*
cross-cut saws:			
chain	II	II	III
reciprocating	II	II	III
sorting tables	I	II	III
ball support plates	III	III	III*
barking drums	III	III	III*
peeling tower	-	-	-
transfer:			
on bogies	I	II	III
chain	I	II	III
BREWERIES, DISTILLERIES			
boilers, continuous duty			II
cookers, continuous duty			II
brewing vats, continuous duty			II
bottling machines	I	I	II
scaling hoppers:			
frequent starts	II	II	III
GRINDERS			
minerals	III	III	III*
stones	III	III	III*
HAMMER MILLS	III	III	III*
ROTARY GRINDERS			
rod mills	III	III	III*
ball mills	III	III	III*
pebble mills	III	III	III*
RUBBER (industry)			
air chamber extruder	II	II	II

OPERATION in hours/day	3 h/day	10 h/day	24 h/day
grinders (2 or more)	II	II	II*
calenders	II	II	II*
extruding machines	II	II	III
sheet forming machines	I	II	II*
mixers	III	III	III*
CLARIFIERS	I	I	II
SORTERS, GRADERS	I	II	II
COMPRESSORS			
lobe	I	II	II
centrifugal	I	II	II
CONVEYORS (loaded or fed uniformly)			
belt	I	I	II
chain	I	I	II
apron	I	I	II
bucket	I	I	II
scraper	I	I	II
screw	I	I	II
assembly	I	I	II
furnace	I	I	II
CONVEYORS (loaded or fed non-uniformly)			
heavy duty:			
belt	II	II	II
chain	II	II	II
apron	II	II	II
bucket	II	II	II
scraper	II	II	II
roller	I	I	II
screw	II	II	II
reciprocating	III	III	III*
assembly	II	II	II
furnace	II	II	II
vibratory	III	III	III*
removal	I	I	-
CANE KNIVES	II	II	III
SIEVES			
rotary	I	II	III
stone washer with water circulation	I	I	II
DREDGERS			
shaker control	III	III	III*
cutting head control	III	III	III*
sieve control	III	III	III*
conveyors	I	II	II
pumps	I	II	II
cable winding drums	I	II	-
handling winches	II	II	-
service winches	II	II	-
CONTROL (vehicle)	II	II	II
ELEVATORS			
centrifugal unloading	I	I	II
gravity unloading	I	I	II
escalators	I	II	III
buckets:			
continuous load	I	I	II
heavy load	II	II	II
uniform load	I	I	II
hoist for building materials	III	III	-
WINDING MACHINES	–	–	–
FILTERS	I	II	III
FURNACES			
dryers, coolers	I	II	II
tumbling barrels	III	III	III*
CRANES AND LIFTING			
moving truck	-	-	-
moving bridge	-	-	-
bucket winches	-	-	-
hoisting gear	-	-	-
WINDLASSES, CAPSTANS	II	II	II*
PRINTING (presses)	I	I	II
PACKAGING MACHINES			
stackers	II	III	III
wrapping machines	I	I	II
WASHING MACHINES			
drum	II	II	II
reversible	II	II	II
MACHINE TOOLS			
main drive system	I	II	II
auxiliary drive system	I	I	II
punching machines (geared)	III	III	III*
flat planers	III	III	III*

OPERATION in hours/day	3 h/day	10 h/day	24 h/day
bending rollers	II	II	II
nut tappers	II	III	III*
shears	III	III	III
MIXERS			
constant density	I	I	II
variable density	I	II	II
cement, continuous duty	I	II	II
cement, intermittent duty	I	I	-
METALLURGY (industry)			
drawing frames, carriage	III	III	III*
drawing frames, main control	III	III	III*
table conveyor:			
single direction of operation	I	II	III
reverse operation	III	III	III
wire winders	I	II	II
sheet metal winders	I	II	II
spreading roller drive	III	III	III*
splitting lines	II	II	III
wire drawing mills, flatteners	II	II	III
shape-cutting machines	III	III	III*
separating rollers	-	-	-
drying rollers	-	-	-
PAPER (industry)			
aerators	-	-	-
agitators, mixers	I	II	II
wind up turrets	I	I	II
calenders	I	II	II*
conveyors	I	II	II
ball conveyors	III*	III*	III*
cutters, plating machines	I	II	II
bleaching vats	I	II	II
cylinders	I	II	II
felt stitching machines	III*	III*	III*
washers, thickeners	I	II	II*
barking machines (mechanical)	III	III	III
pulp machines, uncoilers	I	II	II
pulp hammers	II	II	II*
presses	I	II*	II*
suction rollers	I	II	II*
dryers	I	II	II*
wood pulp storing machines	I	II	II
barking drums	III	III	III*
felt tension devices	I	II	II
PUMPS			
reciprocating:			
multi-cylinder single-acting	I	II	II
centrifugal	I	I	II
dosing	I	II	II*
rotary:			
geared	I	I	II
lobed, vaned	I	I	II
SEWAGE PLANTS			
surface aerators	III	III	III
duck type aerators	III	III	III
bar screens	I	I	II
screw pumps	I	II	III
TEXTILES			
reelers (except drum)	I	II	II
calenders	I	II	II
padding calenders	I	II	II
carding machines, spinners	I	II	II*
alignment controls	-	-	-
glueing machines	I	II	II
drying machines, mangles	II	II	II
napping mills	I	II	II
washing machines	I	II	II
soap milling machines	I	II	II
dyeing machines	I	II	II
knitting machines	-	-	-
cloth finishing machines:			
washers, spreading machines	I	II	II
dryers, calenders	I	II	II
thread preparation machines:			
weaving looms	II	III	III
spinning machines	I	I	II
dryers	I	II	II
loading hoppers	II	II	II
VENTILATION	-	-	-

** : These classes assume minimum and normal conditions. To take account of variations which may affect the load conditions, it is recommended that applications are carefully researched before making a selection.*

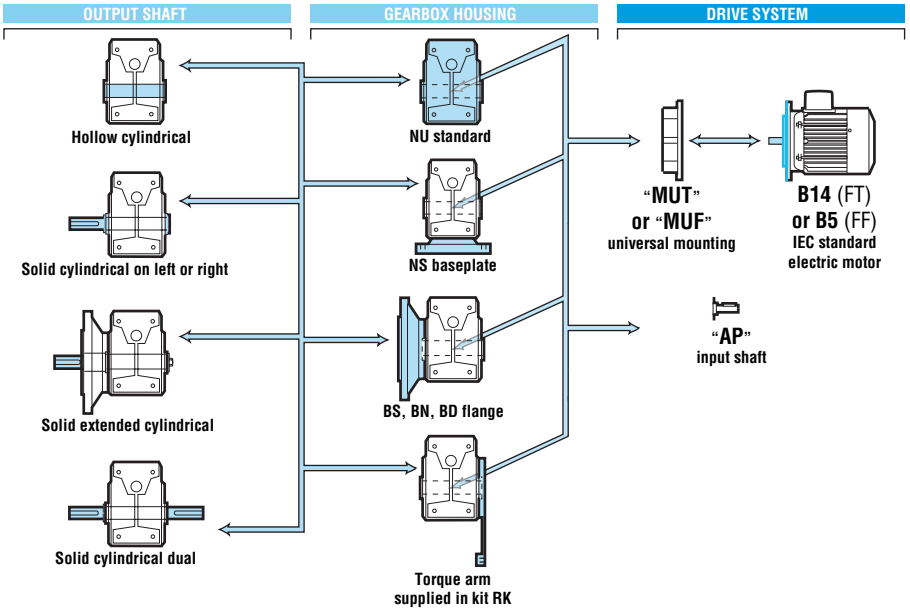
- : Consult Leroy-Somer

Adaptation possibilities

Leroy-Somer offers several drives for its gearboxes which meet a diverse range of needs. They are described below and offered in this catalogue in the section relating to gearboxes.
For other drives, consult Leroy-Somer technical specialists who will be pleased to assist you.

Multibloc Mb gearboxes can be used in conjunction with the following drives:

- **3-phase asynchronous motors:**
  - LS motor from 0,18 to 9 kW
  - LSES motor from 0,75 to 9 kW
  - LS motor FCR brake from 0,18 to 9 kW
  - LSES motor FCR brake from 0,75 to 9 kW



Designation / Coding

Mb	2301	20	NS	D	H	B3	MUT	4P	LSES 90 S	1.1 kW LS2/IE2	230/400 V 50 Hz	UG
Gearbox type	Size	Exact reduction	Mounting type	Mounting position	Output shaft definition	Operating position	Input type	No. of poles	Series, frame size, manufacturer index	Motor power, generation code and η classe	Voltage and mains frequency	Use

Codification example:

Multibloc Mb 2301 - 1.1 kW, 72 min^{-1}, class II

Designation:	**Code**
Mb 2301 - 20 NS D H B3 MUT 4P LSES 90 S 1,1 kW LS2/IE2 230/400V 50 Hz UG	4749993

Conditions

Mb : NU, NS, BS, BD, BN, RK
4 pole - **LS** : IP55 - 50 Hz - Cl. F - 400 VY - from 0,25 to 0,55 kW - **LSES** : IP55 - 50 Hz - Cl. F - 400 VY, 400VΔ from 0,75 to 9 kW LS2/IE2 - U.G.
8 pole - **LS** : IP55 - 50 Hz - Cl. F - 400 VY - from 0,18 to 3 kW - U.G.
LS FCR brake : IP55 - 50 Hz - Cl. F - 400 V, LS from 0,18 to 9 kW - **LSES FCR brake** : from 0,75 to 9 kW - U.G.

Maximum quantity

Input MUT (b14) MUF (B5)		Mb 3101	Mb 2201	Mb 2301	Mb 2401	Mb 2501	Mb 2601
AP	-						
LS	8p : 0,18 - 2,2 kW	-	5	5	5	5	2
	4p : 0,25 - 0,55[1] kW	5	5	5	5	-	-
LSES	4p : 0,75 - 9 kW	5	5	5	5	5	2
LS FCR	8p : 0,18 - 2,2 kW	-					
	4p : 0,25 - 4 kW	5	5	5	5	5	2
	4p : 5,5 - 9 kW[2]	-	-	-			2 [2]
LSES FCR	4p : 0,75 - 9 kW						

1. 0,55 kW for LS 71 except Mb 24 with LS 80

2. MUT (B14) only

Mechanical options and pages of dimensions corresponding to mounting and hollow shaft H

		Mb forms					
		Baseplate	Flanges mounted			Torque arm	Input shaft
Type	NU	NS D/F/U	BSL / BSR	BDL / BDR	BNL / BNR	BTLR	RK	AP
Mb 3101	21				20-21		44	
Mb 2201	23	22	23	22	22		44	22
Mb 2301	25	24	25	24	24		44	24
Mb 2401	27	26	27	26	26		44	26
Mb 2501	29	28	29	28	28		44	28
Mb 2601	31	30	31	30	30	31		30

Mechanical options and pages of dimensions corresponding to mounting and output shaft HL (left) HR (right)

		Mb forms				
		Baseplate	Flanges mounted			Input shaft
Type	NU	NS D/F/U	BSL / BSR	BDL / BDR	BNL / BNR	AP
Mb 3101	33				32-33	
Mb 2201	35	34	35	34	34	34
Mb 2301	37	36	37	36	36	36
Mb 2401	39	38	39	38	38	38
Mb 2501	41	40	41	40	40	40
Mb 2601	43	42	43	42	42	42

Options

Input		Electrical options			Mechanical options		Brake options			
	4p / MU	230/400V	400V Δ	PTO/CTP	Drip cover	Steel cover	DLRA	Different Mf	TRR	J01
LS	0,18 - 0,55 kW		-			-	-	-	-	-
LSES	0,75 - 0,9 kW		-				-	-	-	-
	1,1 - 3 kW						-	-	-	-
	4 - 9 kW					-	-	-	-	-
LS FCR	0,25 - 3 kW					-				
	4 - 5,5 kW					-				
	7,5 - 9 kW[1]					-				-
LSES FCR	0,75 - 9 kW[1]					-				

1. MUT (B14) only for Mb 26

DG	<	2 WD	<	5 WD	<	10 WD	<	15 WD	<	To be agreed

DG : Availability ; n WD : Working Days

AP Selection

Mb "AP" - 1430 min^{-1} - Kp = 1*

Rated capacities

n_S (min^{-1})	*i*	MULTIBLOC											
		3101**	**2201**		**2301**		**2401**		**2501**		**2601**	
14.3	100		100	0.51	100	0.51	100	0.52	100	0.55	100	0.57
			0.3	102	**0.5**	170	**0.71**	247	**1.24**	455	**2.21**	841
17.9	80		80	0.55	80	0.55	80	0.57	80	0.6	80	0.62
			0.37	109	**0.61**	180	**0.87**	265	**1.62**	521	**2.87**	950
23.8	60		60	0.6	60	0.59	60	0.63	60	0.66	60	0.68
			0.41	99	**0.7**	164	**1.01**	256	**1.84**	486	**3.32**	905
28.6	50		50	0.61	50	0.64	50	0.66	50	0.69	50	0.72
			0.51	104	**0.84**	180	**1.2**	265	**2.18**	502	**3.95**	950
35.8	40		40	0.65	40	0.68	40	0.7	40	0.72	40	0.75
			0.6	104	**1.02**	186	**1.47**	275	**2.69**	518	**4.89**	980
47.7	30		30	0.71	30	0.7	30	0.74	30	0.76	30	0.8
			0.75	107	**1.19**	167	**1.76**	260	**3.38**	515	**5.2**	834
57.2	25.5		25.5	0.75	25.5	0.76	25.5	0.78	25.5	0.8	25.5	0.82
			0.77	99	**1.28**	166	**1.86**	247	**3.51**	478	**6.55**	915
71.5	20		20	0.79	20	0.79	19.5	0.8	20.5	0.82	20.5	0.83
			1.08	114	**1.65**	174	**2.53**	263	**4.51**	506	**8.29**	942
95.3	15		15	0.81	15	0.81	14.5	0.83	15.5	0.84	15.5	0.85
			1.34	109	**1.87**	152	**3.08**	247	**5.66**	492	**10.71**	942
124	11.5		11.5	0.84	11.5	0.84						
			1.71	110	**2.77**	179						
139	10.3		10.33	0.84	10.33	0.85	10.33	0.86	10.33	0.87	10.33	0.87
			1.75	102	**2.83**	166	**4.29**	255	**8.51**	511	**15.15**	909
196	7.3		7.33	0.86	7.5	0.88	7.25	0.88	7.25	0.88	7.5	0.88
			2.31	97	**3.8**	167	**5.5**	235	**11.18**	476	**18.62**	821
286	5.2				5.2	0.88						
					5.29	162						

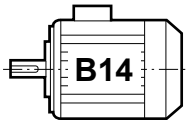
** : check the duty factor of the application.*
*** : the Mb 3101 is designed with an integral input flange with tapped holes (FT85) which does not allow use of the «AP» version.*

n_S : output speed
M_{nS} : rated output torque

Exact reduction	η
kW	M_{nS} (N.m)

Selection

Classes I, II, III (kp = 1, 1.4, 2)	Mb 31 LS IE1, LSES IE2, LSES brake, LS brake - IP 55 - Cl. F 230V/400V Y - 50 Hz - U.G.	Universal mounting **MUT**

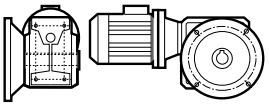


		Mb 3101				
		LS IM 3601-3611-3631 (B14-V18-V19) (kW)				
		0,25	**0,37**	**0,55**	**0,75**	**0,9**
		3-phase LS, LSES 4p				
min	i exact	LS 71			LSES 80 [1]	
14,3	100					
17,8	80	0,91				
23,8	60	1,15				
28,5	50	1,40	0,92			
35,6	40	1,94	1,28	0,84		
47,5	30	2,33	1,53	1,00		
57,0	25	2,16	1,42	0,93		
71,3	20	2,85	1,87	1,23	0,91	
95,0	15	3,85	2,53	1,65	1,22	1,01
114	12,5	4,31	2,83	1,85	1,37	1,14
143	10	5,26	3,45	2,26	1,67	1,39
187	7,5	6,52	4,28	2,80	2,07	1,72
LS, LSES 4p and brake			3-phase LS, LSES 4p			
LS FCR			71 L		80 L[1]	
LSES FCR					80 [1]	

1. LSES80 FT 85 ba 14 x 30 obligatory

Selection example	
Required power:	0,55 kW
Required speed:	70 min^{-1}
Duty factor necessary for the application:	Kp = 1
Operating position ; Mounting form:	Horizontal B5; hollow shaft; flange

Designation : Mb 3101 i : 20 BNL H B5 - MUT 4p LS 71 L 0,55 kW - 400V Y - U.G.

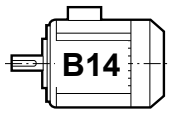


Selection AGMA I, II, III

Classes I, II, III (kp = 1, 1.4, 2)

Mb 2201
LS IE1, LSES IE2, LS brake, LSES brake - IP 55 - Cl. F
230V/400V Y - 50 Hz - U.G.

Universal mounting **MUT**
Input shaft mounting **AP**



Mb 2201

LS IM 3601-3611-3631 (B14-V18-V19) (kW)

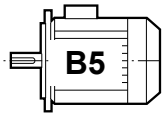
	0,18	**0,25**	**0,37**	**0,55**	**0,75**	**0,9**	**1,1**	**1,5**	**1,8**
3-phase LS, LSES 4p			71		80		90		
3-phase LS 8p			***80***						
min-1 / i exact									
7,00 / 100		1,19	0,83						
8,8 / 80		1,45	1,02						
11,7 / 60		1,68	1,18						
14,2 / 100			1,35	0,87					
17,3 / 80			1,67	1,08					
23,7 / 60			1,89	1,22	0,79				
28,4 / 50			2,27	1,47	0,95				
35,5 / 40			2,69	1,74	1,13	0,83			
47,3 / 30			3,39	2,19	1,42	1,04	0,87		
55,7 / 25,5			3,45	2,23	1,44	1,06	0,88		
71,0 / 20			4,87	3,14	2,04	1,50	1,25	1,01	
94,7 / 15			6,05	3,91	2,54	1,87	1,56	1,26	0,91
123 / 11,5			7,82	5,05	3,27	2,41	2,01	1,62	1,18	0,98
137 / 10,3			7,87	5,08	3,30	2,42	2,02	1,63	1,19	0,99
194 / 7,33				6,80	4,41	3,25	2,71	2,18	1,59	1,33
LS, LSES 4p and brake					3-phase LS, LSES 4p				
LS FCR			71 L			80 L		90 L	
LSES FCR						80		90	
LS 8p and brake FCR		***3-phase LS 8p*** ***80***							

The types of 8-poles motors are in bold italics.

Classes I, II, III (kp = 1, 1.4, 2)

Mb 2201
LS IE1, LSES IE2, LS brake, LSES brake - IP 55 - Cl. F
230V/400V Y - 50 Hz - U.G.

Universal mounting **MUF**
Input shaft mounting **AP**

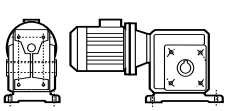


Mb 2201

LS IM 3001-3011-3031 (B5-V1-V3) (kW)

	0,18	**0,25**	**0,37**	**0,55**	**0,75**	**0,9**	**1,1**	**1,5**	**1,8**
3-phase LS, LSES 4p			LS 71		LSES 80		LSES 90 [1]		
3-phase LS 8p			***80***						
min-1 / i exact									
7,00 / 100		1,19	0,83						
8,8 / 80		1,45	1,02						
11,7 / 60		1,68	1,18						
14,2 / 100			1,35	0,87					
17,3 / 80			1,67	1,08					
23,7 / 60			1,89	1,22	0,79				
28,4 / 50			2,27	1,47	0,95				
35,5 / 40			2,69	1,74	1,13	0,83			
47,3 / 30			3,39	2,19	1,42	1,04	0,87		
55,7 / 25,5			3,45	2,23	1,44	1,06	0,88		
71,0 / 20			4,87	3,14	2,04	1,50	1,25	1,01	
94,7 / 15			6,05	3,91	2,54	1,87	1,56	1,26	0,91	
123 / 11,5			7,82	5,05	3,27	2,41	2,01	1,62	1,18	0,98
137 / 10,3			7,87	5,08	3,30	2,42	2,02	1,63	1,19	0,99
194 / 7,33				6,80	4,41	3,25	2,71	2,18	1,59	1,33
LS, LSES 4p and brake					3-phase LS, LSES 4p				
LS FCR			71 L			80 L		90 L [1]	
LSES FCR						80		90 [1]	
LS 8p and brake LS FCR		***3-phase LS 8p*** ***80***							

The types of 8-poles motors are in bold italics.
1. LSES90 FF130 ba 19 x 40 obligatory



Selection example

Required power:	0,55 kW
Required speed:	35 min-1
Duty factor necessary for the application:	Kp = 1
Operating position ; Mounting form:	Horizontal B3 ; hollow shaft; baseplate

Designation: Mb 2201 B3 NSD H i: 40 MUF - 4p LS 71 L 0.55 kW - 400V Y - U.G.

