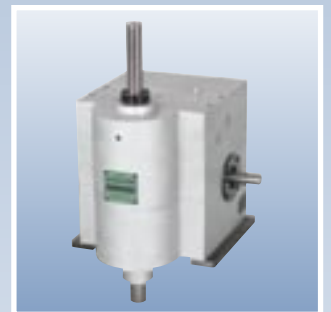
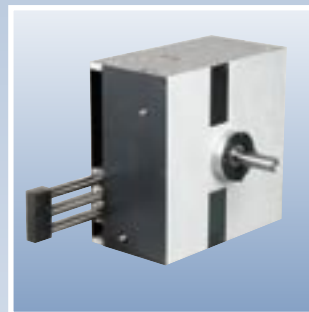
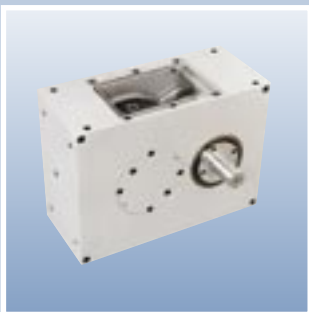
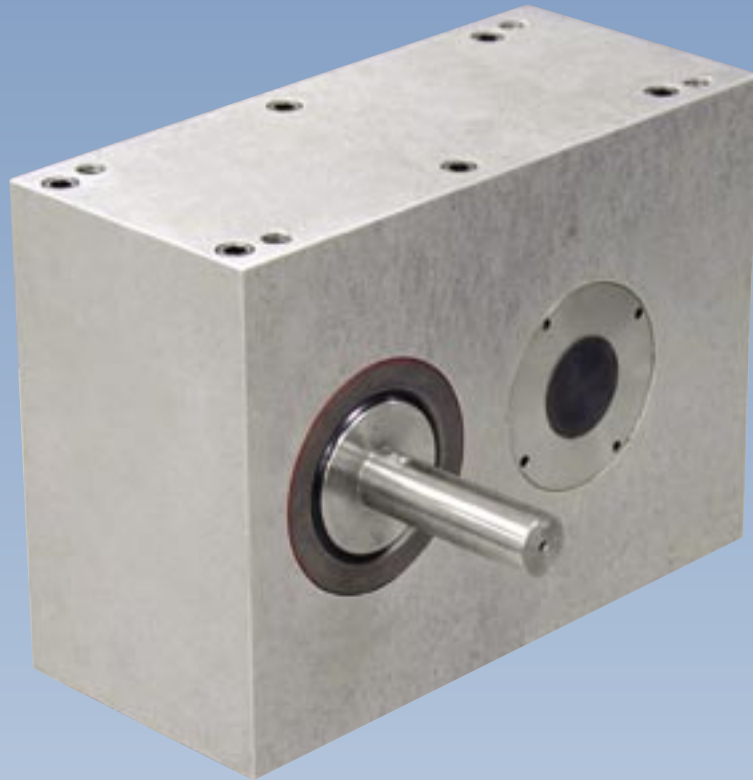


Stelron PS Indexer



PS Series Parallel Shaft Indexer

INTRODUCTION:

The recent introduction of the PS series index drives confirms STELRON's continuing commitment to the design & manufacture of automation components. These components are integrated into all types of high speed machinery.

STANDARD FEATURES:

- Shaft / Flange output
- Preloaded cam & follower wheel arrangement
- Hardened steel cam – CNC Ground to precise tolerances
- Compact Aluminum housing – Machine on all six mounting surfaces
- Oversize bearings support input and output shafts
- Input and output slip clutch options
- Wide variety of low backlash gear reducers
- Output through hole available (optional)
- Universal mounting on any of six sides
- Universal housing –Top & Bottom split
- Large YOKE rollers supported from both ends
- Many standard motion sequences using MODIFIED SINE with 0% Constant Velocity
- Standard accuracy of +/- .001" @ pitch diameter
- Direct replacement for industry standard sizes
- Easy maintenance

GENERAL:

Indexers similar to this have been available for many years. In that time these components have proven to be effective solutions in many high speed applications. Reliable cam driven indexers can operate at higher speeds than Pneumatic, Hydraulic, or Geneva indexers while offering much greater overall reliability and lower maintenance & operating cost.

The STELRON PS-Series Parallel Shaft indexers are among the highest speed indexers available today. Parallel Shaft indexers in particular can operate at higher speeds than either Right-Angle or Roller Gear cam systems due to fact that the followers are preloaded throughout the entire motion and are not subject to roller reversal.

