

# HSD

MECHATRONIC  
SOLUTIONS

More Value for Your Machine



Linea WPA  
Fresatura - Foratura - Taglio  
WPA Line  
Milling - Drilling - Cutting



HSD SpA Mechatronic Solutions progetta e produce componenti tecnologicamente avanzati ad alta precisione per lavorazioni di fresatura, foratura e taglio su un'ampia gamma di materiali (legno, alluminio, plastica, marmo, vetro e metallo):

- Elettromandrini a cambio automatico
- Elettromandrini a cambio manuale
- Elettroteste a 2 assi
- Rinvii angolari per elettromandrini
- Teste di foratura a mandrini indipendenti
- Servomotori con azionamento integrato
- Gruppi Multifunzione

HSD SpA Mechatronic Solutions designs and produces technologically advanced, high precision components for milling, boring and cutting operations on a wide range of materials (wood, aluminium, plastic, marble, glass and metal):

- Automatic tool change electrospindles
- Manual tool change electrospindles
- 2 axis heads
- Right angle heads for electrospindles
- Independent spindle boring heads
- Servomotors with integrated driver control
- Multi-functional units



The wide range of products means that HSD is able to respond to the specific needs of its customers through a specific, well structured, complementary offer.

We work by using the most up-to-date manufacturing control systems, including:

- braking bench
- electronic and automatic testing bench
- metrology lab equipped with all the most modern dimensional measuring instruments



All this in compliance with the test standards required by ISO9001 regulations  
As well as the Italian parent company, HSD operates directly through 3 branches located on the main world markets, with the aim of ensuring immediate and highly qualified pre and post sales services using staff trained by the headquarter:

- HSD USA (Fort Lauderdale, FL)
- HSD Deutschland (Göppingen)
- HSD China (Shanghai)

L'ampia gamma di prodotti consente ad HSD di rispondere alle specifiche esigenze del cliente con un'offerta strutturata e complementare mirata.

Operiamo con i più moderni sistemi di controllo della propria produzione tra i quali:

- banco freno
- banco prova di rodaggio elettronico ed automatico
- sala metrologica dotata dei più moderni strumenti di misura dimensionali

Tutto questo avviene nel rispetto degli standard di verifica previsti dalle norme ISO9001. HSD, oltre alla casa madre italiana, opera direttamente con 3 filiali localizzate nei principali mercati mondiali con l'obiettivo di garantire un'assistenza pre e post vendita immediata ed altamente qualificata con personale istruito presso la casa madre:

- HSD USA (Fort Lauderdale, FL)
- HSD Deutschland (Göppingen)
- HSD China (Shanghai).





Dati tecnici ed illustrazioni non sono impegnativi, nell'ambito del continuo miglioramento dei propri prodotti  
Hsd Mechatronic Solutions si riserva il diritto di apportare eventuali modifiche senza preavviso.

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

## LINEA WPA FRESATURA - FORATURA - TAGLIO WPA LINE FOR MILLING - DRILLING - CUTTING

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HSD offre un'ampia gamma di soluzioni per la lavorazione di Legno, Plastica e Alluminio.

Gli Elettromandrini a cambio utensile rapido con raffreddamento ad aria o liquido, prodotti in migliaia di esemplari per molteplici applicazioni, sono caratterizzati da un vasto range di potenze, coppie e velocità di rotazione, senza rinunciare ad un elevata affidabilità.

Le motorizzazioni coprono una gamma molto estesa, dal ES325 (2kW, 50.000rpm) che viene utilizzato prevalentemente per lavorazioni di finitura, al ES929 liquido (16kW, 24.000rpm) e ES939 (16kW, 24.000rpm) utilizzati per lavorazioni più gravose.

Le Elettroteste rappresentano la sintesi più recente tra innovazione e tecnologia, con molteplici possibilità di scelta tra strutture monospalla e doppiaspalla. Di particolare interesse è la vasta gamma di Elettromandrini disponibili con potenze a partire da 4kW fino a 42kW e velocità fino a 50.000rpm.

Gli Aggregati consentono di effettuare lavorazioni di fresatura, forature e taglio su un'ampia gamma di materiali (legno, alluminio e PVC). Assieme all'Asse C e all'Elettromandrino formano una soluzione unica e intercambiabile in grado di garantire massima flessibilità di lavorazione al Centro di Lavoro.

Usate nelle foratrici punto a punto e nei pantografi, le Unità di Foratura HSD sono disponibili in un'ampia gamma di modelli a mandrini indipendenti verticali, orizzontali e gruppi lama. Le motorizzazioni vanno da 1,7kW a 3Kw, interasse standard mandrini da 32mm e il numero di mandrini varia da 5 ad un massimo di 36.

I Gruppi Multifunzione sono particolari unità dedicate a lavorazioni speciali su Legno. L'intercambiabilità delle testine permette la massima flessibilità e versatilità operativa. Un'ottima soluzione per applicazioni medio-leggere (Gruppi da 1,7kW) e pesanti (Gruppi da 5kW).

HSD offers a wide range of solutions for machining wood, plastic and aluminium.

The quick-change air or liquid cooled Electrosplindles, manufactured by the thousand for many applications, are characterized by their wide range of powers, torques and rotation speeds that do not detract from their high levels of reliability.

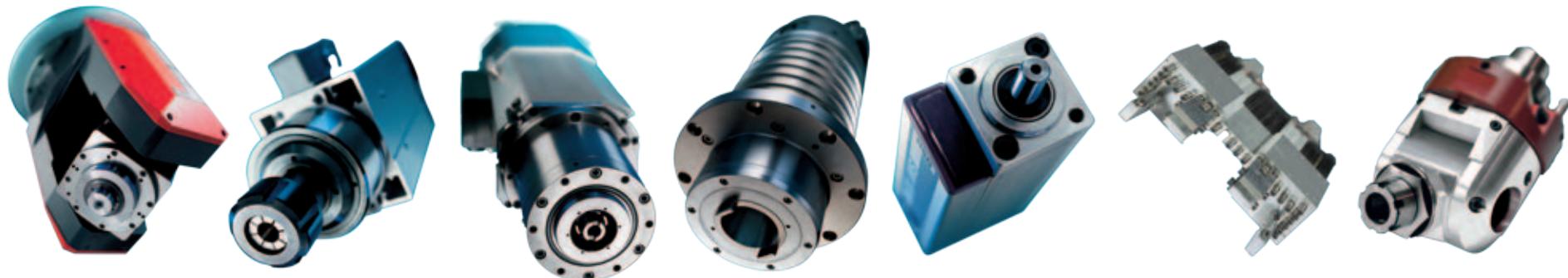
A wide range of motors are available, ranging from the ES325 (2 kW, 50,000 rpm) used prevalently for finish machining, to the ES929 liquid (16 kW, 24,000 rpm) and ES939 (16 kW, 24,000 rpm) used for heavier machining operations.

The Electroheads represent the most recent example of innovation combined with technology, with numerous choices of single or dual abutment structures. Of particular interest is the range of Electrosplindles available with power ratings ranging from 4kW up to 42 kW with speeds up to 50,000 rpm.

The Aggregates allow milling, boring and cutting operations to be carried out on a wide range of materials (wood, aluminium, PVC). The Electrosindle, together with the C-axis form a unique and interchangeable combination capable of guaranteeing maximum machining flexibility of the CNC Working Centre.

Used on point-to-point boring machines and on pantograph machines, the HSD Boring Units are available in a wide range of independent vertical, horizontal spindle and blade unit models. The drive motors range from 1.7 kW to 3 kW, with a standard spindle distance between centres of 32 mm and a number of spindles that can vary from 5 to a maximum of 36.

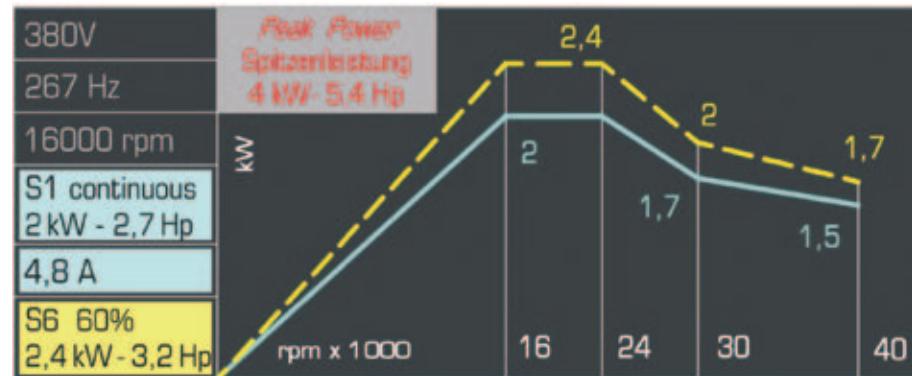
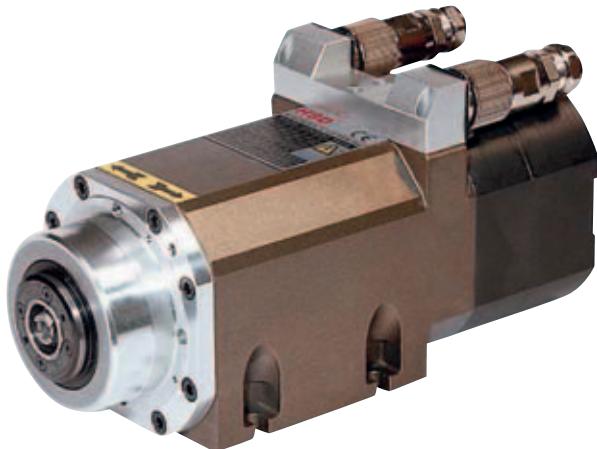
The Multifunctional Units are special devices designed for specific machining operations on wood. The interchangeable heads provide maximum operational flexibility and versatility. An optimum solution for medium-light applications (Units from 1.7 kW) and heavy duty work (Units from 5kW).



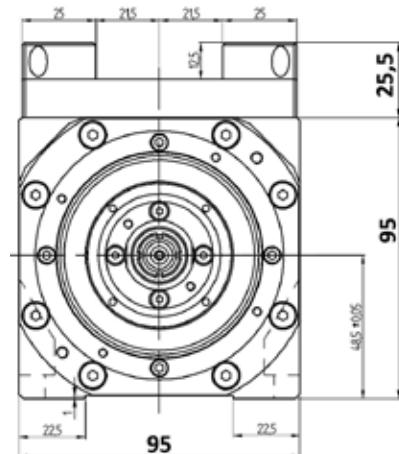
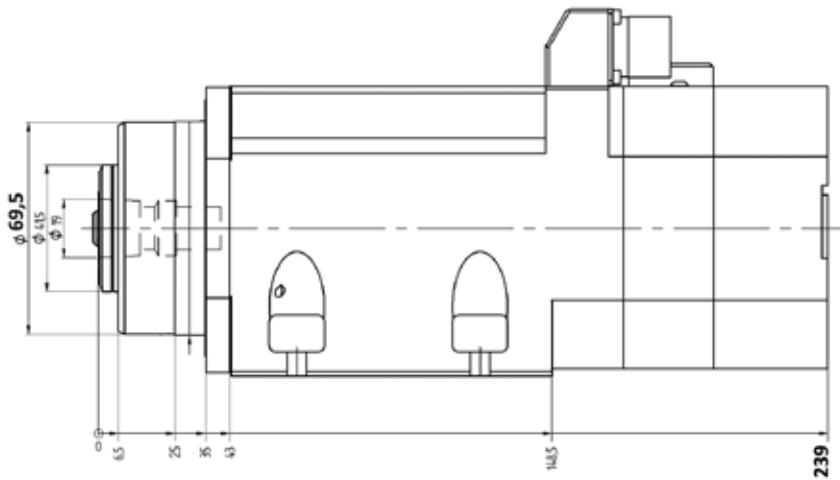
Linea WPA Fresatura - Foratura - Taglio  
WPA Line for Milling - Drilling - Cutting



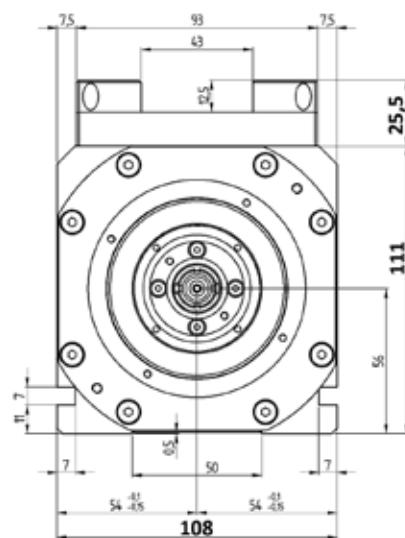
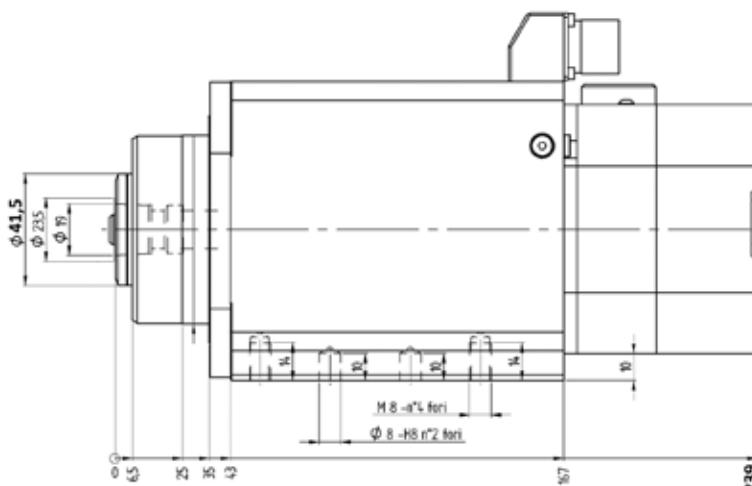
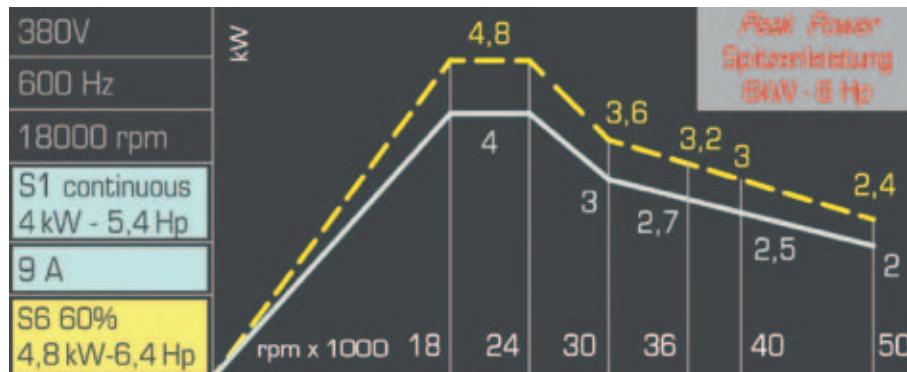
# ES325 HSK E25



Potenza S1 / S6	2 kw / 2,4 kw
Power S1 / S6	2 kw / 2,4 kw
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Tensione Nominale	380V
Rated Voltage	380V
Encoder	Non disponibile
Encoder	Not available
Poli	2
Poles	2
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Ceramici
Bearings Rear	Ceramic
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	40.000 o 50.000
Max RPM	40.000 or 50.000
Peso	11 kg
Weight	11 kg
Corpo elettromandrino	Lega di alluminio
Spindle body	Aluminium Alloy
Raffreddamento	Liquido
Cooling	Liquid

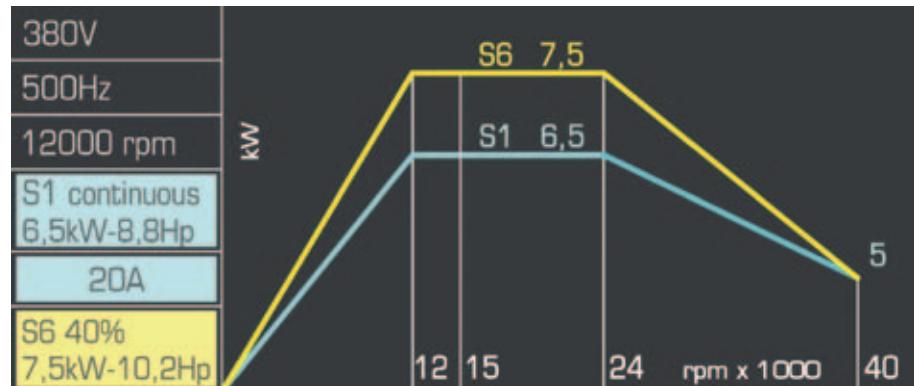
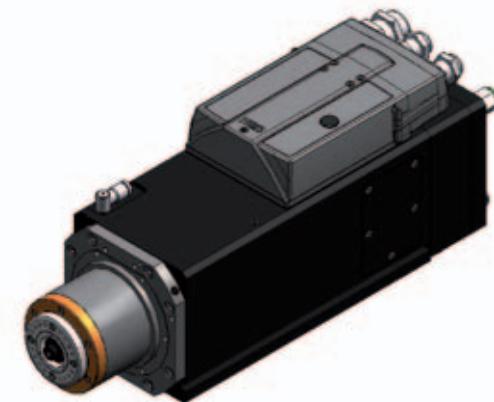


# ES326 HSK E25

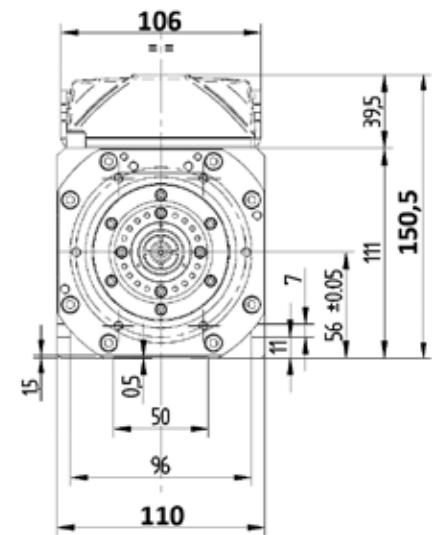
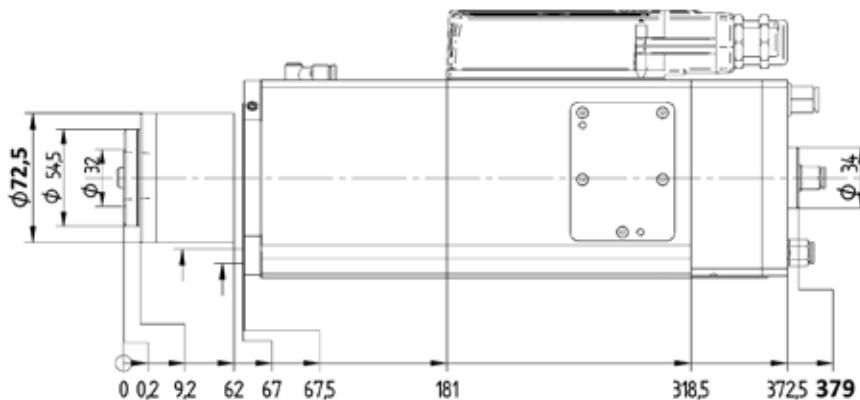


Potenza SI / S6 Power SI / S6	4 kw / 4,8 kw 4 kw / 4,8 kw
Dispositivo bloccaggio utensile Tool Blocking	Automatico con pistone pneumatico Automatic with pneumatic piston
Tensione Nominale Rated Voltage	380V 380V
Encoder Encoder	Non disponibile Not available
Poli Poles	4 4
Cuscinetti anteriori Bearings Front	Ceramici Ceramic
Cuscinetti posteriori Bearings Rear	Ceramici Ceramic
Lubrificazione cuscinetti Bearings lubrication	Lubrificazione a vita Long life lubricated
Max RPM Max RPM	40.000 o 50.000 40.000 or 50.000
Peso Weight	8 kg 8 kg
Corpo elettromandrino Spindle body	Lega di alluminio Aluminium Alloy
Raffreddamento Cooling	Liquido Liquid

# ES351 HSK E32

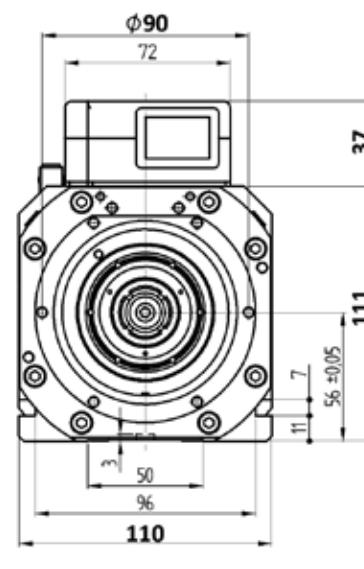
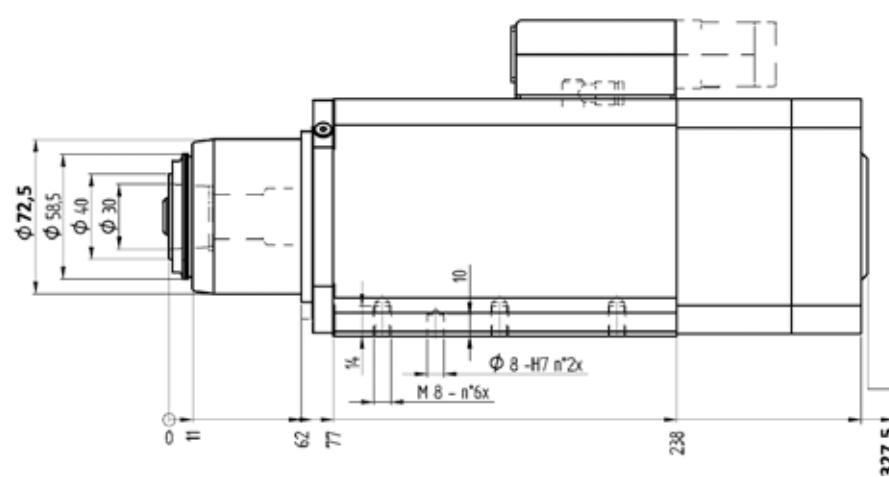
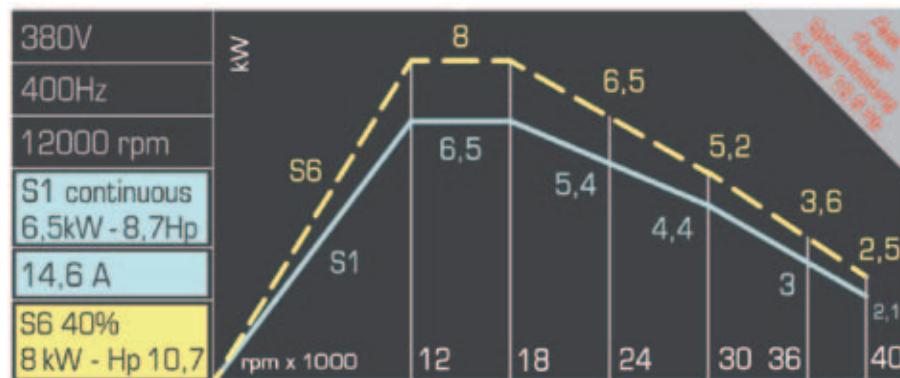


Potenza S1 / S6	6,5 kw / 7,5 kw
Power S1 / S6	6,5 kw / 7,5 kw
Dispositivo bloccaggio utensile Tool Blocking	Automatico con pistone pneumatico Automatic with pneumatic piston
Tensione Nominale Rated Voltage	380V 380V
Encoder Encoder	LB LB
Poli Poles	4 4
Cuscinetti anteriori Bearings Front	Ceramici Ceramic
Cuscinetti posteriori Bearings Rear	Ceramici Ceramic
Lubrificazione cuscinetti Bearings lubrication	Lubrificazione a vita Long life lubricated
Max RPM	40.000
Max RPM	40.000
Peso Weight	20 kg 20 kg
Corpo elettromandrino Spindle body	Lega di alluminio Aluminium Alloy
Raffreddamento Cooling	Liquido Liquid



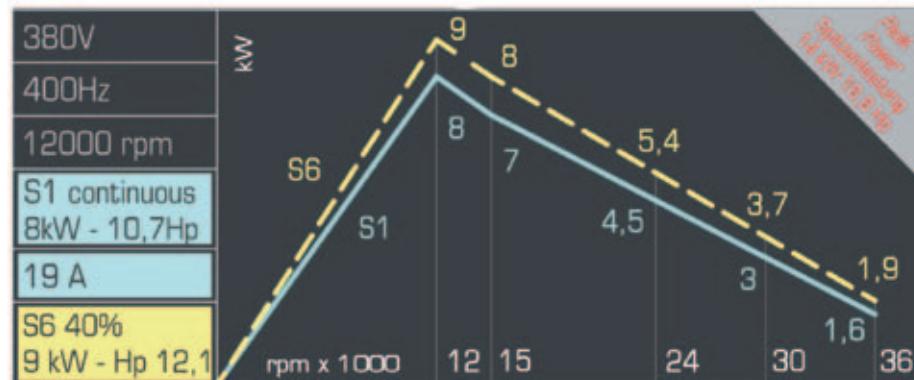
# ES350 HSK E40-F50

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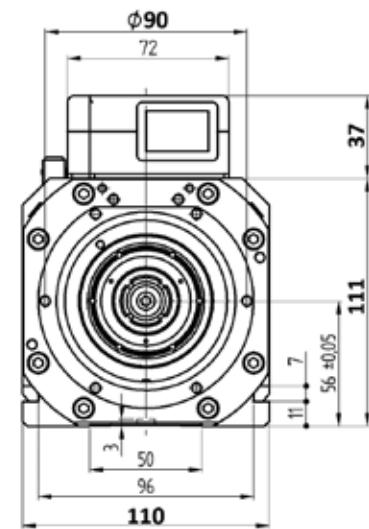
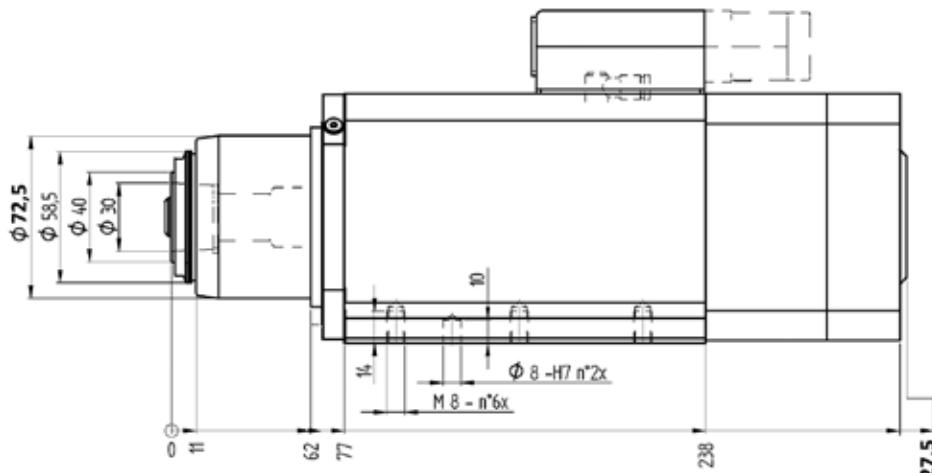


