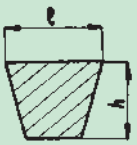
V-Pulleys

SIT V-Pulleys

On the market there are various types of **V-belts**, among which, the most 'widespread are:
- "narrow" SPZ-SPA-SPB-SPC (ISO4184 - DIN 7753)
- "classic" Z-A-B-C (ISO 4184 - DIN 2215)
- "American narrow" 3V-5V (RMA-MPTA).

The **"narrow" V-pulleys** (DIN2211 - ISO4183) **manufactured by SIT** and shown in this catalogue are suitable to be used with all the aforementioned types of belts. Note: for banded belts 3V - 5V - 8V use pulleys with RMA specifications (ref. pag 100). These pulleys are not standard and are available only on request.

Compatibility table between main V-belts types and SIT V-pulleys.

		V-belts										
		ISO 4184 - DIN 7753/1				RMA - MPTA			ISO 4184 - DIN 2215			
		SPZ	SPA	SPB	SPC	3V	5V	8V	Z	A	B	C
	a x b	9,7 x 8	12,7 x 10	17 x 13	22 x 18	9,5 x 8	16 x 13,5	25,5 x 23	10 x 6	13 x 8	17 x 11	22 x 14
SIT Pulleys (DIN 2211)												
PT	SPZ	○										
	SPA	-		-	-	-	-	-	-	○	-	-
	SPB	-	-	○	-	-	○*	-	-	-	○	-
	C	-	-	-	X	-	-	-	-	-	-	○
PBT	SPZ	○	-	-	-	○*	-	-	○	-	-	-
	SPA	-	○	-	-	-	-	-	-	○	-	-
	SPB	-	-	○	-	-	○*	-	-	-	○	-
	SPC	-	-	-	○	-	-	-	-	-	-	○
PCT	SPZ	○	-	-	-	○*	-	-	○	-	-	-
	SPA	-	○	-	-	-	-	-	-	○	-	-
	SPB	-	-	○	-	-	○*	-	-	-	○	-
	SPC	-	-	-	○	-	-	-	-	-	-	○

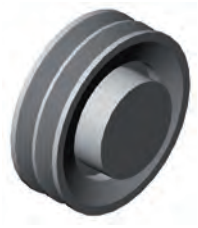
○ = COMPATIBLE
X = NOT COMPATIBLE

* Pitch among the grooves of SPZ pulley is different from the 3V. Similarly, the pitch is also different between SPB and 5V.

SIT V-Pulleys - production range

PT pulleys - solid hub
Material: cast iron DIN 1691 GG-20/GG25
Finishing: black manganese phosphating process.

V-groove pulleys suitable for normal application for use with the following belt types:
- **SPZ-Z-3V**
- **SPA-A**
- **SPB-B-5V**
- **C**



PBT pulleys - for mounting taper bushing SER-SIT®
Material: cast iron DIN 1691 GG-20/GG25
Finishing: black manganese phosphating process.

V-groove pulleys suitable for use with the following belts:
- **SPZ-Z-3V**
- **SPA-A**
- **SPB-B-5V**
- **SPC-C**

PCT pulleys - oversized hub for Self Locking Units
Material: cast iron DIN 1691 GG-20/GG25
Finishing: black manganese phosphating process.

V-groove pulleys suitable for use with the following belts:
- **SPZ-Z-3V**
- **SPA-A**
- **SPB-B-5V**
- **SPC-C**

Features

Our pulleys can be used for application with a speed up to 35 m/s.
The pulley dimensions are very accurate as they are manufactured only by means of CNC or automatic lathes.
For higher speed is strongly recommended to use steel as material of construction.

Balancing

Our PBT pulleys are statically balanced according to ISO.
The PT pulleys are not balanced, as they do not have a finished bores.

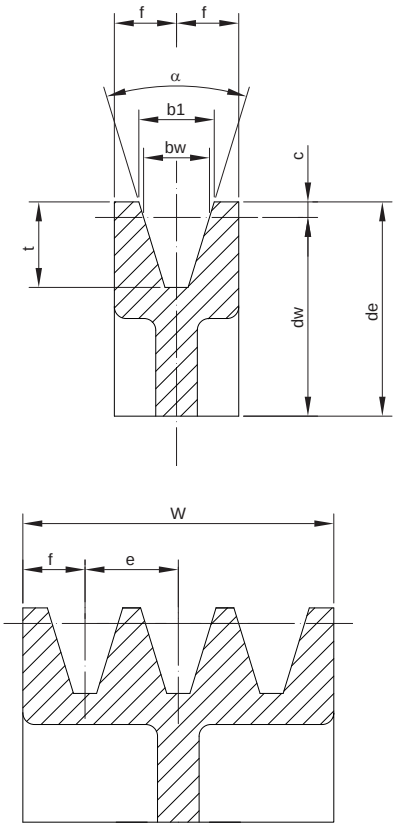
TOLERANCES

dw [mm]	Tolerance of pitch diameter dw [mm]	Eccentricity tolerance relevant to the outside diameter [mm]
50	± 0,4	0,2
56	± 0,4	
63	± 0,5	
71	± 0,6	
80	± 0,6	
90	± 0,7	
100	± 0,8	
112	± 0,9	0,3
118	± 1,0	
125	± 1,0	
135	± 1,0	
140	± 1,1	
150	± 1,2	
160	± 1,3	
180	± 1,4	0,4
190	± 1,5	
200	± 1,6	
212	± 1,7	
224	± 1,8	
236	± 1,9	
250	± 2,0	
280	± 2,2	0,5
300	± 2,4	
315	± 2,5	
355	± 2,8	
400	± 3,2	
450	± 3,6	0,6
500	± 4,0	
560	± 4,5	
630	± 5,0	
710	± 5,7	0,8
800	± 6,4	
900	± 7,2	
1000	± 8,0	
1120	± 9,0	1,0
1250	± 10,0	

Max. difference among the pitch diameter of the grooves of the same pulley [mm]	
SPZ - SPA - SPB	SPC
0,4	0,6

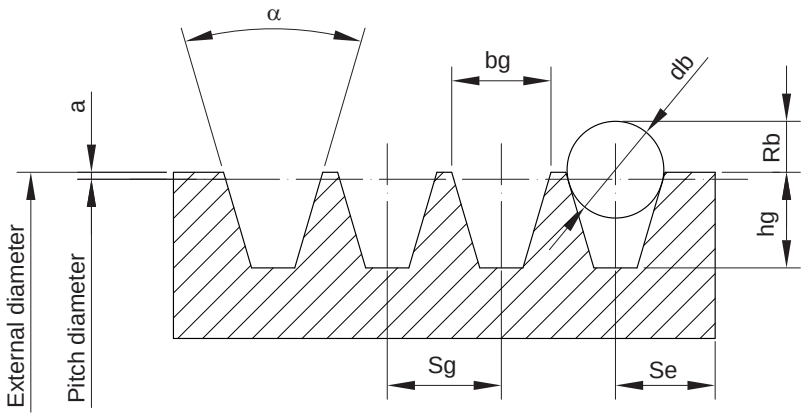
Note
Due to a constant improvement of our products, technical data of the pulleys may be subject to changes.

Dimension of grooves (DIN 2211)



Section		SPZ [mm]	SPA [mm]	SPB [mm]	C/SPC [mm]
b_w [mm]		8,5	11,0	14,0	19,0
b_1 [mm] (±0,2)		9,7	12,7	16,3	22,0
c [mm]		2,0	2,8	3,5	4,8
e [mm]		12 ± 0,3	15 ± 0,3	19 ± 0,4	25,5 ± 0,5
f [mm]		8 ± 0,6	10 ± 0,6	12,5 ± 0,8	17±1
t [mm] min.		$11^{+0,6}_{0}$	$13,8^{+0,6}_{0}$	$17,5^{+0,6}_{0}$	C: 20 I SPC: $23,8^{+0,6}_{0}$
α 34° per dw [mm]		≤ 80	≤ 118	≤ 190	≤ 315
α 38° per dw [mm]		>80	>118	>190	>315
Tolerance		± 1°	± 1°	± 1°	± 1°
W Crown width for number of grooves Z [mm]	**Z = 1**	16	20	25	34
	2	28	35	44	59,5
	3	40	50	63	85
	4	52	65	82	110
	5	64	80	101	136
	6	76	95	120	161,5
	7	88	110	139	187
	8	100	125	158	212,5
	9	112	140	177	238
	10	124	155	196	263,5
	11	136	170	215	289
	12	148	185	234	314,5

Dimension of grooves of V-Pulleys suitable for banded belts (RMA)



Section	D [mm]	α [°]	bg [mm]	hg min. [mm]	a [mm]	Rb min. [mm]	db [mm]	Sg [mm]	Se [mm]
3V	≤ 89	36 ± 0,25	8,89 ± 0,13	8,63	0,63	4,6	8,73 ± 0,01	10,3 ± 0,4	9^{+2}_{-1}
	90 ÷ 152	38 ± 0,25	8,89 ± 0,13	8,63	0,63	4,6	8,73 ± 0,01	10,3 ± 0,4	9^{+2}_{-1}
	153 ÷ 1305	40 ± 0,25	8,89 ± 0,13	8,63	0,63	4,7	8,73 ± 0,01	10,3 ± 0,4	9^{+2}_{-1}
	> 305	42 ± 0,25	8,89 ± 0,13	8,63	0,63	4,8	8,73 ± 0,01	10,3 ± 0,4	9^{+2}_{-1}
5V	≤ 254	38 ± 0,25	15,24 ± 0,13	14,98	1,27	8,4	15,08 ± 0,01	17,5 ± 0,4	13^{+3}_{-1}
	255 ÷ 406	40 ± 0,25	15,24 ± 0,13	14,98	1,27	8,4	15,08 ± 0,01	17,5 ± 0,4	13^{+3}_{-1}
	> 406	42 ± 0,25	15,24 ± 0,13	14,98	1,27	8,5	15,08 ± 0,01	17,5 ± 0,4	13^{+3}_{-1}
8V	≤ 406	38 ± 0,25	25,4 ± 0,13	25,14	2,54	14,6	25,4 ± 0,01	28,6 ± 0,4	19^{+6}_{-2}
	407 ÷ 569	40 ± 0,25	25,4 ± 0,13	25,14	2,54	14,7	25,4 ± 0,01	28,6 ± 0,4	19^{+6}_{-2}
	> 569	42 ± 0,25	25,4 ± 0,13	25,14	2,54	14,9	25,4 ± 0,01	28,6 ± 0,4	19^{+6}_{-2}

Dimensions of V-Pulleys PT - solid hub

PT SPZ-Z-3V

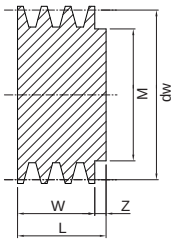
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
50	1	1	32*	28	16	12
	2	1	35*	35	28	7
	3	1	35*	44	40	4
	4	1	35*	56	52	4
56	1	1	32**	28	16	12
	2	1	40**	35	28	7
	3	1	42**	44	40	4
	4	1	42**	56	52	4
63	1	1	40	28	16	12
	2	1	40	35	28	7
	3	1	42	44	40	4
	4	1	42	56	52	4
71	1	1	40	28	16	12
	2	1	48	35	28	7
	3	1	50	44	40	4
	4	1	50	56	52	4
75	1	1	40	28	16	12
	2	1	50	35	28	7
	3	1	50	44	40	4
	4	1	50	56	52	4
80	1	4	40	28	16	12
	2	1	50	35	28	7
	3	1	50	44	40	4
	4	1	65	56	52	4
	5	1	65	68	64	4
85	1	4	40	28	16	12
	2	4	50	35	28	7
	3	1	50	44	40	4
	4	1	65	56	52	4
	5	1	65	68	64	4
90	1	4	40	28	16	12
	2	4	50	35	28	7
	3	4	50	44	40	4
	4	1	65	56	52	4
	5	1	68	68	64	4
95	1	4	45	28	16	12
	2	4	50	35	28	7
	3	4	50	40	40	-
	4	1	65	56	52	4
	5	1	68	68	64	4
100	1	4	45	28	16	12
	2	4	50	35	28	7
	3	4	60	40	40	-
	4	1	65	56	52	4
	5	1	68	68	64	4
106	1	4	45	28	16	12
	2	4	50	35	28	7
	3	4	60	40	40	-
	4	4	65	56	52	4
	5	4	68	68	64	4
112	1	4	45	28	16	12
	2	4	50	35	28	7
	3	4	60	40	40	-
	4	4	68	52	52	-
	5	5	68	60	64	4
118	1	4	45	28	16	12
	2	4	50	35	28	7
	3	4	60	40	40	-
	4	4	68	52	52	-
	5	5	75	60	64	4

