



SilentSync Timing Belt Drives



Ideal for:

- Extruders
- Mills
- Mixers
- Industrial fans
- Air Handling Units
- Compressors - Blowers

and also for traditional applications:

- Machine tools
- Metal working machinery
- Machinery for the food industry
- Packaging Equipment

5% energy savings compared to traditional belt drives

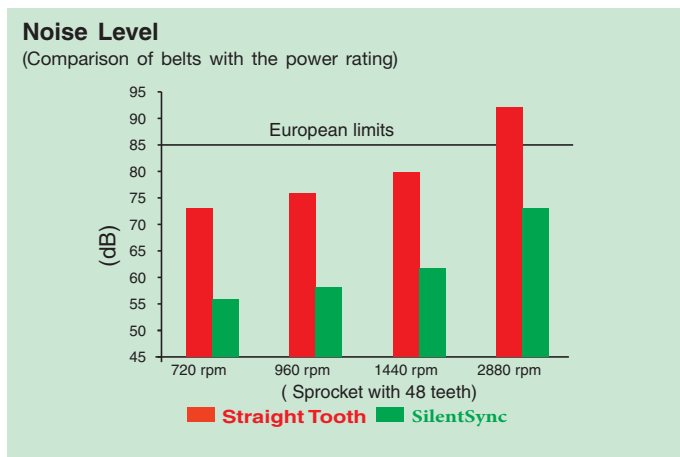
Synchronous Belt Drive



The need to transmit torque in a more compact, reliable and quiet package contributed to the study of new technical solutions and the search for increasingly efficient and innovative materials. Rainbow Precision is able to supply such solutions, thanks to a belt "SilentSync", the latest creation by ContiTech .

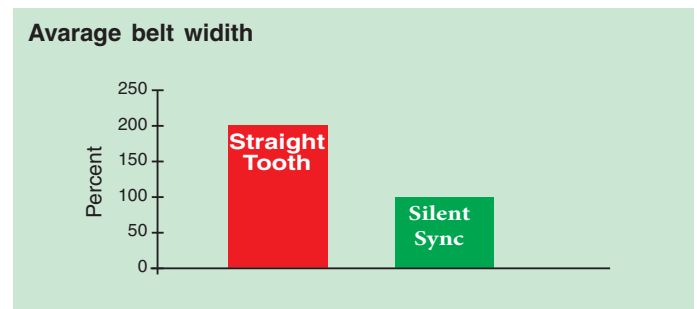
SilentSync NOISE REDUCER

No other drive system reduces noise at its source as can the **ContiTech SilentSync**. It is, by far, the quietest on the market. The **SilentSync** belt and the sprocket reduce drive noise by 17-19 decibels when compared to other types of straight toothed belts.



Design Features

The self-aligning feature of the SilentSync, the Helical Off-set Tooth design eliminates the need for flanged sprockets, thereby reducing the diameter, the width and the weight of the drive. The belt is bidirectional and, therefore, can be used in applications with reversed motion. Moreover, since the SilentSync is manufactured from special high-tech materials such as rubber Hibrex™, the cords of Flexten® and the fabric coating Plioguard™, the width of the belt can be mini-mized even for transmissions requiring high torques without compromising strength. The result is a lighter drive system, more compact and more suitable for a variety of applications.



Reduction of noise between belt and sprocket

With **SilentSync** has gone beyond the traditional synchronous drive with a round or parabolic tooth profile and adopted a revolutionary design called HOT (Helical Offset Tooth) belt and sprocket which runs extremely quiet.

The system allows for the HOT continuous meshing of belt teeth with sprocket teeth resulting in a transmission with reduced vibration and less noise. Slipping of the belt is also eliminated. Using a concept called "circular arc geometry" the HOT configuration offers:

- High wear resistance of the teeth
- More precise motion
- Transmit higher torques
- Reduction of backlash in reversing applications
- A better distribution of the stresses which reduces belt wear

SilentSync: the tailor made solution

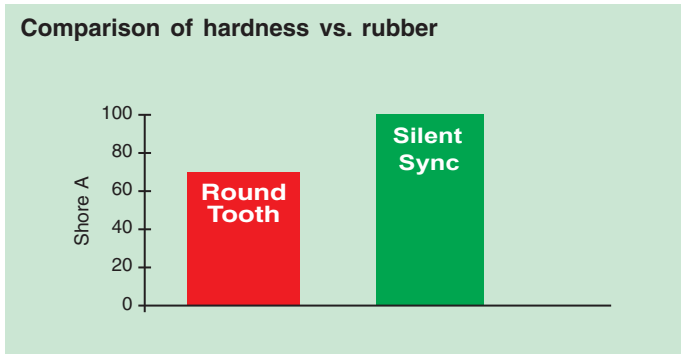
In any type of application, the Eagle NRG™ drive system can significantly reduce both noise levels and costs. There are over 1000 combinations of standard sprockets so it is extremely easy to obtain the desired design speed. Being able to choose from a wide range of possible gear ratios means the drive can be optimally compact. Applications are in these industries and machines:

- Agricultural machinery
- Construction equipment
- Mining machinery
- Conveying machinery
- Machine tools
- Metal working machinery
- Textile Machinery
- Industrial fans and blowers
- Woodworking machinery
- Pulp and Paper machinery
- Pumps
- Machinery for the food industry
- Printing machinery
- Packaging Equipment

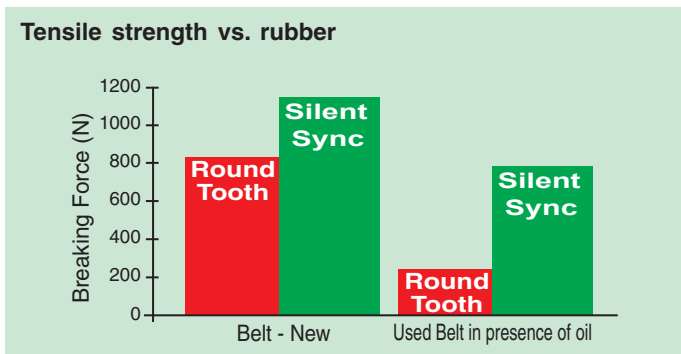


Built stronger to last longer

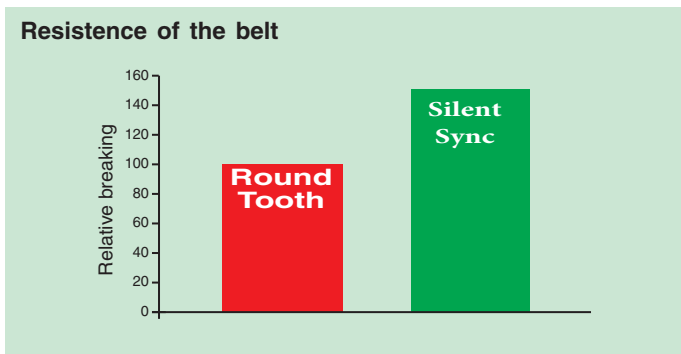
The belt and sprocket have been designed for longevity and maintenance-free operation. The longer service life is due to the rubber compound Hibrex™, a cross-linked elastomer formulated to resist deformation of the tooth and to increase the rigidity.



