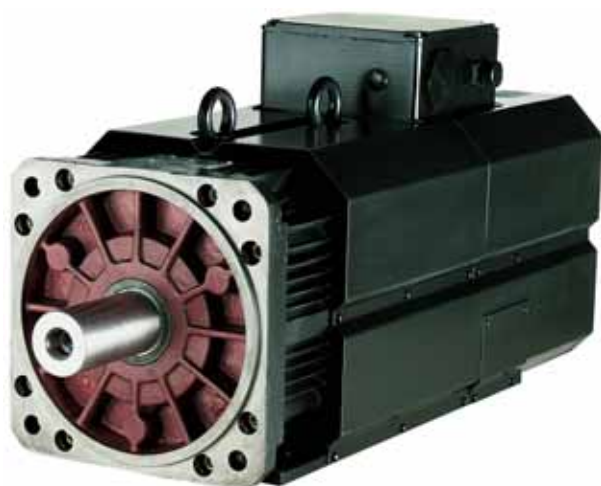


HV SPINDLE SERVO MOTORS 4 to 50kW

The HV series are permanent magnet synchronous motors used for machine tool 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, RAPID CHANGES IN SPEED FOR REDUCED TOOL CHANGING TIME

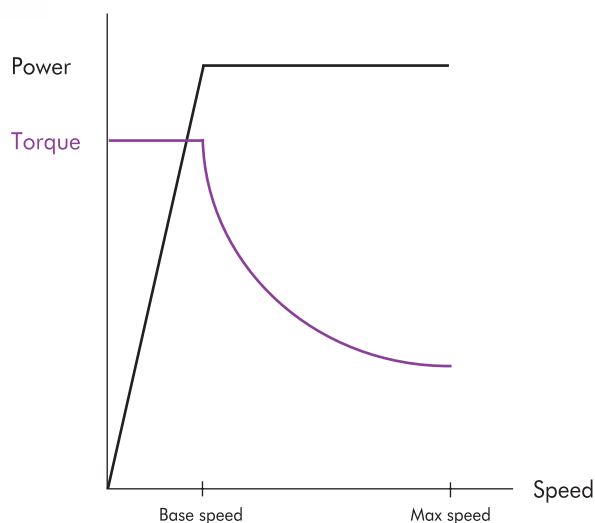
IP 54 PROTECTION

CLASS F INSULATION

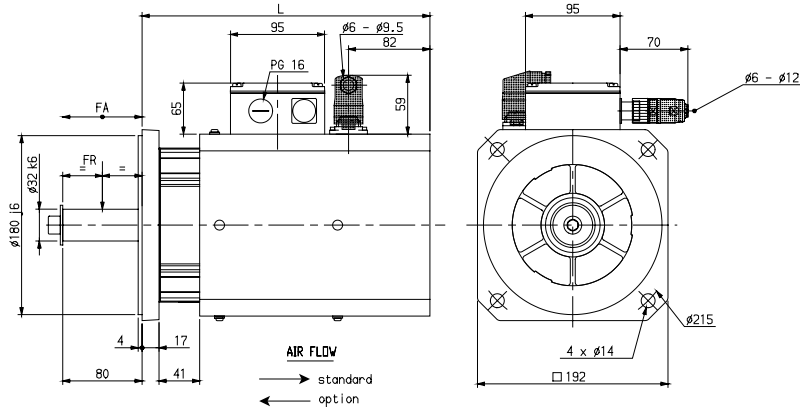
HV - 400V power supply					
Motor	DIGIVEX ⁽¹⁾ Drive Ratings	Torque S1/S6 (N.m)	Power S1/S6 ⁽²⁾ (kW)	Base/Max speed (rpm)	Inertia (kgm ²)
HV820EZ	16/32	17/20.4	4.3/5.1	2390/8000	0.0035
HV830EM	32/64	25/30	9/10.7	3400/8000	0.0049
HV840EM	32/64	32/38.4	9/10.7	2660/8000	0.0063
HV930EQ	32/64	63.6/70	10/11	1480/7000	0.018
HV930EL	50/80	64/72.5	14.5/16.5	2170/7000	0.018
HV950EQ	32/64	95	10	1020/7000	0.029
HV950EK	50/80	95	15.6	1570/7000	0.029
HVA30JO	50/80	149	16.4	1050/6000	0.027
HVA30JH	100/120	140/157	28/32	1940/6000	0.027
HVA40JH	100/120	200	31	1500/6000	0.035
HVA40JG	150/150	200/240	31/37	1480/6000	0.035