Potenza S1 / S6	6,5 kw / 8 kw
Power S1 / S6	6,5 kw / 8 kw
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Tensione Nominale	380V
Rated Voltage	380V
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Ceramici
Bearings Rear	Ceramic
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	36.000
Max RPM	36.000
Corpo elettromandrino	Lega di alluminio
Spindle body	Aluminium Alloy
Raffreddamento	Liquido
Cooling	Liquid
Raffreddamento	Liquido
Cooling	Liquid

# ES350 HSK E40-F50

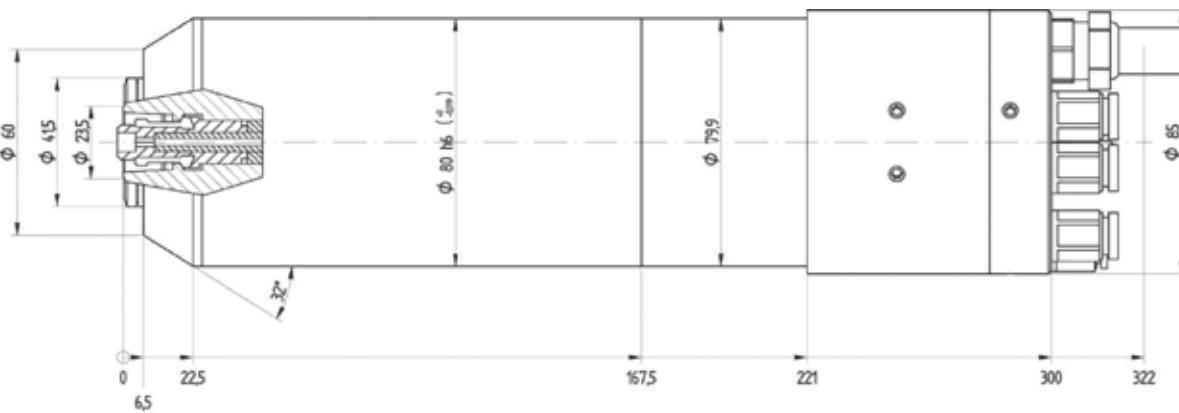
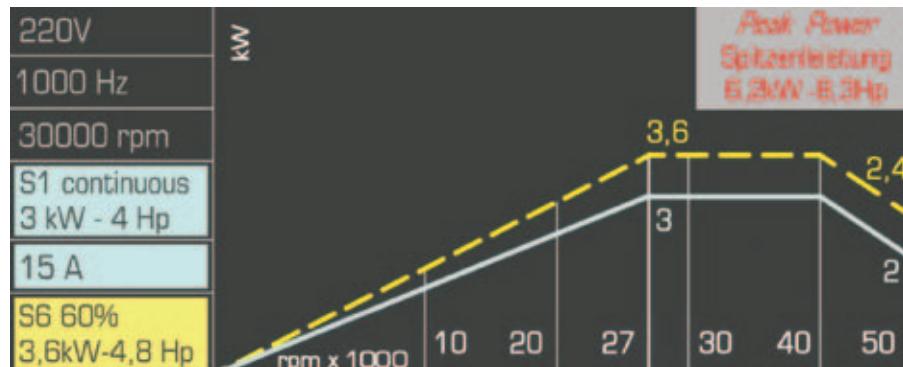


Potenza S1 / S6	8 kw / 9 kw
Power S1 / S6	8 kw / 9 kw
Dispositivo bloccaggio utensile Tool Blocking	Automatico con pistone pneumatico Automatic with pneumatic piston
Tensione Nominale Rated Voltage	380V
Encoder Encoder	LB
Poli Poles	4
Cuscinetti anteriori Bearings Front	Ceramici Ceramic
Cuscinetti posteriori Bearings Rear	Ceramici Ceramic
Lubrificazione cuscinetti Bearings lubrication	Lubrificazione a vita Long life lubricated
Max RPM	36.000
Max RPM	36.000
Corpo elettromandrino Spindle body	Lega di alluminio Aluminium Alloy
Raffreddamento Cooling	Liquido Liquid



# ES327 HSK E25

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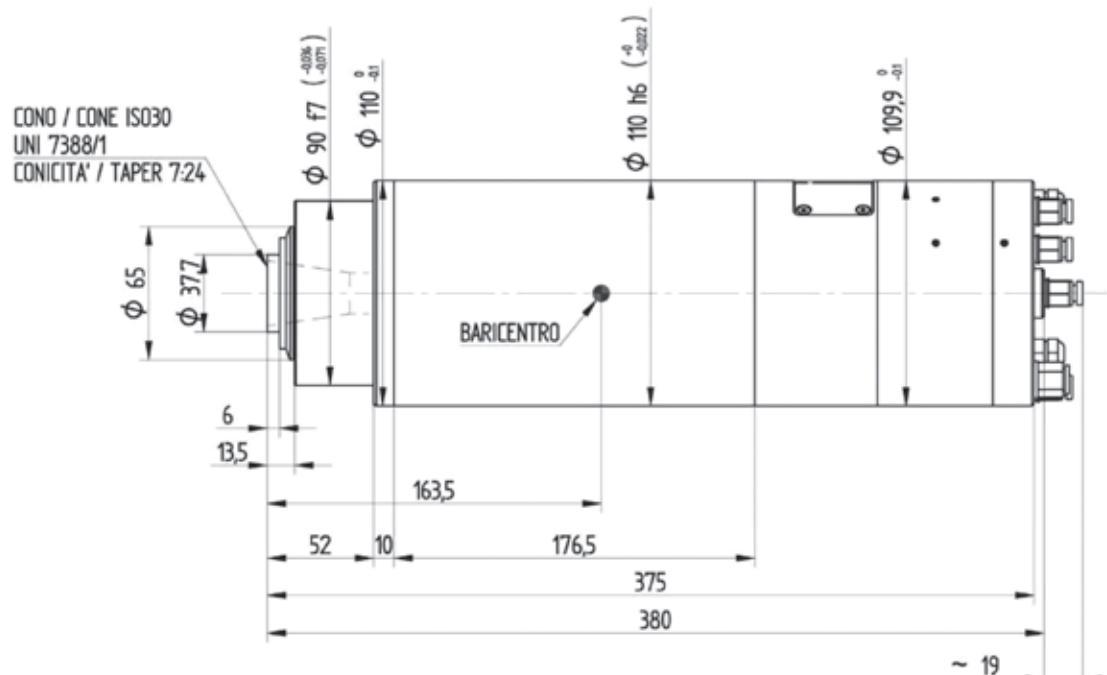
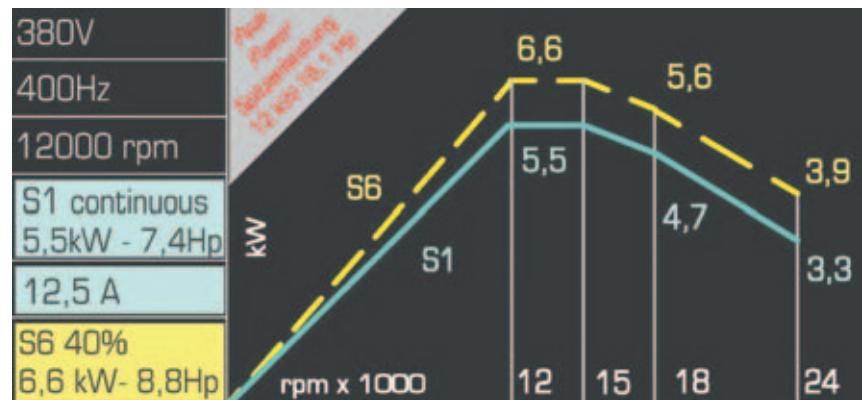


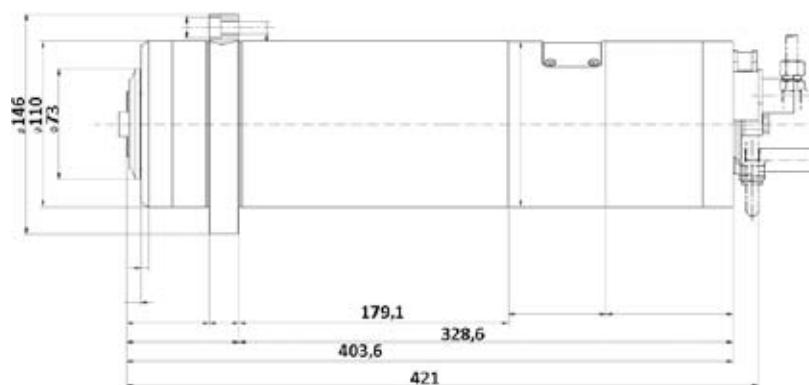
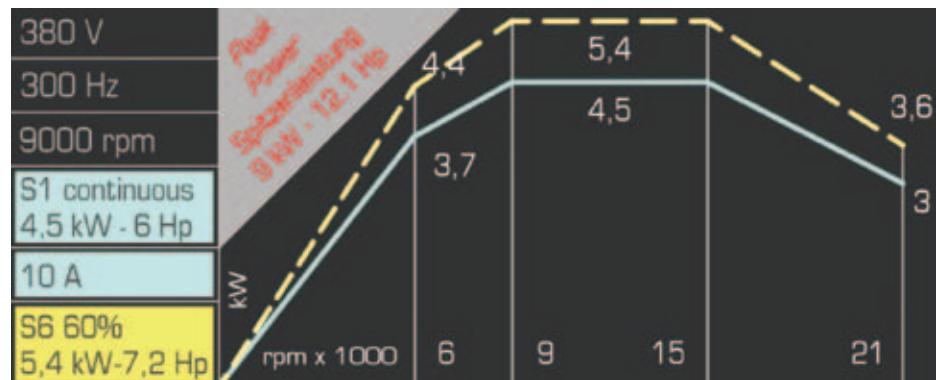
Potenza SI / S6 Power SI / S6	3 kw / 3,6 kw 3 kw / 3,6 kw
Coppia nominale Rated Torque	1,06 / 1,27 Nm 1,06 / 1,27 Nm
Dispositivo bloccaggio utensile Tool Blocking	Automatico con pistone pneumatico Automatic with pneumatic piston
Tensione Nominale Rated Voltage	380 o 220V 380 or 220V
Encoder	Non disponibile Not available
Poli Poles	4 4
Cuscinetti anteriori Bearings Front	Ceramici Ceramic
Cuscinetti posteriori Bearings Rear	Ceramici Ceramic
Lubrificazione cuscinetti Bearings lubrication	Lubrificazione a vita Long life lubricated
Max RPM Max RPM	40.000 o 50.000 40.000 or 50.000
Peso Weight	8 kg 8 kg
Corpo elettromandrino Spindle body	Acciaio Cromato Chromium-plated Steel
Raffreddamento Cooling	Liquido Liquid

# ES330 ISO30 liquid



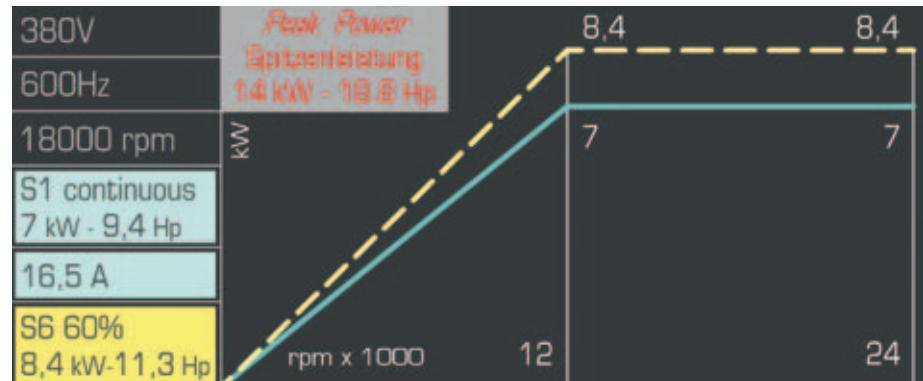
Potenza S1 / S6	5,5 kw / 6,6 kw
Power S1 / S6	5,5 kw / 6,6 kw
Coppia nominale S1 / S6	4,4 / 5,3 Nm
Rated Torque S1 / S6	4,4 / 5,3 Nm
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Tensione Nominale	380V
Rated Voltage	380V
Encoder	Non disponibile
Encoder	Not available
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Acciaio
Bearings Rear	Steel
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	24.000
Max RPM	24.000
Peso	28 kg
Weight	28 kg
Corpo elettromandrina	Acciaio Cromato
Spindle body	Chromium-plated steel
Raffreddamento	Liquido
Cooling	Liquid



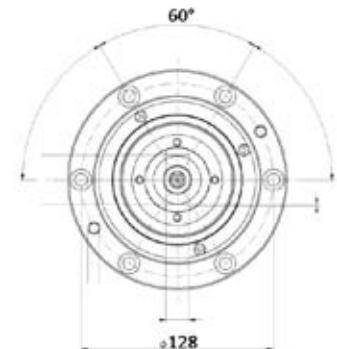
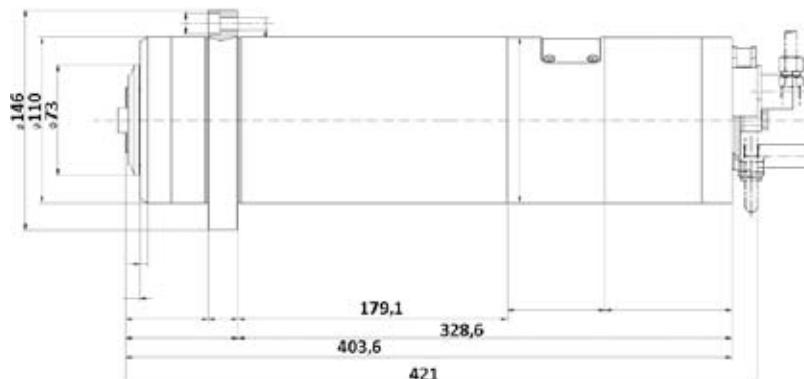


Potenza S1 / S6	4,5 kw / 5,4 kw
Power S1 / S6	4,5 kw / 5,4 kw
Coppia nominale S1 / S6	5,9 / 7 Nm
Rated Torque S1 / S6	5,9 / 7 Nm
Dispositivo bloccaggio utensile	Idraulico con olio
Tool Blocking	Hydraulic with oil
Tensione Nominale	380V
Rated Voltage	380V
Encoder	LB
Encoder	LB
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Acciaio
Bearings Rear	Steel
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	21.000
Max RPM	21.000
Corpo elettromandrino	Acciaio Cromato
Spindle body	Chromium-plated steel
Raffreddamento	Liquido
Cooling	Liquid

# ES33 I BT30



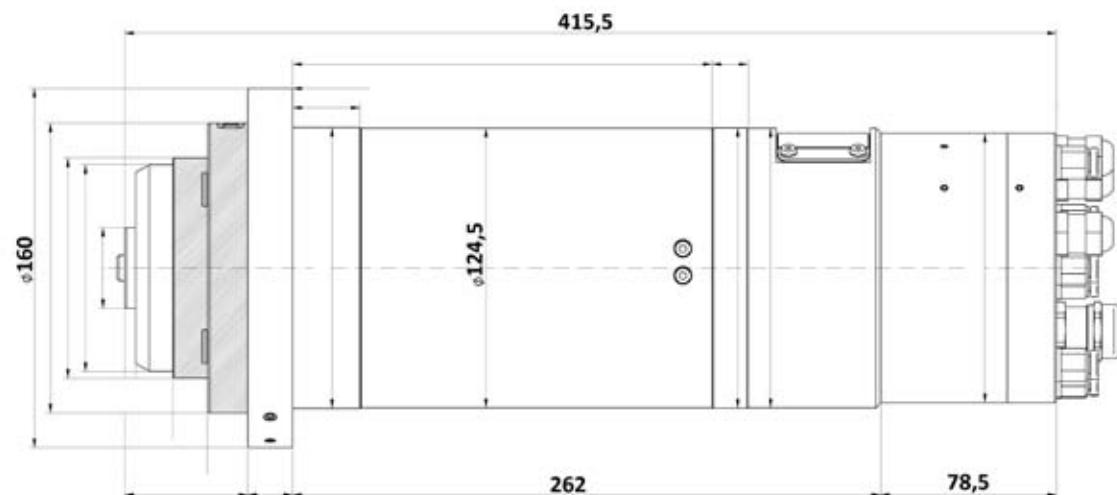
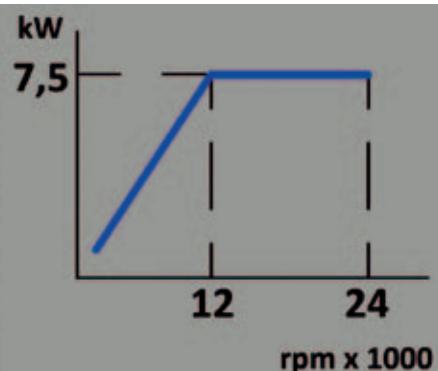
Potenza S1 / S6	7 kw / 8,4 kw
Power S1 / S6	7 kw / 8,4 kw
Coppia nominale S1 / S6	5,9 / 7 Nm
Rated Torque S1 / S6	5,9 / 7 Nm
Dispositivo bloccaggio utensile	Idraulico con olio
Tool Blocking	Hydraulic with oil
Tensione Nominale	380V
Rated Voltage	380V
Encoder	LB
Encoder	LB
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Acciaio
Bearings Rear	Steel
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	24.000
Max RPM	24.000
Corpo elettromandrino	Acciaio Cromato
Spindle body	Chromium-plated steel
Raffreddamento	Liquido
Cooling	Liquid



# ES333 HSK A32

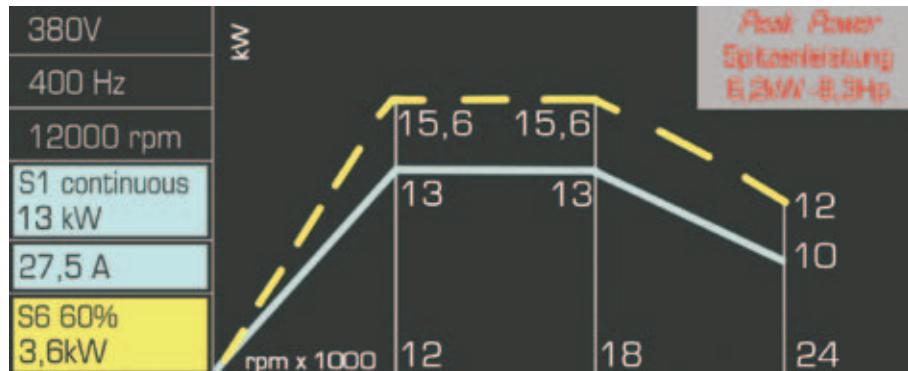
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V	400	400	S1 CONTINUOUS
Hz	400	800	
rpm	12000	24000	
kW	7.5	7.5	
A	15	13.5	
$\eta = 0.8$	$\cos\phi=0.8$	Poles: 4	
Ins.Cl. F	IP 54	kg 27	

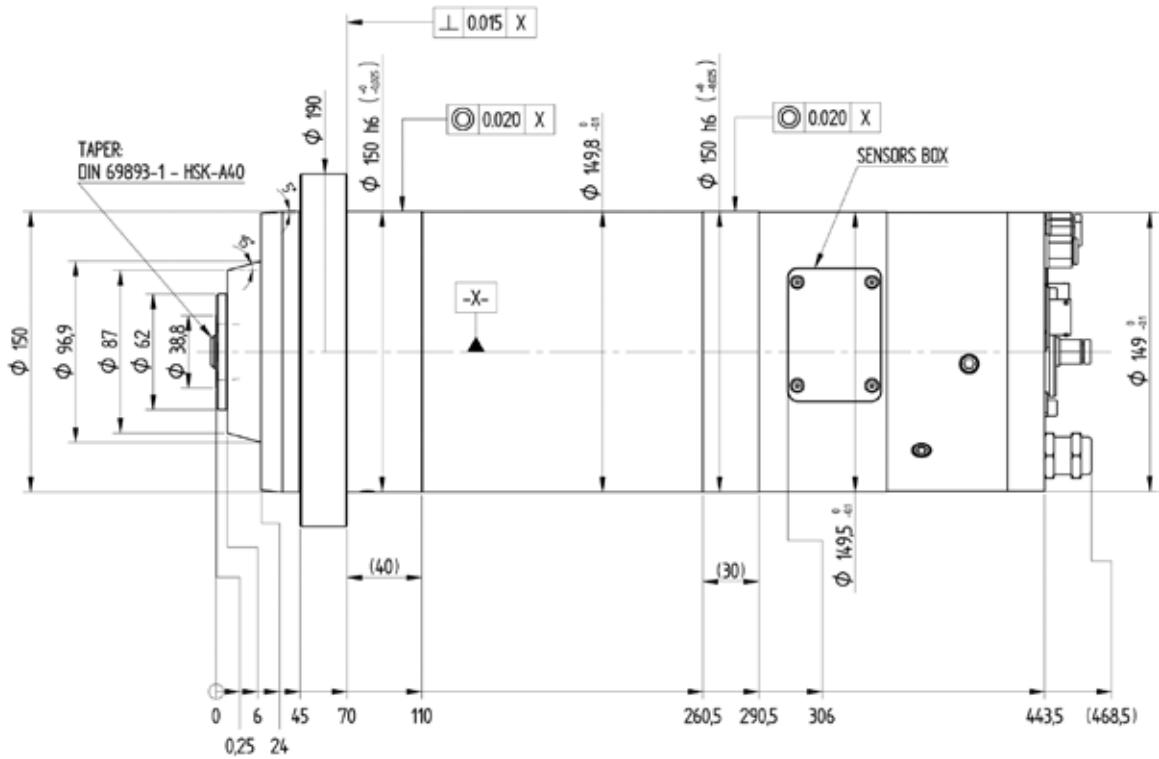


Potenza SI / S6	7,5 kw
Power SI / S6	7,5 kw
Coppia nominale	6 Nm
Rated Torque	6 Nm
Dispositivo bloccaggio utensile	Pneumatico
Tool Blocking	Pneumatic
Tensione Nomina	400V
Rated Voltage	400V
Encoder	LB
Encoder	LB
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Ceramici
Bearings Rear	Ceramic
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	24.000
Max RPM	24.000
Corpo elettromandrino	Acciaio
Spindle body	Steel
Raffreddamento	Liquido
Cooling	Liquid

# ES332 HSK A40

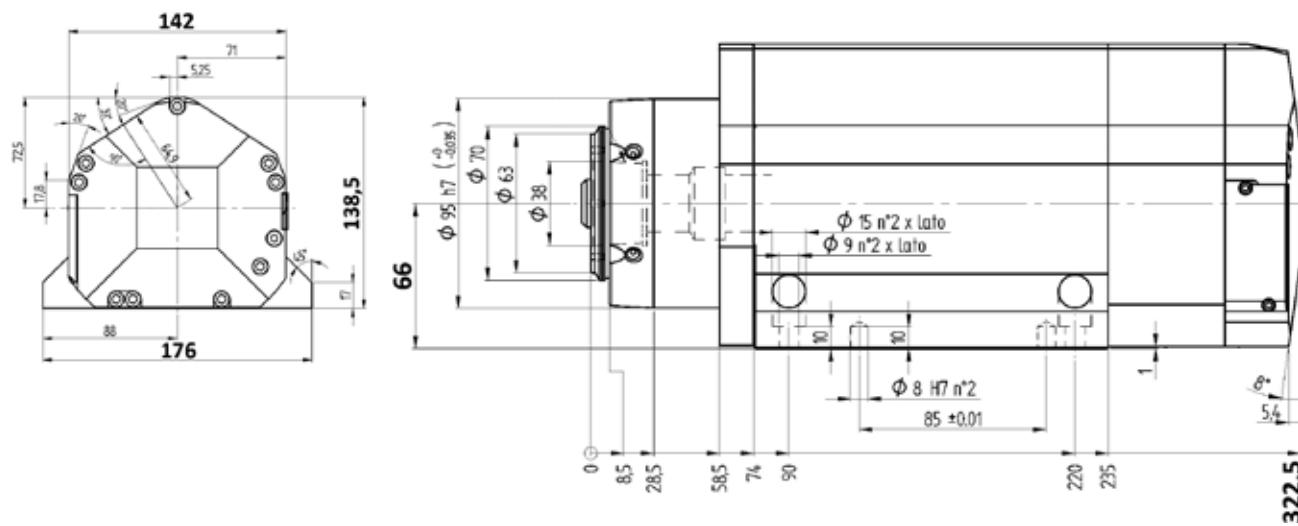
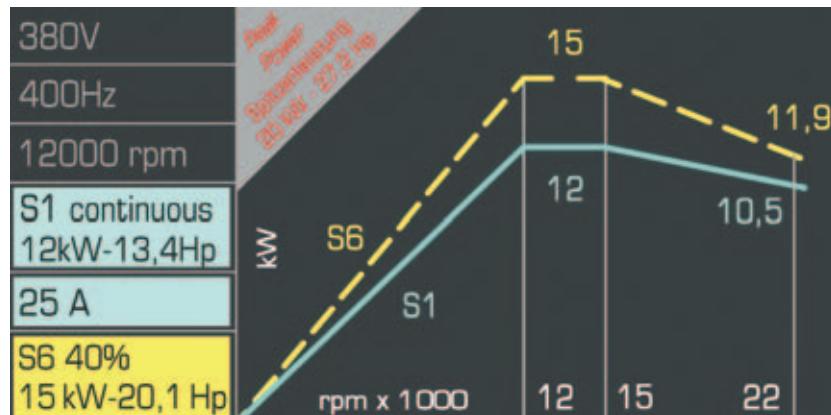


