

# SW aluminium worm geared motors

90W to 4kW

A range of 1 phase geared motors, 3 phase geared and brake motors that combines flexibility, economy and long life.

- 7 sizes of gearbox for torques up to 647Nm**
- Output speeds from 15 to 280 r/min**
- High torques from quality gearbox construction**
- Long life with design rating of 15000 hours**
- Single phase models with high starting torques**
- Three phase with standard or braked motors**

## Other features

- smooth casing in aluminium minimises dirt traps
- maintenance-free, filled for life with synthetic oil AGIP TELIUM VSF (equivalent Shell TIVELA SC320)
- mount in any position (*but see comment on page 336*)
- geared motors supplied in silver grey finish
- hollow shaft mounting, optional torque arm, output flange, or feet (options supplied loose)
- single- and double-ended shafts available, also hollow shaft end cover
- special long life shaft seals

## Motor speeds

- SW gearboxes suit inputs up to 3000 r/min with inverter operation or 2 pole motors
- standard selections feature 4 pole and 6 pole motors

## Helical worm geared motors

Addition of a helical stage results in every economical geared motors with output speeds in the range 3-19 r/min, plus ex-stock delivery. The helical worm models type PC-SW are available on the Stockline CD or on our website.



## Inverter variable speed



smd



8200 motec

SW geared motors can be supplied with matching Lenz inverters.

- smd inverters – low cost compact and simple to use. Ideal for conveyors and individual speed adjustable drives. Single and three phase models.
- 8200 vector – combining high performance with PID processing and fieldbus communications, 8200 vector is available to 2.2kW single phase and 0.55 to 4kW with 3 phase supply.
- 8200 motec – terminal box inverters with IP55 enclosure and all the features of 8200 vector. Saves on panel space, cabling and installation time. Supply 1 phase 180-264V, 0.25-0.37kW  
Supply 3 phase 320-550V, 0.55-4.0kW

## Radial loads

- Where belts, sprockets or gears are fitted to the optional gearbox output shafts, consideration of radial loads is required. This depends on the transmitted torque and the type/size of transmission element where:

$$\text{Radial load} = 2000 \cdot \frac{M_2 \cdot fz}{dw}$$

where  $M_2$  = output torque in Nm  
 $dw$  = effective diameter of sprocket or gear  
 $fz$  = factor for type of element

Gears	$fz = 1.1$
Chainwheels	$fz = 1.4$
V belts	$fz = 1.7$
Flatbelts	$fz = 2.5$

Gear ratio	Gearbox size						
	30	40	50	63	75	90	105
5	597	1149	1577	–	–	–	–
10	752	1447	1987	2597	3065	3391	4285
20	948	1824	2503	3272	3862	4273	5399
30	1085	2087	2865	3745	4421	4891	6181
50	1286	2475	3397	4440	5241	5799	7328
60	1367	2630	3610	4719	5569	6163	7787

Gearbox radial load capacity in N based on input speed of 1400 r/min. Higher speeds reduce load capacity.

- radial load capacities are rated for forces acting halfway along the output shaft. For other load positions the capacities should be adjusted.

# SW aluminium worm geared motors

## Motors

- Stockline 3 phase motors are enclosed to IP55 with class F insulation. Voltage range:  
230/400 ±10%/3/50  
255/440 ±10%/3/60  
Operation at 60 Hz changes speeds and torque data, ask for details.
- Stockline 3 phase brake motors are as above except with the Lenze BFK458 spring applied brake for holding and dynamic duties.  
Speak to us for manual release and for switching with inverter drives.
- Stockline 1 phase high starting torque motors are of cap start/cap run design with enclosure to IP55 and suiting voltages 220/240 1/50.
- also available on request are other voltages, permanent capacitor, flameproof, d.c., servo, other speeds, and motors with tachos or encoders.

## Service factors

- SW gearboxes are rated for 15 000 hours operation with service factor = 1. On request we can calculate life for different loads.
- service factors to suit different applications can be calculated from the tables below:

Type of load	hours running per day			
	<2	2-8	9-16	>16
Uniform	0.8	1	1.25	1.5
Medium shock	1	1.25	1.5	1.8
Heavy shock	1.25	1.5	2	2.4

	number of starts per hours				
	<10	10-30	31-60	61-120	>120
1	1.15	1.2	1.3	1.5	

## Ordering

Data required:

- quantity and type description
- motor and gearbox types
- Stockline number
- terminal box position
- optional extras with Stockline numbers

### LOWER SPEEDS

#### **NEW** PC-SW helical worm range

SW aluminium gearboxes are now available with an additional stage making the PC-SW range of helical worm geared motors.

- lower output speeds 3-19 r/min
- motor powers 90W to 750W
- output torques up to 516Nm

[View the product range](#)



## Other gearbox options

Available on request:

- alternative hollow shaft sizes:

gearbox size	40	50	63	75	90	105
standard bore (mm)	18	25	25	28	35	42
alternative bore(mm)	19	24	28	35	38	-

## Output shafts for alternative bores not available.

- free shaft input and second worm shaft output
- double worm gearbox assemblies for output speeds down to 1 r/min or lower

## Gearbox efficiency

- running efficiencies are achieved after a short period or running-in
- typical efficiency figures vary with the gear ratio

i = 5 - 10	$\eta \geq 80\%$
i = 15 - 40	$\eta = 60 - 80\%$
i = 50 - 60	$\eta = 50 - 70\%$

Smaller sizes have efficiencies lower in the stated loads. More accurate data is available on request.

- starting efficiencies are lower by about 25%, i.e. 80% efficiency becomes 55%.

