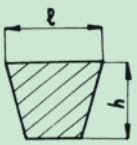
V-Pulleys

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.

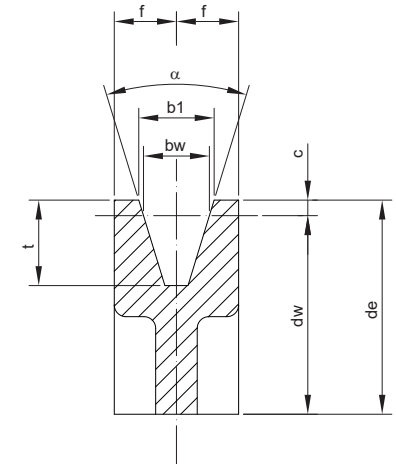
TOLERANCES

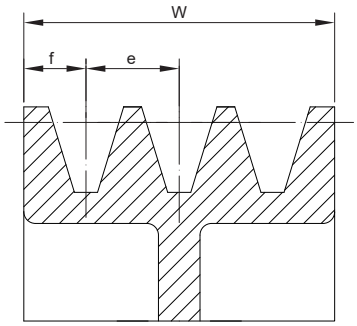
dw [mm]	Tolerance of pitch diameter dw [mm]	Eccentricity tolerance relevant to the outside diameter [mm]
50	± 0,4	0,2
56	± 0,4	
63	± 0,5	
71	± 0,6	
80	± 0,6	
90	± 0,7	
100	± 0,8	
112	± 0,9	0,3
118	± 1,0	
125	± 1,0	
135	± 1,0	
140	± 1,1	
150	± 1,2	
160	± 1,3	
180	± 1,4	0,4
190	± 1,5	
200	± 1,6	
212	± 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.

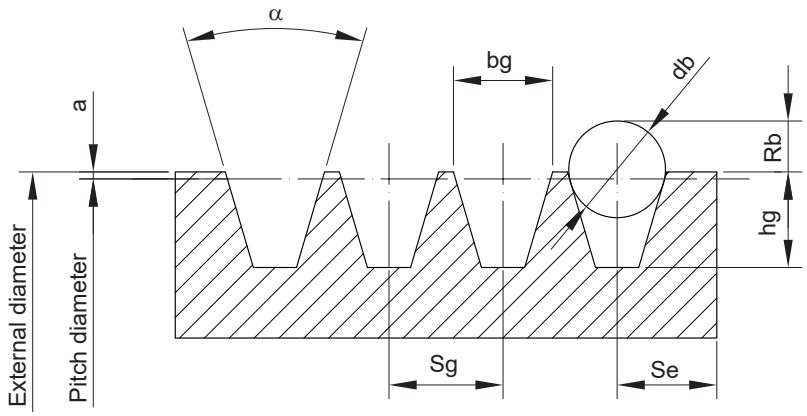
Dimension of grooves (DIN 2211)





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

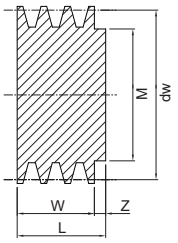
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
50	1	1	32*	28	16	12
	2	1	35*	35	28	7
	3	1	35*	44	40	4
	4	1	35*	56	52	4
56	1	1	32**	28	16	12
	2	1	40**	35	28	7
	3	1	42**	44	40	4
	4	1	42**	56	52	4
63	1	1	40	28	16	12
	2	1	40	35	28	7
	3	1	42	44	40	4
	4	1	42	56	52	4
71	1	1	40	28	16	12
	2	1	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

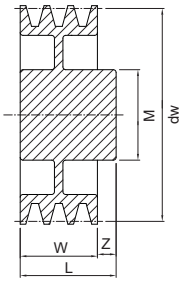
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
125	1	4	45	28	16	12
	2	4	50	35	28	7
	3	4	60	40	40	-
	4	4	68	52	52	-
	5	5	75	60	64	4
132	1	4	45	28	16	12
	2	4	60	40	28	12
	3	4	60	40	40	-
	4	4	68	52	52	-
	5	5	75	60	64	4
140	1	4	55	28	16	12
	2	4	60	40	28	12
	3	4	60	40	40	-
	4	4	68	52	52	-
	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

