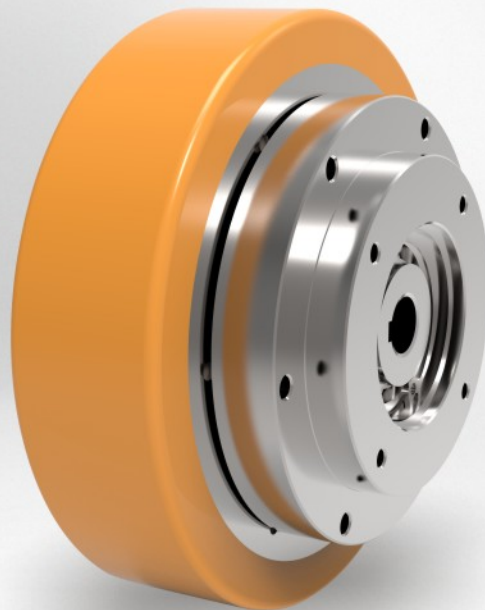


KGV

Powerful. Compact. Reliable

▶ KGV Wheel

KGV Valued Solution



KGV Wheel Specification in Metric System

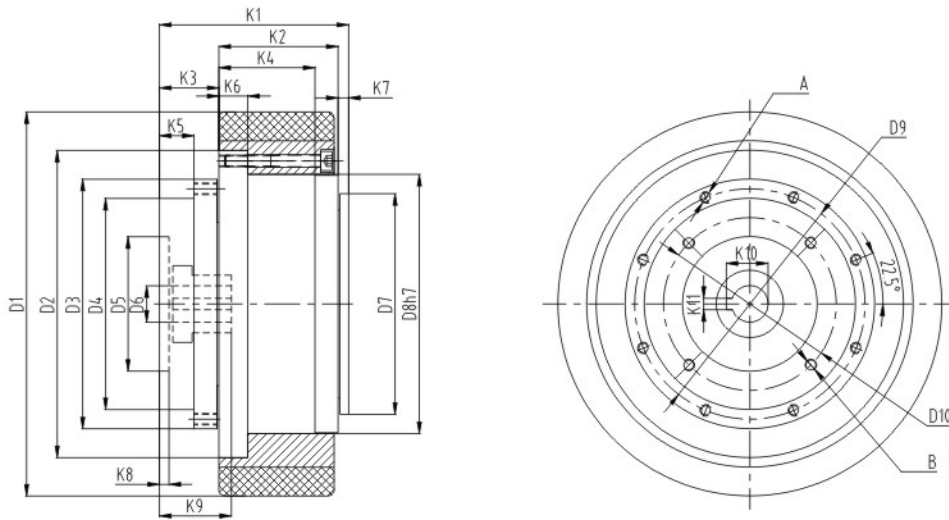
Model		KGV118W	KGV138W	KGV160W	KGV190W	Ratio	Stage	
Rated Output Torque	Nm	75	100	135	210	2	1	
		87	115	250	320	3		
		93	120	230	300	4		
		87	114	170	250	5		
		81	105	140	220	6		
		69	90	130	170	7		
		63	82	120	150	8		
		63	82	110	130	9		
		75	100	150	200	14		2
		75	100	145	190	16		
		75	100	140	180	18		
		75	100	130	160	20		
		87	115	230	300	21		
		87	115	230	285	24		
		87	115	220	270	27		
		93	120	250	320	28*		
		87	115	190	240	30		
		93	120	250	320	32*		
93	120	240	300	36*				
93	120	240	300	40*				
Emergency Stop Torque	Nm	2 times rated output torque						
Regular Applied Servo Motor	Watt	400~750	400~750	750~1000	1000~1500			
Max Radial Force	N	4000	8000	10000	12000			
Bearing Weight Capacity	kg	400	800	1000	1200			
Full loading Efficiency	%	95					1	
		93					2	
Service lifetime	h	15000						
Weight	kg	4.5	10.5	14	16.5		1	
		5.5	12	17.5	20		2	

