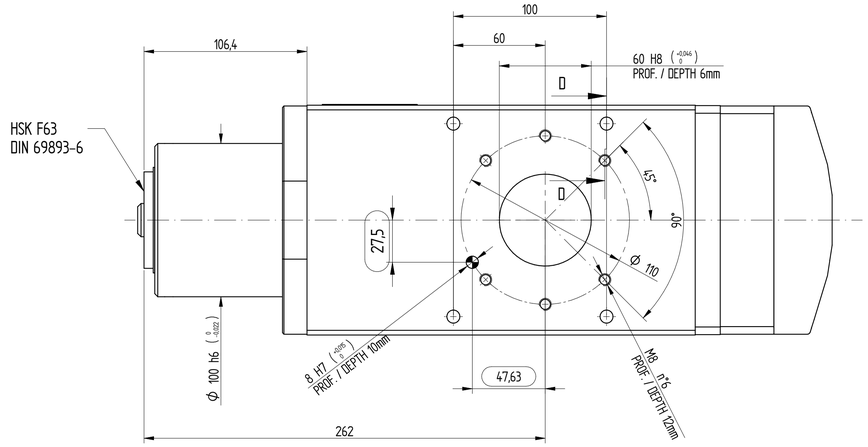
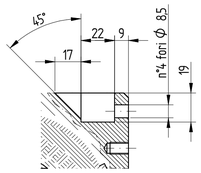
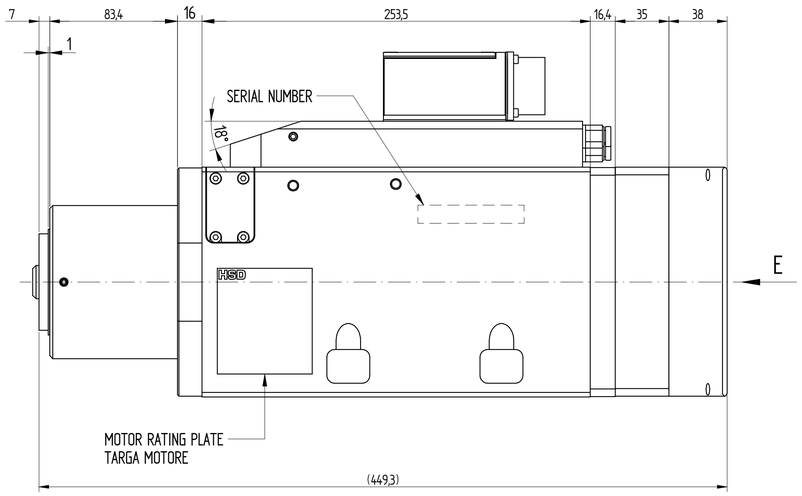


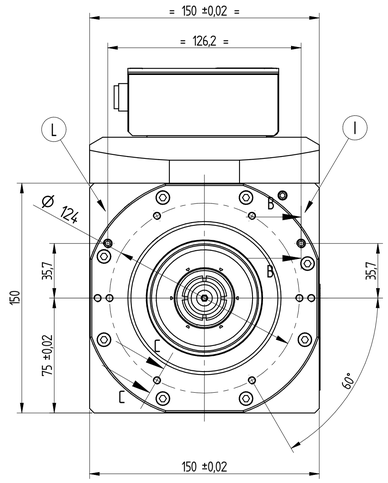


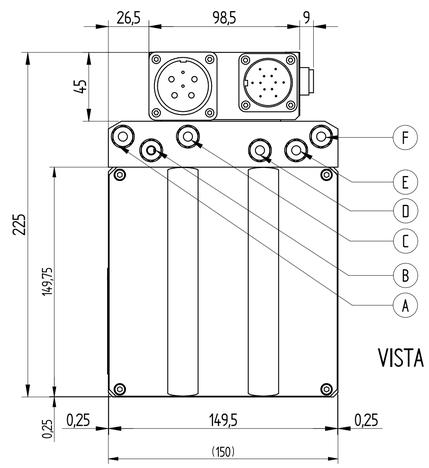
SEZIONE D-D

SENSORS AND THEIR BEHAVIOR / SENSORI E LORO COMPORTAMENTO						
SENSORS	/ SENSORI					
S1	*DRAWBAR POSITION: TOOL PRESENT*	PRESENZA UTENSILE				
S1+S4	*DRAWBAR POSITION: TOOL CORRECTLY CLAMPED*	UTENSILE CORRETTAMENTE AGGANCIATO				
S2	*DRAWBAR POSITION: TOOL UNCLAMPED*	UTENSILE ESPULSO				
S3	*SHAFT STOPPED (2 CPR)*	CONTAIMPULSI (2 IMPULSI PER GIRO)				
POSITION	/ POSIZIONE		S1	S4	S1+S4	S2
P1	*TOOL UNCLAMPED*	UTENSILE ESPULSO	0	0	0	1
P2	*TOOL CLAMPED*	UTENSILE AGGANCIATO	1	1	1	0
P3	*CLAMPED WITHOUT TOOL OR TOO LONG / TOO SHORT TOOL CLAMPED*	ASSENZA UTENSILE O UTENSILE TROPPO LUNGO/CORTO	0/1	0/1	0	0