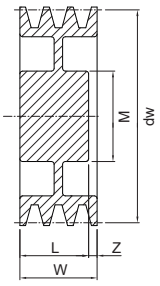


1



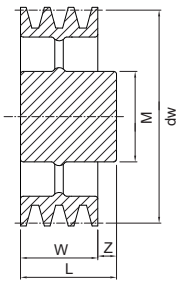
4

4A (with lightening bores)



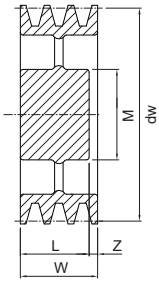
5

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

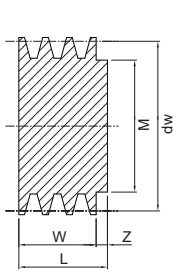
Dimensions of V-Pulleys PT - solid hub

PT SPA-A

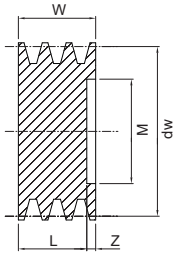
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
50	1	1	32*	35	20	15
	2	1	40*	45	35	10
	3	1	40*	54	50	4
56	1	1	35**	35	20	15
	2	1	40**	45	35	10
	3	1	40**	54	50	4
63	1	1	40	35	20	15
	2	1	40	45	35	10
	3	1	40	54	50	4
	4	1	40	68	65	3
	5	1	40	84	80	4
71	1	1	40	35	20	15
	2	1	50	45	35	10
	3	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

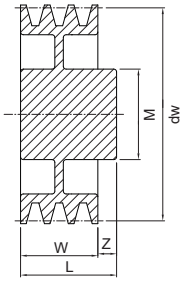
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
125	1	4	55	35	20	15
	2	4	60	45	35	10
	3	4	68	50	50	-
	4	5	68	50	65	15
	5	5	80	50	80	30
132	1	4	55	35	20	15
	2	4	60	45	35	10
	3	4	68	50	50	-
	4	5	68	50	65	15
	5	5	80	50	80	30
140	1	4	60	35	20	15
	2	4	60	45	35	10
	3	4	68	50	50	-
	4	5	68	50	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

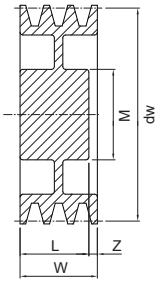


2



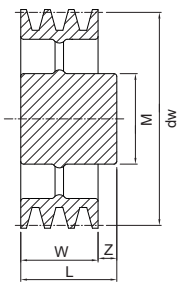
4

4A (with lightening bores)

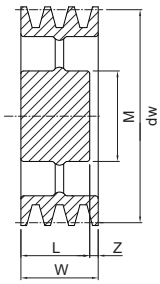


5

5A (with lightening bores)



8 (3 spokes)
8A (6 spokes)



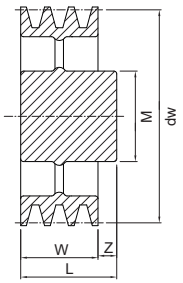
9
9A (3 spokes)
9B (6 spokes)

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

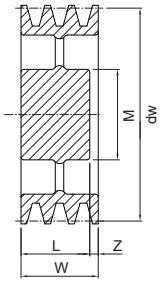
Dimensions of V-Pulleys PT - solid hub

» 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)

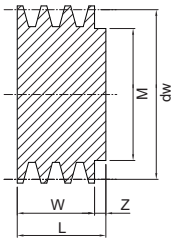
Dimensions of V-Pulleys PT - solid hub

PT SPB-B-5V

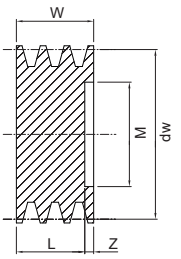
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
60	1	1	40	35*	25	10
	2	1	40	48*	44	4
71	1	1	45	35**	25	10
	2	1	45	48**	44	4
	3	1	45	67**	63	4
75	1	1	45	35	25	10
	2	1	45	48	44	4
	3	1	45	67	63	4
80	1	1	50	35	25	10
	2	1	50	48	44	4
	3	1	50	67	63	4
	4	1	52	86	82	4
	5	1	58	105	101	4
85	1	1	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

