

# Balanced Spiral Woven Belt

## Positive Drive Belt

## Sprocket & Shaft Setup Information

As a general guide, the number of sprockets for the drive shaft can be calculated using:

Belt Specification	Minimum Number of Sprockets = (round up)	Maximum Number of Sprockets = (round down)
BS-W-PD 18-16-16-16 BS-W-PD 18-14-16-14	Belt Width (mm) x 0.006	Belt Width (mm) x 0.014
BS-W-PD 30-17-24-17 BS-W-PD 30-16-24-16	Belt Width (mm) x 0.009	Belt Width (mm) x 0.020
BS-W-PD 42-18-36-18 BS-W-PD 42-17-36-17 BS-W-PD 42-16-36-16	Belt Width (mm) x 0.009	Belt Width (mm) x 0.027
BS-W-PD 48-17-48-17 BS-W-PD 48-16-48-16	Belt Width (mm) x 0.009	Belt Width (mm) x 0.022
BS-W-PD 60-20-48-18 BS-W-PD 60-18-48-18	Belt Width (mm) x 0.010	Belt Width (mm) x 0.032
BS-W-PD 60-18-60-18	Belt Width (mm) x 0.010	Belt Width (mm) x 0.024

When choosing the number of sprockets, to use, consideration needs to be given to the length of the conveyor, the loading on the belt and the circuit design.

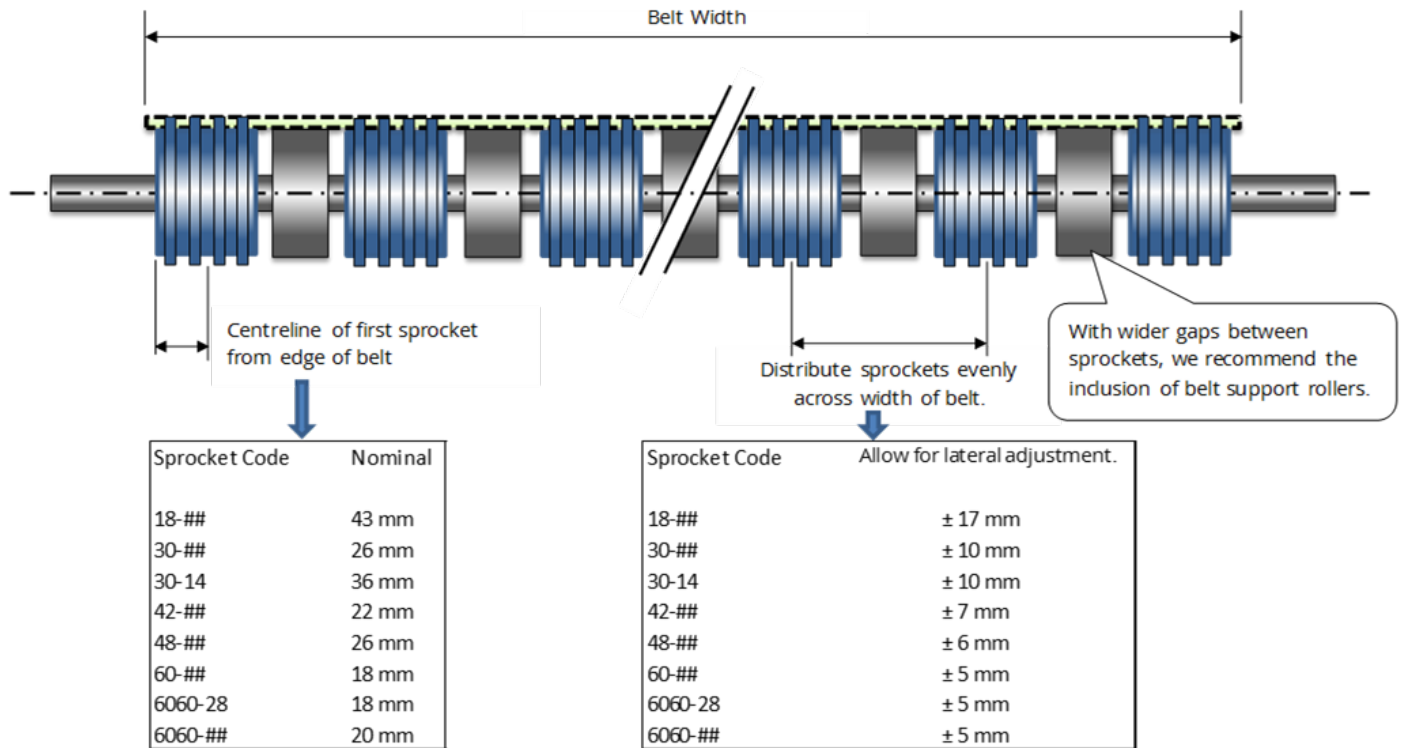
If using the minimum number of sprockets (or near to) then, it is recommended that belt support rollers should be included between the sprockets.

