

Technical Data Sheet

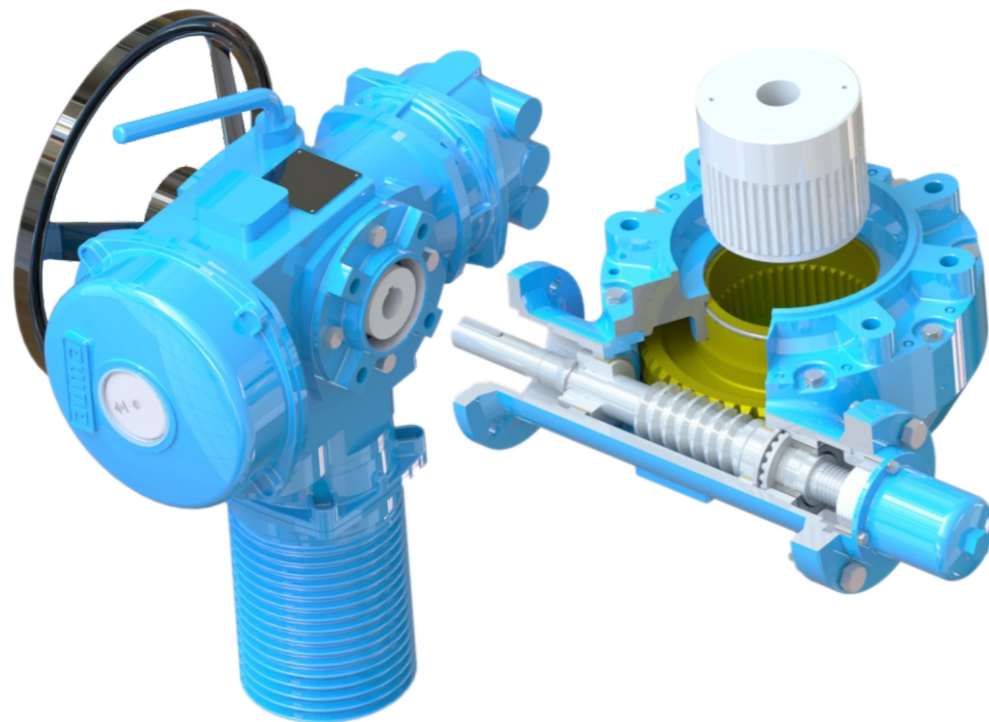
for



AUMA India Multi-turn

Worm Gearboxes

GS 40.2 - GS 500



Technical Data sheet for Multi-turn Worm Gearboxes

TECHNICAL DATA FOR MULTI-TURN WORM GEARBOXES (FLANGE MOUNTED) AND PRIMARY REDUCTION GEARS					GS 40.2 - GS 125.2			
Output torque for manual operation ¹⁾ max.	Nm	420	850	1400	2800		5600	
	lbs. ft.	310	625	1030	2060		4120	
Output torque for motor operation ²⁾ T _N	Nm	300	600	1000	2000		4000	
	lbs. ft.	220	440	750	1500		3000	
Operator	Type	GS 40.2	GS 63.2	GS 80.2	GS 100.2		GS 125.2	
Reduction	Type	—	—	—	—	VZ 4	—	VZ 4
Total reduction ratio	GS(+VZ4) i=	21:1	39:1	40:1	40:1	157:1	52:1	204:1
Input torque at max. output torque ¹⁾	Nm	47	51	81	162	48	250	74
	lbs. ft.	35	38	60	120	35	184	54
Input torque at nominal output torque ²⁾	Nm	33	36	58	116	34	178	53
	lbs. ft.	24	26	43	85	25	131	39
Mechanical advantage ³⁾		9	16.7	17.3	17.3	58.5	22.5	75.5
Valve mounting flange dimensions according to ISO 5211 ⁴⁾	Standard	F07	F10	F12	F14		F16	
	Special	F05 ⁷⁾ /F10	F12	F14	F16		F25	
Valve shaft diameter Ø	max. mm	25	36	48	60		80	
	max. inch	1	1 7/16	1 7/8	2 3/8		3 1/8	
Valve shaft square □	max. mm	22	27	41	50		65	
	max. inch	7/8	1	1 5/8	2		2 1/2	
Input shaft diameter	max. mm	20	20	20	20	20	30	20
	max. inch	0.787	0.787	0.787	0.787	0.787	1.181	0.787
Handwheel diameter ⁵⁾	mm	250/300	250/300	300/350	350/400	250/300	400/500	300/350
	inch	10/12	10/12	12/16	12/16	10/12	16/20	12/16
Weight (without handwheel) ⁶⁾	kg	3.5	9	13.5	30	34	43	47
	lbs.	8	20	30	66	75	95	104
Mounting flange for actuator	DIN 3210	G0	G0	G0	G0	G0	G½	G0
	ISO 5210	F07/ F10	F07/ F10	F07/ F10	F10	F10	F14	F10
Suitable multi-turn actuator (with output drive type E)		SA 6	SA 6	SA 6	SA 12	SA 6	SA 25	SA 6
Max. permissible weight of multi-turn actuator	kg	30	30	30	30	30	70	30
	lbs.	66	66	66	66	66	155	66
<p>1) For rare operation, based on a service life of min. 2000 cycles of 90°</p> <p>2) Nominal torque for frequent operation, based on a service life of min 15000 operating cycles of 90°</p> <p>3) Conversion factor output torque to input torque</p> <p>4) On request, other sizes can be supplied</p> <p>5) Observing the permissible effort at handwheel</p> <p>6) Flanges at GS and GZ according to ISO 5210 are standard</p> <p>7) Without siggot</p> <p>NOTE: For dimensional details, refer to GS 40.2- GS 125.2 dimensional sheet.</p>								

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Technical Data sheet for Multi-turn Worm Gearboxes

TECHNICAL DATA FOR MULTI-TURN FOR WORM GEARBOXES (FLANGE MOUNTED) AND PRIMARY REDUCTION GEARS										GS 160 - GS 250			