UTENZE PNEUMATICE E IDRAULICHE PENUMATIC & HYDRAULIC CONNECTIONS	
RIF	**DESCRIZIONE / DESCRIPTION**
A	Ø6 - Ingresso liquido refrigerante utensile / Tool cooling liquid inlet
B	Ø6 - Ingresso liquido refrigerante utensile / Tool cooling liquid inlet
C	Ø6 - Ingresso liquido refrigerante elettromandrino / Electrospindle cooling liquid inlet
D	Ø6 - Uscita liquido refrigerante elettromandrino / Electrospindle cooling liquid outlet
E	Ø6 - 4bar - Ingresso aria pressurizzazione e pulizia cono / Pressurization and cone cleaning air inlet
F	Ø6 - 10bar - Ingresso/uscita aria per cambio utensile / Tool release air I/O







VISTA DA E

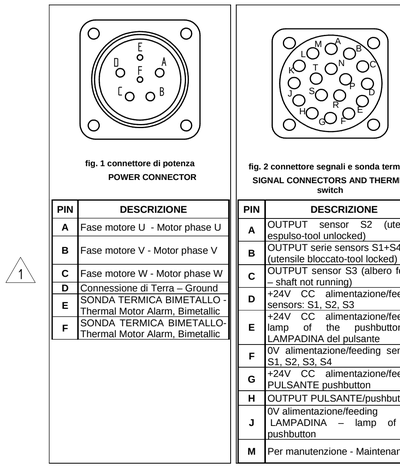


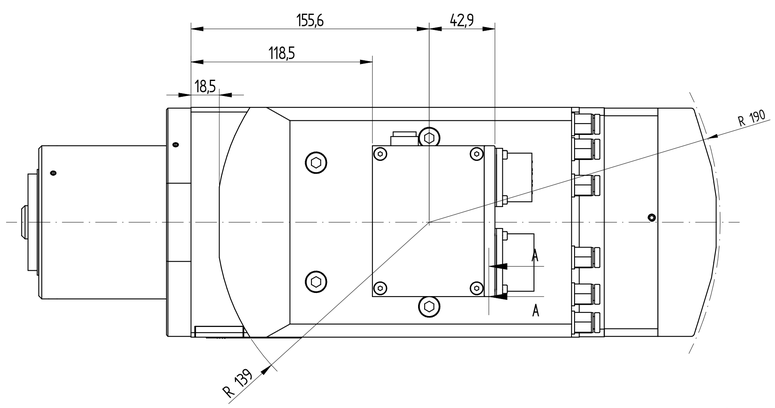
fig. 1 connettore di potenza
POWER CONNECTOR

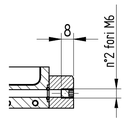
PIN	DESCRIZIONE
A	Fase motore U - Motor phase U
B	Fase motore V - Motor phase V
C	Fase motore W - Motor phase W
D	Connessione di Terra – Ground
E	SONDA TERMICA BIMETALLO - Thermal Motor Alarm, Bimetallic
F	SONDA TERMICA BIMETALLO- Thermal Motor Alarm, Bimetallic

fig. 2 connettore segnali e sonda termica
SIGNAL CONNECTORS AND THERMIC switch

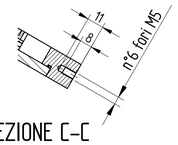
PIN	DESCRIZIONE
A	OUTPUT sensor S2 (utensile espulso-tool unlocked)
B	OUTPUT serie sensors S1+S4 (utensile bloccato-tool locked)
C	OUTPUT sensor S3 (albero fermo – shaft not running)
D	+24V CC alimentazione/feeding sensors: S1, S2, S3
E	+24V CC alimentazione/feeding lamp of the pushbutton - LAMPADINA del pulsante
F	0V alimentazione/feeding sensors S1, S2, S3, S4
G	+24V CC alimentazione/feeding PULSANTE pushbutton
H	OUTPUT PULSANTE/pushbutton
J	0V alimentazione/feeding LAMPADINA – lamp of the pushbutton
M	Per manutenzione - Maintenance