Potenza S1 / S6	13 kw / 15,6 kw
Power S1 / S6	13 kw / 15,6 kw
Coppia nominale	10,3 / 12,3 Nm
Rated Torque	10,3 / 12,3 Nm
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Tensione Nominale	380V
Rated Voltage	380V
Encoder	LB
Encoder	LB
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Ceramici
Bearings Rear	Ceramic
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	24.000
Max RPM	24.000
Peso	35 kg
Weight	35 kg
Corpo elettromandrino	Lega di alluminio
Spindle body	Aluminium Alloy
Raffreddamento	Liquido
Cooling	Liquid



# ES362 HSK F63

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Potenza S1 / S6  
Power S1 / S6

12 kw / 15 kw  
12 kw / 15 Kw

Dispositivo bloccaggio utensile  
Tool Blocking

Automatico con pistone pneumatico  
Automatic with pneumatic piston

Tensione Nominale  
Rated Voltage

380V  
380V

Poli  
Poles

4  
4

Cuscinetti anteriori  
Bearings Front

Ceramici  
Ceramic

Cuscinetti posteriori  
Bearings Rear

Ceramici  
Ceramic

Lubrificazione cuscinetti  
Bearings lubrication

Lubrificazione a vita  
Long life lubricated

Max RPM  
Max RPM

22.000  
22.000

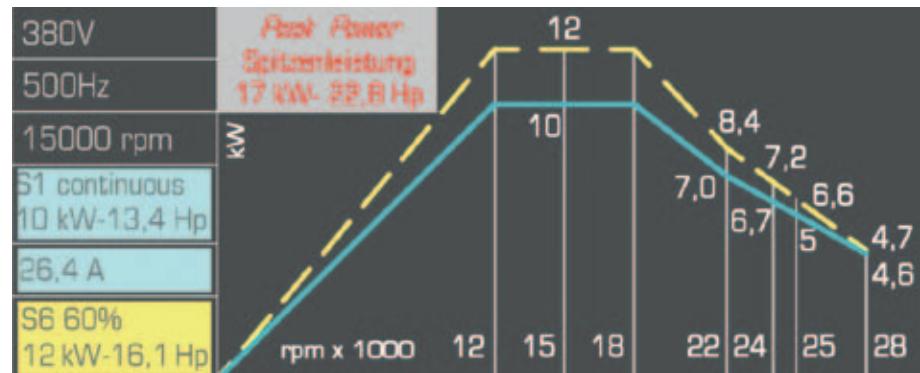
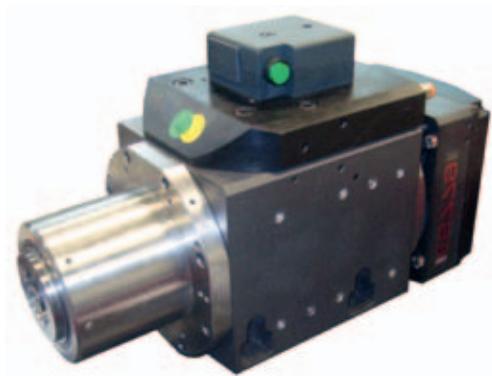
Corpo elettromandrino  
Spindle body

Lega di alluminio  
Alluminium alloy

Raffreddamento  
Cooling

Liquido  
Liquid

# ES779 HSK F63



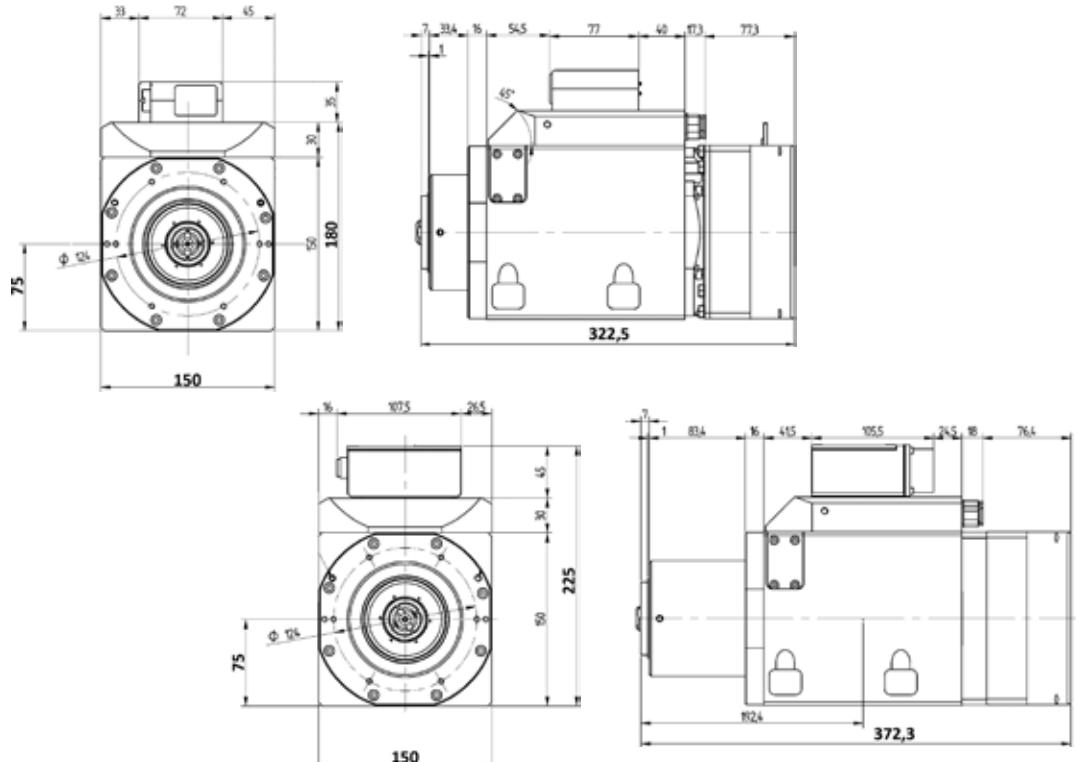
Altre versioni disponibili

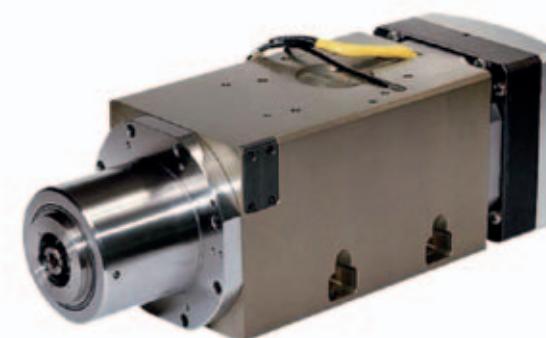
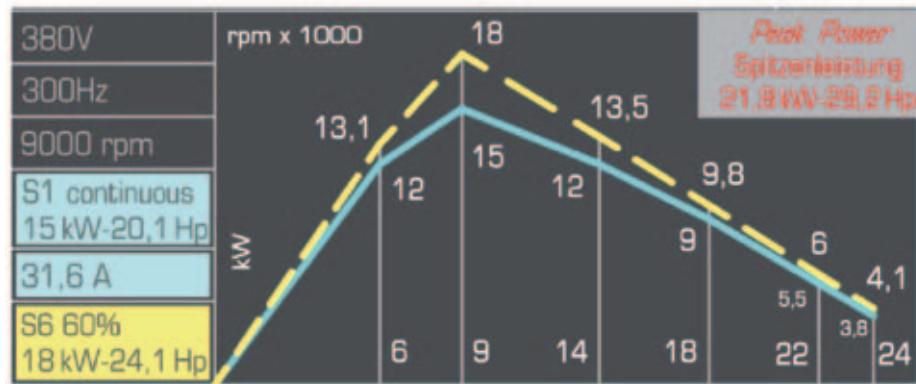
HSK A63 - E63 - F50

Other available models

HSK A63 - E63 - F50

Potenza SI / S6 Power SI / S6	da 10 kw a 13,5 kw / da 12 kw a 16,2 kw from 10 kw to 13,5 kw / from 12 kw to 16,2 kw
Dispositivo bloccaggio utensile Tool Blocking	Automatico con pistone pneumatico Automatic with pneumatic piston
Naso Nose	Naso Corto o Lungo Short Nose or Long
Tensione Nominale Rated Voltage	380V 380V
Encoder Encoder	LB o HSD LB or HSD
Poli Poles	4 4
Cuscinetti anteriori Bearings Front	Ceramici Ceramic
Cuscinetti posteriori Bearings Rear	Ceramici Ceramic
Lubrificazione cuscinetti Bearings lubrication	Lubrificazione a vita Long life lubricated
Max RPM Max RPM	28.000 28.000
Corpo elettromandrino Spindle body	Lega di alluminio Alluminium Alloy
Raffreddamento Cooling	Liquido Liquid



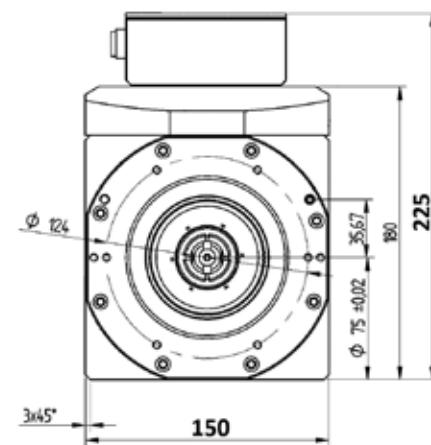
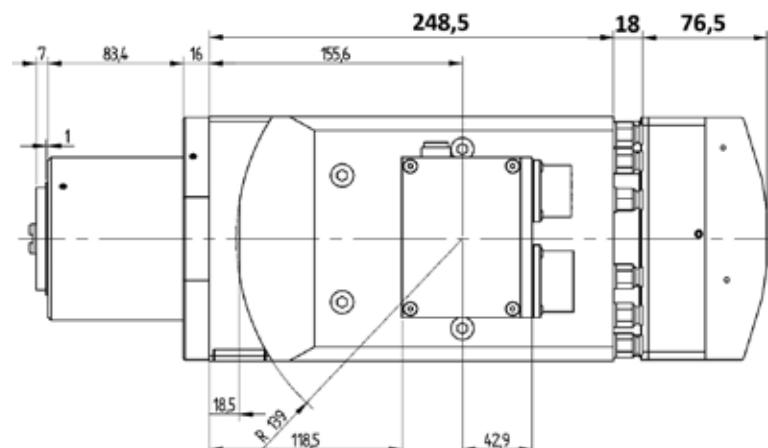


Altre versioni disponibili

Other available models

HSK A63

HSK A63



Potenza S1 / S6  
Power S1 / S6

15 kw / 18 kw  
15 kw / 18 kw

Dispositivo bloccaggio utensile  
Tool Blocking

Automatico con pistone idraulico  
Automatic with hydraulic piston

Tensione Nominale  
Rated Voltage

380V  
380V

Encoder  
Encoder

LB o HSD  
LB or HSD

Poli  
Poles

4  
4

Cuscinetti anteriori  
Bearings Front

Ceramici  
Ceramic

Cuscinetti posteriori  
Bearings Rear

Ceramici  
Ceramic

Lubrificazione cuscinetti  
Bearings lubrication

Lubrificazione a vita  
Long life lubricated

Max RPM  
Max RPM

24.000  
24.000

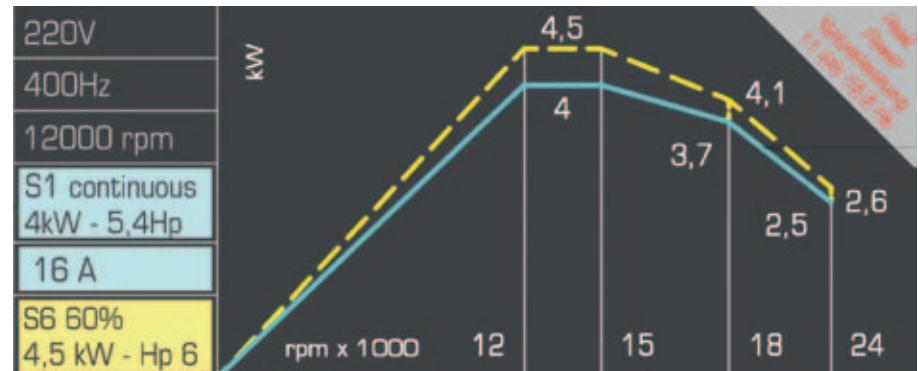
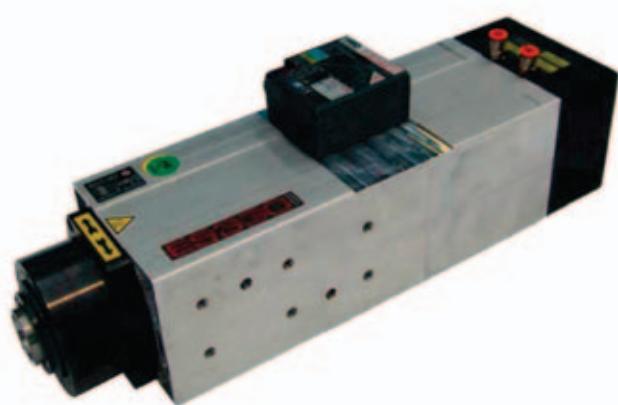
Corpo elettromandrino  
Spindle body

Lega di alluminio  
Alluminium Alloy

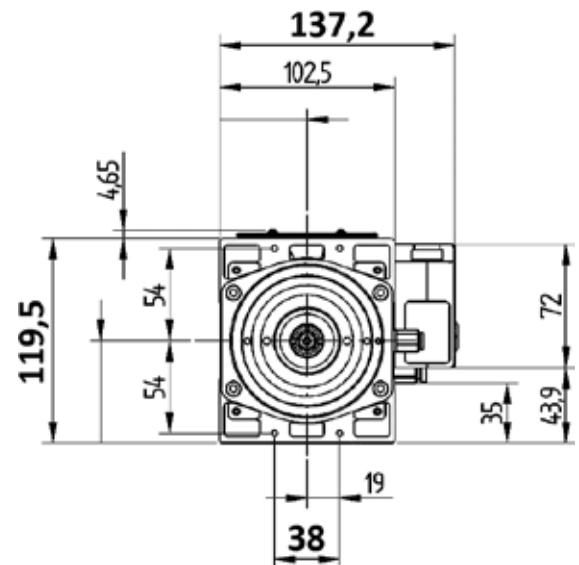
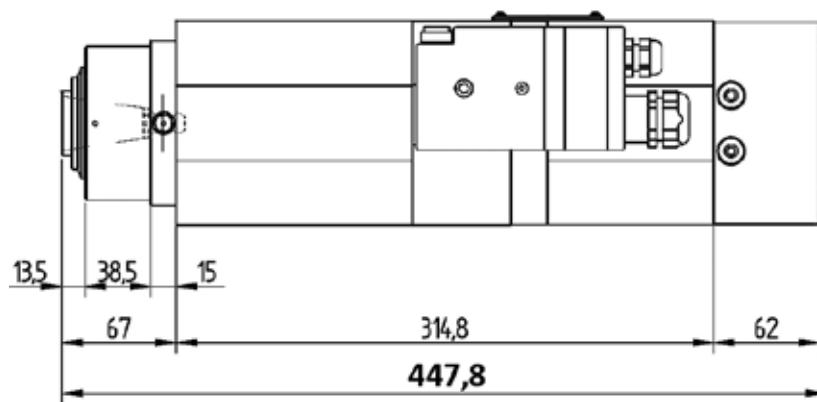
Raffreddamento  
Cooling

Liquido  
Liquid

# ES330 ISO30

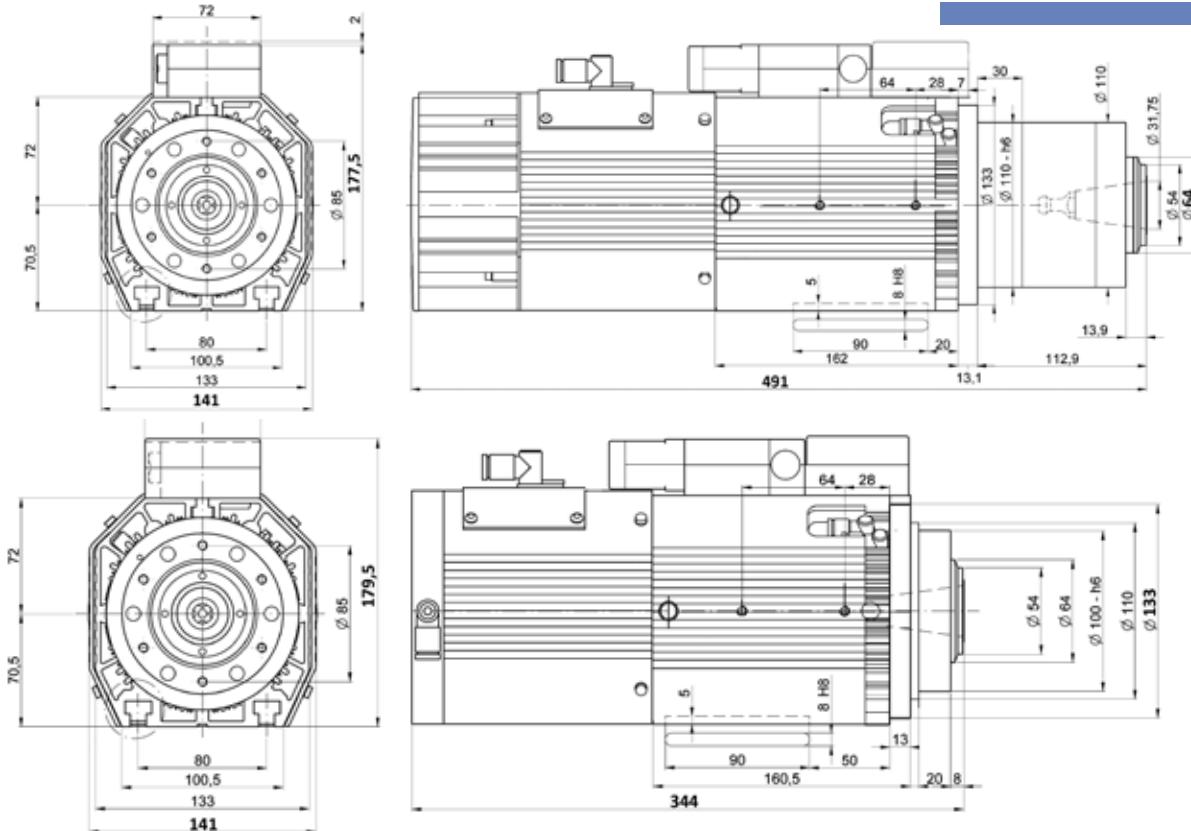
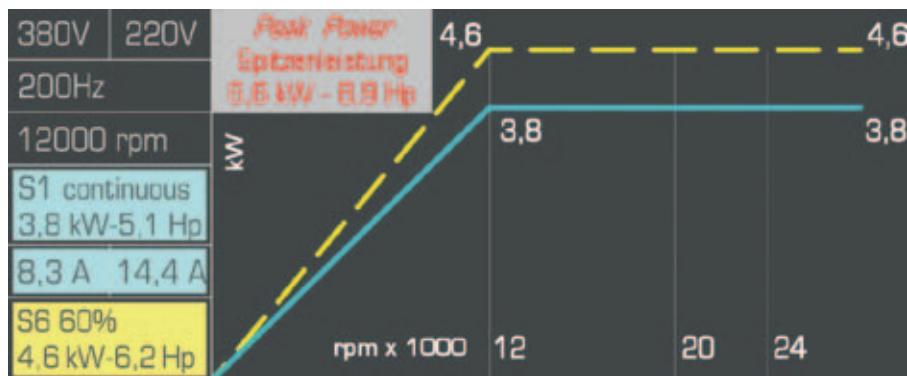


Potenza S1 / S6	4 kw / 4,5 kw
Power S1 / S6	4 kw / 4,5 kw
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Tensione Nominale	220 o 380V
Rated Voltage	220 or 380V
Encoder	Non disponibile
Encoder	Not available
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Acciaio
Bearings Rear	Steel
Lubrificazione cuscinetti	Lubrification a vita
Bearings lubrication	Long life lubricated
Max RPM	24.000
Max RPM	24.000
Corpo elettromandrino	Lega di alluminio
Spindle body	Aluminium Alloy
Raffreddamento	Elettroventola
Cooling	Electric fan



# ES915 ISO30

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Potenza S1 / S6  
Power S1 / S6

3,8 kw / 4,6 kw  
3,8 kw / 4,6 kw

Dispositivo bloccaggio utensile  
Tool Blocking

Automatico con pistone pneumatico  
Automatic with pneumatic piston

Naso  
Nose

Naso Corto o Lungo  
Short or Long Nose

Tensione Nominale  
Rated Voltage

220 o 380V  
220 or 380V

Encoder  
Encoder

Non disponibile  
Not available

Poli  
Poles

Ceramici o acciaio  
Ceramic or steel

Cuscinetti anteriori  
Bearings Front

Ceramici o acciaio  
Ceramic or steel

Cuscinetti posteriori  
Bearings Rear

Lubrificazione cuscinetti  
Bearings lubrication

Max RPM  
Max RPM

20.000 / 24.000  
20.000 / 24.000

Peso  
Weight

21 kg  
21 kg

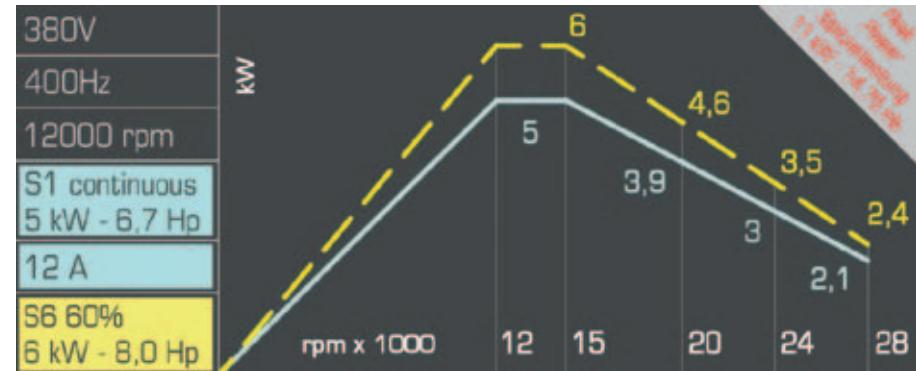
Corpo elettromandrino  
Spindle body

Lega di alluminio  
Alluminium Alloy

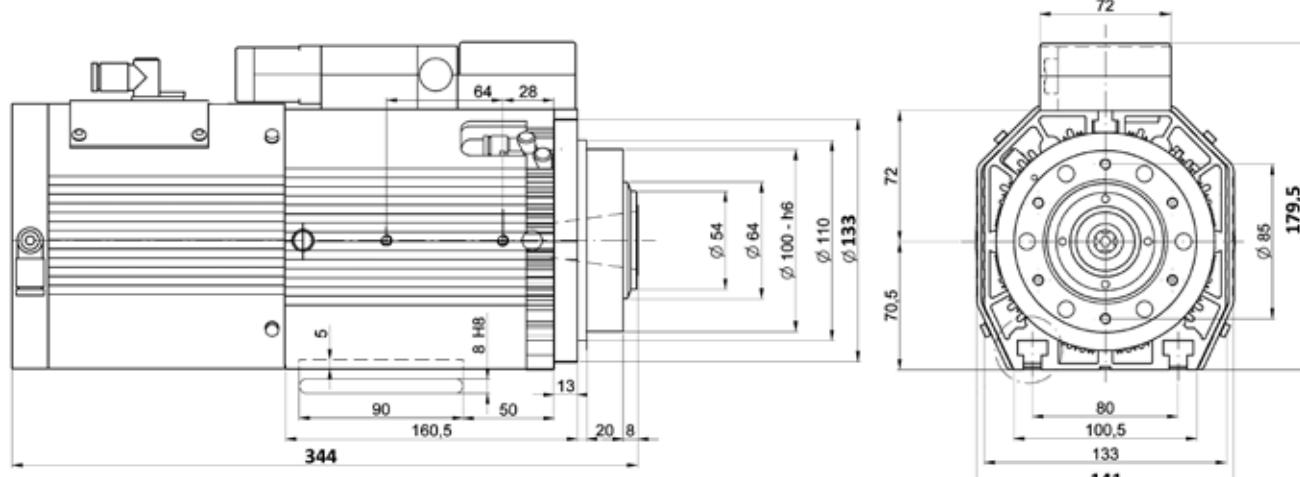
Raffreddamento  
Cooling

Elettroventola / Aria forzata  
Elettric-fan / Forced air

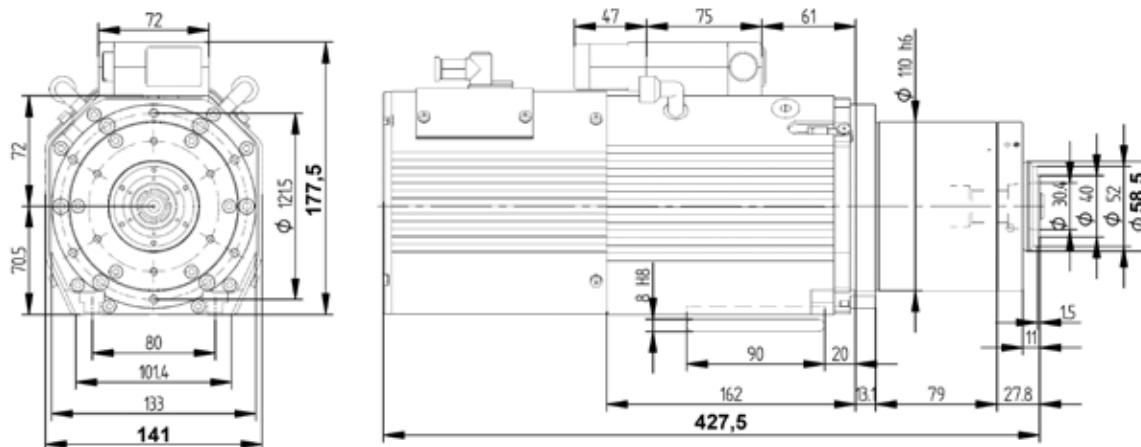
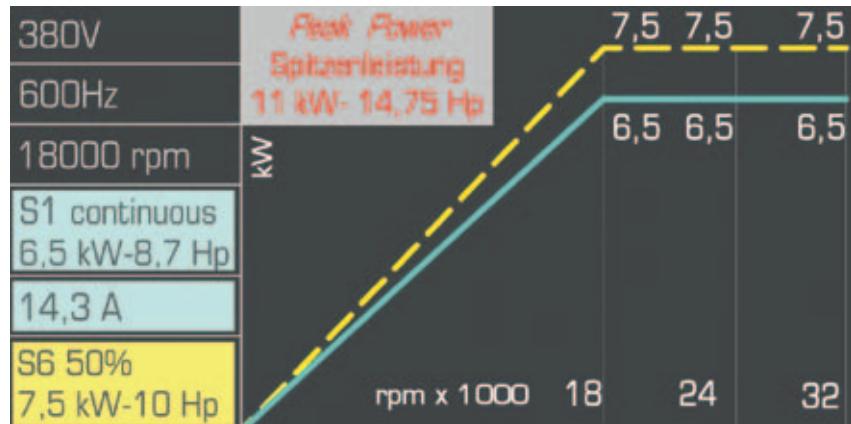
# ES915 ISO30