The compound Hibrex™ is also chemically stable against the effects of oils, coolants, heat and ozone.

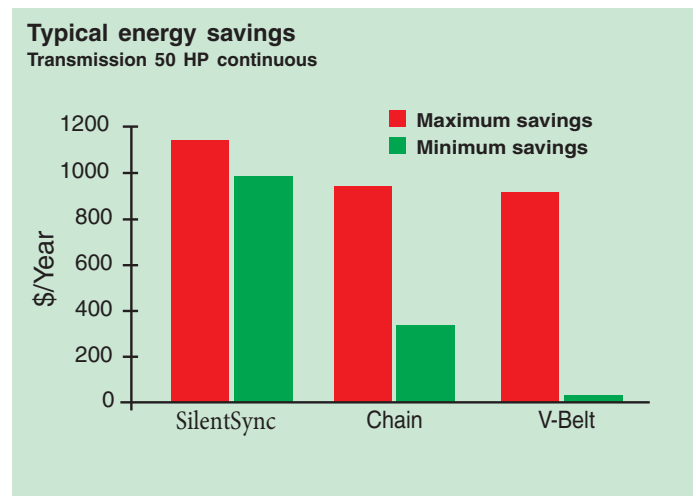


The cord made of Flexten® makes the belt highly resistant to flex fatigue, elongation and shock loads in conditions characterized by high transmission of torque.



The fabric coating Plioguard™ reduces friction on the teeth while helping with the belt resistance to oils and chemicals.

The Investment in the SilentSync solution provides cost savings in both the short and long term. The immediate benefits will be from the energy savings due to the high transmission efficiency of 98%, and that is at least 5% more than the performance of V-belt drives.



In the long run, the investment in **SilentSync** is more than recovered through increased efficiency and reduced maintenance costs. These savings become more substantial when Eagle NRG™ is used for drives with high energy consumption used 24 hours per day or for transmission of high loads that increase the energy consumption during peak periods.

Unlike chain drives, the **SilentSync** does not need lubrication. It is also unnecessary to retention the belt which is typical of V-belt drives and chain.

Your maintenance costs will almost drop to zero by using the **SilentSync** drive system.

Drive classification

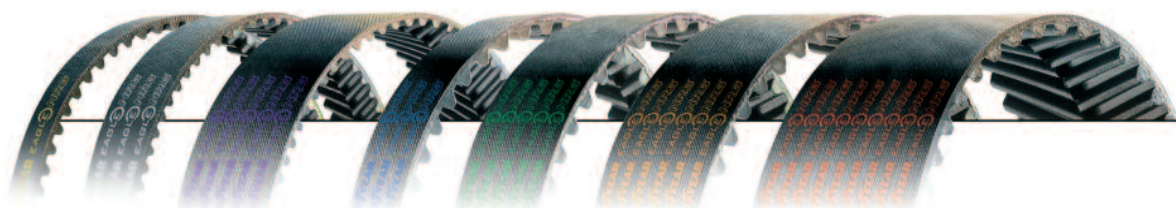


The color coding facilitates the choice of the most suitable product. Each color indicates a pitch and a belt width specification. Simply match the color of the belt to the respective sprocket to install the **SilentSync**.

The colors of the belts: the ability to transmit power lower to higher, the colors are: **Yellow, White, Purple, Blue, Green, Orange, Red.**

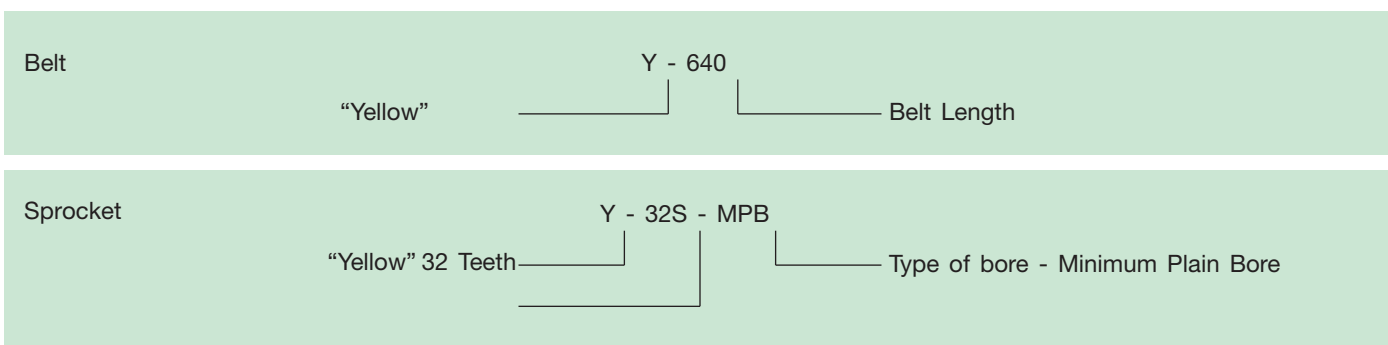
The belts of yellow, white and purple have a pitch of 8 mm and those of blue, green, orange and red have a pitch of 14 mm.

To compare the transmitted power to the belt rating, it is easier to begin with the color which has the lowest rating and work upwards. This is the yellow for 8 mm and blue for the 14 mm belt.



Symbol - Color	Pitch P [mm]
Y - Yellow	8
W - White	8
P - Purple	8
B - Blue	14
G - Green	14
O - Orange	14
R - Red	14

Classification example:

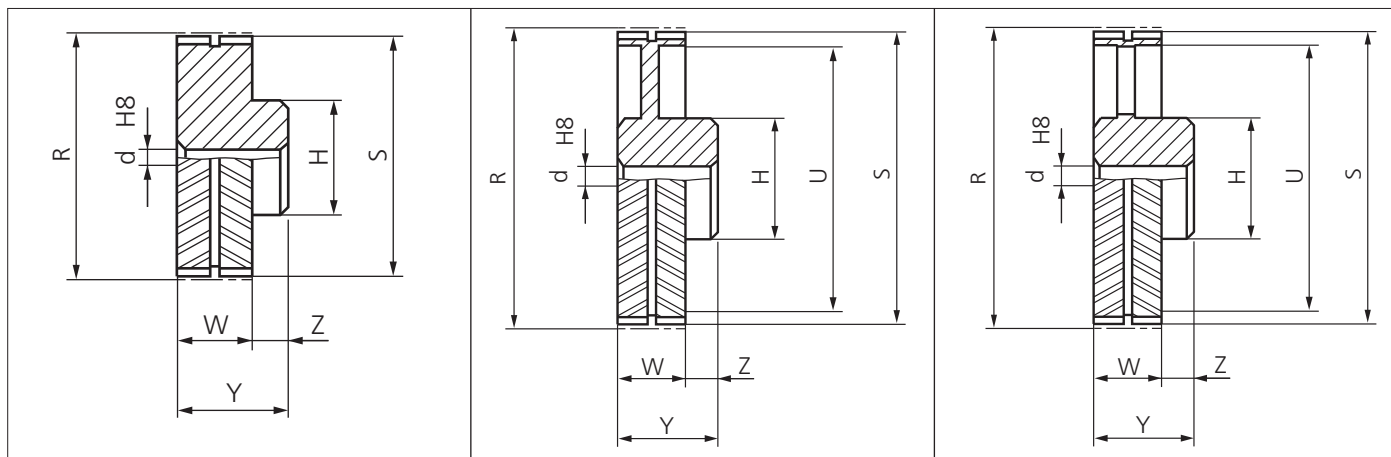


- Increase in transmissible power: the transmissible power increases with sprockets of large diameter and with belts of great width.