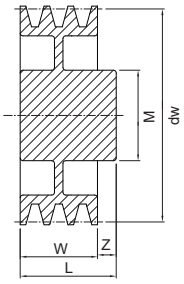
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
140	1	4	60	35	25	10
	2	4	65	50	44	6
	3	5	75	50	63	13
	4	5	80	50	82	32
	5	5	80	60	101	41
	6	5	80	60	120	60
150	1	4	60	40	25	15
	2	4	65	50	44	6
	3	5	75	50	63	13
	4	5	80	50	82	32
	5	5	80	60	101	41
	6	5	88	60	120	60
160	1	4	65	40	25	15
	2	4	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



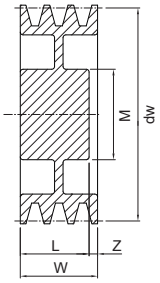
1



2



4



5

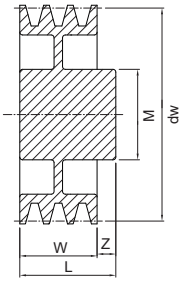
* Note: the diameter at the bottom of the groove is 32 mm
** Note: the diameter at the bottom of the groove is 43 mm

Dimensions of V-Pulleys PT - solid hub

» PT SPB-B-5V

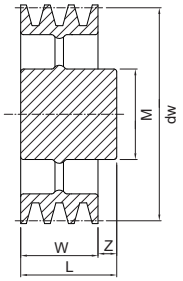
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	z [mm]
250	1	8	70	45	25	20
	2	8	75	50	44	6
	3	9	88	60	63	3
	4	9	96	65	82	17
	5	4A	104	75	101	26
	6	4A	104	80	120	40
280	1	8	75	45	25	20
	2	8	75	50	44	6
	3	9	88	60	63	3
	4	9	96	65	82	17
	5	9	104	75	101	26
	6	9	104	80	120	40
300	1	8	75	50	25	25
	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



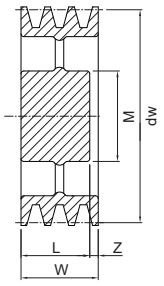
4

4A (with lightening bores)



8 (3 spokes)

8A (6 spokes)



9

9A (3 spokes)

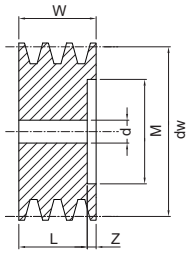
Dimensions of V-Pulleys PT - solid hub

PT C

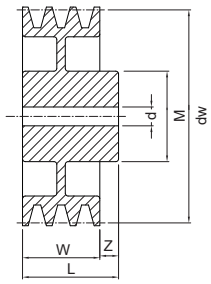
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	d [mm]	z [mm]
140	1	6	62	58	34	16	24
	2	7	70	58	59,5	16	2
	3	3	83	70	85	16	15
	4	3	83	74	110,5	16	37
	5	3	83	78	136	16	58
	6	3	83	78	161,5	20	84
150	1	6	70	59	34	16	25
	2	6	70	61	59,5	16	2
	3	3	93	70	85	16	15
	4	3	93	74	110,5	16	37
	5	3	93	78	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

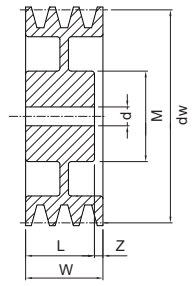
Pitch dw [mm]	Number of grooves	Type	M [mm]	L [mm]	W [mm]	d [mm]	z [mm]
280	1	6	82	64	34	20	30
	2	6	82	74	59,5	20	15
	3	7	90	80	85	20	5
	4	7	95	90	110,5	20	21
	5	7	100	96	136	25	40
	6	11	102	102	161,5	25	60
300	1	11	85	65	34	20	31
	2	11	90	75	59,5	20	16
	3	11	90	80	85	20	5
	4	11	105	90	110,5	20	21
	5	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