## Ordering example

- 5 off SW 40/71 - 4/30-18
- 3 phase motor 0.25 kW
- Stockline no. **G5-834 221**
- terminal box position 2
- with feet **G4-238 616**  
single shaft **G4-885 631**  
shaft cover **G4-885 528**

# SW aluminium worm geared motors

Speed r/min	Torque Nm	Gearbox service factor	Ratio	Type description	3 phase	3 phase braked	1 phase
<b>90W</b>							
280	2.7	6.7	5	SW30/56-4/5-14	<b>G5-321 538</b>	<b>G5-321 676</b>	
187	3.9	4.6	7.5	SW30/56-4/7-14	<b>G5-321 52X</b>	<b>G5-321 668</b>	
140	5.0	3.6	10	SW30/56-4/10-14	<b>G5-321 503</b>	<b>G5-287 390</b>	
94	7.1	2.5	15	SW30/56-4/15-14	<b>G5-321 483</b>	<b>G5-321 609</b>	
70	9.0	2.0	20	SW30/56-4/20-14	<b>G5-321 475</b>	<b>G5-321 597</b>	
56	10	2.0	25	SW30/56-4/25-14	<b>G5-321 467</b>	<b>G5-321 589</b>	
47	12	1.7	30	SW30/56-4/30-14	<b>G5-321 459</b>	<b>G5-321 570</b>	Not available
35	14	1.2	40	SW30/56-4/40-14	<b>G5-321 440</b>	<b>G5-321 562</b>	
30	17	1.2	30	SW30/63-6/30-14	<b>G5-832 452</b>		
30	19	2.6	30	SW40/63-6/30-18	<b>G5-834 071</b>		
22	21	1.0	40	SW30/63-6/40-14	<b>G5-834 118</b>		
22	24	1.9	40	SW40/63-6/40-18	<b>G5-834 300</b>		
18	27	1.5	50	SW40/63-6/50-18	<b>G5-834 319</b>		
15	31	1.3	60	SW40/63-6/60-18	<b>G5-834 280</b>		
<b>130W</b>							
280	4	5.1	5	SW30/63-4/5-14	<b>G5-879 628</b>	<b>G5-879 486</b>	
187	5	3.4	7.5	SW30/63-4/7-14	<b>G5-879 636</b>	<b>G5-879 494</b>	
140	7	2.7	10	SW30/63-4/10-14	<b>G5-879 644</b>	<b>G5-879 506</b>	
94	9	1.9	15	SW30/63-4/15-14	<b>G5-879 652</b>	<b>G5-879 514</b>	
70	12	1.5	20	SW30/63-4/20-14	<b>G5-879 660</b>	<b>G5-879 522</b>	
56	14	1.5	25	SW30/63-4/25-14	<b>G5-879 679</b>	<b>G5-879 530</b>	Not available
47	16	1.3	30	SW30/63-4/30-14	<b>G5-879 687</b>	<b>G5-879 549</b>	
47	17	2.6	30	SW40/63-4/30-18	<b>G5-879 695</b>	<b>G5-879 557</b>	
35	21	1.9	40	SW40/63-4/40-18	<b>G5-832 515</b>	<b>G5-840 314</b>	
28	25	1.5	50	SW40/63-4/50-18	<b>G5-833 878</b>	<b>G5-840 330</b>	
23	28	1.3	60	SW40/63-4/60-18	<b>G5-833 973</b>	<b>G5-840 349</b>	
23	29	2.3	60	SW50/63-4/60-25	<b>G5-879 707</b>	<b>G5-879 565</b>	
15	42	1.7	60	SW50/63-6/60-25	<b>G5-879 731</b>	<b>G5-879 59X</b>	
<b>180W</b>							
280	5	3.4	5	SW30/63-4/5-14	<b>G5-129 951</b>	<b>G5-143 082</b>	<b>G5-118 696</b>
187	8	2.3	7.5	SW30/63-4/7-14	<b>G5-129 96X</b>	<b>G5-144 012</b>	<b>G5-128 883</b>
140	10	1.8	10	SW30/63-4/10-14	<b>G5-132 273</b>	<b>G5-144 205</b>	<b>G5-128 938</b>
94	14	1.3	15	SW30/63-4/15-14	<b>G5-132 884</b>	<b>G5-145 123</b>	<b>G5-129 25</b>
70	18	1.0	20	SW30/63-4/20-14	<b>G5-132 892</b>	<b>G5-145 245</b>	<b>G5-129 848</b>
70	19	2.0	20	SW40/63-4/20-18	<b>G5-335 077</b>	<b>G5-111 59X</b>	<b>G5-111 695</b>
56	21	1.0	25	SW30/63-4/25-14	<b>G5-135 634</b>	<b>G5-145 60</b>	<b>G5-132 281</b>
56	23	1.7	25	SW40/63-4/25-18	<b>G5-338 671</b>	<b>G5-111 679</b>	<b>G5-116 360</b>
47	26	1.7	30	SW40/63-4/30-18	<b>G5-834 047</b>	<b>G5-840 156</b>	<b>G5-835 332</b>
35	32	1.3	40	SW40/63-4/40-18	<b>G5-834 063</b>	<b>G5-840 251</b>	<b>G5-912 18</b>
28	38	1.0	50	SW40/63-4/50-18	<b>G5-834 08X</b>	<b>G5-840 286</b>	<b>G5-835 375</b>
28	39	1.9	50	SW50/63-4/50-25	<b>G5-135 756</b>	<b>G5-158 686</b>	<b>G5-835 391</b>
24	43	1.6	60	SW50/63-4/60-25	<b>G5-834 10X</b>	<b>G5-840 294</b>	<b>G5-835 403</b>
18	56	1.4	50	SW50/71-6/50-25	<b>G5-138 18X</b>	<b>G5-151 642</b>	-
15	63	1.1	60	SW50/71-6/60-25	<b>G5-142 602</b>	<b>G5-156 519</b>	-