» PT SPZ-Z-3V

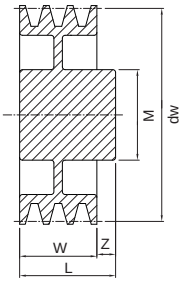
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
125	1	4	45	28	16	12
	2	4	50	35	28	7
	3	4	60	40	40	-
	4	4	68	52	52	-
	5	5	75	60	64	4
132	1	4	45	28	16	12
	2	4	60	40	28	12
	3	4	60	40	40	-
	4	4	68	52	52	-
	5	5	75	60	64	4
140	1	4	55	28	16	12
	2	4	60	40	28	12
	3	4	60	40	40	-
	4	4	68	52	52	-
	5	5	75	60	64	4
150	1	4	55	32	16	16
	2	4	60	40	28	12
	3	4	68	45	40	5
	4	4	68	52	52	-
	5	5	80	60	64	4
160	1	4	55	32	16	16
	2	4	60	40	28	12
	3	4	68	45	40	5
	4	4	68	52	52	-
	5	5	80	60	64	4
180	1	4	55	32	16	16
	2	4	65	40	28	12
	3	4	68	45	40	5
	4	4	80	52	52	-
	5	5	80	60	64	4
200	1	4A	55	32	16	16
	2	4A	65	40	28	12
	3	4A	68	45	40	5
	4	4A	80	52	52	-
	5	5A	80	60	64	4
224	1	8	55	32	16	16
	2	8	65	40	28	12
	3	8	68	45	40	5
	4	8	80	52	52	-
	5	9	80	60	64	4
250	1	8	55	32	16	16
	2	8	62	40	28	12
	3	8	68	45	40	5
	4	8	80	52	52	-
	5	9	88	60	64	4
280	1	8	68	45	16	29
	2	8	68	45	28	17
	3	8	80	50	40	10
	4	8	80	52	52	-
	5	9	96	60	64	4
315	1	8	68	45	16	29
	2	8	68	45	28	17
	3	8	80	50	40	10
	4	8	96	55	52	3
	5	9	96	60	64	4
355	1	8	68	45	16	29
	2	8	68	45	28	17
	3	8	80	50	40	10
	4	8	96	55	52	3
	5	9	96	60	64	4

Part Number **PT 100 SPZ 2**

- V-Pulley - solid hub
- Pitch diameter [mm]
- Section
- Number of grooves

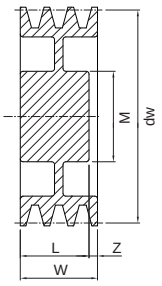


1



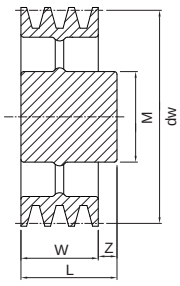
4

4A (with lightening bores)



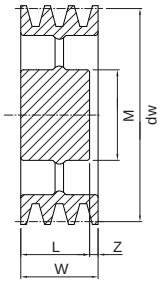
5

5A (with lightening bores)



8 (3 spokes)

8A (6 spokes)



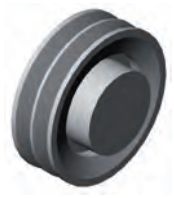
9

9A (3 spokes)

9B (6 spokes)

* Note: the diameter at the bottom of the groove is 32 mm
** Note: the diameter at the bottom of the groove is 38 mm

Dimensions of V-Pulleys PT - solid hub

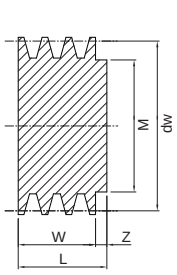


PT SPA-A

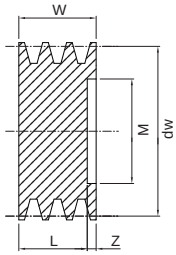
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
50	1	1	32*	35	20	15
	2	1	40*	45	35	10
	3	1	40*	54	50	4
56	1	1	35**	35	20	15
	2	1	40**	45	35	10
	3	1	40**	54	50	4
63	1	1	40	35	20	15
	2	1	40	45	35	10
	3	1	40	54	50	4
	4	1	40	68	65	3
	5	1	40	84	80	4
71	1	1	40	35	20	15
	2	1	50	45	35	10
	3	1	52	54	50	4
	4	1	52	68	65	3
	5	1	52	84	80	4
75	1	1	40	35	20	15
	2	1	50	45	35	10
	3	1	52	54	50	4
	4	1	52	68	65	3
	5	1	52	84	80	4
80	1	1	45	35	20	15
	2	1	50	45	35	10
	3	1	62	54	50	4
	4	1	62	68	65	3
	5	1	62	84	80	4
85	1	4	45	35	20	15
	2	1	50	45	35	10
	3	1	62	54	50	4
	4	1	62	68	65	3
	5	1	62	84	80	4
90	1	4	45	35	20	15
	2	1	60	45	35	10
	3	1	62	54	50	4
	4	1	68	68	65	3
	5	1	68	84	80	4
95	1	4	45	35	20	15
	2	1	60	45	35	10
	3	1	62	54	50	4
	4	1	68	68	65	3
	5	1	68	84	80	4
100	1	4	45	35	20	15
	2	1	60	45	35	10
	3	1	62	54	50	4
	4	2	70	50	65	15
	5	2	70	50	80	30
106	1	4	45	35	20	15
	2	4	60	45	35	10
	3	4	60	50	50	-
	4	2	68	50	65	15
	5	2	68	50	80	30
112	1	4	45	35	20	15
	2	4	60	45	35	10
	3	4	60	50	50	-
	4	2	68	50	65	15
	5	2	68	50	80	30
118	1	4	60	35	20	15
	2	4	60	45	35	10
	3	4	70	50	50	-
	4	2	70	50	65	15
	5	2	80	50	80	30

» PT SPA-A

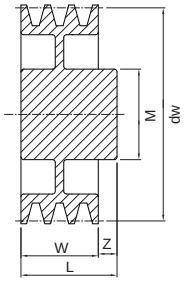
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
125	1	4	55	35	20	15
	2	4	60	45	35	10
	3	4	68	50	50	-
	4	5	68	50	65	15
	5	5	80	50	80	30
132	1	4	55	35	20	15
	2	4	60	45	35	10
	3	4	68	50	50	-
	4	5	68	50	65	15
	5	5	80	50	80	30
140	1	4	60	35	20	15
	2	4	60	45	35	10
	3	4	68	50	50	-
	4	5	68	50	65	15
	5	5	80	50	80	30
150	1	4	60	40	20	20
	2	4	60	45	35	10
	3	4	68	50	50	-
	4	5	68	50	65	15
	5	5	80	50	80	30
160	1	4	60	40	20	20
	2	4	60	45	35	10
	3	4	68	50	50	-
	4	5	80	50	65	15
	5	5	80	50	80	30
170	1	4	60	40	20	20
	2	4	60	45	35	10
	3	4	68	50	50	-
	4	5	80	50	65	15
	5	5	80	50	80	30
180	1	4	65	40	20	20
	2	4	68	50	35	15
	3	4	68	50	50	-
	4	5	80	60	65	5
	5	5	80	65	80	15
190	1	4	65	40	20	20
	2	4	68	50	35	15
	3	4	68	50	50	-
	4	5	80	60	65	5
	5	5	80	65	80	15
200	1	4	65	40	20	20
	2	4	68	50	35	15
	3	4	75	50	50	-
	4	5	88	60	65	5
	5	5	88	65	80	15
224	1	4	65	40	20	20
	2	4	68	50	35	15
	3	4	75	50	50	-
	4	5	88	60	65	5
	5	5	88	65	80	15
236	1	4	68	40	20	20
	2	4	68	50	35	15
	3	4	75	50	50	-
	4	5	88	60	65	5
	5	5	88	65	80	15
250	1	8	75	50	20	30
	2	8	75	50	35	15
	3	8	75	50	50	-
	4	9	88	60	65	5
	5	9	96	65	80	15



1

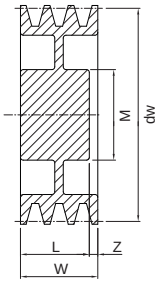


2



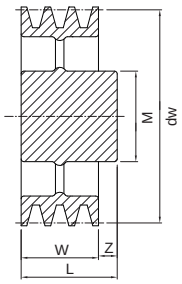
4

4A (with lightening bores)



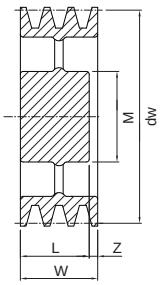
5

5A (with lightening bores)



8 (3 spokes)

8A (6 spokes)



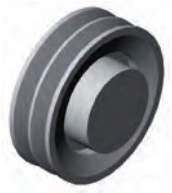
9

9A (3 spokes)

9B (6 spokes)

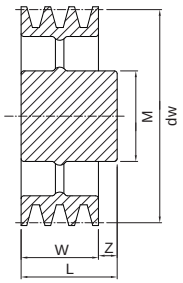
* Note: the diameter at the bottom of the groove is 32 mm
** Note: the diameter at the bottom of the groove is 34 mm

Dimensions of V-Pulleys PT - solid hub

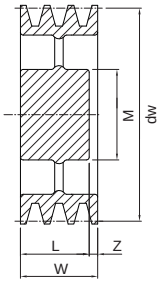


» PT SPA-A

Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
280	1	8	68	50	20	30
	2	8	75	50	35	15
	3	8	75	50	50	-
	4	9	88	60	65	5
	5	9	96	65	80	15
300	1	8	75	50	20	30
	2	8	75	50	35	15
	3	8	88	60	50	10
	4	9	88	60	65	5
	5	9	96	70	80	10
315	2	8	75	50	35	15
	3	8	88	60	50	10
	4	9	88	60	65	5
	5	9	96	70	80	10
355	2	8	88	60	35	25
	3	8	88	60	50	10
	4	9	88	60	65	5
	5	9	96	70	80	10
400	1	8A	78	50	20	30
	2	8A	88	60	35	25
	3	8A	96	65	50	15
	4	8A	96	65	65	-
	5	9A	96	70	80	10
450	2	8A	88	60	35	25
	3	8A	96	65	50	15
	4	8A	104	70	65	5
	5	9A	104	70	80	10
500	2	8A	88	60	35	25
	3	8A	96	65	50	15
	4	8A	104	70	65	5
	5	9A	104	70	80	10
560	2	8A	88	60	35	25
	3	8A	96	65	50	15
	4	8A	104	70	65	5
	5	9A	104	70	80	10
630	3	8A	104	65	50	15
	4	8A	112	70	65	5
	5	9A	120	75	80	5
800	3	8A	128	100	50	50
	4	8A	128	100	65	35
	5	8A	145	110	80	30

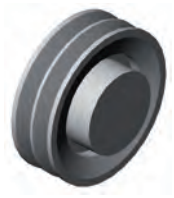


8 (3 spokes)
8A (6 spokes)



9
9A (3 spokes)

Dimensions of V-Pulleys PT - solid hub

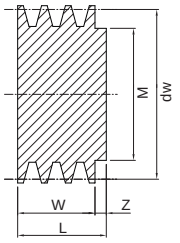


PT SPB-B-5V

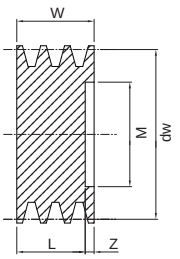
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
60	1	1	40	35*	25	10
	2	1	40	48*	44	4
71	1	1	45	35**	25	10
	2	1	45	48**	44	4
	3	1	45	67**	63	4
75	1	1	45	35	25	10
	2	1	45	48	44	4
	3	1	45	67	63	4
80	1	1	50	35	25	10
	2	1	50	48	44	4
	3	1	50	67	63	4
	4	1	52	86	82	4
	5	1	58	105	101	4
85	1	1	50	35	25	10
	2	1	50	48	44	4
	3	1	52	67	63	4
	4	1	58	86	82	4
	5	1	58	105	101	4
90	1	1	50	35	25	10
	2	1	50	48	44	4
	3	1	58	67	63	4
	4	2	65	50	82	32
	5	2	65	50	101	51
95	1	1	52	35	25	10
	2	1	55	48	44	4
	3	1	58	67	63	4
	4	2	65	50	82	32
	5	2	65	50	101	51
100	1	1	52	35	25	10
	2	1	55	48	44	4
	3	1	58	67	63	4
	4	2	65	50	82	32
	5	2	65	50	101	51
106	1	4	50	35	25	10
	2	4	55	48	44	4
	3	2	65	50	63	13
	4	2	65	50	82	32
	5	2	67	50	101	51
112	1	4	55	35	25	10
	2	4	60	48	44	4
	3	2	65	50	63	13
	4	2	75	50	82	32
	5	2	75	50	101	51
118	1	4	55	35	25	10
	2	4	60	48	44	4
	3	2	75	50	63	13
	4	2	75	50	82	32
	5	2	75	50	101	51
125	1	4	55	35	25	10
	2	4	60	48	44	4
	3	5	75	50	63	13
	4	5	75	50	82	32
	5	5	75	50	101	51
	6	2	80	60	120	60
132	1	4	60	35	25	10
	2	4	60	50	44	6
	3	5	75	50	63	13
	4	5	80	50	82	32
	5	5	80	60	101	41
	6	5	80	60	120	60