Potenza S1 / S6	5 kw / 6 kw
Power S1 / S6	5 kw / 6 kw
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Naso	Naso Corto
Nose	Short Nose
Tensione Nominale	380V
Rated Voltage	380V
Encoder	Non disponibile
Encoder	Not available
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici o acciaio
Bearings Front	Ceramic or steel
Cuscinetti posteriori	Ceramici o acciaio
Bearings Rear	Ceramic or steel
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	20.000 / 24.000
Max RPM	20.000 / 24.000
Peso	21 kg
Weight	21 kg
Corpo elettromandrino	Lega di alluminio
Spindle body	Aluminium Alloy
Raffreddamento	Elettroventola / Aria forzata
Cooling	Electric-fan / Forced air

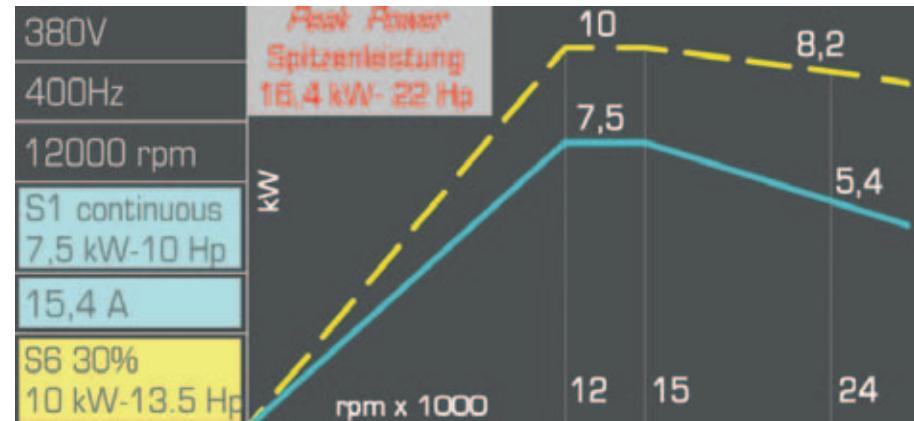


# ES915 HSK E40-F50

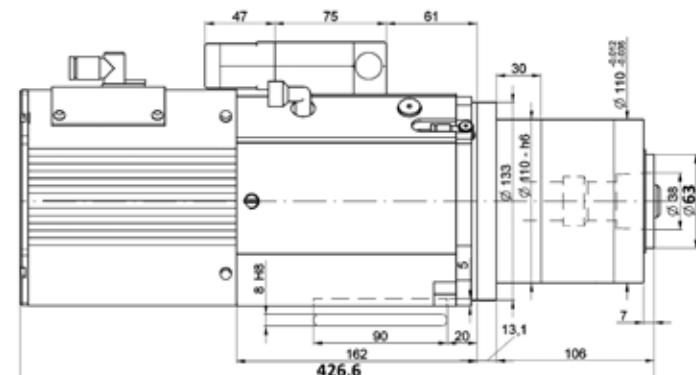
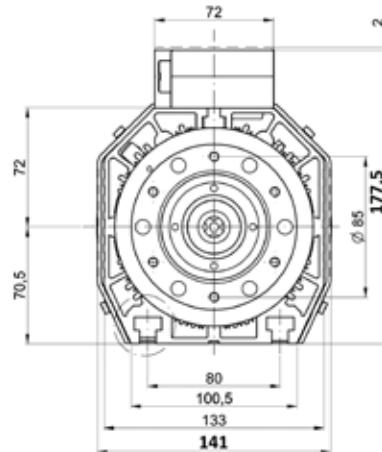


Potenza S1 / S6	6,5 kw / 7,5 kw
Power S1 / S6	6,5 kw / 7,5 kw
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Naso	Naso Lungo
Nose	Long Nose
Tensione Nominale	380V
Rated Voltage	380V
Encoder	Non disponibile
Encoder	Not available
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Ceramici
Bearings Rear	Ceramic
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	32.000
Max RPM	32.000
Peso	26 kg
Weight	26 kg
Corpo elettromandrino	Lega di alluminio
Spindle body	Alluminium Alloy
Raffreddamento	Liquido
Cooling	Liquid

# ES925 HSK F63

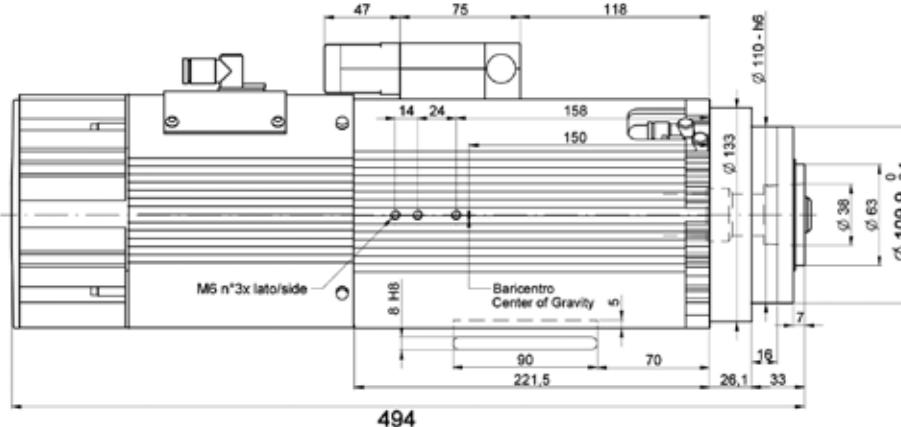
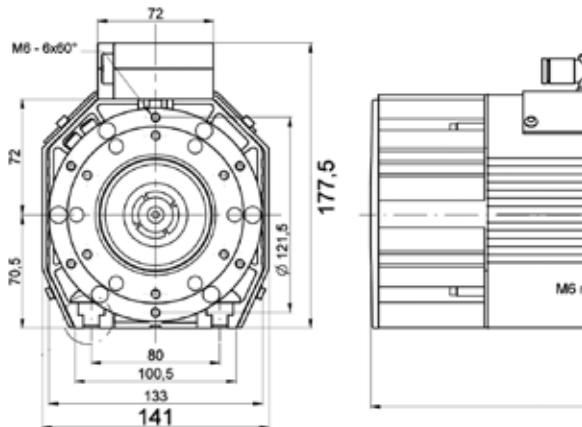
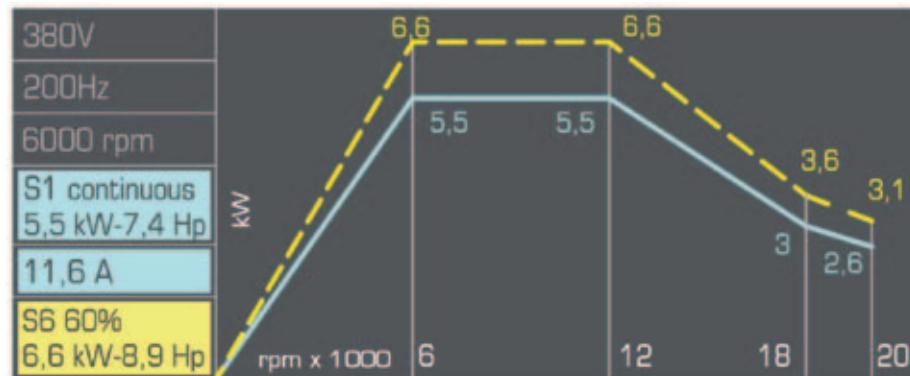


Potenza S1 / S6	7,5 kw / 10 kw
Power S1 / S6	7,5 kw / 10 kw
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Naso	Naso Lungo
Nose	Long Nose
Tensione Nominale	380V
Rated Voltage	380V
Encoder	Non disponibile
Encoder	Not available
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Ceramici
Bearings Rear	Ceramic
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	24.000
Max RPM	24.000
Peso	29 kg
Weight	29 kg
Corpo elettromandrino	Lega di alluminio
Spindle body	Aluminium Alloy
Raffreddamento	Liquido
Cooling	Liquid



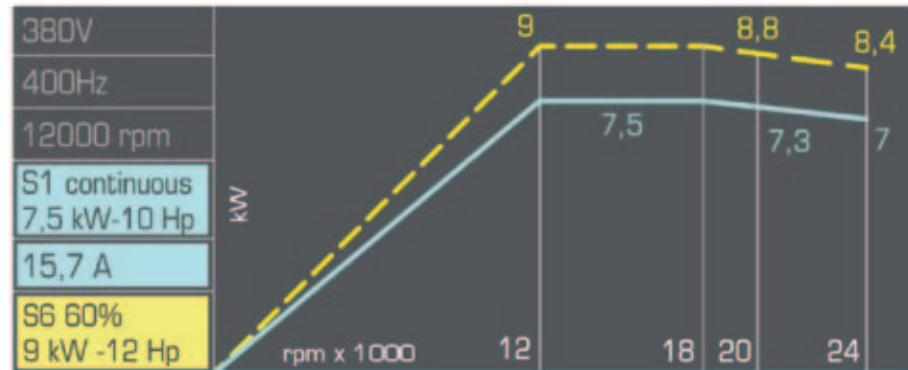
# ES929 HSK F63

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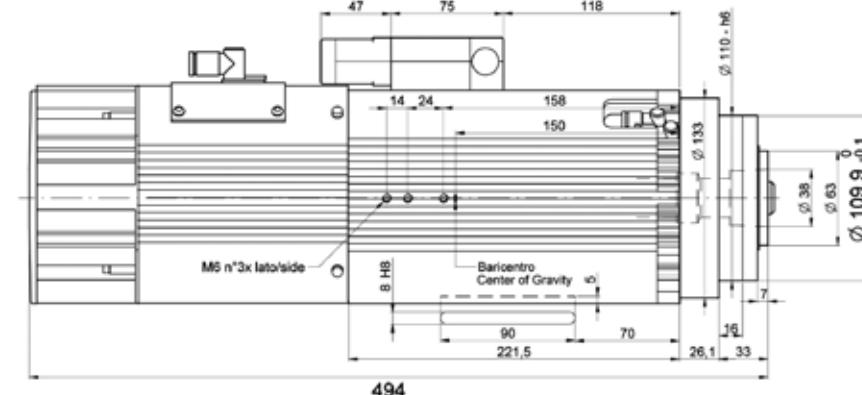
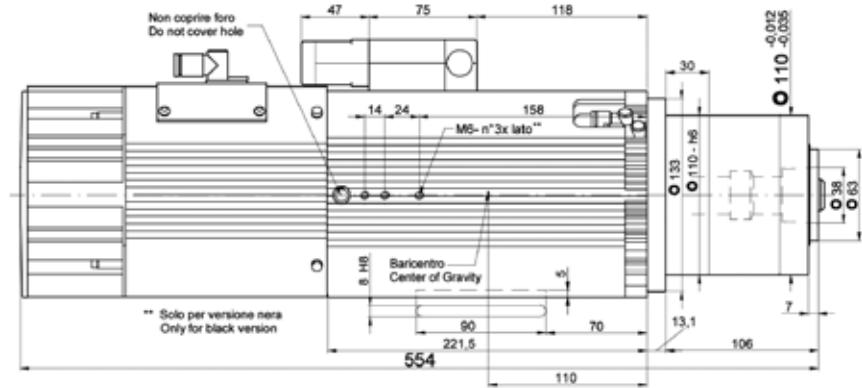
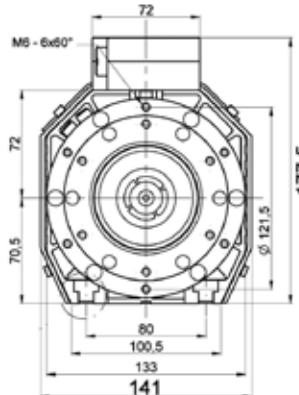
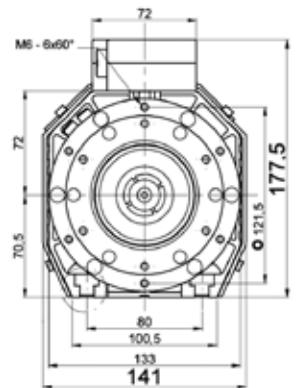


Potenza S1 / S6	5,5 kw / 6,6 kw
Power S1 / S6	5,5 kw / 6,6 kw
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Naso	Naso Corto
Nose	Short Nose
Tensione Nominale	380V
Rated Voltage	380V
Encoder	Non disponibile
Encoder	Not available
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici o Acciaio
Bearings Front	Ceramic or Steel
Cuscinetti posteriori	Ceramici o Acciaio
Bearings Rear	Ceramic or Steel
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	18.000 / 20.000
Max RPM	18.000 / 20.000
Peso	28 kg
Weight	28 kg
Corpo elettromandrino	Lega di alluminio
Spindle body	Alluminium Alloy
Raffreddamento	Elettroventola / Aria forzata
Cooling	Eletric-fan / Forced air

# ES929 HSK F63

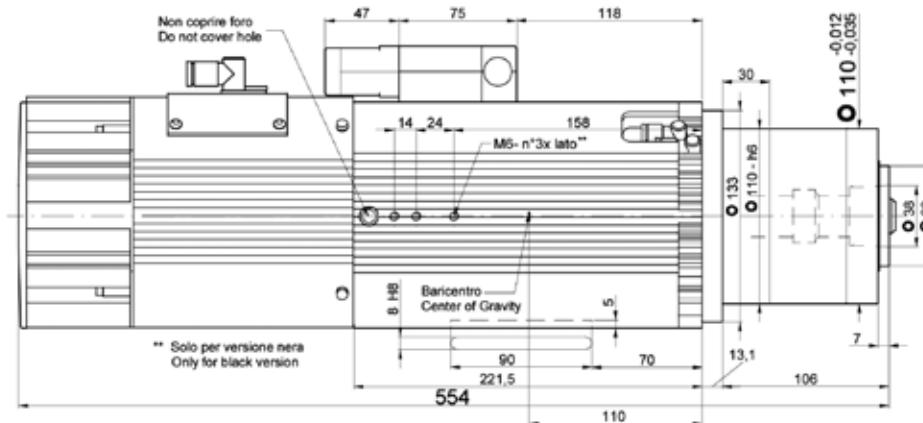
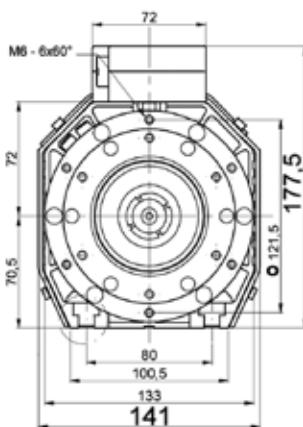
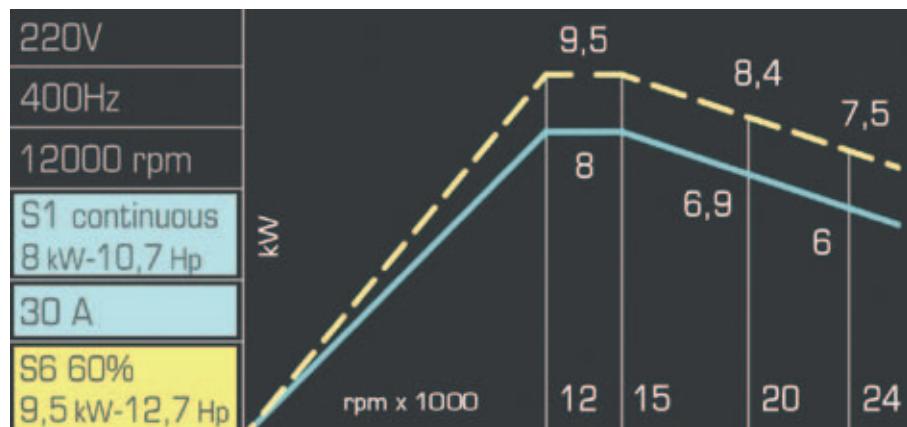


Potenza S1 / S6 Power S1 / S6	7,5 kw / 9 kw 7,5 kw / 9 kw
Dispositivo bloccaggio utensile Tool Blocking	Automatico con pistone pneumatico Automatic with pneumatic piston
Naso Nose	Naso Corto o Lungo Short or Long Nose
Tensione Nominale Rated Voltage	380V 380V
Encoder Encoder	Non disponibile Not available
Poli Poles	4 4
Cuscinetti anteriori Bearings Front	Ceramici Ceramic
Cuscinetti posteriori Bearings Rear	Ceramici Ceramic
Lubrificazione cuscinetti Bearings lubrication	Lubrificazione a vita Long life lubricated
Max RPM Max RPM	24.000 24.000
Peso Weight	28 kg 28 kg
Corpo elettromandrino Spindle body	Lega di alluminio Aluminium Alloy
Raffreddamento Cooling	Elettroventola / Aria forzata Electric-fan / Forced air



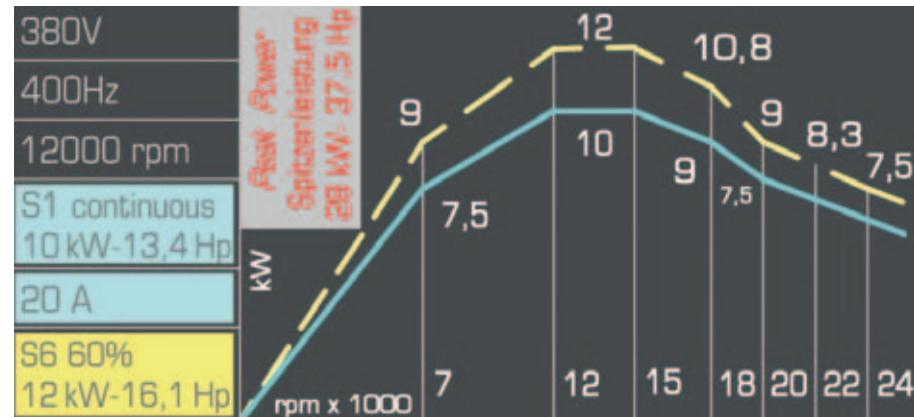
# ES929 HSK F63

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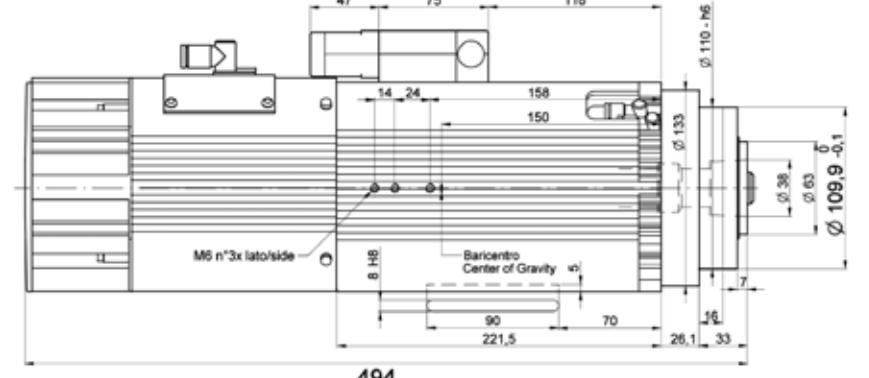
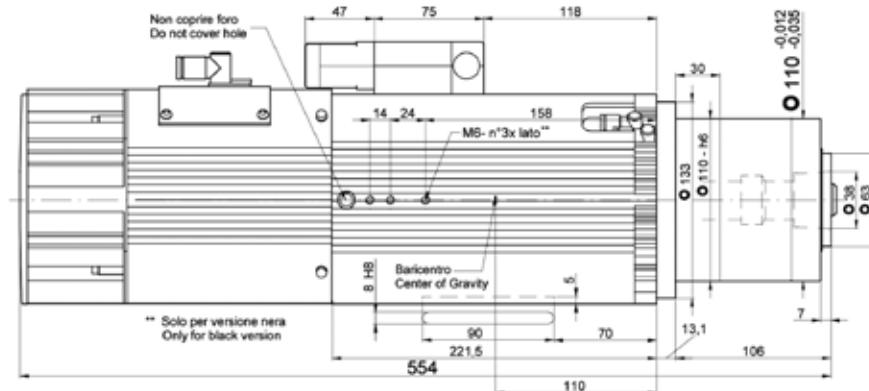
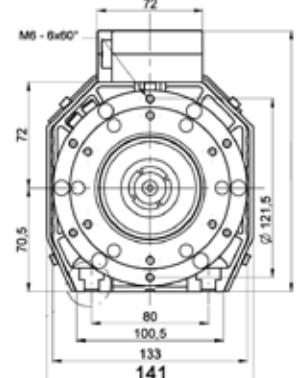
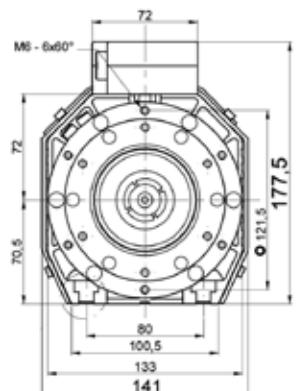


Potenza SI / S6	8 kw / 9,5 kw
Power SI / S6	8 kw / 9,5 kw
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Naso	Naso Lungo
Nose	Long Nose
Tensione Nomina	220V
Rated Voltage	220V
Encoder	Non disponibile
Encoder	Not available
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Ceramici
Bearings Rear	Ceramic
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	24.000
Max RPM	24.000
Peso	31 kg
Weight	31 kg
Corpo elettromandrino	Lega di alluminio
Spindle body	Alluminium Alloy
Raffreddamento	Elettroventola
Cooling	Electric-Fan

