



Elettromandrini per la lavorazione di Metalli,
Leghe e Materiali Compositi
Electrospindles for Metal, Alloys
& Composites machining

MORE VALUE FOR YOUR MACHINE.

HSD[®]
MECHATRONICS



Serie con diametro corpo
da ø80 a ø170
Body diameter range
from ø80 to ø170

ELETTROMANDRINI ELECTROSPINDLES		ES327 HSK E25	ES328 HSK E25	ES329 HSK E32
Diametro Corpo Body Diameter	mm	ø80mm	ø90mm	ø100mm
Coppia S1/S6 Torque S1/S6	Nm	1/1,3Nm	1,8/2,1Nm	3,2/3,8Nm
Potenza S1/S6 Power S1/S6	kW	3/3,6kW	5/6kW	6/7,2kW
Tecnologia Motore Motor Technology		Asynchronous	Asynchronous	Asynchronous
Sbloccaggio Utensile Tool Release		Pneumatic	Pneumatic	Pneumatic
Tensione Nominale Rated Voltage	V	220V or 380V	220V	380V
Opzione Encoder Option Encoder		No	No	No
Poli Poles		4Poles	4Poles	4Poles
Lubrificazione Cuscinetti Bearings Lubrication		Grease	Grease	Grease
Frequenza Massima Max Frequency	Hz	1333/1667Hz	1667Hz	1333Hz
Velocità Massima Max Speed	rpm	40000rpm or 50000rpm	50000rpm	40000rpm
Velocità Nominale Rated Speed	rpm	27000rpm	27000rpm	18000rpm
Peso Weight	kg	~8Kg	~10Kg	~16Kg
Opzione Distributore Option Coolant Through Shaft		-	-	-
Sensore di allungamento Elongation sensor		-	-	-
Sensore di vibrazione Vibration sensor		-	-	-
Housing Housing		-	-	-

ES334 BT30/HSK E40	ES505 HSK A63	ES505 HT HSK A63	ES332 HSK A40/E40	ES508 HSK A63
ø120mm	ø140mm	ø140mm	ø150mm	ø170mm
5,7/6,8Nm	30/36Nm	48/57,5Nm	10,3/12,4Nm	30/36Nm
3,6/4,3kW	25/30kW	40/48kW	13/15,6kW	25/30kW
Asynchronous	Synchronous	Synchronous	Asynchronous	Synchronous
Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
220V or 380V	536V	491/592V	380V	445/536V
LB 1 Vpp	LB 1 Vpp or TTL	LB 1 Vpp or TTL	LB 1 Vpp or TTL	LB 1 Vpp or TTL
4Poles	6Poles	6Poles	4Poles	6Poles
Grease or Air-oil	Grease or Air-oil	Grease or Air-oil	Grease or Air-oil	Grease or Air-oil
800/1000Hz	1000/1200Hz	1000/1200Hz	800/1066Hz	900/1200Hz
24000rpm Grease 30000rpm Air-oil	20000rpm Grease 24000rpm Air-oil	20000rpm Grease 24000rpm Air-oil	24000rpm Grease 32000rpm Air-oil	18000rpm Grease 24000rpm Air-oil
6000rpm	8000rpm	8000rpm	12000rpm	8000rpm
~27Kg	~34Kg	~38Kg	~35Kg	~55Kg
High Pressure	High Pressure	High Pressure	High Pressure	High Pressure
-	-	-	-	Yes
-	Yes only with housing	Yes only with housing	-	-
-	Yes	Yes	-	-

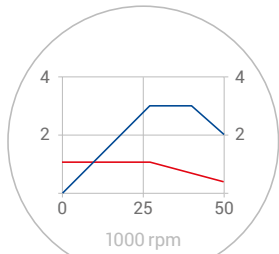
Le misure sono in mm
Measurements are in mm

Il peso dipende dall'housing scelto
Weight depends on the chosen housing

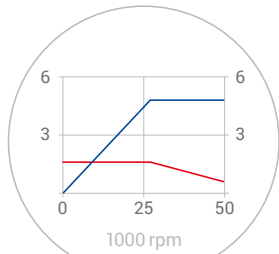
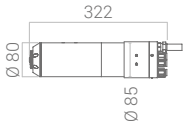
Tutti i modelli hanno:
-sistema di raffreddamento liquido
-cuscinetti ceramici

