SW1RU Series Harmonic Gearboxes

FEATURES

- Better loading capacity and bigger transmission ratio
- High efficiency and longer life
- Compact and light weight
- Impact resistant, Smooth transmission, high precision and low noise
- Backlash 30 arc-seconds

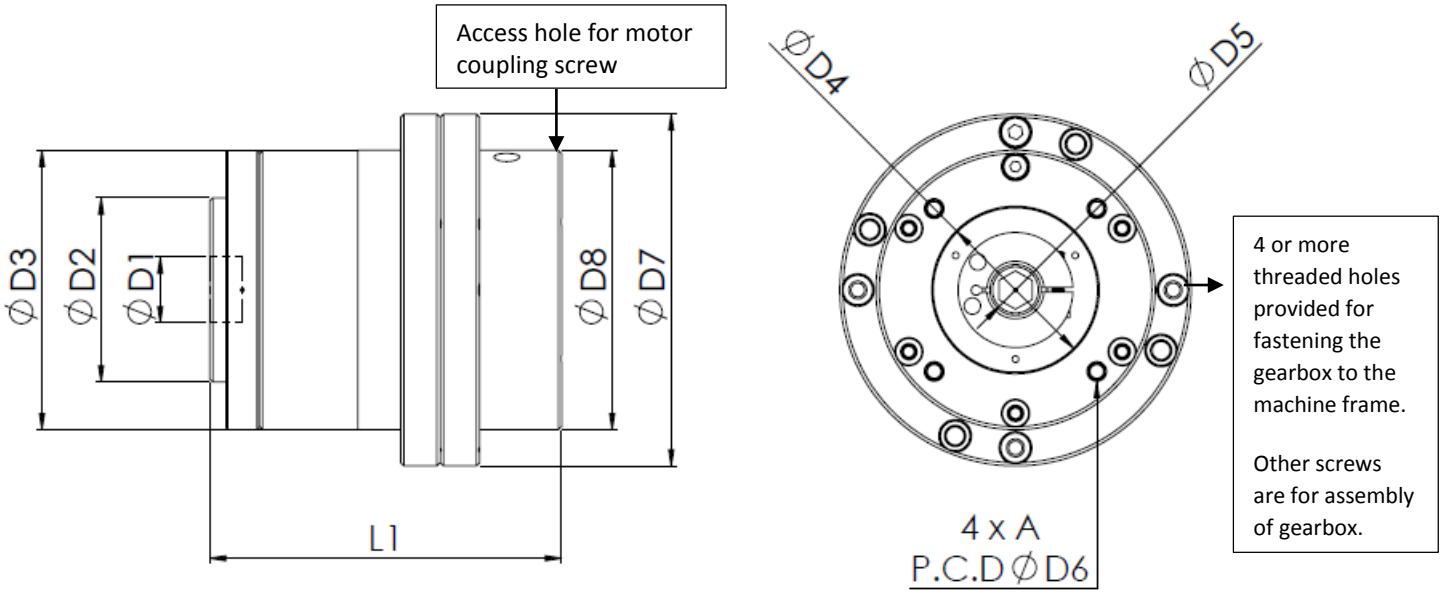
TECHNICAL SPECIFICATIONS

Performances		Ratio	SW1RU64	SW1RU76	SW1RU86	SW1RU107	SW1RU138	SW1RU165	SW1RU226
Nominal Output Torque	Lb-in/ Nm	80	53/ 6	103/ 12	222/ 25	354/ 40	885/ 100	1770/ 200	3186/ 360
		100	-	133/ 15	267/ 30	443/ 50	1062/ 120	2124/ 240	3983/ 450
		120	-	-	-	443/ 50	-	-	3983/ 450
		135	-	-	-	-	1062/ 120	-	-
		150	-	-	-	443/ 50	-	-	3983/ 450
		160	-	-	-	443/ 50	1062/ 120	2124/ 240	3983/ 450
		200	-	-	-	443/ 50	1062/ 120	2124/ 240	3983/ 450
Max Acceleration Torque	Lb-in/ Nm	80~200	3 Times Nominal Output Torque						
Emergency Stop Torque	Lb-in/ Nm	80~100	(1) 3.4 times Nominal Output Torque						
Permissible Input Speed	rpm	80~200	3000	3000	3000	3000	3000	3000	3000
Max Backlash	arc-sec	80~200	30	30	30	30	30	30	30
Max Tilting moment-at flange face	Lb-in/ Nm	80~200	44/ 5	53/ 6	70/ 8	88/ 10	440/ 50	530/ 60	619/ 70
Max. radial force	Lbf/ N	80~200	77/343	88/392	165/735	110/ 490	441/1961	661/2940	765 / 3402
Max. axial force	Lbf/ N	80~200	38/171	44/196	82/ 367	55/245	220/980	330/1470	382 / 1701
Rated life (2)	H	80~200	＞10,000						
Operating Temperature Range	℃	80~200	-10℃ to +40℃ ambient -- 90℃ max operating case temperature						
Noise level (3)	dB(A)	80~200	52	52	52	53	55	62	70
Lubrication		80~200	Lubricated for life (synthetic grease)						
Protection class		80~200	IP54						
Gearhead Inertia	Kg- cm²	80~200	0.04	0.14	0.54	1.3	4.2	9.6	22.5
Rigidity	Kgf- m/ arc-min	80~200	0.024	0.060	0.121	0.226	0.538	0.97	1.89
Weight	Kg	80~200	0.7	1.0	1.5	2.7	5.6	12	27.9
No-load running torque	Lb-in/ Nm	80~200	0.6/ 0.07	0.6/ 0.07	0.6/ 0.07	1.2/ 0.13	2.2/ 0.25	4.16/ 0.47	8.4/ 0.95

Notes:

(1) For 1000 times max during life of gearhead
(2) At permissible input speed and Continuous Output Torque
(3) At input speed of 1000 rpm
(4) Efficiency = 85% at permissible input speed and full load

MECHANICAL DIMENSIONS



Dimension (mm)	SW1RU64	SW1RU76	SW1RU86	SW1RU107	SW1RU138	SW1RU165	SW1RU226
D1- output pilot bore	10	12	16	20	30	32	40
D2 – rotating output flange	24	30	38	56	80	96	135
D3 – output body dia.	50	60	70	85	112	137	186
D4 – motor pilot (typical)	30	30	30	50	70	70	110
D5 – motor input shaft (typ)	8	8	8	14	19	19	22-24
D6 – motor flange mtg holes	46	46	46	70	90	90	145
D7 – dia. of housing flange	64	76	86	107	138	165	226
D8 – input hub diameter.	52	60	70	85	112	132	175
L1 - overall length	69	74.5	91.5	107.2	130	160.5	202