The SilentSync range of timing sprockets

SilentSync timing sprockets, manufactured with innovative high-tech equipment, have been designed to insure maximum service life and performance. High quality materials are used in the production of sprockets to insure maximum wear resistance. The sprockets are also statically balanced and receive a surface treatment for resistance to oxidation. The belt-sprocket system is designed for precision operation with a minimum of friction. The continuous and gradual engagement of the teeth of the belt with the sprockets reduces wear and noise and guarantees a longer service life of the drive.

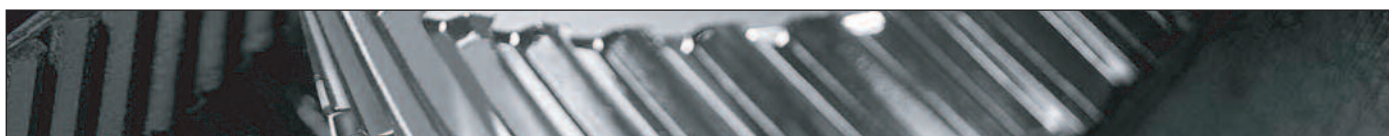
Standard versions of SilentSync sprockets



Note for the customer: it is important to indicate on design drawings, when ordering non-standard sprockets, the orientation of the teeth relative to the position of the hub (as in the figures above).

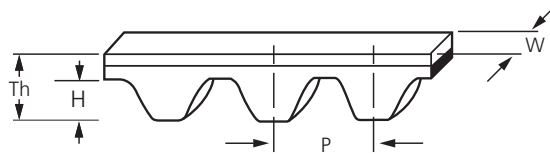
Sprocket Tolerances SilentSync

Range of diameters [mm]		OD Tolerances [mm]	Radial Tolerances [mm]	Axial Tolerances [mm]	Maximum variation of the tooth pitch [mm]
0	101.6	-0 / +0.13	0.13	0.12	0.1
101.6	177.8	-0 / +0.13	0.13	0.15	0.1
177.8	304.8	-0 / +0.15	0.15	0.20	0.1
304.8	508	-0 / +0.18	0.20	0.35	0.1
508	750	-0 / +0.20	0.30	0.43	0.1



The Standard range of SilentSync timing Belts

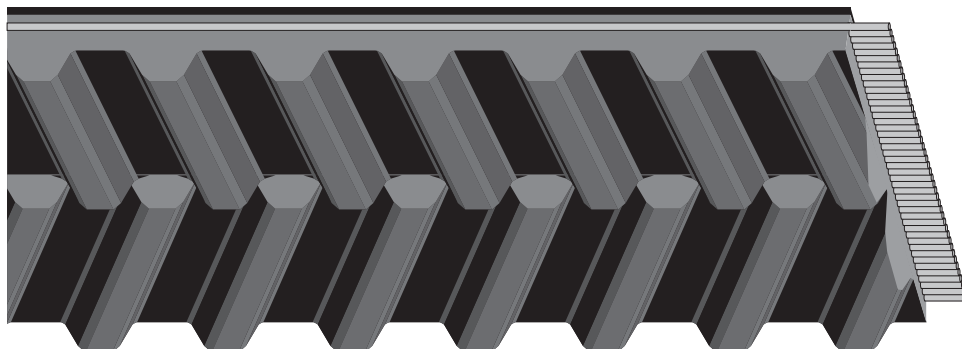
Belt dimensions



Symbol - Color	Width W [mm]	Pitch P [mm]	Thickness Th [mm]	Tooth Height H [mm]
Y - Yellow	16	8	5.33	3.05
W - White	32	8	5.33	3.05
P - Purple	64	8	5.33	3.05
B - Blue	35	14	8.64	5.33
G - Green	52.5	14	8.64	5.33
O - Orange	70	14	8.64	5.33
R - Red	105	14	8.64	5.33

Standard available belts

Type	P	Width	L _{cST} Standard Available [mm]																	
			640	720	800	896	1000	1120	1200	1280	1440	1600	1792	2000	2240	2400	-	-	-	-
Y	8	16	640	720	800	896	1000	1120	1200	1280	1440	1600	1792	2000	2240	2400	-	-	-	-
W	8	32	640	720	800	896	1000	1120	1200	1280	1440	1600	1792	2000	2240	2400	-	-	-	-
P	8	64	-	720	800	896	1000	1120	1200	1280	1440	1600	-	-	-	-	-	-	-	-
B	14	35	994	1120	1190	1260	1400	1568	1750	1960	2100	2240	2380	2520	2660	2800	3136	3304	3500	3920
G	14	52.5	994	1120	1190	1260	1400	1568	1750	1960	2100	2240	2380	2520	2660	2800	3136	3304	3500	3920
O	14	70	-	1120	1190	1260	1400	1568	1750	1960	2100	2240	2380	2520	2660	2800	3136	3304	3500	3920
R	14	105	-	-	-	1260	1400	1568	1750	1960	2100	2240	2380	2520	2660	2800	3136	3304	3500	3920



SilentSync timing sprockets 8M - (Minimum Plain Bore)

Type "Yellow" Y - Pitch 8 mm - Width W = 17 mm

Code	N. Teeth	Fig.	S	R	U	H	W	Z	Y	d	Max. Bore	Material
Y-18S-MPB	18	1	44.47	45.84		38.7	17	10	27	12.7	26	Steel
Y-20S-MPB	20	1	49.56	50.93		40.7	17	12	29	12.7	27	
Y-22S-MPB	22	1	54.65	56.02		45.9	17	12	29	12.7	31	
Y-24S-MPB	24	1	59.75	61.12		51	17	16	33	12.7	34	
Y-25S-MPB	25	1	62.29	63.66		53.5	17	16	33	12.7	36	
Y-26S-MPB	26	1	64.84	66.21		57.8	17	16	33	12.7	39	
Y-28S-MPB	28	1	69.93	71.30		61	17	16	33	12.7	41	
Y-30S-MPB	30	1	75.03	76.40		67	17	16	33	12.7	45	
Y-32S-MPB	32	1	80.12	81.49		72	17	16	33	12.7	48	
Y-34S-MPB	34	1	85.21	86.58		77	17	16	33	12.7	51	
Y-36S-MPB	36	1	90.30	91.68		82	17	16	33	12.7	55	
Y-38S-MPB	38	1	95.40	96.77		87	17	16	33	12.7	58	
Y-40S-MPB	40	1	100.49	101.86		92	17	16	33	12.7	62	
Y-44S-MPB	44	1	110.68	112.05		102	17	16	33	12.7	68	
Y-45S-MPB	45	1	113.22	114.59		105	17	16	33	12.7	70	
Y-48S-MPB	48	1	120.86	122.23		112	17	16	33	12.7	75	
Y-50S-MPB	50	1	125.96	127.33		118	17	16	33	12.7	79	
Y-52S-MPB	52	1	131.05	132.42		123	17	16	33	12.7	82	
Y-56S-MPB	56	1	141.24	142.61		133	17	16	33	12.7	89	
Y-60S-MPB	60	1	151.42	152.79		143	17	16	33	12.7	96	
Y-63S-MPB	63	2	159.06	160.43	139	110	17	16	33	12.7	73	GS400
Y-64S-MPB	64	2	161.61	162.98	142	110	17	16	33	12.7	74	
Y-68S-MPB	68	2	171.79	173.17	152	110	17	16	33	12.7	74	
Y-72S-MPB	72	2	181.98	183.35	162	110	17	16	33	12.7	74	
Y-75S-MPB	75	2	189.62	190.99	170	110	17	16	33	12.7	73	
Y-76S-MPB	76	2	192.17	193.54	172	110	17	16	33	12.7	74	
Y-80S-MPB	80	2	202.35	203.72	182	110	17	16	33	12.7	73	
Y-90S-MPB	90	2	227.82	229.19	208	110	17	16	33	25.4	73	
Y-112S-MPB	112	2	283.84	285.21	264	110	17	16	33	25.4	73	
Y-140S-MPB	140	2	355.15	356.52	335	110	17	16	33	25.4	73	
Y-180S-MPB	180	3	457.01	458.38	433	150	17	16	33	25.4	100	GG
Y-224S-MPB	224	3	569.06	570.43	545	150	17	16	33	25.4	100	GG