SIZE & RANGE:

The PS-Series is offered in six different frame sizes with pitch diameters from 2.500 inches up to 12.00 inches and motions from 1- Position (360°) through 8-Positions (45°). Special indexing & oscillating motion sequences are available upon request.

CONSTRUCTION:

Our rugged PS Series indexers feature two plate cams mounted as a conjugate pair. The follower wheel positions one cam follower above and another below the input shaft centerline to produce a preloaded "locking" action against the cams. Parallel Shaft indexers are capable of generating large output displacement angles and are ideally suited for in-line indexing conveyor applications.

*Over 40 Years of Engineering Experience
in Cam Design and Motion Control!*

Take advantage of STELRON's experience, give us a call.

tel. 201.529.5450 ~ fax 201.529.5493 ~ e-mail customerservice@stelron.com or visit www.stelron.com

PARALLEL SHAFT INDEXING DRIVES

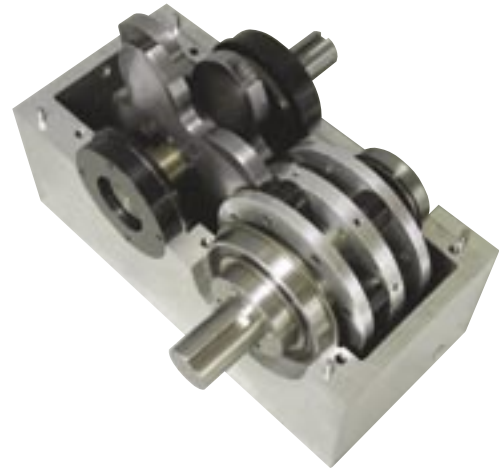


Table #1

INDEXING CAPACITY

Standard Sequences and Capacities (inch-lbs)					
Number of Stops	Index Period	"Tr" B10 Capacity @ 50 ind. / min.			
		PS-250	PS-380	PS-510	PS-660
1	300	330	1535	4279	6515
2	180	463	2162	5462	8396
2	270	502	2360	5388	8468
3	180	574	2700	6167	9692
3	270	538	2544	5780	9243
4	90	704	2234	7585	11640
4	120	702	3298	7544	11782
4	180	667	3150	7165	11407
4	270	610	2887	6542	10548
6-2	180	634	3010	6804	10970
6-2	270	566	2685	6074	9859
8-2	120	791	2536	8487	13642
8-2	180	710	3365	7615	12342
8-2	270	628	2980	6737	10964
Int. Inertia lb-in ²		3	18	60	180
Roller Pitch Rad.		1.250	1.937	2.562	3.312

To Calculate the dynamic capacity at a required speed and life (Ta) use the following formula:

$$T_a = \frac{T_r}{C_s * C_l}$$

Where Tr = Value from Table #1

Cs = Speed factor from Table #2

Cl = Life factor from Table #3

Example - Find the capacity of the following:

PS-380, 4 - Stop, 270° Period

@ 200 RPM & 32,000 Hours

$$T_a = \frac{T_r}{C_s * C_l} = \frac{2887}{1.4 * 1.51} = \underline{1365 \text{ inch-lbs.}}$$

Table #2

	Speed Factors					
Indexes Per Minute	25	50	75	100	200	500
Factor Cs	.8	1.0	1.12	1.25	1.4	2.0