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Speed r/min	Torque Nm	Gearbox service factor	Ratio	Type description	3 phase	3 phase braked	1 phase
<b>0.25kW</b>							
280	8	4.5	5	SW40/71-4/5-18	<b>G5-834 126</b>	<b>G5-840 452</b>	
187	11	3.6	7.5	SW40/71-4/7-18	<b>G5-834 142</b>	<b>G5-840 479</b>	
140	14	2.8	10	SW40/71-4/10-18	<b>G5-834 169</b>	<b>G5-840 495</b>	
94	21	1.9	15	SW40/71-4/15-18	<b>G5-834 185</b>	<b>G5-840 515</b>	
70	27	1.5	20	SW40/71-4/20-18	<b>G5-834 213</b>	<b>G5-840 531</b>	
56	32	1.2	25	SW40/71-4/25-18	<b>G5-226 818</b>	<b>G5-238 273</b>	
56	32	2.2	25	SW50/71-4/25-25	<b>G5-228 051</b>	<b>G5-840 574</b>	<b>Not available</b>
47	36	1.3	30	SW40/71-4/30-18	<b>G5-834 221</b>	<b>G5-840 558</b>	
47	37	2.3	30	SW50/71-4/30-25	<b>G5-834 256</b>	<b>G5-840 590</b>	
35	46	1.7	40	SW50/71-4/40-25	<b>G5-229 091</b>	<b>G5-840 582</b>	
28	54	1.4	50	SW50/71-4/50-25	<b>G5-834 272</b>	<b>G5-840 602</b>	
24	60	1.1	60	SW50/71-4/60-25	<b>G5-834 299</b>	<b>G5-840 629</b>	
24	63	2.0	60	SW63/71-4/60-25	<b>G5-231 753</b>	<b>G5-237 450</b>	
<b>0.37kW</b>							
280	11	3.0	5	SW40/71-4/5-18	<b>G5-834 343</b>	<b>G5-840 67X</b>	<b>G7-835 411</b>
187	16	2.4	7.5	SW40/71-4/7-18	<b>G5-834 36X</b>	<b>G5-840 696</b>	<b>G5-835 438</b>
140	21	1.9	10	SW40/71-4/10-18	<b>G5-834 386</b>	<b>G5-840 716</b>	<b>G5-835 454</b>
94	31	1.3	15	SW40/71-4/15-18	<b>G5-834 406</b>	<b>G5-840 732</b>	<b>G5-835 470</b>
94	31	2.4	15	SW50/71-4/15-25	<b>G5-834 414</b>	<b>G5-840 767</b>	<b>G5-133 439</b>
70	39	1.0	20	SW40/71-4/20-18	<b>G5-834 430</b>	<b>G5-840 759</b>	<b>G5-835 497</b>
70	40	1.8	20	SW50/71-4/20-25	<b>G5-834 481</b>	<b>G5-840 791</b>	<b>G5-135 642</b>
56	48	1.5	25	SW50/71-4/25-25	<b>G5-834 449</b>	<b>G5-840 775</b>	<b>G5-136 970</b>
47	55	1.5	30	SW50/71-4/30-25	<b>G5-834 457</b>	<b>G5-840 783</b>	<b>G5-835 525</b>
35	68	1.1	40	SW50/71-4/40-25	<b>G5-834 473</b>	<b>G5-840 803</b>	<b>G5-835 541</b>
35	71	2.1	40	SW63/71-4/40-25	<b>G5-83451X</b>	<b>G5-840 740</b>	<b>G5-139 633</b>
28	83	1.6	50	SW63/71-4/50-25	<b>G5-834 501</b>	<b>G5-840 862</b>	<b>G5-142 39X</b>
24	94	1.4	60	SW63/71-4/60-25	<b>G5-834 536</b>	<b>G5-840 838</b>	<b>G5-835 576</b>
18	120	1.2	50	SW63/80-6/50-25	<b>G5-834 552</b>	<b>G5-840 889</b>	-
15	137	1.0	60	SW63/80-6/60-25	<b>G5-834 544</b>	<b>G5-840 870</b>	-
15	144	1.5	60	SW75/80-6/60-28	<b>G5-240 96X</b>	<b>G5-246 005</b>	-
<b>0.55kW</b>							
280	17	3.7	5	SW50/80-4/5-25	<b>G5-834 579</b>	<b>G5-840 897</b>	<b>G5-293 440</b>
187	25	2.9	7.5	SW50/80-4/7-25	<b>G5-834 595</b>	<b>G5-840 925</b>	<b>G5-293 842</b>
140	32	2.2	10	SW50/80-4/10-25	<b>G5-834 615</b>	<b>G5-840 95X</b>	<b>G5-295 37</b>
94	46	1.6	15	SW50/80-4/15-25	<b>G5-834 666</b>	<b>G5-840 976</b>	<b>G5-295 445</b>
70	59	1.2	20	SW50/80-4/20-25	<b>G5-834 682</b>	<b>G5-840 984</b>	<b>G5-295 453</b>
70	61	2.2	20	SW63/80-4/20-25	<b>G5-834 710</b>	<b>G5-841 007</b>	<b>G5-295 75X</b>
56	71	1.0	25	SW50/80-4/25-25	<b>G5-834 690</b>	<b>G5-840 992</b>	<b>G5-296 398</b>
56	73	1.8	25	SW63/80-4/25-25	<b>G5-834 737</b>	<b>G5-841 031</b>	<b>G5-297 632</b>
47	81	1.0	30	SW50/80-4/30-25	<b>G5-834 702</b>	<b>G5-841 015</b>	<b>G5-298 672</b>
47	83	1.9	30	SW63/80-4/30-25	<b>G5-834 753</b>	<b>G5-841 04X</b>	<b>G5-300 63</b>
35	105	1.4	40	SW63/80-4/40-25	<b>G5-834 77X</b>	<b>G5-841 023</b>	<b>G5-311 58</b>
28	124	1.1	50	SW63/80-4/50-25	<b>G5-834 832</b>	<b>G5-841 082</b>	<b>G5-320 33</b>
28	129	1.6	50	SW75/80-4/50-28	<b>G5-246 616</b>	<b>G5-841 058</b>	<b>G5-321 55</b>
23	146	1.4	60	SW75/80-4/60-28	<b>G5-248 077</b>	<b>G5-841 074</b>	<b>G5-324 19</b>
15	224	1.6	60	SW90/80-6/60-35	<b>G5-252 839</b>	<b>G5-257 153</b>	-