# ES929 HSK F63

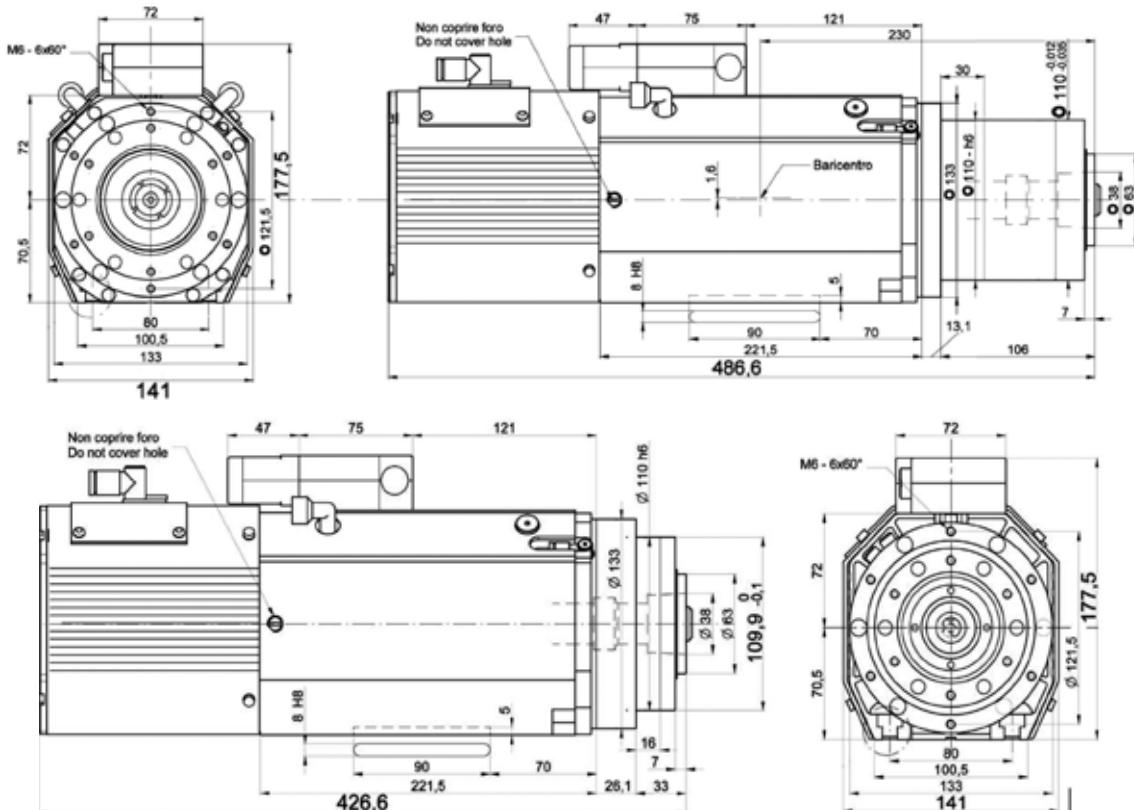
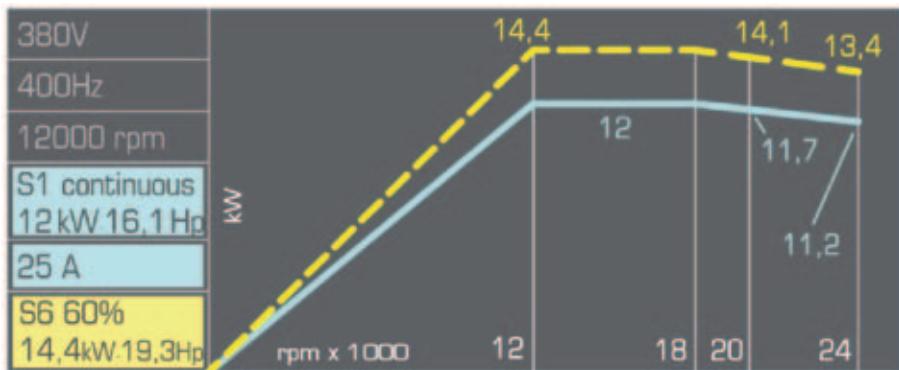


Potenza S1 / S6 Power S1 / S6	10 kw / 12 kw 10 kw / 12 kw
Dispositivo bloccaggio utensile Tool Blocking	Automatico con pistone pneumatico Automatic with pneumatic piston
Naso Nose	Naso Corto o Lungo Short or Long Nose
Tensione Nominale Rated Voltage	380V 380V
Encoder Encoder	Non disponibile Not available
Poli Poles	4 4
Cuscinetti anteriori Bearings Front	Ceramici Ceramic
Cuscinetti posteriori Bearings Rear	Ceramici Ceramic
Lubrificazione cuscinetti Bearings lubrication	Lubrificazione a vita Long life lubricated
Max RPM Max RPM	24.000 24.000
Peso Weight	26 kg 26 kg
Corpo elettromandrino Spindle body	Lega di alluminio Alluminium Alloy
Raffreddamento Cooling	Elettroventola Eletric-fan



# ES929 HSK F63

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Potenza S1 / S6  
Power S1 / S6

12 kw / 14,4 kw  
12 kw / 14,4 kw

Dispositivo bloccaggio utensile  
Tool Blocking

Automatico con pistone pneumatico  
Automatic with pneumatic piston

Naso  
Nose

Naso Corto o Lungo  
Short or Long Nose

Tensione Nominale  
Rated Voltage

380V  
380V

Encoder  
Encoder

Non disponibile  
Not available

Poli  
Poles

4  
4

Cuscinetti anteriori  
Bearings Front

Ceramici  
Ceramic

Cuscinetti posteriori  
Bearings Rear

Ceramici  
Ceramic

Lubrificazione cuscinetti  
Bearings lubrication

Lubrificazione a vita  
Long life lubricated

Max RPM  
Max RPM

24.000  
24.000

Peso  
Weight

31 kg  
31 kg

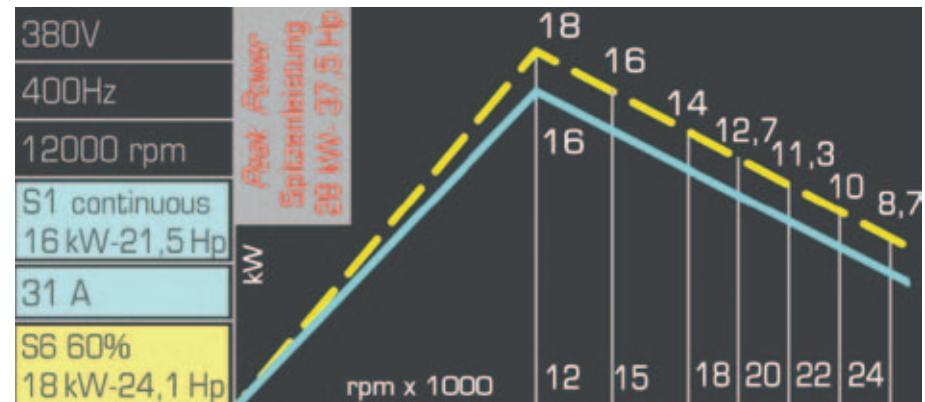
Corpo elettromandrino  
Spindle body

Lega di alluminio  
Alluminium Alloy

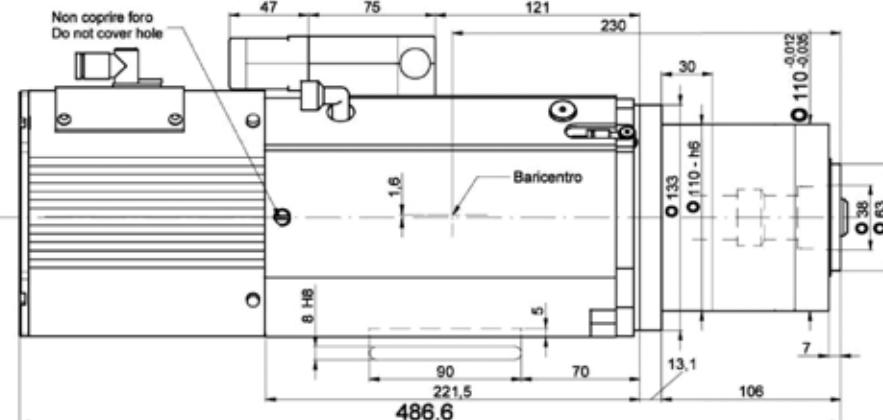
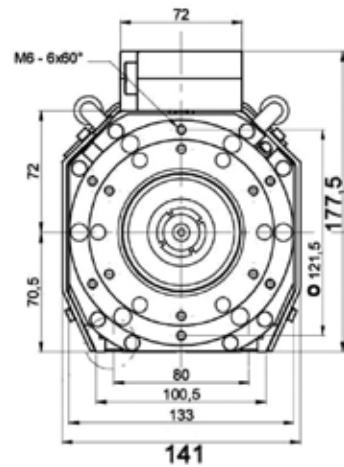
Raffreddamento  
Cooling

Liquido  
Liquid

# ES929 HSK F63

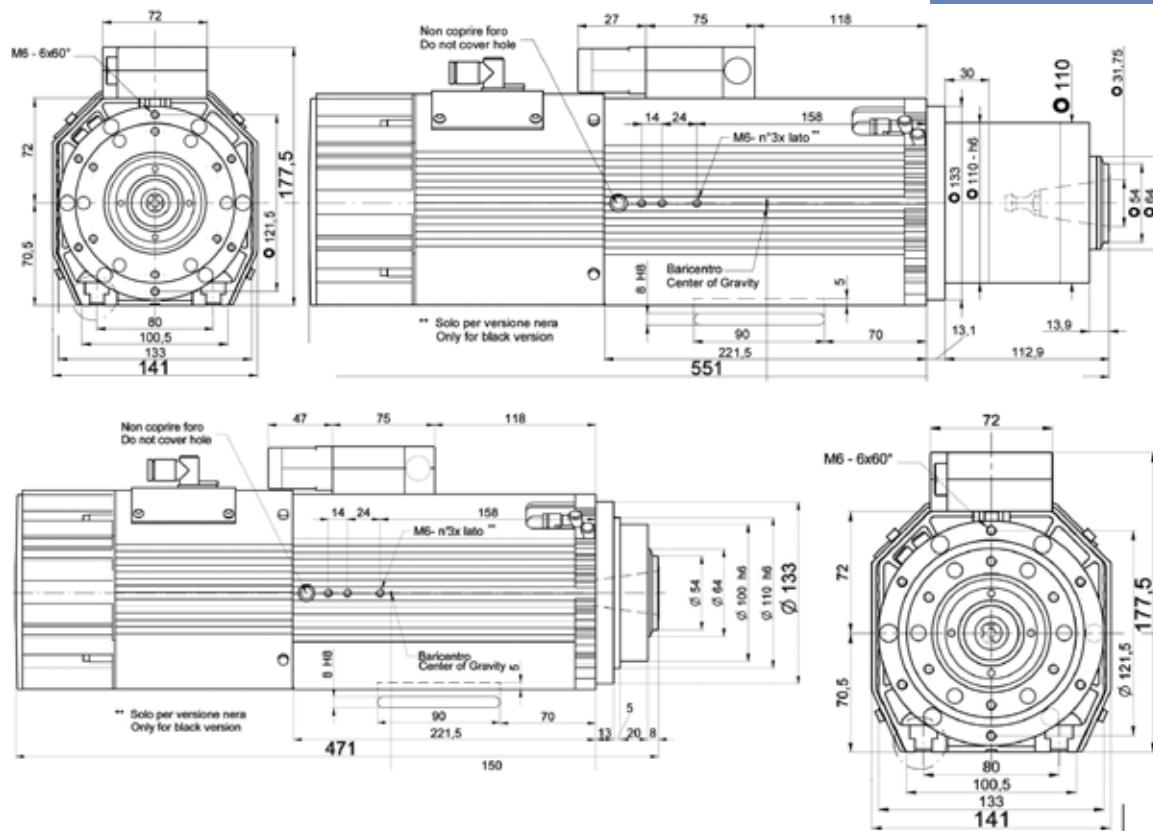
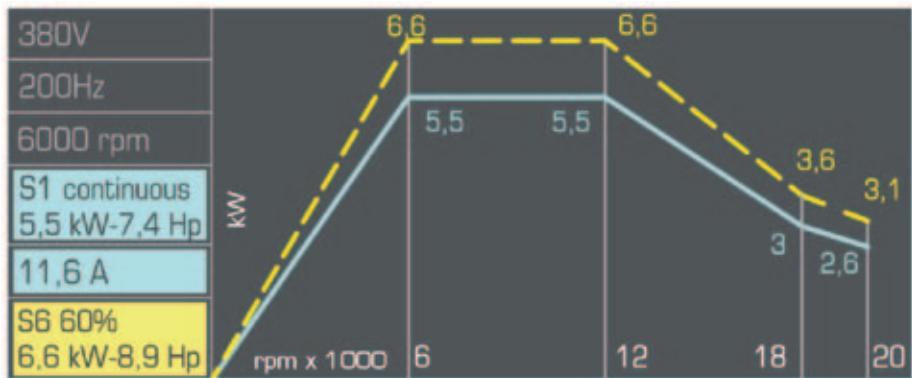


Potenza S1 / S6	16 kw / 18 kw
Power S1 / S6	16 kw / 18 kw
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Naso	Naso Lungo
Nose	Long Nose
Tensione Nominale	380V
Rated Voltage	380V
Encoder	Non disponibile
Encoder	Not available
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Ceramici
Bearings Rear	Ceramic
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	24.000
Max RPM	24.000
Peso	31 kg
Weight	31 kg
Corpo elettromandrina	Lega di alluminio
Spindle body	Aluminium Alloy
Raffreddamento	Liquido
Cooling	Liquid



# ES929 ISO30

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Potenza S1 / S6  
Power S1 / S6

5,5 kw / 6,6 kw  
5,5 kw / 6,6 kw

Dispositivo bloccaggio utensile  
Tool Blocking

Automatico con pistone pneumatico  
Automatic with pneumatic piston

Naso  
Nose

Naso Corto o Lungo  
Short or Long Nose

Tensione Nominale  
Rated Voltage

380V  
380V

Encoder  
Encoder

Non disponibile  
Not available

Poli  
Poles

4  
4

Cuscinetti anteriori  
Bearings Front

Ceramici o Acciaio  
Ceramic or Steel

Cuscinetti posteriori  
Bearings Rear

Ceramici o Acciaio  
Ceramic or Steel

Lubrificazione cuscinetti  
Bearings lubrication

Lubrificazione a vita  
Long life lubricated

Max RPM  
Max RPM

20.000  
20.000

Peso  
Weight

26 kg  
26 kg

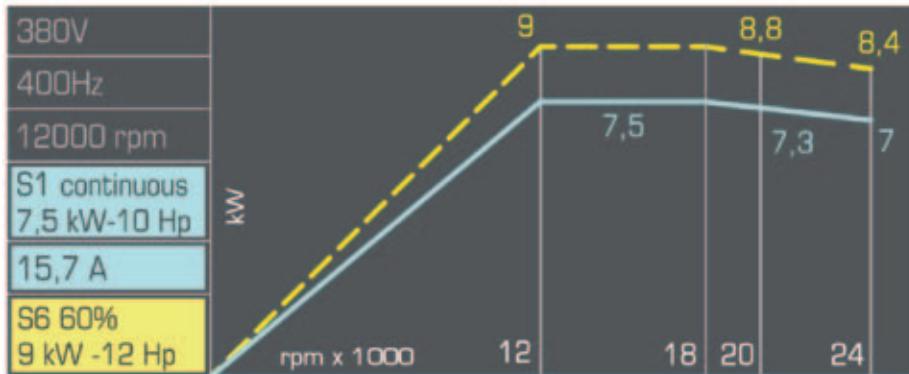
Corpo elettromandrino  
Spindle body

Lega di alluminio  
Aluminium Alloy

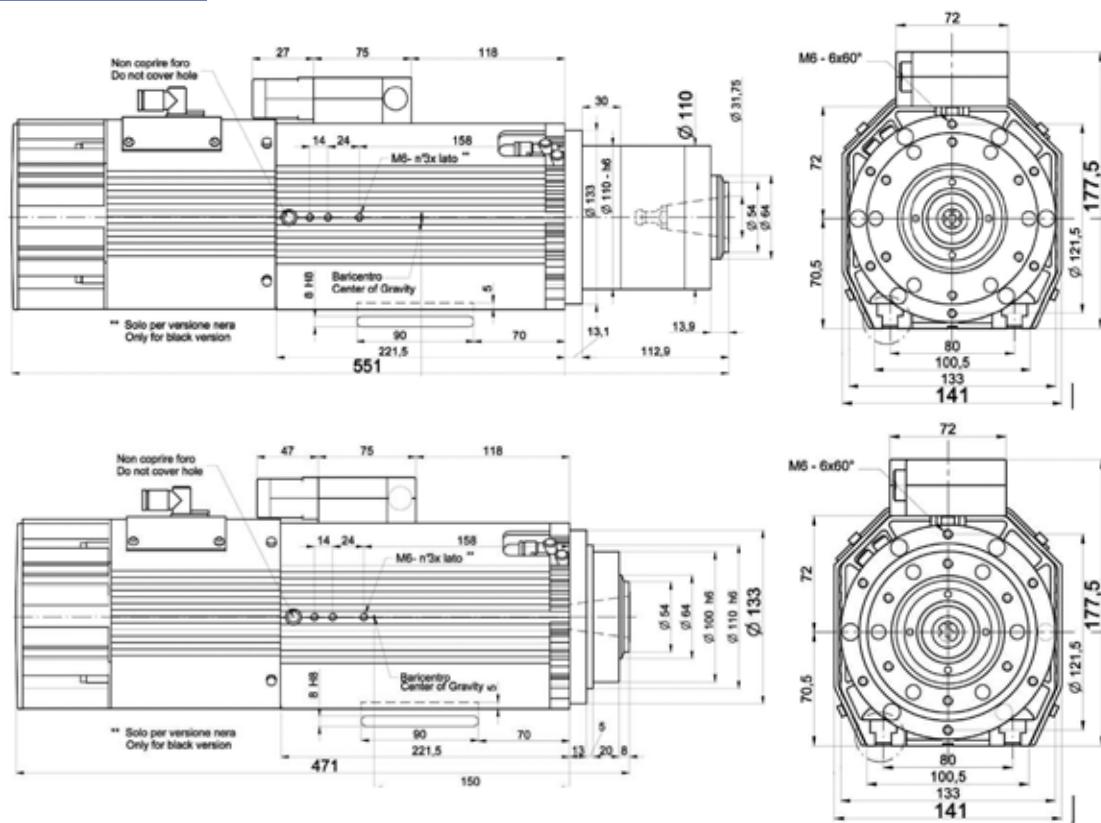
Raffreddamento  
Cooling

Elettroventola / Aria forzata  
Electric-fan / Forced air

# ES929 ISO30

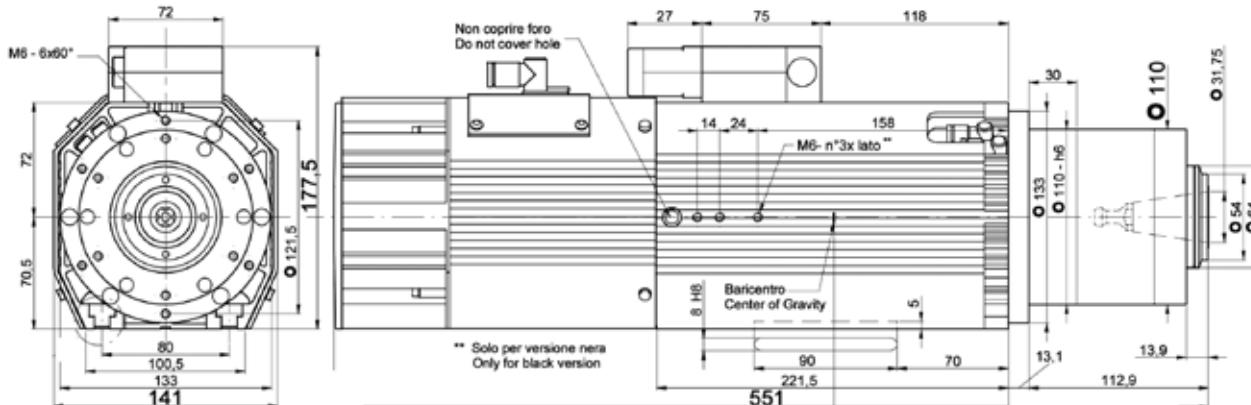
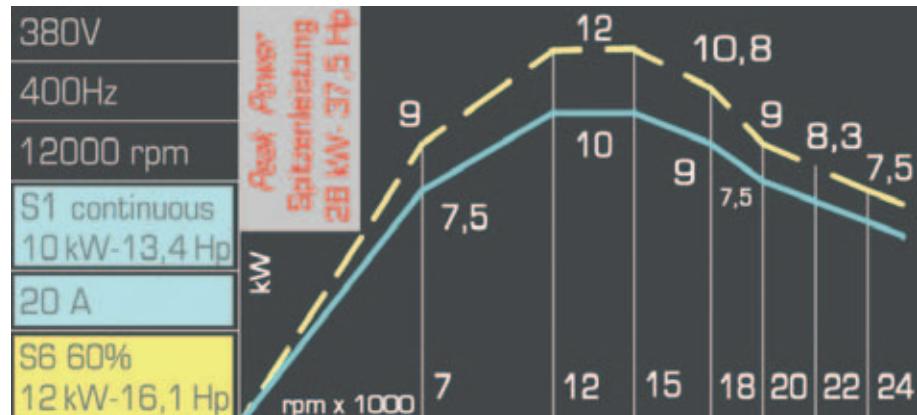


Potenza S1 / S6 Power S1 / S6	7,5 kw / 9 kw 7,5 kw / 9 kw
Dispositivo bloccaggio utensile Tool Blocking	Automatico con pistone pneumatico Automatic with pneumatic piston
Naso Nose	Naso Corto o Lungo Short or Long Nose
Tensione Nominale Rated Voltage	380V 380V
Encoder Encoder	Non disponibile Not available
Poli Poles	4 4
Cuscinetti anteriori Bearings Front	Ceramici o Acciaio Ceramic or Steel
Cuscinetti posteriori Bearings Rear	Ceramici o Acciaio Ceramic or Steel
Lubrificazione cuscinetti Bearings lubrication	Lubrificazione a vita Long life lubricated
Max RPM Max RPM	20.000 / 24.000 20.000 / 24.000
Peso Weight	26 kg 26 kg
Corpo elettromandrina Spindle body	Lega di alluminio Aluminium Alloy
Raffreddamento Cooling	Elettroventola / Aria forzata Electric-fan / Forced air



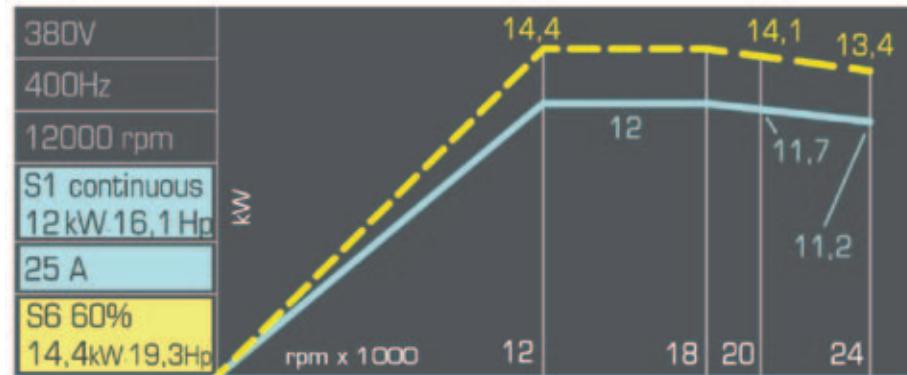
# ES929 ISO30

33

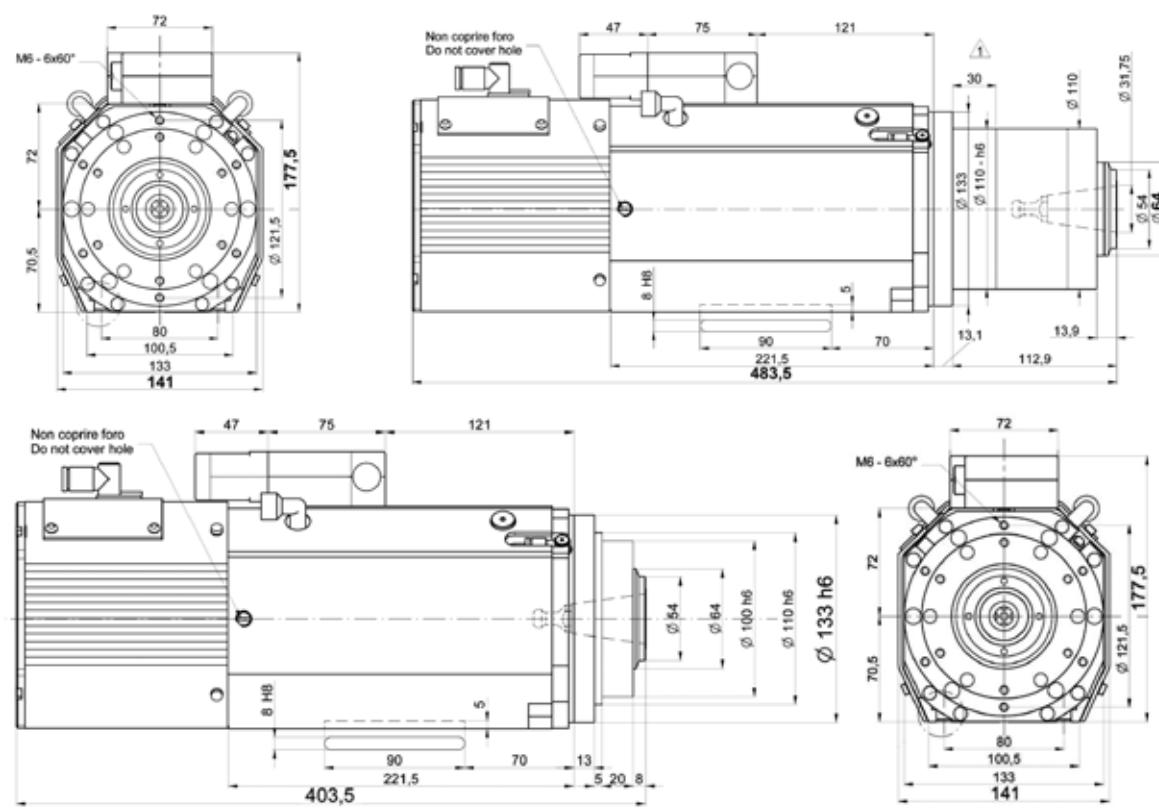


Potenza S1 / S6	10 kw / 12 kw
Power S1 / S6	10 kw / 12 kw
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Naso	Naso Lungo
Nose	Long Nose
Tensione Nominale	380V
Rated Voltage	380V
Encoder	Non disponibile
Encoder	Not available
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Ceramici
Bearings Rear	Ceramic
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	24.000
Max RPM	24.000
Peso	31 kg
Weight	31 kg
Corpo elettromandrino	Lega di alluminio
Spindle body	Alluminium Alloy
Raffreddamento	Elettroventola
Cooling	Electric-Fan