» PT SPB-B-5V

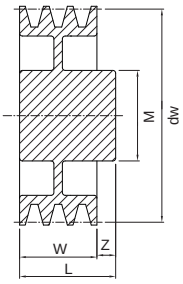
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
140	1	4	60	35	25	10
	2	4	65	50	44	6
	3	5	75	50	63	13
	4	5	80	50	82	32
	5	5	80	60	101	41
	6	5	80	60	120	60
150	1	4	60	40	25	15
	2	4	65	50	44	6
	3	5	75	50	63	13
	4	5	80	50	82	32
	5	5	80	60	101	41
	6	5	88	60	120	60
160	1	4	65	40	25	15
	2	4	68	50	44	6
	3	5	80	50	63	13
	4	5	88	60	82	22
	5	5	88	60	101	41
	6	5	88	65	120	55
170	1	4	65	40	25	15
	2	4	68	50	44	6
	3	5	80	50	63	13
	4	5	88	60	82	22
	5	5	88	60	101	41
	6	5	104	65	120	55
180	1	4	65	40	25	15
	2	4	68	50	44	6
	3	5	80	50	63	13
	4	5	88	60	82	22
	5	5	88	70	101	31
	6	5	104	70	120	50
190	1	4	65	40	25	15
	2	4	68	50	44	6
	3	5	80	50	63	13
	4	5	88	60	82	22
	5	5	88	70	101	31
	6	5	104	70	120	50
200	1	4	68	40	25	15
	2	4	68	50	44	6
	3	5	80	50	63	13
	4	5	88	60	82	22
	5	5	88	70	101	31
	6	5	104	80	120	40
212	1	4	68	45	25	20
	2	4	68	50	44	6
	3	5	80	50	63	13
	4	5	88	60	82	22
	5	5	88	70	101	31
	6	5	104	80	120	40
224	1	4	68	45	25	20
	2	4	75	50	44	6
	3	5	80	50	63	13
	4	5	88	60	82	22
	5	5	96	70	101	31
	6	5	104	80	120	40
236	1	4	68	45	25	20
	2	4	75	50	44	6
	3	5	80	60	63	3
	4	5	88	65	82	17
	5	5	96	75	101	26
	6	5	104	80	120	40



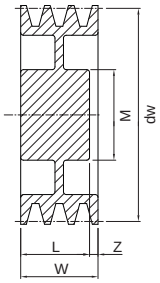
1



2



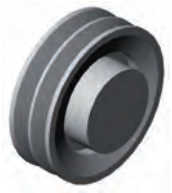
4



5

* Note: the diameter at the bottom of the groove is 32 mm
** Note: the diameter at the bottom of the groove is 43 mm

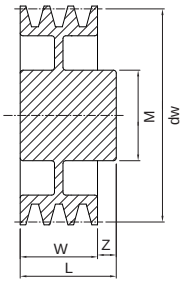
Dimensions of V-Pulleys PT - solid hub



» PT SPB-B-5V

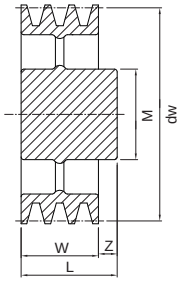
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
250	1	8	70	45	25	20
	2	8	75	50	44	6
	3	9	88	60	63	3
	4	9	96	65	82	17
	5	4A	104	75	101	26
	6	4A	104	80	120	40
280	1	8	75	45	25	20
	2	8	75	50	44	6
	3	9	88	60	63	3
	4	9	96	65	82	17
	5	9	104	75	101	26
	6	9	104	80	120	40
300	1	8	75	50	25	25
	2	8	80	50	44	6
	3	9	88	60	63	3
	4	9	96	65	82	17
	5	9	104	75	101	26
	6	9	104	80	120	40
315	2	8	88	60	44	16
	3	9	88	60	63	3
	4	9	96	65	82	17
	5	9	104	75	101	26
	6	9	120	90	120	30
355	1	8A	80	50	25	25
	2	8	88	60	44	16
	3	9	96	60	63	3
	4	9	96	65	82	17
	5	9	104	75	101	26
	6	9	120	90	120	30
400	2	8A	88	60	44	16
	3	8A	96	65	63	2
	4	9A	104	75	82	7
	5	9A	112	85	101	16
	6	9A	120	100	120	20
450	2	8A	88	60	44	16
	3	8A	96	65	63	2
	4	9A	104	75	82	7
	5	9A	112	85	101	16
	6	9A	120	100	120	20
500	2	8A	96	65	44	21
	3	8A	104	75	63	12
	4	8A	112	85	82	3
	5	9A	120	90	101	11
	6	9A	128	105	120	15
560	2	8A	96	65	44	21
	3	8A	104	75	63	12
	4	8A	112	85	82	3
	5	9A	120	90	101	11
	6	9A	128	105	120	15

Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
630	2	8A	104	65	44	21
	3	8A	120	75	63	12
	4	8A	128	105	82	23
	5	8A	145	115	101	14
	6	9A	145	115	120	5
710	2	8A	96	65	44	21
	3	8A	112	75	63	12
	4	8A	120	90	82	8
	5	8A	128	105	101	4
	6	9A	145	115	120	5
800	2	8A	104	70	44	26
	3	8A	120	90	63	27
	4	8A	128	105	82	23
	5	8A	145	115	101	14
	6	9A	145	115	120	5



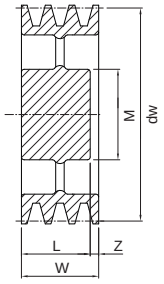
4

4A (with lightening bores)



8 (3 spokes)

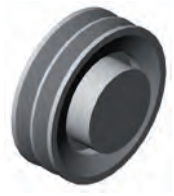
8A (6 spokes)



9

9A (3 spokes)

Dimensions of V-Pulleys PT - solid hub

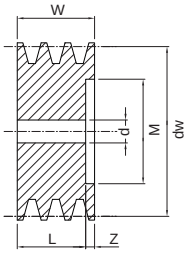


PT C

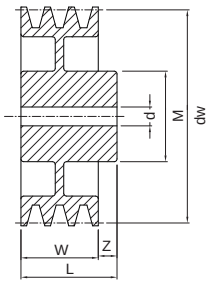
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	d [mm]	z [mm]
140	1	6	62	58	34	16	24
	2	7	70	58	59,5	16	2
	3	3	83	70	85	16	15
	4	3	83	74	110,5	16	37
	5	3	83	78	136	16	58
	6	3	83	78	161,5	20	84
150	1	6	70	59	34	16	25
	2	6	70	61	59,5	16	2
	3	3	93	70	85	16	15
	4	3	93	74	110,5	16	37
	5	3	93	78	136	16	58
	6	3	93	78	161,5	20	84
160	1	6	62	59	34	16	25
	2	6	70	61	59,5	16	2
	3	3	103	70	85	16	15
	4	3	103	74	110,5	20	37
	5	3	103	78	136	20	58
	6	3	103	78	161,5	20	84
170	1	6	70	60	34	16	26
	2	6	70	62	59,5	16	3
	3	7	78	74	85	20	11
	4	3	113	74	110,5	20	37
	5	3	113	78	136	20	58
	6	3	113	80	161,5	20	82
180	1	6	70	60	34	16	26
	2	6	70	60	59,5	16	1
	3	7	78	72	85	20	13
	4	7	82	74	110,5	20	37
	5	7	82	80	136	20	56
	6	7	87	72	161,5	20	90
190	1	6	70	60	34	16	26
	2	6	74	60	59,5	16	1
	3	7	78	72	85	20	13
	4	7	82	74	110,5	20	37
	5	7	84	80	136	20	56
	6	7	88	85	161,5	20	77
200	1	6	71	60	34	16	26
	2	6	73	72	59,5	20	13
	3	7	83	76	85	20	9
	4	7	90	88	110,5	20	23
	5	7	92	92	136	20	44
	6	7	96	98	161,5	20	64
224	1	6	71	63	34	20	29
	2	6	76	68	59,5	20	9
	3	7	83	76	85	20	9
	4	7	93	90	110,5	20	21
	5	7	93	92	136	25	44
	6	7	98	98	161,5	25	64
250	1	6	82	63	34	20	29
	2	6	82	71	59,5	20	12
	3	7	90	80	85	20	5
	4	7	95	90	110,5	20	21
	5	7	100	96	136	25	40
	6	7	102	102	161,5	25	60

» PT C

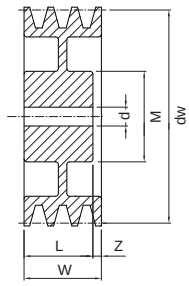
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	d [mm]	z [mm]
280	1	6	82	64	34	20	30
	2	6	82	74	59,5	20	15
	3	7	90	80	85	20	5
	4	7	95	90	110,5	20	21
	5	7	100	96	136	25	40
	6	11	102	102	161,5	25	60
300	1	11	85	65	34	20	31
	2	11	90	75	59,5	20	16
	3	11	90	80	85	20	5
	4	11	105	90	110,5	20	21
	5	11	105	95	136	25	41
	6	11	105	107	161,5	25	55
315	1	11	85	65	34	20	31
	2	11	90	75	59,5	20	16
	3	11	90	80	85	20	5
	4	11	105	90	110,5	25	21
	5	11	105	95	136	25	41
	6	11	105	107	161,5	25	55
355	1	11	100	70	34	25	36
	2	11	105	80	59,5	25	21
	3	11	105	80	85	25	5
	4	11	115	90	110,5	25	21
	5	11	115	95	136	25	41
	6	11	115	110	161,5	25	52
400	1	11	100	70	34	25	36
	2	11	105	75	59,5	25	16
	3	11	105	80	85	25	5
	4	11	120	90	110,5	25	21
	5	11	120	95	136	25	41
	6	11	120	110	161,5	25	52
450	1	11	105	70	34	25	36
	2	11	110	75	59,5	25	16
	3	11	110	80	85	25	5
	4	11	120	95	110,5	32	16
	5	11	120	100	136	32	36
	6	11	120	110	161,5	32	52
500	1	11	110	75	34	25	41
	2	11	115	80	59,5	25	21
	3	11	115	85	85	25	-
	4	11	125	100	110,5	32	11
	5	11	125	110	136	32	26
	6	11	125	115	161,5	32	47
560	1	11	110	75	34	25	41
	2	11	115	80	59,5	25	21
	3	11	115	85	85	25	-
	4	11	125	100	110,5	32	11
	5	11	125	110	136	32	26
	6	11	125	115	161,5	32	47
630	1	11	115	75	34	25	41
	2	11	120	80	59,5	25	21
	3	11	120	95	85	25	10
	4	11	130	100	110,5	32	11
	5	11	130	110	136	32	26
	6	11	130	115	161,5	32	47



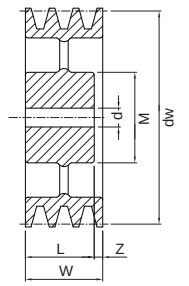
3



6



7



11

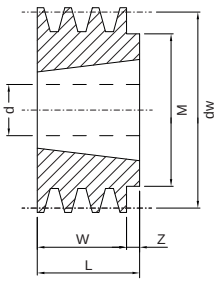
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

"PBT" SPZ-Z-3V

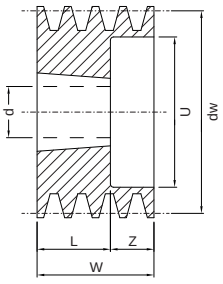
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
63	1	1	1108	11-28	62	22	6	-	16
	2	10	1108	11-28	-	22	6	38	28
	3	10	1108	11-28	-	22	18	38	40
67	1	1	1108	11-28	62	22	6	-	16
	2	10	1108	11-28	-	22	6	38	28
	3	10	1108	11-28	-	22	18	38	40
71	1	1	1108	11-28	62	22	6	-	16
	2	10	1108	11-28	-	22	6	42	28
	3	10	1108	11-28	-	22	18	42	40
75	1	1	1108	11-28	62	22	6	-	16
	2	10	1210	11-32	-	25	3	48	28
	3	10	1210	11-32	-	25	15	48	40
	4	10	1210	11-32	-	25	27	48	52
80	1	1	1210	11-32	75	25	9	-	16
	2	10	1210	11-32	-	25	3	52	28
	3	10	1210	11-32	-	25	15	52	40
	4	10	1210	11-32	-	25	27	52	52
85	1	1	1210	11-32	86	25	9	-	16
	2	10	1610	12-42	-	25	3	57	28
	3	10	1610	12-42	-	25	15	57	40
	4	10	1610	12-42	-	25	27	57	52
	5	10	1610	12-42	-	25	39	57	64
90	1	1	1210	11-32	86	25	9	-	16
	2	10	1610	12-42	-	25	3	62	28
	3	10	1610	12-42	-	25	15	62	40
	4	10	1610	12-42	-	25	27	62	52
	5	10	1610	12-42	-	25	39	62	64
	6	10	1610	12-42	-	26	50	62	76
95	1	1	1210	11-32	86	25	9	-	16
	2	10	1610	12-42	-	25	3	67	28
	3	10	1610	12-42	-	25	15	67	40
	4	10	1610	12-42	-	25	27	67	52
	5	10	1610	12-42	-	25	39	67	64
	6	10	1610	12-42	-	26	50	67	76
100	1	1	1210	11-32	86	25	9	-	16
	2	10	1610	12-42	-	25	3	71	28
	3	10	1610	12-42	10	25	15	71	40
	4	10	1610	12-42	-	25	27	71	52
	5	10	2012	14-50	-	32	32	71	64
	6	10	2012	14-50	-	32	44	71	76
106	1	1	1610	12-42	92	25	9	-	16
	2	10	1610	12-42	-	25	3	76	28
	3	10	1610	12-42	-	25	15	76	40
	4	10	1610	12-42	-	25	27	76	52
	5	10	2012	14-50	-	32	32	76	64
	6	10	2012	14-50	-	31	45	76	76
112	1	1	1610	12-42	92	25	9	-	16
	2	10	1610	12-42	-	25	3	84	28
	3	10	2012	14-50	-	32	8	84	40
	4	10	2012	14-50	-	32	20	84	52
	5	10	2012	14-50	-	32	32	84	64
	6	10	2012	14-50	-	31	45	84	76

