



Dynabloc hd

Geared Servomotors



LEROY-SOMER™

Nidec
All for dreams

DYNABLOC solutions for intermittent duty applications

GEARBOX

Planetary or worm/wheel with reduced backlash

Output torque up to 690 N.m

Ratios from 3 to 90

Angular backlash: EXPERT 1-4', MEDIUM 4-7', BASIC 8-14'

Easy integration: inline or perpendicular mounting

Mechanical transmission: plain or hollow shaft with or without shrink disk

Unimotor **MOTOR**

Segmented stator with high ratio torque/inertia for applications with high dynamics

Enclosure IP 65

Encoder incremental CR, CA or absolute EM, EC, or Resolver AR, AE

Optional parking brake

Designed for optimized operation with drives Unidrive M



Pje DYNABLOC 



Pjr DYNABLOC 



Mjd DYNABLOC 

APPLICATIONS

Packaging, wrapping, labelling

Printing

Tooling machines

Wood machines

Textile machines

Machine process

Robotics

Palletizers

Pick & Place



Contents

Introduction.....	4
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GENERAL INFORMATION

Angular backlash of the gearboxes	5
Torsional stiffness	5
Finite reduction ratios	5
Servomotors technical data	6

SELECTION CRITERIA

Necessary information	7
Selection flow chart.....	8

SERVO GEARBOX SELECTION

Planetaries Pje :

General.....	9
Mounting form, operating position	10
Designation / Codification	11
Pje 0641 - Pje 0642	12
Pje 0841 - Pje 0842	13
Pje 1181 - Pje 1182	14
Pje 1501 - Pje 1502	15
Dimensions Pje.....	16

Planetaries Pjr :

General.....	17
Mounting form, operating position	18
Designation / Codification	19
Pjr 0601 - Pjr 0602	20
Pjr 0751 - Pjr 0752	21
Pjr 1001 - Pjr 1002	22
Pjr 1401 - Pjr 1402	23
Pjr 1801 - Pjr 1802	24
Dimensions Pjr.....	25

Worm gearbox Mjd :


General.....	26
Mounting form, operating position	27
Designation / Codification	28
Mjd 0351	29
Mjd 0451	30
Mjd 0551	31
Mjd 0631	32
Mjd 0751	33
Mjd 0901	34
Mjd 1101	35
Dimensions Mjd	36



TECHNICAL CHARACTERISTICS


Pje	39
Pjr	40
Mjd	41

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The description cannot in any way be considered contractual.*


Introduction

Leroy-Somer offers the DYNABLOC  geared servo-motor range for highly dynamic applications.


The DYNABLOC  range consists of speed reducers with reduced backlash, combined with Unimotor  servomotors.

DYNABLOC  products are available in the following technologies:

- with planetary helical gears:

Pje and Pjr DYNABLOC 

- with high precision worm/wheel stage:

Mdj DYNABLOC 

Angular backlash of the gearboxes

The backlash in the gearbox output shaft varies from 1 to 14 arcmin depending on the chosen gearbox type and backlash class. The possible selections are as follows:

Backlash class	Low speed shaft orientation			
	Axial		Perpendicular	
	Type	Backlash	Type	Backlash
BASIC	Pje $i = 3 - 10$	$< 8 - < 10'$	Mjd	10'
	Pje $i = 12 - 100$	$< 12 - < 14'$		
MEDIUM	Pjr $i = 3 - 10$	$< 4 - < 6'$	Mjd	5'
	Pjr $i = 12 - 100$	$< 6 - < 7'$		
EXPERT	Pjr $i = 3 - 10$	$< 2 - < 4' *$	Mjd	1'
	Pjr $i = 12 - 100$	$< 4 - < 5' *$		

The exact backlash for each gearbox type and ratio i is specified in § Technical characteristics, refer to pages 39 to 41.


Torsional stiffness

The torsional stiffness is the characteristic which indicates the torque in N.m which must be applied to the servo gearbox to deform it by an angle of one arcmin. The stiffness is indicated in N.m/arcmin.

In the event of very severe applications combined with a high inertia of the load, it is advisable to choose a servo gearbox with high torsional stiffness in order to guarantee the stability of the servomotor at dynamic operation.

The proposed planetary gearboxes Pje and Pjr or worm gearboxes Mjd are most suitable under these conditions.


Finite reduction ratios

In the DYNABLOC  range, all reduction ratios are finite numbers or integers to enable a precise calculation of the positioning, without rounding.

Servomotors technical data




Temperature rise class F
 Ambiente temperature 40°C
 Power supply 380-480 V AC (230 V on request)
 Nominal speed 3000 rpm (except type 190UD: 2000 rpm)

Servomotor type Unimotor 	Continuous stall torque	Rated torque	Peak torque*	Moment of inertia		Parking brake	
				Without brake	With brake	Braking torque	Supply
				10^{-4} kgm^2	10^{-4} kgm^2	$N.m$	V
055UD A 30	0.72	0.70	2.88	0.14	0.17	1.8	24
055UD B 30	1.18	1.05	4.72	0.25	0.28	1.8	24
055UD C 30	1.65	1.48	6.60	0.36	0.39	1.8	24
067UD B 30	2.55	2.45	7.65	0.53	0.60	4	24
067UD C 30	3.7	3.50	11.1	0.75	0.82	4	24
089UD B 30	5.5	4.85	16.5	1.61	1.73	10	24
089UD C 30	8.0	6.90	24.0	2.34	2.46	10	24
115UD C 30	14.6	10.5	43.8	6.39	6.72	25	24
115UD D 30	18.8	13.6	56.4	8.38	8.71	25	24
142UD C 30	25.0	18.4	74.9	17.0	19.54	42	24
142UD E 30	38.0	23.0	114	27.2	29.74	42	24
190UD C 20	52.0	42.5	156	54.6	59.17	67	24

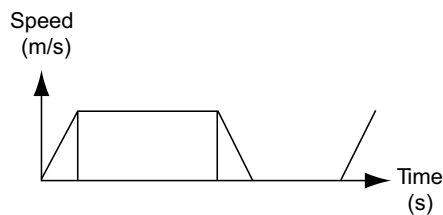
* The peak torque can be limited by put current of the drive.



For all the safety instructions, general information and technical characteristics relating to the servomotor Unimotor , refer to the technical motor catalogue.

Necessary information

- Type of application
- Weight of load to be moved
- Duty cycle, see diagram below (example)
- Linear speed
 - > Calculate the speed n_2 at the gearbox output
- Accuracy of positioning
 - > Calculate the angular backlash of the gearbox
- Resistive and acceleration torque at output
- Radial and axial force on output shaft
- Ambient temperature
- Height of installation

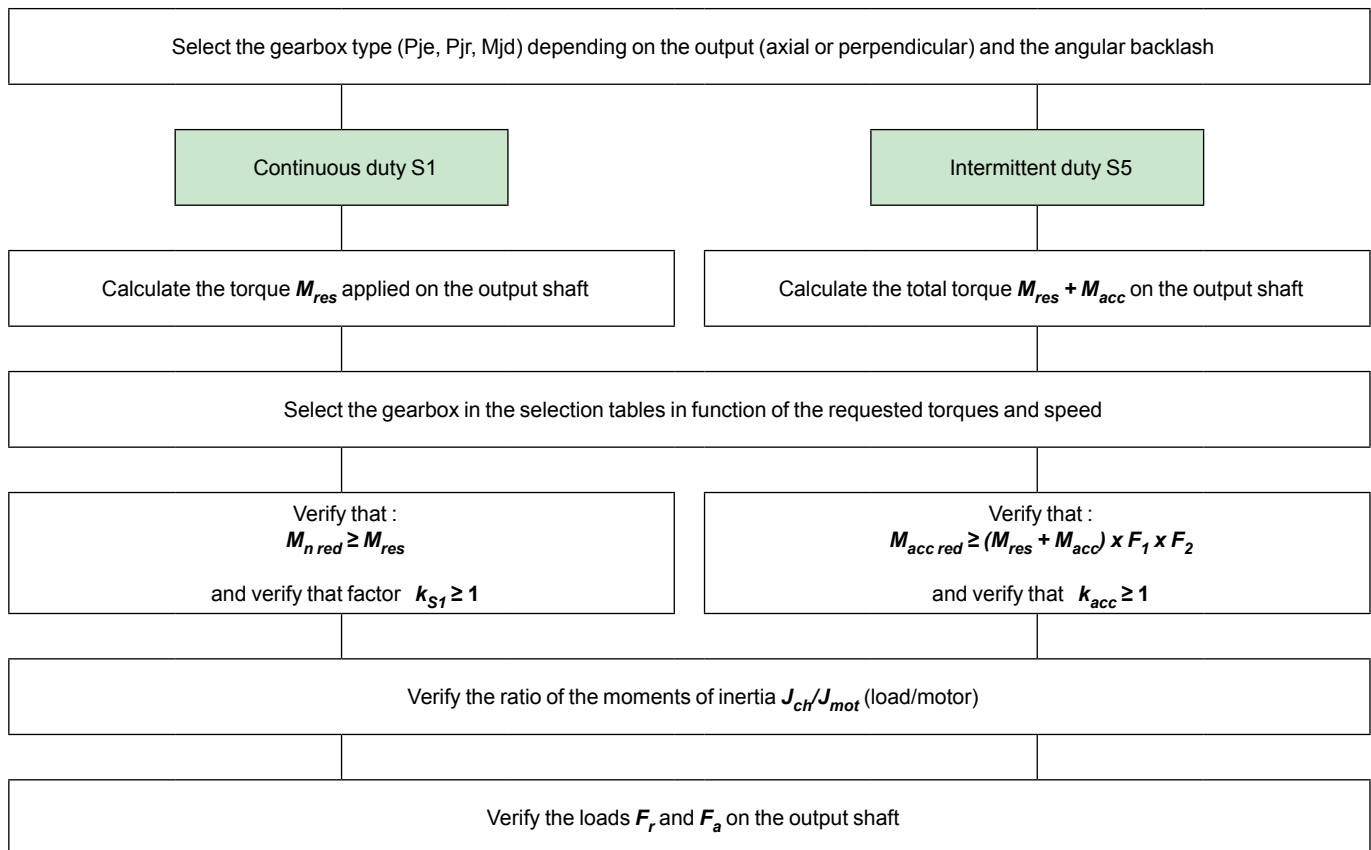


Duty cycle diagram

ABBREVIATIONS

Definitions	Symbols
Maximum permissible gearbox output torque for S1 Duty in N.m (optimum case)	$M_{Red-S1\ max}$
Motor nominal torque in N.m	$M_{n\ mot}$
Motor peak torque in N.m	$M_{peak\ mot}$
Gearbox nominal output torque in N.m	$M_{n\ red}$
Acceleration torque at gearbox output in N.m	$M_{acc\ red}$
Requested acceleration torque in N.m	M_{acc}
Resistive torque of the load at gearbox output in N.m	M_{res}
Duty factor for S1 Duty	k_{S1}
Duty factor at acceleration	k_{acc}
Motor inertia in kgm^2	J_{mot}
Gearbox inertia at input in kgm^2	J_{red}
Inertia of load, in kgm^2 , at gearbox input	J_{ch}
Exact gearbox ratio	i_{exact}
Output speed in min^{-1}	n_2
Maximum permissible load in middle of output shaft in N	F_r
Maximum permissible axial load on output shaft in N	F_a

Selection flow chart



Correction factors

Factor F1					
Running time per cycle	10 %	30 %	50 %	70 %	90 %
Corrective factor F1	0.7	0.85	1	1.11	1.2

Factor F2				
Number of starts per hour	1000-2000	2000-3000	3000-5000	5000-10000
Corrective factor F2	1 - 1.3	1.3 - 1.5	1.5 - 1.7	1.7 - 1.9

Indicative values for the ratio of inertias J_{ch}/J_{mot}

Acceleration time	Ratio J_{ch}/J_{mot}
0.1 s	≤ 3
0.2 s	≤ 5
0.5 s	≤ 8
1.0 s	≤ 15

DYNABLOC


Geared Servomotors


Pje Servo gearbox selection

General


Pje DYNABLOC



The planetary servo gearboxes **Pje DYNABLOC**  contribute to reduce the speed of servomotors and to increase the torque. They also help to optimize the ratio of inertia between the driven load and the motor.

The compact design and the reduced weight of the gearboxes make their integration into machines very easy. The **Pje DYNABLOC**  range with low backlash BASIC, is designed for high torsional stiffness.

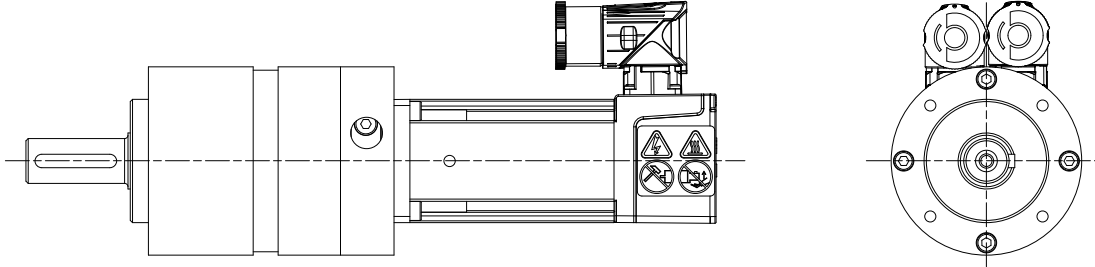
Maintenance-free, they are supplied lubricated and are multipositional.