CONNETTORI FEMMINA FORNITI A CORREDO
FEMALE CONNECTOR INCLUDED

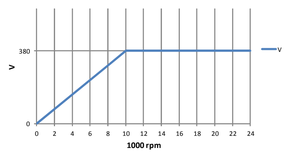


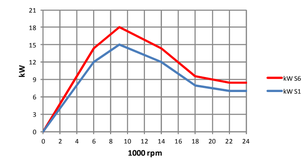


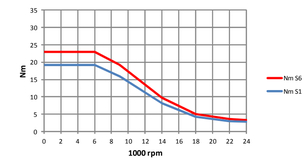
SEZIONE B-B



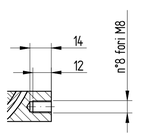
SEZIONE C-C



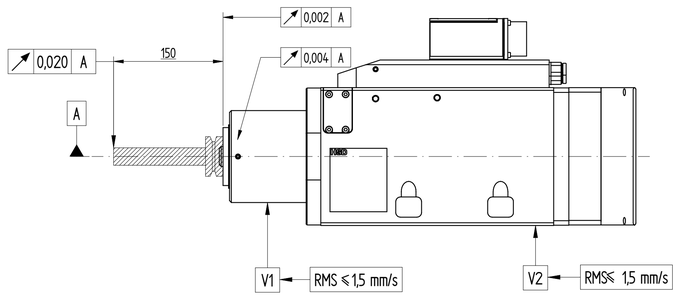




DATASHEET / SCHEDA MOTORE		
TOOL-HOLDER TYPE	TIPO PORTAUTENSILE	HSK F63
WEIGHT	PESO	~37 kg
ROTATION	VERSO DI ROTAZIONE	↻ ↺
ROTOR INTERTIA	INERZIA ROTORICA	3,8*e-03 kg*m²
WORKING POSITION	POSIZIONE DI LAVORO	↕ ↔
BEARINGS LUBRICATION	LUBRIFICAZIONE CUSCINETTI	*Grease* / Grasso
MOTOR COOLANT	REFRIGERANTE MOTORE	Liquid / Liquido
TOOL BALANCING LEVEL	GRADO DI EQUILIBRATURA UTENSILI	G1 (max 0.02 g)
MOTOR TYPE	CLASSIFICAZIONE MOTORE	*Three-phase asynchronous As* incrono trifase
RATED POWER	POTENZA NOMINALE	15 Kw
RATED TORQUE	COPPIA NOMINALE	15,9 Nm
RATED VOLTAGE	TENSIONE NOMINALE	380 V
RATED CURRENT	CORRENTE NOMINALE	32 A
RATED SPEED	VELOCITA' NOMINALE	9'000 RPM
MAX SPEED	VELOCITA' MASSIMA	24'000 RPM
EFFICIENCY	RENDIMENTO	0,84
POWER FACTOR	FATTORE DI POTENZA	0,87
POLES NUMBER	NUMERO DI POLI	4
INSULATION CLASS	CLASSE DI ISOLAMENTO	F
INDEX PROTECTION	GRADO DI PROTEZIONE IP	54



SEZIONE A-A



Tensione nominale (*)	Nennspannung (*)	*Rated voltage (*)*	**V**	253		380		380		380		380	
Frequenza nominale	Nennfrequenz	*Rated frequency*	**Hz**	200		300		467		600		800	
Velocità nominale	Nominale Geschwindigkeit	*Rated speed*	**rpm**	6000		9000		14000		18000		24000	
Tipo di servizio	Betriebsart	*Duty type*		S1 cont	***S6 60%***	S1 cont	***S6 60%***	S1 cont	***S6 60%***	S1 cont	***S6 60%***	S1 cont	***S6 60%***
Potenza nominale	Nennleistung	*Rated power*	**kW**	12	***14,4***	15	***18***	12	***14,4***	8	***9,6***	7	***8,4***
Coppia nominale	Nenndrehmoment	*Rated torque*	**Nm**	19,1	***22,9***	15,9	***19,1***	8,2	***9,8***	4,2	***5,1***	2,8	***3,3***
Corrente nominale	Nennstrom	*Rated current*	**A**	37,4	***44,0***	32,0	***38,0***	24,5	***28,5***	16,0	***19,5***	14,0	***17,0***

REPRODUZIONE E/O DIFFUSIONE VIETATA
REPRODUCTION AND OR DISCLOSURE OF THE DRAWING IS FORBIDDEN

REV.	DESCRIZIONE REVISIONE / *REVISION DESCRIPTION*	N°REV	DATA / *DATE*	FIRMA / *SIGN*
		--		
		--		
1	Ins.inid.su sonda termica motore/Pinout potenza allineato alla realtà.	1	27/6/2016	L.B.

	DISEGNATO / *DRAWN BY*	CONTROLLATO / *CHECKED BY*	APPROVATO / *APPROVED*
DATA / *DATE*	19/04/2016	20/04/2016	
FIRMA / *SIGN*	Bernabucci L.	Bugari M.	

PESO / *WEIGHT* :
GREZZO DI / *RAW* :

HSD DIVISION

SCALA / *SCALE* : 1:2 — FOGLIO / *SHEET* : 1 / 1 — A1

QUOTE SENZA INDICAZIONE DI TOLLERANZA *POSITIONS WITHOUT TOLERANCE INFORMATION*
- LAVORAZIONI MECCANICHE / *MECHANICAL WORKINGS* :
- SALDOCARPENTERIE / *WELDMENT* :
- GETTI / *MELT CASTING* :

MATERIALE / MATERIAL :
TRATTAMENTO TERMICO / HEAT TREATMENT :
RIVESTIMENTO SUPERFICIALE / SURFACE TREATMENT :
CICLO DI VERNICIATURA / *PAINTING CYCLE* :

DENOMINAZIONE / DESCRIPTION : DIM.ES789LF6L-1509S24CCG-BSXM

CODICE ARTICOLO / *ARTICLE CODE* : 6161H1483 — REVISIONE / *REVISION* : 1