Part Number **PBT 100 SPZ 2**

- V-Pulley - mounting taper bushing
- Pitch diameter [mm]
- Section
- Number of grooves



1

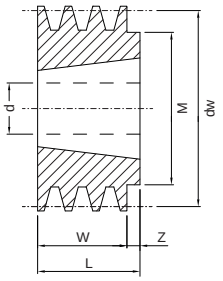


10

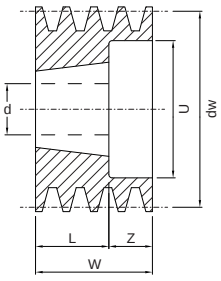
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

» "PBT" SPZ-Z-3V

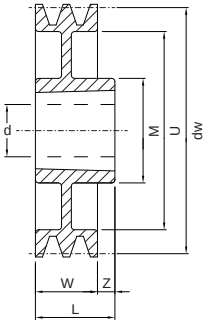
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
118	1	1	1610	12-42	-	92	25	9	-	16
	2	10	1610	12-42	-	-	25	3	90	28
	3	2	2012	14-50	-	-	32	8	90	40
	4	2	2012	14-50	-	-	32	20	90	52
	5	10	2012	14-50	-	-	32	32	90	64
	6	2	2012	14-50	-	-	31	45	90	76
125	1	1	1610	12-42	-	92	25	9	-	16
	2	10	1610	12-42	-	-	25	3	98	28
	3	2	2012	14-50	-	-	32	8	98	40
	4	2	2012	14-50	-	-	32	20	98	52
	5	2	2012	14-50	-	-	32	32	98	64
	6	10	2517	18-65	-	-	46	30	98	76
132	1	1	1610	12-42	-	92	25	9	-	16
	2	10	1610	12-42	-	-	25	3	103	28
	3	2	2012	14-50	-	-	32	8	103	40
	4	2	2012	14-50	-	-	32	20	103	52
	5	10	2517	18-65	-	-	45	19	103	64
	6	2	2517	18-65	-	-	46	30	103	76
140	1	4	1610	12-42	-	92	25	9	-	16
	2	10	1610	12-42	-	-	25	3	112	28
	3	2	2012	14-50	-	-	32	8	112	40
	4	2	2012	14-50	-	-	32	20	112	52
	5	2	2517	18-65	-	-	45	19	112	64
	6	2	2517	18-65	-	-	46	30	112	76
150	1	4	1610	12-42	*1*	92	25	9	-	16
	2	1	2012	14-50	-	112	32	4	-	28
	3	2	2012	14-50	-	-	32	8	122	40
	4	2	2517	18-65	-	-	45	7	122	52
	5	2	2517	18-65	-	-	45	19	122	64
	6	2	2517	18-65	-	-	46	30	122	76
160	1	4	1610	12-42	-	92	25	9	-	16
	2	4	2012	14-50	-	112	32	4	-	28
	3	2	2012	14-50	-	-	32	8	131	40
	4	2	2517	18-65	-	-	45	7	131	52
	5	2	2517	18-65	-	-	45	19	131	64
	6	5	2517	18-55	-	120	46	30	133	76
180	1	4	1610	12-42	-	92	25	9	152	16
	2	4	2012	14-50	-	106	32	4	152	28
	3	5	2012	14-50	-	106	32	8	152	40
	4	2	2517	18-65	-	-	45	7	152	52
	5	2	2517	18-65	-	-	45	19	152	64
	6	5	2517	18-55	-	120	46	30	152	76
190	2	4	2012	14-50	-	106	32	10	162	28
200	1	4	2012	14-50	-	112	32	16	171	16
	2	4	2012	14-50	-	112	32	4	171	28
	3	6	2012	14-50	-	112	32	4	171	40
	4	6	2517	18-65	-	125	45	3,5	171	52
	5	6	2517	18-65	*11*	-	45	9,5	171	64
	6	6	2517	18-65	-	120	46	15	171	76
224	1	12	2012	14-50	-	110	32	8	195	16
	2	7	2012	14-50	-	112	32	4	195	28
	3	6	2012	14-50	-	112	32	4	195	40
	4	6	2517	18-65	*9*	124	45	3,5	195	52
	5	6	2517	18-65	-	124	45	9,5	195	64
	6	5	2517	18-65	-	120	46	30	195	76



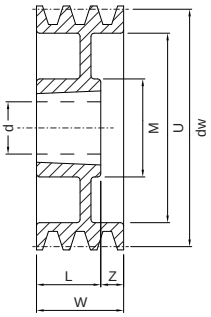
1



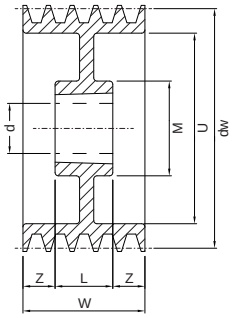
2



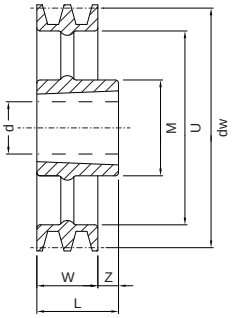
4



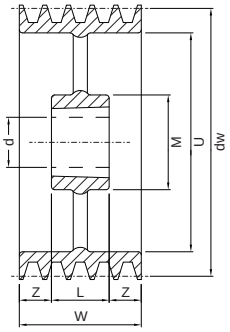
5



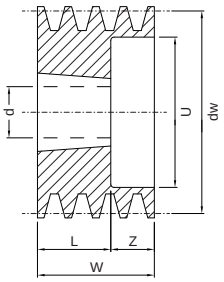
6



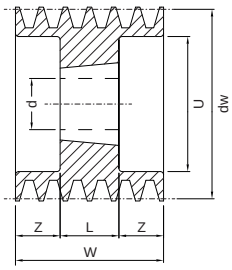
7



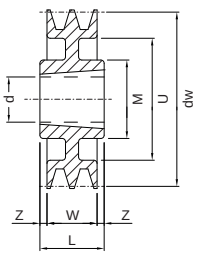
9



10



11

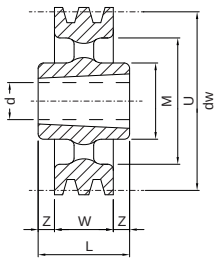


12

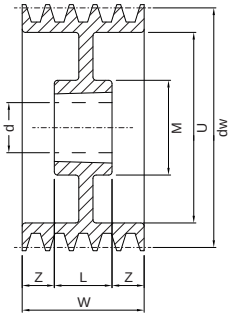
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

» "PBT" SPZ-Z-3V

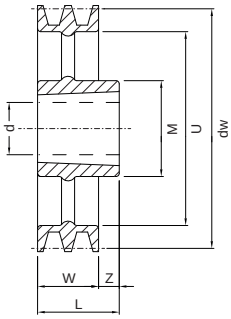
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
250	1	3	2012	14-50	-	110	32	8	223	16
	2	3	2012	14-50	-	110	32	2	223	28
	3	9	2012	14-50	-	112	32	4	223	40
	4	6	2517	18-65	*9*	124	45	3,5	223	52
	5	6	2517	18-65	-	124	45	9,5	223	64
	6	6	2517	18-65	-	120	46	15	223	76
280	1	3	2012	14-50	-	110	32	8	252	16
	2	3	2012	14-50	-	112	32	2	252	28
	3	3	2517	18-65	-	124	45	2,5	252	40
	4	9	2517	18-65	-	124	45	3,5	252	52
	5	9	2517	18-65	-	124	45	9,5	221	64
	6	8	2517	18-55	-	120	46	30	252	76
315	1	3	2012	14-50	-	110	32	8	288	16
	2	3	2012	14-50	-	110	32	2	288	28
	3	3	2517	18-65	-	120	45	2,5	288	40
	4	9	2517	18-65	-	120	45	3,5	288	52
	5	9	2517	18-65	-	120	45	9,5	288	64
	6	6	2517	18-65	-	125	45	15,5	288	76
355	1	3	2012	14-50	-	110	32	8	326	16
	2	3	2012	14-50	-	112	32	2	326	28
	3	3	2517	18-65	-	125	45	2,5	326	40
	4	9	2517	18-65	-	124	45	3,5	326	52
	5	9	2517	18-65	-	124	45	9,5	326	64
	6	8	2517	18-65	-	120	46	30	326	76
400	1	3	2012	14-50	-	110	32	8	372	16
	2	3	2517	18-65	-	120	45	8,5	372	28
	3	3	2517	18-65	-	120	45	2,5	372	40
	4	9	2517	18-65	-	120	45	3,5	372	52
	5	9	3020	22-75	-	146	51	6,5	372	64
	6	9	3030	25-75	-	150	76	-	372	76
450	1	3	2517	18-65	-	124	45	14,5	421	16
	2	3	2517	18-65	-	124	45	8,5	421	28
	3	3	2517	18-65	-	124	45	2,5	421	40
	4	9	3020	22-75	-	146	45	0,5	421	52
	5	9	3020	22-75	-	146	51	6,5	421	64
	6	8	3020	22-75	-	140	76	-	421	76
500	1	7	2517	18-65	-	120	46	30	473	16
	2	3	2517	18-65	-	125	45	8,5	473	28
	3	3	2517	18-65	-	120	45	2,5	473	40
	4	9	3020	22-75	-	146	51	1	473	52
	5	3	3030	25-75	-	146	76	6	473	64
	6	9	3020	22-75	-	140	76	-	473	76
630	1	7	2517	18-65	-	120	46	30	603	16
	2	7	2517	18-65	-	120	46	18	603	28
	3	3	2517	18-65	-	120	46	3	603	40
	4	9	3020	22-75	-	146	51	0,5	603	52
	5	9	3020	22-75	-	146	51	6,5	603	64



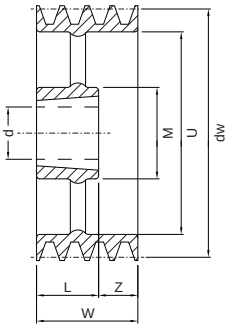
3



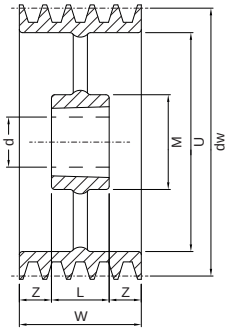
6



7



8

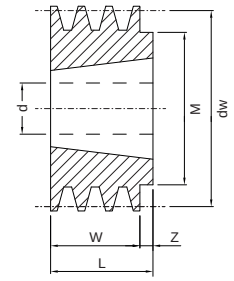


9

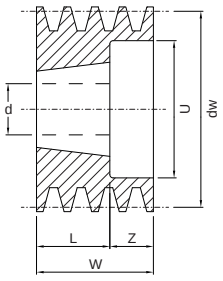
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