Description	
Range	4 sizes from 0641 to 1502
Rated torque	20 - 340 N.m
Max acceleration torque	Up to 460 N.m
Gearbox ratio	1-stage: 5 ratios from 3 to 10 2-stage: 5 ratios from 12 to 50
Backlash	BASIC • 1-stage: 8 to 10' • 2-stage: 12 to 14'
Lubrication	Life lubricated, multiposition
Efficiency	1-stage: 94 % 2-stage: 92 %
Output shaft	Solid shaft with key
Unimotor 	Nominal speed 3000 min ⁻¹ Connectors rotatable by 90° Incremental or absolute encoder Motor with or without brake
Finishing	Painting black RAL 9005 and unpainted aluminium

Mounting form, operating position

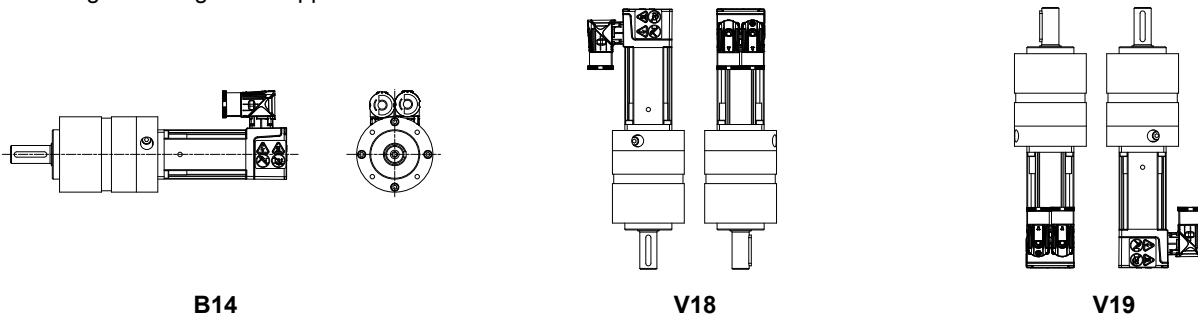
MOUNTING FORM

Mounting with flange with tapped holes **BT**



OPERATING POSITION

Mounting with flange with tapped holes **BT**



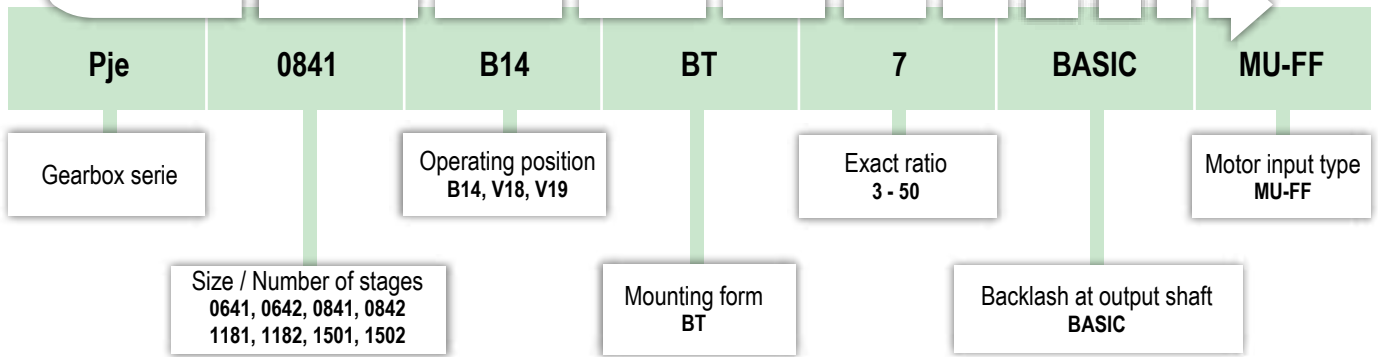
B14

V18

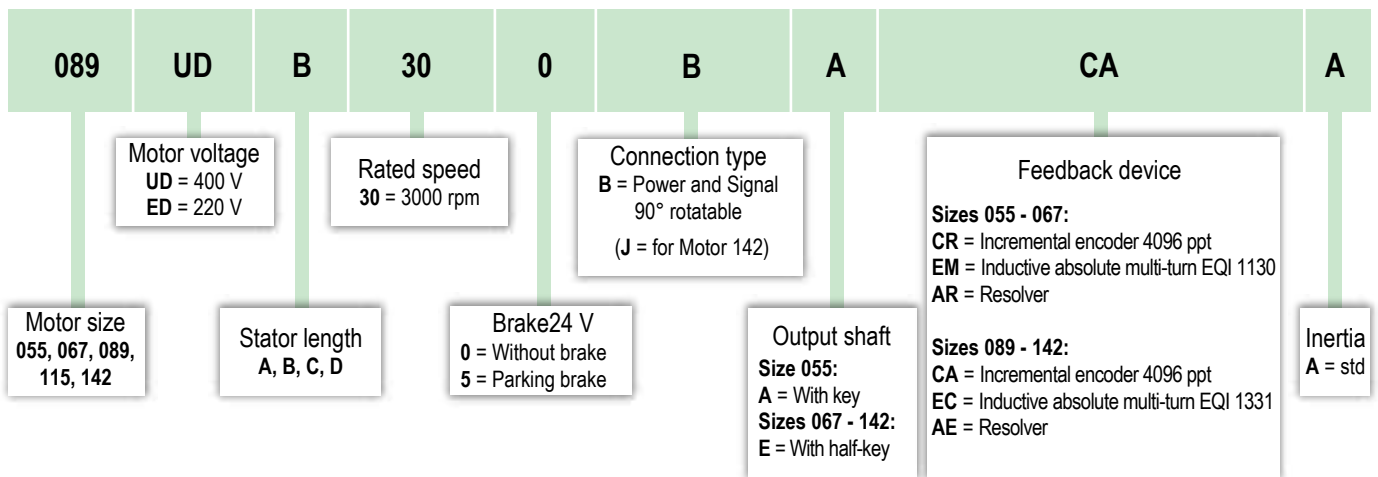
V19



GEARBOX



MOTOR UNIMOTOR 




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Pje 0641 M_{Red-S1} 26 N.m max

Motor type	Motor nominal torque	Motor peak torque	Motor inertia	Gearbox inertia	Exact ratio	Output speed	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ red}$	k_{S1}	$M_{acc\ red}$	k_{acc}
	$M_{n\ mot}$	$M_{peak\ mot}$	J_{mot}	J_{red}	i_{exact}	n_2	N.m		N.m	
	N.m	N.m	10^{-4} kg.m ²	10^{-4} kg.m ²		min ⁻¹				
055UD A 30	0.70	2.88	0.14	0.45	3	1000	2.0	10.13	8.1	4.43
				0.38	4	750	2.6	9.88	10.8	4.06
				0.36	5	600	3.3	7.90	13.5	3.25
				0.35	7	429	4.6	5.64	19.0	2.32
				0.34	10	300	6.6	2.43	27.1	0.89
055UD B 30	1.05	4.72	0.25	0.45	3	1000	3.0	6.75	13.3	2.70
				0.38	4	750	3.9	6.59	17.7	2.48
				0.36	5	600	4.9	5.27	22.2	1.98
				0.35	7	429	6.9	3.76	31.1	1.42
				0.34	10	300	9.9	1.62	44.4	0.54
055UD C 30	1.48	6.6	0.36	0.45	3	1000	4.2	4.79	18.6	1.93
				0.38	4	750	5.6	4.67	24.8	1.77
				0.36	5	600	7.0	3.74	31.0	1.42
				0.35	7	429	9.7	2.67	43.4	1.01
				0.34	10	300	13.9	1.15	62.0	0.39
067UD B 30	2.45	7.65	0.53	0.45	3	1000	6.9	2.89	21.6	1.67
				0.38	4	750	9.2	2.82	28.8	1.53
				0.36	5	600	11.5	2.26	36.0	1.22
				0.35	7	429	16.1	1.61	50.3	0.87
				0.45	3	1000	9.9	2.03	31.3	1.15
067UD C 30	3.50	11.1	0.75	0.38	4	750	13.2	1.98	41.7	1.05
				0.36	5	600	16.5	1.58	52.2	0.84
				0.35	7	429	23.0	1.13	73.0	0.60

Pje 0642 M_{Red-S1} 44 N.m max

Motor type	Motor nominal torque	Motor peak torque	Motor inertia	Gearbox inertia	Exact ratio	Output speed	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ red}$	k_{S1}	$M_{acc\ red}$	k_{acc}
	$M_{n\ mot}$	$M_{peak\ mot}$	J_{mot}	J_{red}	i_{exact}	n_2	N.m		N.m	
	N.m	N.m	10^{-4} kg.m ²	10^{-4} kg.m ²		min ⁻¹				
055UD A 30	0.70	2.88	0.14	0.38	12	250	7.7	4.66	31.8	1.42
				0.38	16	188	10.3	4.08	42.4	1.23
				0.36	20	150	12.9	3.26	53.0	0.98
				0.35	35	86	22.5	1.95	92.7	0.59
				0.34	50	60	32.2	1.37	132.5	0.42
055UD B 30	1.05	4.72	0.25	0.38	12	250	11.6	3.11	52.1	0.86
				0.38	16	188	15.5	2.72	69.5	0.75
				0.36	20	150	19.3	2.17	86.8	0.60
055UD C 30	1.48	6.6	0.36	0.38	12	250	16.3	2.20	72.9	0.62
				0.38	16	188	21.8	1.93	97.2	0.54
				0.36	20	150	27.2	1.54	121.4	0.43

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Other technical gearbox data refer to page 39.

Pje 0841 M_{Red-S1} 54 N.m max

Motor type	Motor nominal torque $M_{n\ mot}$ N.m	Motor peak torque $M_{peak\ mot}$ N.m	Motor inertia J_{mot} 10^{-4} kg.m ²	Gearbox inertia J_{red} 10^{-4} kg.m ²	Exact ratio i_{exact}	Output speed n_2 min ⁻¹	S1		S5	
							Gearbox nominal torque $M_{n\ red}$ N.m	Duty factor k_{S1}	Acceleration torque at gearbox $M_{acc\ red}$ N.m	Duty factor at acceleration k_{acc}
055UD A 30	0.70	2.88	0.14	1.37	3	1000	2.0	20.26	8.10	8.62
				1.14	4	750	2.6	20.52	10.8	9.23
				1.05	5	600	3.3	16.41	13.5	7.39
				0.97	7	429	4.6	11.72	19.0	5.28
				0.93	10	300	6.6	6.08	27.1	2.77
055UD B 30	1.05	4.72	0.25	1.37	3	1000	3.0	13.51	13.3	5.26
				1.14	4	750	3.9	13.68	17.7	5.63
				1.05	5	600	4.9	10.94	22.2	4.51
				0.97	7	429	6.9	7.82	31.1	3.22
				0.93	10	300	9.9	4.05	44.4	1.69
055UD C 30	1.48	6.60	0.36	1.37	3	1000	4.2	9.58	18.6	3.76
				1.14	4	750	5.6	9.70	24.8	4.03
				1.05	5	600	7.0	7.76	31.0	3.22
				0.97	7	429	9.7	5.55	43.4	2.30
				0.93	10	300	13.9	2.88	62.0	1.21
067UD B 30	2.45	7.65	0.53	1.37	3	1000	6.9	5.79	21.6	3.24
				1.14	4	750	9.2	5.86	28.8	3.48
				1.05	5	600	11.5	4.69	36.0	2.78
				0.97	7	429	16.1	3.35	50.3	1.99
				0.93	10	300	23.0	1.74	71.9	1.04
067UD C 30	3.50	11.1	0.75	1.37	3	1000	9.9	4.05	31.3	2.24
				1.14	4	750	13.2	4.10	41.7	2.40
				1.05	5	600	16.5	3.28	52.2	1.92
				0.97	7	429	23.0	2.34	73.0	1.37
				0.93	10	300	32.9	1.22	104.3	0.72
089UD B 30	4.85	16.5	1.61	1.37	3	1000	13.7	2.92	46.5	1.50
				1.14	4	750	18.2	2.96	62.0	1.61
				1.05	5	600	22.8	2.37	77.6	1.29
				0.97	7	429	32.6	1.66	108.6	0.92
				1.37	3	1000	19.5	2.06	67.7	1.03
089UD C 30	6.90	24.0	2.34	1.14	4	750	25.9	2.08	90.2	1.11
				1.05	5	600	32.4	1.67	112.8	0.89
				0.97	7	429	45.4	1.19	157.9	0.63

Pje 0842 M_{Red-S1} 100 N.m max

Motor type	Motor nominal torque $M_{n\ mot}$ N.m	Motor peak torque $M_{peak\ mot}$ N.m	Motor inertia J_{mot} 10^{-4} kg.m ²	Gearbox inertia J_{red} 10^{-4} kg.m ²	Exact ratio i_{exact}	Output speed n_2 min ⁻¹	S1		S5	
							Gearbox nominal torque $M_{n\ red}$ N.m	Duty factor k_{S1}	Acceleration torque at gearbox $M_{acc\ red}$ N.m	Duty factor at acceleration k_{acc}
055UD A 30	0.70	2.88	0.14	1.14	12	250	7.7	10.35	31.8	3.15
				1.14	16	188	10.3	9.70	42.4	2.95
				1.05	20	150	12.9	7.76	53.0	2.36
				0.97	35	86	22.5	4.44	92.7	1.35
				0.93	50	60	32.2	3.11	132.5	0.94
055UD B 30	1.05	4.72	0.25	1.14	12	250	11.6	6.90	52.1	1.92
				1.14	16	188	15.5	6.47	69.5	1.80
				1.05	20	150	19.3	5.18	86.8	1.44
				0.97	35	86	33.8	2.96	152.0	0.82
				0.93	50	60	48.3	2.07	217.1	0.58
055UD C 30	1.48	6.60	0.36	1.14	12	250	16.3	4.90	72.9	1.37
				1.14	16	188	21.8	4.59	97.2	1.29
				1.05	20	150	27.2	3.67	121.4	1.03
				0.97	35	86	47.7	2.10	212.5	0.59
				0.93	50	60	68.1	1.47	303.6	0.41
067UD B 30	2.45	7.65	0.53	1.14	12	250	27.0	2.96	84.5	1.18
				1.14	16	188	36.1	2.77	112.6	1.11
				1.05	20	150	45.1	2.22	140.8	0.89
				1.14	12	250	38.6	2.07	122.5	0.82
				1.14	16	188	51.5	1.94	163.4	0.77
067UD C 30	3.50	11.1	0.75	1.05	20	150	64.4	1.55	204.2	0.61

: CMR delivery


Other technical gearbox data refer to page 39.

