



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

**MORE VALUE FOR YOUR MACHINE.**

**HSD<sup>®</sup>**  
**MECHATRONICS**



Serie con diametro corpo da  $\varnothing 80$  a  $\varnothing 170$   
 Body diameter range from  $\varnothing 80$  to  $\varnothing 170$



**ELETTROMANDRINI  
 ELECTROSPINDLES**

		<b>ES327 HSK E25</b>	<b>ES328 HSK E25</b>	<b>ES329 HSK E32</b>
Diametro Corpo <b>Body Diameter</b>	mm	$\varnothing 80$ mm	$\varnothing 90$ mm	$\varnothing 100$ mm
Coppia S1/S6 <b>Torque S1/S6</b>	Nm	1/1,3Nm	1,8/2,1Nm	3,2/3,8Nm
Potenza S1/S6 <b>Power S1/S6</b>	kW	3/3,6kW	5/6kW	6/7,2kW
Tecnologia Motore <b>Motor Technology</b>		Asynchronous	Asynchronous	Asynchronous
Sbloccaggio Utensile <b>Tool Release</b>		Pneumatic	Pneumatic	Pneumatic
Tensione Nominale <b>Rated Voltage</b>	V	220V or 380V	220V	380V
Opzione Encoder <b>Option Encoder</b>		No	No	No
Poli <b>Poles</b>		4Poles	4Poles	4Poles
Lubrificazione Cuscinetti <b>Bearings Lubrication</b>		Grease	Grease	Grease
Frequenza Massima <b>Max Frequency</b>	Hz	1333/1667Hz	1667Hz	1333Hz
Velocità Massima <b>Max Speed</b>	rpm	40000rpm or 50000rpm	50000rpm	40000rpm
Velocità Nominale <b>Rated Speed</b>	rpm	27000rpm	27000rpm	18000rpm
Peso <b>Weight</b>	kg	~8Kg	~10Kg	~16Kg
Opzione Distributore <b>Option Coolant Through Shaft</b>		-	-	-
Sensore di allungamento <b>Elongation sensor</b>		-	-	-
Sensore di vibrazione <b>Vibration sensor</b>		-	-	-
Housing		-	-	-

**ES334  
BT30/HSK E40**

**ES505  
HSK A63**

**ES505 HT  
HSK A63**

**ES332  
HSK A40/E40**

**ES508  
HSK A63**

		<b>ES334 BT30/HSK E40</b>	<b>ES505 HSK A63</b>	<b>ES505 HT HSK A63</b>	<b>ES332 HSK A40/E40</b>	<b>ES508 HSK A63</b>
Diametro Corpo <b>Body Diameter</b>	mm	$\varnothing 120$ mm	$\varnothing 140$ mm	$\varnothing 140$ mm	$\varnothing 150$ mm	$\varnothing 170$ mm
Coppia S1/S6 <b>Torque S1/S6</b>	Nm	5,7/6,8Nm	30/36Nm	48/57,5Nm	10,3/12,4Nm	30/36Nm
Potenza S1/S6 <b>Power S1/S6</b>	kW	3,6/4,3kW	25/30kW	40/48kW	13/15,6kW	25/30kW
Tecnologia Motore <b>Motor Technology</b>		Asynchronous	Synchronous	Synchronous	Asynchronous	Synchronous
Sbloccaggio Utensile <b>Tool Release</b>		Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Tensione Nominale <b>Rated Voltage</b>	V	220V or 380V	536V	491/592V	380V	445/536V
Opzione Encoder <b>Option Encoder</b>		LB 1 Vpp	LB 1 Vpp or TTL	LB 1 Vpp or TTL	LB 1 Vpp or TTL	LB 1 Vpp or TTL
Poli <b>Poles</b>		4Poles	6Poles	6Poles	4Poles	6Poles
Lubrificazione Cuscinetti <b>Bearings Lubrication</b>		Grease or Air-oil	Grease or Air-oil	Grease or Air-oil	Grease or Air-oil	Grease or Air-oil
Frequenza Massima <b>Max Frequency</b>	Hz	800/1000Hz	1000/1200Hz	1000/1200Hz	800/1066Hz	900/1200Hz
Velocità Massima <b>Max Speed</b>	rpm	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
Velocità Nominale <b>Rated Speed</b>	rpm	6000rpm	8000rpm	8000rpm	12000rpm	8000rpm
Peso <b>Weight</b>	kg	~27Kg	~34Kg	~38Kg	~35Kg	~55Kg
Opzione Distributore <b>Option Coolant Through Shaft</b>		High Pressure	High Pressure	High Pressure	High Pressure	High Pressure
Sensore di allungamento <b>Elongation sensor</b>		-	-	-	-	Yes
Sensore di vibrazione <b>Vibration sensor</b>		-	Yes only with housing	Yes only with housing	-	-
Housing		-	Yes	Yes	-	-

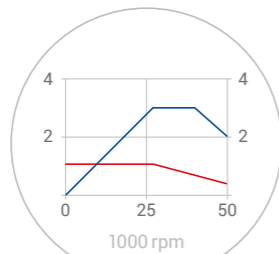
Le misure sono in mm  
**Measurements are in mm**

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

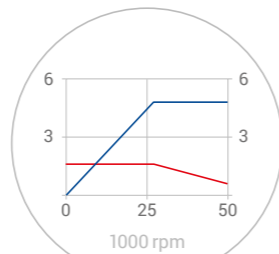
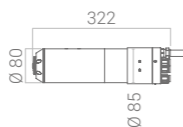
Tutti i modelli hanno:  
 -sistema di raffreddamento liquido  
 -cuscinetti ceramici