As a general guide, the number of sprockets for the drive shaft can be calculated using:

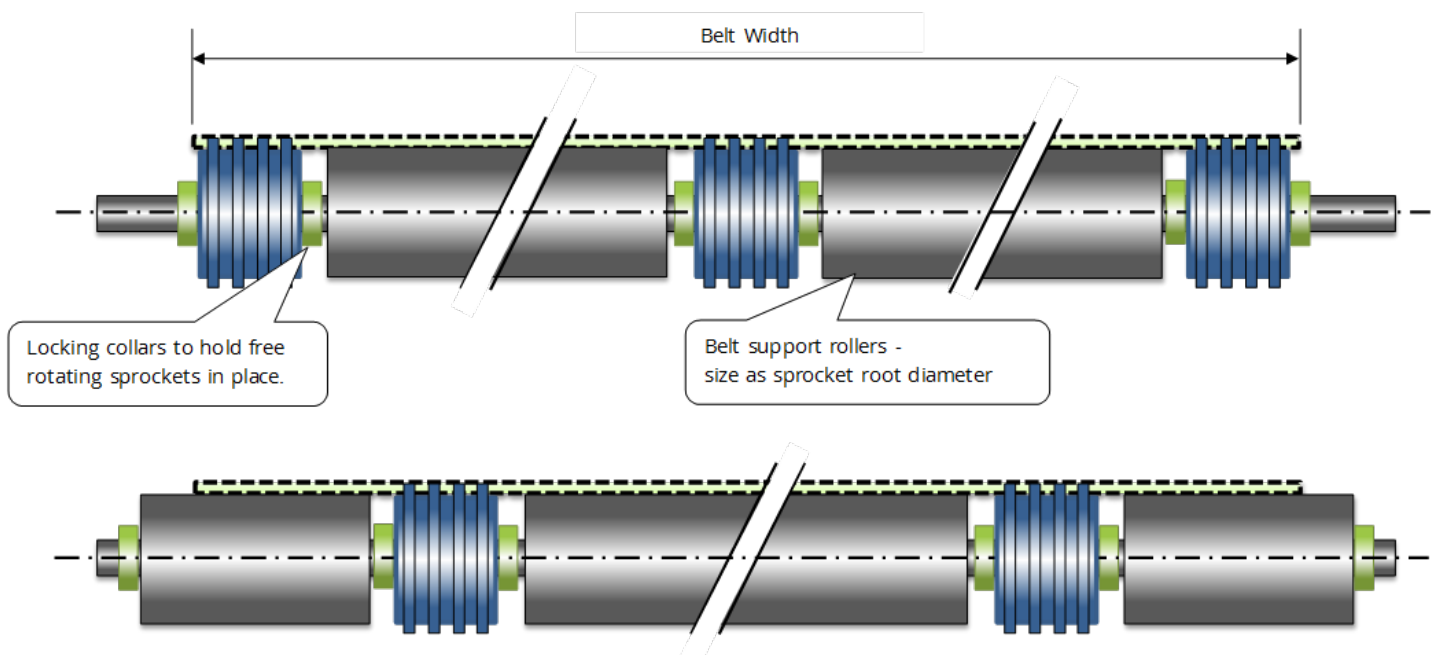
<b>Belt Specification</b>	<b>Code</b>	<b>No of Teeth</b>	<b>Tooth Rows</b>	<b>Overall Diameter</b>	<b>Root/Roller Diameter</b>	<b>Face Width</b>
<b>BS-W-PD 18-16-16-16</b> <b>BS-W-PD 18-14-16-14</b>	18-8	4	3	50.5 mm	38.4 mm	50.8 mm
	18-12	6	3	75.7 mm	63.5 mm	50.8 mm
	18-14	7	3	87.9 mm	74.9 mm	50.8 mm
	18-18	9	3	112.5 mm	100.3 mm	50.8 mm
<b>BS-W-PD 30-17-24-17</b> <b>BS-W-PD 30-16-24-16</b>	30-8	4	3	34.8 mm	23.8 mm	30.5 mm
	30-12	6	3	51.6 mm	40.6 mm	30.5 mm
	30-14	7	4*	59.7 mm	48.5 mm	38.1 mm
	30-16	8	3	67.8 mm	56.6 mm	30.5 mm
	30-18	9	3	76.5 mm	65.5 mm	30.5 mm
	30-20	10	3	84.6 mm	73.4 mm	30.5 mm
	30-24	12	3	100.8 mm	89.4 mm	30.5 mm
<b>BS-W-PD 42-18-36-18</b> <b>BS-W-PD 42-17-36-17</b> <b>BS-W-PD 42-16-36-16</b>	42-12	6	4	35.0 mm	25.7 mm	29.0 mm
	42-20	10	4	56.4 mm	47.7 mm	29.0 mm
	42-24	12	4	67.7 mm	58.4 mm	29.0 mm
	42-30	15	4	83.8 mm	74.4 mm	29.0 mm