Pje 1181 M_{Red-S1} 120 N.m max

Motor type	Motor nominal torque	Motor peak torque	Motor inertia	Gearbox inertia	Exact ratio	Output speed	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ mot}$	$M_{peak\ mot}$	J_{mot}	J_{red}
N.m	N.m	10^{-4} kg.m ²	10^{-4} kg.m ²		min ⁻¹	N.m		N.m		
089UD B 30	4.85	16.5	1.61	6.54	3	1000	13.7	7.31	46.5	3.87
				4.80	4	750	18.2	6.58	62.0	3.22
				4.05	5	600	22.8	5.26	77.6	2.58
				3.40	7	429	31.9	3.76	108.6	1.84
				3.10	10	300	45.6	2.30	155.1	1.16
089UD C 30	6.90	24.0	2.34	6.54	3	1000	19.5	5.14	67.7	2.66
				4.80	4	750	25.9	4.63	90.2	2.22
				4.05	5	600	32.4	3.70	112.8	1.77
				3.40	7	429	45.4	2.64	157.9	1.27
				3.10	10	300	64.9	1.62	225.6	0.80
115UD C 30	10.5	43.8	6.39	6.54	3	1000	29.6	3.38	123.5	1.46
				4.80	4	750	39.5	3.04	164.7	1.21
				4.05	5	600	49.4	2.43	205.9	0.97
				3.40	7	429	69.1	1.74	288.2	0.69
				3.10	10	300	98.7	1.06	411.7	0.44
115UD D 30	13.6	56.4	8.38	6.54	3	1000	38.4	2.61	159.0	1.13
				4.80	4	750	51.1	2.35	212.1	0.94
				4.05	5	600	63.9	1.88	265.1	0.75
				3.40	7	429	89.5	1.34	371.1	0.54

Pje 1182 M_{Red-S1} 210 N.m max

Motor type	Motor nominal torque	Motor peak torque	Motor inertia	Gearbox inertia	Exact ratio	Output speed	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ mot}$	$M_{peak\ mot}$	J_{mot}	J_{red}
N.m	N.m	10^{-4} kg.m ²	10^{-4} kg.m ²		min ⁻¹	N.m		N.m		
089UD B 30	4.85	16.5	1.61	4.8	12	250	53.5	3.17	182.2	1.18
				4.8	16	188	71.4	2.94	242.9	1.05
				4.05	20	150	89.2	2.35	303.6	0.84
				3.4	35	86	156.2	1.34	531.3	0.48
089UD C 30	6.90	24.0	2.34	4.8	12	250	76.2	2.23	265.0	0.81
				4.8	16	188	101.6	2.07	353.3	0.72
				4.05	20	150	127.0	1.65	441.6	0.58

 : CMR delivery

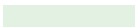
Other technical gearbox data refer to page 39.

Pje 1501 M_{Red-S1} 310 N.m max

Motor type	Motor nominal torque	Motor peak torque	Motor inertia	Gearbox inertia	Exact ratio	Output speed	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ mot}$	$M_{peak\ mot}$	J_{mot}	J_{red}
N.m	N.m	10^{-4} kg.m ²	10^{-4} kg.m ²		min ⁻¹	N.m		N.m		
115UD C 30	10.5	43.8	6.39	12.23	3	1000	29.6	7.77	123.516	2.91
				7.65	4	750	39.5	7.85	164.688	2.79
				6.24	5	600	49.4	6.28	205.860	2.23
				4.70	7	429	69.1	4.49	288.204	1.60
				3.80	10	300	98.7	1.82	411.720	0.83
115UD D 30	13.6	56.4	8.38	12.23	3	1000	38.4	6.00	159.048	2.26
				7.65	4	750	51.1	6.06	212.064	2.17
				6.24	5	600	63.9	4.85	265.080	1.74
				4.70	7	429	89.5	3.46	371.112	1.24
				3.80	10	300	127.8	1.41	530.160	0.64
142UD C 30	18.4	74.9	17.0	12.23	3	1000	51.9	4.43	211.218	1.70
				7.65	4	750	69.2	4.48	281.624	1.63
				6.24	5	600	86.5	3.58	352.030	1.31
				4.70	7	429	121.1	2.56	492.842	0.93
				3.80	10	300	173.0	1.04	704.060	0.48
142UD E 30	23.0	114	27.2	12.23	3	1000	64.9	3.55	321.480	1.12
				7.65	4	750	86.5	3.58	428.640	1.07
				6.24	5	600	108.1	2.87	535.800	0.86
				4.70	7	429	151.3	2.05	750.120	0.61

Pje 1502 M_{Red-S1} 340 N.m max

Motor type	Motor nominal torque	Motor peak torque	Motor inertia	Gearbox inertia	Exact ratio	Output speed	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ mot}$	$M_{peak\ mot}$	J_{mot}	J_{red}
N.m	N.m	10^{-4} kg.m ²	10^{-4} kg.m ²		min ⁻¹	N.m		N.m		
115UD C 30	10.5	43.8	6.39	7.65	12	250	115.9	3.11	483.6	0.74
				7.65	16	188	154.6	2.20	644.7	0.71
				6.24	20	150	193.2	1.76	805.9	0.57
				4.70	35	86	338.1	1.01	1410.4	0.33
115UD D 30	13.6	56.4	8.38	7.65	12	250	150.1	2.40	622.7	0.58
				7.65	16	188	200.2	1.70	830.2	0.55
				6.24	20	150	250.2	1.36	1037.8	0.44
142UD C 30	18.4	74.9	17.0	7.65	12	250	203.1	1.77	826.9	0.44
				7.65	16	188	270.8	1.26	1102.5	0.42
				6.24	20	150	338.6	1.00	1378.2	0.33
142UD E 30	23.0	114	27.2	7.65	12	250	253.9	1.42	1258.6	0.29
				7.65	16	188	338.6	1.00	1678.1	0.27

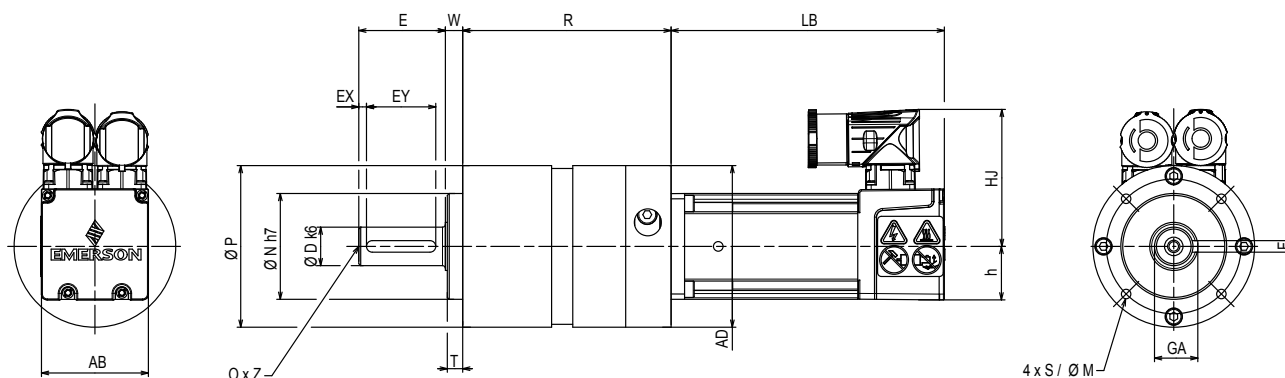
 : CMR delivery

Other technical gearbox data refer to page 39.

Dimensions : Flange with tapped holes BT


Pje 0641 to Pje 1502 - Universal mounting MU-FF

Dimensions in mm




Type 1-stage / 2-stage	Gearbox							Weight kg
	AD	M	N	P	S	T	W	
Pje 0641 / 0642	70	52	40	64	M5x12	8	9	1 / 1.3
Pje 0841 / 0842	90	70	55	84	M6x14	8	9	2.3 / 3.1
Pje 1181 / 1182	120	100	80	118	M8x18	10	11	5.8 / 7.9
Pje 1501 / 1502	140	130	110	150	M10x20	5.5	12	10 / 12.5

Solid output shaft							
D	E	F	GA	EY	EX	O	Z
14	30	5	16	25	1.5	M5	12
20	45	6	22.5	36	4.5	M6	16
25	50	8	28	45	1.5	M10	22
40	70	12	44	60	5	M10	26

Motor type	Unimotor 				AB	HJ	h
	Without brake		With brake				
	LB	Weight kg	LB	Weight kg			
055A	118	1.2	158	1.6	55	71.5	27.5
055B	142	1.5	182	1.9	55	71.5	27.5
055C	166	1.8	206	2.2	55	71.5	27.5
067B	173	2.6	208	3.3	70	76.5	35
067C	203	3.2	238	3.9	70	76.5	35
089B	191	4.4	231	5.4	91	85	45.5
089C	221	5.5	261	6.5	91	85	45.5
115C	237	8.9	274	10.4	116	98.5	58
115D	267	10.7	304	12.2	116	98.5	58
142C	217	11.5	283	14.3	142	112.5	71
142E	277	18.5	343	21.3	142	112.5	71


Gearbox type							
Pje							
0641	0642	0841	0842	1181	1182	1501	1502
R							
79	101	108	141	-	-	-	-
79	101	108	141	-	-	-	-
79	101	108	141	-	-	-	-
79	-	108	141	-	-	-	-
79	-	108	141	-	-	-	-
-	-	118	-	138	178	-	-
-	-	118	-	138	178	-	-
-	-	-	-	148	-	193	234
-	-	-	-	148	-	193	234
-	-	-	-	-	-	203	244
-	-	-	-	-	-	203	244


Max. length depending on the feedback

DYNABLOC 
 Geared Servomotors
 Pjr Servo gearbox selection
General


Pjr DYNABLOC 



The planetary servo gearboxes **Pjr DYNABLOC**  contribute to reduce the speed of servomotors and to increase the torque. They also help to optimize the ratio of inertia between the driven load and the motor.

In order to meet the requirements of highly dynamic servo applications, the **Pjr DYNABLOC**  servo gearboxes feature a high overload capacity and a very high torsional stiffness. Due to their precise construction, the gearboxes are available with backlash

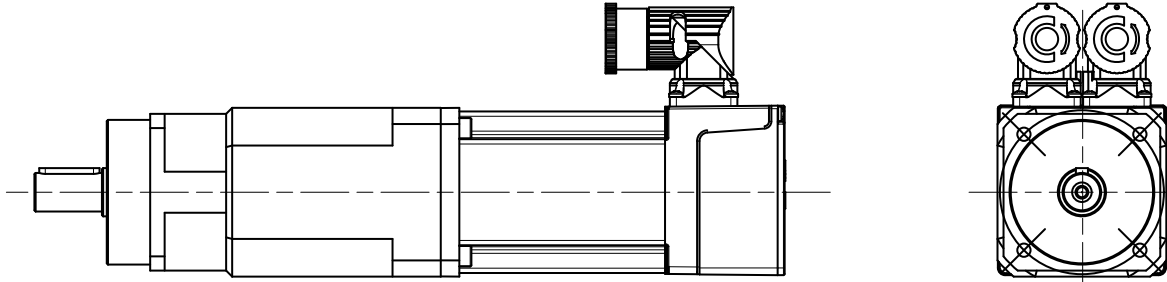
down to 2 arcmin and reduction ratios up to 50 (higher ratios on request). The compact design and the reduced weight of the gearboxes make their integration into machines very easy. Maintenance-free, they are supplied lubricated and are multipositional.

Description	
Range	5 sizes from 0601 to 1802
Rated torque	26 - 600 N.m
Max acceleration torque	Up to 1300 N.m
Gearbox ratio	1-stage: 5 ratios from 3 to 10 2-stage: 5 ratios from 12 to 50
Backlash	MEDIUM • 1-stage: 4 to 6' • 2-stage: 6 to 7' EXPERT • 1-stage: 2 to 4' • 2-stage: 4 to 5'
Lubrication	Life lubricated, multiposition
Efficiency	1-stage: 96 % 2-stage: 94 %
Output shaft	Solid shaft with key
Unimotor 	Nominal speed 3000 min ⁻¹ Connectors rotatable by 90° Incremental or absolute encoder Motor with or without brake
Finishing	Painting black RAL 9005 and unpainted aluminium