"PBT" SPA-A

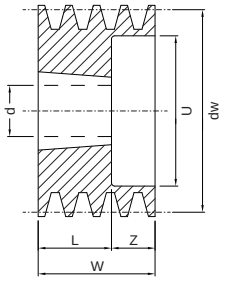
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
67	2	10	1108	11-28	-	22	13	37	35
71	1	1	1108	11-28	60	22	2	-	20
	2	10	1108	11-28	-	22	13	40	35
	3	10	1108	11-28	-	22	28	40	50
75	1	1	1108	11-28	60	22	2	-	20
	2	10	1108	11-28	-	22	13	44	35
	3	10	1108	11-28	-	22	28	44	50
80	1	1	1210	11-32	84	25	5	-	20
	2	10	1210	11-32	-	25	10	50	35
	3	10	1210	11-32	-	25	25	50	50
85	1	1	1210	11-32	88	25	5	-	20
	2	10	1210	11-32	-	25	10	55	35
	3	10	1210	11-32	-	25	25	55	50
90	1	1	1210	11-32	90	25	5	-	20
	2	10	1610	12-42	-	25	10	60	35
	3	10	1610	12-42	-	25	25	56	50
	4	10	1615	12-42	-	38	27	60	65
95	1	1	1210	11-32	90	25	5	-	20
	2	10	1610	12-42	-	25	10	62	35
	3	10	1610	12-42	-	25	25	62	50
	4	10	1615	12-42	-	38	27	62	65
100	1	1	1610	12-42	92	25	5	-	20
	2	10	1610	12-42	-	25	10	66	35
	3	2	1610	12-42	-	25	25	66	50
	4	2	1615	12-42	-	38	27	66	65
	5	2	1615	12-42	-	38	42	66	80
106	1	1	1610	12-42	85	25	5	-	20
	2	10	1610	12-42	-	25	10	72	35
	3	2	1610	12-42	-	25	25	72	50
	4	10	2012	14-50	-	32	33	72	65
	5	10	2012	14-50	-	32	48	72	80
112	1	1	1610	12-42	90	25	5	-	20
	2	10	1610	12-42	-	25	10	77	35
	3	10	2012	14-50	-	32	18	77	50
	4	10	2012	14-50	-	32	33	77	65
	5	10	2012	14-50	-	32	48	77	80
118	1	1	1610	12-42	96,4	25	5	-	20
	2	10	1610	12-42	-	25	10	85	35
	3	2	2012	14-50	-	32	18	85	50
	4	2	2012	14-50	-	32	33	85	65
	5	2	2012	14-50	-	32	48	85	80
125	1	1	1610	12-42	92	25	20	-	20
	2	10	1610	12-42	-	25	10	92	35
	3	2	2012	14-50	-	32	18	92	50
	4	2	2012	14-50	-	32	33	92	65
	5	11	2012	14-50	-	32	24	92	80
132	1	1	1610	12-42	92	25	5	-	20
	2	10	2012	14-50	-	32	3	97	35
	3	2	2012	14-50	-	32	18	97	50
	4	2	2517	18-65	-	45	20	97	65
	5	11	2517	18-65	-	45	17,5	102	80
140	1	1	1610	12-42	92	25	5	-	20
	2	10	2012	14-50	-	32	3	106	35
	3	10	2517	18-65	-	45	5	106	50
	4	2	2517	18-65	-	45	20	106	65
	5	11	2517	18-65	-	45	17,5	106	80



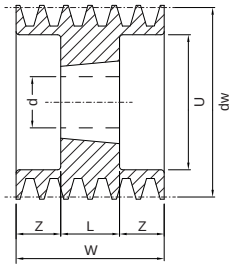
1



2



10

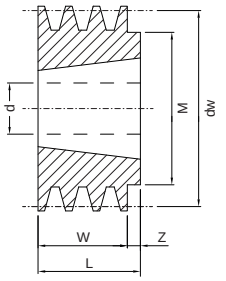


11

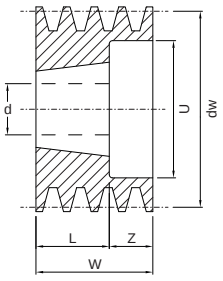
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

» "PBT" SPA-A

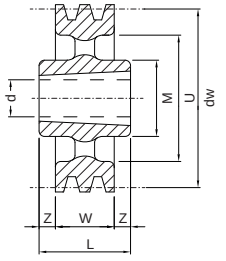
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
150	1	4	1610	12-42	-	92	25	5	-	20
	2	10	2012	14-50	-	-	32	3	116	35
	3	10	2517	18-65	-	-	45	5	116	50
	4	2	2517	18-65	-	-	45	20	116	65
	5	11	2517	18-65	-	-	45	17,5	116	80
160	1	4	1610	12-42	*1*	92	25	5	-	20
	2	10	2012	14-50	-	-	32	3	126	35
	3	10	2517	18-65	-	-	45	5	126	50
	4	2	2517	18-65	-	-	45	20	126	65
	5	11	2517	18-65	-	-	45	17,5	126	80
170	1	4	1610	12-42	-	92	25	5	-	20
	2	10	2012	14-50	-	-	32	3	135	35
	3	10	2517	18-65	-	-	45	5	135	50
	4	2	2517	18-65	-	-	45	20	135	65
	5	11	2517	18-65	-	-	45	17,5	135	80
180	1	4	1610	12-42	-	92	25	5	146	20
	2	6	2012	14-50	-	108	32	1,5	146	35
	3	10	2517	18-65	-	-	45	5	146	50
	4	2	2517	18-65	-	-	45	20	146	65
	5	11	3020	22-75	-	-	51	14,5	146	80
190	1	4	1610	12-42	*7*	92	25	5	156	20
	2	6	2012	14-50	-	108	32	1,5	156	35
	3	10	2517	18-65	-	-	45	5	165	50
	4	2	2517	18-65	-	-	45	20	156	65
	5	2	3020	22-75	-	-	51	29	156	80
200	1	4	2012	14-50	-	108	32	12	165	20
	2	12	2517	18-65	-	123	45	5	165	35
	3	6	2517	18-65	-	123	45	2,5	177	50
	4	2	3020	22-75	-	-	51	14	165	65
	5	11	3020	22-75	-	-	51	14,5	165	80
212	1	4	2012	14-50	-	110	32	12	178	20
	2	4	2517	18-65	-	120	45	10	178	35
	3	6	2517	18-65	-	123	45	2,5	189	50
	4	2	3020	22-75	-	-	51	14	178	65
224	1	7	2012	14-50	-	112	32	12	189	20
	2	4	2517	18-65	-	124	45	10	189	35
	3	6	2517	18-65	-	124	45	2,5	189	50
	4	2	3020	22-75	-	-	51	14	189	65
	5	2	3020	22-75	-	-	51	29	189	80
236	1	7	2012	14-50	-	110	32	12	203	20
	2	7	2517	18-65	-	124	45	10	203	35
	3	9	2517	18-65	-	124	45	2,5	203	50
	4	6	3020	22-75	-	146	51	7	203	65
	5	6	3020	22-75	-	155	51	14,5	203	80
250	1	3	2012	14-50	-	112	32	6	215	20
	2	3	2517	18-65	-	124	45	5	215	35
	3	9	2517	18-65	-	124	45	2,5	215	50
	4	6	3020	22-75	-	159	51	7	215	65
	5	6	3020	22-75	-	159	51	14,5	215	80
280	1	7	2012	14-50	-	110	32	10	246	20
	2	7	2517	18-65	-	120	45	10	246	35
	3	9	2517	18-65	-	124	45	2,5	246	50
	4	9	3020	22-75	-	146	51	7	246	65
	5	12	3535	25-90	-	175	89	4,5	246	80
300	1	7	2012	14-50	-	112	32	12	266	20
	2	7	2517	18-65	-	124	45	10	266	35
	3	7	3020	22-75	-	146	51	1	266	50
	4	9	3020	22-75	-	146	51	7	266	65
	5	4	3535	25-90	-	175	89	9	266	80



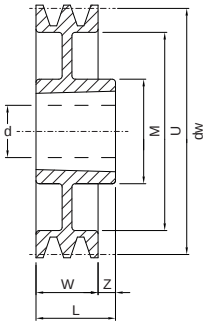
1



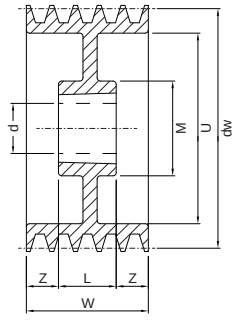
2



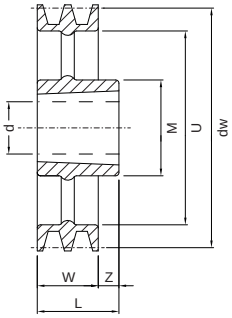
3



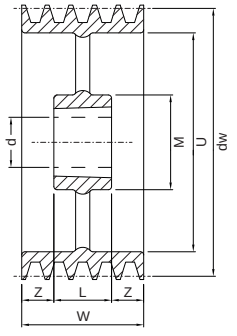
4



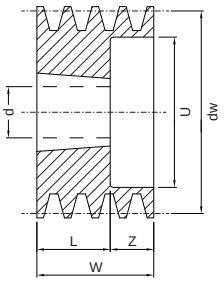
6



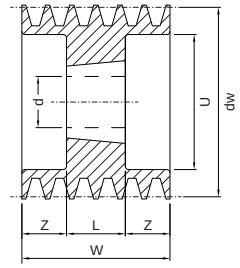
7



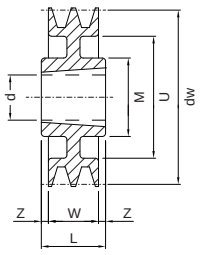
9



10



11

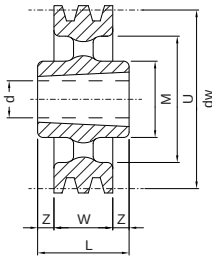


12

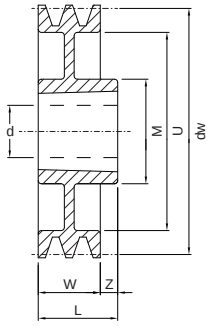
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

» "PBT" SPA-A

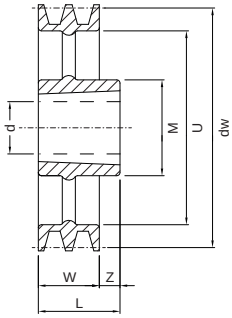
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
315	1	7	2012	14-50	-	110	32	10	282	20
	2	7	2517	18-65	-	120	45	10	282	35
	3	3	3020	22-75	-	146	51	0,5	282	50
	4	9	3020	22-75	-	146	51	7	282	65
	5	12	3535	25-90	*3*	175	89	4,5	282	80
355	1	7	2012	14-50	-	110	32	10	322	20
	2	7	2517	18-65	-	120	45	10	322	35
	3	3	3020	22-75	-	146	51	0,5	322	50
	4	9	3020	22-75	-	146	51	7	322	65
	5	3	3535	22-75	-	175	89	4,5	322	80
400	1	7	2012	14-50	-	110	32	10	366	20
	2	7	2517	18-65	-	120	45	10	366	35
	3	7	3020	22-75	-	159	51	1	366	50
	4	9	3020	22-75	-	146	51	7	366	65
	5	3	3535	25-90	-	180	89	9	366	80
450	1	7	2012	14-50	-	110	32	12	416	20
	2	7	2517	18-65	-	120	45	10	416	35
	3	7	3020	22-75	-	159	51	1	416	50
	4	9	3020	22-75	-	146	51	7	416	65
	5	3	3535	22-75	-	175	89	4,5	416	80
500	1	7	2517	18-65	-	120	45	25	467	20
	2	7	2517	18-65	-	120	45	10	467	35
	3	7	3020	22-75	-	159	51	1	465	50
	4	9	3020	22-75	-	146	51	7	467	65
	5	3	3535	25-90	-	180	89	9	467	80
560	1	7	2517	18-65	-	124	45	25	526	20
	2	7	3020	22-75	-	146	51	16	526	35
	3	7	3020	22-75	-	146	51	1	526	50
	4	3	3535	25-90	-	175	89	12	526	65
	5	3	3535	25-90	-	178	89	9	526	80
630	1	7	2517	18-65	-	124	45	25	596	20
	2	3	3020	22-75	-	159	51	8	596	35
	3	7	3020	22-75	-	160	51	1	596	50
	4	3	3535	25-90	-	175	89	12	596	65
	5	3	3535	25-90	-	178	89	9	596	80
800	2	3	3535	25-90	-	178	89	27	765	35
	3	3	3535	25-90	-	178	89	19,5	765	50
	4	3	3535	25-90	-	178	89	12	765	65
	5	3	4040	40-100	-	216	102	11	765	80
900	3	3	3535	25-90	-	178	89	19,5	865	50
	4	3	3535	25-90	-	178	89	12	865	65
	5	3	4040	40-100	-	216	102	11	865	80
1000	3	3	3535	25-90	-	178	89	19,5	965	50
	4	3	4040	40-100	-	216	102	18,5	965	65
	5	3	4545	55-110	-	242	114	17	965	80



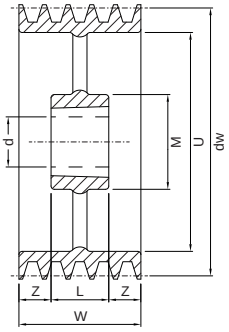
3



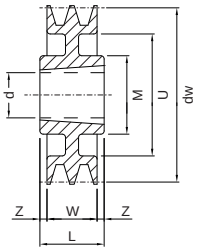
4



7



9

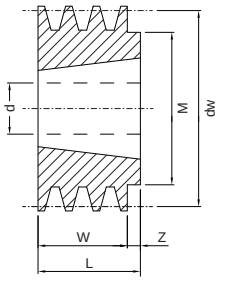


12

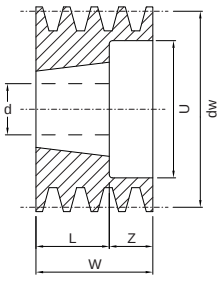
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