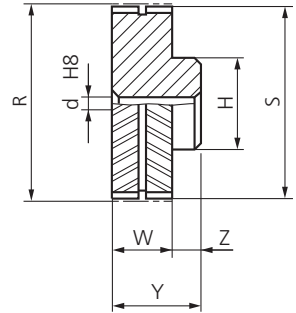


Fig. 1

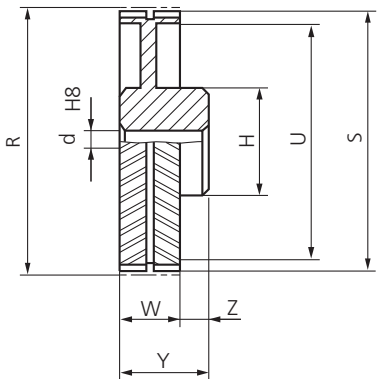


Fig. 2

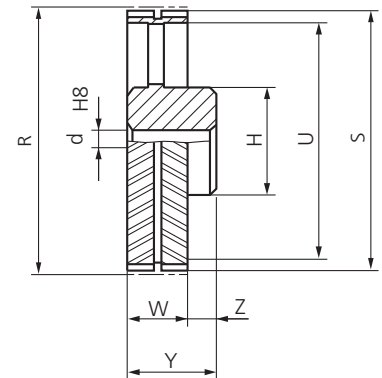


Fig. 3

Type "White" W - Pitch 8 mm - Width W = 33 mm

Code	N. Teeth	Fig.	S	R	U	H	W	Z	Y	d	Max. Bore	Material	
W-18S-MPB	18	1	44.47	45.84		38.4	33	10	43	12.7	26	Steel	
W-20S-MPB	20	1	49.56	50.93		40.7	33	12	45	12.7	27		
W-22S-MPB	22	1	54.65	56.02		45.9	33	12	45	12.7	31		
W-24S-MPB	24	1	59.75	61.12		51	33	16	49	12.7	34		
W-25S-MPB	25	1	62.29	63.66		53.5	33	16	49	12.7	36		
W-26S-MPB	26	1	64.84	66.21		57.8	33	16	49	12.7	39		
W-28S-MPB	28	1	69.93	71.30		62	33	16	49	12.7	41		
W-30S-MPB	30	1	75.03	76.40		67	33	16	49	12.7	45		
W-32S-MPB	32	1	80.12	81.49		72	33	16	49	12.7	48		
W-34S-MPB	34	1	85.21	86.58		77	33	16	49	12.7	51		
W-36S-MPB	36	1	90.30	91.68		82	33	16	49	12.7	55		
W-38S-MPB	38	1	95.40	96.77		87	33	16	49	12.7	58		
W-40S-MPB	40	1	100.49	101.86		92	33	16	49	12.7	62		
W-44S-MPB	44	1	110.68	112.05		102	33	16	49	12.7	68		
W-45S-MPB	45	1	113.22	114.59		105	33	16	49	12.7	70		
W-48S-MPB	48	1	120.86	122.23		112	33	16	49	12.7	75		
W-50S-MPB	50	1	125.96	127.33		118	33	16	49	12.7	79		
W-52S-MPB	52	1	131.05	132.42		123	33	16	49	12.7	82		
W-56S-MPB	56	1	141.24	142.61		133	33	16	49	12.7	89		
W-60S-MPB	60	1	151.42	152.79		143	33	16	49	12.7	96		
W-63S-MPB	63	1	159.06	160.43		151	33	16	49	12.7	101		
W-64S-MPB	64	1	161.61	162.98		153	33	16	49	12.7	102		
W-68S-MPB	68	2	171.79	173.17	152	120	33	16	49	25.4	80	GS400	
W-72S-MPB	72	2	181.98	183.35	162	120	33	16	49	25.4	80		
W-75S-MPB	75	2	189.62	190.99	170	120	33	16	49	25.4	80		
W-76S-MPB	76	2	192.17	193.54	172	120	33	16	49	25.4	80		
W-80S-MPB	80	2	202.35	203.72	182	120	33	16	49	25.4	80		
W-90S-MPB	90	2	227.82	229.19	208	120	33	16	49	25.4	80		
W-112S-MPB	112	2	283.84	285.21	264	120	33	16	49	25.4	80		
W-140S-MPB	140	2	355.15	356.52	335	150	33	16	49	25.4	100		
W-180S-MPB	180	3	457.00	458.38	433	150	33	16	49	25.4	100		GG
W-224S-MPB	224	3	569.04	570.43	545	150	33	16	49	25.4	100		GG

GS400 = ductile iron - GG = cast iron - All dimensions in [mm]

SilentSync timing sprockets 8M - (Minimum Plain Bore)