Mounting form, operating position

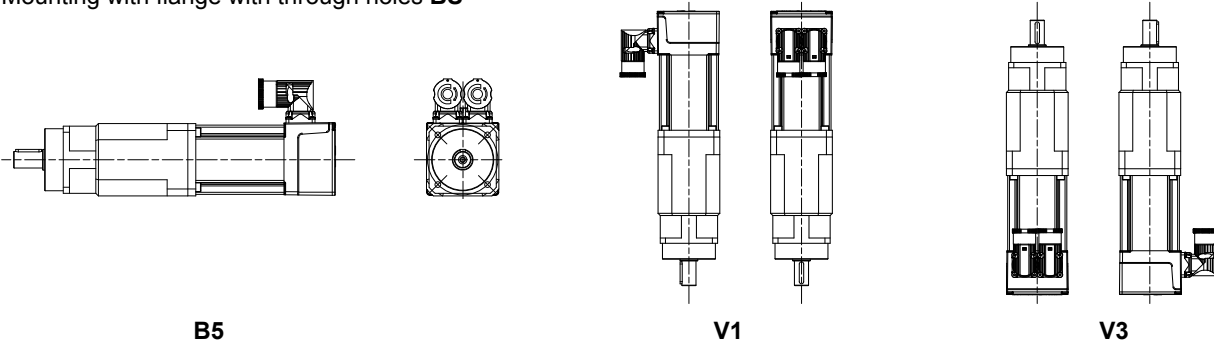
MOUNTING FORM

Mounting with flange with through holes **BS**

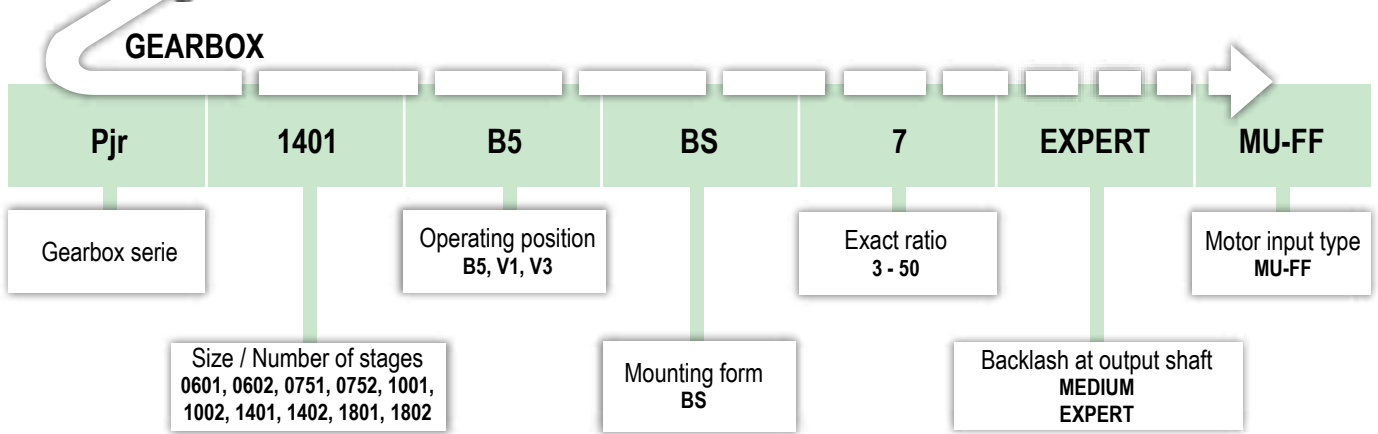


OPERATING POSITION

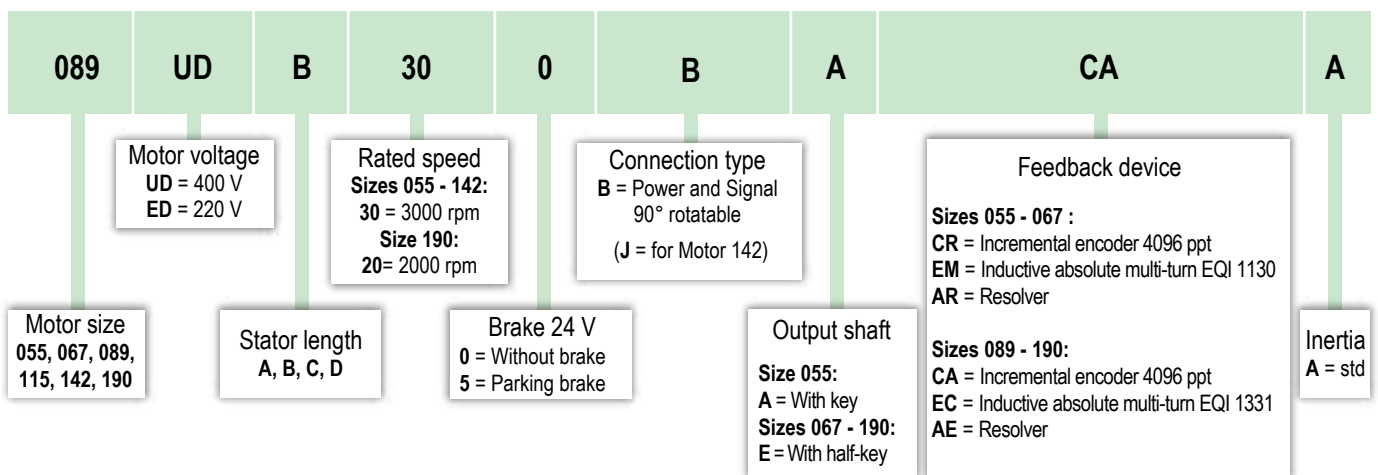
Mounting with flange with through holes **BS**



Designation / Codification



MOTOR UNIMOTOR



We reserve the right to modify the design, technical specifications and dimensions of the products shown in this document.
 The description cannot in any way be considered contractual.

DYNABLOC 
 Geared Servomotors
 Pjr Servo gearbox selection
Pjr 0601 - Pjr 0602

Pjr 0601 M_{Red-S1} **32 N.m max**

Motor type	Motor nominal torque	Motor peak torque	Motor inertia	Gearbox inertia	Exact ratio	Output speed	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ red}$	k_{S1}	$M_{acc\ red}$	k_{acc}
	$M_{n\ mot}$	$M_{peak\ mot}$	J_{mot}	J_{red}	I_{exact}	n_2	N.m		N.m	
	N.m	N.m	10^{-4} kg.m ²	10^{-4} kg.m ²		min ⁻¹				
055UD A 30	0.70	2.88	0.14	0.43	3	1000	2.0	12.9	8.30	4.34
				0.33	4	750	2.7	11.9	11.1	4.52
				0.27	5	600	3.4	9.52	13.8	3.62
				0.23	7	429	4.7	6.80	19.4	2.58
				0.20	10	300	6.7	3.57	27.6	1.30
055UD B 30	1.05	4.72	0.25	0.43	3	1000	3.0	8.60	13.6	2.65
				0.33	4	750	4.0	7.94	18.1	2.76
				0.27	5	600	5.0	6.35	22.7	2.21
				0.23	7	429	7.1	4.54	31.7	1.58
				0.20	10	300	10.1	2.38	45.3	0.79
055UD C 30	1.48	6.6	0.36	0.43	3	1000	4.3	6.10	19.0	1.89
				0.33	4	750	5.7	5.63	25.3	1.97
				0.27	5	600	7.1	4.50	31.7	1.58
				0.23	7	429	9.9	3.22	44.4	1.13
				0.20	10	300	14.2	1.69	63.4	0.57
067UD B 30	2.45	7.65	0.53	0.43	3	1000	7.1	3.68	22.0	1.63
				0.33	4	750	9.4	3.40	29.4	1.70
				0.27	5	600	11.8	2.72	36.7	1.36
				0.23	7	429	16.5	1.94	51.4	0.97
				0.20	10	300	23.5	1.02	73.4	0.49
067UD C 30	3.50	11.1	0.75	0.43	3	1000	10.1	2.58	32.0	1.13
				0.33	4	750	13.4	2.38	42.6	1.17
				0.27	5	600	16.8	1.90	53.3	0.94
				0.23	7	429	23.5	1.36	74.6	0.67

Pjr 0602 M_{Red-S1} **38 N.m max**

Motor type	Motor nominal torque	Motor peak torque	Motor inertia	Gearbox inertia	Exact ratio	Output speed	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ red}$	k_{S1}	$M_{acc\ red}$	k_{acc}
	$M_{n\ mot}$	$M_{peak\ mot}$	J_{mot}	J_{red}	I_{exact}	n_2	N.m		N.m	
	N.m	N.m	10^{-4} kg.m ²	10^{-4} kg.m ²		min ⁻¹				
055UD A 30	0.70	2.88	0.14	0.36	12	250	7.9	4.81	32.5	1.66
				0.36	16	188	10.5	3.61	43.3	1.25
				0.32	20	150	13.2	2.89	54.1	1.00
				0.28	35	86	23.0	1.65	94.8	0.57
				0.27	50	60	32.9	1.16	135.4	0.40
055UD B 30	1.05	4.72	0.25	0.36	12	250	11.8	3.21	53.2	1.01
				0.36	16	188	15.8	2.41	71.0	0.76
				0.32	20	150	19.7	1.93	88.7	0.61
055UD C 30	1.48	6.6	0.36	0.36	12	250	16.7	2.28	74.4	0.73
				0.36	16	188	22.3	1.71	99.3	0.54
				0.32	20	150	27.8	1.37	124.1	0.44

: CMR delivery for version MEDIUM

Other technical gearbox data refer to page 40.

Pjr 0751 M_{Red-S1} 65 N.m max

Motor type	Motor nominal torque $M_{n\ mot}$ N.m	Motor peak torque $M_{peak\ mot}$ N.m	Motor inertia J_{mot} 10^{-4} kg.m ²	Gearbox inertia J_{red} 10^{-4} kg.m ²	Exact ratio i_{exact}	Output speed n_2 min ⁻¹	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ red}$ N.m	k_{S1}	$M_{acc\ red}$ N.m	k_{acc}
055UDA 30	0.70	2.88	0.14	1.15	3	1000	2.0	19.35	8.3	9.65
				0.92	4	750	2.7	24.18	11.1	10.85
				0.81	5	600	3.4	19.35	13.8	8.68
				0.72	7	429	4.7	13.82	19.4	6.20
				0.67	10	300	6.7	5.95	27.6	3.40
055UD B 30	1.05	4.72	0.25	1.15	3	1000	3.0	12.90	13.6	5.89
				0.92	4	750	4.0	16.12	18.1	6.62
				0.81	5	600	5.0	12.90	22.7	5.30
				0.72	7	429	7.1	9.21	31.7	3.78
				0.67	10	300	10.1	3.97	45.3	2.07
055UD C 30	1.48	6.60	0.36	1.15	3	1000	4.3	9.15	19.0	4.21
				0.92	4	750	5.7	11.44	25.3	4.73
				0.81	5	600	7.1	9.15	31.7	3.79
				0.72	7	429	9.9	6.54	44.4	2.71
				0.67	10	300	14.2	2.82	63.4	1.48
067UD B 30	2.45	7.65	0.53	1.15	3	1000	7.1	5.53	22.0	3.63
				0.92	4	750	9.4	6.91	29.4	4.08
				0.81	5	600	11.8	5.53	36.7	3.27
				0.72	7	429	16.5	3.95	51.4	2.33
				0.67	10	300	23.5	1.70	73.4	1.28
067UD C 30	3.50	11.1	0.75	1.15	3	1000	10.1	3.87	32.0	2.50
				0.92	4	750	13.4	4.84	42.6	2.82
				0.81	5	600	16.8	3.87	53.3	2.25
				0.72	7	429	23.5	2.76	74.6	1.61
				0.67	10	300	33.6	1.19	106.6	0.88
089UD B 30	4.85	16.5	1.61	1.15	3	1000	14.0	2.79	47.5	1.68
				0.92	4	750	18.6	3.49	63.4	1.89
				0.81	5	600	23.3	2.79	79.2	1.52
				0.72	7	429	32.6	1.99	110.9	1.08
				1.15	3	1000	19.9	1.96	69.1	1.16
089UD C 30	6.90	24.0	2.34	0.92	4	750	26.5	2.45	92.2	1.30
				0.81	5	600	33.1	1.96	115.2	1.04
				0.72	7	429	46.4	1.40	161.3	0.74

Pjr 0752 M_{Red-S1} 85 N.m max

Motor type	Motor nominal torque $M_{n\ mot}$ N.m	Motor peak torque $M_{peak\ mot}$ N.m	Motor inertia J_{mot} 10^{-4} kg.m ²	Gearbox inertia J_{red} 10^{-4} kg.m ²	Exact ratio i_{exact}	Output speed n_2 min ⁻¹	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ red}$ N.m	k_{S1}	$M_{acc\ red}$ N.m	k_{acc}
055UDA 30	0.70	2.88	0.14	0.38	12	250	7.90	10.76	32.5	3.85
				0.38	16	188	10.5	8.07	43.3	2.89
				0.33	20	150	13.2	6.46	54.1	2.31
				0.29	35	86	23.0	3.69	94.8	1.32
				0.27	50	60	32.9	2.58	135.4	0.92
055UD B 30	1.05	4.72	0.25	0.38	12	250	11.8	7.18	53.2	2.35
				0.38	16	188	15.8	5.38	71.0	1.76
				0.33	20	150	19.7	4.31	88.7	1.41
				0.29	35	86	34.5	2.46	155.3	0.80
				0.27	50	60	49.4	1.72	221.8	0.56
055UD C 30	1.48	6.60	0.36	0.38	12	250	16.7	5.09	74.4	1.68
				0.38	16	188	22.3	3.82	99.3	1.26
				0.33	20	150	27.8	3.05	124.1	1.01
				0.29	35	86	48.7	1.75	217.1	0.58
				0.27	50	60	69.6	1.22	310.2	0.40
067UD B 30	2.45	7.65	0.53	0.38	12	250	27.6	3.08	86.3	1.45
				0.38	16	188	36.8	2.31	115.1	1.09
				0.33	20	150	46.1	1.85	143.8	0.87
				0.38	12	250	39.5	2.15	125.2	1.00
				0.38	16	188	52.6	1.61	166.9	0.75
067UD C 30	3.50	11.1	0.75	0.33	20	150	65.8	1.29	208.7	0.60

: CMR delivery for version MEDIUM

Other technical gearbox data refer to page 40.