"PBT" SPB-B-5V

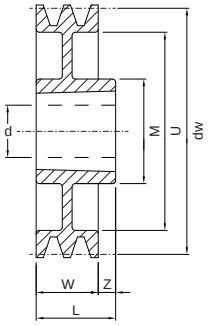
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
90	1	1	1210	14-50	-	-	25	-	-	25
	2	10	1210	14-50	-	-	25	19	52	44
	3	10	1210	14-50	-	-	25	38	50	63
100	1	1	1610	12-42	-	-	25	-	-	25
	2	10	1610	12-42	-	-	25	19	57	44
	3	10	1610	12-42	-	-	25	38	57	63
112	1	1	1610	12-42	-	-	25	-	-	25
	2	2	1610	12-42	-	-	25	19	69	44
	3	10	1610	12-42	-	-	25	38	69	63
	4	10	1610	12-42	-	-	25	57	72	82
118	1	1	1610	12-42	-	-	25	-	-	25
	2	2	1610	12-42	-	-	25	19	69	44
	3	10	1610	12-42	-	-	25	38	76	63
125	1	1	1610	12-42	-	-	25	-	-	25
	2	2	2012	14-50	-	-	32	12	86	44
	3	2	2012	14-50	-	-	32	31	86	63
	4	11	2012	14-50	-	-	32	25	86	82
132	1	1	1610	12-42	-	-	25	-	-	25
	2	2	2012	14-50	-	-	32	12	89	44
	3	2	2012	14-50	-	-	32	31	89	63
	4	11	2012	14-50	-	-	32	25	89	82
	5	10	2517	18-65	-	-	45	56	94	101
140	1	1	1610	12-42	-	-	25	-	-	25
	2	2	2012	14-50	-	-	32	12	97	44
	3	2	2012	14-50	-	-	32	31	97	63
	4	11	2517	18-65	-	-	45	18,5	102	82
	5	11	2517	18-65	-	-	45	28	102	101
	6	11	2517	18-65	-	-	45	37,5	102	120
150	1	4	1610	12-42	*1*	-	25	-	-	25
	2	2	2012	14-50	-	-	32	12	107	44
	3	2	2517	18-65	-	-	45	18	107	63
	4	11	2517	18-65	-	-	45	18,5	107	82
	5	11	2517	18-65	-	-	45	28	107	101
	6	11	2517	18-65	-	-	45	37,5	107	120
160	1	4	1610	12-42	*1*	-	25	-	-	25
	2	2	2012	14-50	-	-	32	12	120	44
	3	2	2517	18-65	-	-	45	18	120	63
	4	11	2517	18-65	-	-	45	18,5	117	82
	5	11	2517	18-65	-	-	45	28	117	101
	6	11	3020	22-75	-	-	51	34,5	123	120
	8	11	3020	22-75	-	-	51	53,5	123	158
170	1	4	1610	12-42	-	-	25	-	-	25
	2	2	2012	14-50	-	-	32	12	130	44
	3	2	2517	18-65	-	-	45	18	130	63
	4	11	2517	18-65	-	-	45	18,5	127	82
	5	11	3020	22-75	-	-	51	25	127	101
	6	11	3020	22-75	-	-	51	34,5	127	120
	8	11	3030*	25-75	-	-	51	53,5	130	158
180	1	6	1610	12-42	-	90	25	-	132	25
	2	1	2517	18-65	-	120	45	1	-	44
	3	2	2517	18-65	-	-	45	18	137	63
	4	11	2517	18-65	-	-	45	18,5	137	82
	5	11	3020	22-75	-	-	51	25	142	101
	6	11	3020	22-75	-	-	51	34,5	137	120
	8	11	3030	25-75	-	-	76	41	137	158
190	1	12	2012	14-50	-	104	32	3,5	147	25
	2	1	2517	18-65	-	120	45	1	-	44
	3	2	2517	18-65	-	-	45	18	147	63
	4	11	2517	18-65	-	-	45	18,5	147	82
	5	11	3020	22-75	-	-	51	25	147	101
	6	11	3020	22-75	-	-	51	34,5	147	120
	8	11	3030	25-75	-	-	76	41	147	158



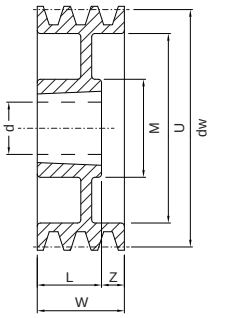
1



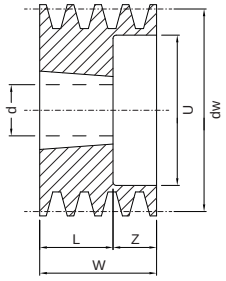
2



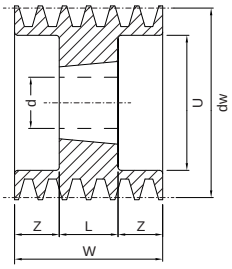
4



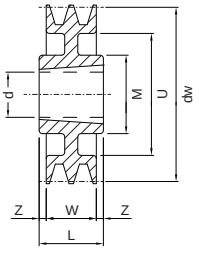
5



10



11



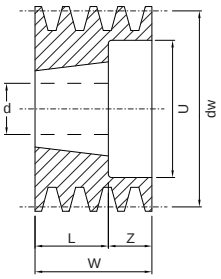
12

* = PBT170SPB8 - taper bush type 3020 up to sold out.

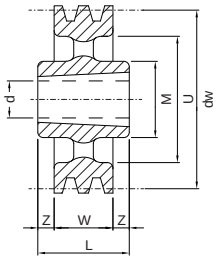
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

» "PBT" SPB-B-5V

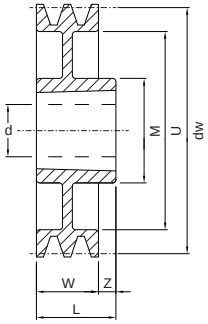
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
200	1	12	2012	14-50	-	104	32	3,5	157	25
	2	4	2517	18-65	-	117	45	1	-	44
	3	2	2517	18-65	-	-	45	18	157	63
	4	11	3020	22-75	-	-	51	15,5	157	82
	5	11	3020	22-75	-	-	51	25	157	101
	6	11	3020	22-75	-	-	51	34,5	157	120
	8	11	3535	25-90	-	-	89	34,5	160	158
212	1	3	2012	14-50	-	104	32	3,5	169	25
	2	4	2517	18-65	-	125	45	1	169	44
	3	5	2517	18-65	-	125	45	18	169	63
	4	11	3020	22-75	-	-	51	15,5	169	82
	5	11	3020	22-75	-	-	51	25	169	101
	6	11	3535	25-90	-	-	89	15,5	169	120
	8	11	3535	25-90	-	-	89	34,5	173	158
224	1	12	2012	14-50	-	104	32	3,5	181	25
	2	4	2517	18-65	-	117	45	1	181	44
	3	5	2517	18-65	-	117	45	18	181	63
	4	11	3020	22-75	-	-	51	15,5	181	82
	5	11	3020	22-75	-	-	51	25	181	101
	6	11	3535	25-90	-	-	89	15,5	181	120
	8	11	3535	25-90	-	-	89	34,5	185	158
236	2	4	2517	18-65	-	117	45	1	193	44
	3	5	2517	18-65	-	117	45	18	193	63
	4	11	3020	22-75	-	-	51	15,5	193	82
	5	11	3535	25-90	-	-	89	6	196	101
	6	11	3535	25-90	-	-	89	15,5	193	120
	8	11	3535	25-90	-	-	89	34,5	197	158
250	1	12	2012	14-50	*3*	104	32	3,5	207	25
	2	4	2517	18-65	*7*	124	45	1	207	44
	3	5	3020	22-75	-	144	51	12	207	63
	4	6	3020	22-75	-	144	51	15,5	207	82
	5	11	3535	25-90	-	-	89	6	207	101
	6	11	3535	25-90	-	-	89	15,5	207	120
	8	11	3535	25-90	-	-	89	34,5	207	158
280	1	3	2012	14-50	-	104	32	3,5	237	25
	2	7	2517	18-65	-	125	45	1	237	44
	3	9	3020	22-75	-	144	51	6	237	63
	4	6	3020	22-75	-	144	51	15,5	237	82
	5	6	3535	25-90	-	175	89	6	237	101
	6	6	3535	25-90	-	175	89	15,5	237	120
	8	6	3535	25-90	-	175	89	34,5	237	158
300	1	3	2012	14-50	-	104	32	3,5	285	25
	2	7	2517	18-65	*4*	125	45	1	257	44
	3	9	3020	22-75	-	144	51	6	257	63
	4	4	3535	25-90	-	175	89	7	257	82
	5	6	3535	25-90	-	175	89	6	257	101
	6	6	3535	25-90	-	175	89	15,5	257	120
	8	6	3535	25-90	-	178	89	34,5	260	158
315	1	3	2012	14-50	-	104	32	3,5	272	25
	2	7	2517	18-65	-	125	45	1	272	44
	3	9	3020	22-75	-	144	51	6	272	63
	4	3	3535	25-90	-	175	89	3,5	272	82
	5	6	3535	25-90	-	175	89	6	272	101
	6	6	3535	25-90	-	175	89	15,5	272	120
	8	6	3535	25-90	-	175	89	34,5	272	158
335	2	7	2517	18-65	-	125	45	1	292	44
	3	9	3020	22-75	-	144	51	6	292	63
	4	3	3535	25-90	-	175	89	3,5	292	82
	5	6	3535	25-90	-	175	89	6	292	101
	6	6	3535	25-90	*9*	175	89	15,5	292	120
	8	6	3535	25-90	*9*	175	89	34,5	292	158



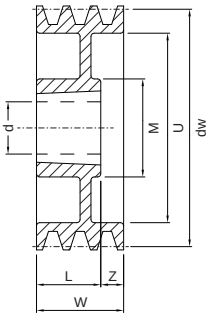
2



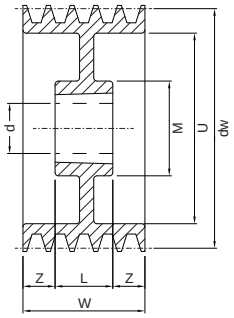
3



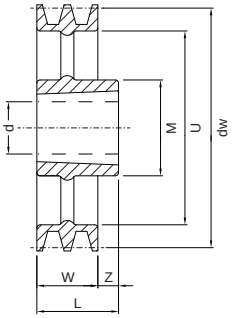
4



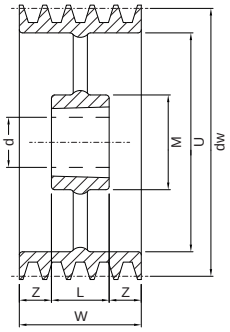
5



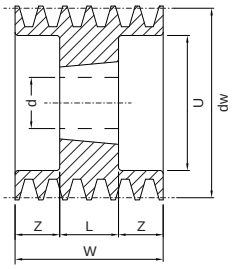
6



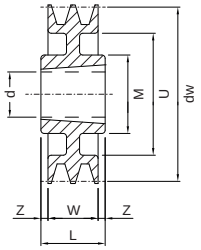
7



9



11

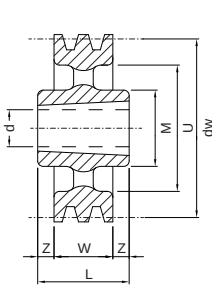


12

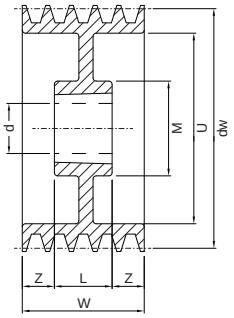
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