Model		KGV118W	KGV138W	KGV160W	KGV190W	Ratio	Stage
Mass Moment of Inertia	kgcm ²	0.16	0.61	2.63	3.25	2	1
		0.14	0.48	1.79	2.74	3	
		0.13	0.47	1.53	2.71	4	
		0.13	0.47	1.5	2.62	5	
		0.13	0.45	1.4	2.62	6	
		0.13	0.44	1.32	2.62	7	
		0.13	0.44	1.32	2.57	8	
		0.13	0.44	1.32	2.57	9	
		0.127	0.127	1.63	2.56	14	
		0.127	0.127	1.75	2.56	16	
		0.12	0.12	1.53	1.75	18	
		0.075	0.075	1.49	1.5	20	
		0.075	0.075	1.49	1.49	21	
		0.064	0.064	1.3	1.3	24	
		0.064	0.064	1.3	1.3	27	
		0.064	0.064	1.3	1.3	28	
		0.064	0.064	1.3	1.3	30	
		0.064	0.064	1.3	1.3	32	
0.075	0.075	1.3	1.5	36			
0.075	0.075	1.32	1.49	40			
Running Noise	dB(A)	58	60	63	65		
Max Input Speed	min-1	6000	6000	6000	6000		
Rated Input Speed	min-1	3000	3000	3000	3000		
Protection Class		IP65					
Working Temperature	°C	minus 25 to 90					
Installation Position		Any					
Standard Lubrication		Lifetime Synthetic Lubrication Grease					
Low Temperature Lubrication		Lifetime Synthetic Lubrication Grease					
Backlash	arcmin	≤15	≤12	≤12	≤12		
Unit Gearbox Weight	kg	7	11	14	27.5		1
		8	11.5	15	31.5		2

KGV Wheel Specification in British System

Model		KGV118W	KGV138W	KGV160W	KGV190W	Ratio	Stage	
Rated Output Torque	in.lb	664	885	1195	1859	2	1	
		770	1018	2213	2832	3		
		823	1062	2036	2655	4		
		770	1009	1505	2213	5		
		717	929	1239	1947	6		
		611	797	1151	1505	7		
		558	726	1062	1328	8		
		558	726	974	1151	9		
		664	885	1328	1770	14		2
		664	885	1283	1682	16		
		664	885	1239	1593	18		
		664	885	1151	1416	20		
		770	1018	2036	2655	21		
		770	1018	2036	2522	24		
		770	1018	1947	2390	27		
		823	1062	2213	2832	28*		
		770	1018	1682	2124	30		
		823	1062	2213	2832	32*		
823	1062	2124	2655	36*				
823	1062	2124	2655	40*				
Emergency Stop Torque	in.lb	2 times rated output torque						
Regular Applied Servo Motor	Watt	400~750	400~750	750~1000	1000~1500			
Max Radail Force	lb _r	899	1798	2248	2698			
Bearing Weight Capcity	lb _m	882	1764	2205	2646			
Full loading Efficiency	%	95						1
		93						2
Service lifetime	h	15000						
Weight	lb _m	9.9	23.2	30.9	36.4		1	
		12.1	26.5	38.6	44.1		2	

