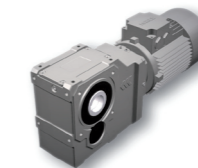
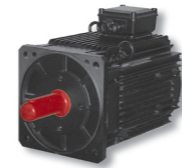


## Provided motors solutions



	Synchronous servo motors	Synchronous servo motors	Asynchronous servo motors	Direct drive, rotative	Direct drive, linear	Gear motors, standard	Gear motors, customised
	LST	LSH	ASM	MTC	Linear	GMS2000	Gx
<b>Product range</b>	LST	LSH	ASM	MTC	Linear	GMS2000	Gx
<b>Properties</b>							
Synchronous	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-
Asynchronous	-	-	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Dynamics	++	++	+	++	++	-	- +
Winding technology							
- distributed	<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- concentrated	-	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	-	-
- ring winding	-	-	-	<input checked="" type="checkbox"/>	-	-	-
Number of poles	6	6, 10	4	64, 88	-	2, 4, 6, 8	2, 4, 6, 8
Protection category	IP64 (flange: IP54)	IP64 (flange: IP54)	IP64	IP44	IP64	IP55	IP54
Specials	-	-	up to 8,000 revolutions in field weakening range	external rotor, hollow shaft 56 mm	ironless, iron-core	-	special shafts and flanges
<b>Performance data</b>							
Nominal power $P_N$ [kW]	0.03 - 8	0.05 - 6	3.6 - 11	-	-	0.75 - 90	0.75 - 15
Nominal force $F_N$ [N]/velocity $v$ [m/s]	-	-	-	-	30 - 5,850/0 - 10	-	-
Nominal torque $M_N$ [Nm]	0.09 - 24	0.23 - 20	23 - 70	10 - 50	-	bis 14,000	bis 6,000
Nominal speed [min <sup>-1</sup> ]	3,000 - 9,000	3,000 - 4,500	1,500	250 - 550	-	750 - 3,000	750 - 3,000
Maximum torque [Nm]	4 · $M_N$	4.5 · $M_N$	2 up to 5 · $M_N$	2 · $M_N$	2 bis 5 · $M_N$	2.3 · $M_N$	2.3 · $M_N$
<b>Cooling</b>							
Self cooled	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
External cooled	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Suitable for drive controller</b>							
CDE3000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CDF3000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-
CDD3000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CDA3000	-	-	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CDB3000	-	-	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Encodersystems</b>							
Resolver	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-
Sin/Cos encoder	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/>
Sin/Cos encoder with SSI resp. EnDat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/>	-	-
Sin/Cos encoder with Hiperface	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-
TTL incremental encoder	-	-	<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
HTL incremental encoder	-	-	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SSI encoder (multiturn/singleturn)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Miscellaneous</b>							
Holding brake (optionally)	permanent-field	permanent-field	permanent-field	-	-	spring pressure	spring pressure
Motor temperature monitoring	PTC, linear PTC, Klixon	PTC, linear PTC, Klixon	PTC, linear PTC, Klixon	PTC, linear PTC	PTC, linear PTC	linear PTC, Klixon	linear PTC, Klixon
Acceptances	CE, UL	CE, UL	CE	CE	CE	CE	CE
Options	IP65, swivelling terminal plugs, cable tails, feather keys, customised windings, customised flanges	IP65, swivelling terminal plugs, cable tails, feather keys, customised windings, customised flanges	IP65, swivelling terminal plugs, feather keys	solid shaft, liquid cooling	limit switch, capsuled linear ruler, Hall, liquid cooling, magnetic measuring system	servo adapter, heating, special shafts	customised aluminum motors and gears