Table #3

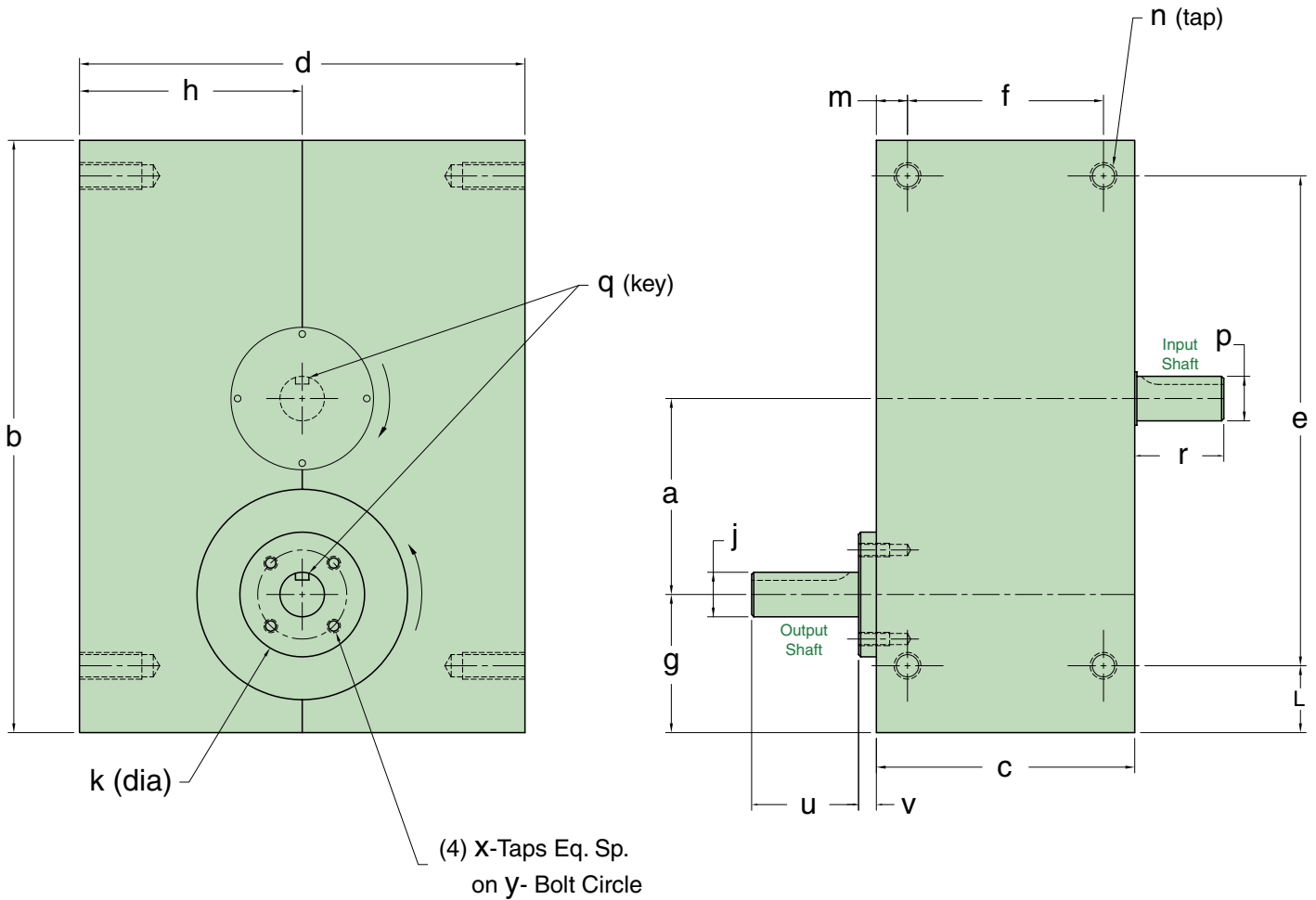
	Life Factors					
Life (x 1000 hours)	4	8	16	32	64	96
Factor Cl	.8	1.0	1.23	1.51	1.86	2.10

In table #1, Standard sequences are shown, additional sequences are available please consult factory.

In table #1, the designations 6-2 and 8-2 are used for Type-2 units. These units provide two indexes for each revolution of the input shaft. This allows the timing to be half of that which is shown in the table. For example, the 8-2-120° unit operating at 50 indexes per minute has a cam shaft speed of 25 rpm.

A single 360° turn of the cam shaft with a 120° index period would consist of:

- 60° for first index -- 120° of first dwell Then,
- 60° for second index -- 120° of second dwell.



NOTES:

Standard Unit includes “L” side input shaft and “K” side output flanged shaft (as shown above).
Optional “L” side output shaft extension and/or “K” side input shaft extension is available upon request.