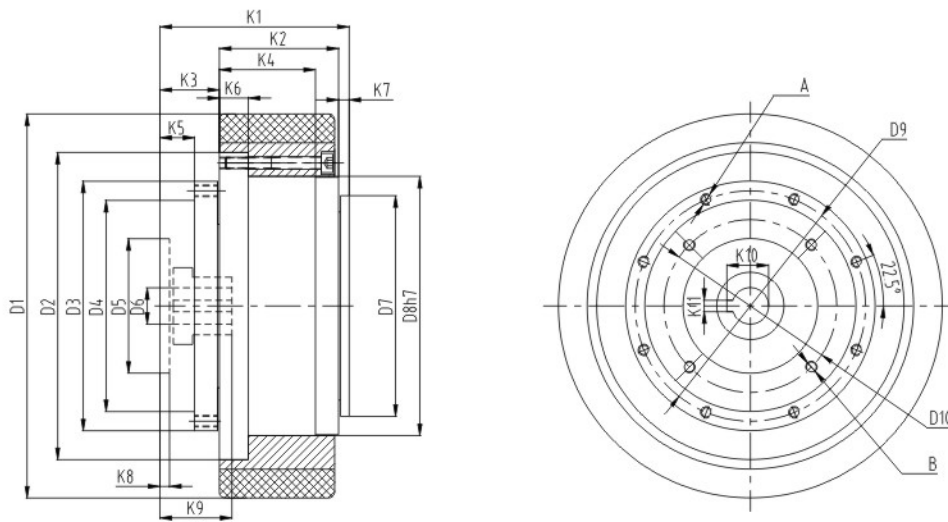
Model		KGV118W	KGV138W	KGV160W	KGV190W	Ratio	Stage	
Mass Moment of Inetia	10 ⁻³ in.lb.s ²	1.42	5.40	23.28	28.76	2	1	
		1.24	4.25	15.84	24.25	3		
		1.15	4.16	13.54	23.99	4		
		1.15	4.16	13.28	23.19	5		
		1.15	3.98	12.39	23.19	6		
		1.15	3.89	11.68	23.19	7		
		1.15	3.89	11.68	22.75	8		
		1.15	3.89	11.68	22.75	9		
		1.12	1.12	14.43	22.66	14		2
		1.12	1.12	15.49	22.66	16		
		1.06	1.06	13.54	15.49	18		
		0.66	0.66	13.19	13.28	20		
		0.66	0.66	13.19	13.19	21		
		0.57	0.57	11.51	11.51	24		
		0.57	0.57	11.51	11.51	27		
		0.57	0.57	11.51	11.51	28		
		0.57	0.57	11.51	11.51	30		
		0.57	0.57	11.51	11.51	32		
		0.66	0.66	11.51	13.28	36		
		0.66	0.66	11.68	13.19	40		
Running Noise	dB(A)	58	60	63	65			
Max input Speed	min ⁻¹	6000	6000	6000	6000			
Rated input Speed	min ⁻¹	3000	3000	3000	3000			
Protection Class		IP65						
Working Temperature	°C	minus 25 to 90						
Installation Position		Any						
Standard Lubrication		Lifetime Synthetic Lubrication Grease						
Low Temperature Lubrication		Lifetime Synthetic Lubrication Grease						
Backlash	arcmin	≤15	≤12	≤12	≤12			
Unit Gearbox Weight	lb _m	15.4	24.3	30.9	60.6		1	
		17.6	25.4	33.1	69.5		2	



KGV Wheel Dimensions in Metric System (mm)

Model	KGV118W		KGV138W		KGV160W		KGV190W	
	1	2	1	2	1	2	1	2
D1	φ 150		φ 170		φ 200		φ 250	
D2	φ 118	φ 120	φ 138		φ 160		φ 190	
D3	φ 110		φ 130		φ 130		φ 190	
D4	φ 83h7		φ 110h7		φ 110h7		φ 160h7	
D5	φ 50G7		φ 70G7		φ 70G7		φ 110G7	φ 95G7
D6	φ 14G7		φ 19G7		φ 19G7		φ 24G7	φ 19G7
D7	φ 90	φ 99	φ 99		φ 115	φ 120	φ 125	φ 140
D8	φ 95h7	φ 100h7	φ 115h7		φ 135h7		φ 160h7	
D9	φ 100		φ 120		φ 120		φ 176	
D10	φ 70		φ 90		φ 90		φ 145	φ 130
K1	70	84.5	81.5	92.5	98.5	108.5	125	121
K2	40	47.5	55		62	70	70	80
K3	27.5	20	24		31	23	51	32.5
K4	40		40	45	60		70	
K5	10		10		18	10	34	15
K6	12		15		15		20	
K7	2.5	17	2.5	13.5	5.5	15.5	4	8.5
K8	4		5		5		8	
K9	31	31.5	31.5	37.5	37.5		56.3	51.8
K10	16.3		21.8		21.8		27.3	21.8
K11	5		6		6		8	6
A	6-M6X8		6-M6X9		8-M6X12		6-M8X16	
B	4-M5X12		4-M6X12		4-M6X12		4-M8X20	