Type "Purple" P - Pitch 8 mm - Width W = 65 mm

Code	N. Denti	Fig.	S	R	U	H	W	Z	Y	d	Max. Bore	Material
P-18S-MPB	18	1	44.47	45.84		38.4	65	20	85	12.7	26	Steel
P-20S-MPB	20	1	49.55	50.93		40.7	65	20	85	12.7	27	
P-22S-MPB	22	1	54.64	56.02		45.9	65	20	85	12.7	31	
P-24S-MPB	24	1	59.74	61.12		51	65	20	85	12.7	34	
P-25S-MPB	25	1	62.28	63.66		53.5	65	20	85	12.7	36	
P-26S-MPB	26	1	64.83	66.21		57.8	65	20	85	12.7	39	
P-28S-MPB	28	1	69.92	71.30		62	65	20	85	12.7	41	
P-30S-MPB	30	1	75.01	76.39		67	65	20	85	12.7	45	
P-32S-MPB	32	1	80.11	81.49		72	65	20	85	12.7	48	
P-34S-MPB	34	1	85.20	86.58		77	65	20	85	12.7	51	
P-36S-MPB	36	1	90.29	91.67		82	65	20	85	12.7	55	
P-38S-MPB	38	1	95.39	96.77		87	65	20	85	12.7	58	
P-40S-MPB	40	1	100.48	101.86		92	65	20	85	12.7	62	
P-44S-MPB	44	1	110.67	112.05		102	65	20	85	12.7	68	
P-45S-MPB	45	1	113.21	114.59		105	65	20	85	12.7	70	
P-48S-MPB	48	1	120.85	122.23		112	65	20	85	25.4	75	
P-50S-MPB	50	1	125.94	127.32		118	65	20	85	25.4	79	
P-52S-MPB	52	1	131.04	132.42		123	65	20	85	25.4	82	
P-56S-MPB	56	1	141.22	142.60		133	65	20	85	25.4	89	
P-60S-MPB	60	1	151.41	152.79		143	65	20	85	25.4	96	
P-63S-MPB	63	1	159.05	160.43		151	65	20	85	25.4	101	
P-64S-MPB	64	1	161.60	162.98		153	65	20	85	25.4	102	
P-68S-MPB	68	2	171.79	173.17	152	120	65	20	85	25.4	108	
P-72S-MPB	72	2	181.97	183.35	162	120	65	20	85	25.4	115	
P-75S-MPB	75	2	189.61	190.99	170	120	65	20	85	25.4	120	
P-76S-MPB	76	2	192.15	193.53	172	120	65	20	85	25.4	120	
P-80S-MPB	80	2	202.34	203.72	182	120	65	20	85	25.4	125	
P-90S-MPB	90	2	227.80	229.18	208	120	65	20	85	25.4	80	
P-112S-MPB	112	2	283.83	285.21	264	120	65	20	85	25.4	80	
P-140S-MPB	140	2	355.14	356.51	335	150	65	20	85	25.4	100	
P-180S-MPB	180	3	457.00	458.37	433	150	65	20	85	25.4	100	
P-224S-MPB	224	3	569.04	570.41	545	150	65	20	85	25.4	100	

GS400 = ductile iron - GG = cast iron - All dimensions in [mm]

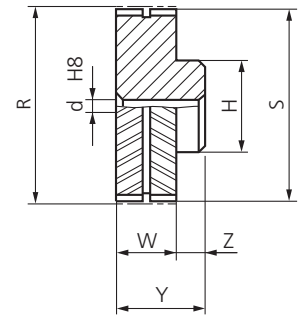


Fig. 1

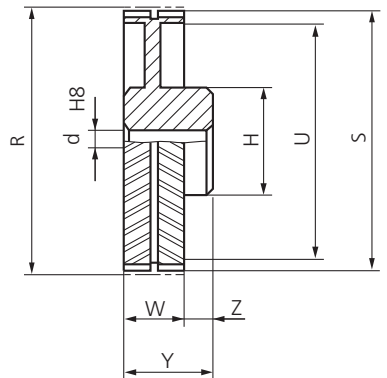


Fig. 2

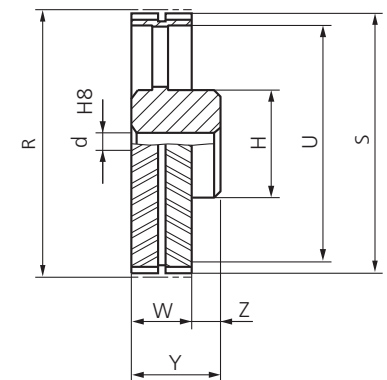


Fig. 3



41669 Date Street, Suite 101
 Murrieta, CA 92562
 phone: 951.677.7424
 fax: 951.677.7334
 email: sales@rainbowprecisionproducts.com
 web: www.rainbowprecisionproducts.com

SilentSync timing sprockets 14M - (Minimum Plain Bore)

Type "Blue" B - Pitch 14 mm - Width W = 37 mm

Code	N. Teeth	Fig.	S	R	U	H	W	Z	Y	d	Max. Bore	Material
B-28S-MPB	28	1	121.99	124.78		105	37	16	53	25.4	70	Steel
B-30S-MPB	30	1	130.90	133.69		114	37	16	53	25.4	76	
B-32S-MPB	32	1	139.81	142.61		123	37	16	53	25.4	82	
B-34S-MPB	34	1	148.73	151.52		132	37	16	53	25.4	88	
B-36S-MPB	36	1	157.64	160.43		141	37	16	53	25.4	94	
B-38S-MPB	38	1	166.55	169.35		150	37	16	53	25.4	100	
B-40S-MPB	40	1	175.46	178.26		159	37	16	53	25.4	106	
B-43S-MPB	43	1	188.83	191.63		172	37	16	53	25.4	115	
B-45S-MPB	45	1	197.75	200.54		181	37	16	53	25.4	121	
B-48S-MPB	48	1	211.12	213.91		195	37	16	53	25.4	130	
B-50S-MPB	50	2	220.03	222.82	185	150	37	16	53	25.4	100	GS400
B-56S-MPB	56	2	246.77	249.56	212	150	37	16	53	25.4	100	
B-60S-MPB	60	2	264.59	267.39	130	150	37	16	53	25.4	100	
B-63S-MPB	63	2	277.96	280.76	243	150	37	16	53	25.4	100	
B-71S-MPB	71	2	313.62	316.41	279	150	37	16	53	25.4	100	
B-75S-MPB	75	2	331.44	334.24	296	150	37	16	53	25.4	100	
B-80S-MPB	80	2	353.72	356.52	319	150	37	16	53	25.4	100	GG
B-90S-MPB	90	2	398.29	401.08	358	150	37	16	53	25.4	100	
B-112S-MPB	112	3	496.33	499.12	456	150	37	16	53	25.4	100	GG
B-140S-MPB	140	3	621.11	623.91	581	150	37	16	53	25.4	100	GG
B-168S-MPB	168	3	745.89	748.69	706	150	37	16	53	25.4	100	GG

