



SERVOGEAR AL
Planetary gears



Servogear AL



The economically efficient gearbox in compact design!

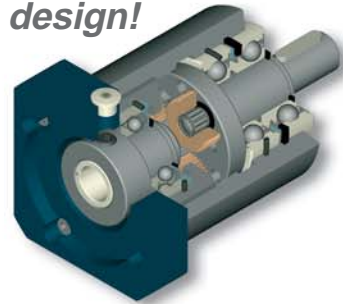
- large gear reduction range up to 1 : 100
- high reliability and overload safety
- low running noise



- optimal efficiency > 95 %

- lifetime lubrication

- easy direct attachment of motor



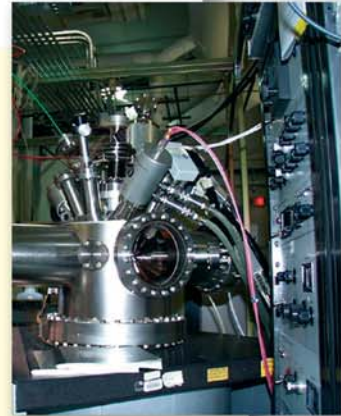
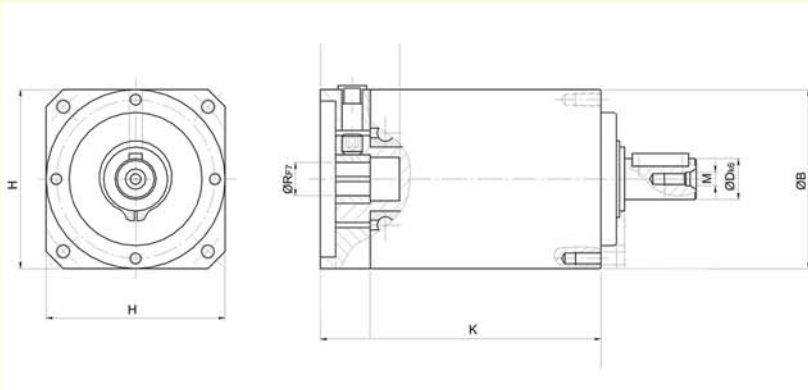
Typical Applications

- carousel indexing tables
- wafer polishing & handling
- robot axes positioning
- bead winders
- servo control tool
- conveyor drives

Industries

- machine Tool
- metal Forming
- packaging
- food processing
- semiconductor processing
- tire industry
- automation





size			1.SG.AL	2.SG.AL	3.SG.AL	4.SG.AL
housing \varnothing	[mm]	B	50	70	90	120
output shaft \varnothing	[mm]	D k6	12	16	22	32
reducer body length	[mm]	K	1 stage 68/73	86.5/89.5	104/109	129.5/139.5
			2 stage 84/89	107.5/110.5	130/135	162/172
max. \varnothing motorshaft	[mm]	R	14	16	24	32
square flange	[mm]	H	50/70	70/90	90/120	120/150
rated output torque	T_{nom} [Nm]	3/5/15/25/30/50 10 / 100	6 5,5	22 20	40 37	100 90
ratio	i	1 stage 2 stage	5/10 25/50/100		3 / 5 / 10 15/25/30/50/100	
backlash	j_t [arcmin]	1 stage 2 stage			≤ 12 ≤ 15	
continuous input speed	$n_{1 nom}$ [min^{-1}]		4000	3700	3400	2600
max. input speed	$n_{1 max.}$ [min^{-1}]		8000	6000	6000	4800
max. radial load ¹⁾	$Fr_{2 max.}$ [N]		650	1450	2400	4600
max. axial load ¹⁾	$Fa_{2 max.}$ [N]		700	1550	1900	4000
efficiency	η [%]	1 stage 2 stage		> 97 > 95		
input inertia	J_1 [$kgcm^2$]	1 stage 2 stage	0,060 0,052	0,29 0,26	1,73 1,48	5,5 4,6
weight	m [kg]	1 stage 2 stage	0,75 0,92	1,7 2,1	4,0 4,9	8,8 10,9
orientation				any		



¹⁾ related to center output shaft at 100 min^{-1}

people in motion



KEB Antriebstechnik Austria GmbH • Ritzstraße 8 • **A** - 4614 Marchtrenk
Tel.: +43 (0)7243 53586-0 • FAX: +43 (0) 7243 53586 - 21 • E-mail: info@keb.at
Kostelni 32/1226 • **CZ** - 370 04 České Budejovice
Tel.: +420 (0) 38 769 91 11 • FAX: +420 (0) 38 769 91 19 • E-mail: info.keb@seznam.cz
Internet: www.keb.at