Selection AGMA I, II, III

Classes I, II, III (kp = 1, 1.4, 2)	Mb 2301 LS IE1, LSES IE2, LS brake, LSES brake - IP 55 - Cl. F 230V/400V Y - 400V Δ - 50 Hz - U.G.	Universal mounting MUT / Input shaft mounting AP

Mb 2301

B14

LS IM 3601-3611-3631 (B14-V18-V19) (kW)

0,18	0,25	0,37	0,55	0,75	0,9	1,1	1,5	1,8	2,2	3	4
3-phase LS, LSES 4p											
	LS 71			LSES 80		LSES 90			LSES 100 [1]		LSES112 [2]

min-1	i exact	3-phase LS 8p 80			90								
7,00	***100***	2,01	1,39	0,90									
8,8	***80***	2,60	1,81	1,18									
11,7	***60***	2,94	2,04	1,33	0,87								
min-1	i exact												
14,2	100		2,35	1,50	0,96								
17,8	80		2,67	1,70	1,10	0,80							
23,7	60		3,29	2,10	1,35	0,99	0,83						
28,4	50		3,95	2,52	1,62	1,19	0,99	0,80					
35,5	40		4,82	3,08	1,98	1,45	1,21	0,97					
47,3	30		5,71	3,64	2,34	1,72	1,43	1,15	0,84				
55,7	25,5		6,01	3,83	2,46	1,81	1,51	1,21	0,88				
71,0	20		7,90	5,04	3,24	2,38	1,98	1,59	1,16	0,97			
94,7	15		8,77	5,59	3,60	2,64	2,20	1,77	1,29	1,08	0,87		
123	11,5			8,39	5,39	3,96	3,30	2,65	1,93	1,61	1,30	0,95	
137	10,3			8,46	5,44	3,99	3,33	2,67	1,94	1,62	1,31	0,96	
189	7,5				7,47	5,48	4,57	3,67	2,67	2,23	1,80	1,31	0,99
273	5,2					7,44	6,20	4,99	3,62	3,02	2,45	1,78	1,34

LS, LSES 4p and brake	3-phase LS, LSES 4p						
LS FCR	71 L			80 L	90 L	100 L [1]	112 [2]
LSES FCR				80	90	100 [1]	112 [2]

LS 8p and brake	***3-phase LS 8p***						
LS FCR	***80***			***90***			

The types of 8-poles motors are in bold italics. 1. LSES100 FT 115 ba 24 x 50 obligatory . 2. LSES112 FT 115 ba 24 x 50 obligatory

Classes I, II, III (kp = 1, 1.4, 2)	Mb 2301 LS IE1, LSES IE2, LS brake, LSES brake - IP 55 - Cl. F 230V/400V Y - 400V Δ - 50 Hz - U.G.	Universal mounting MUF / Input shaft mounting AP

Mb 2301

B5

LS IM 3001-3011-3031 (B5-V1-V3) (kW)

0,18	0,25	0,37	0,55	0,75	0,9	1,1	1,5	1,8	2,2	3	4
3-phase LS, LSES 4p											
	LS 71			LSES 80		LSES 90			LSES 100 [1]		LSES112 [2]

min-1	i exact	3-phase LS 8p 80			90								
7,00	***100***	2,01	1,39	0,90									
8,8	***80***	2,60	1,81	1,18									
11,7	***60***	2,94	2,04	1,33	0,87								
min-1	i exact												
14,2	100		2,35	1,50	0,96								
17,8	80		2,67	1,70	1,10	0,80							
23,7	60		3,29	2,10	1,35	0,99	0,83						
28,4	50		3,95	2,52	1,62	1,19	0,99	0,80					
35,5	40		4,82	3,08	1,98	1,45	1,21	0,97					
47,3	30		5,71	3,64	2,34	1,72	1,43	1,15	0,84				
55,7	25,5		6,01	3,83	2,46	1,81	1,51	1,21	0,88				
71,0	20		7,90	5,04	3,24	2,38	1,98	1,59	1,16	0,97			
94,7	15		8,77	5,59	3,60	2,64	2,20	1,77	1,29	1,08	0,87		
123	11,5			8,39	5,39	3,96	3,30	2,65	1,93	1,61	1,30	0,95	
137	10,3			8,46	5,44	3,99	3,33	2,67	1,94	1,62	1,31	0,96	
189	7,5				7,47	5,48	4,57	3,67	2,67	2,23	1,80	1,31	0,99
273	5,2					7,44	6,20	4,99	3,62	3,02	2,45	1,78	1,34

LS, LSES 4p and brake	3-phase LS, LSES 4p						
LS FCR	71 L			80 L	90 L	100 L [1]	112 [2]
LSES FCR				80	90	100 [1]	112 [2]

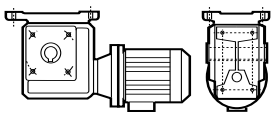
LS 8p and brake	***3-phase LS 8p***						
LS FCR	***80***			***90***			

The types of 8-poles motors are in bold italics. 1. LSES100 FF 165 ba 24 x 50 obligatory. 2. LSES112 FF 165 ba 24 x 50 obligatory

Selection example

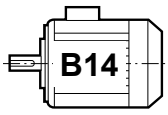
Required power:	1,1 kW
Required speed:	70 min-1
Duty factor necessary for the application:	Kp = 1,4
Operating position ; Mounting form:	Horizontal B8 ; hollow shaft; flange

Designation : Mb 2301 i : 20 NSD H B8 - MUT 4p LSES90S 1,1 kW LS2/IE2 - 400V Y - U.G.



Selection AGMA I, II, III

Classes I, II, III (kp = 1, 1.4, 2)	Mb 2401 LS IE1, LSES IE2, LS brake, LSES brake - IP 55 - Cl. F 230V/400V Y - 400V Δ - 50 Hz - U.G.	Universal mounting MUT Input shaft mounting AP



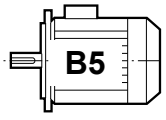
Mb 2401

LS IM 3601-3611-3631 (B14-V18-V19) (kW)

0,18	**0,25**	**0,37**	**0,55**	**0,75**	**0,9**	**1,1**	**1,5**	**1,8**	**2,2**	**3**	**4**	**5,5**
3-phase LS, LSES 4p												
			LS 80[1]	LSES80		LSES90			LSES100		LSES112	LSES132 [2]
			3-phase LS 8p									
			80		***90***		***100***					
6,85	***100***	2,96	2,04	1,32	0,86								
8,6	***80***	3,57	2,46	1,59	1,03								
11,4	***60***	4,29	2,96	1,91	1,24	0,90							
min-1	i exact												
14,4	100				1,38	1,01	0,84						
17,9	80				1,70	1,24	1,03	0,83					
23,8	60				1,97	1,44	1,20	0,96					
28,6	50				2,35	1,71	1,43	1,14	0,83				
36,0	40				2,88	2,10	1,75	1,41	1,02	0,85			
47,9	30				3,46	2,52	2,10	1,69	1,22	1,02	0,82		
56,3	25,5				3,65	2,66	2,22	1,78	1,29	1,08	0,87		
73,6	19,5					3,59	2,99	2,40	1,74	1,45	1,17	0,85	
99,1	14,5					4,40	3,67	2,94	2,13	1,78	1,44	1,05	0,79
139	10,3					6,12	5,10	4,09	2,96	2,47	2,00	1,45	1,09	0,79
198	7,25					7,95	6,63	5,31	3,85	3,21	2,59	1,89	1,42	1,03
LS, LSES 4p and brake							3-phase LS, LSES 4p						
LS FCR						80 L		90 L			100 L		112	132 [2]
LSES FCR						80		90			100		112	132 [2]
LS 8p and brake				***3-phase LS 8p***										
LS FCR		***80***			***90***		***100***							

The types of 8-poles motors are in bold italics. 1. 0,55 kW for LS 80 (FT 100 ba 19 x 40). 2. LSES132 FT130 ba 28 x 60 obligatory.

Classes I, II, III (kp = 1, 1.4, 2)	Mb 2401 LS IE1, LSES IE2, LS brake, LSES brake - IP 55 - Cl. F 230V/400V Y - 400V Δ - 50 Hz - U.G.	Universal mounting MUF Input shaft mounting AP

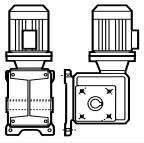


Mb 2401

LS IM 3001-3011-3031 (B5-V1-V3) (kW)

0,18	**0,25**	**0,37**	**0,55**	**0,75**	**0,9**	**1,1**	**1,5**	**1,8**	**2,2**	**3**	**4**	**5,5**
3-phase LS, LSES 4p												
	LS 71			LSES80		LSES90			LSES100		LSES112	LSES132 [1]
	3-phase LS 8p											
	80		***90***		***100***							
7,00	***100***	2,96	2,04	1,32	0,86								
8,8	***80***	3,57	2,46	1,59	1,03								
11,7	***60***	4,29	2,96	1,91	1,24	0,90							
min-1	i exact												
14,4	100	3,43	2,16	1,38	1,01	0,84							
17,9	80	4,24	2,67	1,70	1,24	1,03	0,83						
23,8	60	4,91	3,09	1,97	1,44	1,20	0,96						
28,6	50	5,84	3,67	2,35	1,71	1,43	1,14	0,83					
36,0	40	7,17	4,52	2,88	2,10	1,75	1,41	1,02	0,85				
47,9	30	8,60	5,42	3,46	2,52	2,10	1,69	1,22	1,02	0,82			
56,3	25,5	9,08	5,37	3,65	2,66	2,22	1,78	1,29	1,08	0,87			
73,6	19,5				3,59	2,99	2,40	1,74	1,45	1,17	0,85		
99,1	14,5				4,40	3,67	2,94	2,13	1,78	1,44	1,05	0,79	
139	10,3				6,12	5,10	4,09	2,96	2,47	2,00	1,45	1,09	0,79
198	7,25				7,95	6,63	5,31	3,85	3,21	2,59	1,89	1,42	1,03
LS, LSES 4p and brake							3-phase LS, LSES 4p						
LS FCR		71 L			80 L		90 L			100 L		112	132 [1]
LSES FCR					80		90			100		112	132 [1]
LS 8p and brake				***3-phase LS 8p***									
LS FCR		***80***			***90***		***100***						

The types of 8-poles motors are in bold italics. 1. LSES132 FF 165 ba 28 x 60 obligatory.



Selection example

Required power:	1,1 kW
Required speed:	73 min-1
Duty factor necessary for the application:	Kp = 2
Operating position ; Mounting form:	B7 ; hollow shaft; baseplate

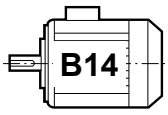
Designation : Mb 2401 i : 19,5 NSD H B7 - MUT 4p LSES90S 1,1 kW LS2/IE2 - 400V Y - U.G.

Selection AGMA I, II, III

Classes I, II, III (kp = 1, 1.4, 2)

Mb 2501
LS IE1, LSES IE2, LS brake, LSES brake - IP 55 - Cl. F
230V/400V Y - 400V Δ - 50 Hz - U.G.

Universal mounting **MUT**
Input shaft mounting **AP**



Mb 2501

LS IM 3601-3611-3631 (B14-V18-V19) (kW)

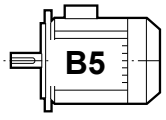
		0,37	0,55	0,75	0,9	1,1	1,5	1,8	2,2	3	4	5,5	7,5	9
		3-phase LS, LSES 4p												
		LS 71		LSES80		LSES90			LSES100		LSES112	LSES132 [1]		
		3-phase LS 8p												
min-1	i exact	***90***		***100***		***100***	***112***							
7,00	***100***	*2,34*	*1,51*	*1,09*										
8,8	***80***	*3,05*	*1,97*	*1,42*		*0,96*								
11,7	***60***	*3,60*	*2,32*	*1,68*		*1,13*	*0,85*							
min-1	i exact													
14,4	100			1,80	1,50	1,19	0,86							
18,0	80			2,38	1,98	1,58	1,14	0,95						
24,0	60			2,73	2,28	1,81	1,31	1,09	0,88					
28,8	50			3,24	2,70	2,15	1,55	1,29	1,04					
36,0	40			3,99	3,33	2,64	1,91	1,59	1,28	0,93				
47,9	30			4,98	4,15	3,30	2,39	1,99	1,60	1,17	0,88			
56,4	25,5			5,59	4,66	3,71	2,68	2,23	1,80	1,31	0,98			
70,2	20,5			6,60	5,50	4,38	3,16	2,63	2,12	1,54	1,16	0,84		
92,8	15,5					5,48	3,96	3,30	2,66	1,93	1,45	1,05		
139	10,3					8,21	5,93	4,94	3,98	2,90	2,17	1,57	1,15	0,96
198	7,25						7,80	6,50	5,24	3,81	2,86	2,07	1,52	1,26
LS, LSES 4p and brake							3-phase LS, LSES 4p							
LS FCR				80		90			100		112	132 [1]		
LSES FCR				80		90			100		112	132 [1]		
LS 8p and brake				***3-phase LS 8p***										
LS FCR		***90***		***100***		***100***	***112***							

The types of 8-poles motors are in bold italics. 1. LSES132 FT 130 ba 28 x 60 obligatory

Classes I, II, III (kp = 1, 1.4, 2)

Mb 2501
LS IE1, LSES IE2, LS brake, LSES brake - IP 55 - Cl. F
230V/400V Y - 400V Δ - 50 Hz - U.G.

Universal mounting **MUF**
Input shaft mounting **AP**



Mb 2501

LS IM 3001-3011-3031 (B5-V1-V3) (kW)

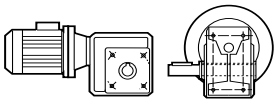
		0,37	0,55	0,75	0,9	1,1	1,5	1,8	2,2	3	4	5,5	7,5	9
		3-phase LS, LSES 4p												
		LS 71		LSES80		LSES90			LSES100		LSES112	LSES132 [1]		
		3-phase LS 8p												
min-1	i exact	***90***		***100***		***100***	***112***							
7,00	***100***	*2,34*	*1,51*	*1,09*										
8,8	***80***	*3,05*	*1,97*	*1,42*		*0,96*								
11,7	***60***	*3,60*	*2,32*	*1,68*		*1,13*	*0,85*							
min-1	i exact													
14,4	100			1,80	1,50	1,19	0,86							
18,0	80			2,38	1,98	1,58	1,14	0,95						
24,0	60			2,73	2,28	1,81	1,31	1,09	0,88					
28,8	50			3,24	2,70	2,15	1,55	1,29	1,04					
36,0	40			3,99	3,33	2,64	1,91	1,59	1,28	0,93				
47,9	30			4,98	4,15	3,30	2,39	1,99	1,60	1,17	0,88			
56,4	25,5			5,59	4,66	3,71	2,68	2,23	1,80	1,31	0,98			
70,2	20,5			6,60	5,50	4,38	3,16	2,63	2,12	1,54	1,16	0,84		
92,8	15,5					5,48	3,96	3,30	2,66	1,93	1,45	1,05		
139	10,3					8,21	5,93	4,94	3,98	2,90	2,17	1,57	1,15	0,96
198	7,25						7,80	6,50	5,24	3,81	2,86	2,07	1,52	1,26
LS, LSES 4p and brake							3-phase LS, LSES 4p							
LS FCR				80		90			100		112	132 [1]		
LSES FCR				80		90			100		112	132 [1]		
LS 8p and brake				***3-phase LS 8p***										
LSFCR		***90***		***100***		***100***	***112***							

The types of 8-poles motors are in bold italics. 1. LSES132 FF 165 ba 28 x 60 obligatory

Selection example

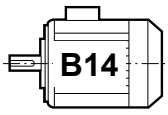
Required power:	3 kW
Required speed:	47,5 min-1
Duty factor necessary for the application:	Kp = 1
Operating position ; Mounting form:	Horizontal B3 ; shaft on the left

Designation : Mb 2501 B3 NU HL i : 30 MUT - 4p LSES100LR 3 kW LS2/IE2 - 400V Y - U.G.



Selection AGMA I, II, III

Classes I, II, III (kp = 1, 1.4, 2)	Mb 2601 LS IE1, LSES IE2, LS brake, LSES brake - IP 55 - Cl. F 230V/400V Y - 400V Δ - 50 Hz - U.G.	Universal mounting MUT Input shaft mounting AP



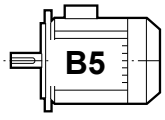
Mb 2601

LS IM 3601-3611-3631 (B14-V18-V19) (kW)

		0,37	0,55	0,75	0,9	1,1	1,5	1,8	2,2	3	4	5,5	7,5	9
		3-phase LS, LSES 4p												
		LS 71		LSES80		LSES90			LSES100 [1]		LSES112 [1]	LSES132		
				3-phase LS 8p										
min-1	i exact			***100*** [1]		***100*** [1]	***112*** [1]		***132***					
7,00	***100***			*1,96*		*1,32*	*1,00*							
8,8	***80***			*2,55*		*1,71*	*1,29*		*0,98*					
11,7	***60***			*2,91*		*1,95*	*1,48*		*1,00*					
min-1	i exact													
14,4	100								1,04					
18,0	80								1,34	0,98				
23,9	60								1,58	1,15	0,86			
28,7	50								1,91	1,39	1,04			
36,0	40								2,37	1,72	1,29	0,93		
47,9	30								2,51	1,82	1,37	0,99		
56,4	25,5								3,16	2,29	1,72	1,24	0,91	
70,2	20,5								3,97	2,88	2,16	1,56	1,14	0,95
92,8	15,5								5,14	3,73	2,8	2,02	1,48	1,23
139	10,3								7,21	5,23	3,92	2,83	2,08	1,73
192	7,5								8,75	6,35	4,76	3,44	2,52	2,1
LS, LSES 4p and brake									3-phase LS, LSES 4p					
LS FCR									100 [1]		112 [1]	132		
LSES FCR									100 [1]		112 [1]	132		
LS 8p and brake				***3-phase LS 8p***										
FCR				***100*** [1]		***100*** [1]	***112*** [1]		***132***					

The types of 8-poles motors are in bold italics. 1. LSES100 and 112 FT215 ba 38 x 80 obligatory

Classes I, II, III (kp = 1, 1.4, 2)	Mb 2601 LS IE1, LSES IE2, LS brake, LSES brake - IP 55 - Cl. F 230V/400V Y - 400V Δ - 50 Hz - U.G.	Universal mounting MUF Input shaft mounting AP

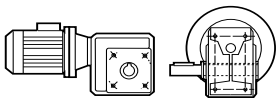


Mb 2601

LS IM 3001-3011-3031 (B5-V1-V3) (kW)

		0,37	0,55	0,75	0,9	1,1	1,5	1,8	2,2	3	4	5,5	7,5	9
		3-phase LS, LSES 4p												
		LS 71		LSES80		LSES90			LSES100		LSES112	LSES132 [1]		
		3-phase LS 8p												
min-1	i exact	***90***		***100***		***100***	***112***		***132*** [1]					
7,00	***100***	*4,26*	*2,72*	*1,96*		*1,32*	*1,00*							
8,8	***80***	*5,54*	*3,54*	*2,55*		*1,71*	*1,29*		*0,98*					
11,7	***60***	*6,32*	*4,04*	*2,91*		*1,95*	*1,48*		*1,00*					
min-1	i exact													
14,4	100					2,16	1,56	1,30	1,04					
18,0	80					2,79	2,01	1,68	1,34	0,98				
23,9	60					3,29	2,37	1,98	1,58	1,15	0,86			
28,7	50					3,97	2,85	2,38	1,91	1,39	1,04			
36,0	40					4,93	3,54	2,95	2,37	1,72	1,29	0,93		
47,9	30					5,21	3,75	3,13	2,51	1,82	1,37	0,99		
56,4	25,5					6,56	4,72	3,93	3,16	2,29	1,72	1,24	0,91	
70,2	20,5					8,25	5,93	4,94	3,97	2,88	2,16	1,56	1,14	0,95
92,8	15,5						7,69	6,41	5,14	3,73	2,8	2,02	1,48	1,23
139	10,3							8,98	7,21	5,23	3,92	2,83	2,08	1,73
192	7,5								8,75	6,35	4,76	3,44	2,52	2,1
LS, LSES 4p and brake									3-phase LS, LSES 4p					
LS FCR						90			100		112	132 [1]		
LSES FCR						90			100		112	132 [1]		
LS 8p and brake		***3-phase LS 8p***												
FCR		***90***		***100***		***100***	***112***		***132*** [1]					

The types of 8-poles motors are in bold italics. 1. LSES132 FF 165 ba 28 x 60 obligatory



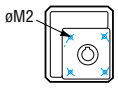
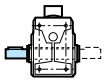
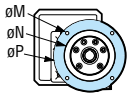
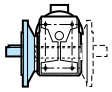
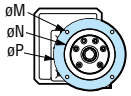
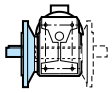
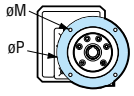
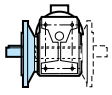
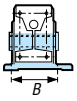
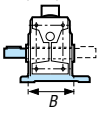
Selection example

Required power:	7,5 kW
Required speed:	70 min-1
Duty factor necessary for the application:	Kp = 1
Operating position ; Mounting form:	Horizontal B3 ; shaft on the left

Designation : Mb 2601 i : 20,5 NU HL B3 - MUF 4p LSES132M 7,5 kW LS2/IE2 - 400V Y- U.G.