DYNABLOC 
 Geared Servomotors
 Pjr Servo gearbox selection
Pjr 1001 - Pjr 1002

Pjr 1001 M_{Red-S1} 150 N.m max

Motor type	Motor nominal torque	Motor peak torque	Motor inertia	Gearbox inertia	Exact ratio	Output speed	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ mot}$	$M_{peak\ mot}$	J_{mot}	J_{red}
N.m	N.m	10^{-4} kg.m ²	10^{-4} kg.m ²		min ⁻¹	N.m		N.m		
089UD B 30	4.85	16.5	1.61	6.05	3	1000	14.0	7.88	47.5	3.79
				4.05	4	750	18.6	8.05	63.4	3.95
				3.17	5	600	23.3	6.44	79.2	3.16
				2.44	7	429	32.6	4.60	110.9	2.25
				2.08	10	300	46.6	2.47	158.4	1.26
089UD C 30	6.90	24.0	2.34	6.05	3	1000	19.9	5.54	69.1	2.60
				4.05	4	750	26.5	5.66	92.2	2.71
				3.17	5	600	33.1	4.53	115.2	2.17
				2.44	7	429	46.4	3.23	161.3	1.55
				2.08	10	300	66.2	1.74	230.4	0.87
115UD C 30	10.5	43.8	6.39	6.05	3	1000	30.2	3.64	126.1	1.43
				4.05	4	750	40.3	3.72	168.2	1.49
				3.17	5	600	50.4	2.98	210.2	1.19
				2.44	7	429	70.6	2.13	294.3	0.85
				2.08	10	300	100.8	1.14	420.5	0.48
115UD D 30	13.6	56.4	8.38	6.05	3	1000	39.2	2.81	162.4	1.11
				4.05	4	750	52.2	2.87	216.6	1.15
				3.17	5	600	65.3	2.30	270.7	0.92
				2.44	7	429	91.4	1.64	379.0	0.66

Pjr 1002 M_{Red-S1} 180 N.m max

Motor type	Motor nominal torque	Motor peak torque	Motor inertia	Gearbox inertia	Exact ratio	Output speed	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ mot}$	$M_{peak\ mot}$	J_{mot}	J_{red}
N.m	N.m	10^{-4} kg.m ²	10^{-4} kg.m ²		min ⁻¹	N.m		N.m		
089UD B 30	4.85	16.5	1.61	1.5	12	250	54.7	3.29	186.1	1.40
				1.5	16	188	72.9	2.47	248.2	1.05
				1.29	20	150	91.2	1.97	310.2	0.84
				1.17	35	86	159.6	1.13	542.9	0.48
089UD C 30	6.90	24.0	2.34	1.5	12	250	77.8	2.31	270.7	0.96
				1.5	16	188	103.8	1.73	361.0	0.72
				1.29	20	150	129.7	1.39	451.2	0.58

: CMR delivery for version MEDIUM

Other technical gearbox data refer to page 40.

Pjr 1401 M_{Red-S1} 340 N.m max

Motor type	Motor nominal torque $M_{n\ mot}$ N.m	Motor peak torque $M_{peak\ mot}$ N.m	Motor inertia J_{mot} 10^{-4} kg.m ²	Gearbox inertia J_{red} 10^{-4} kg.m ²	Exact ratio i_{exact}	Output speed n_2 min ⁻¹	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ red}$ N.m	k_{S1}	$M_{acc\ red}$ N.m	k_{acc}
115UD C 30	10.5	43.8	6.39	14.25	3	1000	30.2	6.94	126.1	3.01
				9.31	4	750	40.3	8.43	168.2	3.21
				6.91	5	600	50.4	6.75	210.2	2.57
				4.91	7	429	70.6	4.82	294.3	1.83
				3.89	10	300	100.8	2.08	420.5	1.05
115UD D 30	13.6	56.4	8.38	14.25	3	1000	39.2	5.36	162.4	2.34
				9.31	4	750	52.2	6.51	216.6	2.49
				6.91	5	600	65.3	5.21	270.7	1.99
				4.91	7	429	91.4	3.72	379.0	1.42
				3.89	10	300	130.6	1.61	541.4	0.81
142UD C 30	18.4	74.9	17.0	14.25	3	1000	53.0	3.96	215.7	1.76
				9.31	4	750	70.7	4.81	287.6	1.88
				6.91	5	600	88.3	3.85	359.5	1.50
				4.91	7	429	123.6	2.75	503.3	1.07
				3.89	10	300	176.6	1.19	719.0	0.61
142UD E 30	23.0	114	27.2	14.25	3	1000	66.2	3.17	328.3	1.16
				9.31	4	750	88.3	3.85	437.8	1.23
				6.91	5	600	110.4	3.08	547.2	0.99
				4.91	7	429	154.6	2.20	766.1	0.70

Pjr 1402 M_{Red-S1} 400 N.m max

Motor type	Motor nominal torque $M_{n\ mot}$ N.m	Motor peak torque $M_{peak\ mot}$ N.m	Motor inertia J_{mot} 10^{-4} kg.m ²	Gearbox inertia J_{red} 10^{-4} kg.m ²	Exact ratio i_{exact}	Output speed n_2 min ⁻¹	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ red}$ N.m	k_{S1}	$M_{acc\ red}$ N.m	k_{acc}
115UD C 30	10.5	43.8	6.39	3.71	12	250	118.4	3.38	494.1	1.11
				3.71	16	188	157.9	2.53	658.8	0.83
				2.82	20	150	197.4	2.03	823.4	0.67
115UD D 30	13.6	56.4	8.38	2.15	35	86	345.5	1.16	1441	0.38
				3.71	12	250	153.4	2.61	636.2	0.86
				3.71	16	188	204.5	1.96	848.3	0.65
142UD C 30	18.4	74.9	17.0	2.82	20	150	255.7	1.56	1060.3	0.52
				3.71	12	250	207.6	1.93	844.9	0.65
				3.71	16	188	276.7	1.45	1126.5	0.49
142UD E 30	23.0	114	27.2	2.82	20	150	345.9	1.16	1408.1	0.39
				3.71	12	250	259.4	1.54	1285.9	0.43
				3.71	16	188	345.9	1.16	1714.6	0.32

: CMR delivery for version MEDIUM

Other technical gearbox data refer to page 40.

DYNABLOC 
 Geared Servomotors
 Pjr Servo gearbox selection
Pjr 1801 - Pjr 1802

Pjr 1801 M_{Red-S1} **600 N.m max**

Motor type	Motor nominal torque	Motor peak torque	Motor inertia	Gearbox inertia	Exact ratio	Output speed	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ red}$	k_{S1}	$M_{acc\ red}$	k_{acc}
	$M_{n\ mot}$	$M_{peak\ mot}$	J_{mot}	J_{red}	i_{exact}	n_2	N.m		N.m	
	N.m	N.m	10^{-4} kg.m ²	10^{-4} kg.m ²		min ⁻¹				
142UD C 30	18.4	74.9	17.0	53	3	1000	53.0	11.32	215.7	5.56
				39	4	750	70.7	8.49	287.6	4.52
				34	5	600	88.3	6.79	359.5	3.62
				31	7	429	123.6	4.85	503.3	2.58
				29	10	300	176.6	3.40	719.0	1.67
142UD E 30	23.0	114	27.2	53	3	1000	66.2	9.06	328.3	3.65
				39	4	750	88.3	6.79	437.8	2.97
				34	5	600	110.4	5.43	547.2	2.38
				31	7	429	154.6	3.88	766.1	1.70
				29	10	300	220.8	2.72	1094.4	1.10
190UD C 20	42.5	156	54.6	53	3	667	122.4	4.90	449.3	2.67
				39	4	500	163.2	3.68	599.0	2.17
				34	5	400	204.0	2.94	748.8	1.74
				31	7	286	285.6	2.10	1048.3	1.24
				29	10	200	408.0	1.47	1497.6	0.80

Pjr 1802 M_{Red-S1} **600 N.m max**

Motor type	Motor nominal torque	Motor peak torque	Motor inertia	Gearbox inertia	Exact ratio	Output speed	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ red}$	k_{S1}	$M_{acc\ red}$	k_{acc}
	$M_{n\ mot}$	$M_{peak\ mot}$	J_{mot}	J_{red}	i_{exact}	n_2	N.m		N.m	
	N.m	N.m	10^{-4} kg.m ²	10^{-4} kg.m ²		min ⁻¹				
142UD C 30	18.4	74.9	17.0	6	12	250	207.6	2.89	844.9	1.54
				6	16	188	276.7	2.17	1126.5	1.15
				5	20	150	345.9	1.73	1408.1	0.92
				5	35	86	605.4	0.991	2464.2	0.53
				6	12	250	259.4	2.31	1285.9	1.01
142UD E 30	23.0	114	27.2	6	16	188	345.9	1.73	1714.6	0.76
				5	20	150	432.4	1.39	2143.2	0.61
				6	12	167	479.4	1.25	1759.7	0.74
190UD C 20	42.5	156	54.6	6	16	125	639.2	0.94	2346.2	0.55

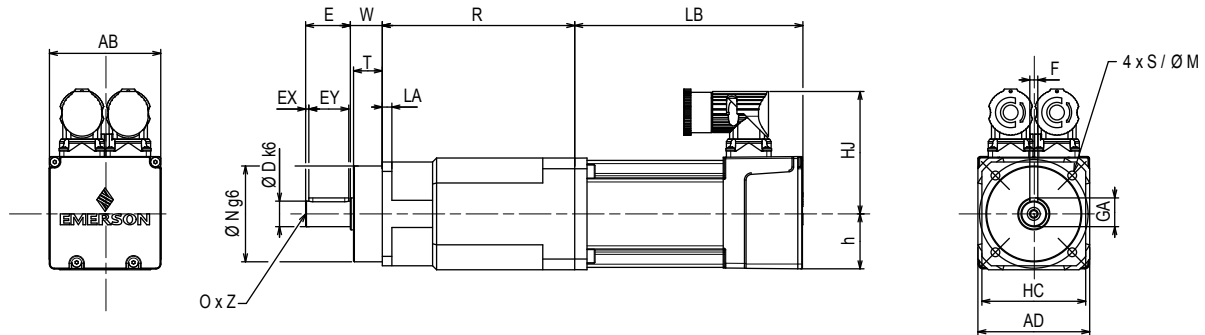
: CMR delivery for version MEDIUM

Other technical gearbox data refer to page 40.

Dimensions : Flange with through holes BS


Pjr 0601 to Pjr 1802 - Universal mounting MU-FF

Dimensions in mm



Type 1-stage / 2-stage	Gearbox								Weight kg
	HC	AD	M	N	LA	S	T	W	
Pjr 0601 / 0602	65	70	68	60	6	5.5	18	20	2.1/3.3
Pjr 0751 / 0752	76	81	85	70	7	6.6	18	20	3.7/4.2
Pjr 1001 / 1002	101	106	120	90	10	9	28	30	7.2/9.5
Pjr 1401 / 1402	141	146	165	130	12	11	27	30	19.3/23.3
Pjr 1801 / 1802	180	200	215	160	14	13	10	14	32/36.6

Solid output shaft							
D	E	F	GA	EY	EX	O	Z
16	28	5	18	25	2	M5	12
22	36	6	24.5	32	2	M8	19
32	58	10	35	50	4	M12	26
40	82	12	43	70	6	M16	36
55	82	16	60	70	6	M20	42

Motor type	Unimotor 						
	Without brake		With brake		AB	HJ	h
	LB	Weight kg	LB	Weight kg			
055A	118	1.2	158	1.6	55	71.5	27.5
055B	142	1.5	182	1.9	55	71.5	27.5
055C	166	1.8	206	2.2	55	71.5	27.5
067B	173	2.6	208	3.3	70	76.5	35
067C	203	3.2	238	3.9	70	76.5	35
089B	191	4.4	231	5.4	91	85	45.5
089C	221	5.5	261	6.5	91	85	45.5
115C	237	8.9	274	10.4	116	98.5	58
115D	267	10.7	304	12.2	116	98.5	58
142C	217	11.5	283	14.3	142	112.5	71
142E	277	18.5	343	21.3	142	112.5	71
190C	221	23.5	320	28.8	191	157.5	95

Gearbox type										
Pjr										
0601	0602	0751	0752	1001	1002	1401	1402	1801	1802	
R										
88	120	99	130	-	-	-	-	-	-	-
88	120	99	130	-	-	-	-	-	-	-
88	120	99	130	-	-	-	-	-	-	-
88	-	99	130	-	-	-	-	-	-	-
88	-	99	130	-	-	-	-	-	-	-
-	-	109	-	129	153	-	-	-	-	-
-	-	109	-	129	153	-	-	-	-	-
-	-	-	-	129	-	150	220	-	-	-
-	-	-	-	129	-	150	220	-	-	-
-	-	-	-	-	-	160	230	196	218	-
-	-	-	-	-	-	160	230	196	218	-
-	-	-	-	-	-	-	-	216	238	-

Max. length depending on the feedback

DYNABLOC


Geared Servomotors

Mjd Servo gearbox selection


General

Mjd DYNABLOC




The **Mjd DYNABLOC**  servo worm-gearboxes contribute to reduce the speed of the servomotor and to increase the torque.


They also help to optimize the ratio of inertia between the driven load and the motor.

The **Mjd DYNABLOC**  range of servo gearboxes provides quiet operation and a very high torsional stiffness.

The multiple possibilities of mounting of the **Mjd** servo gearboxes help to save space and make their integration easy:

- Compact right angle design;
- Fixing possible on 4 sides as standard;

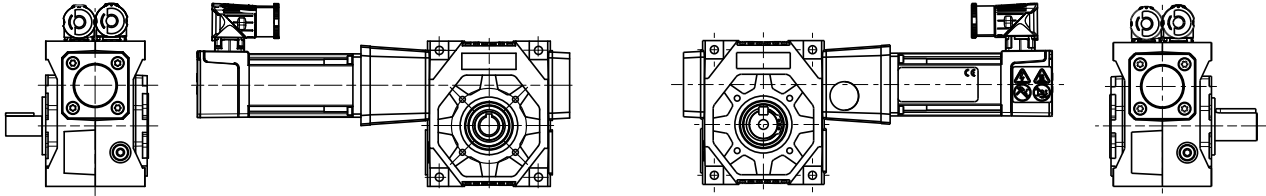
- Solid output shaft single or double, or hollow shaft, keyed or with shrink disk. In the field of high-performance servo gearboxes with low backlash, the **Mjd DYNABLOC**  range always provides a competitive solution. Maintenance-free, they are supplied lubricated.

