



01

02

**GEARBOX SPECIFICATION**

	S1-3	S1-5	S1-7	S1-8	S1-10
<b>GP56-xx-xx-SR</b>					
Reduction Ratio	3.29 (135/41)	5.09 (117/23)	6.53 (111/17)	7.71 (54/7)	9.55 (105/11)
No. of Stages	1				
Rated Output Torque Nm	14.19	15.28	16.29	16.58	13.55
Max. Output Torque Nm	28.38	30.56	32.58	33.16	27.1
Rated Input Speed rpm	3500				
Max. Input Speed rpm	4658	8307	8988	10919	13000
Backlash °	≤0.5				
Efficiency %	92				
Lifetime h	10000				
Gearbox Inertia kg m <sup>2</sup>	8.5 x10 <sup>-6</sup>	3.4 x10 <sup>-6</sup>	3.7 x10 <sup>-6</sup>	2.1 x10 <sup>-6</sup>	3.2 x10 <sup>-6</sup>
Ambient Temperature °C	-15 ... 90				
Protection Class	IP54				
Fr 100 rpm Output Speed N	515				
Fa 100 rpm Output Speed (shaft middle) N	1460				

ISO 8015		ISO 1302		ISO 2768 cK		ISO 13715				
REV	Rev. Text	Name	Date	Date	Name					
				Drawn	17.01.2023	Schneid_A	<b>GP56-S1-x-SR</b>			
				Reviewed	17.05.2023	Kaiming_C				
				Released	17.05.2023	Kaiming_C				
02	Backlash updated	Kaiming_C	24.05.2023	<b>Nanotec</b> PLUG & DRIVE			<b>20001846</b>		Scale: 1 : 1 A4 Page 1	
01	changed values, dim.	Schneid_A	17.05.2023							
REV	Rev. Text	Name	Date	State: Released		Rev: 02		CONFIDENTIAL		EJ