Synthesis

Dimensions in mm

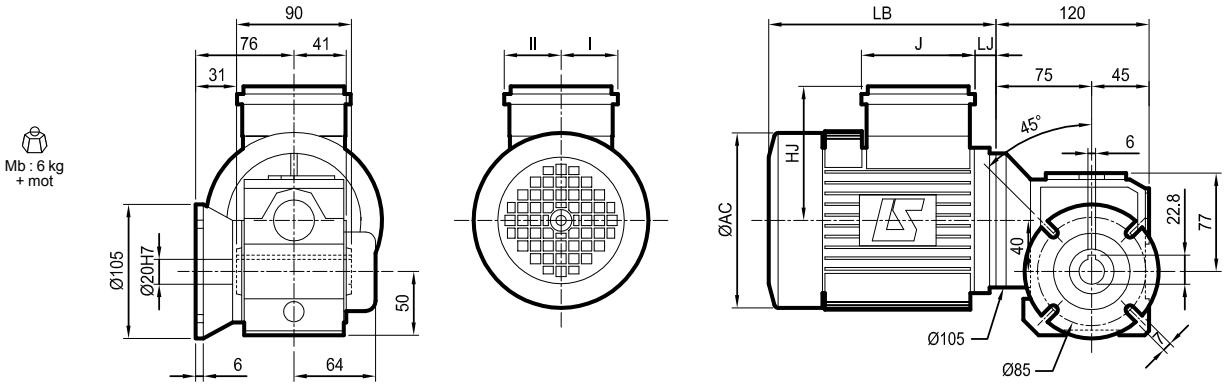
Mountings	Shaft		Frame size	MULTIBLOC Mb 31	Mb 22	Mb 23	Mb 24	Mb 25	Mb 26
NU 		**H**		Ø 20H7 x 90 M2 = 85	Ø 25H7 x 108 M2 = 105	Ø 30H7 x 118 M2 = 115	Ø 35H7 x 138 M2 = 130	Ø 45H7 x 168 M2 = 180	Ø 50H7 x 188 -
		**HL** **HR** **HLR**		Ø 20h6 x 40 M2 = 85	Ø 25h6 x 50 M2 = 105	Ø 30h6 x 60 M2 = 115	Ø 35h6 x 70 M2 = 130	Ø 45h6 x 90 M2 = 180	Ø 50h6 x 100 -
BSL[1] flange 	**H**  **HL, HR, HLR** 	**H** **HL** **HLR**		- - -	M = 165 N = 130 P = 200	M = 165 N = 130 P = 200	M = 215 N = 180 P = 250	M = 265 N = 230 P = 300	M = 300 N = 250 P = 350
BDL[1] flange 	**H**  **HL, HR, HLR** 	**H** **HL** **HLR**		- - -	M = 130 N = 110 P = 160	M = 130 N = 110 P = 160	M = 165 N = 130 P = 200	M = 215 N = 180 P = 250	M = 265 N = 230 P = 300
BNL[1] flange 	**H**  **HL, HR, HLR** 	**H** **HL** **HLR**		M = 100/85/115 P = 120/105/140	M = 165 N = 200	M = 165 N = 200	M = 215 N = 250	M = 265 N = 300	M = 300 N = 350
Feet NSD, NSF, NSU 	**H**  **HL, HR, HLR** 	**H** **HL** **HLR**		- -	A = 134 B = 125	A = 154 B = 128	A = 202 B = 156	A = 220 B = 156	A = 250 B = 180
			Frame size						
MU/LS, LSES			71	FT85-14x30	FT85-14x30	FT85-14x30	-	-	-
			80	FT85-14x30	FT85-14x30	FT85-14x30	-	-	-
			80	-	FT100-19x40	FT100-19x40	FT100-19x40	FT100-19x40	-
			80	-	-	FT115-24x50	FT115-24x50	FT115-24x50	-
			90	-	FT100-19x40	FT100-19x40	FT100-19x40	FT100-19x40	-
			90	-	-	FT115-24x50	FT115-24x50	FT115-24x50	-
			90	-	-	-	FT130-28x60	FT130-28x60	-
	 MU-FT		100	-	-	FT115-24x50	FT115-24x50	FT115-24x50	-
			100	-	-	-	FT130-28x60	FT130-28x60	-
			100	-	-	-	-	-	FT215-38x80
	B14 IEC Std		112	-	-	FT115-24x50	FT115-24x50	FT115-24x50	-
			112	-	-	-	FT130-28x60	FT130-28x60	-
			112	-	-	-	-	-	FT215-38x80
			132	-	-	-	FT130-28x60	FT130-28x60	-
			132	-	-	-	-	-	FT215-38x80
			71	-	FF130-14x30	FF130-14x30	FF130-14x30	-	-
			80	-	FF130-14x30	FF130-14x30	-	-	-
			80	-	FF165-19x40	FF165-19x40	FF165-19x40	FF165-19x40	-
			80	-	-	FF165-19x40	-	-	-
			90	-	FF165-19x40	FF165-19x40	FF165-19x40	FF165-19x40	-
			90	-	FF130-19x40	FF165-24x50	FF165-24x50	FF165-24x50	FF165-24x50
	 MU-FF		90	-	-	-	FF215-28x60	FF215-28x60	FF215-28x60
			100	-	-	FF165-24x50	FF165-24x50	FF165-24x50	FF165-24x50
			100	-	-	-	FF215-28x60	FF215-28x60	FF215-28x60
			112	-	-	FF165-24x50	FF165-24x50	FF165-24x50	FF165-24x50
	B5 IEC Std		112	-	-	-	FF215-28x60	FF215-28x60	FF215-28x60
			132	-	-	-	FF165-28X60	FF165-28X60	FF165-28X60
			132	-	-	-	FF215-28x60	FF215-28x60	FF215-28x60

Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 3101**

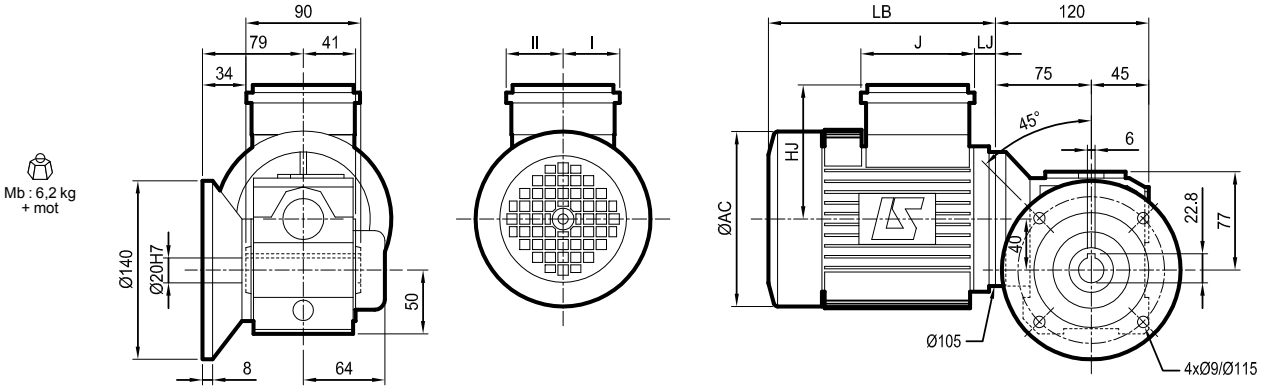
Dimensions in millimetres

- BN1 L* flange on left, H hollow shaft



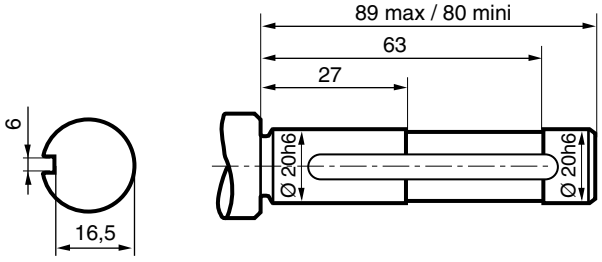
** option on right BN1 R H : identical flange and shaft*

- BN2 L* flange on left, H hollow shaft



** option on right BN2 R H : identical flange and shaft*

- Driven shaft details

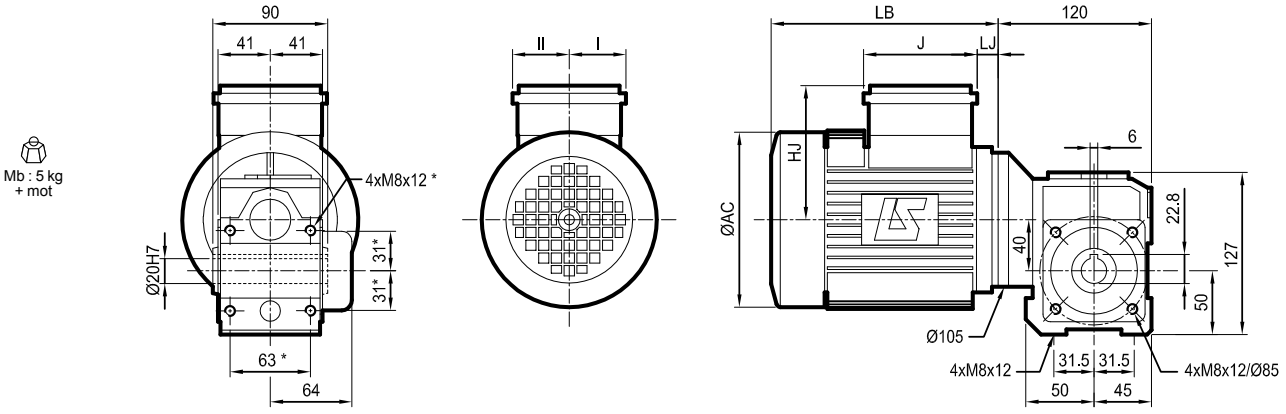


Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 3101 MUT LS**

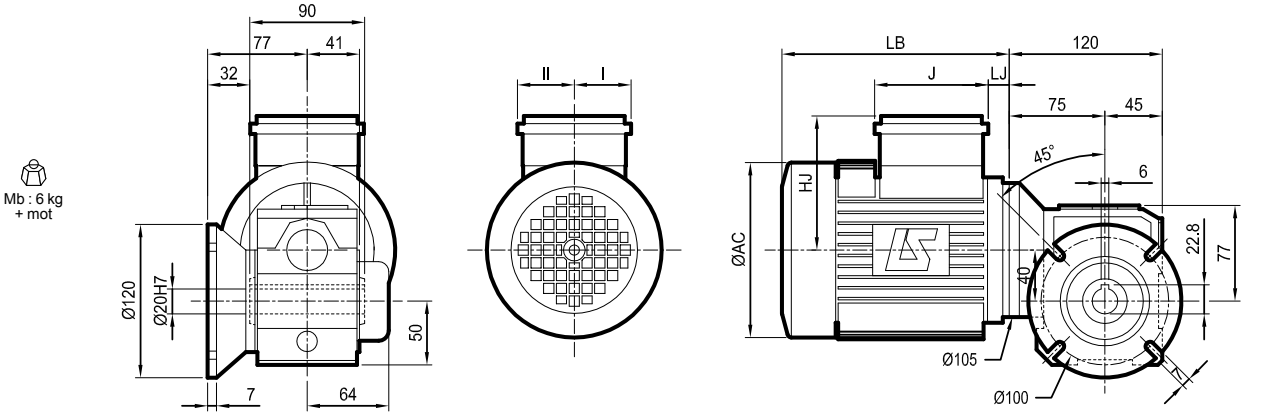
Dimensions in millimetres

- NU standard, H hollow shaft



** option NUF on request*

- BN L* flange on left, H* hollow shaft



** option on right BNR H: identical flange and shaft*

Type	4 poles motors																				
	LSES MUT										LSES FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	171	135	86	267	67,5	105	0	43	43	11,7	172	146	160	304	13	105	0	55	55	18

Type	4, 8 poles motors																				
	LS MUT										LS FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 71 L	140	99	86	193	26	105	0	43	43	8,3	140	135	160	245	13	105	0	55	55	11
LS 80 L	-	-	-	-	-	-	-	-	-	-	172	146	160	300	46	105	0	55	55	18

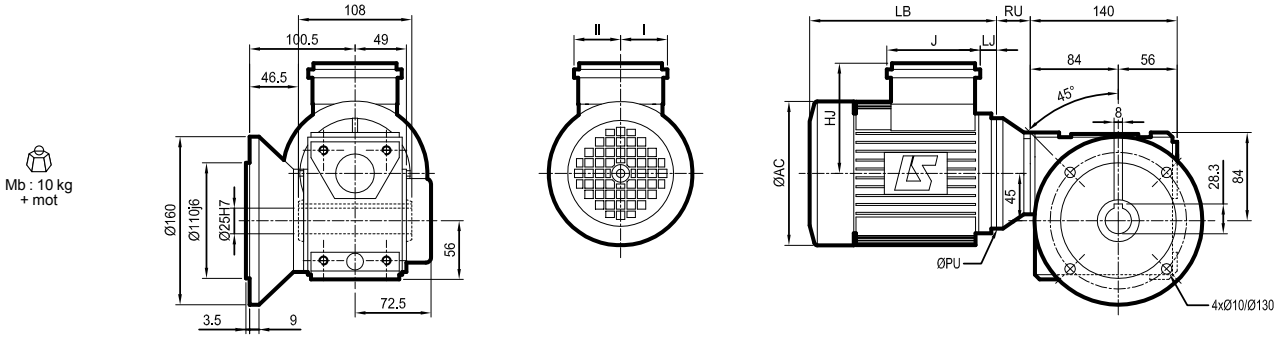
Std CEI

Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2201 MUF LS**

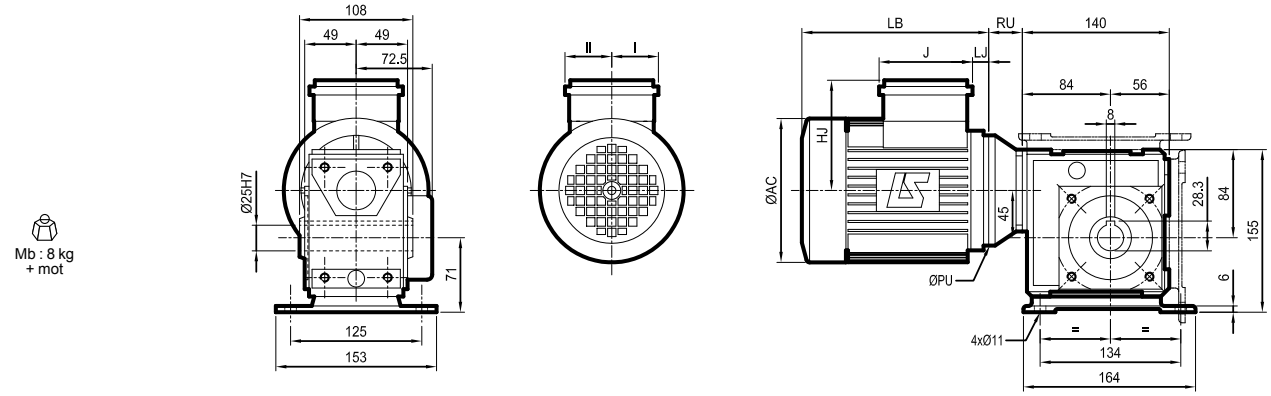
Dimensions in millimetres

- BD L* flange on left, H hollow shaft



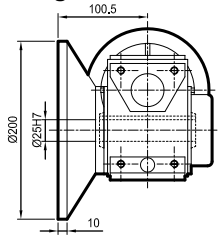
** option on right BDR H: identical flange and shaft*

- NSD* baseplate, H hollow shaft

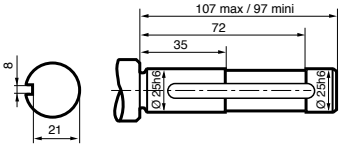


** NSF or NSU baseplate*

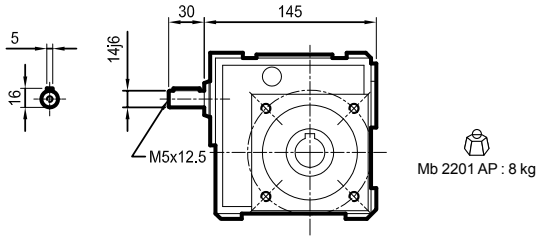
- Flange details BN L



driven shaft



Details AP



Type	4 poles motors																				
	LSES MUF										LSES FCR MUF										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	247	26	200	31	43	43	12,7	184	156	160	324	33	200	31	55	55	25,7
LSES 90	190	135	86	290	71	200	31	43	43	15,2	184	156	160	324	33	200	31	55	55	25,7

Type	4, 8 poles motors																				
	LS 71 - 4 pole ; LS 80 - 8 pole MUF										LS FCR MUF										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 71 L	140	99	86	193	26	160	24	43	43	9	140	135	160	271	38	160	24	55	55	12,5
LS 80 L	170	123	86	215	26	200	31	43	60	10	172	146	160	292	40,5	200	31	55	55	19,7
LS 90 L	-	-	-	-	-	-	-	-	-	-	184	156	160	324	33	200	31	55	55	25,7

Std CEI

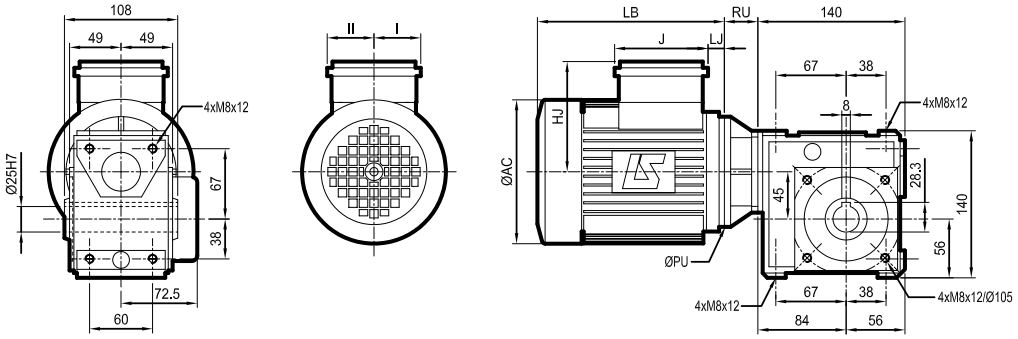
Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2201 MUT LS**