(1) 400V supply voltage

(2) 540V bus voltage



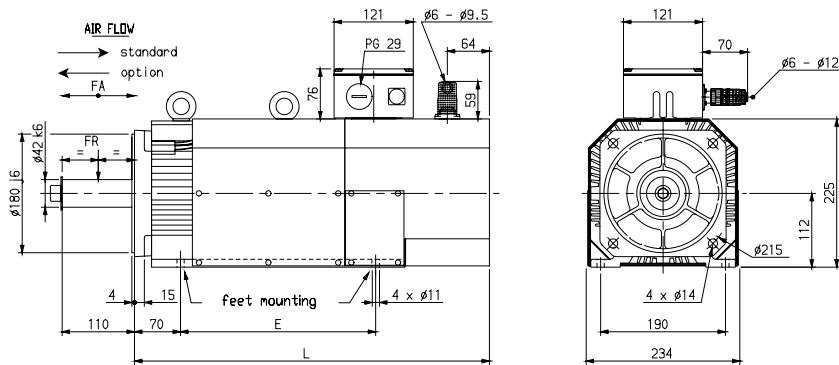
SERVO MOTORS



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

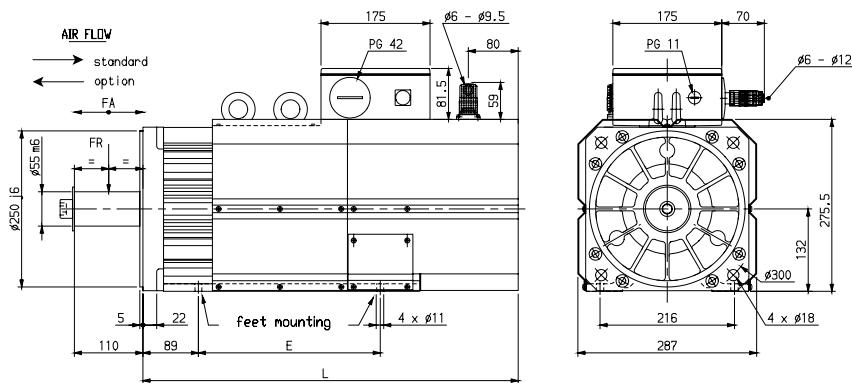
*Fr and Fa not cumulative ; at 3000 rpm



HV9.. dimensions

Motor	L (mm)	E (mm)	Weight (kg)	Fr* (daN)	Fa* (daN)
HV930E	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 1500 rpm

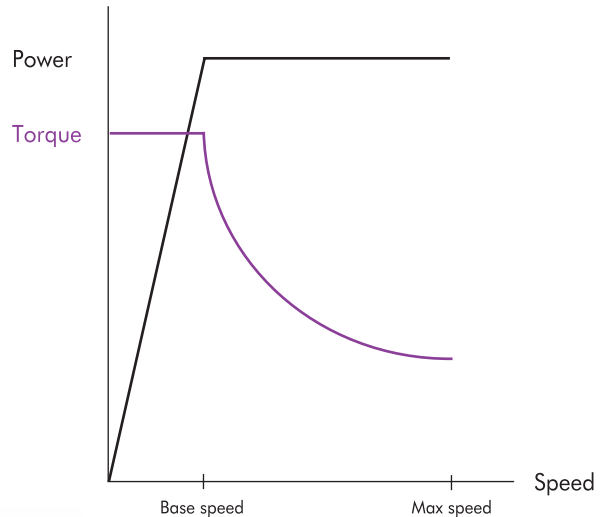
HW ELECTROSPINDLE SYNCHRONOUS MOTORS

2 to 110kW

The HW range of synchronous electrospindle motors has been developed with the aim of solving the problems met in high speed machining.

Compared to conventional asynchronous motors, the HW motors have decisive advantages for quality spindle construction : machining of higher precision, longer bearing lifetime, greater acceleration capacity, higher compactness...

Controlled by the DIGIVEX Drive, the water cooled HW permanent magnets synchronous motors offer torque from 4 to 1250 Nm for speed up to 50000 rpm.