Description	
Range	7 sizes from 035 to 110
Rated torque	23 - 688 N.m
Max acceleration torque	Up to 1100 N.m
Gearbox ratio	9 ratios from 5.2 to 90
Backlash	BASIC: 10 arcmin MEDIUM: 5 arcmin EXPERT: ≤ 1 arcmin
Lubrication	Life lubricated
Efficiency	Depending on ratio (see chapter Mjd Technical characteristics, page 41)
Output shaft	Plain shaft with key, simple or double • Tolerance h6, threaded hole acc. to DIN 332 DR form Keyed hollow shaft or unkeyed with shrink disk • Tolerance of diameter: H7
Unimotor 	Nominal speed 3000 min ⁻¹ (except 190UD) Connectors rotatable by 90° Incremental or absolute encoder Motor with or without brake
Finishing	Painting black RAL 9005 and unpainted aluminium

Mounting form, operating position

MOUNTING FORM

Mounting with flange with tapped holes

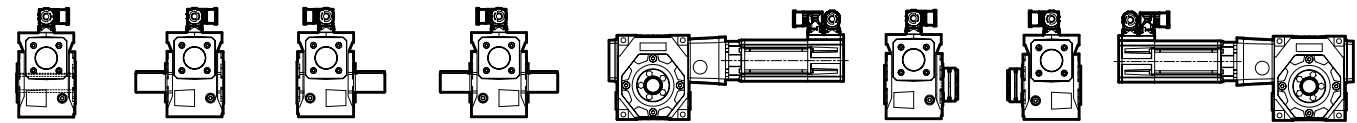


BTL
Tapped holes on left face

or

BTR
Tapped holes on right face

OUTPUT SHAFT



H
Hollow shaft
+ keyway

L
Solid shaft
left

R
Solid shaft
right

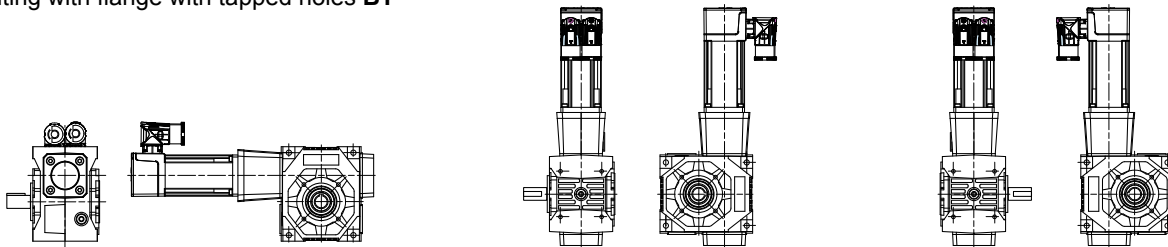
LR
Solid shaft
left and right

SDR
Shrink disk right

SDL
Shrink disk left

OPERATING POSITION

Mounting with flange with tapped holes **BT**



B14

V18

V19

CONNECTOR POSITION




A : Standard

B

C

D

DYNABLOC 
 Geared Servomotors
 Mjd Servo gearbox selection
Designation / Codification



GEARBOX

Mjd	1101	B14	BT	L	L	19.5	MEDIUM	MU-FF
Gearbox serie	Size 0351, 0451, 0551, 0631, 0751, 0901, 1101	Operating position B14, V18, V19	Mounting form BT	Mounting position L - R	Output shaft H, L, R, LR, SDL, SDR	Exact ratio 5.25 - 90	Backlash at output shaft BASIC - MEDIUM - EXPERT	Motor input type MU-FF

MOTOR UNIMOTOR 

089	UD	B	30	0	B	A	CA	A
Motor size 055, 067, 089, 115, 142	Motor voltage UD = 400 V ED = 220 V	Stator length A, B, C, D	Rated speed 30 = 3000 rpm	Brake24 V 0 = Without brake 5 = Parking brake	Connection type B = Power and Signal 90° rotatable (J = for Motor 142)	Output shaft Size 055: A = With key Sizes 067 - 142: E = With half-key	Feedback device Sizes 055 - 067 : CR = Incremental encoder 4096 ppt EM = Inductive absolute multi-turn EQI 1130 AR = Resolver Sizes 089 - 142 : CA = Incremental encoder 4096 ppt EC = Inductive absolute multi-turn EQI 1331 AE = Resolver	Inertia A = std


We reserve the right to modify the design, technical specifications and dimensions of the products shown in this document.
 The description cannot in any way be considered contractual.

Mjd 0351 M_{Red-S1} 23 N.m max

Motor type	Motor nominal torque $M_{n\ mot}$ N.m	Motor peak torque $M_{peak\ mot}$ N.m	Motor inertia J_{mot} 10^{-4} kg.m ²	Gearbox inertia J_{red} 10^{-4} kg.m ²	Exact ratio i_{exact}	Output speed n_2 min ⁻¹	S1		S5	
							Gearbox nominal torque $M_{n\ red}$ N.m	Duty factor k_{S1}	Acceleration torque at gearbox $M_{acc\ red}$ N.m	Duty factor at acceleration k_{acc}
055UD A 30	0.70	2.88	0.14	0.174	5.20	577	3.3	5.38	13.8	2.25
				0.156	7.25	414	4.6	4.16	18.8	1.70
				0.150	10.25	293	6.3	3.17	26.0	1.31
				0.144	14.5	207	8.4	2.61	34.7	1.01
				0.142	19.5	154	10.9	2.01	44.9	0.78
				0.140	30	100	15.1	1.65	62.2	0.64
				0.139	45	67	20.5	1.22	84.2	0.47
055UD B 30	1.05	4.72	0.25	0.174	5.20	577	5.0	3.58	22.6	1.37
				0.156	7.25	414	6.9	2.77	30.8	1.04
				0.150	10.25	293	9.5	2.11	42.6	0.80
				0.144	14.5	207	12.6	1.74	56.8	0.62
				0.142	19.5	154	16.4	1.34	73.6	0.48
055UD C 30	1.48	6.60	0.36	0.174	5.20	577	7.1	2.54	31.6	0.98
				0.156	7.25	414	9.7	1.97	43.1	0.74
				0.150	10.25	293	13.3	1.50	59.5	0.57
				0.144	14.5	207	17.8	1.24	79.4	0.44
067UD B 30	2.45	7.65	0.53	0.274	5.20	577	11.7	1.54	36.6	0.85
				0.256	7.25	414	16.0	1.19	49.9	0.64

: CMR delivery for version MEDIUM

Other technical gearbox data refer to page 41.

DYNABLOC 
 Geared Servomotors
 Mjd Servo gearbox selection
Mjd 0451

Mjd 0451 M_{Red-S1} **61 N.m max**

Motor type	Motor nominal torque $M_{n\ mot}$ N.m	Motor peak torque $M_{peak\ mot}$ N.m	Motor inertia J_{mot} 10^{-4} kg.m ²	Gearbox inertia J_{red} 10^{-4} kg.m ²	Exact ratio i_{exact}	Output speed n_2 min ⁻¹	S1		S5	
							Gearbox nominal torque $M_{n\ red}$ N.m	Duty factor k_{S1}	Acceleration torque at gearbox $M_{acc\ red}$ N.m	Duty factor at acceleration k_{acc}
055UD A 30	0.70	2.88	0.14	0.350	5.20	577	3.4	12.11	13.9	5.03
				0.320	7.25	414	4.7	10.28	19.2	4.16
				0.250	10.25	293	6.5	8.12	26.9	3.16
				0.240	14.5	207	8.8	6.68	36.3	2.59
				0.200	19.5	154	11.7	4.69	48.3	1.82
				0.200	30	100	16.4	3.72	67.4	1.45
				0.182	45	67	22.7	2.60	93.3	1.01
				0.173	60	50	28.6	1.93	117.5	0.73
				0.146	90	33	37.2	1.35	152.9	0.50
				0.350	5.20	577	5.1	8.07	22.8	3.07
055UD B 30	1.05	4.72	0.25	0.320	7.25	414	7.0	6.85	31.5	2.54
				0.250	10.25	293	9.8	5.41	44.0	1.93
				0.240	14.5	207	13.2	4.45	59.5	1.58
				0.200	19.5	154	17.6	3.12	79.2	1.11
				0.200	30	100	24.6	2.48	110.4	0.89
				0.182	45	67	34.0	1.73	152.9	0.61
				0.173	60	50	42.8	1.28	192.6	0.45
				0.350	5.20	577	7.2	5.73	31.9	2.19
				0.320	7.25	414	9.9	4.86	44.0	1.82
				0.250	10.25	293	13.8	3.84	61.6	1.38
055UD C 30	1.48	6.60	0.36	0.240	14.5	207	18.7	3.16	83.3	1.13
				0.200	19.5	154	24.8	2.22	110.7	0.80
				0.200	30	100	34.6	1.76	154.4	0.63
				0.182	45	67	48.0	1.23	213.8	0.44
				0.450	5.20	577	11.8	3.46	37.0	1.89
				0.420	7.25	414	16.3	2.94	51.0	1.57
				0.350	10.25	293	22.9	2.32	71.4	1.19
				0.340	14.5	207	30.9	1.91	96.5	0.97
				0.300	19.5	154	41.1	1.34	128.3	0.69
				0.300	30	100	57.3	1.06	179.0	0.55
067UD B 30	2.45	7.65	0.53	0.450	5.20	577	16.9	2.42	53.7	1.30
				0.420	7.25	414	23.3	2.06	74.0	1.08
				0.350	10.25	293	32.6	1.62	103.5	0.82
				0.340	14.5	207	44.2	1.34	140.0	0.67
				1.150	5.20	577	23.5	1.75	79.8	0.88
089UD B 30	4.85	16.5	1.61	1.120	7.25	414	32.3	1.48	110.1	0.73
				1.050	10.25	293	45.2	1.17	153.9	0.55
				1.150	5.20	577	33.4	1.23	116.1	0.60
089UD C 30	6.90	24.0	2.34	1.120	7.25	414	46.0	1.04	160.1	0.50

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Other technical gearbox data refer to page 41.


Mjd 0551

Mjd 0551 M_{Red-S1} **94 N.m max**

Motor type	Motor nominal torque $M_{n\ mot}$ N.m	Motor peak torque $M_{peak\ mot}$ N.m	Motor inertia J_{mot} 10^{-4} kg.m ²	Gearbox inertia J_{red} 10^{-4} kg.m ²	Exact ratio i_{exact}	Output speed n_2 min ⁻¹	S1		S5	
							Gearbox nominal torque $M_{n\ red}$ N.m	Duty factor k_{S1}	Acceleration torque at gearbox $M_{acc\ red}$ N.m	Duty factor at acceleration k_{acc}
067UD B 30	2.45	7.65	0.53	0.95	5.20	577	12.0	5.68	37.4	3.10
				0.73	7.25	414	16.3	4.53	51.0	2.45
				0.65	10.25	293	22.4	3.89	69.8	2.08
				0.58	14.5	207	30.9	2.65	96.5	1.38
				0.51	19.5	154	40.6	2.14	126.8	1.10
				0.54	30	100	57.3	1.64	179.0	0.83
				0.48	45	67	79.4	1.17	247.9	0.59
067UD C 30	3.50	11.1	0.75	0.95	5.20	577	17.1	3.97	54.3	2.14
				0.73	7.25	414	23.3	3.17	74.0	1.69
				0.65	10.25	293	31.9	2.72	101.3	1.43
				0.58	14.5	207	44.2	1.86	140.0	0.95
				0.51	19.5	154	58.0	1.50	184.0	0.76
				0.54	30	100	81.9	1.15	259.7	0.57
				1.65	5.20	577	23.7	2.87	80.7	1.44
089UD B 30	4.85	16.5	1.61	1.43	7.25	414	32.3	2.29	110.1	1.14
				1.35	10.25	293	44.2	1.97	150.5	0.96
				1.28	14.5	207	61.2	1.34	208.1	0.64
				1.21	19.5	154	80.4	1.08	273.5	0.51
				1.65	5.20	577	33.7	2.02	117.3	0.99
				1.43	7.25	414	46.0	1.61	160.1	0.78
				1.35	10.25	293	62.9	1.38	218.9	0.66
089UD C 30	6.90	24	2.34	1.43	7.25	414	46.0	1.61	160.1	0.78
				1.35	10.25	293	62.9	1.38	218.9	0.66

: CMR delivery for version MEDIUM

Other technical gearbox data refer to page 41.


DYNABLOC 
 Geared Servomotors
 Mjd Servo gearbox selection
Mjd 0631

Mjd 0631 M_{Red-S1} **155 N.m max**

Motor type	Motor nominal torque $M_{n\ mot}$ N.m	Motor peak torque $M_{peak\ mot}$ N.m	Motor inertia J_{mot} 10^{-4} kg.m ²	Gearbox inertia J_{red} 10^{-4} kg.m ²	Exact ratio i_{exact}	Output speed n_2 min ⁻¹	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ red}$ N.m	k_{S1}	$M_{acc\ red}$ N.m	k_{acc}
067UD B 30	2.45	7.65	0.53	1.80	5.20	577	12.0	8.77	37.4	4.79
				1.10	7.25	414	16.5	6.24	51.6	3.37
				1.00	10.25	293	23.1	5.11	72.1	2.69
				0.89	14.5	207	31.6	4.05	98.7	2.10
				0.75	19.5	154	41.6	3.25	129.8	1.66
				0.79	30	100	58.8	2.64	183.6	1.33
				0.70	45	67	82.7	1.66	258.2	0.83
				0.67	60	50	104.4	1.28	325.9	0.63
				1.80	5.20	577	17.1	6.14	54.3	3.30
067UD C 30	3.50	11.1	0.75	1.10	7.25	414	23.6	4.36	74.8	2.32
				1.00	10.25	293	33.0	3.58	104.7	1.85
				0.89	14.5	207	45.2	2.83	143.2	1.45
				0.75	19.5	154	59.4	2.27	188.3	1.14
				0.79	30	100	84.0	1.85	266.4	0.92
				0.70	45	67	118.1	1.16	374.6	0.57
				2.50	5.20	577	23.7	4.43	80.7	2.22
				1.80	7.25	414	32.7	3.15	111.3	1.56
				1.70	10.25	293	45.7	2.58	155.6	1.25
089UD B 30	4.85	16.5	1.61	1.59	14.5	207	62.6	2.05	212.9	0.97
				1.45	19.5	154	82.3	1.64	279.9	0.77
				1.49	30	100	116.4	1.33	396.0	0.62
				2.50	5.20	577	33.7	3.11	117.3	1.53
				1.80	7.25	414	46.5	2.21	161.8	1.08
				1.70	10.25	293	65.1	1.81	226.3	0.86
				1.59	14.5	207	89.0	1.44	309.7	0.67
				1.45	19.5	154	117.1	1.15	407.2	0.53

: CMR delivery for version MEDIUM

Other technical gearbox data refer to page 41.


