

## Technical specification

**Model** 9C53300E000001M00  
**MRP code** 68881501

### Motor parameters

Continuous stall torque	Mo	1	18.4	Nm
Peak stall torque	Mmax	2	55.2	Nm
Rated torque	Mn @ nN	1	12.4	Nm
Rated speed	nN		3000	rpm
Rated frequency	fN		250	Hz
Number of motor poles	p		10	

### Winding specifications

Torque constant	KTo_cold	2-3-5	1.69	Nm/A
Voltage constant	KE	2-3-4	0.97	Vs/rad
Resistance between phases [Ω]	R	2-3	0.64	Ohm
Inductance between phases [mH]	L	6	10.0	mH
Continuous current @ Mo	Io	1-5	12.4	A
Current @ Mmax	Imax	2-5	41.3	A
Rated current @ Mn	In	1-5	8.8	A
Bemf between phases @ nN	Ephph	2-3-4	306	V

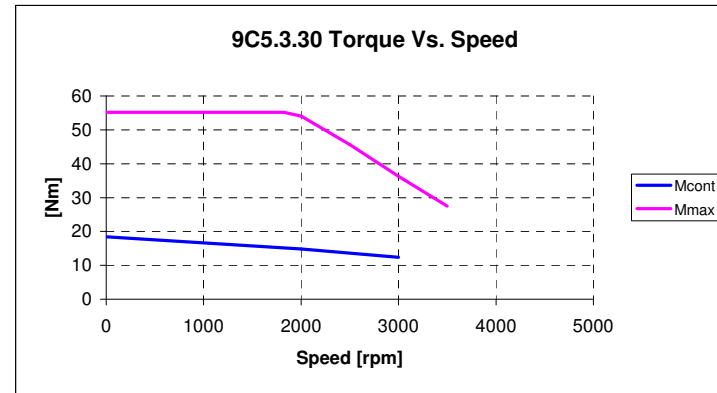
### Mechanical parameters

Moment of inertia of rotor	JM	7	31.6	kg.cm <sup>2</sup>
Mass of the motor	M	7	20.0	kg
Protection degree (body only)	-		IP65	

#### Notes:

- 1) Average motor windings over temperature 100 °C, ambient temperature 40 °C, flange mounted (300x300x20 steel)
- 2) All motor parts at 20 °C
- 3) Tolerance +/-10%
- 4) Vrms between phases
- 5) Arms
- 6) Tolerance +/-15%
- 7) Motor without brake

All values have been calculated



#### Notes:

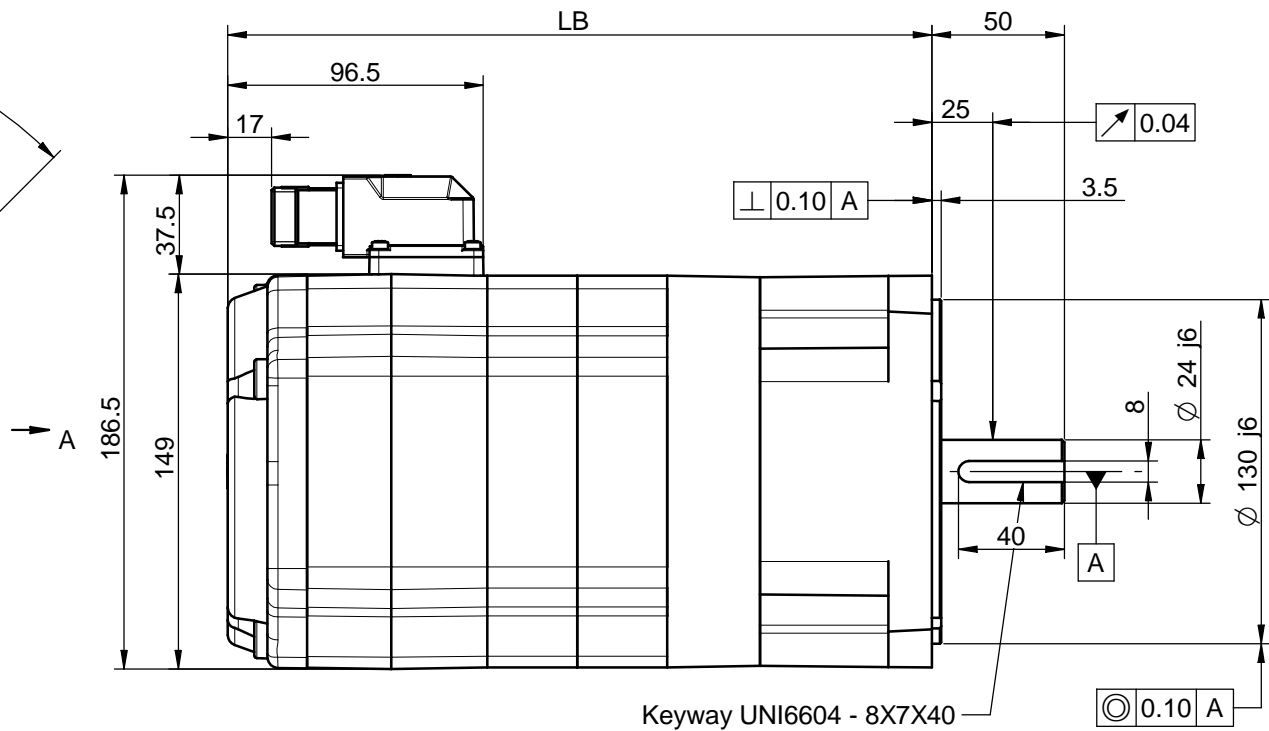
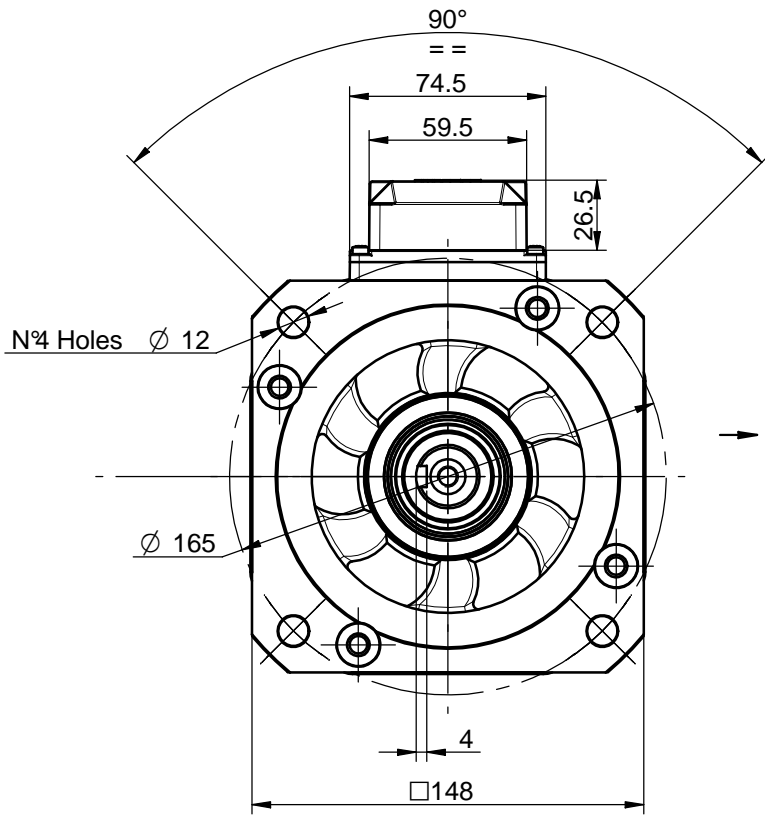
DC bus voltage: 565 Vdc (AC 400 V supply)  
 Max torque curve may depend on actual DC bus voltage.