» "PBT" SPB-B-5V

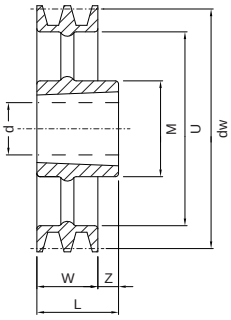
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
355	2	3	3020	22-75	-	146	51	3,5	315	44
	3	9	3020	22-75	-	146	51	6	315	63
	4	3	3535	25-90	-	175	89	3,5	312	82
	5	6	3535	25-90	*9*	175	89	6	312	101
	6	6	3535	25-90	-	175	89	15,5	312	120
	8	6	3535	25-90	*9*	178	89	34,5	315	158
400	2	3	3020	22-75	-	146	51	3,5	360	44
	3	3	3535	25-90	-	175	89	13	357	63
	4	3	3535	25-90	-	175	89	3,5	357	82
	5	9	3535	25-90	-	175	89	6	357	101
	6	9	3535	25-90	-	175	89	15,5	357	120
	8	6	4040	40-100	*9*	245	102	28	360	158
450	2	3	3020	22-75	-	150	51	3,5	407	44
	3	7	3535	25-90	-	178	89	26	410	63
	4	7	3535	25-90	-	178	89	7	410	82
	5	8	3535	25-90	-	178	89	12	410	101
	6	8	4040	40-100	-	215	102	18	410	120
	8	9	4040	40-100	-	215	102	28	410	158
500	2	3	3020	22-75	-	146	51	3,5	460	44
	3	7	3535	25-90	-	178	89	26	460	63
	4	7	3535	25-90	-	178	89	7	460	82
	5	8	3535	25-90	-	178	89	12	460	101
	6	8	4040	40-100	-	215	102	18	460	120
	8	9	4040	40-100	-	215	102	28	460	158
560	2	3	3030	25-75	-	150	76	16	520	44
	3	7	3535	25-90	-	178	89	26	520	63
	4	7	3535	25-90	-	178	89	7	520	82
	5	7	4040	40-100	-	210	102	1	520	101
	6	8	4040	40-100	-	215	102	18	520	120
	8	9	4545	55-110	-	242	114	22	520	158
630	2	3	3030	25-75	-	150	76	16	590	44
	3	7	3535	25-90	-	178	89	26	590	63
	4	7	3535	25-90	-	178	89	7	590	82
	5	7	4040	40-100	-	215	102	1	590	101
	6	8	4040	40-100	-	215	102	18	590	120
	8	9	4545	55-110	-	242	114	22	590	158
710	2	7	3535	25-90	-	185	89	45	664	44
	3	3	3535	25-90	-	175	89	13	664	63
	4	3	3535	25-90	-	185	89	3,5	664	82
	5	7	4040	40-100	-	215	101	1	664	101
	6	9	4545	55-110	-	240	114	3	664	120
	8	9	4545	55-110	-	240	114	22	664	158
800	2	3	3535	25-90	-	175	89	22,5	754	44
	3	3	3535	25-90	-	175	89	13	754	63
	4	3	4040	40-100	-	215	102	10	754	82
	5	7	4040	40-100	-	215	101	1	754	101
	6	9	4545	55-110	-	240	114	3	754	120
	8	9	4545	55-110	-	240	114	22	754	158
900	3	3	3535	25-90	-	185	89	13	854	63
	4	3	4040	40-100	-	216	102	10	854	82
	5	7	4040	40-100	-	210	102	1	854	101
	6	9	4545	55-110	-	240	114	3	854	120
	8	9	4545	55-110	-	240	114	22	854	158
1000	3	3	4040	40-100	-	216	102	6	954	63
	4	3	4040	40-100	-	216	102	4	954	82
	5	3	4545	55-110	-	240	114	6,5	954	101
	6	9	4545	55-110	-	240	114	3	954	120
	8	9	5050	50-125	-	265	127	15,5	954	158
1250	3	3	4040	50-125	-	210	102	19,5	1204	63
	4	3	4545	55-110	-	242	114	16	1204	82
	5	3	4545	55-110	-	242	114	6,5	1204	101
	6	9	4545	55-110	-	242	114	3	1204	120
	8	9	5050	50-125	-	280	127	15,5	1204	158



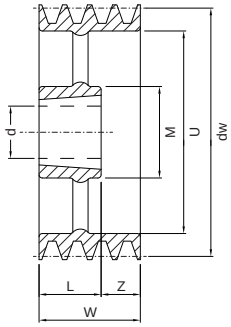
3



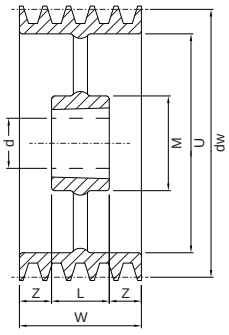
6



7



8

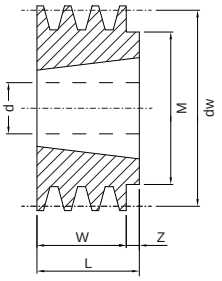


9

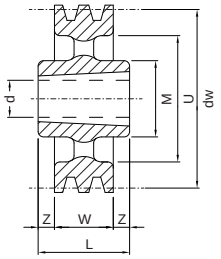
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

"PBT" SPC-C

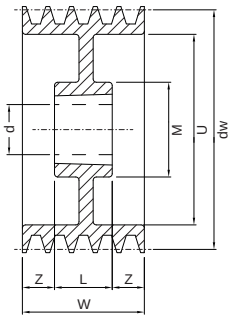
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
212	3	11	3020	22-75	-	-	51	17	156	85
	4	11	3020	22-75	-	-	51	29,5	156	110,5
	5	11	3535	25-90	-	-	89	23,5	156	136
	6	11	3535	25-90	-	-	89	36,25	156	161,5
	8	11	3535	25-90	-	-	89	61,75	156	212,5
224	3	11	3020	22-75	-	-	51	17	173	85
	4	11	3535	49-90	-	-	89	11	168	110,5
	5	11	3535	25-90	-	-	89	23,5	173	136
	6	11	3535	25-90	-	-	89	36,25	173	161,5
	8	11	3535	25-90	-	-	89	62	168	212,5
236	3	11	3020	22-75	-	-	51	17	180	85
	4	11	3535	25-90	-	-	89	10,75	180	110,5
	5	11	3535	25-90	-	-	89	23,5	180	136
	6	11	3535	25-90	-	-	89	36,25	180	161,5
	8	11	3535	25-90	-	-	89	62	180	212,5
250	3	11	3020	22-75	-	-	51	17	194	85
	4	11	3535	25-90	-	-	89	10,75	198	110,5
	5	11	3535	25-90	-	-	89	23,5	198	136
	6	11	3535	25-90	-	-	89	36,25	198	161,5
	8	11	3535	25-90	-	-	89	61,75	198	212,5
265	3	1	3535	25-90	-	175	89	4	-	85
	4	11	3535	25-90	-	-	89	11	209	110,5
	5	11	3535	25-90	-	-	89	23,5	209	136
	6	11	3535	25-90	-	-	89	36,5	209	161,5
	8	11	3535	25-90	-	-	89	62	209	212,5
280	3	1	3535	49-90	-	175	89	4	-	85
	4	6	3535	25-90	-	175	89	10,75	228	110,5
	5	6	3535	25-90	-	-	89	23,5	224	136
	6	6	3535	25-90	-	175	89	36,25	228	161,5
	8	11	3535	25-90	-	-	89	62	224	212,5
300	3	12	3535	25-90	-	175	89	2	244	85
	4	6	3535	25-90	-	175	89	10,75	244	110,5
	5	6	3535	25-90	-	175	89	23,5	247	136
	6	6	3535	25-90	-	175	89	36,25	247	161,5
	8	11	4040	40-100	-	-	102	55,5	244	212,5
315	3	12	3535	25-90	-	175	89	2	259	85
	4	6	3535	25-90	-	175	89	11	259	110,5
	5	6	3535	25-90	-	175	89	23,5	279	136
	6	6	3535	25-90	*9*	175	89	36,5	259	161,5
	8	11	4040	40-100	-	-	102	55,5	259	212,5
335	3	3	3535	25-90	-	175	89	2	279	85
	4	9	3535	25-90	-	175	89	11	279	110,5
	5	6	3535	25-90	-	175	89	23,5	279	136
	6	6	3535	25-90	-	175	89	36,5	279	161,5
	8	6	4040	40-100	-	210	102	55,25	282	212,5
355	3	3	3535	25-90	-	175	89	2	299	85
	4	9	3535	25-90	-	175	89	11	299	110,5
	5	9	3535	25-90	-	175	89	23,5	299	136
	6	6	3535	25-90	-	175	89	36,5	299	161,5
	8	6	4040	40-100	-	216	102	55,5	299	212,5
400	3	3	3535	25-90	-	178	89	2	342	85
	4	9	3535	25-90	-	178	89	10,75	342	110,5
	5	9	3535	25-90	-	175	89	23,5	342	136
	6	6	4040	40-100	-	215	102	29,75	342	161,5
	8	6	4545	55-110	-	242	114	49,5	344	212,5
450	3	3	3535	25-90	-	178	89	2	393	85
	4	9	3535	25-90	-	178	89	10,75	393	110,5
	5	9	4040	40-100	-	215	102	17	393	136
	6	6	4545	55-110	*9*	242	114	24	393	161,5
	8	6	5050	50-125	-	267	127	43	393	212,5



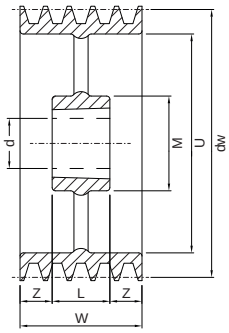
1



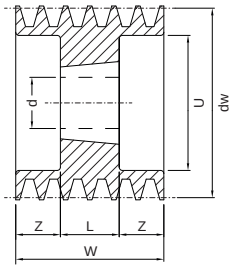
3



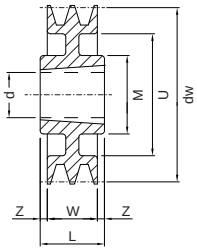
6



9



11

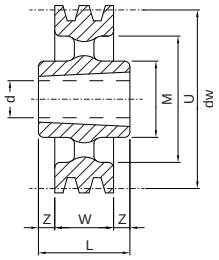


12

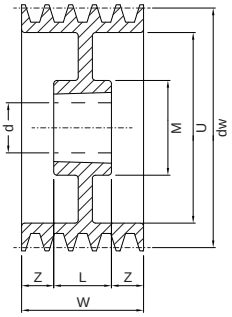
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

» “PBT” SPC-C

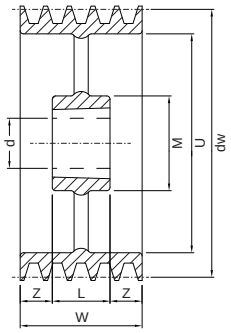
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
475	**3**	3	3535	25-90	-	170	89	2	419	85
500	3	3	3535	25-90	-	178	89	2	443	85
	4	9	3535	25-90	-	175	89	11	443	110,5
	5	9	4040	40-100	-	215	102	17	443	136
	6	9	4545	55-110	-	242	114	24	443	161,5
	8	6	5050	50-125	*9*	267	127	42,75	443	212,5
560	3	3	3535	25-90	-	178	89	2	503	85
	4	9	4040	40-100	-	215	102	4,25	503	110,5
	5	9	4545	55-110	-	242	114	11	503	136
	6	9	5050	50-125	-	267	127	17,25	503	161,5
	8	9	5050	50-125	-	267	127	42,75	503	212,5
630	3	3	4040	40-100	-	215	102	8,5	573	85
	4	9	4545	55-110	-	242	114	1,5	573	110,5
	5	9	5050	50-125	-	267	127	4,5	573	136
	6	9	5050	50-125	-	265	127	17,75	573	161,5
	8	9	5050	50-125	-	267	127	42,75	573	212,5
710	3	3	4040	40-100	-	215	102	8,5	654	85
	4	3	5050	50-125	-	267	127	8	654	110,5
	5	9	5050	50-125	-	265	127	4,5	654	136
	6	9	5050	50-125	-	265	127	17,25	654	161,5
	8	9	5050	50-125	-	265	127	43,75	654	212,5
800	3	3	4545	55-110	-	240	114	14,5	737	85
	4	3	5050	50-125	-	265	127	8,25	737	110,5
	5	9	5050	50-125	-	265	127	4,5	737	136
	6	9	5050	50-125	-	267	127	17,25	737	161,5
	8	9	5050	50-125	-	265	127	42,75	737	212,5
1000	3	3	5050	50-125	-	265	127	21	937	85
	4	3	5050	50-125	-	265	127	8,25	937	110,5
	5	9	5050	50-125	-	265	127	4,5	937	136
	6	9	5050	50-125	-	265	127	17,25	937	161,5
	8	9	5050	50-125	-	265	127	42,75	937	212,5
1250	3	3	5050	50-125	-	267	126	20,5	1190	85
	4	3	5050	50-125	-	267	126	7,75	1190	110,5
	5	9	5050	50-125	-	280	127	4,5	1190	136
	6	9	5050	50-125	-	280	127	17,25	1190	161,5
	8	9	5050	50-125	-	280	127	42,75	1190	212,5



3



6



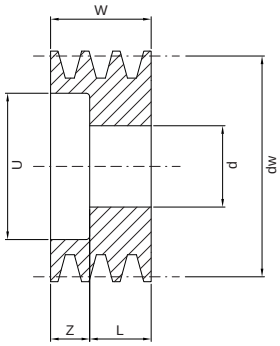
9

Dimension of V-Pulleys PCT - oversized hub for Self Locking Units

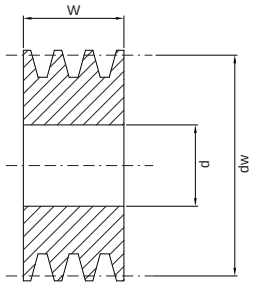
V-Pulleys with oversized hub are designed to be in stalled using Self Locking Device type **SIT-LOCK® CAL 8.**
Bore tolerances is H8.