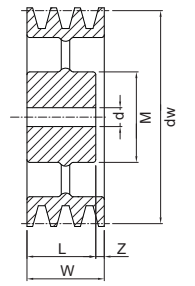
3



6



7



11

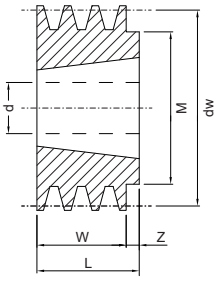
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

"PBT" SPZ-Z-3V

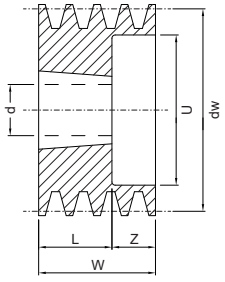
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
63	1	1	1108	11-28	62	22	6	-	16
	2	10	1108	11-28	-	22	6	38	28
	3	10	1108	11-28	-	22	18	38	40
67	1	1	1108	11-28	62	22	6	-	16
	2	10	1108	11-28	-	22	6	38	28
	3	10	1108	11-28	-	22	18	38	40
71	1	1	1108	11-28	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

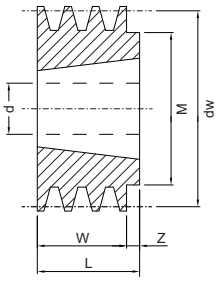


10

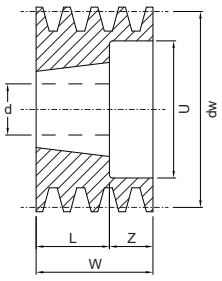
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

» "PBT" SPZ-Z-3V

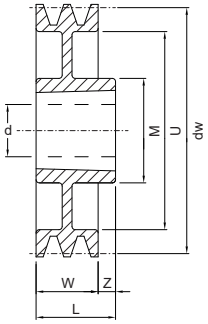
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
118	1	1	1610	12-42	-	92	25	9	-	16
	2	10	1610	12-42	-	-	25	3	90	28
	3	2	2012	14-50	-	-	32	8	90	40
	4	2	2012	14-50	-	-	32	20	90	52
	5	10	2012	14-50	-	-	32	32	90	64
	6	2	2012	14-50	-	-	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



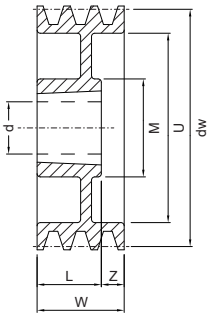
1



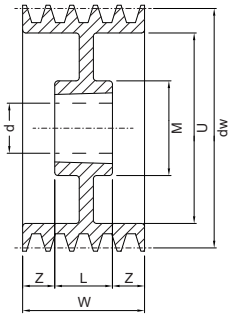
2



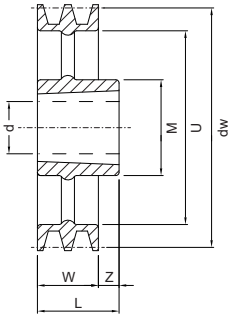
4



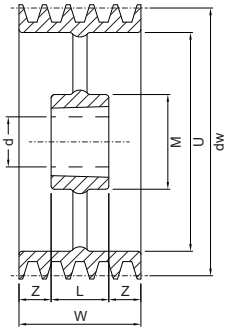
5



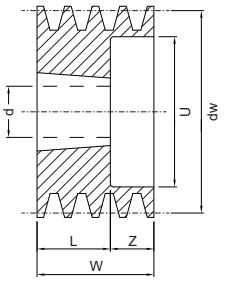
6



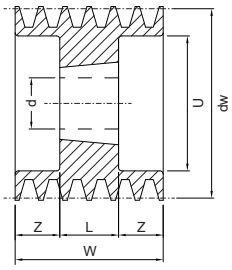
7



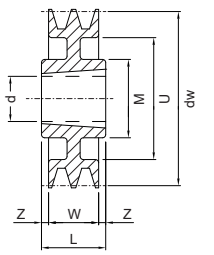
9



10



11

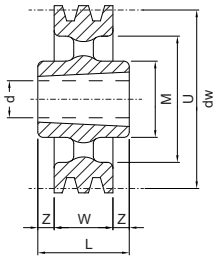


12

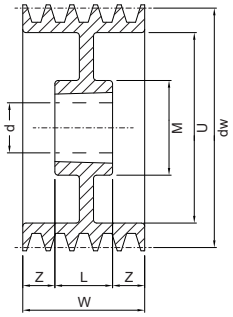
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