#### Transducer type

Endat EQN 1325, 1Vpp, 512 ppr  
 Sin/Cos Nr.: 512  
 Interface: EnDat  
 Rev. Count Bits: 12  
 Pos. Count Bits: 13

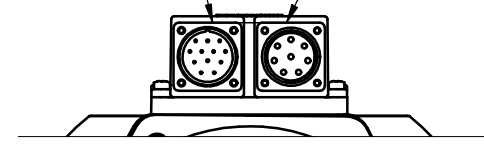
Motor overall dimensions on next page

See motor quick guide for additional information on installation, connections and transducers.

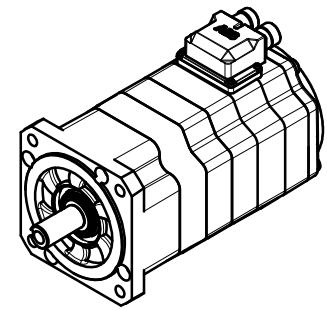


Keyway UNI6604 - 8X7X40

Signal Connector (17 pins) — Power Connector (8 pins)



View A



NOTES:

- 1) This drawing refers to 9C5.2 motor equipped with brake and encoder.
- 2) Dimensions may be subject to changes.
- 3) All motors balanced with half-key, full key in package.

Motor Size	LB [mm]
9C5.2	266
9C5.3	300
9C5.4	334
9C5.6	402

(A) - 24/09/08 - Modified dimensions in table, updated drawing  
(B) - 12/11/08 - Removed 32X58 shaft option

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C	D	E	F	G	H
I	L	MODIFICHE			

<p>ABB S.p.A.</p>	<p>QUOTE SENZA INDICAZIONE DI TOLLERANZA GRADO DI PRECISIONE SECONDO UNI 5307-63</p>	<p><input type="checkbox"/> GROSSOLANO <input type="checkbox"/> MEDIO <input type="checkbox"/> PRECISO</p>	<p>SCALA DATA 1:2 22/10/2007</p>
	<p>DENOMINAZIONE</p> <p><b>9C5 Motor Overall Dimensions</b></p>	<p>LAVORAZIONI</p> <p>0.2 ✓ = ✓ 0.8 ✓ = ✓ 3.2 ✓ = ✓ 12.5 ✓ = ✓ ✓ = ~</p>	<p>DISEGN. CONTROL. PGS Ing. Secondo</p>
<p>MATERIALE</p>	<p>PROTEZ. SUPERFICIALE</p>	<p>PESO</p>	<p>DISEGNO NR. 15.27050</p>

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