Output torque for manual operation ¹⁾ max	Nm	11250				22500				45000			
	lbs. ft.	8300				16600				33200			
Output torque for motor operation ²⁾ T _N	Nm	8000				16000				32000			
	lbs. ft.	5900				11800				23600			
Operator	Type	GS 160				GS 200				GS 250			
Reduction	Type	GZ 14				GZ 16				GZ 25			
Reduction ratio	GSi =	54:1	54:1	54:1	53:1	53:1	53:1	53:1	52:1	52:1	52:1	52:1	
Reduction ratio	GZi =	—	4:1	8:1	—	4:1	8:1	16:1	—	4:1	8:1	16:1	
Total reduction ratio	GS+GZi =	—	216:1	432:1	—	212:1	424:1	848:1	—	208:1	416:1	832:1	
Input torque at max. output torque ¹⁾	Nm	465	138	69	940	276	138	69	1923	560	280	140	
	lbs. ft.	343	102	51	694	204	102	51	1420	414	207	104	
Input torque at nominal output ²⁾	Nm	330	98	49	670	196	98	50	1370	400	200	100	
	lbs. ft.	243	72	36	495	145	72	37	1010	295	148	74	
Mechanical advantage ³⁾		24.2	82	164	23.9	82	163	320	23.4	80	160	320	
Valve mounting flange	ISO 5211 ⁴⁾	F25				F30				F35			
Valve shaft diameter Ø	max. mm	100				125				160			
	max. inch	4				5				6 1/4			
Weight ⁵⁾	kg	85	106	106	150	180	180	180	290	325	325	325	
	lbs.	187	233	233	330	396	396	396	639	715	715	715	
Handwheel diameter ⁶⁾	mm	640/800	400	300	—	500/640	400	300	—	800	500/640	400	
	inch	25/32	16	12	—	20/25	16	12	—	32	20/25	16	
Mounting flange for multi-turn actuator	ISO 5210 ⁷⁾	F 14	F 10	F 10	F 16	F 14	F 10	F 10	F 25	F 14	F 14	F 10	
	DIN 3210	—	G0	G0	—	G½	G0	G0	—	G½	G½	G0	
Suitable multi-turn actuator (with output drive)		SA 50	SA 12	SA 6	SA 100	SA 25	SA 12	SA 6	—	SA 50	SA 25	SA 12	
Max. permissible weight of multi-turn actuator	kg	100	60	60	160	80	60	60	300	100	80	60	
	lbs.	220	135	135	350	180	135	135	660	220	180	135	
Ambient temperature range GS <input type="checkbox"/> -20°C – +80°C <input type="checkbox"/> Type of enclosure IP 67 dust proof and water tight <input type="checkbox"/> IP 68 enclosure on request <input type="checkbox"/>													
<p>1) For rare operation, based on a service life of min. 2000 cycles of 90°</p> <p>2) Nominal torque for frequent operation, based on a service life of min 15000 operating cycles of 90°</p> <p>3) Conversion factor output torque to input torque</p> <p>4) Other sizes can be supplied on request</p> <p>5) With pilot hole in coupling and grease filling</p> <p>6) Observing the permissible effort at handwheel</p> <p>7) Flanges at GS and GZ according to ISO 5210 are standard</p> <p style="text-align: center;">NOTE: For dimensional details, refer to GS 160- GS 500 dimensional sheet.</p>													
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Technical Data sheet for Multi-turn Worm Gearboxes