# SW aluminium worm geared motors

Speed r/min	Torque Nm	Gearbox service factor	Ratio	Type description	3 phase	3 phase braked	1 phase
<b>0.75kW</b>							
280	23	2.7	5	SW50/80-4/5-25	<b>G5-834 867</b>	<b>G5-841 129</b>	<b>G5-835 655</b>
187	34	2.1	7.5	SW50/80-4/7-25	<b>G5-834 883</b>	<b>G5-841 145</b>	<b>G5-835 68X</b>
140	44	1.6	10	SW50/80-4/10-25	<b>G5-834 903</b>	<b>G5-841 161</b>	<b>G5-835 70X</b>
94	63	1.2	15	SW50/80-4/15-25	<b>G5-834 92X</b>	<b>G5-841 188</b>	<b>G5-835 726</b>
94	64	1.2	15	SW63/80-4/15-25	<b>G5-834 911</b>	<b>G5-841 196</b>	<b>G5-157 725</b>
70	83	1.6	20	SW63/80-4/20-25	<b>G5-834 946</b>	<b>G5-841 208</b>	<b>G5-158 915</b>
56	100	1.3	25	SW63/80-4/25-25	<b>G5-834 938</b>	<b>G5-841 216</b>	<b>G5-188 742</b>
56	102	2.0	25	SW75/80-4/25-28	<b>G5-834 962</b>	<b>G5-841 346</b>	<b>G5-189 478</b>
47	114	1.4	30	SW63/80-4/30-25	<b>G5-834 954</b>	<b>G5-841 32X</b>	<b>G5-835 769</b>
47	117	2.0	30	SW75/80-4/30-28	<b>G5-834 989</b>	<b>G5-841 362</b>	<b>G5-189 916</b>
35	143	1.0	40	SW63/80-4/40-25	<b>G5-834 970</b>	<b>G5-841 338</b>	<b>G5-835 785</b>
35	147	1.5	40	SW75/80-4/40-28	<b>G5-261 398</b>	<b>G5-841 354</b>	<b>G5-189 924</b>
28	177	1.2	50	SW75/80-4/50-28	<b>G5-835 001</b>	<b>G5-264 085</b>	<b>G5-194 338</b>
28	184	1.8	50	SW90/80-4/50-35	<b>G5-261 966</b>	<b>G5-264 105</b>	<b>G5-195 481</b>
23	200	1.0	60	SW75/80-4/60-28	<b>G5-834 997</b>	<b>G5-264 251</b>	<b>G5-198 47</b>
23	212	1.5	60	SW90/80-4/60-35	<b>G5-262 683</b>	<b>G5-264 26X</b>	<b>G5-198 78X</b>
15	306	1.1	60	SW90/90-6/60-35	<b>G5-264 077</b>	<b>G5-264 294</b>	-
<b>1.1kW</b>							
187	50	2.6	7.5	SW63/90S-4/7-25	<b>G5-835 01X</b>	<b>G5-841 370</b>	<b>G5-835 864</b>
140	65	2.0	10	SW63/90S-4/10-25	<b>G5-835 028</b>	<b>G5-841 389</b>	<b>G5-835 880</b>
94	93	1.5	15	SW63/90S-4/15-25	<b>G5-835 036</b>	<b>G5-841 397</b>	<b>G5-835 900</b>
70	122	1.1	20	SW63/90S-4/20-25	<b>G5-835 044</b>	<b>G5-841 409</b>	<b>G5-835 927</b>
70	123	1.7	20	SW75/90S-4/20-28	<b>G5-835 052</b>	<b>G5-841 417</b>	<b>G5-207 16</b>
56	150	1.3	25	SW75/90S-4/25-28	<b>G5-835 060</b>	<b>G5-841 425</b>	<b>G5-216 462</b>
47	167	1.0	30	SW63/90S-4/30-25	<b>G5-835 079</b>	<b>G5-841 433</b>	<b>G5-835 951</b>
47	171	1.3	30	SW75/90S-4/30-28	<b>G5-835 087</b>	<b>G5-841 441</b>	<b>G5-217 285</b>
35	216	1.0	40	SW75/90S-4/40-28	<b>G5-835 095</b>	<b>G5-841 45X</b>	<b>G5-217 644</b>
35	225	1.6	40	SW90/90S-4/40-35	<b>G5-835 107</b>	<b>G5-841 468</b>	<b>G5-218 964</b>
28	270	1.3	50	SW90/90S-4/50-35	<b>G5-835 115</b>	<b>G5-841 476</b>	<b>G5-224 718</b>
23	311	1.0	60	SW90/90S-4/60-35	<b>G5-835 123</b>	<b>G5-841 484</b>	<b>G5-225 723</b>
18	397	1.0	50	SW90/90L-6/50-35	<b>G5-264 574</b>	<b>G5-264 637</b>	-
<b>1.5kW</b>							
187	68	1.9	7.5	SW63/90L-4/7-25	<b>G5-835 131</b>	<b>G5-841 504</b>	<b>G5-835 994</b>
140	89	1.5	10	SW63/90L-4/10-25	<b>G5-835 14X</b>	<b>G5-841 512</b>	<b>G5-836 017</b>
94	127	1.1	15	SW63/90L-4/15-25	<b>G5-835 158</b>	<b>G5-841 520</b>	<b>G5-836 033</b>
94	130	1.5	15	SW75/90L-4/15-28	<b>G5-835 166</b>	<b>G5-841 539</b>	<b>G5-228 733</b>
70	168	1.3	20	SW75/90L-4/20-28	<b>G5-835 174</b>	<b>G5-841 547</b>	<b>G5-235 247</b>
70	172	2.1	20	SW90/90L-4/20-35	<b>G5-835 182</b>	<b>G5-841 555</b>	<b>G5-238 797</b>
56	205	1.0	25	SW75/90L-4/25-28	<b>G5-835 190</b>	<b>G5-841 563</b>	<b>G5-239 471</b>
56	210	1.6	25	SW90/90L-4/25-35	<b>G5-835 202</b>	<b>G5-841 571</b>	<b>G5-244 51</b>
47	233	1.0	30	SW75/90L-4/30-28	<b>G5-835 229</b>	<b>G5-841 598</b>	<b>G5-247 881</b>
47	239	1.7	30	SW90/90L-4/30-35	<b>G5-835 237</b>	<b>G5-841 60X</b>	<b>G5-249 705</b>
35	307	1.2	40	SW90/90L-4/40-35	<b>G5-267 462</b>	<b>G5-267 517</b>	<b>G5-251 421</b>
30	358	1.3	30	SW90/100-6/30-35	<b>G5-267 470</b>	<b>G5-268 46X</b>	-

