

AC synchronous spindle motors

HV series

From 4 to 50 kW



Description

The HV series are permanent magnet synchronous motors used for machine tools spindle of traditional type (lathes, grinding machines, milling machines).

The control of synchronous technology gives the possibility to reach a speed range ratio at constant power up to 10.

Moreover the HV series present the same characteristics at low speed as an axis servo motor : high torque to weight ratio, low inertia, high torque at low speed...

Speed up to 8000 rpm

Torque from 17 to 240N.m

Robust and compact design

Speed range ratio at constant power up to 10

High torque at low speed

Low inertia for high acceleration, fast changes in speed for reduced tool changing time

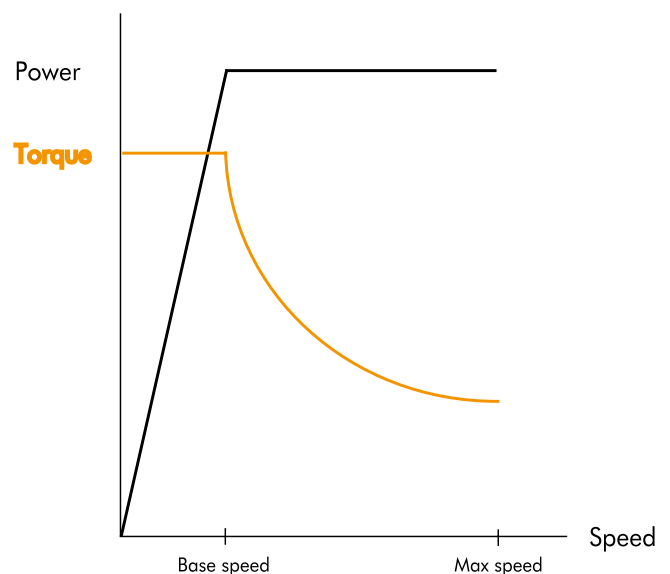
IP 54 protection

Class F Insulation

Technical specifications - 400V power supply

Motor	Torque S1/S6 (N.m)	Power S1/S6 (²) (kW)	Permanent current at low speed (ARMS)	Base/max speed (rpm)	Inertia (kgm²)
HV820EZ	17/20.4	4.3/5.1	8.7	2390/8000	0.0035
HV830EM	25/30	9/10.7	16.9	3400/8000	0.0049
HV840EM	32/38.4	9/10.7	16.1	2660/8000	0.0063
HV930EQ	63.6/70	10/11	19.9	1480/7000	0.018
HV930EI	64/72.5	14.5/16.5	30.5	2170/7000	0.018
HV950EQ	95	10	21.8	1020/7000	0.029
HV950EK	95	15.6	33.2	1570/7000	0.029
HVA30JO	149	16.4	35.1	1050/6000	0.027
HVA30JH	140/157	28/32	60.8	1940/6000	0.027
HVA40JH	200	31	66.4	1500/6000	0.035
HVA40JG	200/240	31/37	75.7	1480/6000	0.035
HVA50JH	250	31	64.9	1180/6000	0,043
HVA50JE	210/237	41/47	82.0	1880/6000	0,043

(²) 540V bus Voltage



Synchronous spindle motors

HV series

From 4 to 50 kW



Selection and ordering

2

AC Synchronous spindle motors	Product code											
	H	V	8	3	0	E	M	R	9	0	0	0
PRODUCT SERIES												
HV : Permanent magnet synchronous motors	H	V										
FRAME + LENGTH												
see motors table			■	■	■							
SPEED CHARACTERISTICS												
(see motors data tables)						■		■				
CONNECTION												
Terminal box (standard)										9	0	
Connectors socket										8	0	
MECHANICAL												
Smooth shaft (standard)											0	0
Other shaft dimensions											■	■

AC synchronous spindle motors

HV series

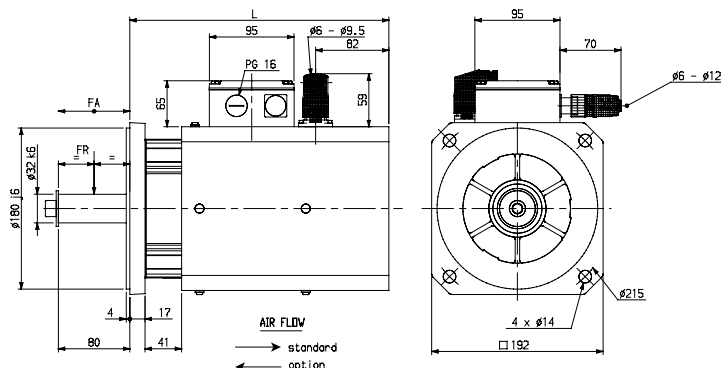
From 4 to 50 kW



HV8 dimensions

Motor	L (mm)	Weight (kg)	Fr* (daN)	Fa* (daN)
HV820E	290	21	110	18
HV830E	333	26	120	21
HV840E	374	30	125	25

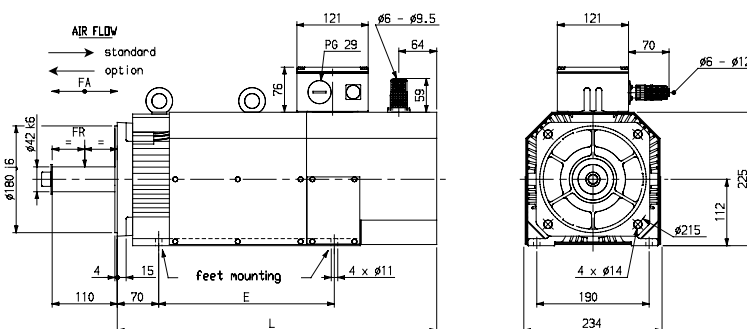
*Fr and Fa not cumulative ; at 3000 rpm



HV9 dimensions

Motor	L (mm)	E (mm)	Weight (kg)	Fr* (daN)	Fa* (daN)
HV920E	416	171	51	240	40
HV950E	516	271	69	270	45

*Fr and Fa not cumulative ; at 3000 rpm



HVA dimensions

Motor	L (mm)	E (mm)	Weight (kg)	Fr* (daN)	Fa* (daN)
HVA30J	582	271	100	530	100
HVA40J	660	349	110	550	100

*Fr and Fa not cumulative ; at 3000 rpm

