# **AVAILABLE COMBINATION**

## A UNIQUE CONCEPT IN GEAR-**MOTORS AND SPEED REDUCERS**

#### Combinations with 4P motor Ratio6 ~ 119

Ratio		6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
O/p Speed		50Hz	242	181	132	112	96.7	85.3	69.0	58.0	50.0	41.4	33.7	28.4	24.6	20.4	16.7	12.2
r/mir				219	159	135	117	103	83.3	70.0	60.3	50.0	40.7	34.3	29.7	24.6	20.1	14.7
	0.	1 × 4																
	0.2	2×4																
	0.2	25 × 4																
	0.4	4 × 4																
	0.5	55 × 4																
	0.7	′5×4																
	1.	1 × 4																
	1.	5×4																
М	2.:	2×4																
0	3.0	0×4																
Т	3.	7×4																
0	5.	5×4																
R	7.	5×4																
kW×P)	11	1×4																
	15	5×4																
	18.	.5 × 4																
	22	2×4																
	30	0×4																
	37	7×4																
	45	5×4																
	55	5×4																
	75	5×4																

## Combinations with 6P motor Ratio11 ~ 87

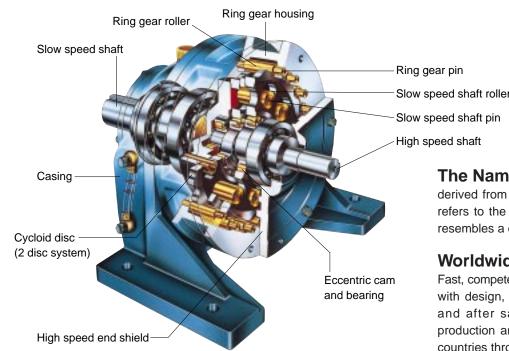
R	ati	0	11	15	21	29	43	59	87
O/p Speed 50Hz			89.1	65.3	46.7	33.8	22.8	16.6	11.3
r/mir	า	60Hz	106	77.7	55.5	40.2	27.1	19.7	13.4
	1	5×6							
	18	3.5 × 6							
	2	2×6							
М О	3	0×6							
T	3	7×6							
0	4	5×6							
R	5	5×6							
IX.	7	5×6							
(kW×P)	9	0×6							
	11	10×6							
	13	32×6							

Added combinations are marked by color.

#### Combinations with 4P motor Ratio 104 ~ 7569

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Ratio	0	104	121	143	165	195	231	273	319	377	473	559	649	731	841	1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	750
O/p Speed r/min	50Hz	13.9	12.0	10.1	8.79	7.44	6.28	5.31	4.55	3.85	3,07	2.59	2.23	1.98	1.72	1.45	1.16	0.980	0.784	0.702	0.572	0.476	0.417	0.327	0.282	0.235	0.1
	60Hz	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39	2.08	1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.2
	0.1 × 4																										Г
	0.2 × 4																										
	$0.25 \times 4$																										
	0.4 × 4																										
	$0.55 \times 4$																										
	$0.75 \times 4$																										
	1.1 × 4																										
M	1.5 × 4																										
0	2.2 × 4																										
Т	3.0 × 4																										1
0	3.7 × 4																										1
R	5.5 × 4																										1
(kW×P)	7.5 × 4																										
	11×4																										
	15 × 4																										1
	$18.5 \times 4$																										1
	22×4																										
	30 × 4																										
	37×4																										L
	45 × 4																										L
Output Torque N • m		24 ~ 7350	24 ~ 31300	24 ~ 7630		24 ~ 700	460	-	24 ~ 68200				45 ~ 68200 6		~		45 24 150 2 68200 68200 68200 68		24 ~ 68200	~		150 ~ 68200			525 ~ 68200		

Added combinations are marked by color.



Cycloid disc

(2 disc system)

#### The Name CYCLO

derived from Kyklos the Greek word for circle, refers to the CYCLO disc, whose outer profile resembles a cycloidal curve.

#### **Worldwide Product Support**

Fast, competent technical advice and assistance with design, application selection, installation, and after sales service is available from production and distribution centers in over 30 countries throughout the world.

#### Many Possibilities

of mechanical and electrical power transmission and control are available in the complete CYCLO product range. CYCLO means the available solution. Get in touch with us, we will be happy to provide whatever information you

### **70 Years of Product Development**

The unique CYCLO operating principle was invented by the German engineer Lorenz Braren in 1931. His ingenious design has continued its progressive development up to the present day.

#### More than 7,000,000 Units Sold

Sumitomo Heavy Industries, Ltd. Power Transmission & Controls Group, a world leader in power transmission control, has produced more than 7,000,000 CYCLO DRIVES, CYCLO DRIVE Gearmotors, and Speed Reducers. They are used daily in industries throughout the world, replacing the more conventional helical, worm, and spur gear units.

#### **Power Transmission Experience**

In addition to a wide range of application knowledge, we can offer 70 years of advanced power transmission drive experience.

Slow speed shaft

Ring gear housing

Ring gear roller

Ring gear pin

#### **Quality System Certification**

Motor flange

Eccentric cam and bearing

> Slow speed shaft pin

bracket

Sumitomo Heavy Industries, Ltd. Nagoya Plant, Power Transmission & Controls Group has achieved the Quality System Certification according to ISO 9001, EN29001, BS5750 Part 1:1987, JIS Z9901:1991 Standard for design and manufacture of mechanical speed reducers, mechanical speed variators, electric motors, and gearmotors.

