LUST

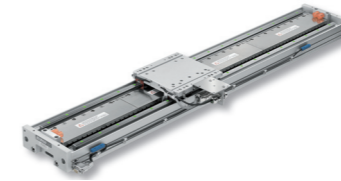## Provided motors solutions

Product range	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
Properties							
Synchronous	☑	☑	-	☑	☑	-	-
Asynchronous	-	-	☑	-	-	☑	☑
Dynamics	+ +	+ +	+	+ +	+ +	-	- +
Winding technology							
- distributed	☑	-	☑	-	☑	☑	☑
- concentrated	-	☑	-	-	☑	-	-
- ring winding	-	-	-	☑	-	-	-
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
Performance data							
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	-	up to 14,000	up to 6,000
Nominal speed [min⁻¹]	3,000 - 9,000	3,000 - 4,500	1,500	250 - 550	-	750 - 3,000	750 - 3,000
Maximum torque [Nm]	$4 \cdot M_N$	$4.5 \cdot M_N$	2 up to $5 \cdot M_N$	$2 \cdot M_N$	2 up to $5 \cdot M_N$	$2.3 \cdot M_N$	$2.3 \cdot M_N$
Cooling							
Self cooled	☑	☑	☑	☑	☑	☑	☑
External cooled	-	-	☑	☑	☑	☑	☑
Suitable for drive controller							
CDE3000	☑	☑	☑	-	-	☑	☑
CDF3000	☑	☑	☑	-	-	-	-
CDD3000	☑	☑	☑	☑	☑	☑	☑
CDA3000	-	-	☑	-	-	☑	☑
CDB3000	-	-	☑	-	-	☑	☑
Encodersystems							
Resolver	☑	☑	☑	-	-	-	-
Sin/Cos encoder	☑	☑	☑	-	☑	-	☑
Sin/Cos encoder with SSI resp. EnDat	☑	☑	☑	-	☑	-	-
Sin/Cos encoder with Hiperface	☑	☑	☑	☑	-	-	-
TTL incremental encoder	-	-	☑	-	☑	☑	☑
HTL incremental encoder	-	-	☑	-	-	☑	☑
SSI encoder (multiturn/singleturn)	☑	☑	☑	-	-	☑	☑
Miscellanous							
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