PCT SPA

dw [mm]	Number of grooves	Type	d min-max [mm]	M [mm]	U [mm]	L [mm]	W [mm]	Z [mm]
090	2	2	55	-	-	35	35	-
100	2	2	65	-	-	35	35	-
	3	2	55	-	-	50	50	-
160	3	1	55	-	127	27	50	23,0
180	2	4	65	120	147	27	35	4,0
225	2	4	55	120	192	27	35	4,0



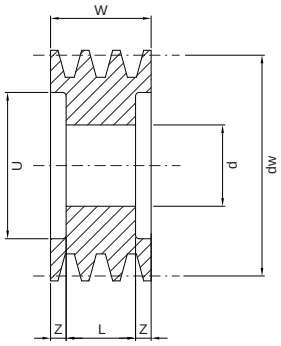
1



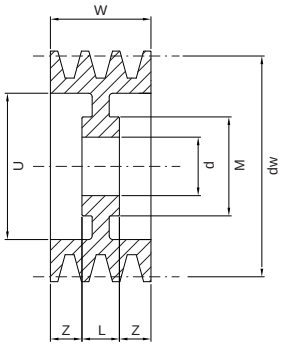
2

PCT SPB

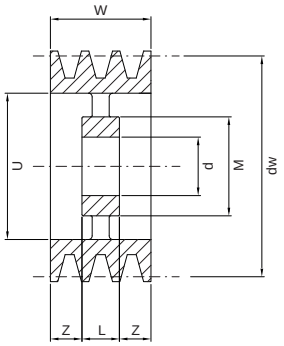
dw [mm]	Number of grooves	Type	d min-max [mm]	M [mm]	U [mm]	L [mm]	W [mm]	Z [mm]
120	2	1	65	-	78	27	44	17,0
125	4	1	55	-	83	27	82	55,0
130	3	1	80	-	88	27	63	35,0
	4	1	80	-	88	27	82	65,0
	5	1	80	-	88	27	101	74,0
140	2	1	65	-	98	27	44	17,0
	3	1	65	-	98	27	63	36,0
	4	1	65	-	98	27	82	55,0
150	2	1	65	-	108	27	44	17,0
	3	1	55	-	108	27	63	36,0
	3	1	65	-	108	27	63	36,0
	3	1	80	-	108	27	63	36,0
	4	1	80	-	108	27	82	55,0
160	3	1	80	-	118	27	63	36,0
	4	1	80	-	118	27	82	55,0
	5	1	80	-	118	27	101	74,0
170	2	3	80	-	128	27	44	8,5
	4	4	80	120	128	27	82	27,5
180	3	4	80	120	138	27	63	18,0
	4	4	80	120	138	27	82	27,5
	5	4	80	120	138	27	101	37,0
190	2	4	80	120	148	27	44	8,5
	4	4	80	120	148	27	82	27,5
200	3	4	80	120	158	27	63	18,0
	4	4	80	120	158	27	82	27,5
	5	4	80	120	158	27	101	37,0
212	4	4	80	120	170	27	82	27.5
	5	4	80	120	170	27	82	27.5
225	2	4	80	120	183	27	44	8,5
	3	4	80	120	183	27	63	18,0
	4	4	80	120	183	27	82	27,5
	5	4	80	120	183	27	101	37,0
250	3	4	80	120	208	27	63	18,0
	4	4	80	120	208	27	82	27,5
	5	4	80	130	208	27	101	37,0
280	4	4	80	120	238	27	82	27,5
	5	4	80	120	238	27	101	37,0
315	5	5	80	140	273	27	101	37,0



3



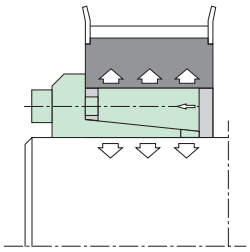
4

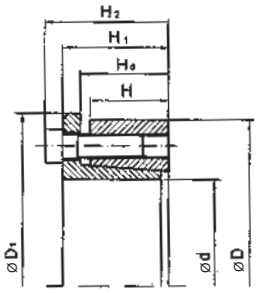


5

SIT-LOCK® 8 - Self-Centering - Special Outside Diameters

Locking assembly with single taper design. The flange design prevents axial movement during installation.
SIT-LOCK® 8 has a very small axial dimension, is self centering and has been designed to suit various shaft diameters although the overall dimensions are the same. SIT-LOCK® 8 is recommended for applications with medium torques which need a good axial positioning.
The limited number of screws make the installation fast.





SIT-LOCK® 8

Dimensions [mm]						Performances		Pressure [N/mm²]		Clamping screws (DIN 912 - 12,9)		
d x D	H	H0	H1	H2	D1	MT [Nm]	Fax [kN]	pw	pn	N°	Type	MS [Nm]
14 x 55	17	22	30	38	62	130	19	208	53	3	M8	25
16 x 55	17	22	30	38	62	149	19	182	53	3	M8	25
18 x 55	17	22	30	38	62	168	19	162	53	3	M8	25
19 x 55	17	22	30	38	62	177	19	153	53	3	M8	25
20 x 55	17	22	30	38	62	186	19	145	53	3	M8	25
22 x 55	17	22	30	38	62	288	26	186	74	3	M8	35
24 x 55	17	22	30	38	62	314	26	170	74	3	M8	35
25 x 55	17	22	30	38	62	328	26	164	74	3	M8	35
28 x 55	17	22	30	38	62	441	32	176	89	3	M8	41
30 x 55	17	22	30	38	62	473	32	164	89	3	M8	41
24 x 65	17	23	31	39	72	448	37	243	90	5	M8	30
25 x 65	17	23	31	39	72	467	37	233	90	5	M8	30
28 x 65	17	23	31	39	72	611	44	243	105	5	M8	35
30 x 65	17	23	31	39	72	655	44	227	105	5	M8	35
32 x 65	17	23	31	39	72	699	44	213	105	5	M8	35
35 x 65	17	23	31	39	72	919	53	234	126	5	M8	41
38 x 65	17	23	31	39	72	998	53	216	126	5	M8	41
40 x 65	17	23	31	39	72	1.051	53	205	126	5	M8	41
30 x 80	20	26	34	42	87	785	52	231	87	7	M8	30
32 x 80	20	26	34	42	87	837	52	217	87	7	M8	30
33 x 80	20	26	34	42	87	863	52	210	87	7	M8	30
35 x 80	20	26	34	42	87	1.070	61	232	101	7	M8	35
38 x 80	20	26	34	42	87	1.162	61	213	101	7	M8	35
40 x 80	20	26	34	42	87	1.223	61	203	101	7	M8	35
42 x 80	20	26	34	42	87	1.544	74	232	122	7	M8	41
45 x 80	20	26	34	42	87	1.655	74	217	122	7	M8	41
48 x 80	20	26	34	42	87	1.765	74	203	122	7	M8	41
50 x 80	20	26	34	42	87	1.838	74	195	122	7	M8	41

Notes:
Dimensions representing the total length of the hub are indicative; they are calculated according to the geometric rules.

For assemblies requiring larger dimensions, contact our Technical Department.

M_S	Screw tightening torque	Nm
M_T	Transmissible torque moment	Nm
F_{ax}	Transmissible axial load	N
p_w	Shaft pressure	N/mm²
p_n	Hub pressure	N/mm²

Belt tensioning and alignment

TEN-SIT® 2.0 - belt-tension electronic gauge

TEN-SIT® 2.0 is an electronic belt gauge, used for the correct tensioning of all types of belt drives. Its operating principle is based on the relationship between belt tension and the vibration frequency of the belt itself. **TEN-SIT® 2.0** is able to measure accurately the tension of any belt due to its flexible microphone.

Part Number	MSTENSIT/02
TEN-SIT® 2.0 - Belt tension.	

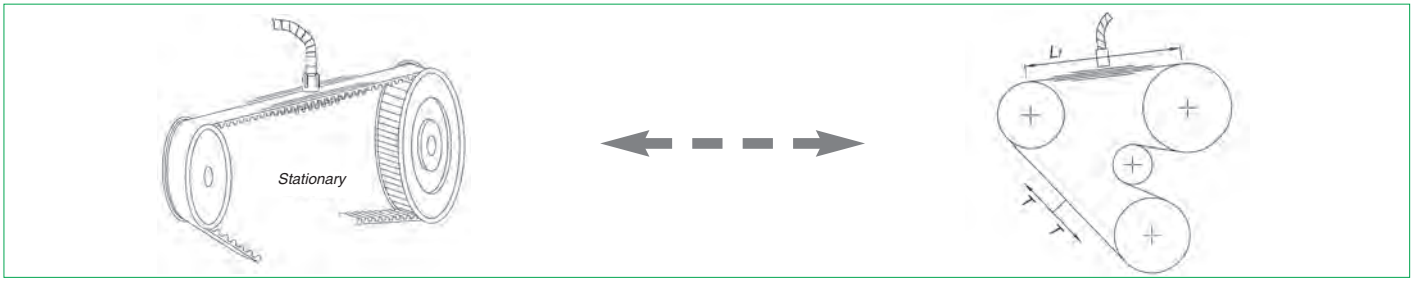
Key features

- Reliability and precision
- Suitable for any kind of belt
- Handy and versatile
- Light and compact
- **Sensitivity range 8 ÷ 600 Hz**
- Unidirectional microphone

Operating instructions

Ensure the drive is stationary.
Check that the probe is connected to the gauge.
Press the **"ON"** button to start the unit.
Place the probe as close as possible to the back of the belt at mid span **"L_f"** without touching it when it vibrates.
If it were not possible, because of a cover, direct the probe towards the inner part of the belt.
Vibrate the belt by striking it with a hammer or other metallic object.
Read the frequency value (Hz) on the display once the acoustic signal has been heard.
The unit is able to recognise and differentiate the differences between belt vibrations and background noise.
The display will show the frequency and alternately the number of measurements made
When installing "multiple belt" drives measure each belt individually and use the average value.
With single belts 2 or 3 measurements should be taken to ensure accuracy.

Calculation example



* See linear masses table.

Belt: 3150 HPPD PLUS 14M 55
SIT Code: HPPD3150P14M55

Belt mass linear: (0,421/40) • 55 = 0,579 [kg/m] (values taken from mass table)
Tension **T**: 2150 **[N]** (Tension value **T**, with stationary drive and idle pulleys, is constant along the whole belt)
Belt span length $\mathbf{L_f}$: 0,65 [m]

The right frequency value that must be obtained and read on **TEN-SIT®** gauge is:

Frequency

$$f = \frac{1}{2 \cdot L_f}\sqrt{\frac{T}{M}} = \frac{1}{2 \cdot 0{,}65}\sqrt{\frac{2150}{0{,}579}} = 46{,}9 \text{ [Hz]}$$

To determine the tension value of a belt whose frequency is indicated by the **TEN-SIT® 2.0** as 53 Hz use the following formula:

Tension

$$T = 4 \cdot M \cdot L_f^2 \cdot f^2 = 4 \cdot 0{,}579 \cdot 0{,}65^2 \cdot 53^2 = 2749 \text{ [N]}$$

Linear masses timing belts

Belt Type	Pitch profile [mm]	Width belt [mm]	Linear mass [kg/m]
SIT Mustang Torque	8	20	**0,083**
	14	40	**0,328**
SIT Mustang Speed	5	9	**0,031**
	8	20	**0,112**
	14	40	**0,408**
SIT HPPD Plus HTD	3	9	**0,022**
	5	9	**0,039**
	8	20	**0,115**
	14	40	**0,421**
CLASSICA Imperial Pitch	XL	25,4	**0,056**
	L	25,4	**0,082**
	H	25,4	**0,120**
	XH	25,4	**0,282**
	XXH	25,4	**0,406**

Where belt widths differ from the ones shown in the table, pro rata the width to obtain the value. For banded, multiply the mass value by the number of ribs on the belt.

Linear masses timing V-Belts

Belt Type	Pitch profile [mm]	Number of belts	Linear mass [kg/m]
SIT TORQUE-FLEX "XP" (ISO)	XPZ	-	0,079
	XPA	-	0,110
	XPB	-	0,192
	XPC	-	0,310
SIT CLASSICAL V-BELTS TORQUE-FLEX (ISO)	ZX	-	0,053
	AX	-	0,100
	BX	-	0,158
	CX	-	0,251
SIT NARROW V-BELTS WEDGE - Envelope (RMA)	3V	-	0,078
	5V	-	0,236
	8V	-	0,531
SIT NARROW V-BELTS WEDGE Moulded Cog (RMA)	3VX	-	0,070
	5VX	-	0,192
SIT EXCELITE ES (ISO)	Z	-	0,059
	A	-	0,118
	B	-	0,197
	C	-	0,335
	D	-	0,630
SIT EXCELITE ES NARROW (ISO)	SPZ	-	0,059
	SPA	-	0,118
	SPB	-	0,197
	SPC	-	0,335
SIT BANDED V-BELTS NARROW (ISO)	SPZ	1	0,100
	SPA	1	0,132
	SPB	1	0,252
	SPC	1	0,433
SIT BANDED V-BELTS Classical (ISO)	BX	1	0,213
	CX	1	0,349
SIT NARROW BANDED V-BELTS WEDGE (RMA)	3V	1	0,118
	5V	1	0,283
	8V	1	0,705

Relationship between belt tension and frequency

$$T = 4 \cdot M \cdot L_f^2 \cdot f^2 \qquad f = \frac{1}{2 \cdot L_f} \sqrt{\frac{T}{M}}$$

In which:

T = Static belt tension [N]
M = Linear belt mass [kg/m]
L_f = Belt span lenght [m]
f = Belt span vibration frequency [Hz]

Utilizing the formula it is possible to calculate simply the desired frequency for any belt drive. If the indicated measurement is less than the calculated value the belt will require further tension, if however the measurement is greater than the calculated value slacken the drive. In both cases measure again.

NOTE: It is necessary to run the drive under load for approximately one or two minutes and then use the **TEN-SIT® 2.0** to verify the tension value, and retighten if necessary. When you have finished using the **TEN-SIT® 2.0** gauge press and hold the **"OFF"** button until the triple acoustic signal is heard.

If **"LOBAT"** appears on the display please replace the battery.