» "PBT" SPZ-Z-3V

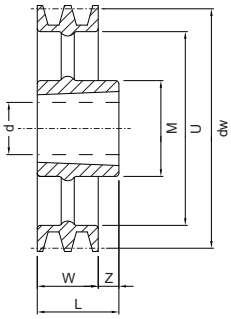
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
250	1	3	2012	14-50	-	110	32	8	223	16
	2	3	2012	14-50	-	110	32	2	223	28
	3	9	2012	14-50	-	112	32	4	223	40
	4	6	2517	18-65	*9*	124	45	3,5	223	52
	5	6	2517	18-65	-	124	45	9,5	223	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



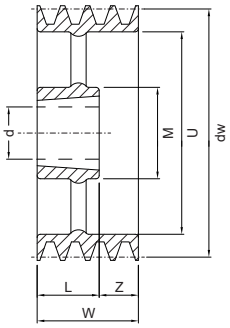
3



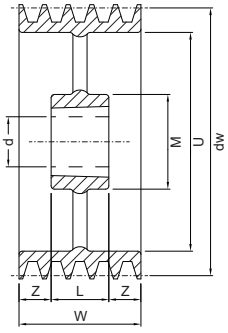
6



7



8

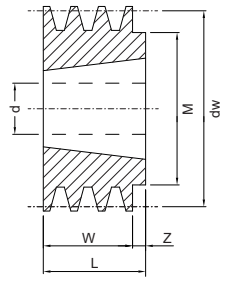


9

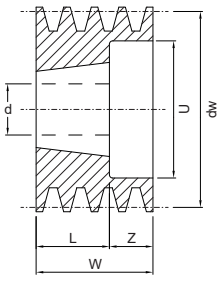
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

"PBT" SPA-A

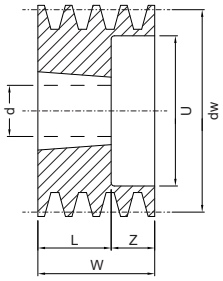
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
67	2	10	1108	11-28	-	22	13	37	35
71	1	1	1108	11-28	60	22	2	-	20
	2	10	1108	11-28	-	22	13	40	35
	3	10	1108	11-28	-	22	28	40	50
75	1	1	1108	11-28	60	22	2	-	20
	2	10	1108	11-28	-	22	13	44	35
	3	10	1108	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



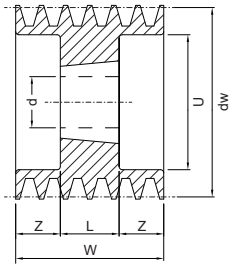
1



2



10

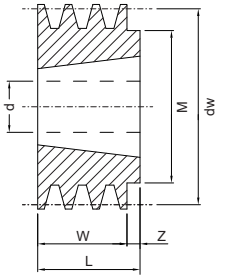


11

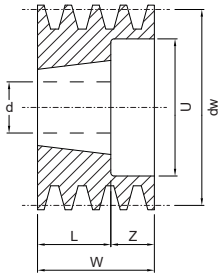
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

» "PBT" SPA-A

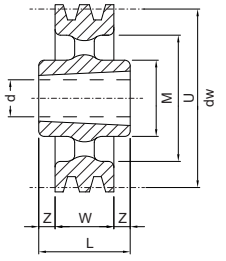
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
150	1	4	1610	12-42	-	92	25	5	-	20
	2	10	2012	14-50	-	-	32	3	116	35
	3	10	2517	18-65	-	-	45	5	116	50
	4	2	2517	18-65	-	-	45	20	116	65
	5	11	2517	18-65	-	-	45	17,5	116	80
160	1	4	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