TECHNICAL DATA FOR MULTI-TURN FOR WORM GEARBOXES (FLANGE MOUNTED) AND PRIMARY REDUCTION GEARS										GS 315 - GS 500			
Output torque for manual operation ¹⁾ max	Nm	90000				180000				360000			
	lbs. ft.	66400				132800				265600			
Output torque for motor operation ²⁾ T _N	Nm	63000				125000				250000			
	lbs. ft.	46500				92200				184400			
Operator	Type	GS 315				GS 400				GS 500			
Reduction	Type	GZ 30				GZ 35				GZ 40			
Reduction ratio	GSi =	53:1	53:1	53:1	53:1	54:1	54:1	54:1	54:1	52:1	52:1	52:1	
Reduction ratio	GZi =	—	8:1	16:1	32:1	—	8:1	16:1	32:1	—	16:1	32:1	
Total reduction ratio	GS+GZi =	—	424:1	848:1	1696:1	—	432:1	864:1	1728:1	—	832:1	1664:1	
Input torque at max. output torque ¹⁾	Nm	3766	556	278	139	7410	1090	545	273	15385	1126	563	
	lbs. ft.	2782	410	205	103	5473	806	403	202	11365	832	416	
Input torque at nominal output ²⁾	Nm	2640	338	194	97	5140	760	380	190	10700	780	390	
	lbs. ft.	1950	286	143	72	3790	560	280	140	7890	576	288	
Mechanical advantage ³⁾		23.9	162	325	650	24.3	165	330	660	23.4	320	640	
Valve mounting flange	ISO 5211 ⁴⁾	F40				F48				F60			
Valve shaft diameter	max. mm	200				250				315			
	max. inch	8				10				12 1/2			
Weight ⁵⁾	kg	520	630	630	630	980	1100	1100	1100	1800	2000	2000	
	lbs.	1144	1386	1386	1386	2156	2420	2420	2420	3960	4400	4400	
Handwheel diameter ⁶⁾	mm	—	640/800	400	300	—	—	800	500/640	—	—	800	
	inch	—	25/32	16	12	—	—	32	20/25	—	—	32	
Mounting flange for multi-turn actuator	ISO 5210 ⁷⁾	F 30	F 14	F 10	F 10	F 35	F 16	F 14	F 14	F 40	F 16	F 14	
	DIN 3210	—	G½	G½	G0	—	G3	G½	G½	—	G3	G½	
Suitable multi-turn actuator (with output drive type E)		—	SA 50	SA 12	SA 6	—	SA 100	SA 50	SA 25	—	SA 100	SA 50	
Max. permissible weight of multi-turn actuator	kg	400	100	60	60	800	160	100	80	1000	160	100	
	lbs.	880	220	135	135	1760	350	220	180	2200	350	220	
Ambient temperature range GS <input type="checkbox"/> -20°C – +80°C <input type="checkbox"/> GS & GZ - Type of enclosure IP 67 dust proof and watertight <input type="checkbox"/> IP 68 enclosure on request <input type="checkbox"/>													
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