# SW aluminium worm geared motors

Speed r/min	Torque Nm	Gearbox service factor	Ratio	Type description	3 phase	3 phase braked	1 phase
<b>1.8kW</b>							
187	81	1.6	7.5	SW63/90L-4/7-25	<b>G5-835 210</b>	<b>G5-841 618</b>	
140	107	1.2	10	SW63/90L-4/10-25	<b>G5-835 245</b>	<b>G5-841 626</b>	
140	108	1.8	10	SW75/90L-4/10-28	<b>G5-835 253</b>	<b>G5-841 634</b>	
93	157	1.3	15	SW75/90L-4/15-28	<b>G5-835 261</b>	<b>G5-841 642</b>	
70	201	1.0	20	SW75/90L-4/20-28	<b>G5-835 27X</b>	<b>G5-841 650</b>	<b>On request</b>
70	206	1.7	20	SW90/90L-4/20-35	<b>G5-835 288</b>	<b>G5-841 685</b>	
56	252	1.4	25	SW90/90L-4/25-35	<b>G5-835 296</b>	<b>G5-841 669</b>	
47	287	1.4	30	SW90/90L-4/30-35	<b>G5-835 308</b>	<b>G5-841 677</b>	
35	368	1.0	40	SW90/90L-4/40-35	<b>G5-105 003</b>	<b>G5-120 826</b>	
<b>2.2kW</b>							
187	100	1.8	7.5	SW75/100-4/7-28	<b>G5-269 7X</b>	<b>G5-268 478</b>	<b>G5-341 281</b>
140	132	1.5	10	SW75/100-4/10-28	<b>G5-270 021</b>	<b>G5-268 557</b>	<b>G5-345 77X</b>
93	191	1.0	15	SW75/100-4/15-28	<b>G5-270 072</b>	<b>G5-268 896</b>	<b>G5-345 788</b>
93	194	1.9	15	SW90/100-4/15-35	<b>G5-270 249</b>	<b>G5-268 932</b>	<b>G5-346 001</b>
70	252	1.4	20	SW90/100-4/20-35	<b>G5-270 588</b>	<b>G5-268 975</b>	<b>G5-349 464</b>
56	308	1.1	25	SW90/100-4/25-35	<b>G5-271 037</b>	<b>G5-269 006</b>	<b>G5-351 349</b>
56	315	1.9	25	SW105/100-4/25-42	<b>G5-964 808</b>	<b>G5-964 816</b>	<b>G5-965 079</b>
47	351	1.2	30	SW90/100-4/30-35	<b>G5-271 159</b>	<b>G5-269 633</b>	<b>G5-353 623</b>
47	356	1.8	30	SW105/100-4/30-42	<b>G5-964 832</b>	<b>G5-964 840</b>	<b>G5-965 087</b>
35	468	1.3	40	SW105/100-4/40-42	<b>G5-964 867</b>	<b>G5-964 970</b>	<b>G5-965 095</b>
28	563	1.1	50	SW105/100-4/50-42	<b>G5-964 875</b>	<b>G5-964 989</b>	<b>G5-965 107</b>
<b>3.0kW</b>							
187	137	1.4	7.5	SW75/100-4/7-28	<b>G5-271 167</b>	<b>G5-282 169</b>	-
140	180	1.1	10	SW75/100-4/10-28	<b>G5-276 97</b>	<b>G5-282 867</b>	-
140	182	1.7	10	SW90/100-4/10-35	<b>G5-278 184</b>	<b>G5-283 612</b>	-
93	264	1.4	15	SW90/100-4/15-35	<b>G5-278 421</b>	<b>G5-283 750</b>	-
70	344	1.0	20	SW90/100-4/20-35	<b>G5-281 153</b>	<b>G5-283 864</b>	-
70	348	1.6	20	SW105/100-4/20-42	<b>G5-964 883</b>	<b>G5-964 997</b>	-
56	430	1.4	25	SW105/100-4/25-42	<b>G5-964 891</b>	<b>G5-965 001</b>	-
47	485	1.3	30	SW105/100-4/30-42	<b>G5-964 911</b>	<b>G5-965 01X</b>	-
35	638	1.0	40	SW105/100-4/40-42	<b>G5-964 92X</b>	<b>G5-965 028</b>	-
<b>4.0kW</b>							
187	184	1.6	7.5	SW90/112-4/7-35	<b>G5-964 702</b>	<b>G5-964 710</b>	-
140	243	1.3	10	SW90/112-4/10-35	<b>G5-964 729</b>	<b>G5-964 737</b>	-
93	352	1.6	15	SW105/112-4/15-42	<b>G5-964 938</b>	<b>G5-965 036</b>	-
70	464	1.2	20	SW105/112-4/20-42	<b>G5-964 946</b>	<b>G5-965 044</b>	-
56	573	1.0	25	SW105/112-4/25-42	<b>G5-964 954</b>	<b>G5-965 052</b>	-
47	647	1.0	30	SW105/112-4/30-42	<b>G5-964 962</b>	<b>G5-965 060</b>	-