All models have:
-liquid cooling system
-ceramic bearings

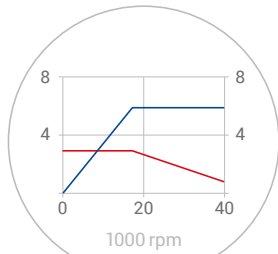
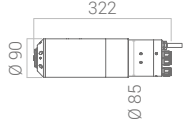
Technical data and illustrations are not binding and,
for the sake of continual improvement of its products,
HSD Mechatronics reserves the right to make
modifications without prior notice



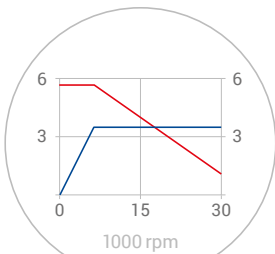
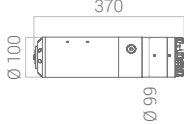
— [kW] S1
— [Nm] S1



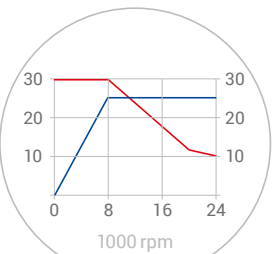
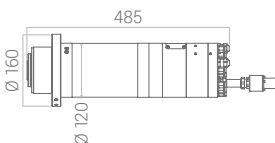
— [kW] S1
— [Nm] S1



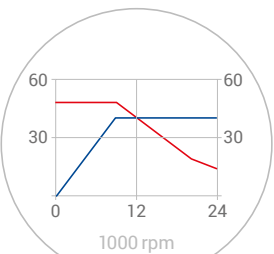
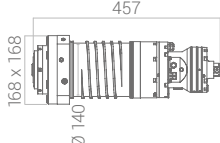
— [kW] S1
— [Nm] S1



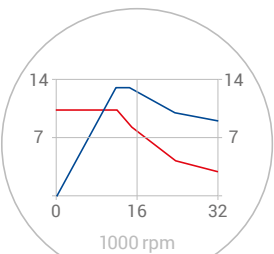
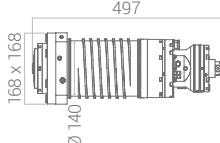
— [kW] S1
— [Nm] S1



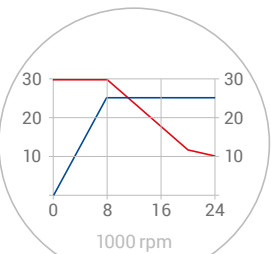
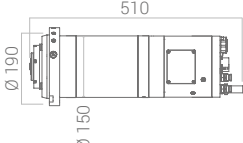
— [kW] S1
— [Nm] S1