DYNABLOC 
 Geared Servomotors
 Mjd Servo gearbox selection
Mjd 0751

Mjd 0751 M_{Red-S1} 212 N.m max

Motor type	Motor nominal torque	Motor peak torque	Motor inertia	Gearbox inertia	Exact ratio	Output speed	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ red}$	k_{S1}	$M_{acc\ red}$	k_{acc}
	N.m	N.m	10^{-4} kg.m ²	10^{-4} kg.m ²	i_{exact}	n_2	N.m		N.m	
089UD B 30	4.85	16.5	1.61	4.60	5.20	577	23.7	7.34	80.7	3.67
				3.40	7.25	414	32.7	4.92	111.3	2.43
				3.10	10.25	293	45.7	3.67	155.6	1.73
				2.80	14.5	207	61.9	3.15	210.5	1.50
				2.40	19.5	154	82.3	2.36	279.9	1.11
				2.50	30	100	119.3	1.78	405.9	0.82
				2.30	45	67	161.5	1.31	549.5	0.60
089UD C 30	6.90	24.0	2.34	4.60	5.20	577	33.7	5.16	117.3	2.52
				3.40	7.25	414	46.5	3.46	161.8	1.67
				3.10	10.25	293	65.1	2.58	226.3	1.19
				2.80	14.5	207	88.0	2.21	306.2	1.03
				2.40	19.5	154	117.1	1.66	407.2	0.76
				2.50	30	100	169.7	1.25	590.4	0.57
				5.50	5.20	577	51.3	3.39	214.1	1.38
115UD C 30	10.5	43.8	6.39	4.30	7.25	414	70.8	2.27	295.3	0.91
				4.00	10.25	293	99.0	1.70	413.0	0.65
				3.70	14.5	207	134.0	1.46	558.9	0.56
				3.30	19.5	154	178.1	1.09	743.1	0.42
				5.50	5.20	577	66.5	2.62	275.7	1.07
				4.30	7.25	414	91.7	1.76	380.3	0.71
				4.00	10.25	293	128.2	1.31	531.9	0.51
115UD D 30	13.6	56.4	8.38	3.70	14.5	207	173.5	1.12	719.7	0.44

: CMR delivery for version MEDIUM

Other technical gearbox data refer to page 41.

DYNABLOC 
 Geared Servomotors
 Mjd Servo gearbox selection
Mjd 0901

Mjd 0901 M_{Red-S1} **385 N.m max**

Motor type	Motor nominal torque	Motor peak torque	Motor inertia	Gearbox inertia	Exact ratio	Output speed	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ mot}$	$M_{peak\ mot}$	J_{mot}	J_{red}
N.m	N.m	10^{-4} kg.m ²	10^{-4} kg.m ²		min ⁻¹	N.m		N.m		
089UD B 30	4.85	16.5	1.61	9.40	5.20	577	24.0	11.31	81.5	5.64
				6.90	7.25	414	33.4	9.16	113.6	4.31
				4.70	10.25	293	46.2	6.79	157.3	3.36
				4.10	14.5	207	63.3	4.96	215.3	2.34
				3.40	19.5	154	83.2	4.41	283.1	2.06
				3.50	30	100	119.3	3.03	405.9	1.41
				2.80	45	67	172.4	2.23	586.6	1.02
				2.60	60	50	218.3	1.67	742.5	0.75
				1.90	90	33	296.8	1.12	1009.8	0.50
				9.40	5.20	577	34.1	7.95	118.6	3.88
089UD C 30	6.90	24.0	2.34	6.90	7.25	414	47.5	6.44	165.3	2.96
				4.70	10.25	293	65.8	4.77	228.8	2.31
				4.10	14.5	207	90.0	3.49	313.2	1.61
				3.40	19.5	154	118.4	3.10	411.8	1.42
				3.50	30	100	169.7	2.13	590.4	0.97
				2.80	45	67	245.3	1.57	853.2	0.70
				2.60	60	50	310.5	1.17	1080	0.52
				10.3	5.20	577	51.9	5.22	216.4	2.13
				7.80	7.25	414	72.3	4.23	301.7	1.62
				115UD C 30	10.5	43.8	6.39	5.60	10.25	293
5.00	14.5	207	137.0					2.29	571.6	0.88
4.30	19.5	154	180.2					2.04	751.6	0.78
4.40	30	100	258.3					1.40	1077.5	0.53
3.70	45	67	373.3					1.03	1557.1	0.38
10.30	5.20	577	67.2					4.03	278.6	1.65
7.80	7.25	414	93.7					3.27	388.5	1.26
115UD D 30	13.6	56.4	8.38	5.60	10.25	293	129.6	2.42	537.6	0.98
				5.00	14.5	207	177.5	1.77	736.0	0.68
				4.30	19.5	154	233.4	1.57	967.8	0.60
				4.40	30	100	334.6	1.08	1387.4	0.41

: CMR delivery for version MEDIUM

Other technical gearbox data refer to page 41.

Mjd 1101

Mjd 1101 M_{Red-S1} **688 N.m max**

Motor type	Motor nominal torque $M_{n\ mot}$ N.m	Motor peak torque $M_{peak\ mot}$ N.m	Motor inertia J_{mot} 10^{-4} kg.m ²	Gearbox inertia J_{red} 10^{-4} kg.m ²	Exact ratio i_{exact}	Output speed n_2 min ⁻¹	S1		S5	
							Gearbox nominal torque	Duty factor	Acceleration torque at gearbox	Duty factor at acceleration
							$M_{n\ red}$ N.m	k_{S1}	$M_{acc\ red}$ N.m	k_{acc}
115UD C 30	10.5	43.8	6.39	20.3	5.20	577	51.9	8.83	216.4	3.60
				14.8	7.25	414	72.3	6.75	301.7	2.64
				8.30	10.25	293	100.1	5.22	417.5	2.10
				8.10	14.5	207	138.5	3.75	577.9	1.44
				6.40	19.5	154	184.3	3.20	768.7	1.23
				5.30	30	100	267.8	2.57	1116.9	0.98
				5.10	45	67	378.0	1.76	1576.8	0.66
				4.80	60	50	485.1	1.21	2023.6	0.45
115UD D 30	13.6	56.4	8.38	20.3	5.20	577	67.2	6.82	278.6	2.80
				14.8	7.25	414	93.7	5.21	388.5	2.05
				8.3	10.25	293	129.6	4.03	537.6	1.63
				8.1	14.5	207	179.5	2.89	744.2	1.12
				6.4	19.5	154	238.7	2.47	989.8	0.95
				5.3	30	100	346.8	1.98	1438.2	0.76
				5.1	45	67	489.6	1.36	2030.4	0.51
				23.9	5.20	577	90.9	5.04	370.0	2.11
142UD C 30	18.4	74.9	17.0	18.4	7.25	414	126.7	3.85	515.9	1.54
				11.9	10.25	293	175.4	2.98	714.0	1.23
				11.7	14.5	207	242.8	2.14	988.3	0.84
				10.0	19.5	154	322.9	1.82	1314.5	0.72
				8.90	30	100	469.2	1.47	1910.0	0.58
				8.70	45	67	662.4	1.00	2696.4	0.38
				23.9	5.20	577	113.6	4.03	563.2	1.38
				18.4	7.25	414	158.4	3.08	785.2	1.01
142UD E 30	23.0	114	27.2	11.9	10.25	293	219.2	2.38	1086.7	0.81
				11.7	14.5	207	303.5	1.71	1504.2	0.55
				10.0	19.5	154	403.7	1.46	2000.7	0.47
				8.90	30	100	586.5	1.17	2907.0	0.38
				8.90	30	100	586.5	1.17	2907.0	0.38

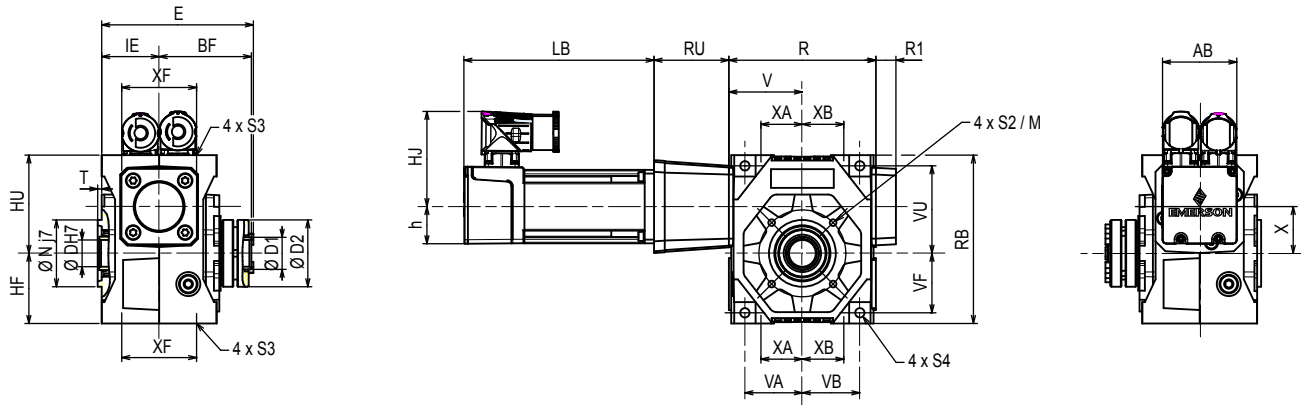
: CMR delivery for version MEDIUM

Other technical gearbox data refer to page 41.

Dimensions: Tapped holes form BTL- Shrink disk to the right SDR

Mjd 0351 to Mjd 1101 - Universal mounting MU-FF


Dimensions in mm



Gearbox type	Gearbox																			Weight kg		
	HF	HU	IE	M	N	R	R1 ¹	RB	S2 ²	S3	S4 ³	T	V	VA	VB	VF	VU	X	XA		XB	XF
Mjd 0351	52.5	73.5	43	65	50	110	15	126	M6	M6	7	3	55	43	43	44.5	65.5	35	31	31	58	3.4
Mjd 0451	62	91	50	85	70	125	16	153	M8	M8	9	3	67.5	54	54	53	82	45	40.5	40.5	68	6.2
Mjd 0551	71	104	56	100	80	150	16	175	M8	M8	9	3.5	75	60	60	61	94	55	45	45	78	8.5
Mjd 0631	78	119	63.5	115	95	168	17	197	M10	M10	11	3.5	84	67	67	66	107	63	49	49	91	13.9
Mjd 0751	94	138	74	130	110	208	20	232	M10	M10	11	4	104	86	86	82	126	75	68	68	110	20.5
Mjd 0901	106	158	85	165	130	229	22	264	M12	M12	13	4	114.5	93	93	91	143	90	70.5	70.5	115	32.5
Mjd 1101	123	183	91	200	165	264	20	306	M12	M12	13	5	132	110	110	108	168	110	87.5	87.5	140	46.5

1. Maximum length (EXPERT version only)
2. Mjd 1101 with 8 tapped holes
3. Through holes

Type	Shaft and shrink disk				
	BF	D	D1	D2	E
Mjd 0351	69	20	24	50	114
Mjd 0451	78	25	30	60	130
Mjd 0551	87	30	36	72	145
Mjd 0631	96.5	35	44	80	162
Mjd 0751	110	40	50	90	186
Mjd 0901	124	50	68	115	211
Mjd 1101	133	60	80	145	226

Motor type	Unimotor 						
	Without brake		With brake		AB	HJ	h
	LB	Weight kg	LB	Weight kg			
055A	118	1.2	158	1.6	55	71.5	27.5
055B	142	1.5	182	1.9	55	71.5	27.5
055C	166	1.8	206	2.2	55	71.5	27.5
067B	173	2.6	208	3.3	70	76.5	35
067C	203	3.2	238	3.9	70	76.5	35
089B	191	4.4	231	5.4	91	85	45.5
089C	221	5.5	261	6.5	91	85	45.5
115C	237	8.9	274	10.4	116	98.5	58
115D	267	10.7	304	12.2	116	98.5	58
142C	217	11.5	283	14.3	142	112.5	71
142E	277	18.5	343	21.3	142	112.5	71

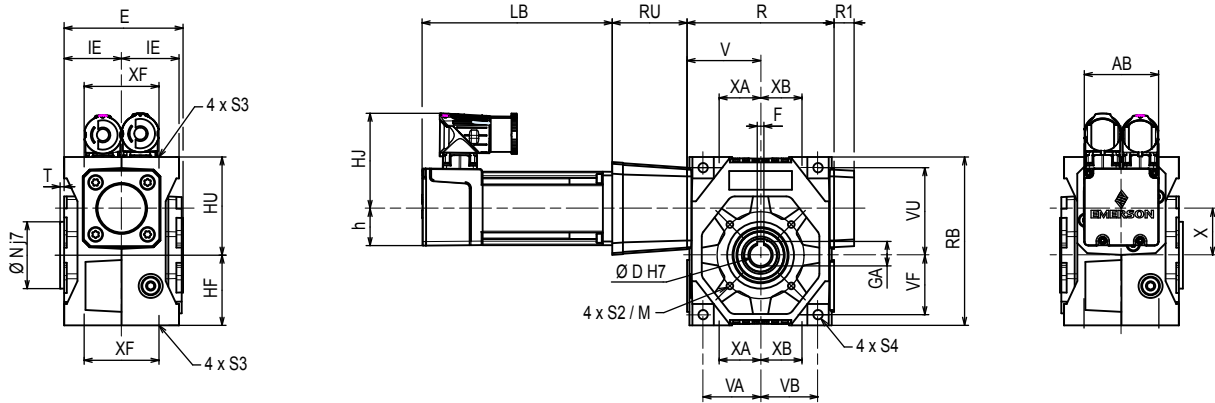
Gearbox type						
Mjd						
0351	0451	0551	0631	0751	0901	1101
56	68	-	-	-	-	-
56	68	-	-	-	-	-
56	68	-	-	-	-	-
-	68	71	76	-	-	-
-	68	71	76	-	-	-
-	78	81	82	87	91	-
-	78	81	82	87	91	-
-	-	-	-	97	101	107
-	-	-	-	97	101	107
-	-	-	-	-	-	107
-	-	-	-	-	-	107