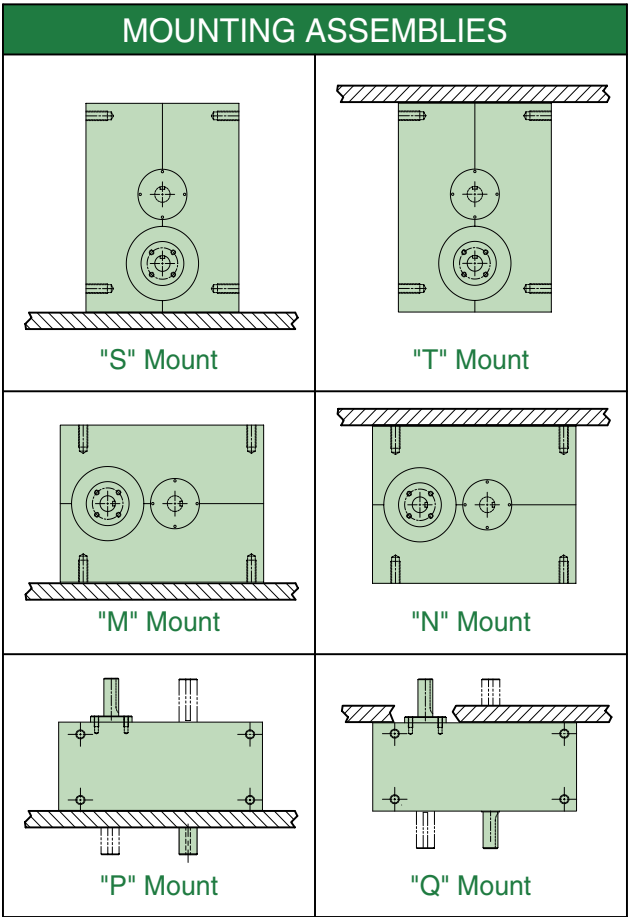
INDEXER	a	b	c	d	e	f	g	h	j	k
PS-250	Center	8.31	3.625	6.25	6.875	2.75	1.937	3.125	.6245	1.750
PS-380	Distance	12.00	5.375	8.75	9.75	4.25	2.812	4.375	.9995	2.56
PS-510	Varies with	16.00	7.500	11.50	14.75	6.25	4.125	5.750	1.6245	3.125
PS-660	Sequence	20.12	8.75	14.50	18.62	7.25	5.00	7.250	1.995	4.250

INDEXER	l	m	n	p	q	r	u	v	x	y
PS-250	.937	.437	3/8-16	.6245	3/16	1.25	1.50	.25	#10-32	1.250
PS-380	1.25	.56	1/2-13	.9995	1/4	1.81	1.75	.06	5/16-24	2.000
PS-510	.625	.625	1/2-13	1.4370	3/8	2.56	2.50	.06	3/8-16	2.375
PS-660	.75	.75	5/8-11	1.9370	1/2	3.31	3.25	.06	3/8-16	3.25