# ES929 ISO30

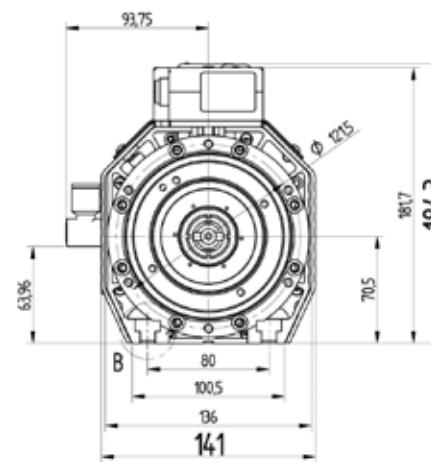
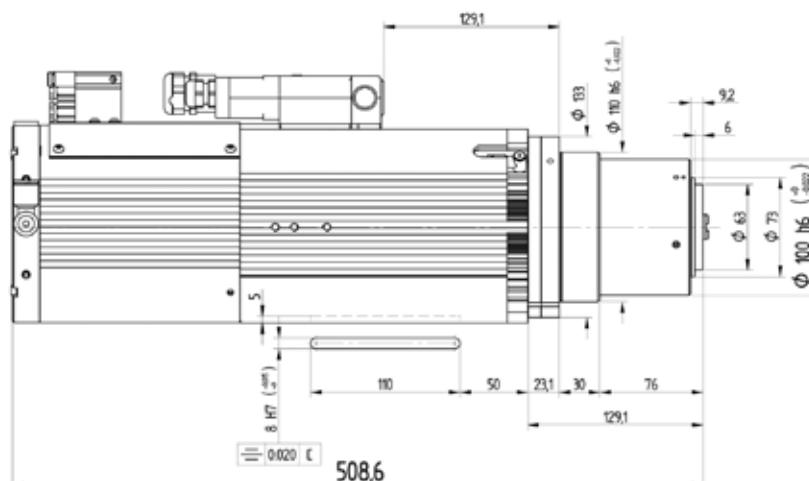
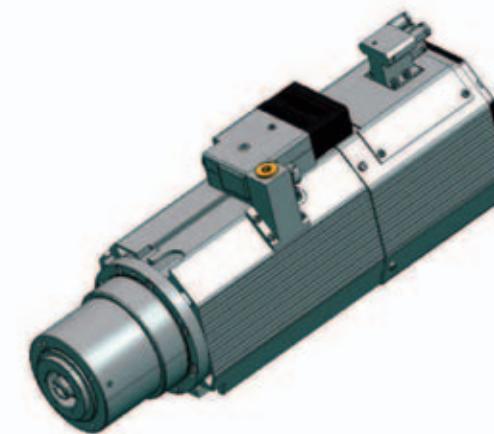
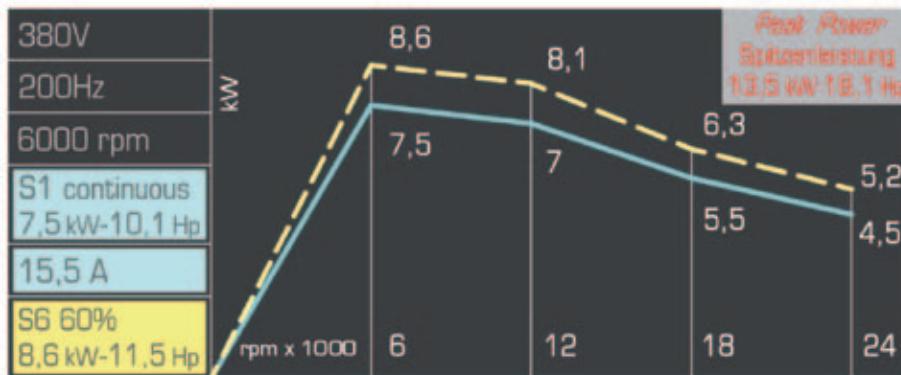


Potenza S1 / S6	12 kw / 14,4 kw
Power S1 / S6	12 kw / 14,4 kw
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Naso	Naso Corto o Lungo
Nose	Short or Long Nose
Tensione Nominale	380V
Rated Voltage	380V
Encoder	Non disponibile
Encoder	Not available
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Ceramici
Bearings Rear	Ceramic
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	24.000
Max RPM	24.000
Peso	28 kg
Weight	28 kg
Corpo elettromandrino	Lega di alluminio
Spindle body	Alluminium Alloy
Raffreddamento	Liquido
Cooling	Liquid



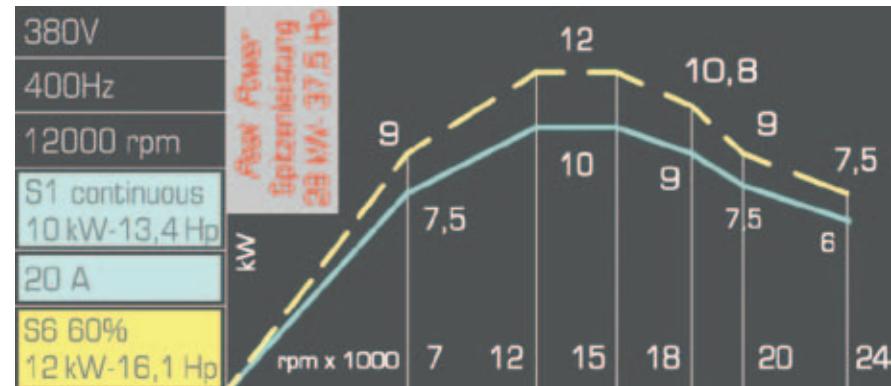
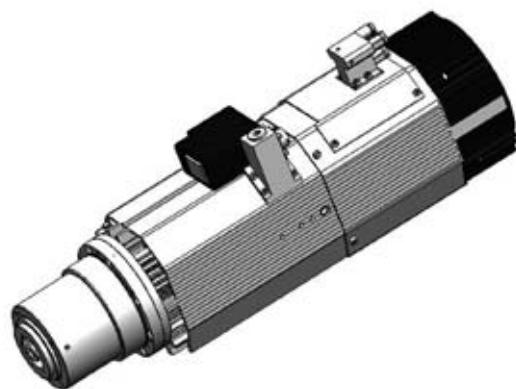
# ES939 HSK F63

35

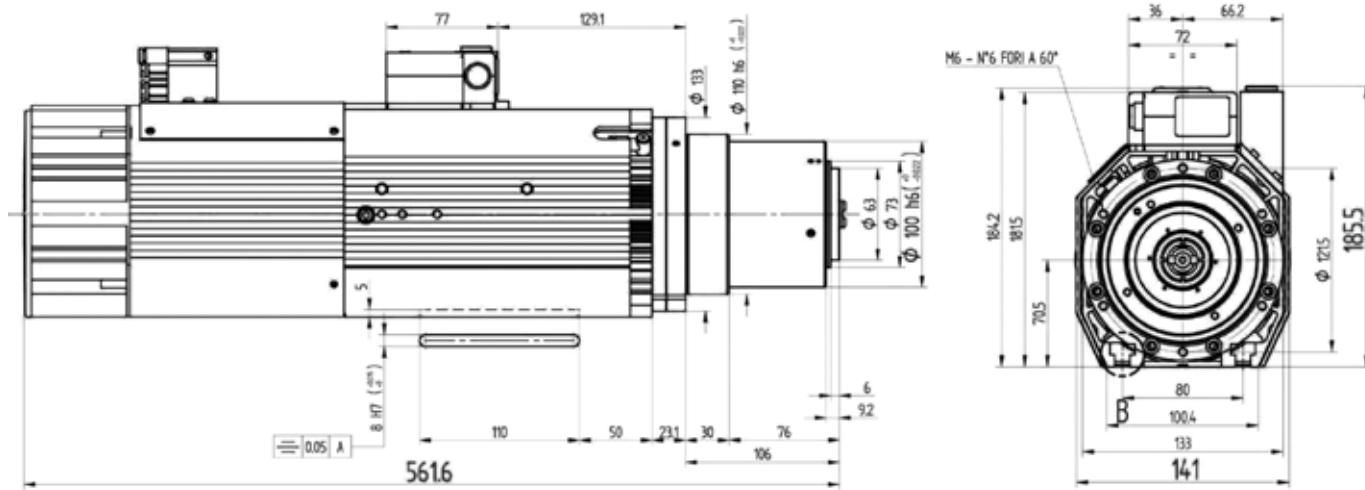


Potenza S1 / S6	7,5 kw / 8,6 kw
Power S1 / S6	7,5 kw / 8,6 kw
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Naso	Naso Lungo
Nose	Long Nose
Tensione Nominale	380V
Rated Voltage	380V
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Ceramici
Bearings Rear	Ceramic
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	24.000
Max RPM	24.000
Peso	35 kg
Weight	35 kg
Corpo elettromandrino	Lega di alluminio
Spindle body	Alluminium Alloy
Raffreddamento	Aria Forzata
Cooling	Forced Air

# ES939 HSK F63

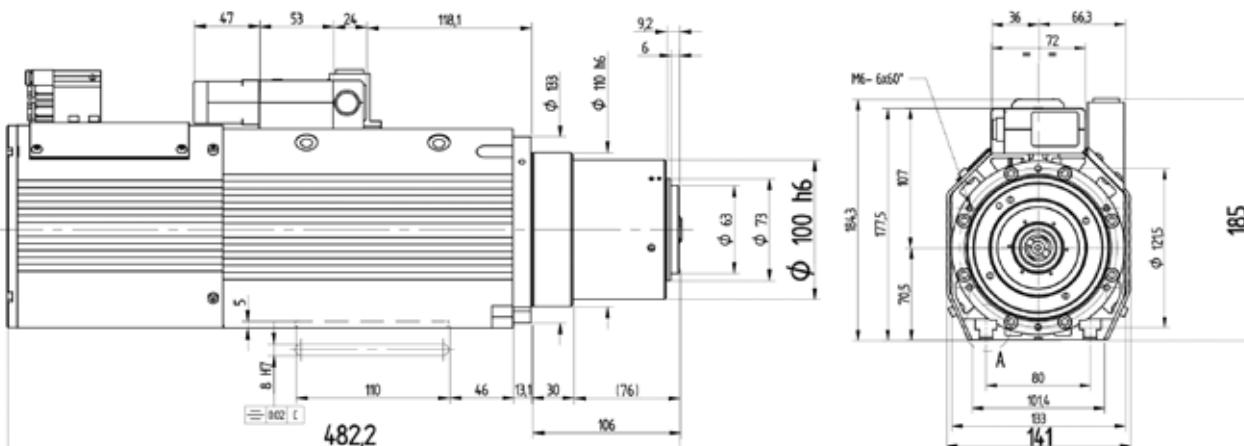
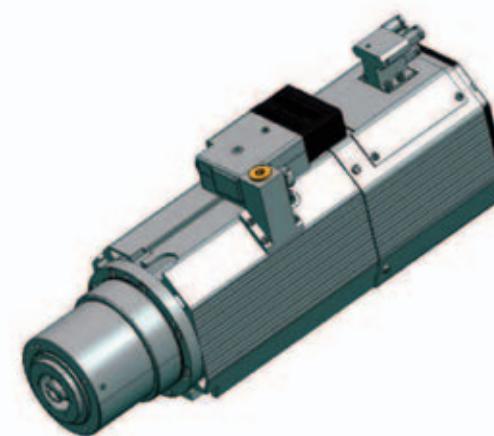
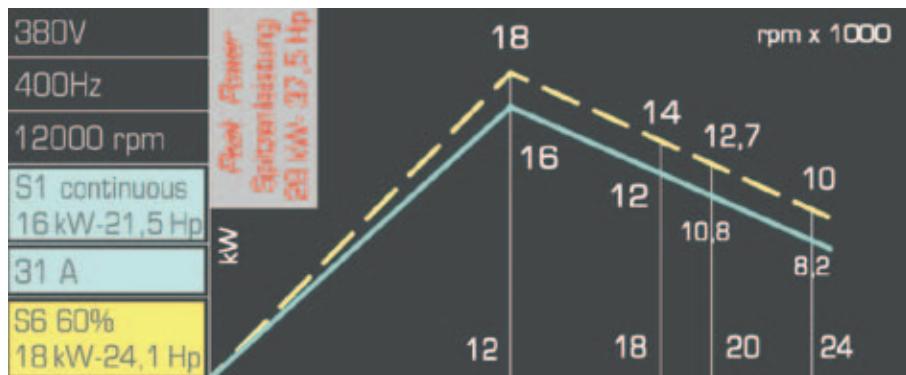


Potenza S1 / S6	10 kw / 12 kw
Power S1 / S6	10 kw / 12 kw
Dispositivo bloccaggio utensile Tool Blocking	Automatico con pistone pneumatico Automatic with pneumatic piston
Naso Nose	Naso Lungo Long Nose
Tensione Nominale Rated Voltage	380V 380V
Encoder Encoder	LB LB
Poli Poles	4 4
Cuscinetti anteriori Bearings Front	Ceramici Ceramic
Cuscinetti posteriori Bearings Rear	Ceramici Ceramic
Lubrificazione cuscinetti Bearings lubrication	Lubrificazione a vita Long life lubricated
Max RPM	24.000
Max RPM	24.000
Peso Weight	35 kg
Corpo elettromandrina Spindle body	Lega di alluminio Aluminium Alloy
Raffreddamento Cooling	Elettroventola Electric fan



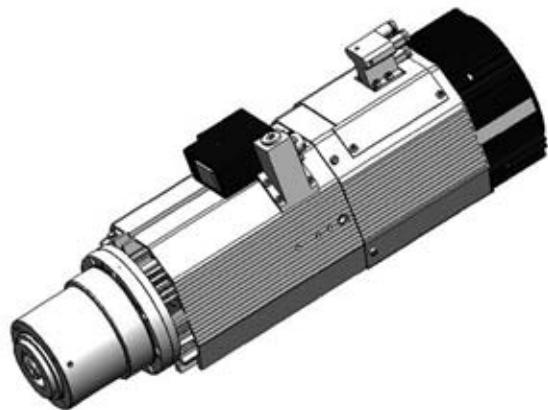
# ES939 HSK F63

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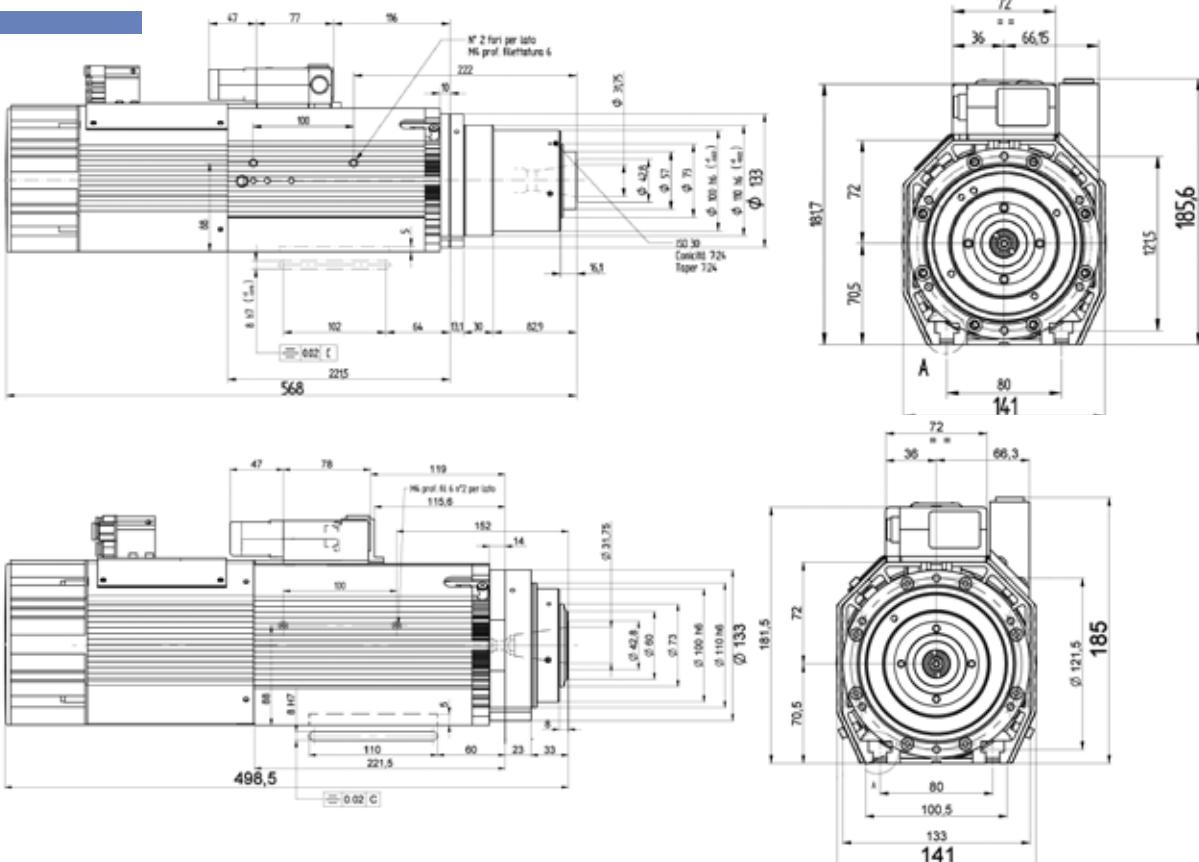
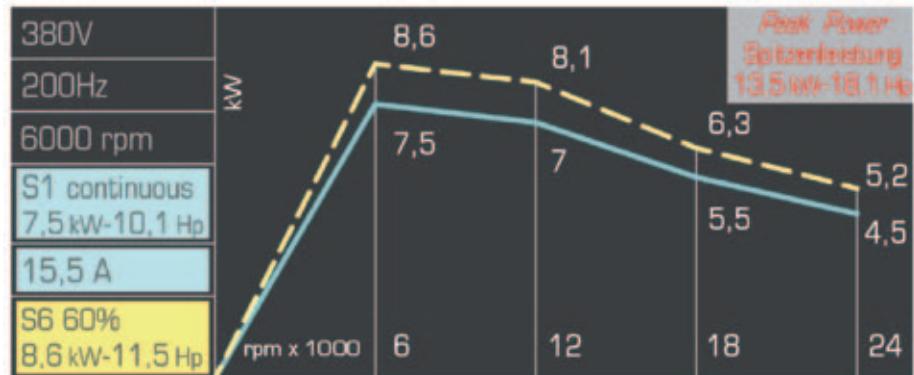


Potenza S1 / S6 Power S1 / S6	16 kw / 18 kw 16 kw / 18 kw
Dispositivo bloccaggio utensile Tool Blocking	Automatico con pistone pneumatico Automatic with pneumatic piston
Naso Nose	Naso Lungo Long Nose
Tensione Nominale Rated Voltage	380V 380V
Encoder Encoder	LB LB
Poli Poles	4 4
Cuscinetti anteriori Bearings Front	Ceramici Ceramic
Cuscinetti posteriori Bearings Rear	Ceramici Ceramic
Lubrificazione cuscinetti Bearings lubrication	Lubrificazione a vita Long life lubricated
Max RPM Max RPM	24.000 24.000
Peso Weight	35 kg 35 kg
Corpo elettromandrino Spindle body	Lega di alluminio Alluminium Alloy
Raffreddamento Cooling	Liquido Liquid

# ES939 ISO30

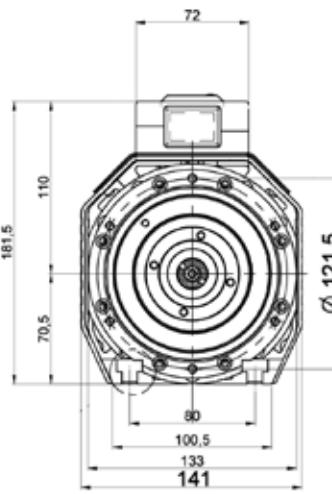
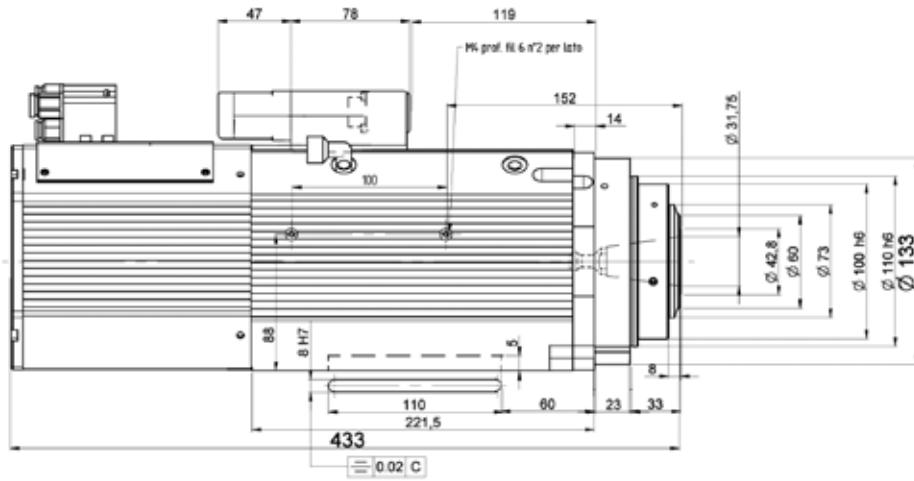
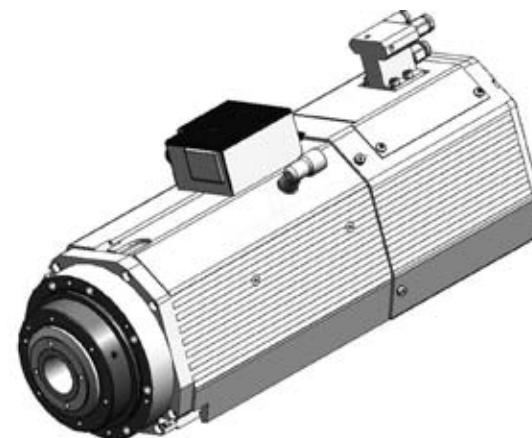
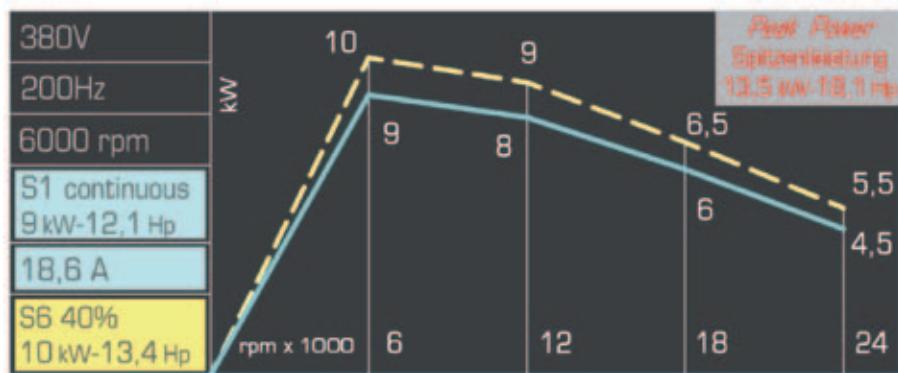


Potenza S1 / S6 Power S1 / S6	7,5 kw / 8,6 kw 7,5 kw / 8,6 kw
Dispositivo bloccaggio utensile Tool Blocking	Automatico con pistone pneumatico Automatic with pneumatic piston
Naso Nose	Naso Corto Short Nose
Tensione Nominale Rated Voltage	380V 380V
Encoder Encoder	LB LB
Poli Poles	4 4
Cuscinetti anteriori Bearings Front	Ceramici Ceramic
Cuscinetti posteriori Bearings Rear	Acciaio Steel
Lubrificazione cuscinetti Bearings lubrication	Lubrificazione a vita Long life lubricated
Max RPM Max RPM	24.000 24.000
Peso Weight	35 kg 35 kg
Corpo elettromandrino Spindle body	Lega di alluminio Aluminium Alloy
Raffreddamento Cooling	Elettroventola / Aria forzata Electric-fan / Forced air



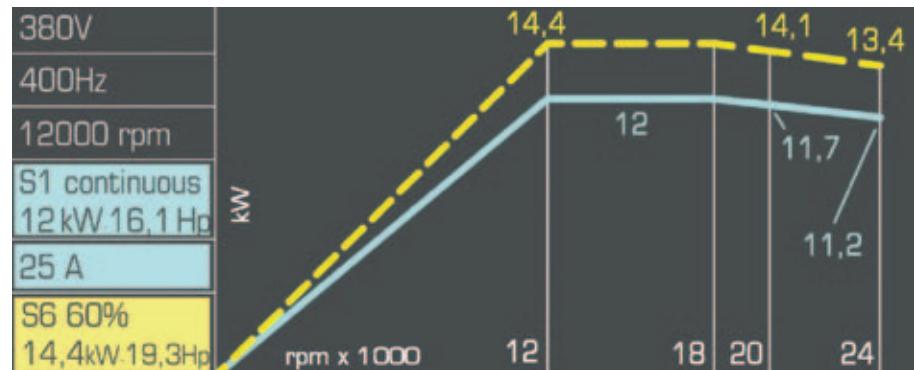
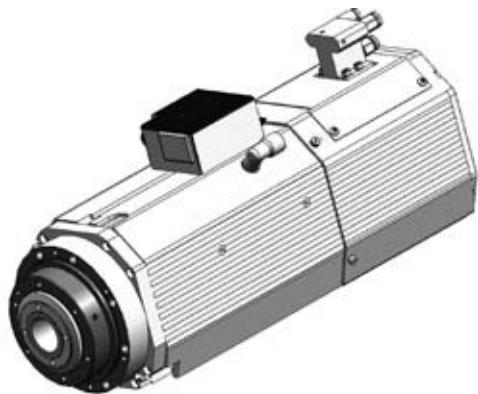
# ES939 ISO30