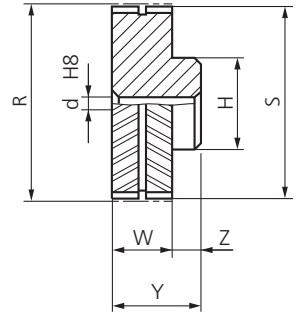


Fig. 1

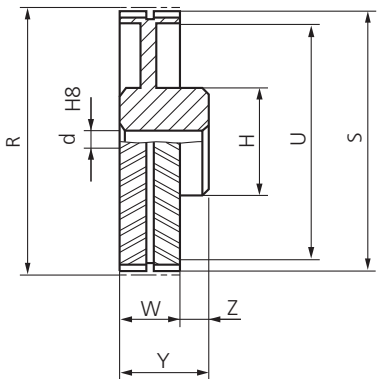


Fig. 2

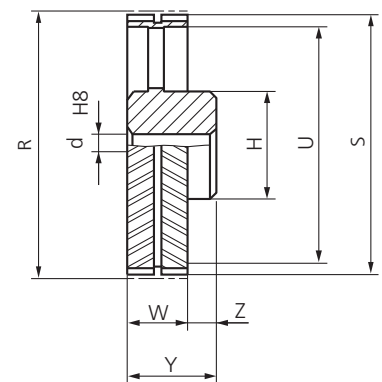


Fig. 3

Type "Green" G - Pitch 14 mm - Width W = 54.5 mm

Code	N. Teeth	Fig.	S	R	U	H	W	Z	Y	d	Max. Bore	Material
G-28S-MPB	28	1	121.99	124.78		109	54.5	20	74.5	25.4	73	Steel
G-30S-MPB	30	1	130.90	133.69		117.5	54.5	20	74.5	25.4	78	
G-32S-MPB	32	1	139.81	142.61		126.5	54.5	20	74.5	25.4	84	
G-34S-MPB	34	1	148.73	151.52		135.5	54.5	20	74.5	25.4	90	
G-36S-MPB	36	1	157.64	160.43		141	54.5	16	70.5	25.4	94	
G-38S-MPB	38	1	166.55	169.35		150	54.5	16	70.5	25.4	100	
G-40S-MPB	40	1	175.46	178.26		159	54.5	16	70.5	25.4	106	
G-43S-MPB	43	1	188.83	191.63		172	54.5	16	70.5	25.4	115	
G-45S-MPB	45	1	197.75	200.54		181	54.5	16	70.5	25.4	121	
G-48S-MPB	48	1	211.12	213.91		195	54.5	16	70.5	25.4	130	
G-50S-MPB	50	2	220.03	222.82	185	150	54.5	16	70.5	25.4	100	GS400
G-56S-MPB	56	2	246.77	249.56	212	150	54.5	16	70.5	25.4	100	
G-60S-MPB	60	2	264.59	267.39	230	150	54.5	16	70.5	25.4	100	
G-63S-MPB	63	2	277.96	280.76	243	150	54.5	16	70.5	25.4	100	
G-71S-MPB	71	2	313.62	316.41	279	150	54.5	16	70.5	25.4	100	
G-75S-MPB	75	2	331.44	334.24	296	150	54.5	16	70.5	25.4	100	
G-80S-MPB	80	2	353.72	356.52	319	150	54.5	16	70.5	25.4	100	GG
G-90S-MPB	90	2	398.29	401.08	358	180	54.5	16	70.5	25.4	120	
G-112S-MPB	112	3	496.33	499.12	456	180	54.5	16	70.5	25.4	120	GG
G-140S-MPB	140	3	621.11	623.91	581	200	54.5	16	70.5	25.4	133	GG
G-168S-MPB	168	3	745.89	748.69	706	200	54.5	16	70.5	25.4	133	GG

GS400 = ductile iron - GG = cast iron - All dimensions in [mm]

Standard SIT "PE" timing sprockets 14M - (Minimum Plain Bore)

Type "Orange" O - Pitch 14 mm - Width W = 72 mm

Code	N. Teeth	Fig.	S	R	U	H	W	Z	Y	d	Max. Bore	Material
O-28S-MPB	28	1	121.99	124.78		109	72	20	92	25.4	73	Steel
O-30S-MPB	30	1	130.90	133.69		117.5	72	20	92	25.4	78	
O-32S-MPB	32	1	139.81	142.61		126.5	72	26	98	25.4	84	
O-34S-MPB	34	1	148.73	151.52		135.5	72	26	98	25.4	90	
O-36S-MPB	36	1	157.64	160.43		144	72	26	98	25.4	95	
O-38S-MPB	38	1	166.55	169.35		153	72	26	98	25.4	101	
O-40S-MPB	40	1	175.46	178.26		162	72	26	98	25.4	107	
O-43S-MPB	43	1	188.83	191.63		174	72	16	88	25.4	116	
O-45S-MPB	45	1	197.75	200.54		183	72	16	88	25.4	122	
O-48S-MPB	48	1	211.12	213.91		197	72	16	88	25.4	131	
O-50S-MPB	50	1	220.03	222.82		205	72	16	88	25.4	137	
O-56S-MPB	56	1	246.77	249.56		230	72	16	88	25.4	153	
O-60S-MPB	60	2	264.59	267.39	230	150	72	16	88	25.4	100	GS400
O-63S-MPB	63	2	277.96	280.76	243	150	72	16	88	25.4	100	
O-71S-MPB	71	2	313.62	316.41	279	150	72	16	88	25.4	100	
O-75S-MPB	75	2	331.44	334.24	296	180	72	16	88	25.4	120	
O-80S-MPB	80	2	353.72	356.52	319	180	72	16	88	25.4	120	
O-90S-MPB	90	2	398.29	401.08	358	200	72	16	88	25.4	133	GG
O-112S-MPB	112	3	496.33	499.12	456	200	72	16	88	25.4	133	GG
O-140S-MPB	140	3	621.11	623.91	581	220	72	16	88	25.4	147	GG
O-168S-MPB	168	3	745.89	748.69	706	220	72	16	88	25.4	147	GG