STELRON PS INDEXER MOUNTING ASSEMBLIES



Above model shown with optional "T" Mount



Above model shown with optional "M" Mount

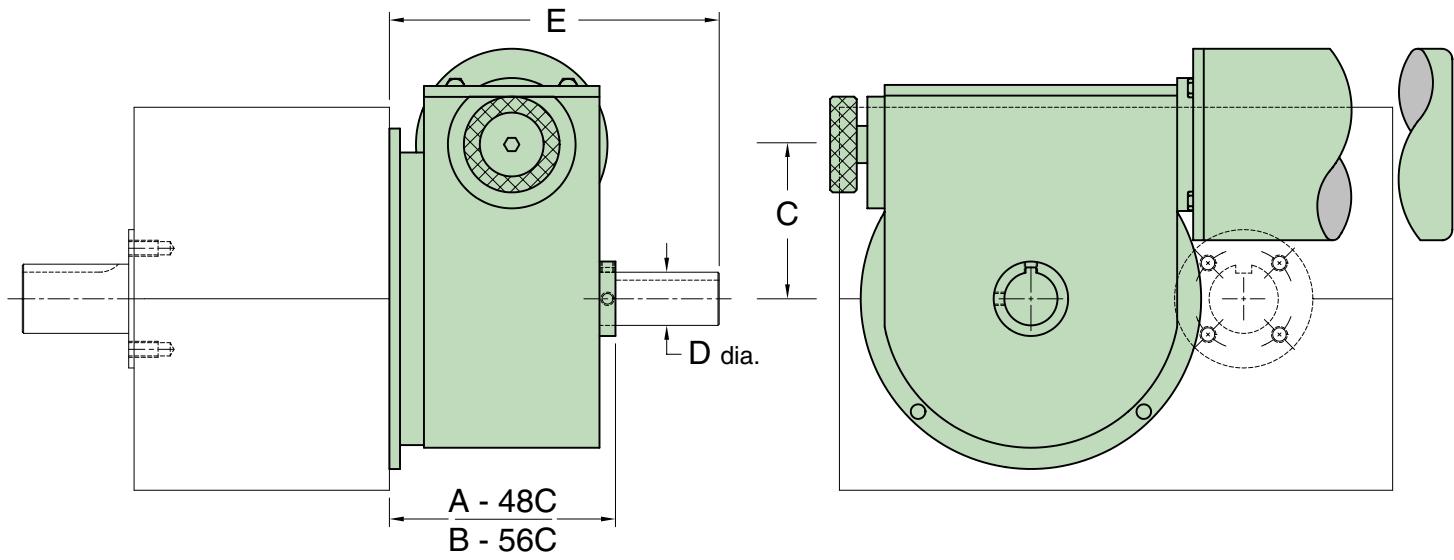


Above model shown with optional "Q" Mount

HOW TO ORDER:

	Model	Number of Stations	Index Angle	Input Shaft	Output Shaft	Mounting
Sample	PS-380	3P	270°	L	K	M

STELRON PS INDEXER DIMENSIONS



NOTES:

Please refer to the STELRON MOTOREDUCER catalog for additional dimensions and information

GEAR REDUCER DIMENSIONS								TORQUE CAPACITY (inch-lbs)			
INDEXER	A	B	C	D	E	REDUCER	RATIO	WORM SHAFT SPEED			
								1750	1150	690	110
PS-250	4.56	5.56	2.125	.6245	6.75	SFLGR-0-3	7.5:1	540	650	740	890
						SFLGR-0-2	15:1	650	750	830	960
						SFLGR-0-1	30:1	680	795	880	1050
PS-380	5.31	5.91	2.725	.9995	7.5	SFLGR-1-3	10:1	920	1200	1400	1850
						SFLGR-1-2	20:1	1050	1300	1500	1900
						SFLGR-1-1	40:1	1060	1310	1520	1910
PS-510	5.31	6.16	3.625	1.2495	7.75	SFLGR-2-3	15:1	2250	2650	3120	3880
						SFLGR-2-2	30:1	2320	2780	3130	3910
						SFLGR-2-1	60:1	2360	2800	3150	3950
PS-660	6.31	6.31	5.125	1.7495	8.75	SFLGR-3-3	22.5:1	4090	5210	6040	6760
						SFLGR-3-2	45:1	4130	5220	6240	6760
						SFLGR-3-1	90:1	2930	3750	4270	5050

STELRON PS INDEXER DRIVE PACKAGES

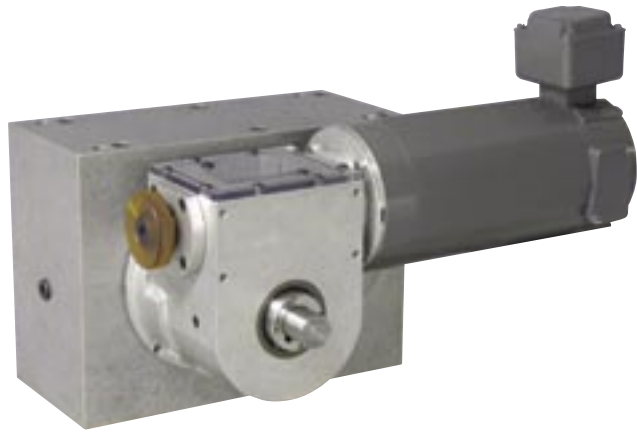
Standard Packages:

- Standard Indexing package includes:

- 1) PS series Indexer with standard cam sequence
- 2) Gear Reducer shown above (all ratios)
- 3) Permanent magnet DC motor
- 4) Basic speed control in Nema-1 enclosure

- Standard Cycling package includes:

- 1), 2) & 3) same as indexing package
- 4) Cycling Nema-4 speed control
- 5) Signal cam & limit switch



Picture shown with optional "AR" Mounting position

	Mounting "A"	Mounting "B"	Mounting "C"	Mounting "D"
"LH" Reducer	<p>"AL"</p>	<p>"BL"</p>	<p>"CL"</p>	<p>"DL"</p>
"RH" Reducer	<p>"AR"</p>	<p>"BR"</p>	<p>"CR"</p>	<p>"DR"</p>

HOW TO ORDER:

	Model	Ratio (Code)	Mounting Position	Motor H.P. - Frame	Drive Pkg.
Sample	SFLGR-0	2	CR	1/3 - 48C	Basic Pkg.
Sample	SFLGR-0	1	DL	1/2 - 48C	Cycling Pkg.

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