Dimensions in millimetres

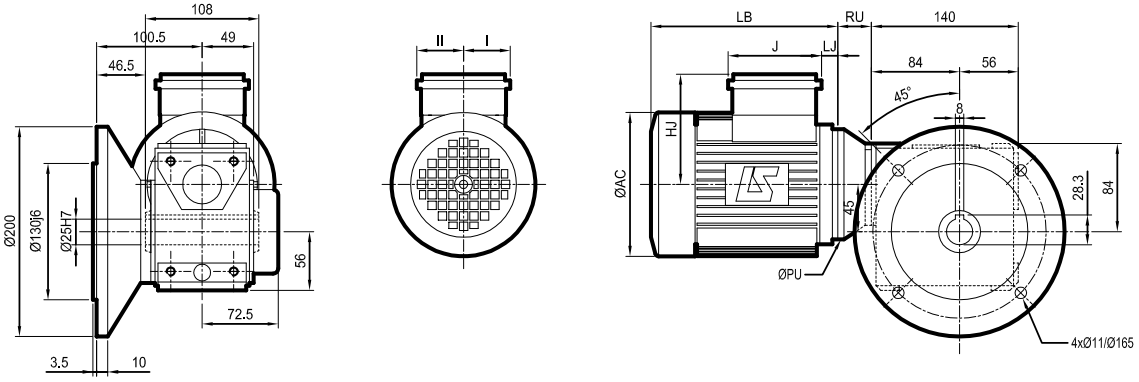
- NU standard, H hollow shaft

Mb : 8 kg
+ mot



- BS[1] L* flange on left, H* hollow shaft

Mb : 11 kg
+ mot



1. or BN flange: details page 22
** option on right BSR H: identical flange and shaft*

Type	4 poles motors																			
	LSES MUT										LSES FCR MUT									
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	267	26	120	33	43	43	12,7	184	156	160	304	13	120	33	55	55	25,2
LSES 90	189	135	86	245	26	120	33	43	43	15,6	184	156	160	304	13	120	33	55	55	25,2

Type	4, 8 poles motors																			
	LS 71 - 4 pole ; LS 80 - 8 pole MUT										LS FCR MUT									
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 71 L	140	99	86	193	26	105	31	43	43	9	140	135	160	245	13	105	31	55	55	12
LS 80 L	170	123	86	215	26	120	33	43	43	11,5	172	146	160	265	13	120	33	55	55	19,2
LS 90 L	-	-	-	-	-	-	-	-	-	-	184	156	160	304	13	120	33	55	55	25,2

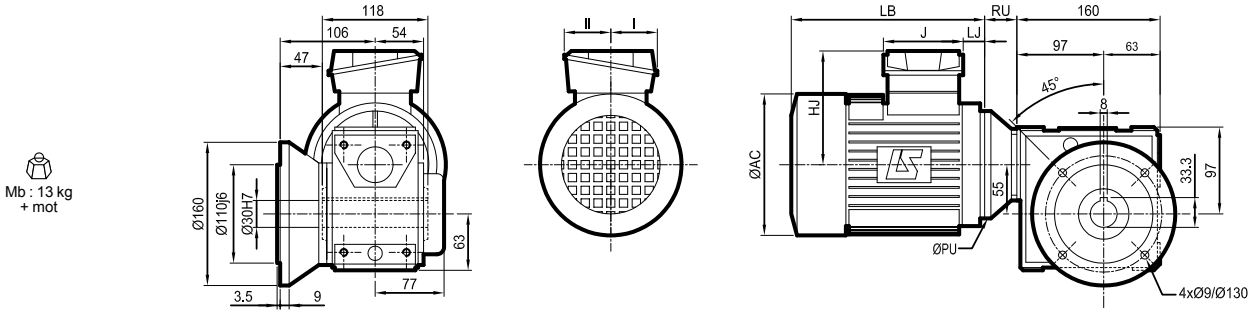
Std CEI

Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2301 MUF LS**

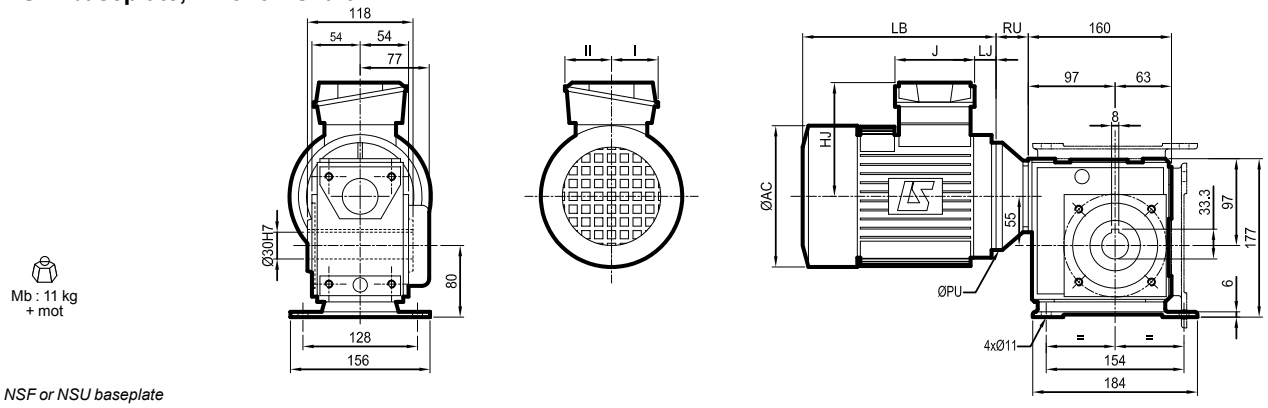
Dimensions in millimetres

- BD L* flange on left, H hollow shaft



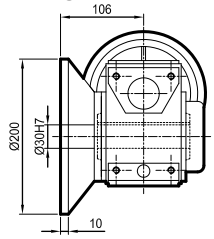
* *option on right BDR H: identical flange and shaft*

- NSD* baseplate, H hollow shaft

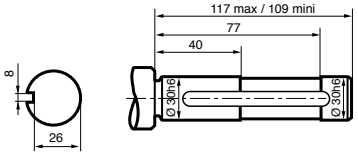


* *NSF or NSU baseplate*

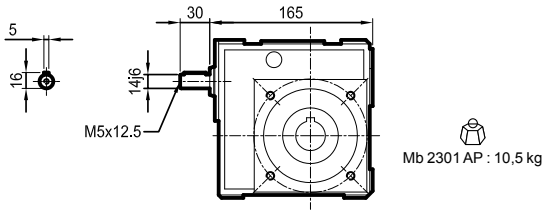
- Flange details BN L



driven shaft



Details AP



Type	4 poles motors																				
	LSES MUF										LSES FCR MUF										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	247	26	200	31	43	43	13,2	184	156	160	324	33	200	31	55	55	25,7
LSES 90	190	135	86	265	46	200	31	43	43	16,1	184	156	160	324	33	200	31	55	55	25,7
LSES 100	235	140	86	309	27	200	31	43	43	27,2	200	161	160	400,5	50	200	31	55	55	31,5
LSES 112	235	149	86	333	35,5	200	31	43	43	36,5	235	165	160	396	23,5	200	31	55	55	42,5

Type	4, 8 poles motors																				
	LS 71 - 4 poles ; LS 80 and 90 - 8 poles MUF										LS FCR MUF										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 71 L	140	99	86	193	26	160	24	43	43	9,8	140	135	160	271	38	160	24	55	55	12,5
LS 80 L	170	123	86	215	26	200	31	43	60	12,4	172	146	160	292	40,5	200	31	55	55	19,7
LS 90 L	190	133	86	265	46	200	31	43	60	16,7	184	156	160	324	33	200	31	55	55	25,7
LS 100 L	-	-	-	-	-	-	-	-	-	-	200	161	160	388	50	200	31	55	55	31,5
LS 112	-	-	-	-	-	-	-	-	-	-	235	165	160	396	23,5	200	31	55	55	42,5

Std CEI

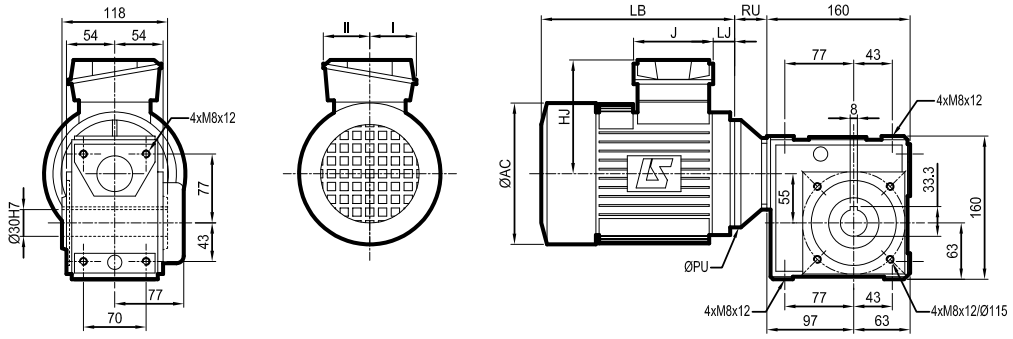
Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2301 MUT LS**

Dimensions in millimetres

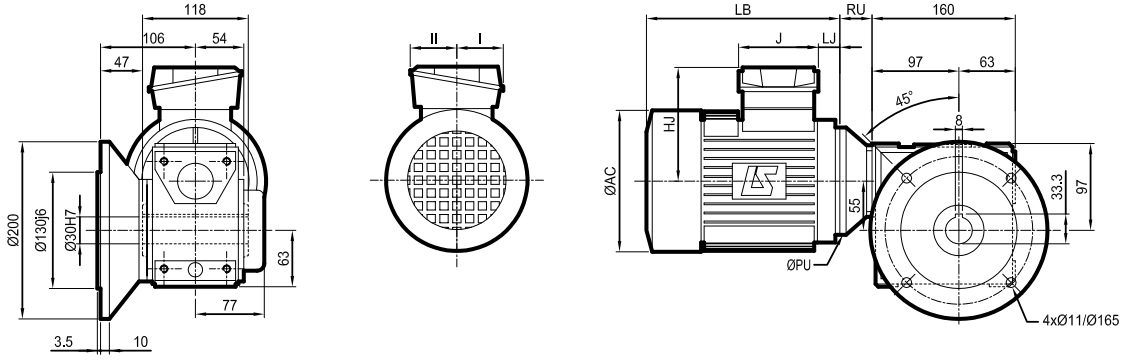
- NU standard, H hollow shaft

Mb : 10,5 kg
+ mot



- BS[1] L* flange on left, H* hollow shaft

Mb : 14 kg
+ mot



1. or BN flange: details page 24
** option on right BSR H: identical flange and shaft*

Type	4 poles motors																				
	LSES MUT										LSES FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	267	26	120	36	43	43	12,7	190	156	160	304	13	120	36	55	55	25,2
LSES 90	190	135	86	245	26	140	38	43	43	16,7	190	156	160	304	13	140	38	55	55	25,2
LSES 100	235	140	86	309	27	140	35	43	43	26,7	200	161	160	364,5	21	140	35	55	55	31
LSES 112	235	149	86	333	35,5	140	38	43	43	36	235	169	160	396	23,5	140	38	55	55	42

Type	4, 8 poles motors																				
	LS 71 - 4 poles ; LS 80 and 90 - 8 poles MUT										LS FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 71 L	140	99	86	193	26	105	35	43	43	9,2	140	135	160	245	13	105	35	55	55	12
LS 80 L	170	123	86	215	26	120	36	43	60	12	172	146	160	265	13	120	36	55	55	19,2
LS 90 L	190	133	86	245	26	140	36	43	60	16	190	156	160	304	13	140	38	55	55	25,2
LS 100 L	-	-	-	-	-	-	-	-	-	-	200	161	160	351	21	140	35	55	55	31
LS 112	-	-	-	-	-	-	-	-	-	-	235	169	160	396	23,5	140	38	55	55	42

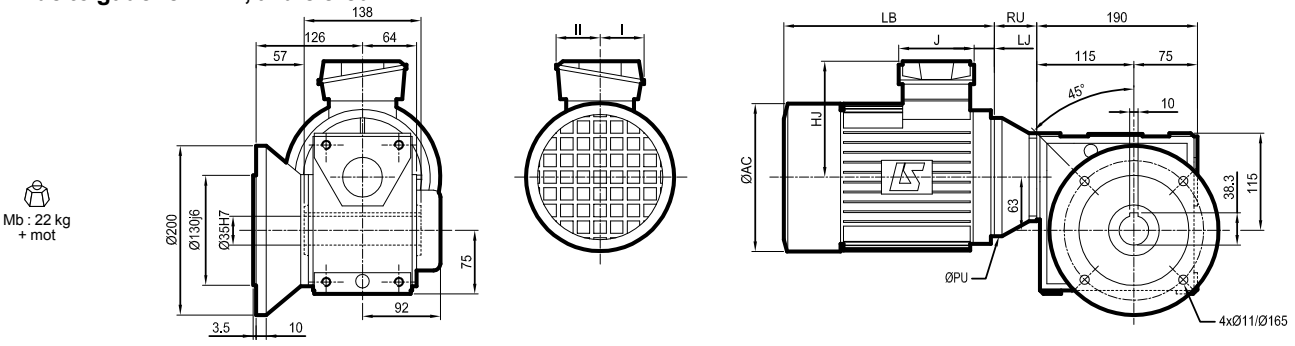
Std CEI

Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2401 MUF LS**

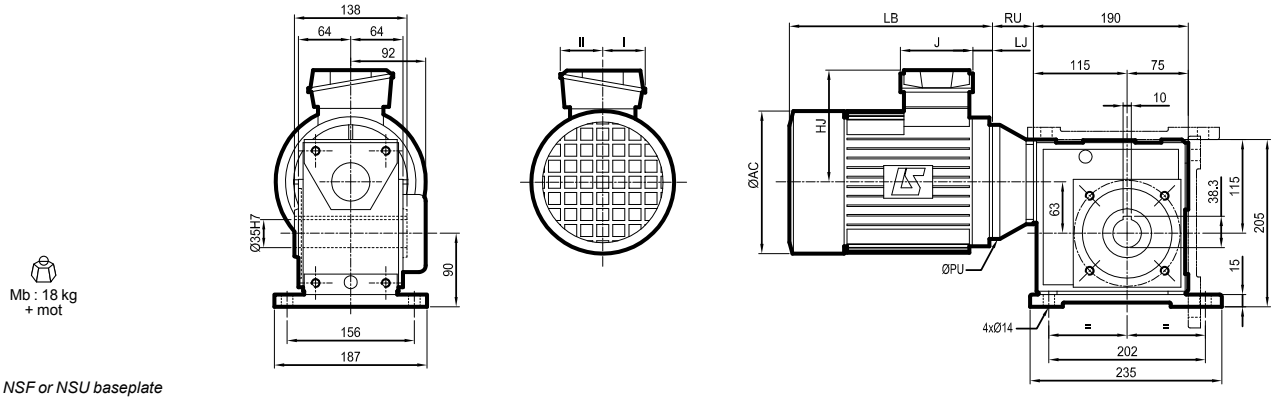
Dimensions in millimetres

- Bride to gauche BDL*, arbre creux H



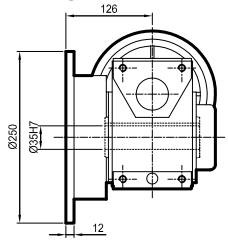
* *option on right BDR H: identical flange and shaft*

- NSD* baseplate, H hollow shaft

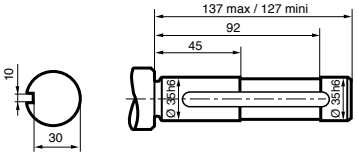


* *NSF or NSU baseplate*

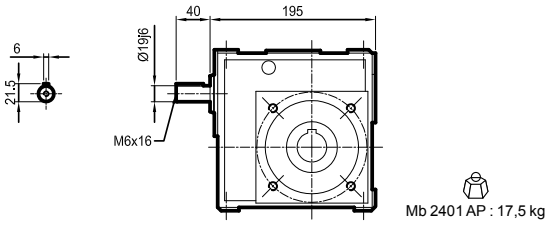
- Flange details BN L



driven shaft



Details AP



Type	4 poles motors																				
	LSES MUF										LSES FCR MUF										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	247	26	200	50	43	43	14,7	184	156	160	324	33	200	50	55	55	27,2
LSES 90	190	135	86	265	46	200	50	43	43	17,6	184	156	160	324	33	200	50	55	55	27,2
LSES 100	235	140	86	309	27	250	50	43	43	28,7	200	161	160	400,5	50	250	50	55	55	33
LSES 112	235	149	86	333	35,5	250	50	43	43	38	235	165	160	396	23,5	250	50	55	55	44
LSES 132	220	172	126	377	32,5	250	50	63	63	45	235	169	160	457	41	250	50	55	55	51

Type	4, 8 poles motors																				
	LS 71 - 4 pole ; LS 8 pole MUF										LS FCR MUF										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 71 L	140	99	86	193	21	160	50	43	43	11,3	140	135	160	271	38	160	50	55	55	14
LS 80 L	170	123	86	215	26	200	50	43	60	14	172	146	160	292	38	200	50	55	55	21,2
LS 90 L	190	133	86	265	46	200	50	43	60	18,2	184	156	160	324	33	200	50	55	55	27,2
LS 100 L	200	138	86	290	26	250	50	43	60	25,5	200	161	160	388	50	250	50	55	55	33
LS 112	-	-	-	-	-	-	-	-	-	-	235	169	160	425	49	250	50	55	55	44
LS 132 S	-	-	-	-	-	-	-	-	-	-	235	169	160	437	41	250	50	55	55	51

Std CEI

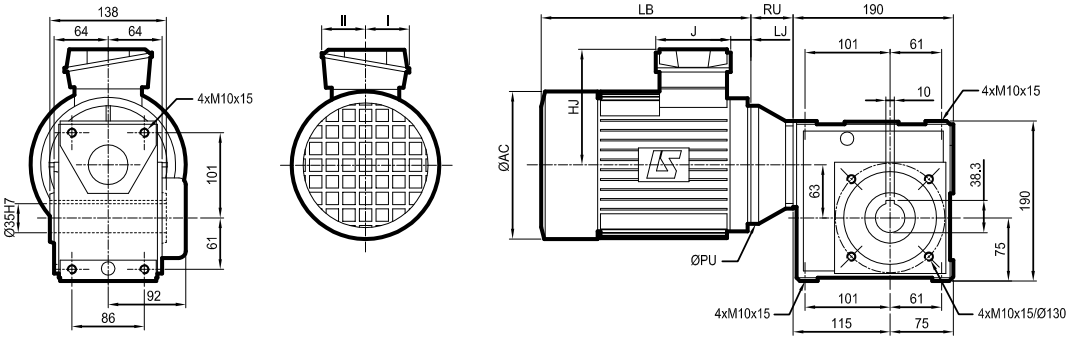
Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2401 MUT LS**

Dimensions in millimetres

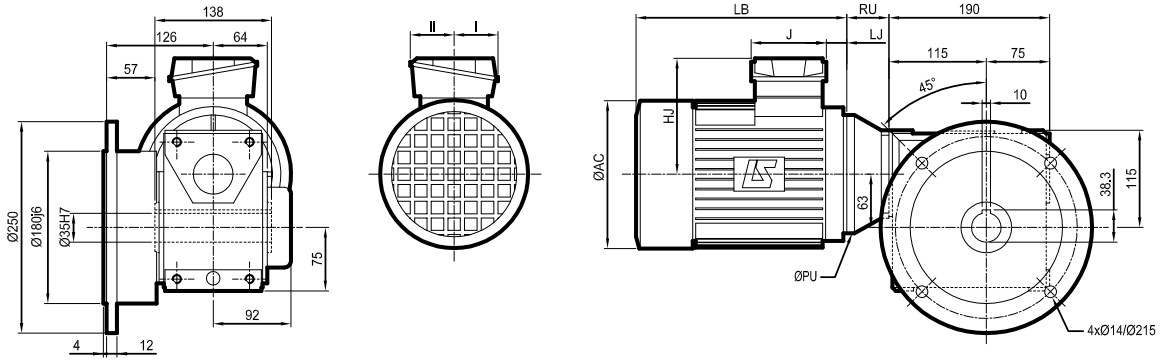
- NU standard, H hollow shaft

Mb : 17,5 kg
+ mot



- BS[1] L* flange on left, H* hollow shaft

Mb : 23 kg
+ mot



1. or BN flange: details page 26
** option on right BSR H: identical flange and shaft*

