

Bevel gearboxes GK 10.2 – GK 40.2

Type	Output torque		Reduction ratio	Input torque ¹⁾		Valve attachment		Factor ²⁾	Input shaft		Hand-wheel max. Ø mm	Weight ³⁾ approx. kg
	Nominal torque	Modulating torque		Nominal torque	Modulating torque	Standard EN ISO 5210	Option DIN 3210		Ø			
	max. Nm	max. Nm		Nm	Nm				Standard	Option		
GK 10.2	120	60	1 : 1	135	66	F10	G0	0,9	20	–	315	8,5
			2 : 1	67	33			1,8			200	
GK 14.2	250	120	2 : 1	139	66	F14	G½	1,8	20	30	315	15
			2.8 : 1	100	48			2,5			250	
GK 14.6	500	200	2.8 : 1	198	80	F14	G½	2,5	30	–	400	15
			4 : 1	139	55			3,6			20	
GK 16.2	1,000	400	4 : 1	278	111	F16	G3	3,6	30	–	500	25
			5.6 : 1	198	80			5,0			400	
GK 25.2	2,000	800	5.6 : 1	397	160	F25	G4	5,0	30	–	630	60
			8 : 1	278	111			7,2			500	
GK 30.2	4,000	1,600	8 : 1	556	222	F30	G5	7,2	30	40	800	110
			11 : 1	404	162			9,9			800	
GK 35.2	8,000	–	11 : 1	808	–	F35	G6	9,9	40	–	800	190
			16 : 1	556	–			14,4		30	800	
GK 40.2	16,000	–	16 : 1	1 111	–	F40	G7 ⁴⁾	14,4	40	–	800	250
			22 : 1	808	–			19,8			800	

Possible combinations with multi-turn actuators

Gearbox Type	Flange for mounting of actuator		Permissible actuator weight max. kg	Suitable AUMA multi-turn actuator ⁵⁾ Type
	Standard EN ISO 5210	Option DIN 3210		
GK 10.2	F10/F14	G0/G½	40/80	SA(R) 10.1/SA(R) 14.1
	F10	G0	40	SA(R) 07.5/SA(R) 10.1
GK 14.2	F10/F14	G0/G½	40/80	SA(R) 10.1/SA(R) 14.1
	F10	G0	40	SA(R) 10.1
GK 14.6	F14	G½	80	SA(R) 14.1
	F10/F14	G0/G½	40/80	SA(R) 10.1/SA 14.1
GK 16.2	F14	G½	80	SA(R) 14.1/SA 14.5
	F14	G½		SA(R) 14.1
GK 25.2	F14	G½	80	SA(R) 14.5
	F14	G½		SA(R) 14.1/SA 14.5
GK 30.2	F14/F16	G½/G3	80/160	SA(R) 14.5/SA(R) 16.1
	F14	G½	80	SA(R) 14.5
GK 35.2	F16	G3	160	SA 16.1
	F14/F16	G½/G3	80/160	SA 14.5/SA 16.1
GK 40.2	F16/F25	G3/G4	160/300	SA 16.1/SA 25.1
	F16	G3	160	SA 16.1

1) At max. output torque

2) Conversion factor from output torque to input torque to determine the actuator size

3) Gearbox without output shaft and without mounting flange for actuator

4) Without spigot

5) Standard flange according to EN ISO 5210

We reserve the right to alter data according to improvements made. Previous documents become invalid with the issue of this document.

Application

For motor or manual operation of valves (e.g. gate valves and globe valves).

Features and functions

Type of duty	Short-time duty S2 - 15 min (open-close duty) Intermittent duty S4 - 25 % (modulating duty)
Direction of rotation	Standard: Clockwise rotation at input shaft results in clockwise rotation at output shaft Option: GK 10.2 – GK 25.2 Reversal of rotation direction using a reversing gearbox GW 14.1 GK 30.2 – GK 40.2 Clockwise rotation possible as an alternative
Stages	Single stage: GK 10.2 – GK 25.2 Double stage: GK 30.2 – GK 40.2
Input shaft	Input shaft made of stainless steel Standard: Cylindrical with parallel key according to DIN 6885.1 (refer to table on page 1) Option ⁶⁾ : Square: - tapered (DIN 3233) - cylindrical

Operation

Motor operation	Directly via electric multi-turn actuator Flanges for mounting the multi-turn actuator (refer to table on page 1)
Manual operation	Possible handwheel diameters (refer to table on page 1) Standard: Without ball handle Options: - With ball handle - Material GJL-200 - Remote extension shaft (not included in AUMA's scope of delivery)

Valve attachment

Output drive types	A, B1, B2, B3, B4 according to EN ISO 5210 A, B, D, E according to DIN 3210 C according to DIN 3338 Special output drive types: AF, AK, AG, IB1, IB3, IB4
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Service conditions

Mounting position	Any position
Enclosure protection according to EN 60 529 ⁷⁾	Standard: IP 67 Options: IP 68 (max. 6 m head of water)
Corrosion protection	Standard: KN Suitable for installation in industrial units, in water or power plants with a low pollutant concentration Options: KS Suitable for installation in occasionally or permanently aggressive atmosphere with a moderate pollutant concentration (e.g. in wastewater treatment plants, chemical industry) KX Suitable for installation in extremely aggressive atmospheres with high humidity and high pollutant concentration
Finish coating	Standard: Two-component iron-mica combination
Colour	Standard: AUMA silver-grey (similar to RAL 7037) if finish painted Option: Other colours on request
Ambient temperature	Standard: -40 °C to +80 °C Options: -60 °C to +60 °C (extreme low temperature), EL version -0 °C to + 120 °C (high temperature), H version
Lifetime	Open-close duty: Operations (OPEN - CLOSE - OPEN) with 30 turns per stroke GK 10.2: 20,000 operations GK 14.2 – 16.2: 15,000 operations GK 25.2 – 30.2: 10,000 operations GK 35.2 – 40.2: 5,000 operations Modulating duty ⁸⁾ : GK 10.2: 5.0 million modulating steps GK 14.2 – 16.2: 3.5 million modulating steps GK 25.2 – 30.2: 2.5 million modulating steps

6) With respect to size, please contact AUMA

7) Refer to information sheet "Multi-turn gearboxes in enclosure protection IP68 (submersible)"

8) The lifetime for modulating duty depends on the load and the number of starts. A high starting frequency will rarely improve the modulating accuracy. To reach the longest possible maintenance and fault-free operating time, the number of starts per hour chosen should be as low as possible for the process.

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