

Technical data Multi-turn gearboxes

Valve			Gearbox					
Max. valve torque	Valve attachment		Gearbox	Reduction ratio	Factor ²⁾	Max. input torques	Input shaft	Weight
to [Nm]	Flange according to EN ISO 5210	Shaft diameter ¹⁾ [mm]						
100	F10	20	GP 10.1	2.4 : 1	2.2	46	20	6.0
				3 : 1	2.7	37	20	6.0
				4 : 1	3.6	28	20	6.0
400	F14	30	GP 14.1	2.4 : 1	2.2	185	30	6.0
				3 : 1	2.7	148	20/30	6.0
				4 : 1	3.6	111	20	6.0
700	F16	40	GP 16.1	4 : 1	3.6	194	30	19.5
				8 : 1	7.2	97	20	19.5
				4 : 1	3.6	333	30	55
1,200	F25	50	GP 25.1	8 : 1	7.2	167	30	55
				16 : 1	14.4	83	20	65
				4 : 1	3.6	694	40	63.5
2,500	F30	60	GP 30.1	8 : 1	7.2	347	30	63.5
				16 : 1	14.4	174	30	75.5

Possible combinations with multi-turn actuators				
Gearbox	Reduction ratio	Suitable AUMA multi-turn actuator ³⁾	Input mounting flange for mounting multi-turn actuator	
			EN ISO 5210	DIN 3210
GP 10.1	2.4 : 1	SA 07.6	F10	G0
	3 : 1	SA 07.6	F10	G0
	4 : 1	SA 07.2	F10	G0
GP 14.1	2.4 : 1	SA 14.2	F14	G1/2
	3 : 1	SA 14.2	F14	G1/2
	4 : 1	SA 10.2	F10	G0
GP 16.1	4 : 1	SA 14.2	F14	G1/2
	8 : 1	SA 10.2	F10	G0
GP 25.1	4 : 1	SA 14.6	F14	G1/2
	8 : 1	SA 14.2	F14	G1/2
	16 : 1	SA 10.2	F10	G0
GP 30.1	4 : 1	SA 16.2	F16	G3
	8 : 1	SA 14.6	F14	G1/2
	16 : 1	SA 14.6	F14	G1/2

General information

Coaxial planetary gearing for motor or manual operation of valves (e.g. gate valves and globe valves).

Notes on table

1) Shaft diameter	Bore with keyway according to DIN 6885-1
2) Factor	Conversion factor from output torque to input torque for actuator size definition
3) Multi-turn actuator flange	Standard flange according to EN ISO 5210

Features and functions

Type of duty	<ul style="list-style-type: none"> Short-time duty S2 - 15 min (open-close duty) Intermittent duty S4 - 25 % (modulating duty)
Direction of rotation	Clockwise rotation at input shaft results in clockwise rotation at output drive

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Input shaft	Standard:	Input shaft with metallic surface protection, cylindrical with parallel key according to DIN 6885-1
	Option:	<ul style="list-style-type: none"> Cylindrical with parallel key according to DIN 6885-1 with square adapter for power tool emergency operation

Operation									
Motor operation	<ul style="list-style-type: none"> Directly via electric multi-turn actuator Input mounting flanges for multi-turn actuator (refer to table page 1) 								
Manual operation	Available handwheel diameters according to EN 12570, selection according to output torque:								
	Type	GP 10.1			GP 14.1			GP 16.1	
	Reduction ratio	2.4:1	3:1	4:1	2.4:1	3:1	4:1	4:1	8:1
	Input shaft	20			30	20/30	20	30	20
	Handwheel Ø [mm]	250			500	315	250	500	250
		315			630	400	315	630	315
		400			800	500	400	800	
	Type	GP 25.1			GP 30.1				
	Reduction ratio	4:1	8:1	16:1	4:1	8:1	16:1		
	Input shaft	30	30	20	40	30	30		
Handwheel Ø [mm]	630	500	250	800	630	400			
	800	630	315		800	500	630		
Standard:	<ul style="list-style-type: none"> Handwheel made of aluminium Handwheel with ball handle 								
Options:	<ul style="list-style-type: none"> Handwheel made of GJL-200 Handwheel lockable 								

Valve attachment	
Valve attachment	B3 according to EN ISO 5210 (bore with parallel keyway)

Service conditions		
Mounting position	Any position	
Ambient temperature	Standard:	-60 °C to +80 °C
	Option:	0 °C to +140 °C (up to +150 °C for a short time with reduced lifetime)
Enclosure protection according to EN 60529	Standard:	IP68-8, dust and water tight up to max. 8 m head of water
	Option:	IP68-20, dust-tight and water-tight up to max. 20 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 use in areas with high salinity, almost permanent condensation, and high pollution.
		KX Suitable for use in areas with extremely high salinity, permanent condensation, and high pollution.
Coating	Double layer powder coating	
Colour	Standard:	AUMA silver-grey (similar to RAL 7037)
	Option:	Available colours on request
Lifetime	AUMA multi-turn gearboxes meet or exceed the lifetime requirements of EN 15714-2. Detailed information can be provided on request.	
Housing	Cast iron	

Further information	
EU Directives	Machinery Directive: (2006/42/EC)
Reference documents	Dimensions GP 10.1 – GP 30.1
	Technical data SA 07.2 – SA 16.2 with 3-phase AC motors