Type	4 poles motors																				
	LSES MUT										LSES FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	267	26	120	50	43	43	13,5	184	156	160	304	13	120	50	55	55	26
LSES 90	190	135	86	245	26	140	50	43	43	16,4	184	156	160	304	13	140	50	55	55	26
LSES 100	235	140	86	309	27	160	50	43	43	27,5	200	161	160	364,5	21	160	50	55	55	31,8
LSES 112	235	149	86	333	35,5	160	50	43	43	36,8	235	169	160	396	23	160	50	55	55	42,8
LSES 132	220	172	126	377	32	160	50	63	63	43,8	235	169	160	457	41	160	50	55	55	43,8

Type	4, 8 poles motors																				
	LS 8 pole MUT										LS FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 80 L	170	123	86	215	26	120	50	43	60	12,7	172	146	160	265	13	120	50	55	55	20
LS 90 L	190	133	86	245	26	140	50	43	60	17	184	156	160	304	13	140	50	55	55	26
LS 100 L	200	138	86	290	26	160	50	43	60	24,3	200	161	160	351	21	160	50	55	55	31,8
LS 112	-	-	-	-	-	-	-	-	-	-	235	169	160	396	23	160	50	55	55	42,8
LS 132 S	-	-	-	-	-	-	-	-	-	-	235	169	160	437	41	160	50	55	55	43,8

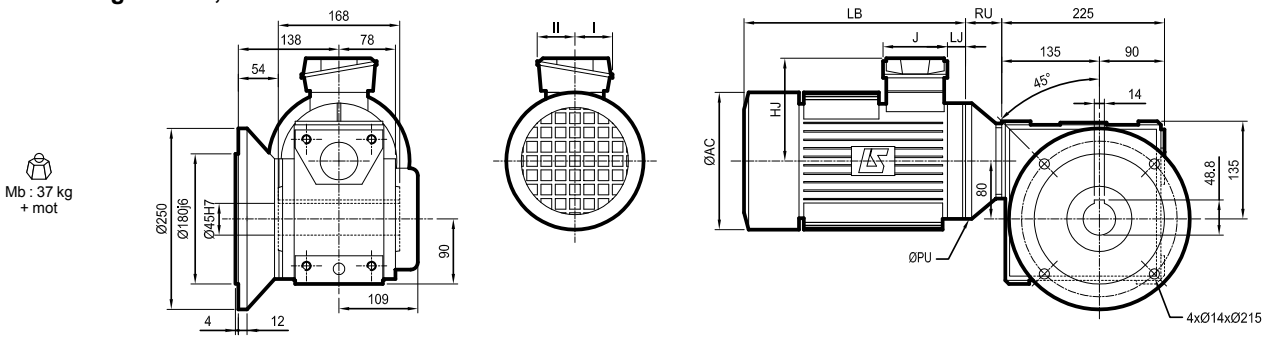
Std CEI

Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2501 MUF LS**

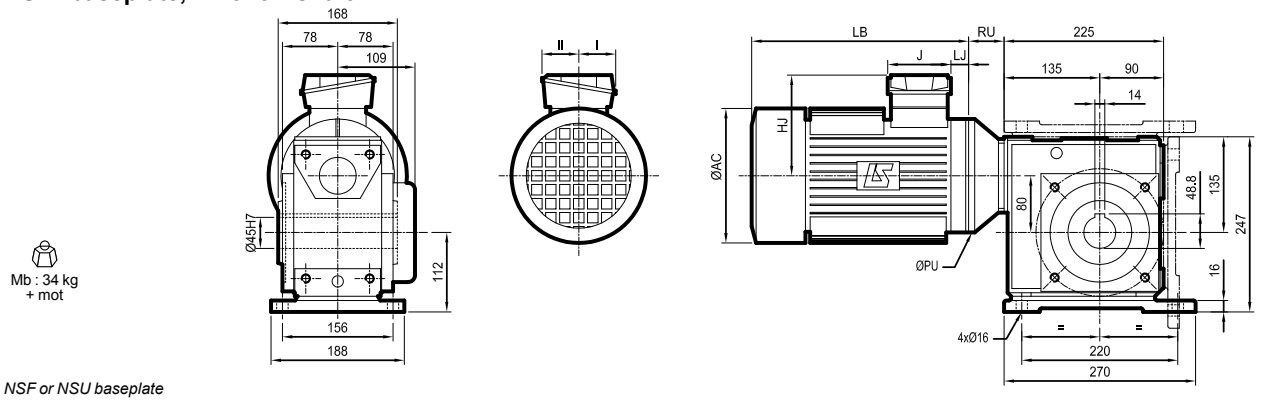
Dimensions in millimetres

- BDL* flange on left, H hollow shaft



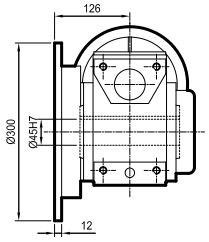
* *option on right BDR H: identical flange and shaft*

- NSD* baseplate, H hollow shaft

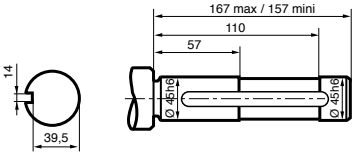


* *NSF or NSU baseplate*

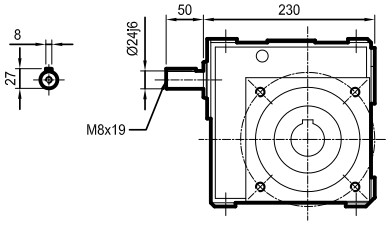
- Flange details BN L



driven shaft



Details AP



Type	4 poles motors																				
	LSES MUF										LSES FCR MUF										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	247	26	200	50	43	43	14,7	184	156	160	324	38	200	50	55	55	27,2
LSES 90	190	135	86	265	46	200	50	43	43	17,6	184	156	160	324	33	200	50	55	55	27,2
LSES 100	235	140	86	309	27	250	50	43	43	28,7	200	161	160	400,5	50	250	50	55	55	33
LSES 112	235	149	86	333	35,5	250	50	43	43	38	235	169	160	425	49	250	50	55	55	44
LSES 132	265	190	126	412	17	250	50	63	63	71	280	188	160	533	65	250	50	55	55	78

Type	4, 8 poles motors																				
	LS 8 pole MUF										LS FCR MUF										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 80 L	-	-	-	-	-	-	-	-	-	-	172	146	160	292	38	200	50	55	55	21,2
LS 90 L	190	133	86	265	46	200	50	43	60	18,4	184	156	160	324	33	200	50	55	55	27,2
LS 100 L	200	138	86	290	26	250	50	43	60	25,6	200	161	160	388	50	250	50	55	55	33
LS 112	200	138	86	290	26	250	50	43	60	27,9	235	169	160	425	49	250	50	55	55	44
LS 132	-	-	-	-	-	-	-	-	-	-	280	188	160	533	65	250	50	55	55	78

Std CEI

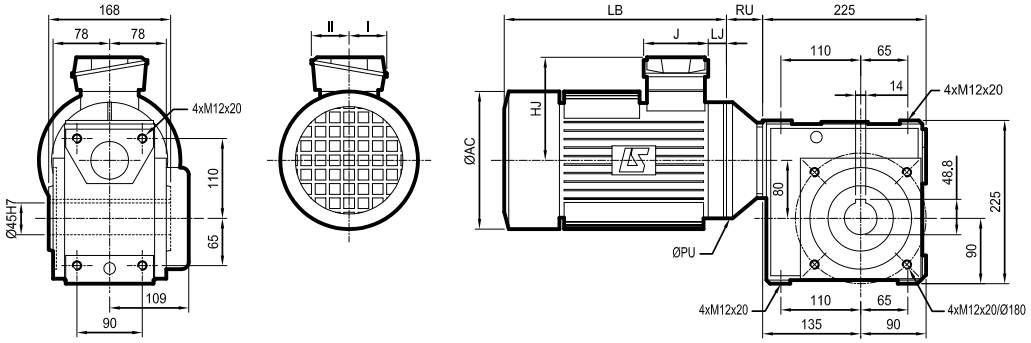
Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2501 MUT LS**

Dimensions in millimetres

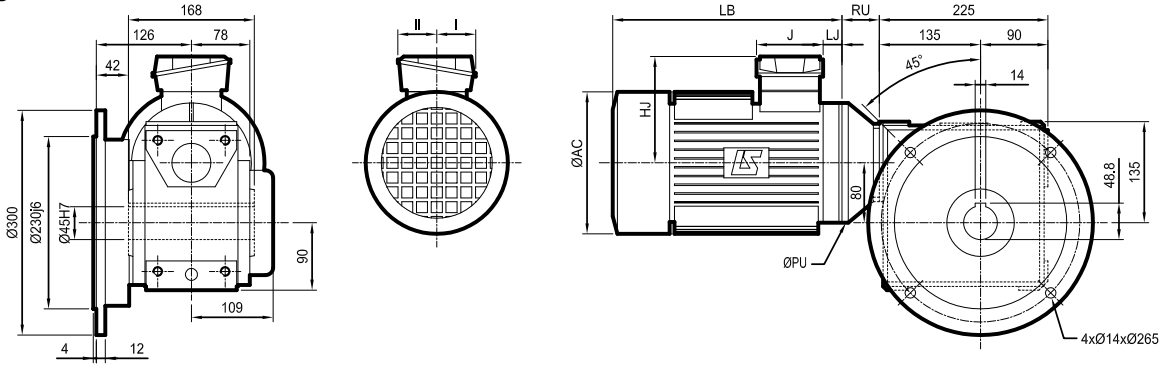
- NU standard, H hollow shaft

Mb : 31 kg
+ mot



- BS[1] L* flange on left, H* hollow shaft

Mb : 38 kg
+ mot



1. or BN flange: details page 28
** option on right BSR H: identical flange and shaft*

Type	4 poles motors																				
	LSES MUT										LSES FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	247	26	120	50	43	43	13,5	190	156	160	304	13	120	50	55	55	26
LSES 90	190	135	86	245	26	140	50	43	43	16,4	190	156	160	304	13	140	50	55	55	26
LSES 100	235	140	86	309	27	160	50	43	43	27,5	200	161	160	363,5	21	160	50	55	55	31,8
LSES 112	235	149	86	333	35,5	160	50	43	43	36,8	235	169	160	396	23	160	50	55	55	42,8
LSES 132	265	190	126	412	17	160	50	43	43	69,8	280	188	160	493	25	160	50	55	55	76,8

Type	4, 8 poles motors																				
	LS 8 pole MUT										LS FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 80 L	-	-	-	-	-	-	-	-	-	-	172	146	160	265	13	120	50	55	55	20
LS 90 L	190	133	86	245	26	140	50	43	60	17	184	156	160	304	13	140	50	55	55	26
LS 100 L	200	138	86	290	26	160	50	43	60	24,3	200	161	160	351	21	160	50	55	55	31,8
LS 112	200	138	86	290	26	160	50	43	60	26,7	235	169	160	396	23	160	50	55	55	42,8
LS 132	-	-	-	-	-	-	-	-	-	-	280	188	160	493	25	160	50	55	55	76,8

Std CEI

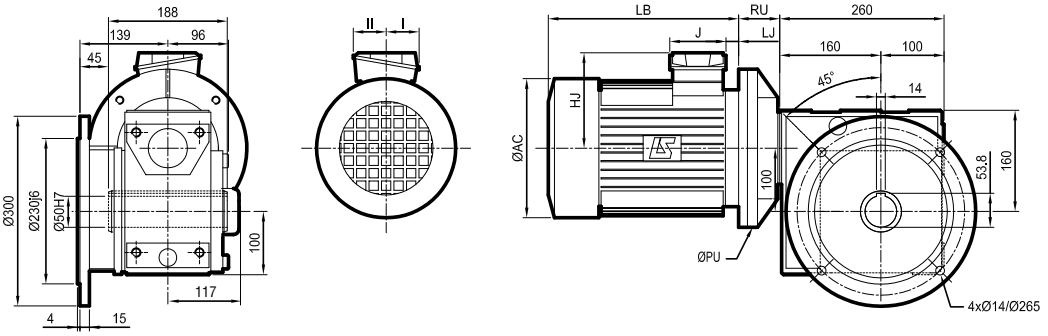
Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2601 MUF LS**

Dimensions in millimetres

- BDL* flange on left, H hollow shaft

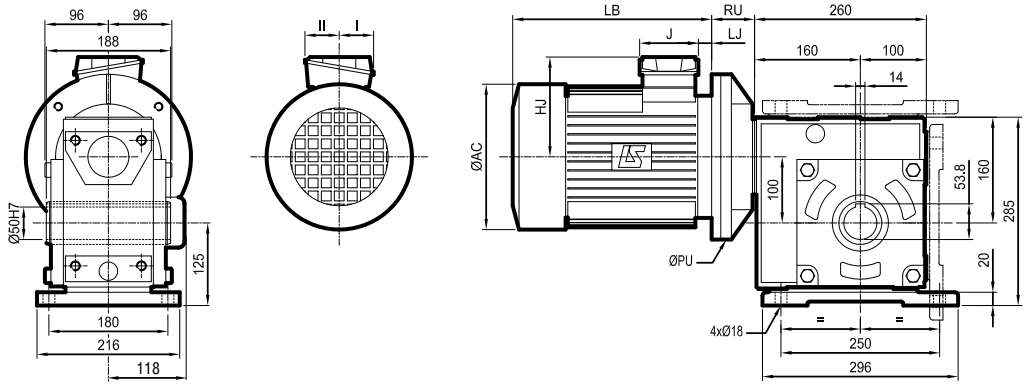
Mb : 56 kg
+ mot



** option on right BDR H: identical flange and shaft*

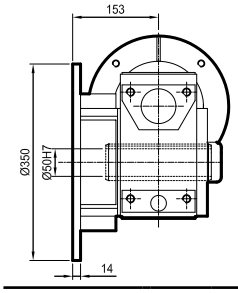
- NSD* baseplate, H hollow shaft

Mb : 44 kg
+ mot

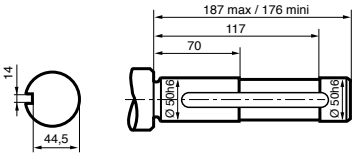


** NSF or NSU baseplate*

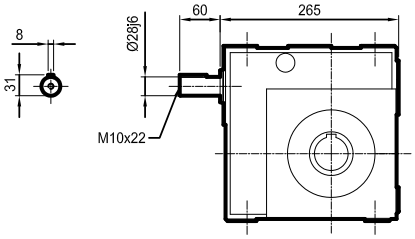
- Flange details BN L



driven shaft



Details AP



Type	4 poles motors																				
	LSES MUF										LSES FCR MUF										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 90	190	135	86	265	46	200	59	43	43	18,2	184	156	160	324	33	200	59	55	55	27,8
LSES 100	235	140	86	309	27	250	51	43	43	29,3	200	161	160	400,5	50	250	51	55	55	33,6
LSES 112	235	149	86	333	35,5	250	51	43	43	38	235	169	160	425	49	250	51	55	55	44,6
LSES 132	265	190	126	452	57	250	51	63	63	71	280	188	160	533	65	250	51	55	55	78,6

Type	4, 8 poles motors																				
	LS 8 pole MUF										LS FCR MUF										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 90 L	190	133	86	265	46	200	59	43	60	18,8	184	156	160	324	33	200	59	55	55	27,8
LS 100 L	200	138	86	290	26	250	51	43	60	26	200	161	160	388	50	250	51	55	55	33,6
LS 112	200	138	86	290	26	250	51	43	60	28,5	235	169	160	425	49	250	51	55	55	44,6
LS 132	280	175	110	387	25	250	51	57	73	63,5	280	188	160	533	65	250	51	55	55	78,6

Std CEI

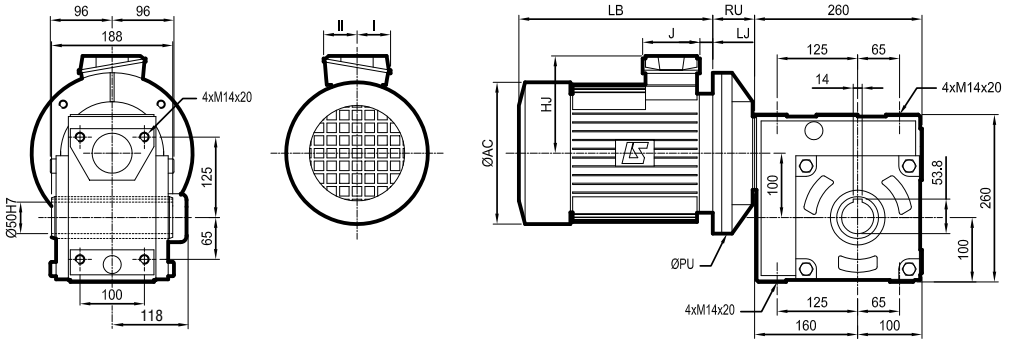
Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2601 MUT LS**

Dimensions in millimetres

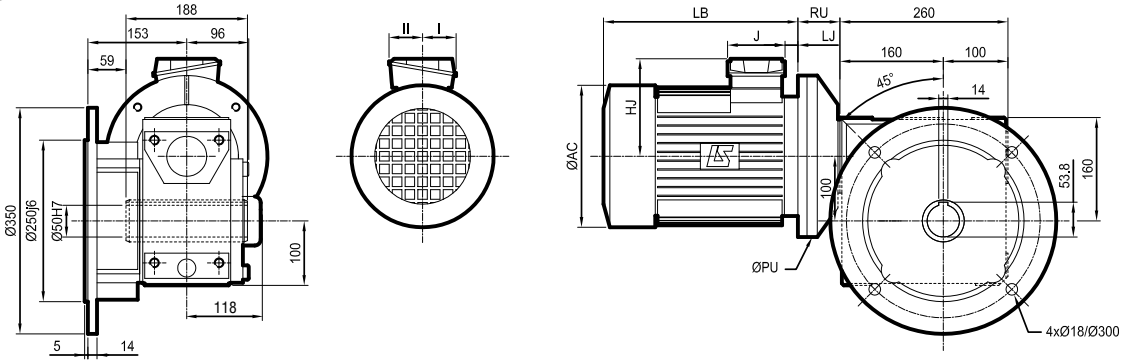
- NU standard, H hollow shaft

Mb : 37 kg
+ mot



- BS[1] L* flange on left, H* hollow shaft

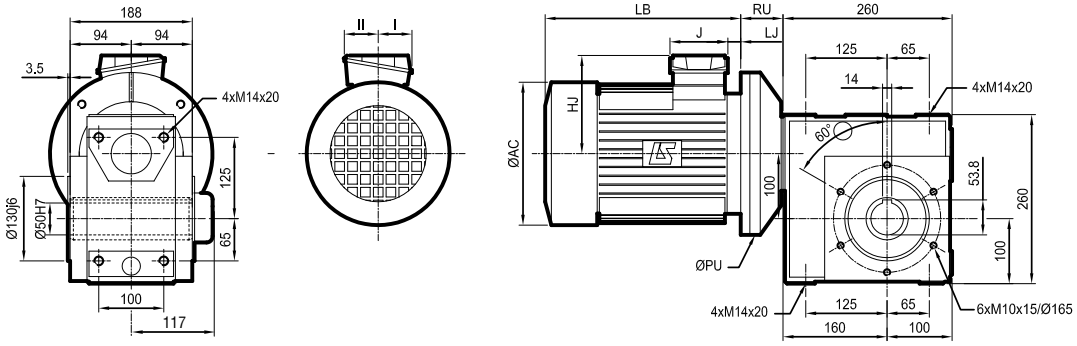
Mb : 47 kg
+ mot



1. or BN flange: details page 30 ** option on right BSR H: identical flange and shaft*

- BT* form, H* hollow shaft

Mb : 40 kg
+ mot



** option*

Type	4 poles motors																				
	LSES MUT										LSES FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 100	235	140	86	309	27	250	51	43	43	29,2	200	161	160	363,5	21	250	51	55	55	33,5
LSES 112	235	149	86	333	35,5	250	51	43	43	38,5	235	169	160	396	23	250	51	55	55	44,5
LSES 132	265	190	126	412	17	250	51	63	63	71,5	280	188	160	493	25	250	51	55	55	78,5

Type	4, 8 poles motors																				
	LS 8 pole MUT										LS FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 100L	200	138	86	290	26	250	51	43	60	26	200	161	160	351	21	250	51	55	55	33,5
LS 112	200	138	86	290	26	250	51	43	60	28,4	235	169	160	396	23	250	51	55	55	44,5
LS 132	280	175	110	387	25	250	51	57	73	63,5	280	188	160	493	25	250	51	55	55	78,5