	42-32	16	4	89.3 mm	79.9 mm	29.0 mm
	42-40	20	4	110.9 mm	101.6 mm	29.0 mm
	42-56	28	4	153.9 mm	144.7 mm	29.0 mm
<b>BS-W-PD 48-17-48-17</b> <b>BS-W-PD 48-16-48-16</b>	48-20	10	6	43.4 mm	34.0 mm	38.1 mm
	48-24	12	6	51.6 mm	42.2 mm	38.1 mm
	48-32	16	6	67.6 mm	58.7 mm	38.1 mm
<b>BS-W-PD 60-20-48-18</b> <b>BS-W-PD 60-18-48-18</b>	60-8	4	5	17.3 mm	11 mm	25.4 mm
	60-12	6	5	25.9 mm	19.6 mm	25.4 mm
	60-24	12	5	50.8 mm	44.2 mm	25.4 mm
	60-42	21	5	86.9 mm	80.3 mm	25.4 mm
	60-54	27	5	111.8 mm	103.9 mm	25.4 mm
	60-82	41	5	168.4 mm	160.5 mm	25.4 mm
<b>BS-W-PD 60-18-60-18</b>	6060-28	14	5	47.8 mm	39.9 mm	25.4 mm
	6060-40	20	6	67.3 mm	59.4 mm	35.6 mm
	6060-92	46	6	151.9 mm	143.3 mm	35.6 mm

\*Confirm details with Wire Belt Technical Sales.

## Typical Drive Shaft Arrangement:-



## Suggested Tracking Shaft (Transfer or Idle Shaft) Optional Arrangements:-



Belt circuit should be arranged such that there is sufficient wrap around the sprocket to ensure that the teeth remain engaged with the mesh.