## LOWER SPEEDS

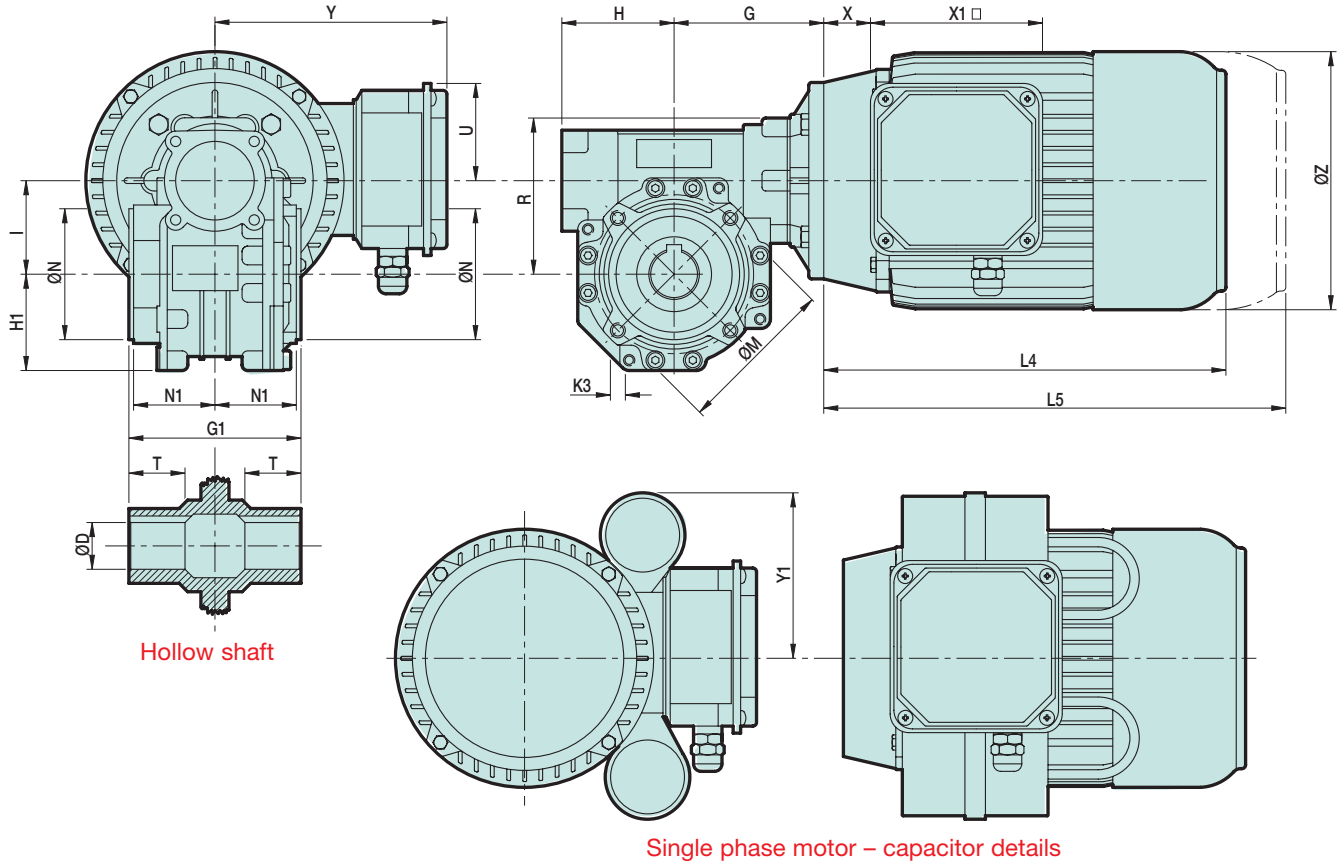
### **NEW** PC-SW helical worm range

SW aluminium gearboxes are now available with an additional stage making the PC-SW range of helical worm geared motors.

- lower output speeds 3-18 r/min
- motor powers 90W to 750W
- output torques up to 516Nm

[View the product range](#)

# SW aluminium worm geared motors



Hollow shaft

Single phase motor – capacitor details

Gearbox size	D H8	G	G1	H	H1	I	K3	M	N h8	N1	R	T	Weight gearbox only
30	14	55	63	40	38	30	M6x11(4)**	65	55	29	57	21	1.1
40	18(19)*	70	78	50	42	40	M6x10(4)	75	60	36.5	70	26	2.1
50	25(24)*	80	92	60	52	50	M8x10(4)	85	70	43.5	84	30	3.0
63	25(28)*	95	112	72	66	63	M8x14(8)	95	80	53	102	36	5.6
75	28(35)*	112.5	120	86	80	75	M8x16(8)	115	95	57	117	40	8.1
90	35(38)*	129.5	140	103	97	90	M10x18(8)	130	110	67	133	45	11.7
105	42	160	155	127.5	115	110	M10x18(8)	165	130	74	166	50	26

\*Alternative hollow shaft option, available on request. \*\* 4 off holes K3 are on vertical and horizontal axes.

Motor frame	L4	L5**	u	x	x1	y	y1	z	Weight kg motor only
56	167	193	58	30	92	110	75	110	3.2
63	193	215	58	25	92	115	90	123	4.7
71	215	246	52	25	92	124	90	138	7.5
80	235	277	60	30	108	141	95	156	12.2
90S	250	292	60	33	108	146	90	176	16.7
90L	275	316	60	33	108	146	90	176	18
100	305	370	60	40	108	157	135	194	26.5
112	325	406	60	45	108	170	-	220	29

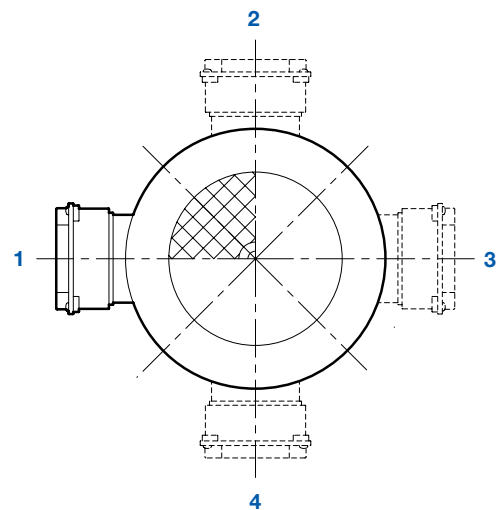
\*\* L5 is length for brake motor

## Mounting positions

SW worm geared motors are supplied lubricated for life with synthetic oil, AGIP TELIUM VSF320. They can be mounted in any position, except

sizes 75 to 105 with motor vertical > ask us for a change of oil fill

## Motor terminal box positions



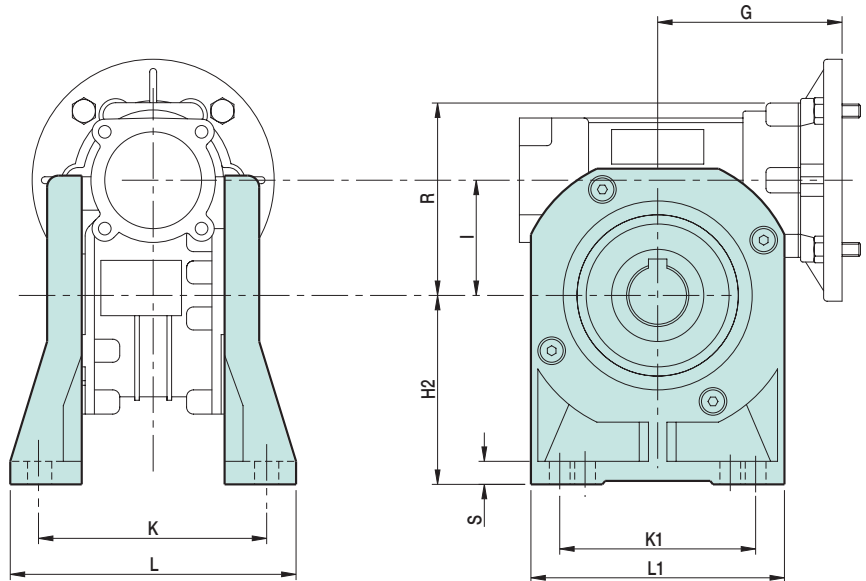
As viewed from rear of motor, position 1 is standard

# SW aluminium worm geared motors

## Feet

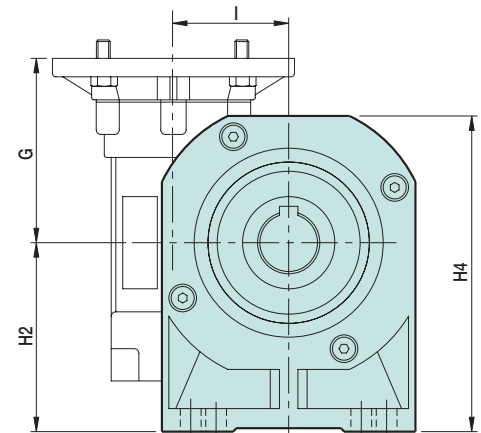
SW gearbox feet are supplied loose complete with fixing screws.