Std CEI

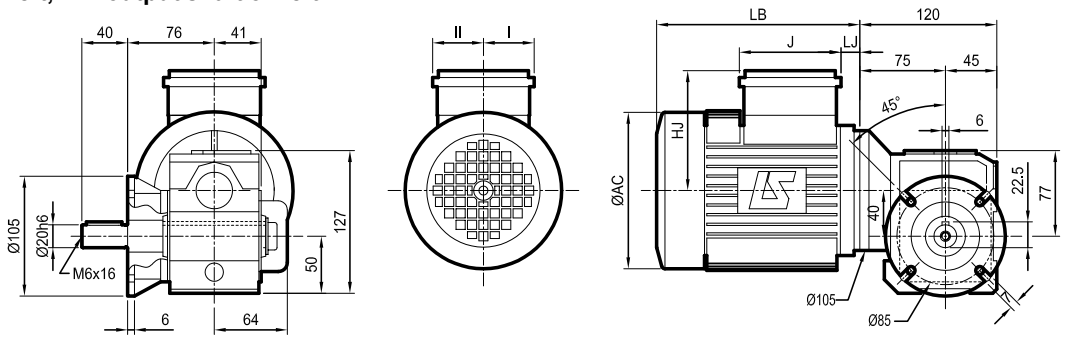
Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 3101**

Dimensions in millimetres

- BN1 L* flange on left, HL* output shaft on left

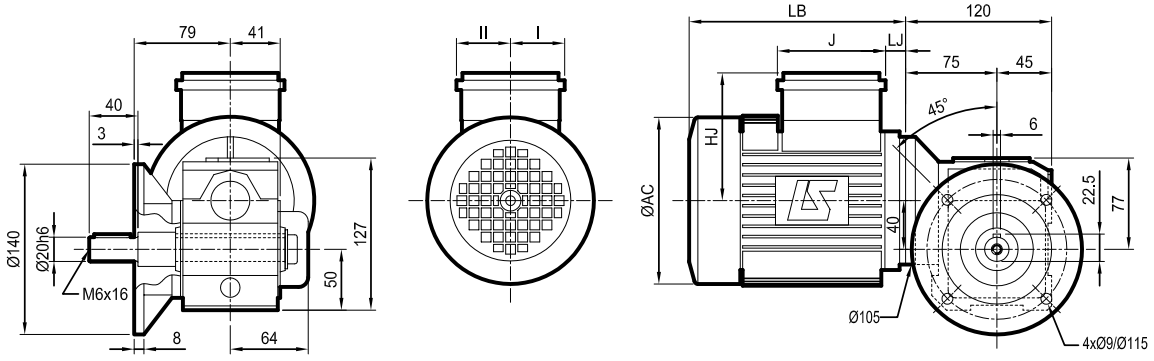
Mb : 6 kg
+ mot



* *option on right BN1 R HR: identical flange and shaft*

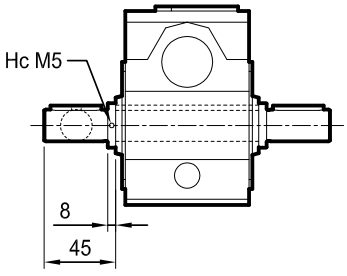
- BN2 L* flange on left, HL* output shaft on left

Mb : 6,5 kg
+ mot



* *option on right BN2 R RH: identical flange and shaft*

- Details HLR



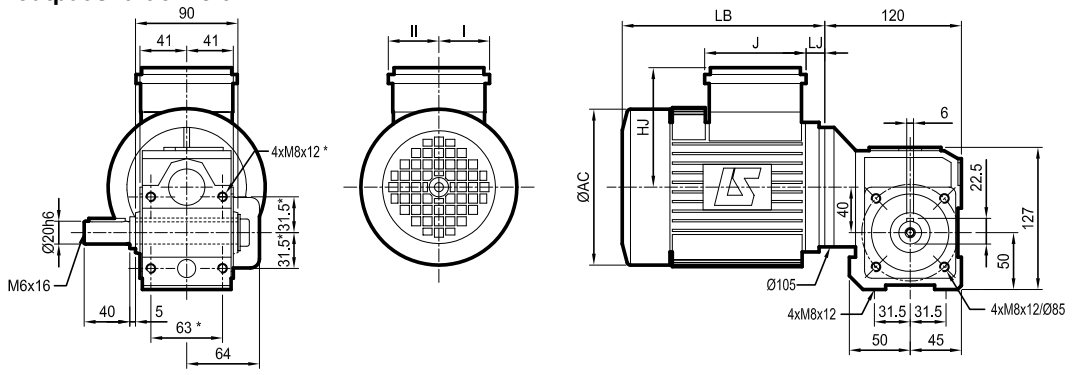
Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 3101 MUT LS**

Dimensions in millimetres

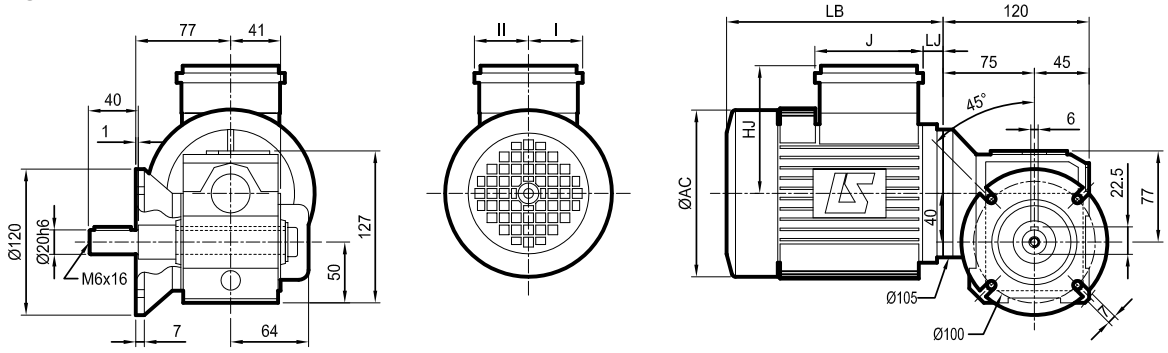
- NU standard, HL[1] output shaft on left

Mb : 5,5 kg
+ mot



- BN[1] L* flange on left, HL* output shaft on left

Mb : 6,5 kg
+ mot



** option on right BNR HR: identical flange and shaft*

Type	4 poles motors																				
	LSES MUT										LSES FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	171	135	86	267	67,5	105	0	43	43	11,7	172	146	160	304	13	105	0	55	55	18

Type	4, 8 poles motors																				
	LS MUT										LS FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 71 L	140	99	86	193	26	105	0	43	43	8,3	140	135	160	245	13	105	0	55	55	11
LS 80 L	-	-	-	-	-	-	-	-	-	-	172	146	160	300	46	105	0	55	55	18

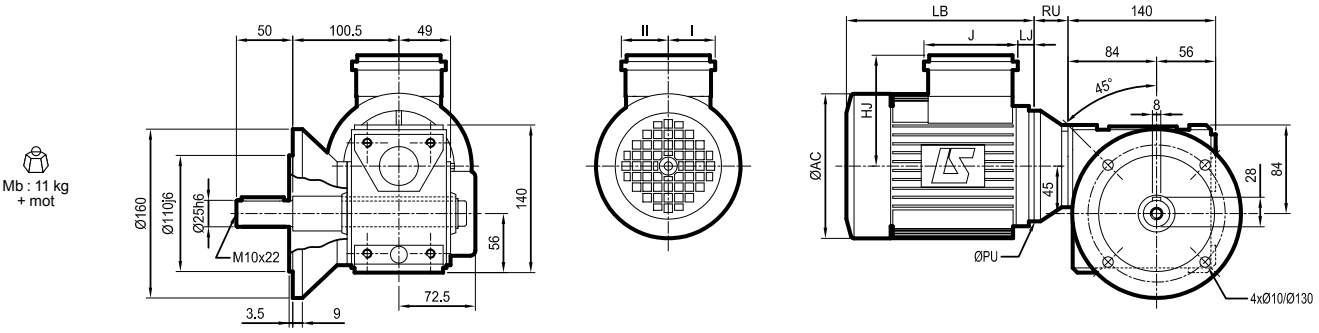
Std CEI

Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2201 MUF LS**

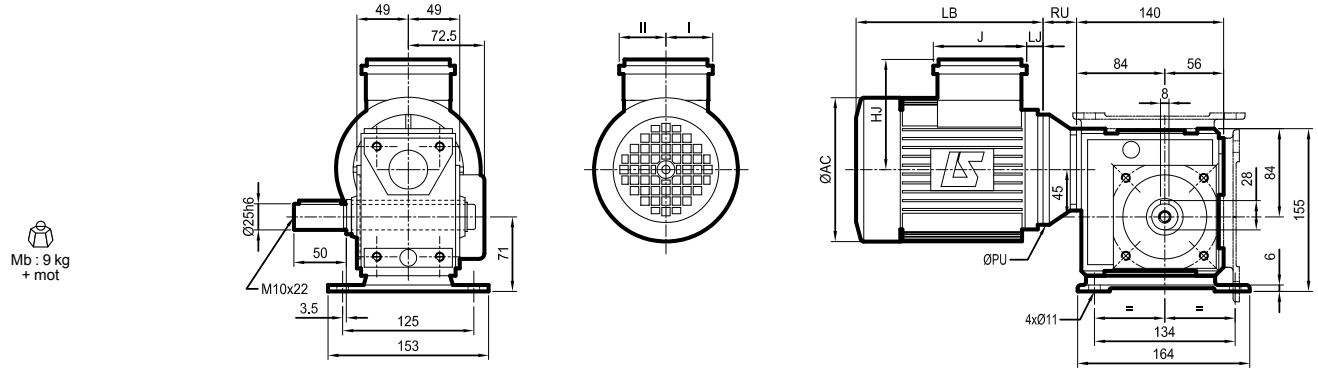
Dimensions in millimetres

- BD L* flange on left, HL* output shaft on left



** option on right BDR HR: identical flange and shaft*

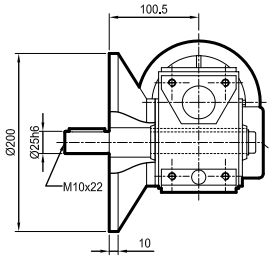
- NSD* baseplate, HL[1] output shaft on left



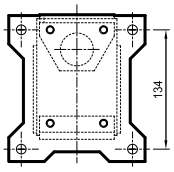
** NSF or NSU baseplate, see details*
1. option: HR shaft on right

- Details

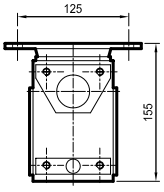
BN L



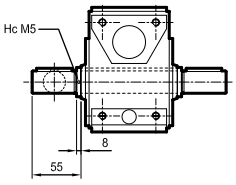
NSF



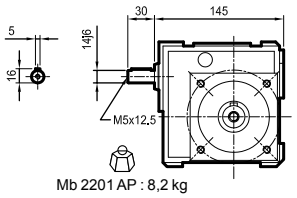
NSU



HLR



Details AP



Type	4 poles motors																				
	LSES MUF										LSES FCR MUF										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	247	26	200	31	43	43	12,7	184	156	160	324	33	200	31	55	55	25,7
LSES 90	190	135	86	290	71	200	31	43	43	15,2	184	156	160	324	33	200	31	55	55	25,7

Type	4, 8 poles motors																				
	LS 71 - 4 poles ; LS 80 - 8 poles MUF										LS FCR MUF										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 71 L	140	99	86	193	26	160	24	43	43	9	140	135	160	271	38	160	24	55	55	12,5
LS 80 L	170	123	86	215	26	200	31	43	60	10	172	146	160	292	40,5	200	31	55	55	19,7
LS 90 L	-	-	-	-	-	-	-	-	-	-	184	156	160	324	33	200	31	55	55	25,7

Std CEI

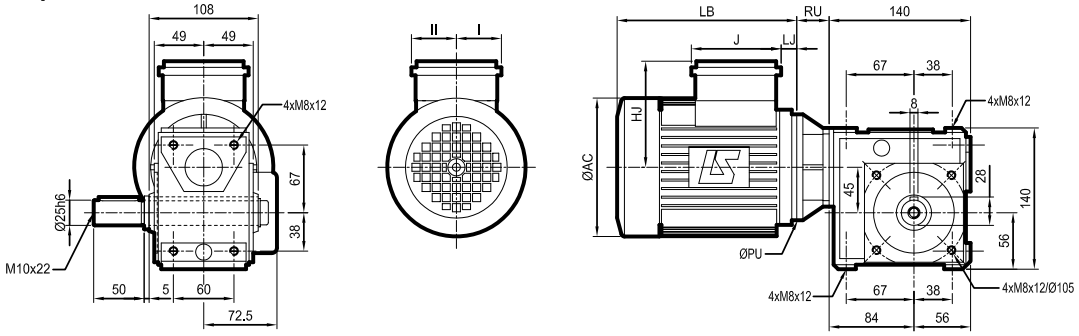
Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2201 MUT LS**

Dimensions in millimetres

- NU standard, HL[1] output shaft on left

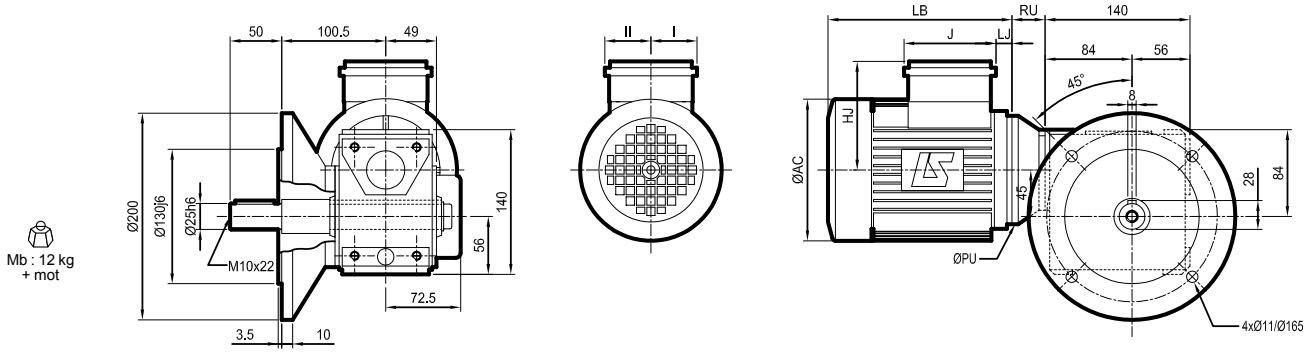
Mb : 8,2 kg
+ mot



1. option : HR shaft on right

- BS[1] L* flange on left, HL* output shaft on left

Mb : 12 kg
+ mot



1. or BN flange: details page 34
** option on right BSR HR: identical flange and shaft*

Type	4 poles motors																				
	LSES MUT										LSES FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	267	26	120	33	43	43	12,7	184	156	160	304	13	120	33	55	55	25,2
LSES 90	189	135	86	245	26	120	33	43	43	15,6	184	156	160	304	13	120	33	55	55	25,2

Type	4, 8 poles motors																				
	LS 71 - 4 poles ; LS 80 - 8 poles MUT										LS FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 71 L	140	99	86	193	26	105	31	43	43	9	140	135	160	245	13	105	31	55	55	12
LS 80 L	170	123	86	215	26	120	33	43	43	11,5	172	146	160	265	13	120	33	55	55	19,2
LS 90 L	-	-	-	-	-	-	-	-	-	-	184	156	160	304	13	120	33	55	55	25,2

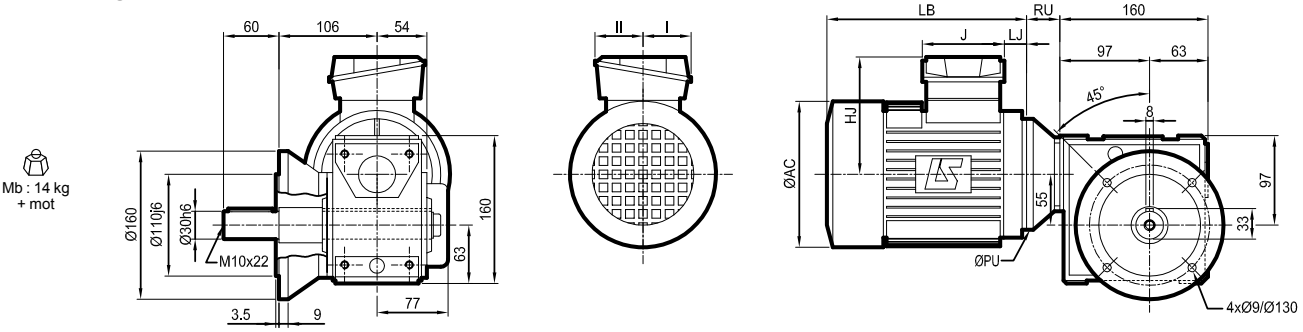
Std CEI

Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2301 MUF LS**

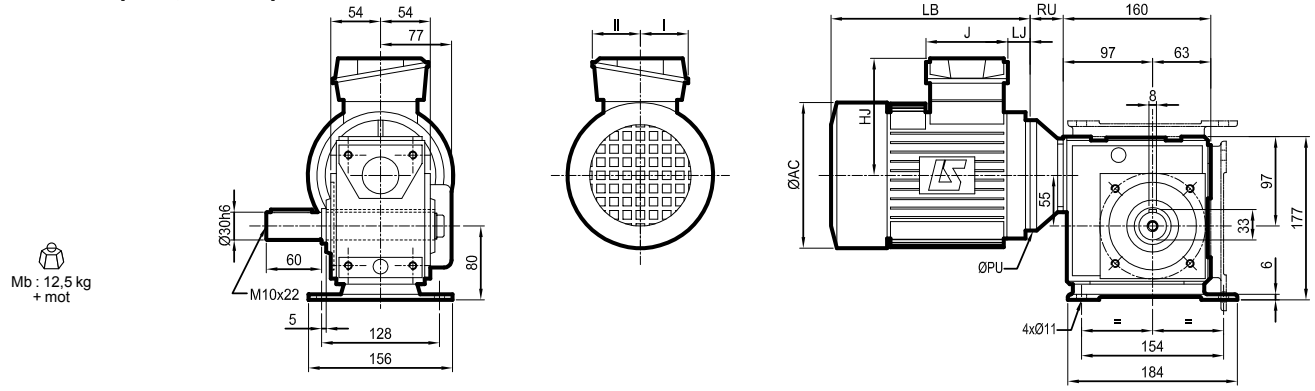
Dimensions in millimetres

- BD L* flange on left, HL* output shaft on left



** option on right BDR HR: identical flange and shaft*

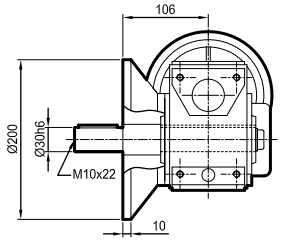
- NSD* baseplate, HL[1] output shaft on left



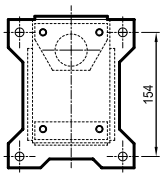
** NSF or NSU baseplate, see details*
1. option: HR shaft on right

- Details

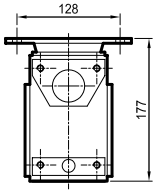
BN L



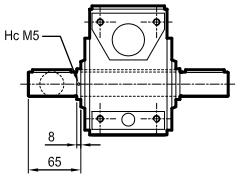
NSF



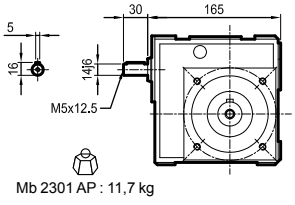
NSU



HLR



Details AP



Type	4 poles motors																				
	LSES MUF										LSES FCR MUF									
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	247	26	200	31	43	43	13,2	184	156	160	324	33	200	31	55	55	25,7
LSES 90	190	135	86	265	46	200	31	43	43	16,1	184	156	160	324	33	200	31	55	55	25,7
LSES 100	235	140	86	309	27	200	31	43	43	27,2	200	161	160	400,5	50	200	31	55	55	31,5
LSES 112	235	149	86	333	35,5	200	31	43	43	36,5	235	165	160	396	23,5	200	31	55	55	42,5