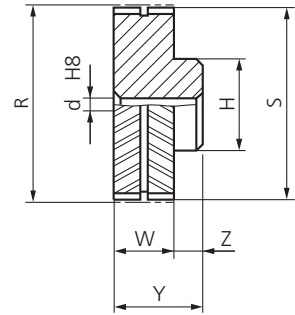


Fig. 1

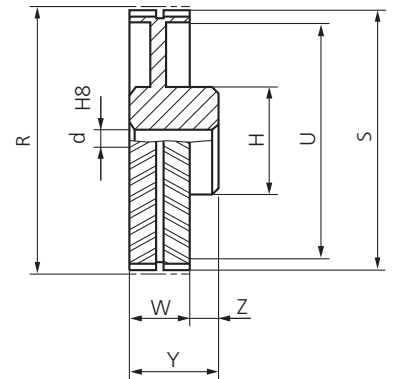


Fig. 2

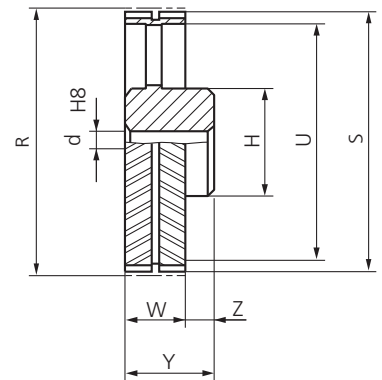


Fig. 3

Type "Red" R - Passo 14 mm - Width W = 107 mm

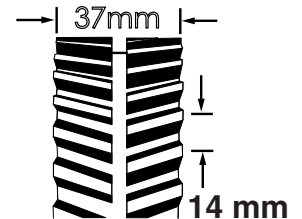
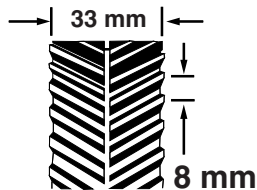
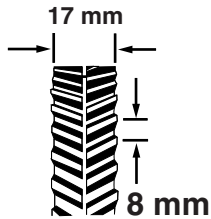
Code	N. Teeth	Fig.	S	R	U	H	W	Z	Y	d	Max. Bore	Material
R-28S-MPB	28	1	121.99	124.78		109	107	26	133	25.4	73	Steel
R-30S-MPB	30	1	130.90	133.69		117.5	107	26	133	25.4	78	
R-32S-MPB	32	1	139.81	142.61		126.5	107	26	133	25.4	84	
R-34S-MPB	34	1	148.73	151.52		135.5	107	26	133	25.4	90	
R-36S-MPB	36	1	157.64	160.43		144	107	26	133	25.4	96	
R-38S-MPB	38	1	166.55	169.35		153	107	26	133	25.4	102	
R-40S-MPB	40	1	175.46	178.26		162	107	26	133	25.4	108	
R-43S-MPB	43	1	188.83	191.63		174	107	26	133	25.4	117	
R-45S-MPB	45	1	197.75	200.54		183	107	16	123	25.4	122	
R-48S-MPB	48	1	211.12	213.91		197	107	16	123	25.4	131	
R-50S-MPB	50	1	220.03	222.82		205	107	16	123	25.4	137	
R-56S-MPB	56	1	246.77	249.56		230	107	16	123	25.4	153	
R-60S-MPB	60	2	264.59	267.39	230	180	107	16	123	25.4	120	GS400
R-63S-MPB	63	2	277.96	280.76	243	180	107	16	123	25.4	120	
R-71S-MPB	71	2	313.62	316.41	279	200	107	16	123	25.4	133	
R-75S-MPB	75	2	331.44	334.24	296	200	107	16	123	25.4	133	
R-80S-MPB	80	2	353.72	356.52	319	200	107	16	123	25.4	133	
R-90S-MPB	90	2	398.29	401.08	358	220	107	16	123	25.4	147	GG
R-112S-MPB	112	3	496.33	499.12	456	220	107	16	123	25.4	147	GG
R-140S-MPB	140	3	621.11	623.91	581	240	107	16	123	25.4	160	GG
R-168S-MPB	168	3	745.89	748.69	706	240	107	16	123	25.4	160	GG

GS400 = ductile iron - GG = cast iron - All dimensions in [mm]

Finished SIT “PE” timing sprockets

FSB (Finish Stock Bore)

QD®



YELLOW
Pitch 8M
Width 17 mm

WHITE
Pitch 8M
Width 33 mm

BLUE
Pitch 14M
Width 37 mm

Finish Stock Bore (FSB)*

Part Number	N. of teeth
Y-18S-...	18
Y-20S-...	20
Y-22S-...	22
Y-24S-...	24
Y-25S-...	25
Y-26S-...	26

QD® Bushing

Part Number	N. of teeth
Y-28S-H	28
Y-30S-H	30
Y-32S-H	32
Y-34S-H	34
Y-36S-SH	36
Y-38S-SH	38
Y-40S-SH	40
Y-45S-SDS	45
Y-48S-SDS	48
Y-50S-SDS	50
Y-56S-SDS	56
Y-60S-SDS	60
Y-63S-SDS	63
Y-75S-SDS	75
Y-80S-SDS	80
Y-90S-SK	90
Y-112S-SK	112
Y-140S-SK	140
Y-180S-SF	180
Y-224S-E	224

Finish Stock Bore (FSB)*

Part Number	N. of teeth
W-18S-...	18
W-20S-...	20
W-22S-...	22
W-24S-...	24
W-25S-...	25
W-26S-...	26

QD® Bushing

Part Number	N. of teeth
W-28S-H	28
W-30S-H	30
W-32S-H	32
W-34S-SH	34
W-36S-SH	36
W-38S-SH	38
W-40S-SH	40
W-45S-SDS	45
W-48S-SDS	48
W-50S-SDS	50
W-56S-SK	56
W-60S-SK	60
W-63S-SK	63
W-75S-SF	75
W-80S-SF	80
W-90S-SF	90
W-112S-SF	112
W-140S-E	140
W-180S-E	180
W-224S-F	224

QD® Bushing

Part Number	N. of teeth
B-28S-SK	28
B-30S-SK	30
B-32S-SK	32
B-34S-SK	34
B-36S-SF	36
B-38S-SF	38
B-40S-SF	40
B-43S-SF	43
B-45S-SF	45
B-48S-SF	48
B-50S-E	50
B-56S-E	56
B-60S-E	60
B-63S-F	63
B-71S-F	71
B-75S-F	75
B-80S-F	80
B-90S-F	90
B-112S-F	112
B-140S-J	140
B-168S-J	168
B-180S-E**	180
B-200S-E**	200
B-224S-E	224

*= see table on page 13 for available stock bore.

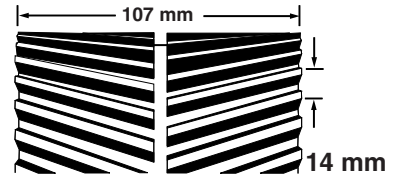
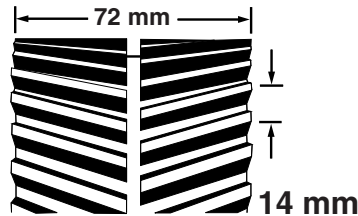
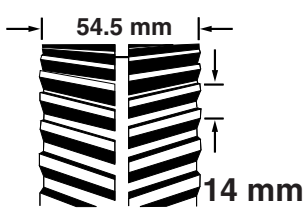
**= Special lightweight design. Please contact our Technical Dept.

QD® is a registered trademark of Emerson Electric Co.

Finished timing sprockets FSB

(Finish Stock Bore)

QD®



GREEN
Pitch 14M
54.5 mm

ORANGE
Pitch 14M
Width 72 mm

RED
Pitch 14M
Width 107 mm

Finish Stock Bore (FSB)*

Part Number	N. of teeth
G-28S-...	28
G-30S-...	30
G-32S-...	32
G-34S-...	34

QD® Bushing

Part Number	N. of teeth
G-30S-SK	30
G-32S-SK	32
G-34S-SK	34
G-36S-SF	36
G-38S-SF	38
G-40S-SF	40
G-43S-E	43
G-45S-E	45
G-48S-E	48
G-50S-E	50
G-56S-E	56
G-60S-E	60
G-63S-F	63
G-71S-J	71
G-75S-J	75
G-80S-J	80
G-90S-J	90
G-112S-J	112
G-140S-M	140
G-168S-M	168
G-180S-F**	180
G-200S-F**	200
G-224S-F	224

Finish Stock Bore (FSB)*

Part Number	N. of teeth
O-28S-...	28
O-30S-...	30
O-32S-...	32
O-34S-...	34
O-36S-...	36
O-38S-...	38
O-40S-...	40

QD® Bushing

Part Number	N. of teeth
O-43S-E	43
O-45S-E	45
O-48S-E	48
O-50S-F	50
O-56S-F	56
O-60S-J	60
O-63S-J	63
O-71S-J	71
O-75S-J	75
O-80S-J	80
O-90S-J	90
O-112S-M	112
O-140S-M	140
O-168S-M	168

Finished Stock Bore (FSB)*

Part Number	N. of teeth
R-28S-...	28
R-30S-...	30
R-32S-...	32
R-34S-...	34
R-36S-...	36
R-38S-...	38
R-40S-...	40
R-43S-...	43

QD® Bushing

Part Number	N. of teeth
R-45S-F	45
R-48S-F	48
R-50S-J	50
R-56S-J	56
R-60S-J	60
R-63S-J	63
R-71S-M	71
R-75S-M	75
R-80S-M	80
R-90S-M	90
R-112S-M	112
R-140S-N	140
R-168S-N	168

*= see table on page 13 for available stock bore.