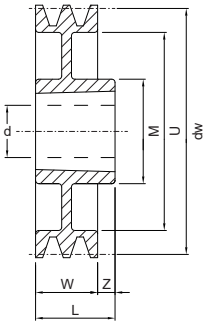
1



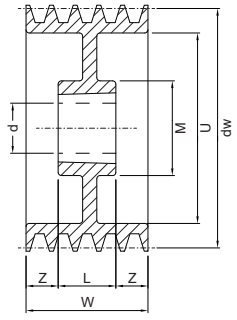
2



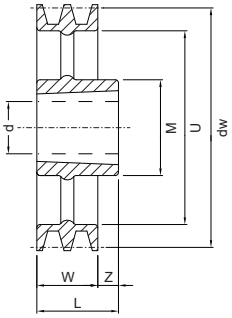
3



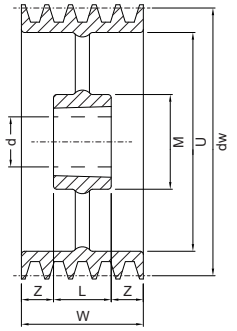
4



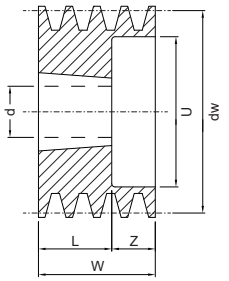
6



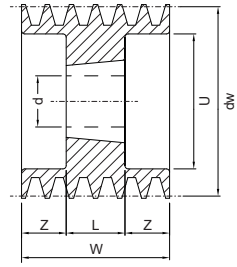
7



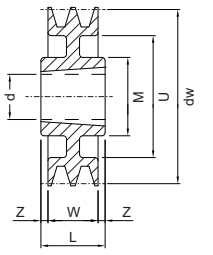
9



10



11

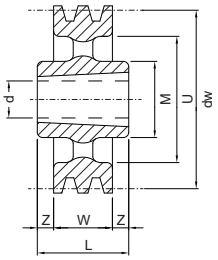


12

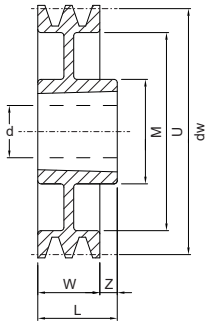
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

» "PBT" SPA-A

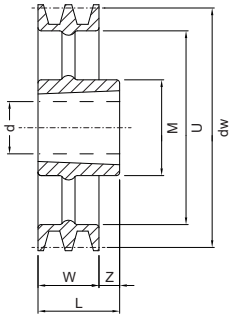
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
315	1	7	2012	14-50	-	110	32	10	282	20
	2	7	2517	18-65	-	120	45	10	282	35
	3	3	3020	22-75	-	146	51	0,5	282	50
	4	9	3020	22-75	-	146	51	7	282	65
	5	12	3535	25-90	*3*	175	89	4,5	282	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



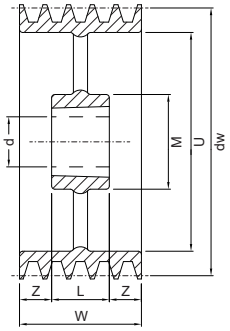
3



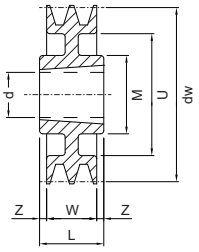
4



7



9

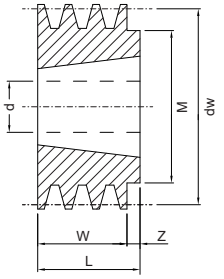


12

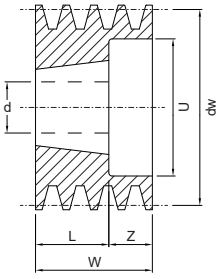
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

"PBT" SPB-B-5V

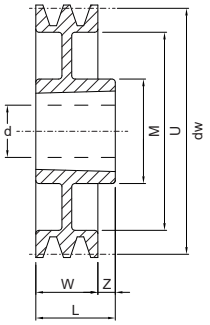
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
90	1	1	1210	14-50	-	-	25	-	-	25
	2	10	1210	14-50	-	-	25	19	52	44
	3	10	1210	14-50	-	-	25	38	50	63
100	1	1	1610	12-42	-	-	25	-	-	25
	2	10	1610	12-42	-	-	25	19	57	44
	3	10	1610	12-42	-	-	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