They can be fitted in any of three positions. With the wormshaft below, note that the gearbox body is sometimes below the feet.



Conventional B3 foot mounting

Gearbox size	G	H2	H4	H6	K	K1
30	55	55	97	1.2	66	50xø6.5
40	70	72	117	-2	81	52xø8.5
50	80	82	137	2	98.5	63xø8.5
63	95	100	170	2	111	95xø10.5
75	112.5	115	196	2	115	120xø11
90	129.5	142	242	-9	146(140)	140xø11
105	160	172	293.5	-6	181(160)	200xø13



Mounting with wormshaft vertical

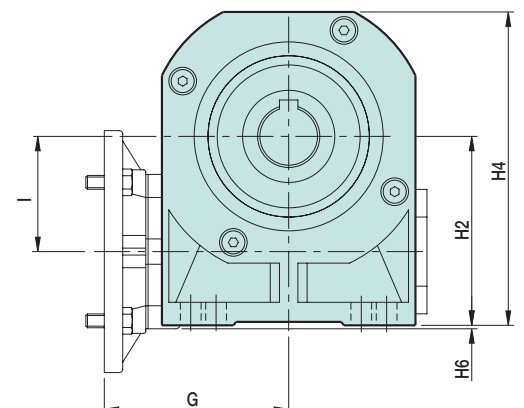
Gearbox size	I	L	L1	R	S	Stockline No. for pair of feet
30	30	80	80	57	7	<b>G4-885 098</b>
40	40	98	90	70	9	<b>G4-238 616</b>
50	50	124	110	81	10	<b>G4-238 640</b>
63	63	138	140	102	10	<b>G4-885 142</b>
75	75	142	160	117	12	<b>G4-885 150</b>
90	90	180	200	133	14	<b>G4-885 169</b>
105	110	208	250	166	20	<b>G4-964 615</b>

## Ordering example

3 off SW75/90L-4/15-28, 3 phase brake motor 1.8kW

Stockline No. **G5-841 642**

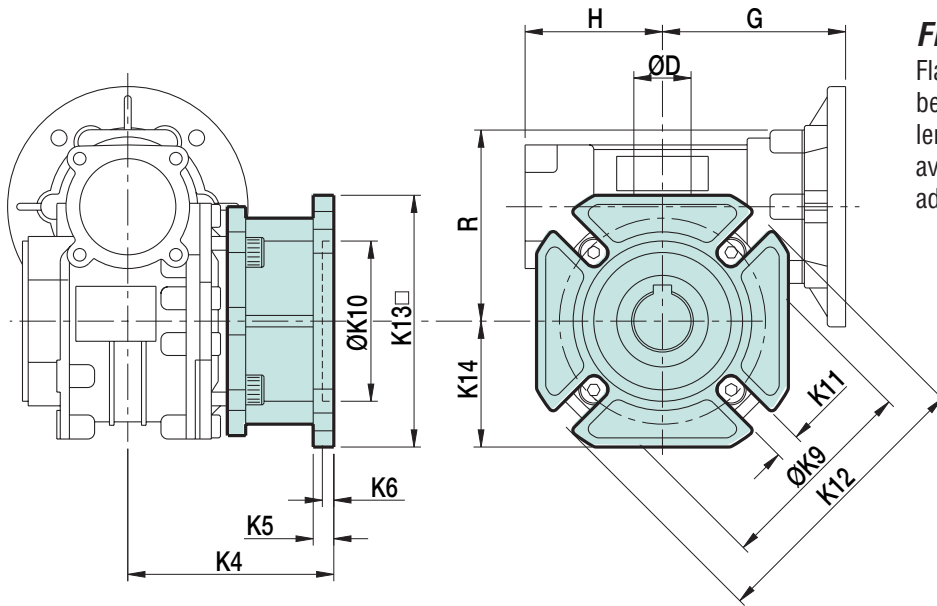
Terminal box position 1, with feet **G4-885 150**



Mounting with worm shaft below (observe dimension H6)

MOTORS & SMALL GEARED MOTORS

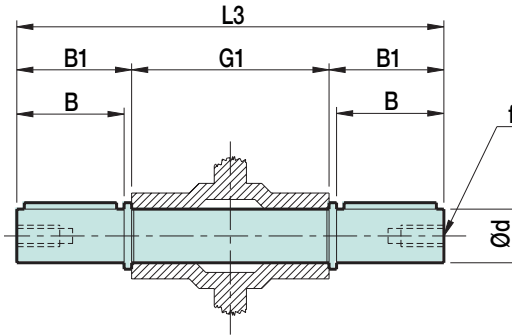
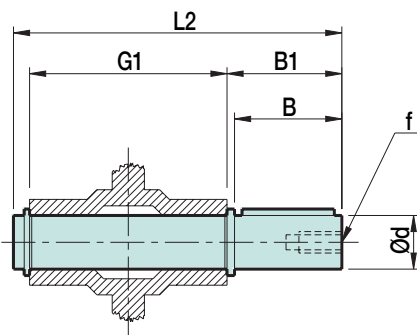
# SW aluminium worm geared motors



## Flanges

Flanges are supplied loose and can be fitted to either side. Two flange lengths, long and short, are available. See previous pages for additional dimensions.

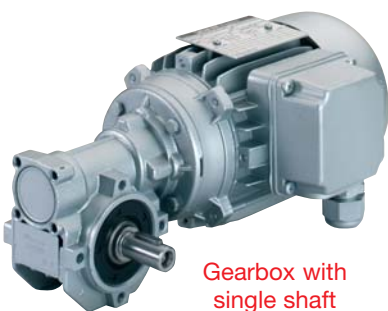
Gearbox size	K5	K6	K9	K10 H8	K11 (4 off)	K12	K13	K14	Stockline Nos.			
									K4	short	long	
30	6	4	68	50	6.5	80	70	35	54.5	<b>G4-885 682</b>	-	-
40	7	4	75	60	9	110	95	47.5	67	<b>G4-238 596</b>	97	<b>G4-885 729</b>
50	9	5	85	70	11	125	110	55	90	<b>G4-238 608</b>	120	<b>G4-885 737</b>
63	10	6	150	115	11	180	142	71	82	<b>G4-885 690</b>	112	<b>G4-885 745</b>
75	13	6	165	130	14	200	170	85	111	<b>G4-885 702</b>	-	-
90	13	6	175	152	14	210	200	100	111	<b>G4-885 710</b>	-	-
105	15	6	230	170	ø14(8off)	230	260	130	131	<b>G4-965 123</b>	-	-



## Shafts

Single and double male shafts are supplied loose with keys, circlips and washers.