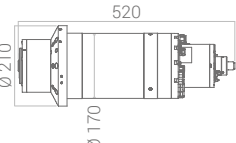
— [kW] S1
— [Nm] S1



— [kW] S1
— [Nm] S1



— [kW] S1
— [Nm] S1



Serie con diametro
corpo da Ø180 a Ø310
Body range diameter
from Ø180 to Ø310



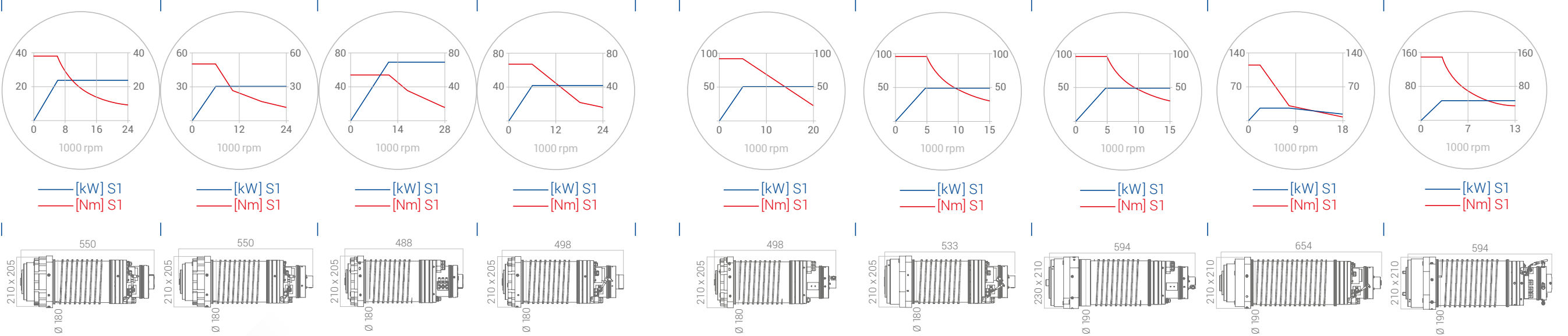
ELETTROMANDRINI ELECTROSPINDLES		ES510 HSK A63	ES510 HSK A63	ES510 HSK A63	ES510 HSK A63/ISO40	ES510 HSK A63	ES510 HSK A100	ES511 TURNING ISO50/HSK T100	ES511 HSK A63/ISO40/BT40	ES511 ISO50/HSK A100	
Diametro Corpo Body Diameter	mm	Ø180mm	Ø180mm	Ø180mm	Ø180mm	Ø180mm	Ø180mm	Ø190mm	Ø190mm	Ø190mm	
Coppia S1/S6 Torque S1/S6	Nm	38/46Nm	48/57Nm	55,7/75,2Nm	67/87,5Nm	90/120Nm	95,5/124Nm	95,5/124Nm	124/149Nm	150/202Nm	
Potenza S1/S6 Power S1/S6	kW	24/28,8kW	30/36kW	70/94,5kW	42/55kW	50/67,5kW	50/65kW	50/65kW	26/31kW	47/63kW	
Tecnologia Motore Motor Technology		Asynchronous	Asynchronous	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous	Asynchronous	Synchronous	
Tensione Nominale Rated Voltage	V	380V	380V	477V	482/566V	616V	474/540V	540/563V	380V	567V	
Poli Poles		6Poles	6Poles	4Poles	4Poles	6Poles	6Poles	6Poles	8Poles	8Poles	
Lubrificazione Cuscinetti Bearings Lubrication		Grease or Air-oil	Grease or Air-oil	Air-oil	Grease or Air-oil	Air-oil	Grease or Air-oil	Grease or Air-oil	Grease or Air-oil	Grease or Air-oil	
Frequenza Massima Max Frequency	Hz	900/1200Hz	900/1200Hz	933Hz	600/800Hz	1000Hz	600/750Hz	600/750Hz	800/1200Hz	533/800/866Hz	
Velocità Massima Max Speed	rpm	18000rpm Grease 24000rpm Air-oil	18000rpm Grease 24000rpm Air-oil	28000rpm	18000rpm Grease 24000rpm Air-oil	20000rpm	12000rpm Grease 15000rpm Air-oil	12000rpm Grease 15000rpm Air-oil	16000rpm Grease 18000rpm Air-oil	8000rpm Grease 12000rpm Grease 13000rpm Air-oil	
Velocità Nominale Rated Speed	rpm	6000rpm	6000rpm	12000rpm	6000rpm	5300rpm	5000rpm	5000rpm	2000rpm	3000rpm	
Peso Weight	kg	~65Kg	~65Kg	~65Kg	~65Kg	~65Kg	~80Kg	~95Kg	~110Kg	~80Kg	
Sensore di allungamento Elongation sensor		-	-	Yes	Yes	Yes	Yes	-	-	-	
Sensore di vibrazione Vibration sensor		Yes only with housing	Yes only with housing	Yes only with housing	Yes only with housing	Yes only with housing	Yes only with housing	Yes only with housing	-	Yes only with housing	
Tornitura Turning		-	-	-	-	-	-	Yes	-	-	
Housing Housing		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

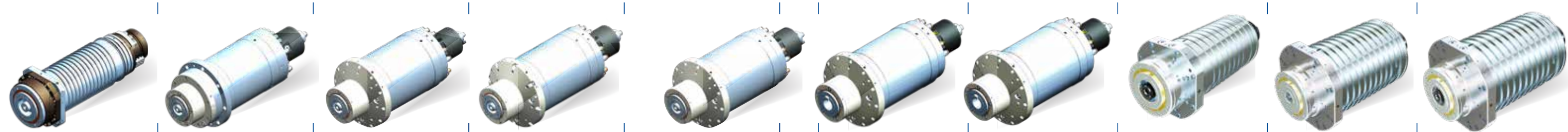
Le misure sono in mm
Measurements are in mm