Type	4, 8 poles motors																				
	LS 71 - 4 poles ; LS 80 and 90 - 8 poles MUF										LS FCR MUF									
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 71 L	140	99	86	193	26	160	24	43	43	9,8	140	135	160	271	38	160	24	55	55	12,5
LS 80 L	170	123	86	215	26	200	31	43	60	12,4	172	146	160	292	40,5	200	31	55	55	19,7
LS 90 L	190	133	86	265	46	200	31	43	60	16,7	184	156	160	324	33	200	31	55	55	25,7
LS 100 L	-	-	-	-	-	-	-	-	-	-	200	161	160	388	50	200	31	55	55	31,5
LS 112	-	-	-	-	-	-	-	-	-	-	235	165	160	396	23,5	200	31	55	55	42,5

Std CEI

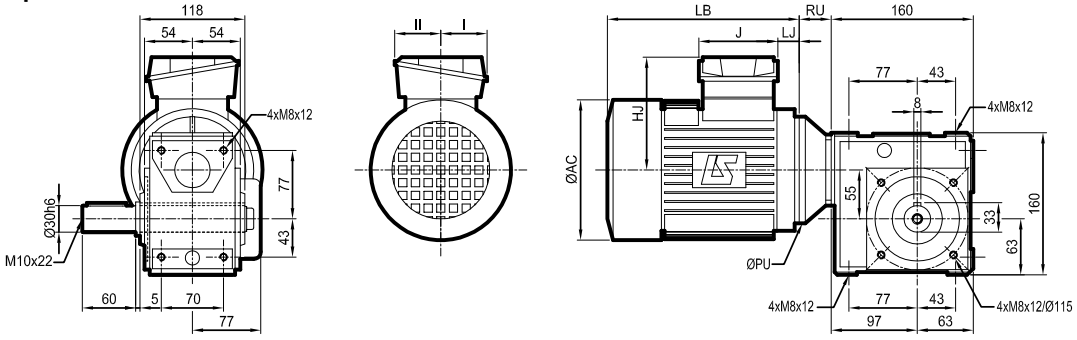
Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2301 MUT LS**

Dimensions in millimetres

- NU standard, HL[1] output shaft on left

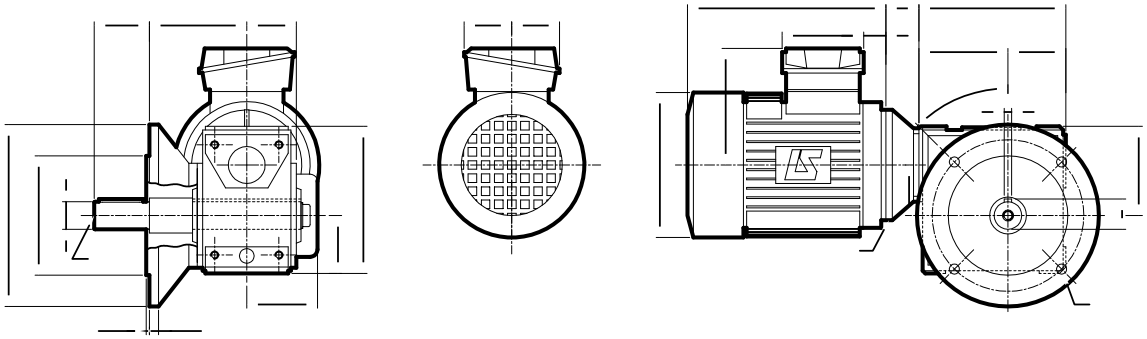
Mb : 11,7 kg
+ mot



1. option: HR shaft on right

- BS[1] L* flange on left, HL* output shaft on left

Mb : 15 kg
+ mot



1. or BN flange: details page 36
** option on right BSR HR: identical flange and shaft*

Type	4 poles motors																				
	LSES MUT										LSES FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	267	26	120	36	43	43	12,7	190	156	160	304	13	120	36	55	55	25,2
LSES 90	190	135	86	245	26	140	38	43	43	16,7	190	156	160	304	13	140	38	55	55	25,2
LSES 100	235	140	86	309	27	140	35	43	43	26,7	200	161	160	364,5	21	140	35	55	55	31
LSES 112	235	149	86	333	35,5	140	38	43	43	36	235	169	160	396	23,5	140	38	55	55	42

Type	4, 8 poles motors																				
	LS 71 - 4 poles ; LS 80 and 90 - 8 poles MUT										LS FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 71 L	140	99	86	193	26	105	35	43	43	9,2	140	135	160	245	13	105	35	55	55	12
LS 80 L	170	123	86	215	26	120	36	43	60	12	172	146	160	265	13	120	36	55	55	19,2
LS 90 L	190	133	86	245	26	140	36	43	60	16	190	156	160	304	13	140	38	55	55	25,2
LS 100 L	-	-	-	-	-	-	-	-	-	-	200	161	160	351	21	140	35	55	55	31
LS 112	-	-	-	-	-	-	-	-	-	-	235	169	160	396	23,5	140	38	55	55	42

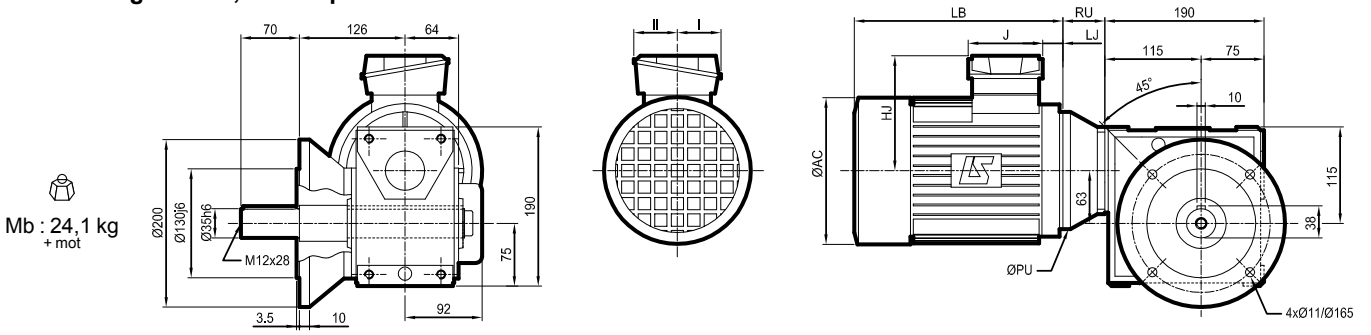
Std CEI

Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2401 MUF LS**

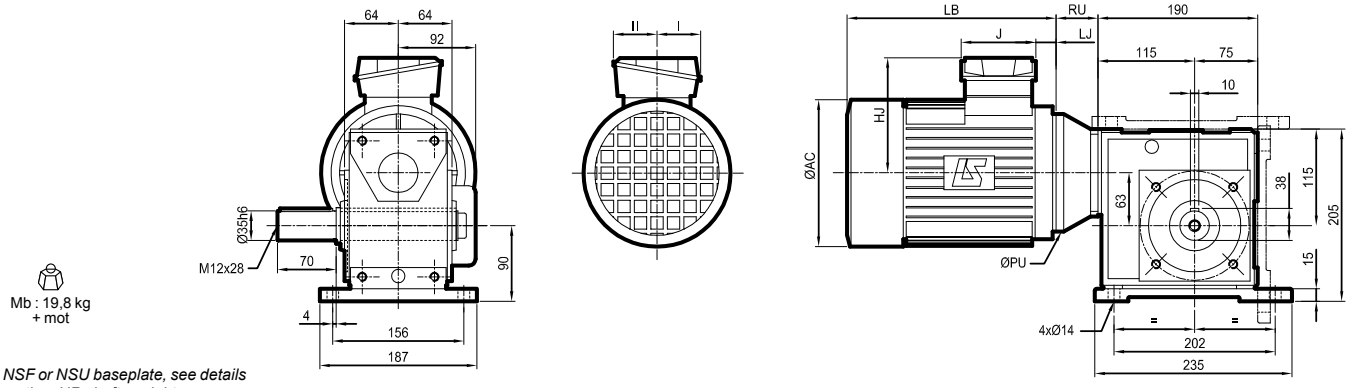
Dimensions in millimetres

- BDL* flange on left, HL* output shaft on left



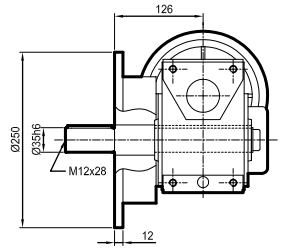
** option on right BDR HR: identical flange and shaft*

- NSD* baseplate, HL[1] output shaft on left

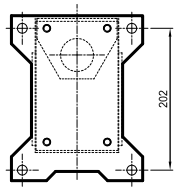


** NSF or NSU baseplate, see details*
1. option: HR shaft on right

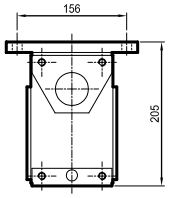
- Details BN L



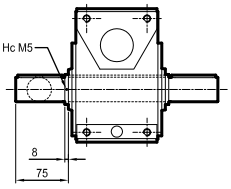
NSF



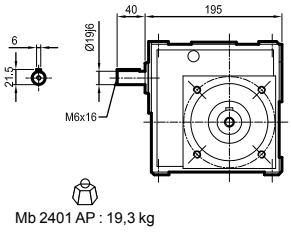
NSU



HLR



Details AP



4 poles motors

Type	LSES MUF										LSES FCR MUF									
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	247	26	200	50	43	43	14,7	184	156	160	324	33	200	50	55	55	27,2
LSES 90	190	135	86	265	46	200	50	43	43	17,6	184	156	160	324	33	200	50	55	55	27,2
LSES 100	235	140	86	309	27	250	50	43	43	28,7	200	161	160	400,5	50	250	50	55	55	33
LSES 112	235	149	86	333	35,5	250	50	43	43	38	235	165	160	396	23,5	250	50	55	55	44
LSES 132	220	172	126	377	32,5	250	50	63	63	45	235	169	160	457	41	250	50	55	55	51

4, 8 poles motors

Type	LS 71 - 4 poles ; LS 8 poles MUF										LS FCR MUF									
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 71 L	140	99	86	193	21	160	50	43	43	11,3	140	135	160	271	38	160	50	55	55	14
LS 80 L	170	123	86	215	26	200	50	43	60	14	172	146	160	292	38	200	50	55	55	21,2
LS 90 L	190	133	86	265	46	200	50	43	60	18,2	184	156	160	324	33	200	50	55	55	27,2
LS 100 L	200	138	86	290	26	250	50	43	60	25,5	200	161	160	388	50	250	50	55	55	33
LS 112	-	-	-	-	-	-	-	-	-	-	235	169	160	425	49	250	50	55	55	44
LS 132 S	-	-	-	-	-	-	-	-	-	-	235	169	160	437	41	250	50	55	55	51

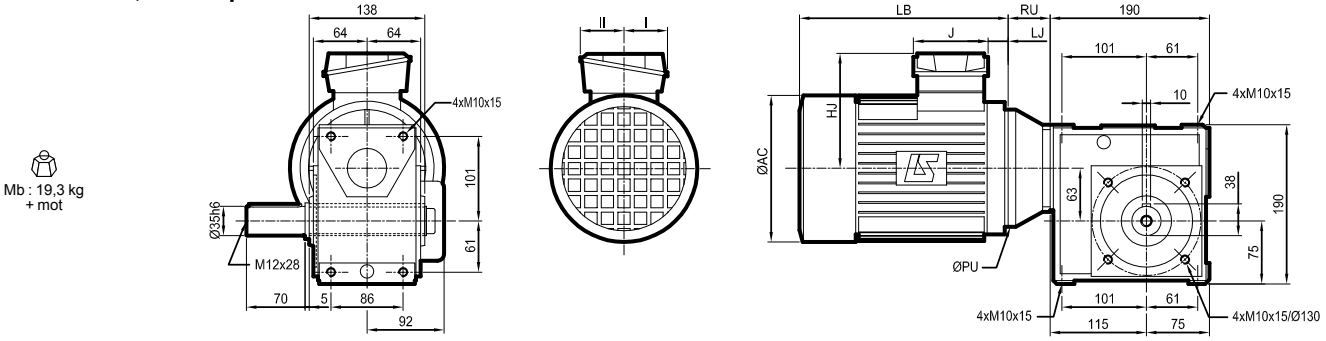
Std CEI

Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2401 MUT LS**

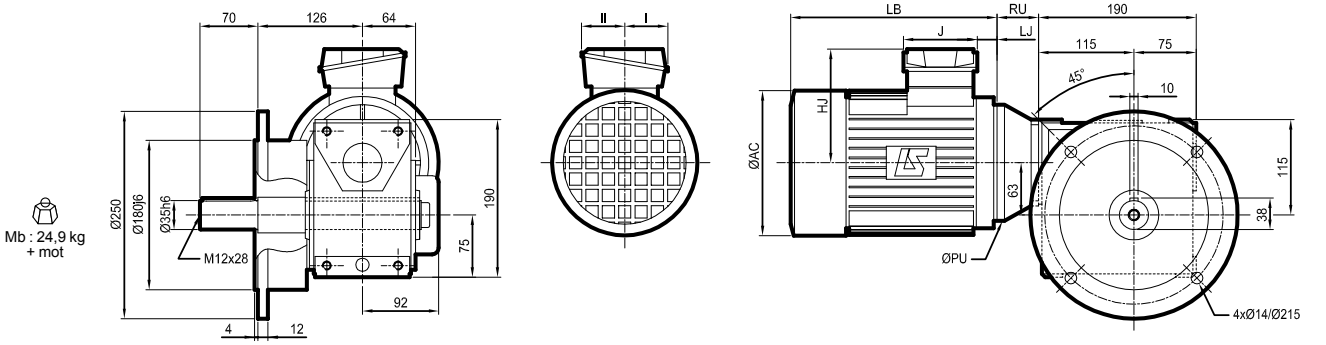
Dimensions in millimetres

- NU standard, HL[1] output shaft on left



1. option: HR shaft on right

- BS[1] L* flange on left, HL* output shaft on left



1. or BN flange: details page 38
** option on right BSR HR: identical flange and shaft*

Type	4 poles motors																				
	LSES MUT										LSES FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	267	26	120	50	43	43	13,5	184	156	160	304	13	120	50	55	55	26
LSES 90	190	135	86	245	26	140	50	43	43	16,4	184	156	160	304	13	140	50	55	55	26
LSES 100	235	140	86	309	27	160	50	43	43	27,5	200	161	160	364,5	21	160	50	55	55	31,8
LSES 112	235	149	86	333	35,5	160	50	43	43	36,8	235	169	160	396	23	160	50	55	55	42,8
LSES 132	220	172	126	377	32	160	50	63	63	43,8	235	169	160	457	41	160	50	55	55	43,8

Type	4, 8 poles motors																				
	LS 8 poles MUT										LS FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 80 L	170	123	86	215	26	120	50	43	60	12,7	172	146	160	265	13	120	50	55	55	20
LS 90 L	190	133	86	245	26	140	50	43	60	17	184	156	160	304	13	140	50	55	55	26
LS 100 L	200	138	86	290	26	160	50	43	60	24,3	200	161	160	351	21	160	50	55	55	31,8
LS 112	-	-	-	-	-	-	-	-	-	-	235	169	160	396	23	160	50	55	55	42,8
LS 132 S	-	-	-	-	-	-	-	-	-	-	235	169	160	437	41	160	50	55	55	43,8

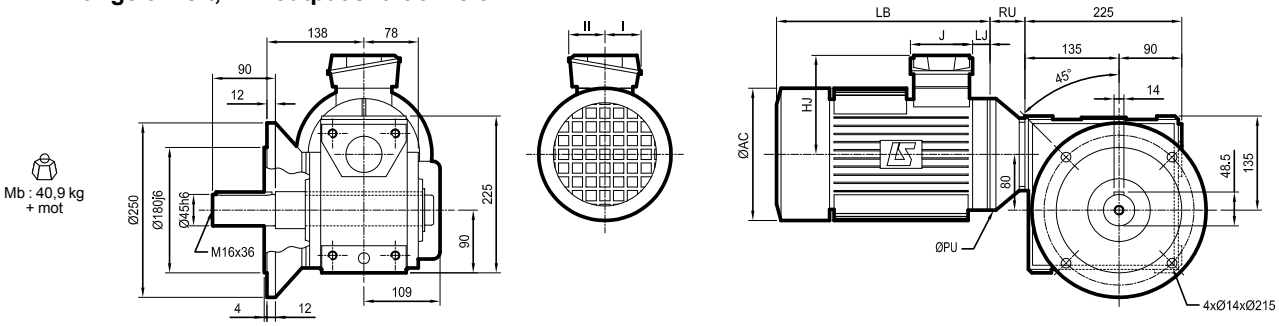
Std CEI

Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2501 MUF LS**

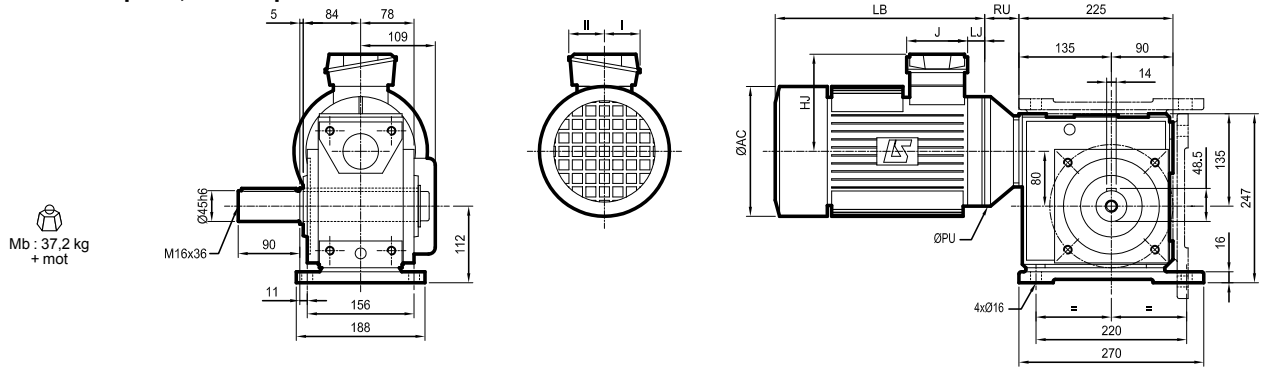
Dimensions in millimetres

- BDL* flange on left, HL* output shaft on left



** option on right BDR HR: identical flange and shaft*

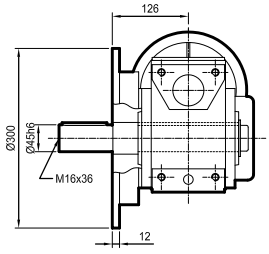
- NSD* baseplate, HL[1] output shaft on left



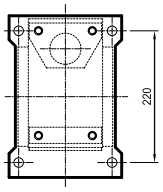
** NSF or NSU baseplate, see details*
1. option: HR shaft on right

- Details

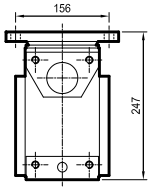
BN L



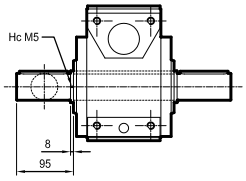
NSF



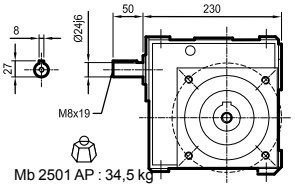
NSU



HLR



Details AP



4 poles motors

Type	LSES MUF										LSES FCR MUF									
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	247	26	200	50	43	43	14,7	184	156	160	324	38	200	50	55	55	27,2
LSES 90	190	135	86	265	46	200	50	43	43	17,6	184	156	160	324	33	200	50	55	55	27,2
LSES 100	235	140	86	309	27	250	50	43	43	28,7	200	161	160	400,5	50	250	50	55	55	33
LSES 112	235	149	86	333	35,5	250	50	43	43	38	235	169	160	425	49	250	50	55	55	44
LSES 132	265	190	126	412	17	250	50	63	63	71	280	188	160	533	65	250	50	55	55	78