**All models have:  
 -liquid cooling system  
 -ceramic bearings**

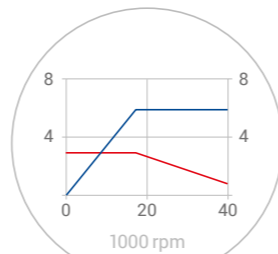
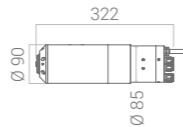
Technical data and illustrations are not binding and, for the sake of continual improvement of its products, HSD Mechatronics reserves the right to make modifications without prior notice



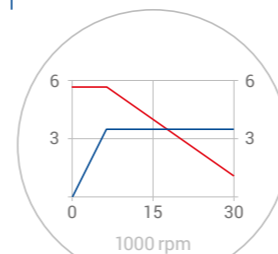
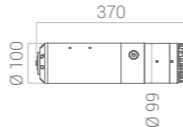
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 — [Nm] S1



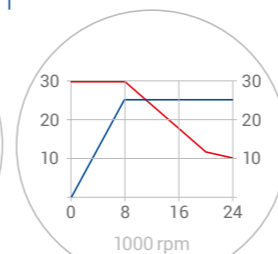
— [kW] S1  
 — [Nm] S1



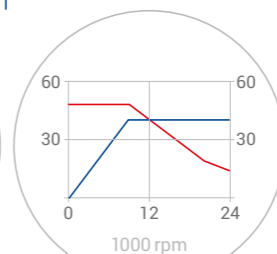
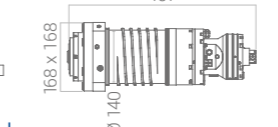
— [kW] S1  
 — [Nm] S1



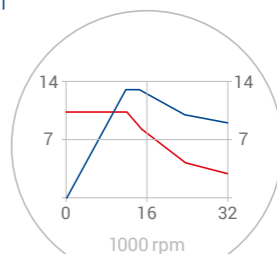
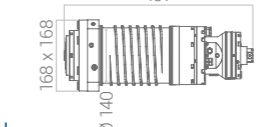
— [kW] S1  
 — [Nm] S1



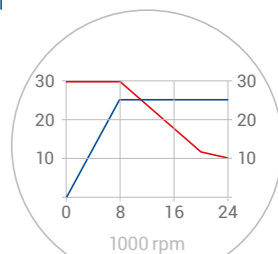
— [kW] S1  
 — [Nm] S1



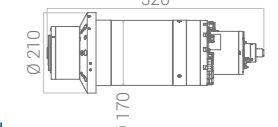
— [kW] S1  
 — [Nm] S1



— [kW] S1  
 — [Nm] S1



— [kW] S1  
 — [Nm] S1



Serie con diametro corpo da  $\varnothing 180$  a  $\varnothing 310$   
 Body range diameter from  $\varnothing 180$  to  $\varnothing 310$



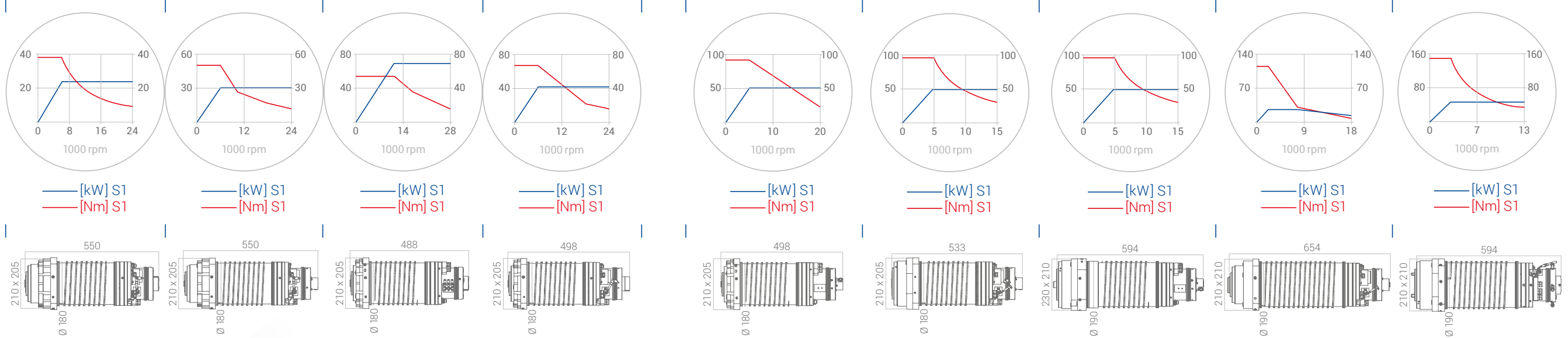
ELETTROMANDRINI ELECTROSPINDLES	ES510 HSK A63	ES510 HSK A63	ES510 HSK A63	ES510 HSK A63/ISO40	ES510 HSK A63	ES510 HSK A100	ES511 TURNING ISO50/HSK T100	ES511 HSK A63/ISO40/BT40	ES511 ISO50/HSK A100
Diametro Corpo Body Diameter	mm $\varnothing 180$ mm	$\varnothing 180$ mm	$\varnothing 180$ mm	$\varnothing 180$ mm	$\varnothing 180$ mm	$\varnothing 180$ mm	$\varnothing 190$ mm	$\varnothing 190$ mm	$\varnothing 190$ mm
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







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**CONSUMER ELECTRONICS**  
**AUTOMOTIVE**  
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