KEB Antriebstechnik • Herenveld 2 • **B** - 9500 Geraadsbergen
Tel.: +32 (0) 5443 7860 • FAX: +32 (0) 5443 7898
E-mail: vb.belgien@keb.de



KEB China • No. 99 Tianzhou Road • **CHN** - 200233 Shanghai
Tel.: +86 (0) 21 54503230 up to 32 • FAX: +86 (0) 21 54450115
Internet: www.keb.cn • E-mail: info@keb.cn



Société Française KEB • Z.I. de la Croix St. Nicolas • 14, rue Gustave Eiffel • **F** - 94510 LA QUEUE EN BRIE
Tél.: +33 (0)1 49620101 • FAX: +33 (0)1 45767495
Internet: www.keb.fr • E-mail: info@keb.fr



KEB (UK) Ltd. • 6 Chieftain Business Park, Morris Close • Park Farm, Wellingborough, **GB** - Northants, NN8 6 XF
Tel.: +44 (0)1933 402220 • FAX: +44 (0)1933 400724
Internet: www.keb-uk.co.uk • E-mail: info@keb-uk.co.uk



KEB Italia S.r.l. • Via Newton, 2 • **I** - 20019 Sétimo Milanese (Milano)
Tel.: +39 02 3350 0782 • FAX: +39 02 3350 0790
Internet: www.keb.it • E-mail: vb.spanien@keb.de



KEB - YAMAKYU Ltd. • 15 - 16, 2-Chome • **J** - Takahawa Minato-ku • **J** - Tokyo 108 - 0074
Tel.: +81 (0) 33 445 / 8515 • FAX: +81 (0) 33 445 8215
E-mail: info@keb.jp



KEB KOREA • Representative Office, Room 1709, 415 Missy 2000, 725 Su Seo Dong, Gang Nam Gu
ROK - 135-757 Seoul / South Korea
Tel.: +82 (0) 2 6253 6771 • FAX: + 82 (0) 2 6253 6770
E-mail: vb.korea@keb.de



KEB Nederland • Leidsevaart 126 • **NL** - 2013 HD Haarlem
Tel.: +31 (0) 23 532 0049 • FAX: + 31 (0) 23 532 2260
E-mail: vb.nederland@keb.de



KEB Polska • Karl E. Brinkmann GmbH • ul. Budapesztańska 3/16 • **PL** - 80-288 Gdańsk
Tel.: +48 (0) 58 524 05 18 • FAX: +48 (0) 58 524 05 19
E-mail: vb.polska@keb.de



KEB Portugal • Karl E. Brinkmann Portugal - Automação L.da
Avenida da Igreja - Pavilhão A n.º 261, Mouquim • **P** - 4770 - 360 MOUQUIM V.N.F.
Tel.: +351 (0) 252 371 318 + 19 • FAX: +351 (0) 252 371 320
E-mail: keb.portugal@netc.pt



KEB Sverige • Box 265 (Bergavägen 19) • **S** - 43093 Hälsö
Tel.: +46 (0) 31 961520 • FAX: +46 (0) 31 961124
E-mail: vb.schweden@keb.de



KEB España • C / Mitjer, Nave 8 Poligono Industrial "La masia"
E - 08799 Sant Cugat Sesgarrigues (Barcelona)
Tel.: +34 (0) 61 83 24 766 • FAX: +34 (0)
E-mail: vb.espana@keb.de



KEB Taiwan Ltd. • No. 8, Lane 89, Sec. 3, Taichung Kang Rd. • **R.O.C.** - Taichung City Taiwan
Tel.: +886 (0) 4 23506488 • FAX: +886 (0) 4 23501403
E-mail: info@keb.keb.com.tw



KEBCO Inc. • 1335 Mendota Heights Road • **USA** - Mendota Heights, MN 55120
Tel.: +1 (0) 651 4546162 • FAX: +1 (0) 651 4546198
Internet: www.kebco.com • E-mail: info@kebco.com



KEB Antriebstechnik GmbH • Wildbacher Str. 5 • **D** - 08289 Schneeberg
Telefon +49 (0) 37 72 67 - 0 • Telefax +49 (0) 37 72 67 - 2 81
E-mail: info@keb-combidrive.de



Karl E. Brinkmann GmbH
Försterweg 36 - 38 • **D** - 32683 Barntrup
Telefon 0 52 63 / 4 01 - 0 • Telefax 4 01 - 116
Internet: www.keb.de • E-mail: info@keb.de