4, 8 poles motors

Type	LS 8 pole MUF										LS FCR MUF									
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 80 L	-	-	-	-	-	-	-	-	-	-	172	146	160	292	38	200	50	55	55	21,2
LS 90 L	190	133	86	265	46	200	50	43	60	18,4	184	156	160	324	33	200	50	55	55	27,2
LS 100 L	200	138	86	290	26	250	50	43	60	25,6	200	161	160	388	50	250	50	55	55	33
LS 112	200	138	86	290	26	250	50	43	60	27,9	235	169	160	425	49	250	50	55	55	44
LS 132	-	-	-	-	-	-	-	-	-	-	280	188	160	533	65	250	50	55	55	78

Std CEI

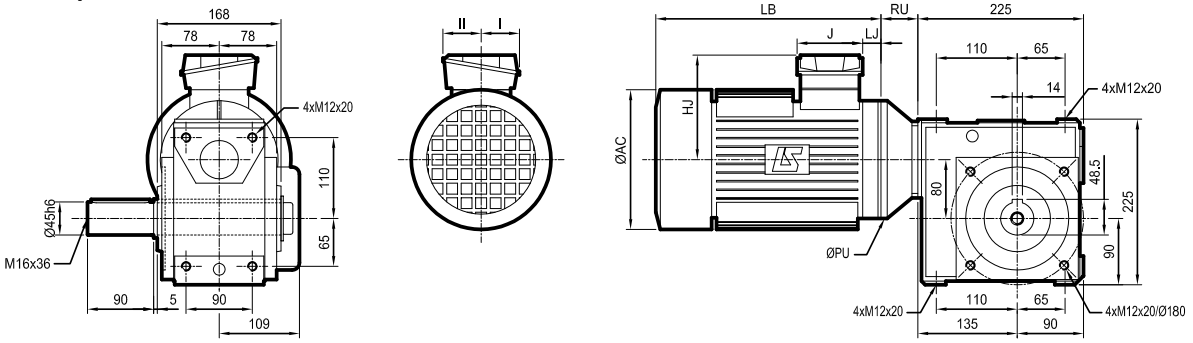
Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2501 MUT LS**

Dimensions in millimetres

- NU standard, HL[1] output shaft on left

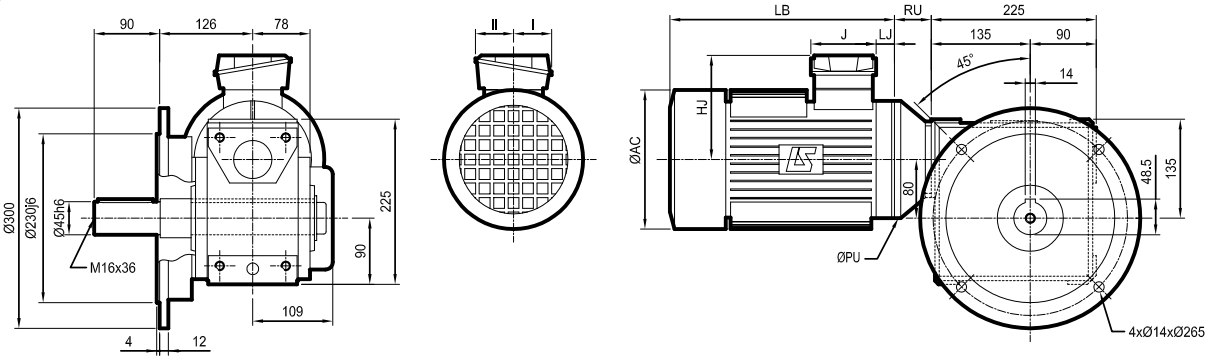
Mb : 34,5 kg
+ mot



1. option: HR shaft on right

- BS[1] L* flange on left, H* hollow shaft

Mb : 41,7 kg
+ mot



1. or BN flange: details page 40
** option on right BSR HR: identical flange and shaft*

Type	4 poles motors																				
	LSES MUT										LSES FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 80	183	135	86	247	26	120	50	43	43	13,5	190	156	160	304	13	120	50	55	55	26
LSES 90	190	135	86	245	26	140	50	43	43	16,4	190	156	160	304	13	140	50	55	55	26
LSES 100	235	140	86	309	27	160	50	43	43	27,5	200	161	160	363,5	21	160	50	55	55	31,8
LSES 112	235	149	86	333	35,5	160	50	43	43	36,8	235	169	160	396	23	160	50	55	55	42,8
LSES 132	265	190	126	412	17	160	50	43	43	69,8	280	188	160	493	25	160	50	55	55	76,8

Type	4, 8 poles motors																				
	LS 8 pole MUT										LS FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 80 L	-	-	-	-	-	-	-	-	-	-	172	146	160	265	13	120	50	55	55	20
LS 90 L	190	133	86	245	26	140	50	43	60	17	184	156	160	304	13	140	50	55	55	26
LS 100 L	200	138	86	290	26	160	50	43	60	24,3	200	161	160	351	21	160	50	55	55	31,8
LS 112	200	138	86	290	26	160	50	43	60	26,7	235	169	160	396	23	160	50	55	55	42,8
LS 132	-	-	-	-	-	-	-	-	-	-	280	188	160	493	25	160	50	55	55	76,8

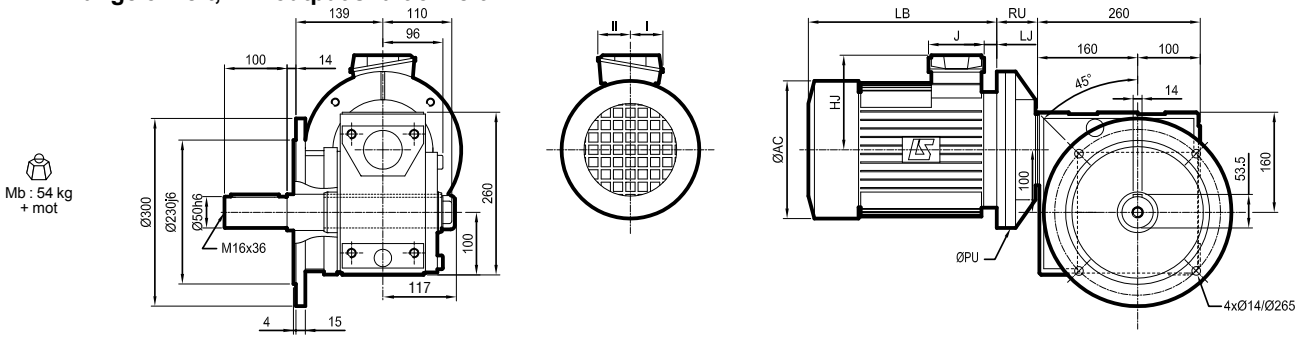
Std CEI

Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2601 MUF LS**

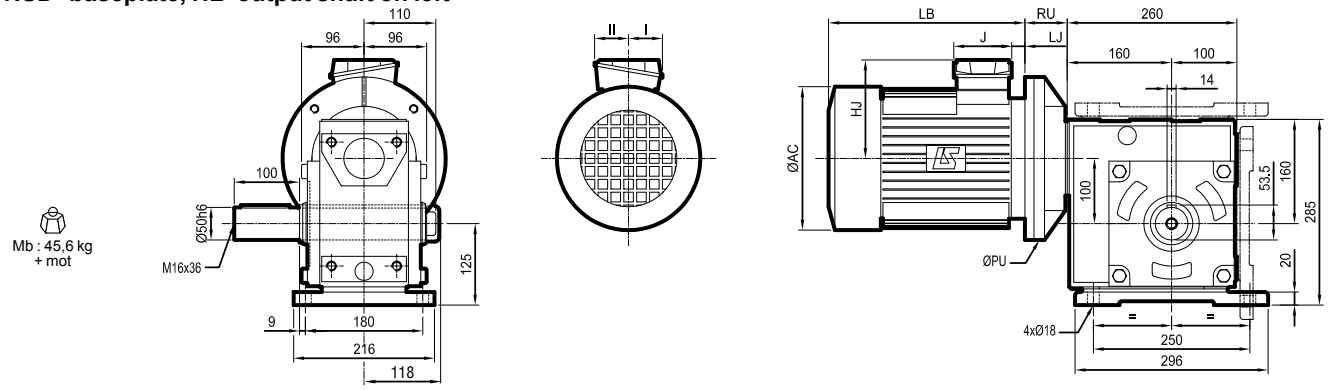
Dimensions in millimetres

- BDL* flange on left, HL* output shaft on left



* *option on right BDR HR: identical flange and shaft*

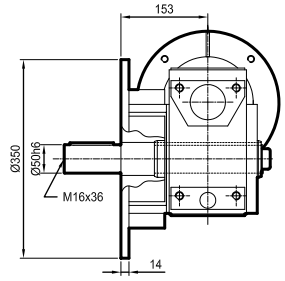
- NSD* baseplate, HL[1] output shaft on left



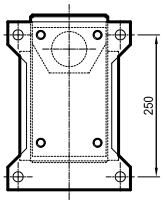
* *NSF or NSU baseplate, see details* *1. option : HR shaft on right*

- Details

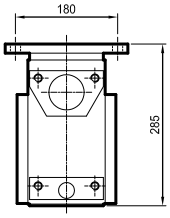
BN L



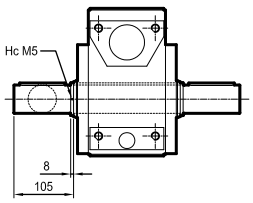
NSF



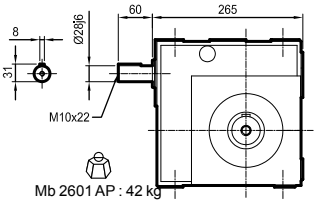
NSU



HLR



Details AP



Type	4 poles motors																			
	LSES MUF										LSES FCR MUF									
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 90	190	135	86	265	46	200	59	43	43	18,2	184	156	160	324	33	200	59	55	55	27,8
LSES 100	235	140	86	309	27	250	51	43	43	29,3	200	161	160	400,5	50	250	51	55	55	33,6
LSES 112	235	149	86	333	35,5	250	51	43	43	38	235	169	160	425	49	250	51	55	55	44,6
LSES 132	265	190	126	452	57	250	51	63	63	71	280	188	160	533	65	250	51	55	55	78,6

Type	4, 8 poles motors																			
	LS 8 pole MUF										LS FCR MUF									
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 90L	190	133	86	265	46	200	59	43	60	18,8	184	156	160	324	33	200	59	55	55	27,8
LS 100L	200	138	86	290	26	250	51	43	60	26	200	161	160	388	50	250	51	55	55	33,6
LS 112	200	138	86	290	26	250	51	43	60	28,5	235	169	160	425	49	250	51	55	55	44,6
LS 132	280	175	110	387	25	250	51	57	73	63,5	280	188	160	533	65	250	51	55	55	78,6

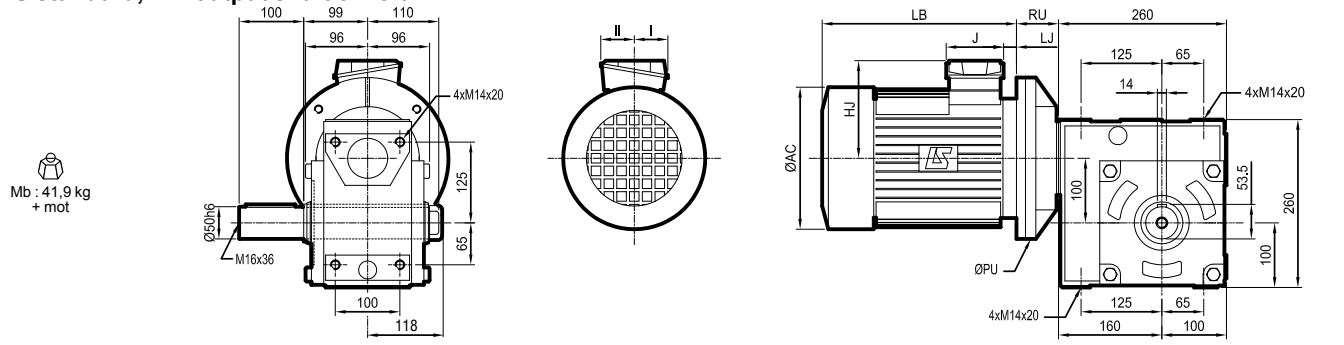
Std CEI

Dimensions

**Dimensions of Multibloc (Mb) geared motors, MU universal mounting,
Mb 2601 MUT LS**

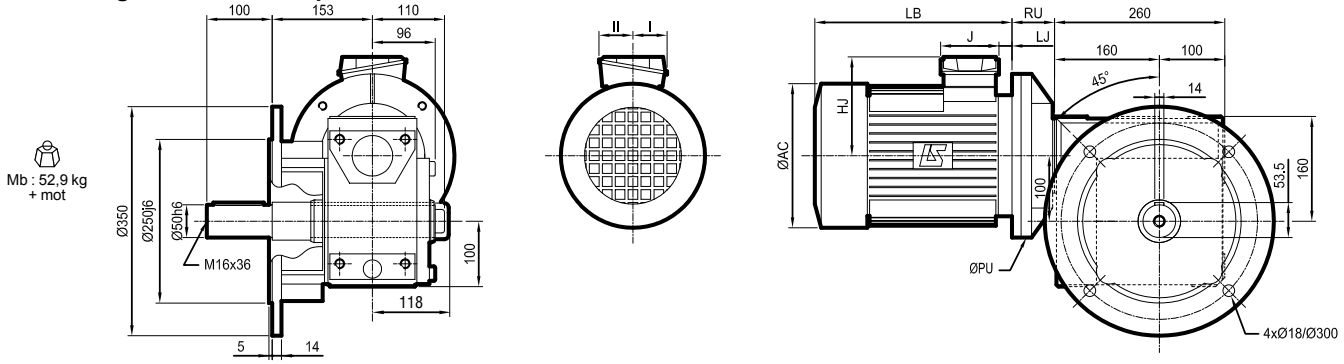
Dimensions in millimetres

- NU standard, HL[1] output shaft on left



1. option: HR shaft on right

- BS[1] L* flange on left, HL* output shaft on left



1. or BN flange: details page 42
** option on right BSR HR: identical flange and shaft*

Type	4 poles motors																				
	LSES MUT										LSES FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LSES 100	235	140	86	309	27	250	51	43	43	29,2	200	161	160	363,5	21	250	51	55	55	33,5
LSES 112	235	149	86	333	35,5	250	51	43	43	38,5	235	169	160	396	23	250	51	55	55	44,5
LSES 132	265	190	126	412	17	250	51	63	63	71,5	280	188	160	493	25	250	51	55	55	78,5

Type	4, 8 poles motors																				
	LS 8 pole MUT										LS FCR MUT										
	AC	HJ	J	LB	LJ	PU	RU	I	II	kg	AC	HJ	J	LB	LJ	PU	RU	I	II	kg
LS 100L	200	138	86	290	26	250	51	43	60	26	200	161	160	351	21	250	51	55	55	33,5
LS 112	200	138	86	290	26	250	51	43	60	28,4	235	169	160	396	23	250	51	55	55	44,5
LS 132	280	175	110	387	25	250	51	57	73	63,5	280	188	160	493	25	250	51	55	55	78,5

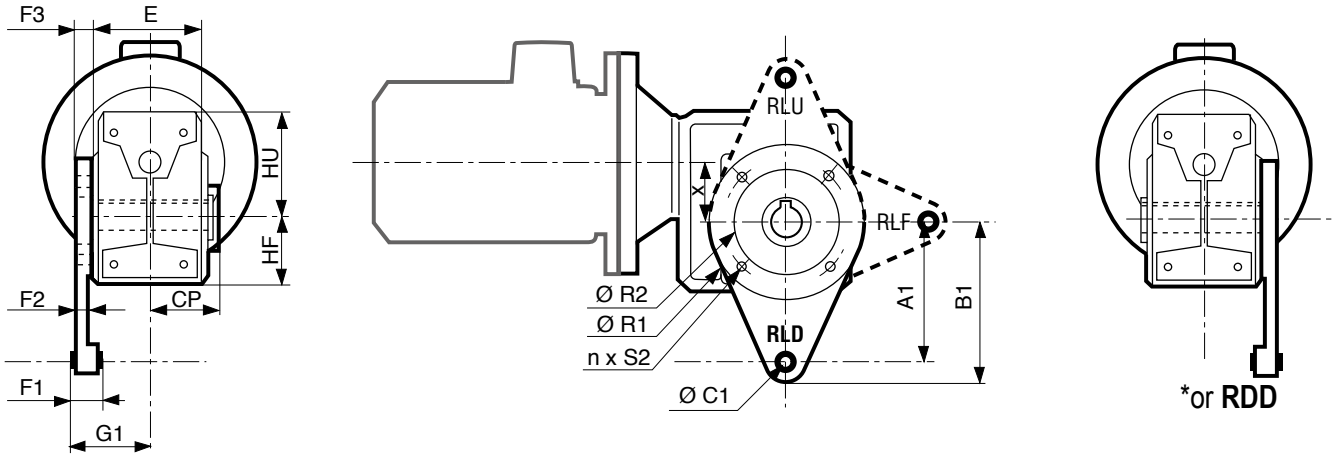
Std CEI

Dimensions

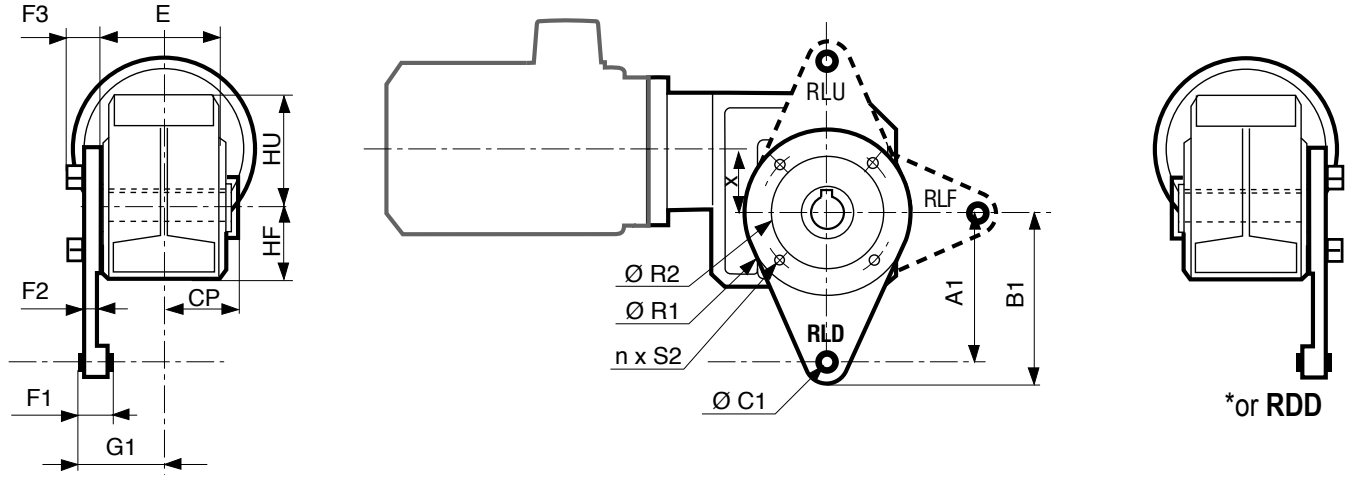
**Dimensions of R torque arm,
Mb 3101 and Mb 2201 to Mb 2501**

Dimensions in millimetres

- Mb 2201 to 2501: R LD form (or R RD)



- Mb 3101: R LD form (or R RD)



	R torque arm																
Type[1]	A1	B1	CP	C1	E	F1	F2	F3	G1	HF	HU	R1	R2	n	S2	x	kg
Mb 2501	310	340	28,5	16 H10	168	54	23	25	105	90	135	225	135	4	M12 x 25	80	6,7
Mb 2401	200	230	28	16 H10	138	54	23	25	91	75	115	179	97	4	M10 x 25	63	4,3
Mb 2301	160	181	22,5	10 H10	118	33	14	16	71,5	63	97	153	86	4	M8 x 15	55	1,8
Mb 2201	130	151	23,5	10 H10	108	33	14	16	66,5	56	84	133	77	4	M8 x 15	45	1,4
Mb 3101	100	120	22,5	10 H10	90	23	6	11,5	48,5	50	70	109	68	4	M8 x 20	40	0,5

1. In standard version, the torque arm (fitted with a flexible Silentbloc shock mount) is supplied separately, painted in black.
*Optionally, the torque arm is supplied mounted on the gearbox: in this case specify **R** (right) or **L** (left) mounting side and **D**, **F** or **U** orientation.*

Notes

Notes

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