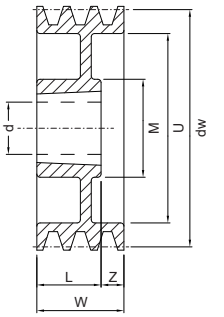
1



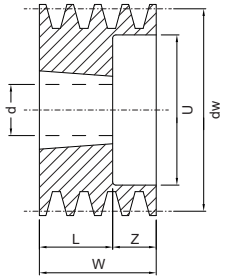
2



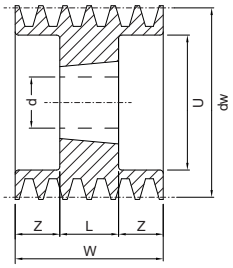
4



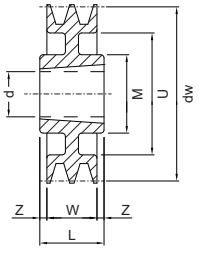
5



10



11



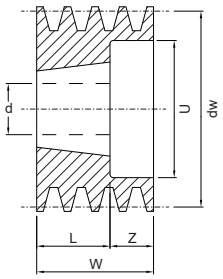
12

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

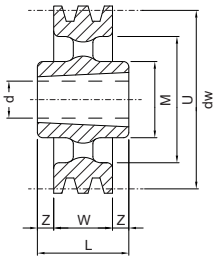
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

» "PBT" SPB-B-5V

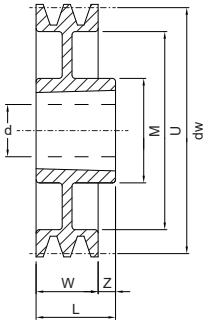
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
200	1	12	2012	14-50	-	104	32	3,5	157	25
	2	4	2517	18-65	-	117	45	1	-	44
	3	2	2517	18-65	-	-	45	18	157	63
	4	11	3020	22-75	-	-	51	15,5	157	82
	5	11	3020	22-75	-	-	51	25	157	101
	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



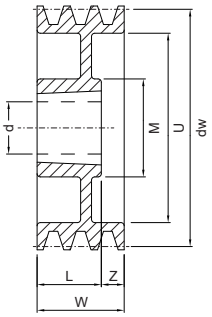
2



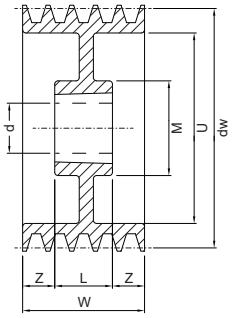
3



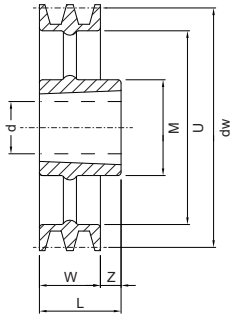
4



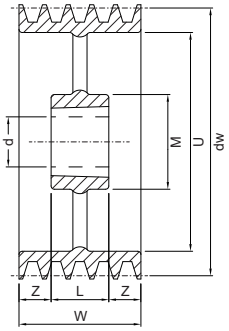
5



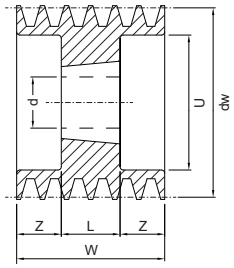
6



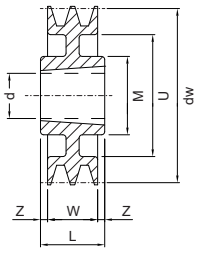
7



9



11

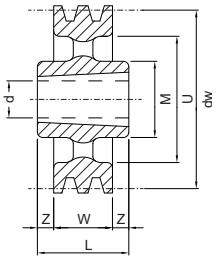


12

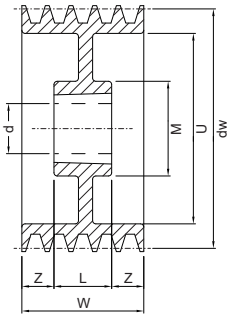
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