39

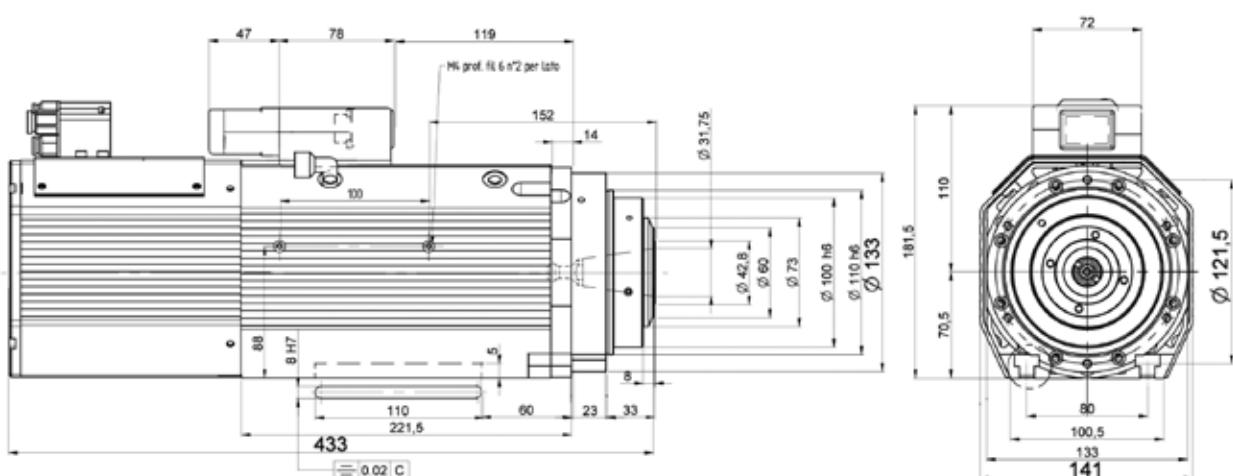


Potenza S1 / S6	9 kw / 10 kw
Power S1 / S6	9 kw / 10 kw
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Naso	Naso Corto
Nose	Short Nose
Tensione Nominali	380V
Rated Voltage	380V
Encoder	non disponibile
Encoder	not available
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Acciaio
Bearings Rear	Stell
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	24.000
Max RPM	24.000
Peso	35 kg
Weight	35 kg
Corpo elettromandrino	Lega di alluminio
Spindle body	Alluminium Alloy
Raffreddamento	Liquido
Cooling	Liquid

# ES939 ISO30

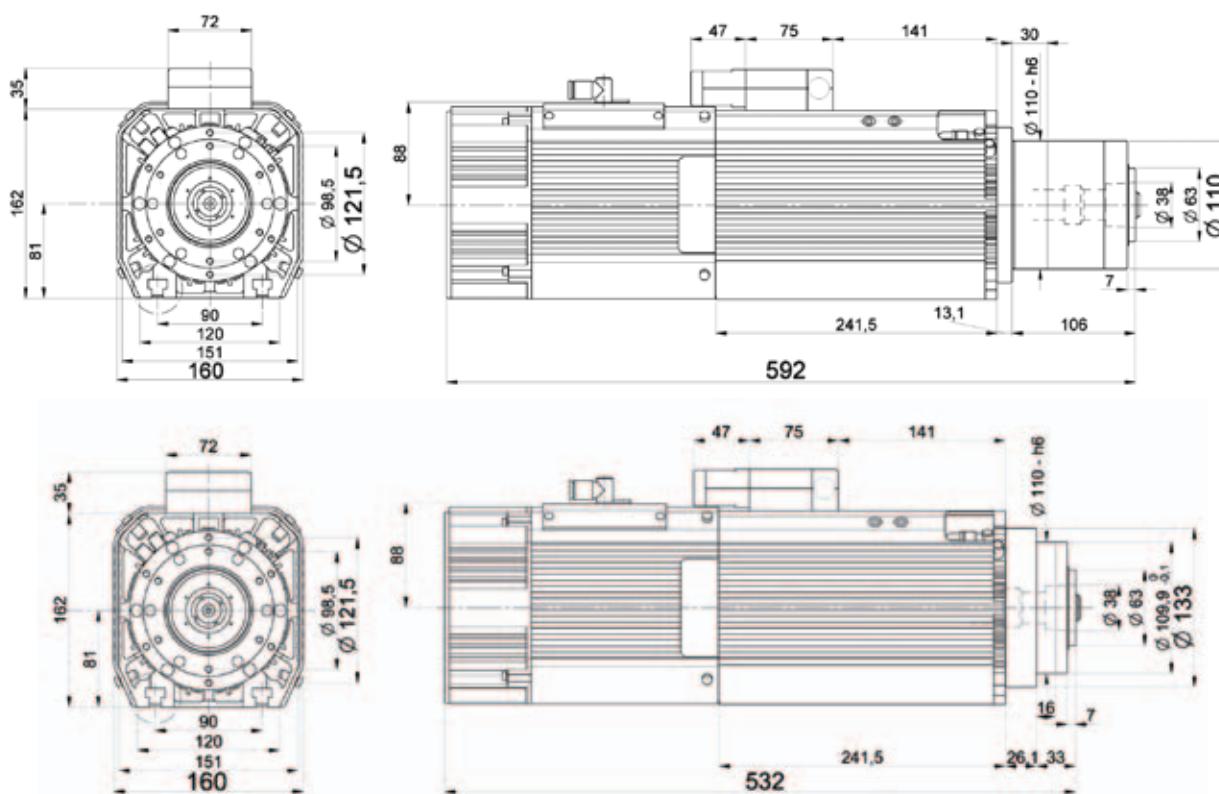
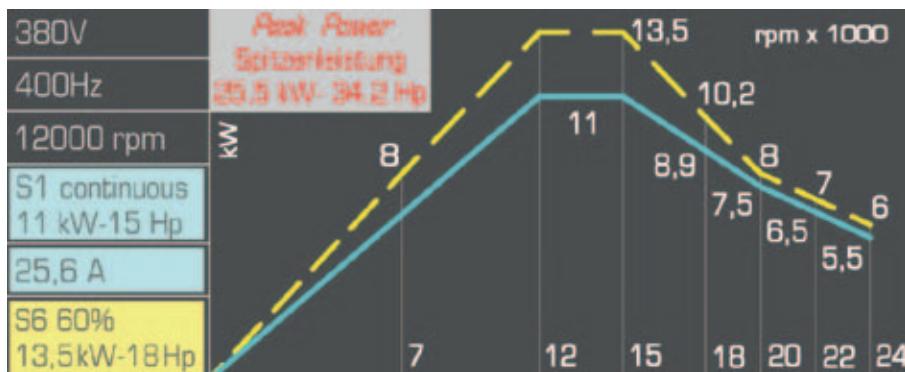


Potenza S1 / S6	12 kw / 14,4 kw
Power S1 / S6	12 kw / 14,4 kw
Dispositivo bloccaggio utensile Tool Blocking	Automatico con pistone pneumatico Automatic with pneumatic piston
Naso Nose	Naso Corto Short Nose
Tensione Nominale Rated Voltage	380V 380V
Poli Poles	4 4
Cuscinetti anteriori Bearings Front	Ceramici Ceramic
Cuscinetti posteriori Bearings Rear	Acciaio Steel
Lubrificazione cuscinetti Bearings lubrication	Lubrificazione a vita Long life lubricated
Max RPM	24.000
Max RPM	24.000
Peso Weight	35 kg 35 kg
Corpo elettromandrino Spindle body	Lega di alluminio Alluminium Alloy
Raffreddamento Cooling	Liquido Liquid



# ES988 HSK F63

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Potenza S1 / S6  
Power S1 / S6

11 kw / 13,5 kw  
11 kw / 13,5 kw

Dispositivo bloccaggio utensile  
Tool Blocking

Automatico con pistone pneumatico  
Automatic with pneumatic piston

Naso  
Nose

Naso Corto o Lungo  
Shot or Long Nose

Tensione Nominale  
Rated Voltage

380V  
380V

Encoder  
Encoder

Non disponibile  
Not available

Poli  
Poles

4  
4

Cuscinetti anteriori  
Bearings Front

Ceramici  
Ceramic

Cuscinetti posteriori  
Bearings Rear

Ceramici  
Ceramic

Lubrificazione cuscinetti  
Bearings lubrication

Lubrificazione a vita  
Long life lubricated

Max RPM  
Max RPM

24.000  
24.000

Peso  
Weight

38 kg  
38 kg

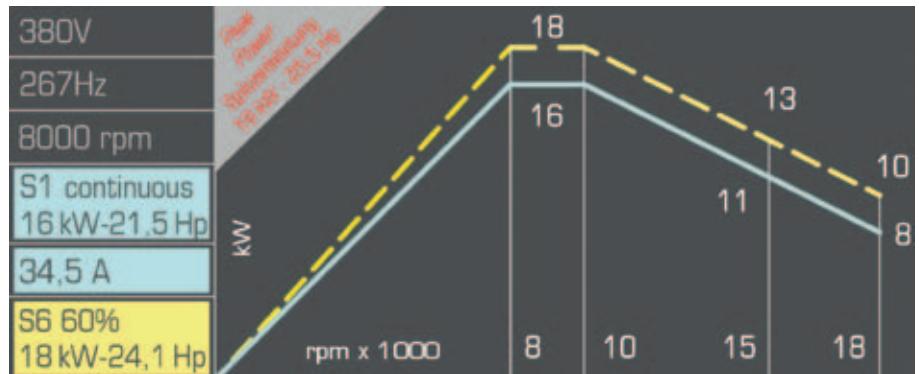
Corpo elettromandrino  
Spindle body

Lega di alluminio  
Alluminium Alloy

Raffreddamento  
Cooling

Elettroventola  
Electric-Fan

# ES884 HSK E63



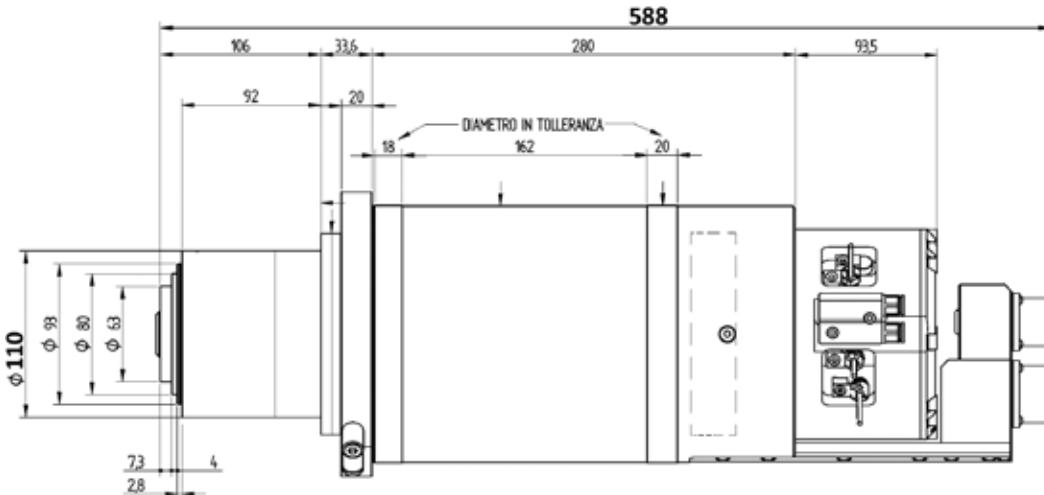
Altre versioni disponibili

HSK F80

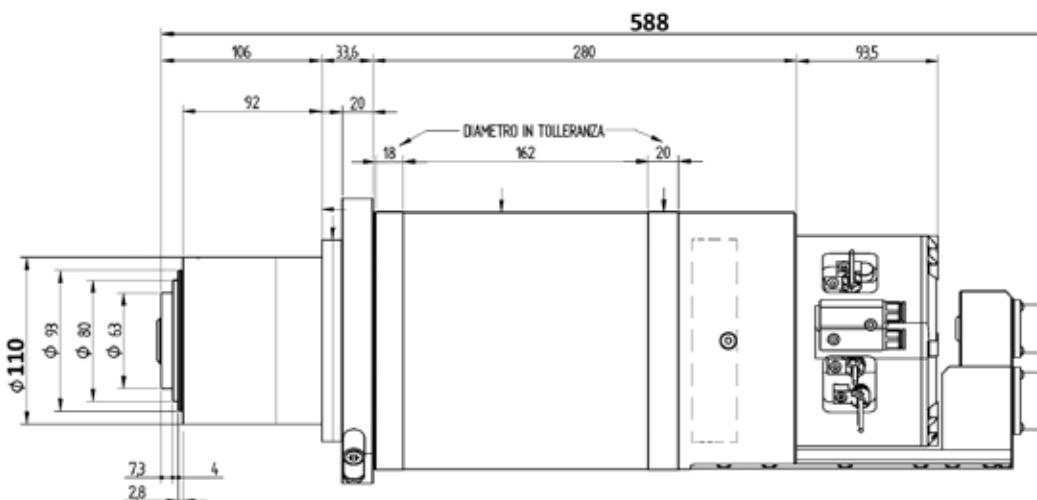
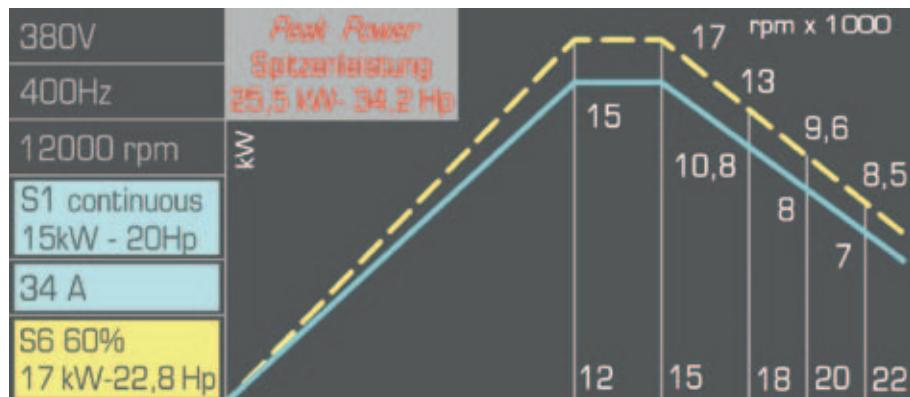
Other available models

HSK F80

Potenza SI / S6	16 kw / 18 kw
Power SI / S6	16 kw / 18 kw
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Naso	Naso Lungo
Nose	Long Nose
Tensione Nominale	380V
Rated Voltage	380V
Encoder	/
Encoder	/
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Acciaio
Bearings Rear	Steel
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	18.000 (E63) / 12.000 (F80)
Max RPM	18.000 (E63) / 12.000 (F80)
Corpo elettromandrino	Lega di alluminio
Spindle body	Alluminium Alloy
Raffreddamento	Liquido
Cooling	Liquid



# ES888 HSK F63



Potenza S1 / S6	15 kw / 17 kw
Power S1 / S6	15 kw / 17 kw
Dispositivo bloccaggio utensile	Automatico con pistone pneumatico
Tool Blocking	Automatic with pneumatic piston
Naso	Naso Lungo
Nose	Long Nose
Tensione Nominale	380V
Rated Voltage	380V
Encoder	/
Encoder	/
Poli	4
Poles	4
Cuscinetti anteriori	Ceramici
Bearings Front	Ceramic
Cuscinetti posteriori	Ceramici
Bearings Rear	Ceramic
Lubrificazione cuscinetti	Lubrificazione a vita
Bearings lubrication	Long life lubricated
Max RPM	22.000
Max RPM	22.000
Corpo elettromandrino	Lega di alluminio
Spindle body	Aluminium Alloy
Raffreddamento	Liquido
Cooling	Liquid



La Linea Elettromandrini HB100 è stata progettata e realizzata per effettuare operazioni di tenonatura e profilatura su legno in presenza di utensili di lavorazione particolarmente grandi e pesanti (da 20kg a 45kg).

The HB100 Electrosindle range is designed for wood tenoning and profiling operation which use particularly large and heavy tools (from 20kg to 45kg).

Puleggia  
Pulley

$\varnothing 70 / \varnothing 94 / \varnothing 120$   
 $\varnothing 70 / \varnothing 94 / \varnothing 120$

Dispositivo bloccaggio utensile  
Tool Blocking

Automatico con pistone pneumatico  
Automatic with pneumatic piston

Rotazione  
Rotation

Sx o Dx  
Left or Right

Cuscinetti  
Bearings

Acciaio  
Steel

Lubrificazione cuscinetti  
Bearings lubrication

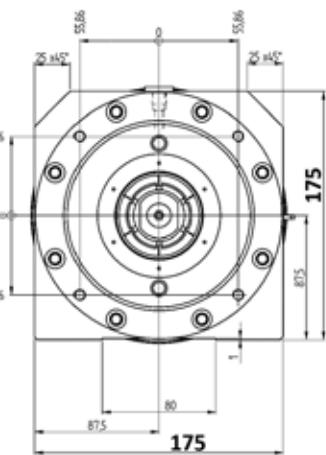
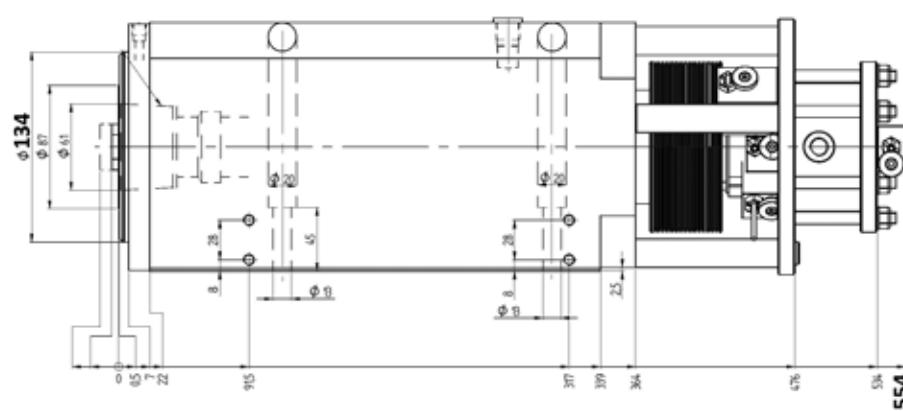
Lubrificazione a vita  
Long life lubricated

Max RPM  
Max RPM

8.000  
8.000

Corpo elettromandrino  
Spindle body

Lega di alluminio  
Aluminium Alloy



# HS300 - LA POTENZA DELLE PICCOLE COSE... HS300 - LITTLE SIZE, GREAT POWER

45

Rotazione Asse C:  $\pm 220^\circ$  o infinita  
Rotazione Asse A:  $\pm 100^\circ / -40^\circ$

Peso: 50kg circa

**SERVOMOTORI DISPONIBILI**  
HSD (Yaskawa - Siemens DQ - OSAI)

**OPTIONALS**  
Slip Ring

C axis rotation:  $\pm 220^\circ$  or endless  
A axis rotation:  $\pm 100^\circ / -40^\circ$

Weight: 50kg about

**AVAILABLE SERVOMOTORS**  
HSD (Yaskawa - Siemens DQ - OSAI)

**OPTIONALS**  
Slip Ring



**ELETTROMANDRINI DISPONIBILI**  
AVAILABLE ELECTROSPINDLES



**ES368**  
HSK F63  
Asincrono / Asynchronous  
7kW  
20.000 rpm

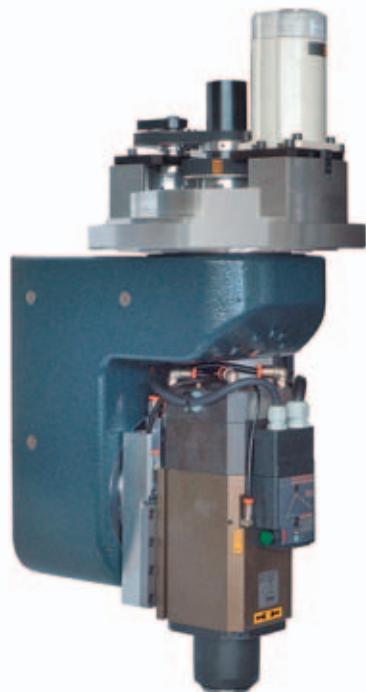
**ES368**  
HSK F63  
Sincrono / Synchronous  
9kW  
20.000 rpm



316 mm

## HS450 – SEMPLICE E AFFIDABILE

## HS450 – USER-FRIENDLY AND RELIABLE

**HS450**

**ELETTROMANDRINI DISPONIBILI**  
AVAILABLE ELECTROSPINDLES

Rotazione Asse C:  $\pm 220^\circ$  o infinita  
Rotazione Asse A:  $\pm 135^\circ$  o  $\pm 120^\circ$  o  $\pm 110^\circ$

Peso: 75kg / 105kg (può variare a seconda dell'elettromandrino)

### SERVOMOTORI DISPONIBILI

Yaskawa - Siemens - Fanuc - Mitsubishi  
Glentek - Schneider

### OPTIONALS

Slip Ring

C axis rotation:  $\pm 220^\circ$  or endless  
A axis rotation:  $\pm 135^\circ$  or  $\pm 120^\circ$  or  $\pm 110^\circ$

Weight: 75kg / 105kg (depending on electrospindle)

### AVAILABLE SERVOMOTORS

Yaskawa - Siemens - Fanuc - Mitsubishi  
Glentek - Schneider

### OPTIONALS

Slip Ring



**ES326**  
HSK E25  
4kW  
40.000 rpm



**ES915**  
HSK F63 / ISO30  
5kW  
24.000 rpm



**ES350**  
HSK E40-F50  
8kW  
36.000 rpm



**ES779**  
HSK F63-A63-E63-F50  
10kW  
24.000 rpm

## HS560 – MASSIMA COPERTURA NEL PIANO DI LAVORO HS560 – MAXIMUM WORKING TABLE COVERAGE

47

Rotazione Asse C:  $\pm 220^\circ$  o infinita  
Rotazione Asse A: infinita

Peso: 85kg / 100kg (può variare a seconda dell'elettromandrino)

**SERVOMOTORI DISPONIBILI**  
Yaskawa - Siemens - Num - Beckhoff

**OPTIONALS**  
Slip Ring

C axis rotation:  $\pm 220^\circ$  or endless  
A axis rotation: endless

Weight: 85kg / 100kg (depending on electrospindle)

**AVAILABLE SERVOMOTORS**  
Yaskawa - Siemens - Num - Beckhoff

**OPTIONALS**  
Slip Ring



**HS560**

**ELETTROMANDRINI DISPONIBILI**  
AVAILABLE ELECTROSPINDLES

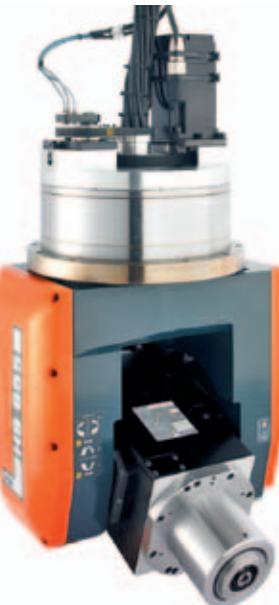


**ES779**  
HSK F63-A63-E63-F50  
13,5kW  
24.000 rpm



**ES362**  
HSK F63  
12kW  
22.000 rpm

## HS655 – DOPPIA SPALLA RIGIDA E COMPATTA HS655 – DOUBLE-COLUMN COMPACT STRUCTURES

**HS655**

Rotazione Asse C:  $\pm 220^\circ$  o infinita  
Rotazione Asse A:  $\pm 120^\circ$

Peso: 90kg / 120kg (può variare a seconda dell'elettromandrino)

### SERVOMOTORI DISPONIBILI

Yaskawa - Siemens - Fanuc - OSAI  
Schneider - Mitsubishi

### OPTIONALS

Slip Ring  
Encoder assi  
Freni pneumatici

C axis rotation:  $\pm 220^\circ$  or endless  
A axis rotation:  $\pm 120^\circ$

Weight: 90kg / 120kg (depending on electrospindle)

### AVAILABLE SERVOMOTORS

Yaskawa - Siemens - Fanuc - OSAI  
Schneider - Mitsubishi

### OPTIONALS

Slip Ring  
Direct Axis Encoder  
Pneumatic brakes an axis

### ELETTROMANDRINI DISPONIBILI AVAILABLE ELECTROSPINDLES



**ES789**  
HSK F63-A63  
16kW  
24.000 rpm



**ES779**  
HSK F63-A63-E63-F50  
13,5kW  
24.000 rpm

Rotazione Asse C:  $\pm 245^\circ$   
Rotazione Asse A:  $\pm 120^\circ$

Peso: 250kg circa (può variare a seconda  
dell'elettromandrino)

**SERVOMOTORI DISPONIBILI**  
Yaskawa, Siemens, Fanuc, OSAI

**OPTIONALS**  
Encoder elettromandrino  
Encoder assi  
Freni pneumatici sugli assi

C axis rotation:  $\pm 245^\circ$   
A axis rotation:  $\pm 120^\circ$

Weight: 250kg about (depending on  
electrospindle)

**AVAILABLE SERVOMOTORS**  
Yaskawa, Siemens, Fanuc, OSAI

**OPTIONALS**  
Spindle Encoder  
Direct Axis Encoder  
Pneumatic brakes on axes



**HS678**

**ELETTROMANDRINI DISPONIBILI**  
**AVAILABLE ELECTROSPINDLES**



**ES789**  
HSK F63-A63  
16kW  
24.000 rpm



**ES798**  
HSK A63  
22 kW  
20.000 rpm

## HS778 – PER APPLICAZIONI PESANTI

## HS778 – FOR HEAVY APPLICATIONS

**HS778**

**ELETTROMANDRINI DISPONIBILI**  
AVAILABLE ELECTROSPINDLES

Rotazione Asse C:  $\pm 262^\circ$   
Rotazione Asse A:  $\pm 120^\circ$

Peso: 300kg circa (può variare a seconda dell'elettromandrino)

### SERVOMOTORI DISPONIBILI

Yaskawa, Bosch, Siemens, Fanuc, OSAI, Num, HEIDENHAIN

### OPTIONALS

Encoder elettromandrino  
Encoder assi  
Freni idraulici sugli assi

C axis rotation:  $\pm 262^\circ$   
A axis rotation:  $\pm 120^\circ$

Weight: 300kg about (depending on electrospindle)

### AVAILABLE SERVOMOTORS

Yaskawa, Bosch, Siemens, Fanuc, OSAI, Num, HEIDENHAIN

### OPTIONALS

Spindle Encoder  
Direct Axis Encoder  
Hydraulic brakes on axis



**ES789**  
HSK F63-A63  
16kW  
24.000 rpm



**ES510**  
HSK A63  
42 kW  
24.000 rpm



**ES793**  
ISO 40  
15 kW  
12.000 rpm



**ES799**  
HSK A63  
30 kW  
24.000 rpm

# SERVOMOTORI CON AZIONAMENTO INTEGRATO

## SERVOMOTORS WITH INTEGRATED DRIVER CONTROL

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### I servo-motori con azionamento integrato SM137

I servo-motori con azionamento integrato nascono all'interno di HSD Division come frutto di una progettazione in cui confluiscono competenze meccaniche ed elettroniche all'avanguardia.