**= Special lightweight design. Please contact our Technical Dept.

QD® is a registered trademark of Emerson Electric Co.

timing sprockets finished stock bore size

FSB

Sprocket size	Stock Bore Size [inches]							
	7/8"	1-1/8"	1-1/8"	1-5/8"	1-7/8"	2-1/8"	2-3/8"	2-7/8"
Y-18S-...	X							
W-18S-...	X							
Y-20S-...	X	X						
W-20S-...	X	X						
Y-22S-...	X	X						
W-22S-...	X	X						
Y-24S-...	X	X	X					
W-24S-...	X	X	X					
Y-25S-...	X	X	X					
W-25S-...	X	X	X					
Y-26S-...	X	X	X	X				
W-26S-...	X	X	X	X				
G-28S-...					X	X	X	
O-28S-...					X	X	X	
R-28S-...					X	X	X	X
G-30S-...					X	X	X	
O-30S-...					X	X	X	
R-30S-...					X	X	X	X
G-32S-...					X	X	X	
O-32S-...					X	X	X	X
R-32S-...					X	X	X	X
G-34S-...					X	X	X	
O-34S-...					X	X	X	X
R-34S-...					X	X	X	X
O-36S-...					X	X	X	X
R-36S-...					X	X	X	X
O-38S-...					X	X	X	X
R-38S-...					X	X	X	X
O-40S-...					X	X	X	X
R-40S-...					X	X	X	X
R-43S-...					X	X	X	X

X = Stock Size

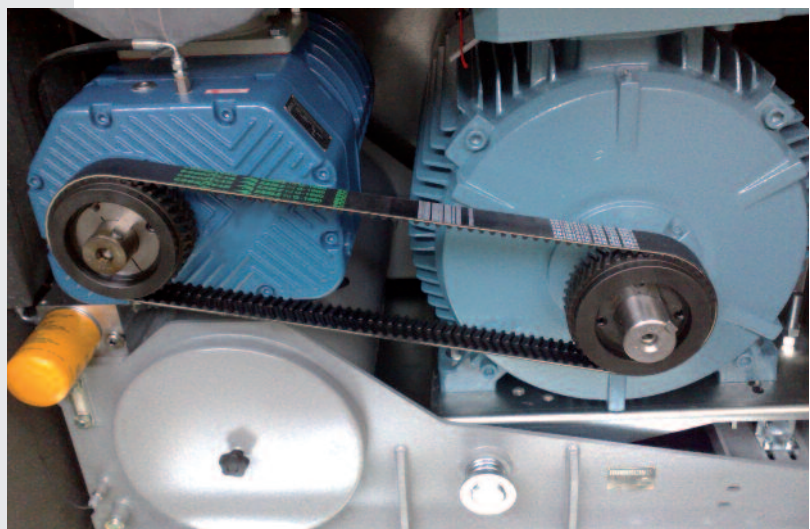


41669 Date Street, Suite 101
 Murrieta, CA 92562
 phone: 951.677.7424
 fax: 951.677.7334
 email: sales@rainbowprecisionproducts.com
 web: www.rainbowprecisionproducts.com



Solutions

With decades of experience, R.P.P. can provide variety of power transmission and conveying solutions for a wide range of industries, from machine tools to packaging equipment, from food processing to oil & gas, material handling, tile, glass, wood working, and many others.



41669 Date Street, Suite 101
Murrieta, CA 92562
phone: 951.677.7424
fax: 951.677.7334
email: sales@rainbowprecisionproducts.com
web: www.rainbowprecisionproducts.com

Invent the future, with SilentSync timing belt drive

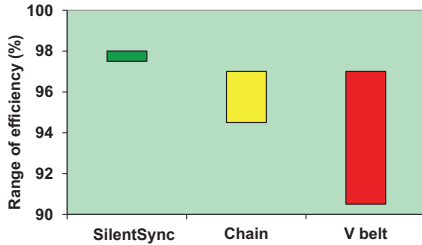
In the designing and development of products, energy consumption should be taken into consideration by implementing programs that increase efficiency and energy savings.

The advantage of the SilentSync drive system offers designers a valuable method by which to achieve these goals quickly without a long payback time.

The advantages benefit both the manufacturer and the end user.

Advantages

- Energy savings
- Dynamic load reduction
- Noiselessness
- Less maintenance
- Drive size and weight reduction
- Ease of tensioning
- Low vibrations



SIT offers mechanical transmissions that optimize energy efficiency and reduce noise pollution.

The **SilentSync** timing belt, the only belt with the helical offset tooth profile, **guarantees at least a 5% energy savings compared to V-belt drives and at least a 10 dB(A) noise reduction compared to traditional timing belt drives.**

The energy savings permits a short payback time and a considerable reduction of operating costs. Furthermore, the noise

reduction allows the use of the SilentSync timing belt drive system in areas with special restrictions on noise pollution.

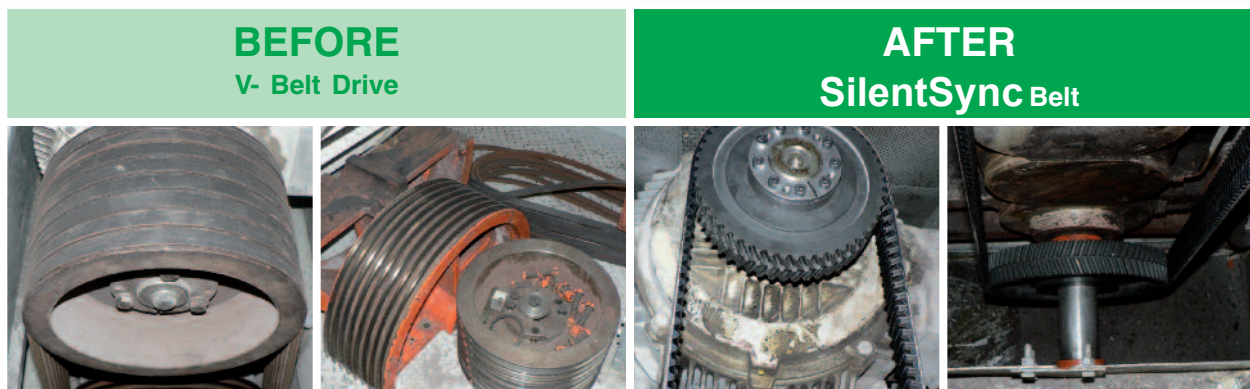
SilentSync transmission” and “V-belt transmissions” compared

(Estimation of annual savings after 7000 hours in operation.

(Estimation in US based on \$ 0.11 kW/h)

MOTOR SIZE	ANNUAL SAVING	ENERGY SAVING
27 - 50 HP	\$ 600 - \$ 1200	5%
50 - 100 HP	\$ 1200 - \$ 2400	
100 - 175 HP	\$ 2400 - \$ 4200	
175 - 240 HP	\$ 4200 - \$ 6000	

Generic example of energy savings based on RPP experience. Contact our Technical Dept. for an accurate estimation.



Extruders - 60 HP