Note: The gearbox input dimensions would be different for each applied specific motor.



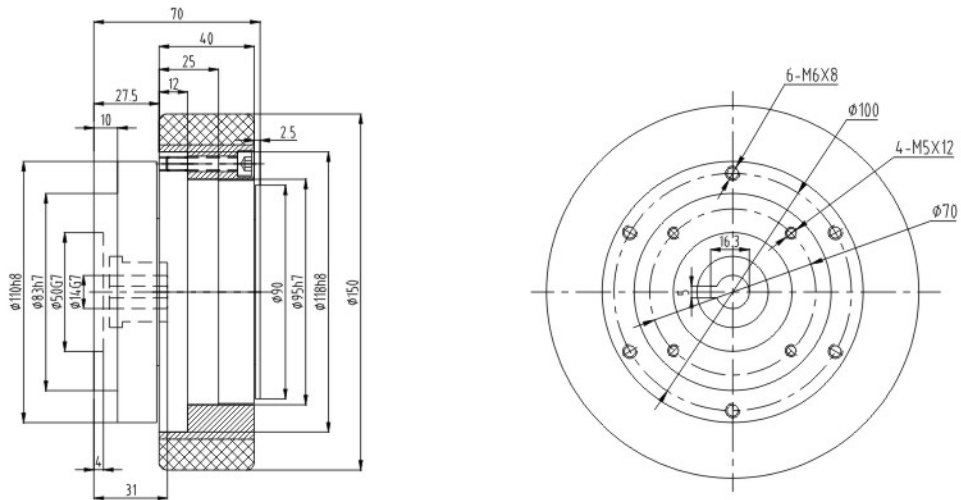
KGV Wheel Dimensions in British System (inch)

Model	KGV118W		KGV138W		KGV160W		KGV190W	
	1	2	1	2	1	2	1	2
D1	φ 5.85		φ 6.63		φ 7.8		φ 9.75	
D2	φ 4.62	φ 4.68	φ 5.382		φ 6.24		φ 7.41	
D3	φ 4.29		φ 5.07		φ 5.07		φ 7.41	
D4	φ 3.237h7		φ 4.29h7		φ 4.29h7		φ 6.24h7	
D5	φ 1.95G7		φ 2.73G7		φ 2.73G7		φ 4.29G7	φ 3.705G7
D6	φ 0.546G7		φ 0.741G7		φ 0.741G7		φ 0.936G7	φ 0.741G7
D7	φ 3.51	φ 3.861	φ 3.861		φ 4.485	φ 4.68	φ 4.875	φ 5.46
D8	φ 3.705h7	φ 100h7	φ 4.485h7		φ 5.265h7		φ 6.24h7	
D9	φ 3.9		φ 4.68		φ 4.68		φ 6.864	
D10	φ 2.73		φ 3.51		φ 3.51		φ 5.655	φ 5.07
K1	2.73	3.2955	3.1785	3.6075	3.8415	4.2315	4.875	4.719
K2	1.56	1.8525	2.145		2.418	2.73	2.73	3.12
K3	1.0725	0.78	0.936		1.209	0.897	1.989	1.2675
K4	1.56		1.56	1.76	2.34		2.73	
K5	0.39		0.39		0.702	0.390	1.326	0.585
K6	0.468		0.585		0.585		0.78	
K7	0.0975	0.663	0.0975	0.5265	0.2145	0.6045	0.156	0.3315
K8	0.156		0.195		0.195		0.312	
K9	1.209	1.2285	1.2285	1.4625	1.4625		2.1957	2.0202
K10	0.6357		0.8502		0.8502		1.0647	0.8502
K11	0.195		0.234		0.234		0.312	0.234
A	6-M6X0.312		6-M6X0.351		8-M6X0.468		6-M8X0.624	
B	4-M5X0.468		4-M6X0.468		4-M6X0.468		4-M8X0.780	