Max. length depending on the feedback

Dimensions: Tapped holes form BTL - Hollow shaft H

Mjd 0351 to Mjd 1101 - Universal mounting MU-FF


Dimensions in mm



Gearbox type	Gearbox																			Weight kg		
	HF	HU	IE	M	N	R	R1 ¹	RB	S2 ²	S3	S4 ³	T	V	VA	VB	VF	VU	X	XA		XB	XF
Mjd 0351	52.5	73.5	43	65	50	110	15	126	M6	M6	7	3	55	43	43	44.5	65.5	35	31	31	58	3.4
Mjd 0451	62	91	50	85	70	125	16	153	M8	M8	9	3	67.5	54	54	53	82	45	40.5	40.5	68	6.2
Mjd 0551	71	104	56	100	80	150	16	175	M8	M8	9	3.5	75	60	60	61	94	55	45	45	78	8.5
Mjd 0631	78	119	63.5	115	95	168	17	197	M10	M10	11	3.5	84	67	67	66	107	63	49	49	91	13.9
Mjd 0751	94	138	74	130	110	208	20	232	M10	M10	11	4	104	86	86	82	126	75	68	68	110	20.5
Mjd 0901	106	158	85	165	130	229	22	264	M12	M12	13	4	114.5	93	93	91	143	90	70.5	70.5	130	32.5
Mjd 1101	123	183	91	200	165	264	20	306	M12	M12	13	5	132	110	110	108	168	110	87.5	87.5	140	46.5

1. Maximum length (EXPERT version only)
2. Mjd 1101 with 8 tapped holes
3. Through holes

Type	Hollow shaft			
	D	GA	F	E
Mjd 0351	16	18.3	5	90
Mjd 0451	25	28.3	8	104
Mjd 0551	30	33.3	8	116
Mjd 0631	35	38.3	10	131
Mjd 0751	40	43.3	12	152
Mjd 0901	50	53.8	14	174
Mjd 1101	60	64.4	18	186

Motor type	Unimotor 						
	Without brake		With brake		AB	HJ	h
	LB	Weight kg	LB	Weight kg			
055A	118	1.2	158	1.6	55	71.5	27.5
055B	142	1.5	182	1.9	55	71.5	27.5
055C	166	1.8	206	2.2	55	71.5	27.5
067B	173	2.6	208	3.3	70	76.5	35
067C	203	3.2	238	3.9	70	76.5	35
089B	191	4.4	231	5.4	91	85	45.5
089C	221	5.5	261	6.5	91	85	45.5
115C	237	8.9	274	10.4	116	98.5	58
115D	267	10.7	304	12.2	116	98.5	58
142C	217	11.5	283	14.3	142	112.5	71
142E	277	18.5	343	21.3	142	112.5	71

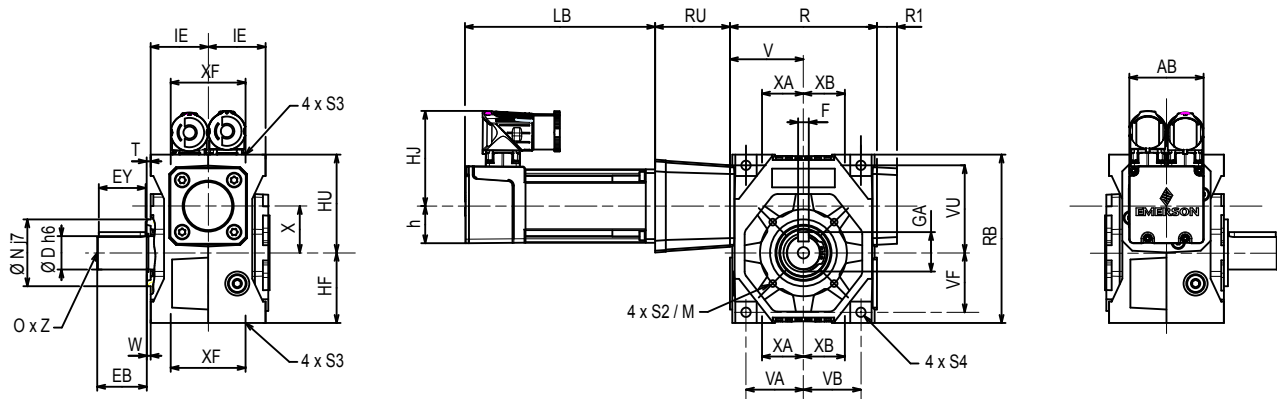
Gearbox type						
Mjd						
0351	0451	0551	0631	0751	0901	1101
RU						
56	68	-	-	-	-	-
56	68	-	-	-	-	-
56	68	-	-	-	-	-
-	68	71	76	-	-	-
-	68	71	76	-	-	-
-	78	81	82	87	91	-
-	78	81	82	87	91	-
-	-	-	-	97	101	107
-	-	-	-	97	101	107
-	-	-	-	-	-	107
-	-	-	-	-	-	107

Max. length depending on the feedback

Dimensions: Tapped holes form BTL - Solid shaft to the left L

Mjd 0351 to Mjd 1101 - Universal mounting MU-FF


Dimensions in mm



Gearbox type	Gearbox																			Weight kg			
	HF	HU	IE	M	N	R	R1 ¹	RB	S2 ²	S3	S4 ³	T	V	VA	VB	VF	VU	X	XA	XB	XF	Shaft L or R	Shaft LR
	Mjd 0351	52.5	73.5	43	65	50	110	15	126	M6	M6	7	3	55	43	43	44.5	65.5	35	31	31		
Mjd 0451	62	91	50	85	70	125	16	153	M8	M8	9	3	67.5	54	54	53	82	45	40.5	40.5	68	6.8	7.0
Mjd 0551	71	104	56	100	80	150	16	175	M8	M8	9	3.5	75	60	60	61	94	55	45	45	78	9.2	9.5
Mjd 0631	78	119	63.5	115	95	168	17	197	M10	M10	11	3.5	84	67	67	66	107	63	49	49	91	15.2	15.8
Mjd 0751	94	138	74	130	110	208	20	232	M10	M10	11	4	104	86	86	82	126	75	68	68	110	22.2	23.0
Mjd 0901	106	158	85	165	130	229	22	264	M12	M12	13	4	114.5	93	93	91	143	90	70.5	70.5	130	35.1	36.1
Mjd 1101	123	183	91	200	165	264	20	306	M12	M12	13	5	132	110	110	108	168	110	87.5	87.5	140	50.3	52.3


1. Maximum length (EXPERT version only)
2. Mjd 1101 with 8 tapped holes
3. Through holes

Type	Solid output shaft							
	D	EB	EY	W	GA	F	O	Z
Mjd 0351	25	38	35	2	28	8	M10	22
Mjd 0451	35	55	50	2	38	10	M12	28
Mjd 0551	40	60	55	2	43	12	M16	36
Mjd 0631	45	70	65	2	48.5	14	M16	36
Mjd 0751	50	75	70	2	53.5	14	M16	36
Mjd 0901	65	100	95.5	2	69	18	M20	42
Mjd 1101	75	115	110	2	79.5	20	M20	42

Motor type	Unimotor 				AB	HJ	h
	Without brake		With brake				
	LB	Weight kg	LB	Weight kg			
055A	118	1.2	158	1.6	55	71.5	27.5
055B	142	1.5	182	1.9	55	71.5	27.5
055C	166	1.8	206	2.2	55	71.5	27.5
067B	173	2.6	208	3.3	70	76.5	35
067C	203	3.2	238	3.9	70	76.5	35
089B	191	4.4	231	5.4	91	85	45.5
089C	221	5.5	261	6.5	91	85	45.5
115C	237	8.9	274	10.4	116	98.5	58
115D	267	10.7	304	12.2	116	98.5	58
142C	217	11.5	283	14.3	142	112.5	71
142E	277	18.5	343	21.3	142	112.5	71


Gearbox type						
Mjd						
0351	0451	0551	0631	0751	0901	1101
RU						
56	68	-	-	-	-	-
56	68	-	-	-	-	-
56	68	-	-	-	-	-
-	68	71	76	-	-	-
-	68	71	76	-	-	-
-	78	81	82	87	91	-
-	78	81	82	87	91	-
-	-	-	-	97	101	107
-	-	-	-	97	101	107
-	-	-	-	-	-	107
-	-	-	-	-	-	107

Max. length depending on the feedback

DYNABLOC 
 Geared Servomotors
 Technical characteristics

Pje DYNABLOC 

Gearbox type	Exact ratio	Efficiency	Torsional stiffness N.m/arcmin	Angular backlash			Max. radial load F_r at E/2 N	Max. axial load F_a N
				BASIC	MEDIUM	EXPERT		
				arcmin				
Pje 0641	3	0.94	2.4	< 10	-	-	450	500
	4		2.4					
	5		2.4					
	7		1.7					
	10		1.3					
Pje 0642	12	0.92	2.4	< 14	-	-	450	500
	16		2.4					
	20		2.4					
	35		2.4					
	50		2.4					
Pje 0841	3	0.94	2.4	< 10	-	-	1300	500
	4		2.4					
	5		2.4					
	7		1.7					
	10		1.3					
Pje 0842	12	0.92	2.4	< 14	-	-	1300	500
	16		2.4					
	20		2.4					
	35		2.4					
	50		2.4					
Pje 1181	3	0.94	2.4	< 8	-	-	2600	1000
	4		2.4					
	5		2.4					
	7		1.7					
	10		1.3					
Pje 1182	12	0.92	2.4	< 12	-	-	2600	1000
	16		2.4					
	20		2.4					
	35		2.4					
Pje 1501	3	0.94	2.4	< 8	-	-	6500	6000
	4		2.4					
	5		2.4					
	7		1.7					
	10		1.3					
Pje 1502	12	0.92	2.4	< 12	-	-	6500	6000
	16		2.4					
	20		2.4					
	35		2.4					

DYNABLOC 
 Geared Servomotors
 Technical characteristics

Pjr DYNABLOC 

Gearbox type	Exact ratio	Efficiency	Torsional stiffness N.m/arcmin	Angular backlash			Max. radial load F_r at E/2 N	Max. axial load F_a N
				BASIC	MEDIUM	EXPERT		
				arcmin				
Pjr 0601	3	0.96	5	-	< 6	< 4	3000	2400
	4							
	5							
	7							
	10							
Pjr 0602	12	0.94	5	-	< 7	< 5	3000	2400
	16							
	20							
	35							
	50							
Pjr 0751	3	0.96	13	-	< 5	< 3	4200	3800
	4							
	5							
	7							
	10							
Pjr 0752	12	0.94	13	-	< 6	< 4	4200	3800
	16							
	20							
	35							
	50							
Pjr 1001	3	0.96	40	-	< 5	< 3	6300	5600
	4							
	5							
	7							
	10							
Pjr 1002	12	0.94	40	-	< 6	< 4	6300	5600
	16							
	20							
	35							
	50							
Pjr 1401	3	0.96	56	-	< 5	< 3	11000	10600
	4							
	5							
	7							
	10							
Pjr 1402	12	0.94	56	-	< 6	< 4	11000	10600
	16							
	20							
	35							
	50							
Pjr 1801	3	0.96	130	-	< 4	< 2	13000	13500
	4							
	5							
	7							
	10							
Pjr 1802	12	0.94	130	-	< 6	< 4	13000	13500
	16							
	20							
	35							
	50							

Technical characteristics

Mjd DYNABLOC 

Gearbox type	Exact ratio	Efficiency	Torsional stiffness	Angular backlash			Max. radial load F_r at E/2	Max. axial load F_a
			N.m/arcmin	BASIC	MEDIUM	EXPERT	N	N
				arcmin				
Mjd 0351	5.2	0.92	5	< 10	< 5	< 1	3800	2800
	7.25	0.90						
	10.25	0.88						
	14.5	0.83						
	19.5	0.80						
	30	0.72						
	45	0.65						
Mjd 0451	5.2	0.93	9	< 10	< 5	< 1	5800	4000
	1.25	0.92						
	10.25	0.91						
	14.5	0.87						
	19.5	0.86						
	30	0.78						
	45	0.72						
	60	0.68						
90	0.59							
Mjd 0551	5.2	0.94	20	< 10	< 5	< 1	7000	4800
	7.25	0.92						
	10.25	0.89						
	14.5	0.87						
	19.5	0.85						
	30	0.78						
Mjd 0631	5.2	0.94	36	< 10	< 5	< 1	8800	8500
	7.25	0.93						
	10.25	0.92						
	14.5	0.89						
	19.5	0.87						
	30	0.80						
	45	0.75						
60	0.71							
Mjd 0751	5.2	0.94	50	< 10	< 5	< 1	10500	10500
	7.25	0.93						
	10.25	0.92						
	14.5	0.89						
	19.5	0.87						
	30	0.82						
Mjd 0901	5.2	0.95	75	< 10	< 5	< 1	15800	13000
	7.25	0.95						
	10.25	0.93						
	14.5	0.90						
	19.5	0.88						
	30	0.82						
	45	0.79						
	60	0.75						
90	0.68							
Mjd 1101	5.2	0.95	120	< 10	< 5	< 1	21500	16000
	7.25	0.95						
	10.25	0.93						
	14.5	0.91						
	19.5	0.90						
	30	0.85						
45	0.80							
60	0.77							

Notes

Notes

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