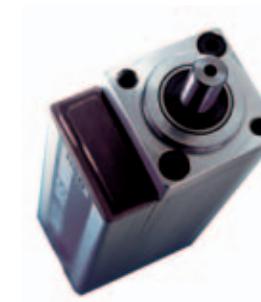
I servo-motori sono dotati di tecnologia brushless integrando al loro interno il Motion Controller, un encoder e varie possibilità di interfaccia verso i bus di campo.

Dispongono di una potenza nominale che va dai 50 Watt del modello SM137 ai 200 Watt del modello SM140 e sono disponibili con diversi rapporti di riduzione.

Alimentazione logica 24V DC +/-10%  
 Alimentazione potenza 24V DC +/-10%  
 Con rapporti di riduzione da 1:6,25 a 1:50  
 Assorbimento alimentazione potenza 68W  
 Con velocità di rotazione da 640 a 80rpm  
 Con riduttore epicycloidale integrato

### SM140

Alimentazione logica 24V DC +/-10%  
 Alimentazione potenza 24V DC +/-10%  
 Con rapporto di riduzione 1:1  
 Assorbimento alimentazione potenza 260W  
 Velocità di rotazione 4000rpm



**SM137**

#### **SM137 1:6.25**

	<b>Max</b>	<b>SI 640 rpm</b>	<b>SI 0 rpm</b>	<b>S5</b>
Coppie / Torque (Nm)	3.19	0.60	1.00	1.18

#### **SM137 1:8**

	<b>Max</b>	<b>SI 640 rpm</b>	<b>SI 0 rpm</b>	<b>S5</b>
Coppie / Torque (Nm)	4.10	0.70	1.32	3.19

#### **SM137 1:25**

	<b>Max</b>	<b>SI 640 rpm</b>	<b>SI 0 rpm</b>	<b>S5</b>
Coppie / Torque (Nm)	12.4	2.10	3.90	4.69

#### **SM137 1:50**

	<b>Max</b>	<b>SI 640 rpm</b>	<b>SI 0 rpm</b>	<b>S5</b>
Coppie / Torque (Nm)	24.8	4.20	6.80	9.4

#### **SM140 1:1**

	<b>Max</b>	<b>SI 640 rpm</b>	<b>SI 0 rpm</b>	<b>S5</b>
Coppie / Torque (Nm)	1.2	0.46	0.57	0.65

### Servomotors with integrated driver control SM137

Servomotors with integrated driver control are specially designed by HSD Division to combine mechanical expertise and advanced electronics.

These brushless servomotors all feature integrated motion controllers, encoders and can interface with the field bus in various way.

The product range includes units with nominal power ratings from 50 Watts for model SM137 to 200 Watts for model SM140. Various gear ratio are also available.

### SM140

Logic feeding 24V DC +/-10%  
 Motor power 24V DC +/-10%  
 Reduction ratio from 1:6,25 to 1:50  
 Power feeding absorption 68W  
 Speed from 640 to 80rpm  
 With epicyclic reduction gear

### SM140

Logic feeding 24V DC +/-10%  
 Motor power 24V DC +/-10%  
 Reduction ratio 1:1  
 Power feeding absorption 260W  
 Speed 4000rpm



**SM140**

## RINVII ANGOLARI E ASSE "C" RIGHT ANGLE HEADS AND "C" AXES

### Fresatura / Milling

Per legno, plastica e alluminio  
For wood, aluminium and plastic.



### Flottante / Floating

Per legno, plastica e alluminio  
For wood, aluminium and plastic.



### "Ponte" / Moulder

Per legno, plastica e alluminio  
For wood, aluminium and plastic.



### Disco Segare Circolare Circular Blade

Per marmo e vetro  
For marble and glass.



### Rinvii Angolari

I Rinvii Angolari per Elettromandrini HSD consentono di eseguire lavorazioni di fresatura, foratura e taglio su un'ampia gamma di materiali, dal Legno al Marmo alla Plastica.

**Disponibili attacchi per tutte le macchine CNC.**

### Right angle heads

HSD Right Angle Head allows milling, boring and cutting operations to be carried out for a wide range of materials as Wood, Plastic, Marble, Aluminium and Glass.

**Available coupling for all CNC machines.**

### Asse C

**Asse C interpolante  
Configurazione Naso Lungo e Corto**

### CAxes

**CAxes interpolating  
Short & Long nose configuration**



Disponibilità con vena d'aria.  
Available with Air Passage.

## PACCHETTO UNICO HSD: ELETTROMANDRINO + ASSE C + RINVIO ANGOLARE “ALL IN ONE” SOLUTION BY HSD: ELECTROSPINDLE + C AXIS + AGGREGATE HEAD

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Solo HSD può offrire una soluzione unica ed intercambiabile formata da Elettromandrino + Asse C + Rinvio Angolare.

- Elevata flessibilità
- Massima versatilità
- Configurazioni intercambiabili

Only HSD can offer you an “All in One” interchangeable solution.  
Electrospindle + C Axis + Aggregate Head.

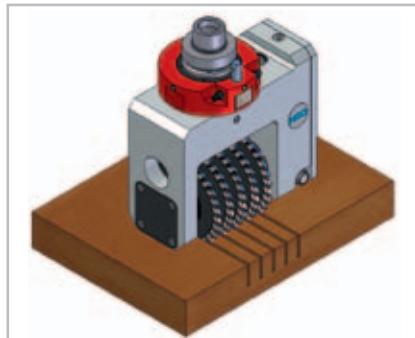
- High flexibility
- Great versatility
- Interchangeable configurations



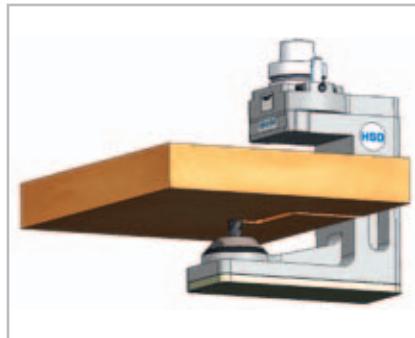
## RINVII ANGOLARI PER FRESCARE AGGREGATE HEAD FOR MILLING



2 uscite utensili. Ideale per scasso serrature.  
2 tool outlets. For door locking, peg-hole drilling,  
channeling, hinge drilling.



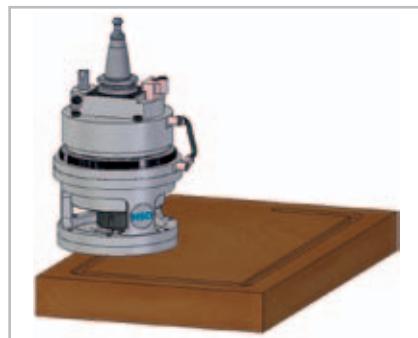
Per tagli, profilazioni e fresature  
speciali sulla superficie del pannello.  
For heavy duty molding or profiling applications. Can  
be equipped with knives, profile cutters, sawblade.



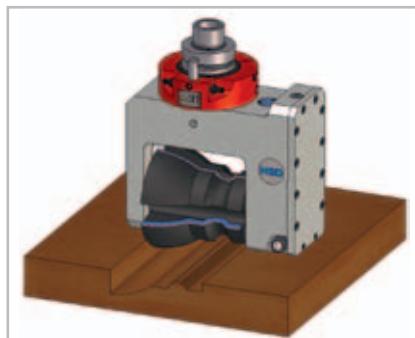
Per lavorazioni da sotto così da evitare  
di capovolgere il pannello.  
For machining underneath of panel,  
avoiding the turning of workpiece.



1 uscita utensile per "Folding" (lavorazioni a "V").  
1 outlet for "Folding" ("V" grooving).



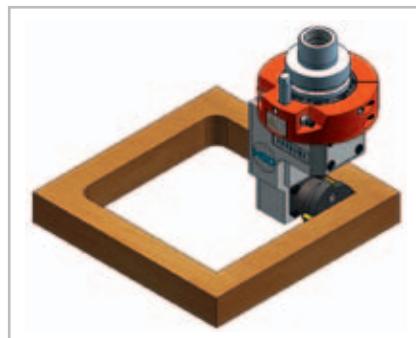
1 uscita utensile flottante a frescare.  
Per fresatura costanti su superfici o bordi irregolari.  
1 Floating outlet for milling, cutting or profiling a  
workpiece with an uneven surface.



Per tagli, profilazioni e fresature  
speciali sulla superficie del pannello.  
For heavy duty molding or profiling applications. Can  
be equipped with knives, profile cutters, sawblade.



1 uscita utensile lama + 1 pinza.  
Per tagli e fresature.  
1 tool outlet for milling + 1 for cutting.  
For peg-hole drilling, chanelling, hinge-drilling.



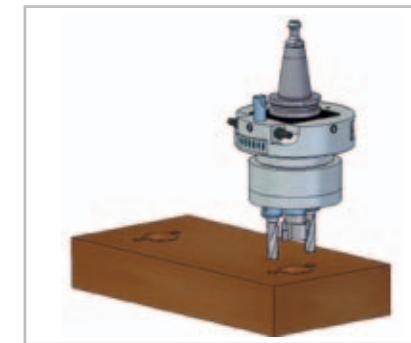
Finitura e squadratura degli  
angoli interni del pannello.  
Corner notching of inside corners.  
Squaring corners of flat panel.

## RINVII ANGOLARI PER FORARE E TAGLIARE AGGREGATE HEAD FOR DRILLING AND CUTTING

55



1 uscita lama + pinza ER25 variabile manualmente. Per fresaure e tagli inclinati.  
1 blade outlet + ER25 collet. For inclined cutting/milling.



3 uscite utensili verticali.  
Ideale per cerniere.  
3 verticals tool outlets.  
Hinge drilling, line boring applications.



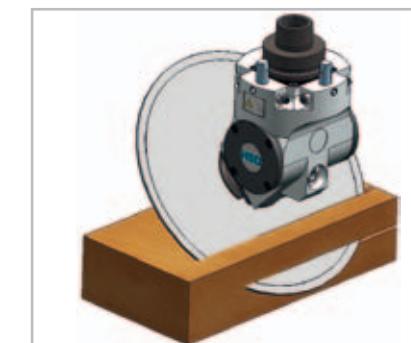
2 uscite a forare + 2 a frescare. Ideale per serramenti e scasso serratura.  
2 boring + 2 milling tool outlets.  
Ideal for door and window frames.



Per tagliare. Utensile lama 270mm.  
For cutting. Blade 270mm.



Per realizzare fori quadri.  
For drilling square holes.



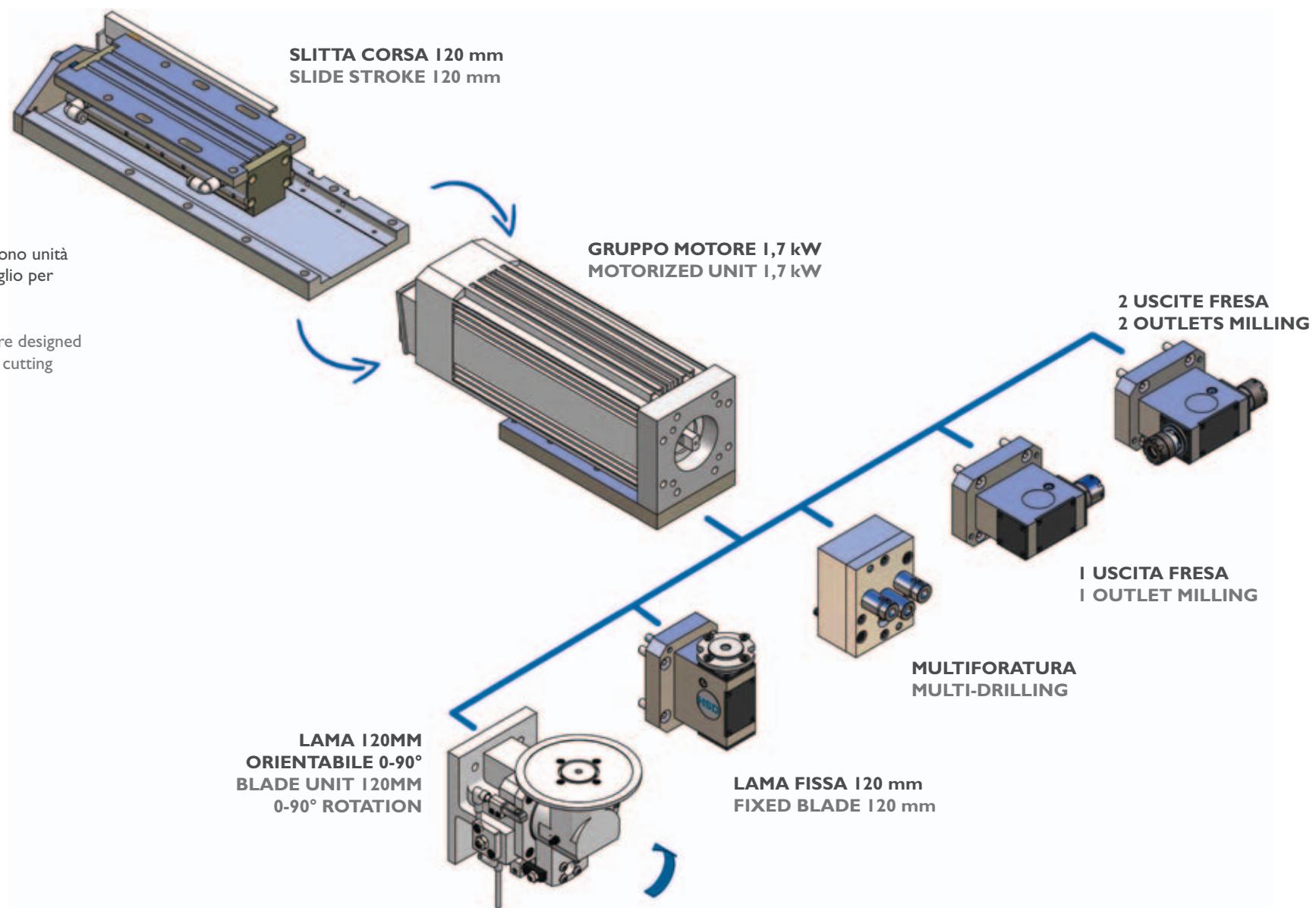
1 uscita lama inclinazione fissa 45°.  
1 fixed blade outlet 45°. For edge bevelling,  
grooving, peg-hole drilling. 2 Ausg. Zange.

## GRUPPI MULTIFUNZIONE INTERCAMBIABILI LEGGERI (1,7kW) INTERCHANGEABLE MULTI-FUNCTIONAL LIGHT UNITS (1,7kW)

I Gruppi Multifunzione da 1,7 kW sono unità dedicate alla fresatura, foratura e taglio per applicazioni medio-leggere.

The 1.7 kW Multifunctional Units are designed for medium-light milling, boring and cutting applications.

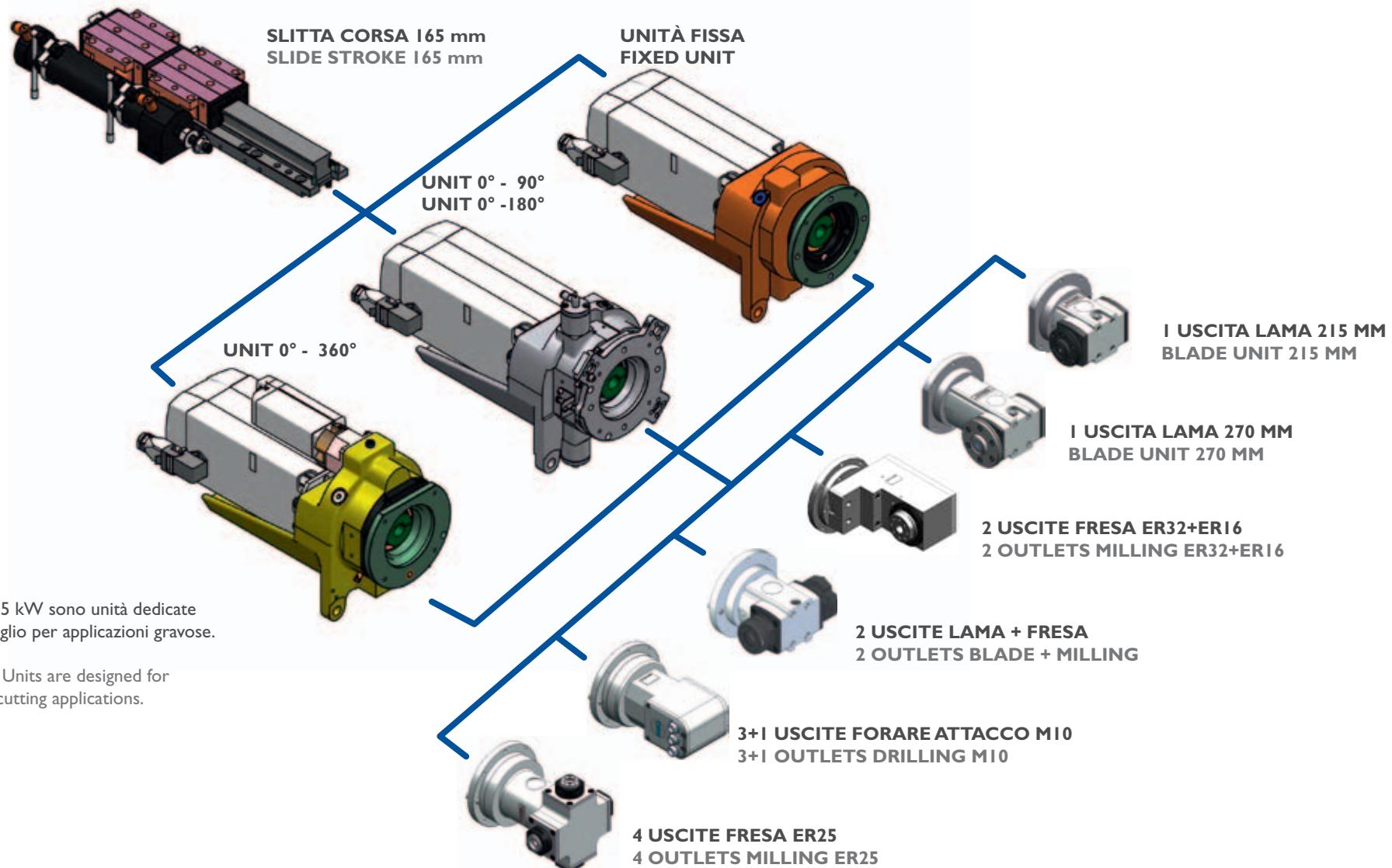
- Flessibilità
- Modularità
- Intercambiabilità
- Flexibility
- Modularity
- Interchangeability



# GRUPPI MULTIFUNZIONE INTERCAMBIABILI PESANTI (5kW)

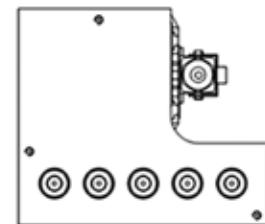
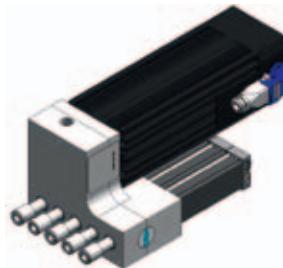
## INTERCHANGEABLE MULTI-FUNCTIONAL HEAVY UNITS (5kW)

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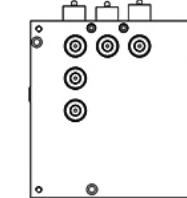
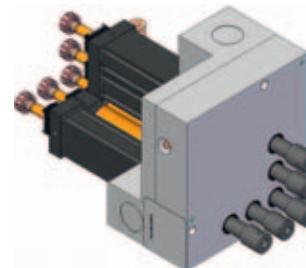


## UNITÀ DI FORATURA A MANDRINI INDIPENDENTI BORING HEADS WITH INDEPENDENT SPINDLES

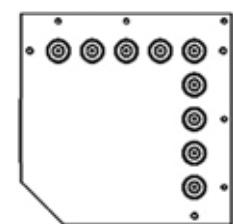
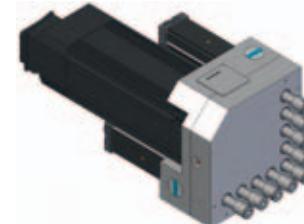
**BH5: B6318B0128**  
5 mandrini verticali  
5 vertical spindles



**H6318H0055**  
5 mandrini verticali  
5 vertical spindles



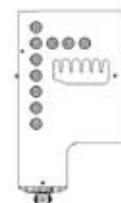
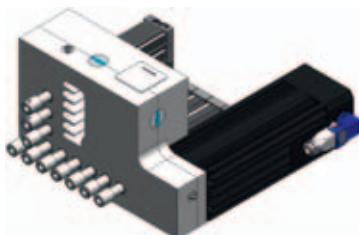
**H6318H0056**  
9 mandrini verticali  
9 vertical spindles



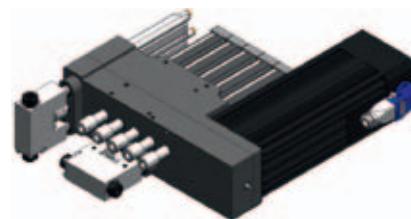
- Motorizzazioni da 1,7kW a 3kW
- Voltaggio 220/380
- Interasse standard mandrini 32 mm
- Pistone a sezione ovale

- Rated Power from 1,7kW to 3kW
- Voltage 220/380
- 32 mm standard spacing between spindles
- Special oval section pistons

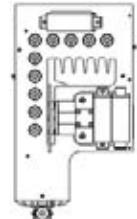
**BH10: H6318H0118**  
10 mandrini verticali  
10 vertical spindles



**BH9: B6318B0129**  
5 mandrini verticali + 2 orizzontali  
5 vertical +2 horizontal spindles



**BH17: H6318H0120**  
10 mandrini verticali + 3 orizzontali + 1 gruppo lama  
10 vertical + 3 horizontal spindles + 1 blade unit

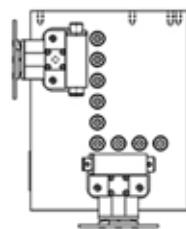
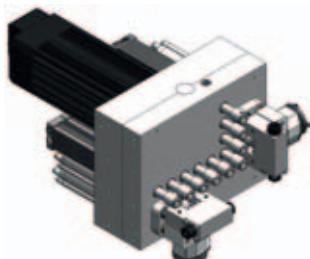


## UNITÀ DI FORATURA A MANDRINI INDIPENDENTI BORING HEADS WITH INDEPENDENT SPINDLES

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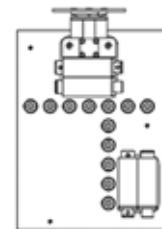
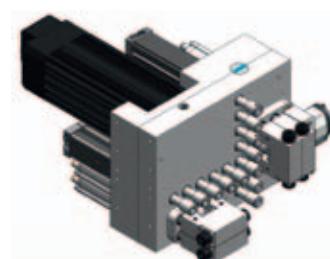
**H6318H0018**

**9 mandrini verticali + 2 orizzontali + 2 gruppo lama**  
9 vertical + 2 horizontal spindles + 2 blade unit



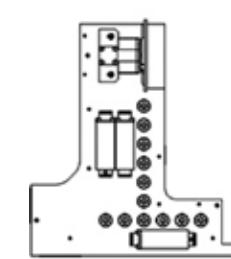
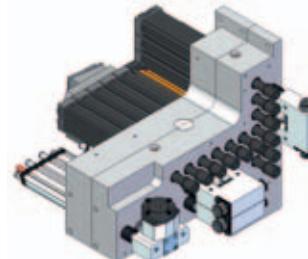
**H6318H0058**

**12 mandrini verticali + 4 orizzontali + 1 gruppo lama**  
12 vertical + 4 horizontal spindles + 1 blade unit



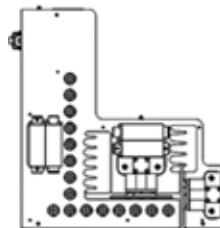
**H631832900**

**12 mandrini verticali + 3 orizzontali + 1 gruppo lama**  
12 vertical + 3 horizontal spindles + 1 blade unit



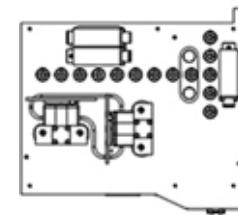
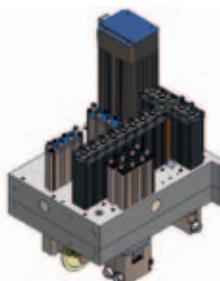
**BH26: H6318H0122**

**16 mandrini verticali + 4 orizzontali + 2 gruppo lama**  
16 vertical + 4 horizontal spindles + 2 blade unit



**H631827300**

**14 mandrini verticali + 3 orizzontali + 2 gruppo lama**  
14 vertical + 3 horizontal spindles + 2 blade unit



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