Il peso dipende dall'housing scelto
Weight depends on the chosen
housing

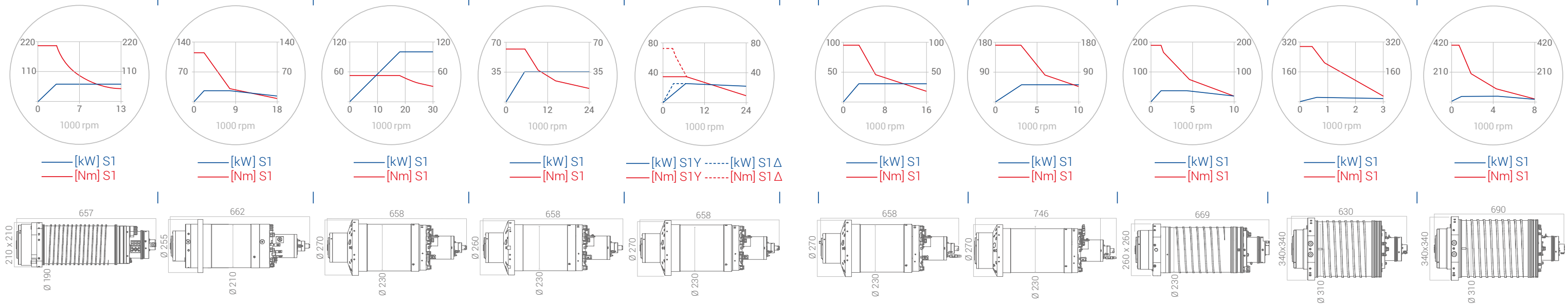
I seguenti modelli hanno:
- sistema di raffreddamento a liquido
- cuscinetti ceramici
- opzione Encoder
- sbloccaggio utensile idraulico
- opzione distributore ad alta pressione

The following models have:
- liquid cooling system
- ceramic bearings
- option Encoder
- hydraulic tool release
- option coolant through shaft
with high pressure





ES511 ISO50/HSK A100	ES550 HSK A63	ES575 HSK A63	ES575 HSK A63	ES575 HSK A63	ES575 BT40/ISO40	ES575 HSK A100	ES514 HSK T100	ES518 PSC63	ES518 HSK A100
Ø190mm	Ø210mm	Ø230mm	Ø230mm	Ø230mm	Ø230mm	Ø230mm	Ø230mm	Ø310mm	Ø310mm
200/241Nm	124/149Nm	53/64Nm	61,7/74Nm	72/87Nm Y 34,5/41,5Nm Δ	95,5/114,5Nm	170/216Nm	191/229Nm	298/358Nm	410/493Nm
63/76kW	26/31kW	100/120kW	35/42kW	25/30kW Y 25/30kW Δ	30/36kW	54/68kW	34/41kW	20/24kW	43/51,6kW
Synchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous Y/Δ	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
586/615V	380V	380V	380V	380V	380V	380V	400V	380V	380V
8Poles	8Poles	4Poles	4Poles	4Poles	8Poles	8Poles	8Poles	6Poles	6Poles
Grease or Air-oil	Grease	Air-oil	Grease or Air-oil	Air-oil	Grease or Air-oil	Air-oil	Grease	Grease	Air-oil
800/866Hz	1200Hz	1000Hz	600/800Hz	800Hz	1067Hz	667Hz	667Hz	150Hz	400Hz
12000rpm Grease 13000rpm Air-oil	18000rpm	30000rpm	18000rpm Grease 24000rpm Air-oil	24000rpm	16000rpm	10000rpm	10000rpm	3000rpm	8000rpm
3000rpm	2000rpm	18000rpm	5400rpm	3300rpm Y - 6900rpm Δ	3000rpm	3000rpm	1700rpm	640rpm	1000rpm
~105Kg	~110Kg	~120Kg	~120Kg	~120Kg	~120Kg	~150Kg	~160Kg	~240Kg	~270Kg
-	-	Yes	Yes	Yes	Yes	Yes	Yes	-	-
-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
-	-	-	-	-	-	-	Yes	-	-
Yes	-	-	-	-	-	-	Yes	Yes	Yes



Elettromandrini per la lavorazione di Metalli, Leghe e Materiali Compositi
Electrospindles for Metal, Alloys & Composites Machining



AEROSPACE
WINDOWS & FURNITURE
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AUTOMOTIVE
HIGH TECH.