**PERMANENT MAGNETS,
COLD ROTOR TECHNOLOGY**

**LOW INERTIA AND HIGHER
COMPACTNESS COMPARED TO
ASYNCHRONOUS SOLUTION**

**HIGH TORQUE AT LOW SPEED AND
SPEED AT CONSTANT POWER
UP TO 50000 RPM**

**SPEED RANGE RATIO AT CONSTANT
POWER UP TO 10**

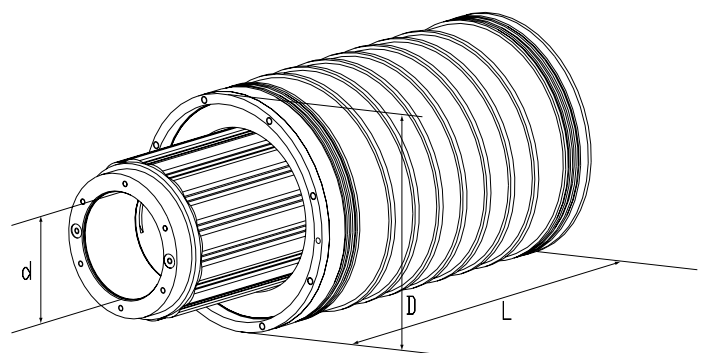
TORQUE FROM 4 TO 1250 N.M

INCREASED MACHINING PRECISION

BETTER SURFACE FINISHING

**HIGH ACCELERATION/DECELERATION
FOR RAPID CYCLES**

REDUCED MAINTENANCE



HW - 400V power supply

Motor	DIGIVEX ⁽¹⁾ Drive Rating	Torque S1/S6 (N.m)	Power S1/S6 ⁽²⁾ (kW)	Base/Max speed (rpm)	Inertia (kgm ²)	Weight (kg)	Dimensions		
							L	D	d
HW420BU	8/16	4.2	2.3	5230/50000	0.00049	3.9	143	100	32
HW420BP	16/32	4.2	5	11250/50000	0.00049	3.9	143	100	32
HW420BK	32/64	4.2	10	23200/50000	0.00049	3.9	143	100	32
HW430BQ	16/32	6.7	4.7	6700/50000	0.00068	5.2	176	100	32
HW430BL	32/64	6.7	10	14300/50000	0.00068	5.2	176	100	32
HW430BI	50/80	6.7	15.6	22300/50000	0.00068	5.2	176	100	32
HW620CN	16/32	8.3/10	4/4.9	4680/30000	0.0017	6.5	159	130	40
HW620CI	32/64	8.3/10	8.6/10.4	9930/30000	0.0017	6.5	159	130	40
HW635CI	32/64	15/18	8.5/10	5410/30000	0.003	11	219	130	40
HW635CF	50/80	15/18	13/15.6	8270/30000	0.003	11	219	130	40
HW820RR	32/64	21.5/26	7.3/8.8	3230/24000	0.007	8	189	180	60
HW820RP	50/80	21.5/26	11.6/14	5140/24000	0.007	8	189	180	60
HW820CR	32/64	25.8/31	8.6/10.3	3170/18000	0.007	8	189	180	60
HW820CP	50/80	25.8/31	13.4/16	4960/18000	0.007	8	189	180	60
HW840CR	32/64	57.3/66	8.5/10	1420/18000	0.0137	16	269	180	60
HW840CP	50/80	57.3/66	13.6/16	2270/24000	0.0137	16	269	180	60
HW840CH	100/120	57.3/66	28/32	4700/24000	0.0137	16	269	180	60
HW840CF	150	57.3/70	36/44	6020/24000	0.0137	16	269	180	60
HW930CI	100/120	102	34	3180/20000	0.034	35	302	220	70
HW930CF	150	102	52	4870/20000	0.034	35	302	220	70
HW930CC	300	102	100	9500/20000	0.034	35	302	220	70
HW930CJ	100/120	112	30	2600/20000	0.034	35	302	220	70
HW930CE	200	112	63	5330/20000	0.034	35	302	220	70
HW950CI	100/120	170	33	1880/20000	0.055	58	422	220	70
HW950CF	150	170	52	2920/20000	0.055	58	422	220	70
HW950CC	300	170	105	5900/20000	0.055	58	422	220	70
HW950CJ	100/120	186	30	1540/20000	0.055	58	422	220	70
HW950CE	200	186	63	3240/20000	0.055	58	422	220	70
HWA30DN	50/80	260	15	550/12000	0.142	70	355	270	106
HWA30DF	100/120	260	32	1190/12000	0.142	70	355	270	106
HWA30DD	150	260	50	1820/12000	0.142	70	355	270	106
HWA30DC	200	260	67	2460/12000	0.142	70	355	270	106
HWA30DB	300	260	100	3710/12000	0.142	70	355	270	106
HWA50DG	100/120	430/510	22/26	490/12000	0.235	120	505	270	106
HWA50DF	100/120	430	31	690/12000	0.235	120	505	270	106
HWA50DD	150	430	49	1080/12000	0.235	120	505	270	106
HWA50DC	200	430	67	1480/12000	0.235	120	505	270	106
HWA50DB	300	430	100	2250/12000	0.235	120	505	270	106
HWB20HH	150	575	46	770/8000	0.35	120	339	340	152
HWB20HD	300	575	95	1580/8000	0.35	120	339	340	152
HWB20HJ	150	600/710	37/44	590/8000	0.35	120	339	340	152
HWB20HE	300	600/710	77/91	1220/8000	0.35	120	339	340	152
HWB30HH	150	860	45	500/8000	0.49	170	439	340	152
HWB30HD	300	860	95	1050/8000	0.49	170	439	340	152
HWB30HJ	150	940/1070	35/40	360/8000	0.49	170	439	340	152
HWB30HE	300	940/1070	76/87	775/8000	0.49	170	439	340	152
HWB40HH	150	1150	44	365/8000	0.64	220	539	340	152
HWB40HD	300	1150	94	780/8000	0.64	220	539	340	152
HWB40HJ	150	1250/1400	34/38	260/5800	0.64	220	539	340	152
HWB40HE	300	1250/1400	75/84	573/8000	0.64	220	539	340	152
HWB40HF	300	1250/1500	62/74	475/8000	0.64	220	539	340	152

(1) 400V supply voltage

(2) 540V bus voltage