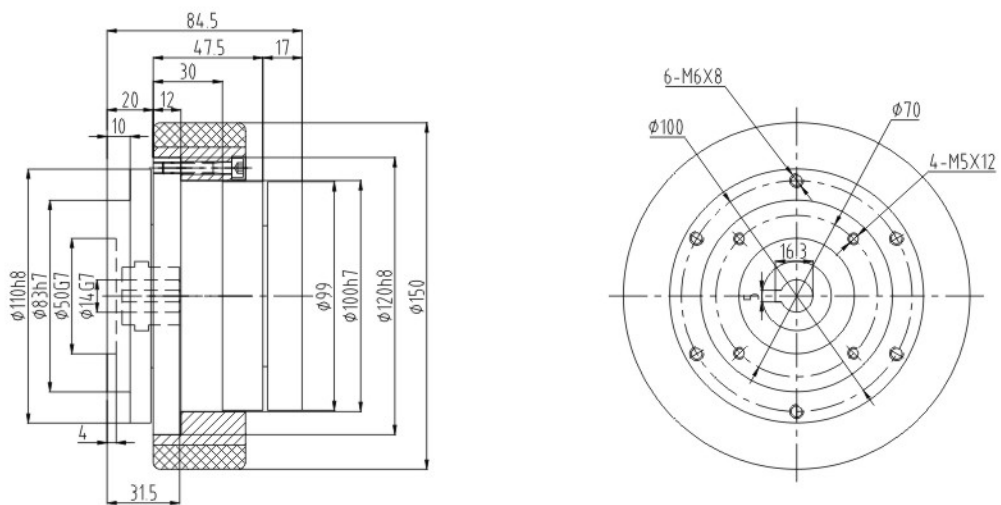
Note: The gearbox input dimensions would be different for each applied specific motor.