Gearbox size	d	B	B1	G1	f	L2	L3	Stockline Nos.	
								single	double
30	14g6	30	32.5	63	M6	102	128	<b>G4-885 623</b>	<b>G4-885 587</b>
40	18h6	40	43	78	M6	128	164	<b>G4-885 631</b>	<b>G4-238 553</b>
50	25h6	50	53.5	92	M10	153	199	<b>G4-885 64X</b>	<b>G4-238 561</b>
63	25h6	50	53.5	112	M10	173	219	<b>G4-885 658</b>	<b>G4-885 595</b>
75	28h6	60	63.5	120	M10	192	247	<b>G4-885 666</b>	<b>G4-885 607</b>
90	35h6	80	84.5	140	M12	234	309	<b>G4-885 674</b>	<b>G4-885 615</b>
105	42h6	80	84.5	155	M16	249	324	<b>G4-965 14X</b>	<b>G4-965 166</b>

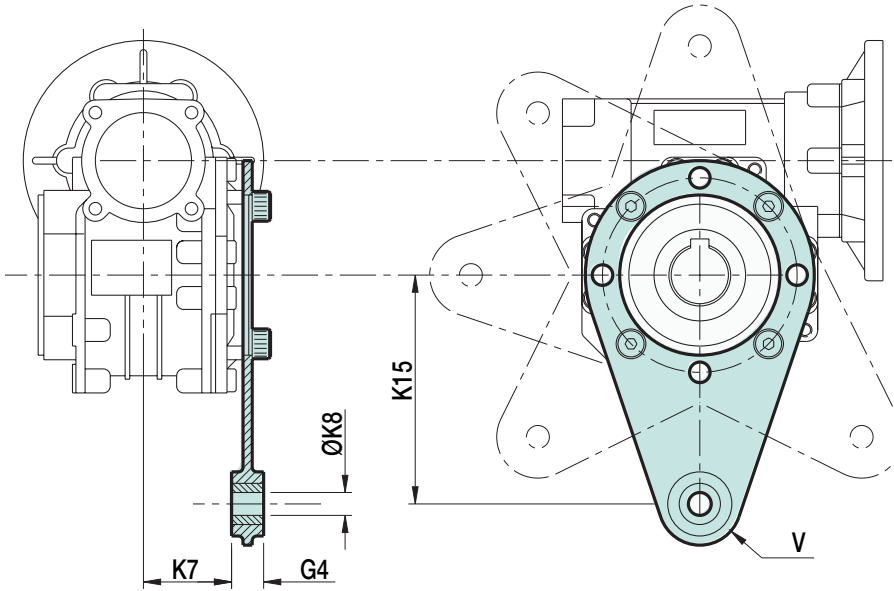


Gearbox with single shaft



Gearbox with flange

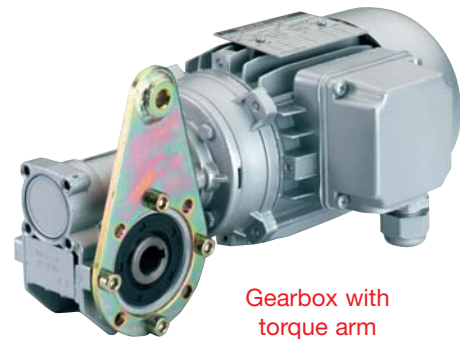
# SW aluminium worm geared motors



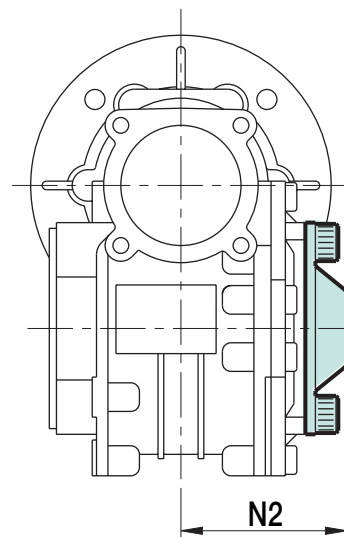
## Torque arms

Supplied loose with fixing bolts, the torque arm can be fitted to either side of the gearbox and in any of six positions.

Gearbox size	G4	K7	K8	K15	V	Stockline No.
30	14	24	8	85	15	<b>G4-885 473</b>
40	14	31.5	10	100	18	<b>G4-238 57X</b>
50	14	38.5	10	100	18	<b>G4-238 588</b>
63	14	49	10	150	18	<b>G4-885 481</b>
75	25	47.5	20	200	30	<b>G4-885 49X</b>
90	25	57.5	20	200	30	<b>G4-885 501</b>
105	30	62	25	250	35	<b>G4-965 174</b>



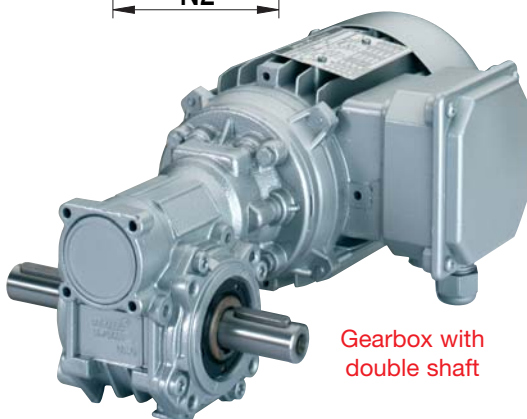
Gearbox with torque arm



## Shaft covers

These covers fit to either side of the gearbox.

Gearbox size	N2	Stockline No.
30	38	<b>G4-885 51X</b>
40	50	<b>G4-885 528</b>
50	58	<b>G4-885 536</b>
63	69	<b>G4-885 544</b>
75	74	<b>G4-885 552</b>
90	86	<b>G4-885 579</b>
105	94	<b>G4-965 182</b>



Gearbox with double shaft



Gearbox with feet