KGV Wheel Dimensions

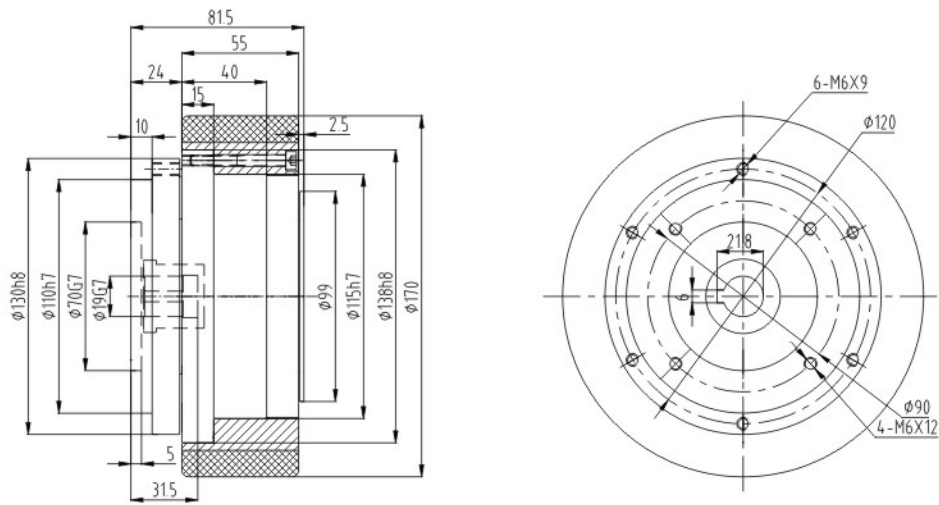
KGV118-W-1 stage



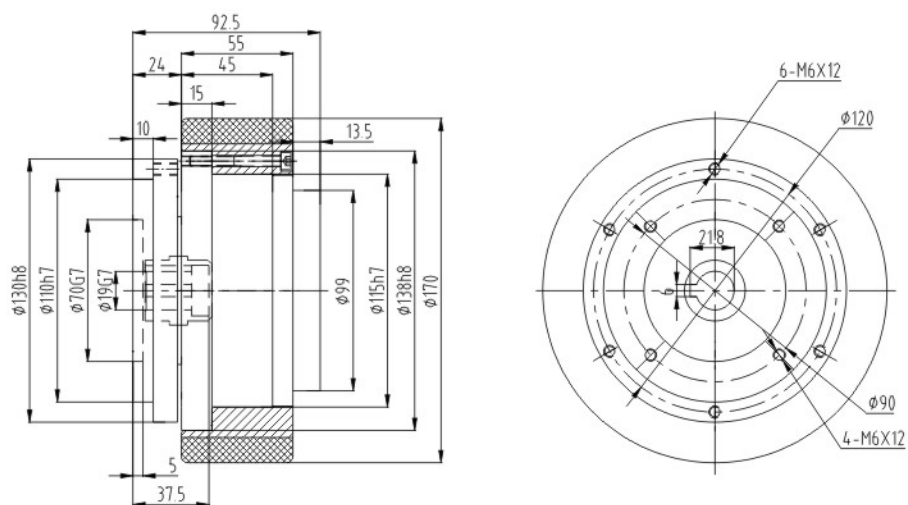
KGV118-W-2 stages



KGV138-W-1 stage



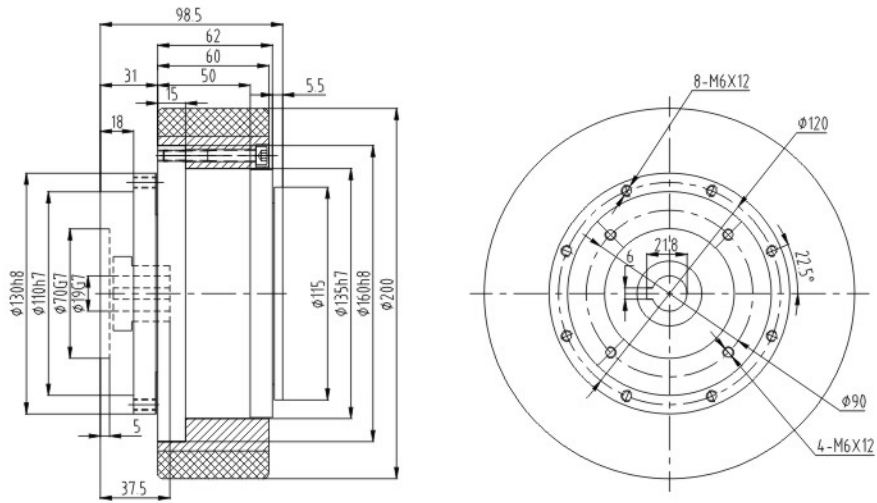
KGV138-W-2 stages



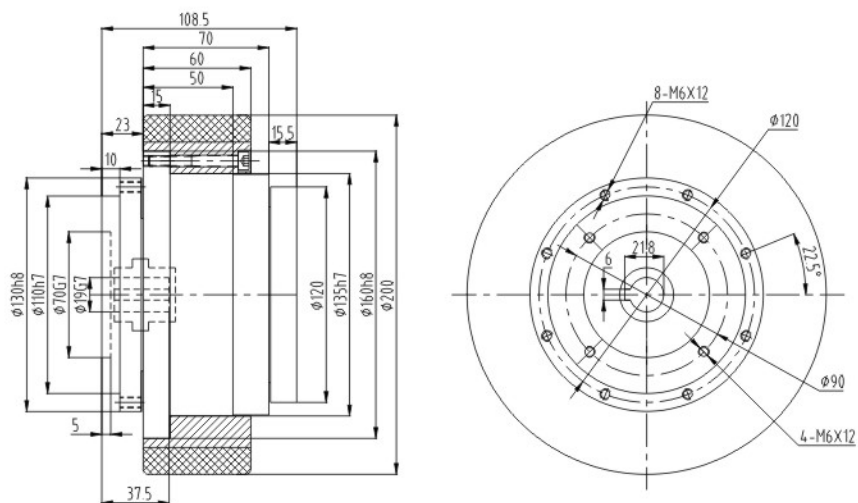
KGV Wheel

KGV Wheel Dimensions

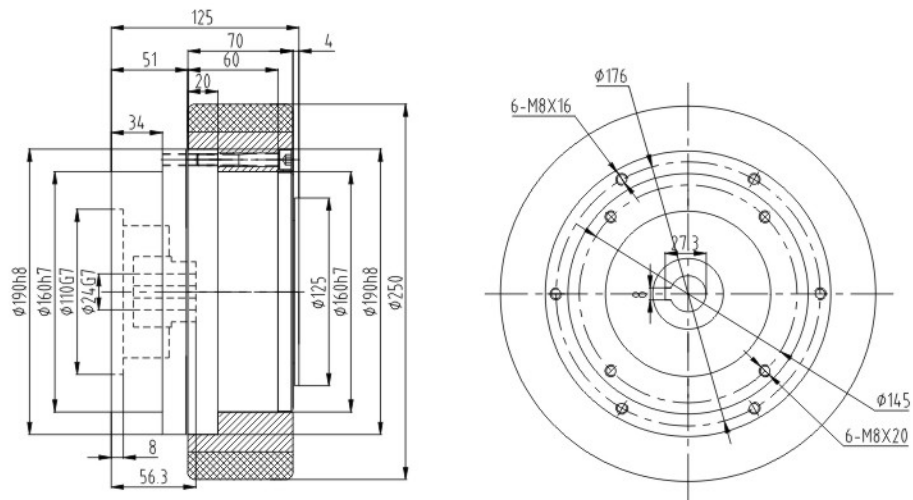
KGV160-W-1 stage



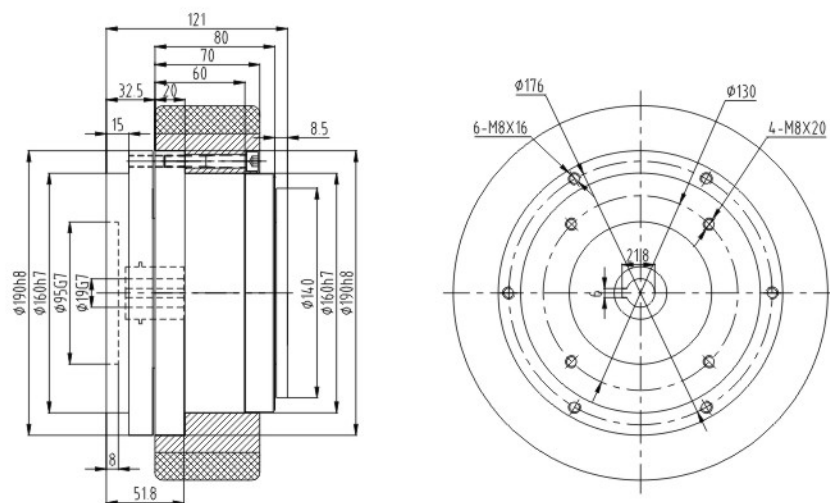
KGV160-W-2 stages



KGV190-W-1 stage

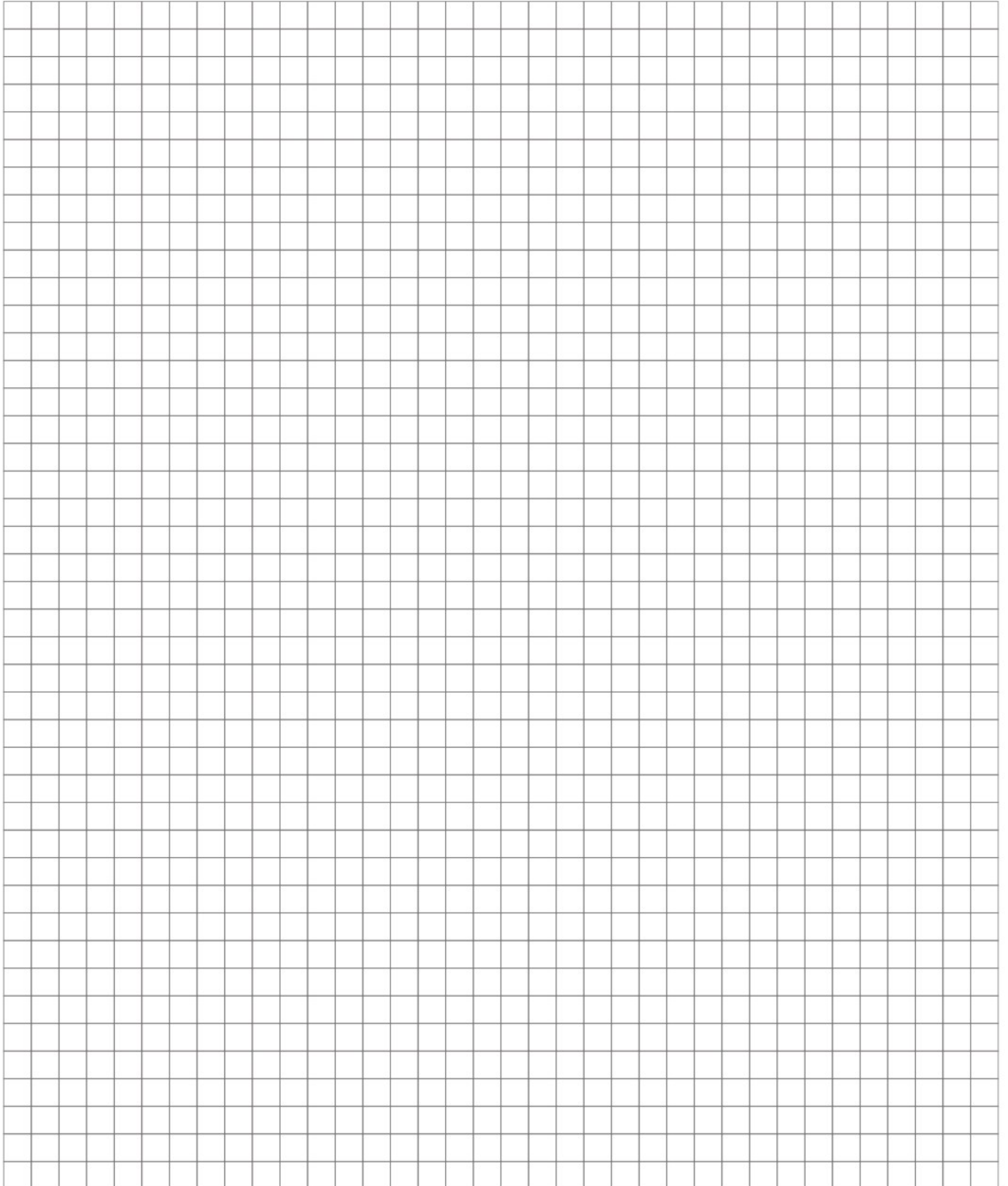


KGV190-W-2 stages



KGV Wheel

Technical Memo



A large grid of graph paper, consisting of 20 columns and 40 rows of small squares, intended for technical drawing or calculations.