» "PBT" SPB-B-5V

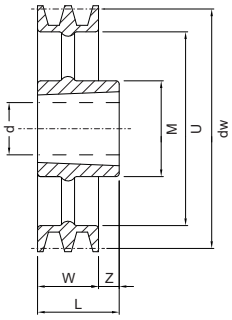
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
355	2	3	3020	22-75	-	146	51	3,5	315	44
	3	9	3020	22-75	-	146	51	6	315	63
	4	3	3535	25-90	-	175	89	3,5	312	82
	5	6	3535	25-90	*9*	175	89	6	312	101
	6	6	3535	25-90	-	175	89	15,5	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



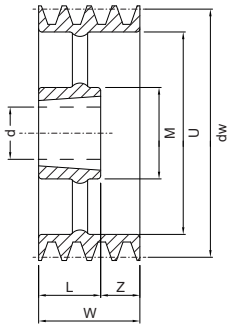
3



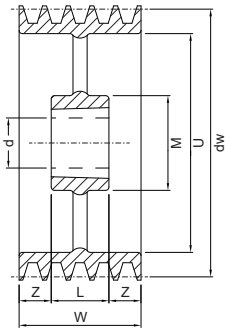
6



7



8

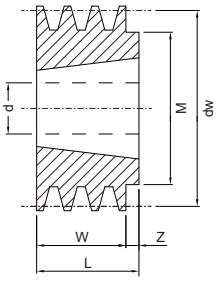


9

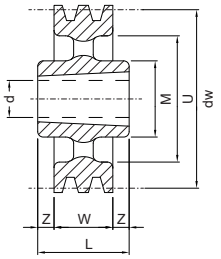
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

"PBT" SPC-C

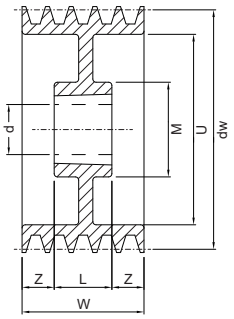
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
212	3	11	3020	22-75	-	-	51	17	156	85
	4	11	3020	22-75	-	-	51	29,5	156	110,5
	5	11	3535	25-90	-	-	89	23,5	156	136
	6	11	3535	25-90	-	-	89	36,25	156	161,5
	8	11	3535	25-90	-	-	89	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



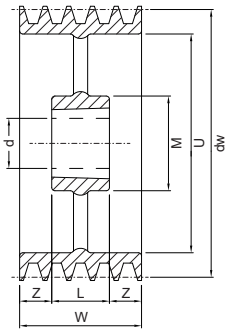
1



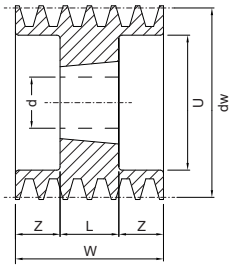
3



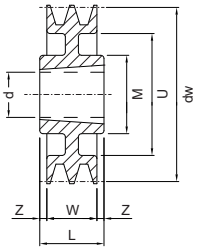
6



9



11

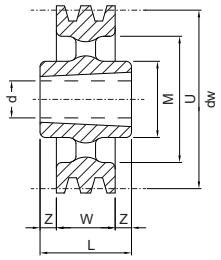


12

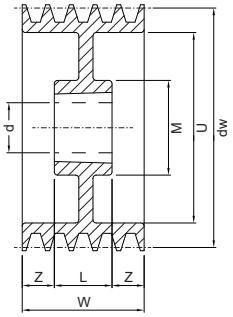
Dimensions of V-Pulleys PBT - mounting taper bushing SER-SIT®

» "PBT" SPC-C

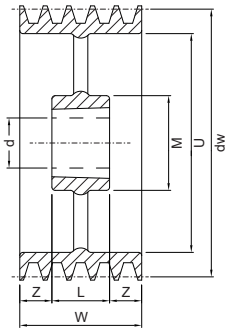
dw [mm]	Number of grooves	Type	SER-SIT® Taper bushing	d min-max [mm]	*Type to exhaustion*	M [mm]	L [mm]	Z [mm]	U [mm]	W [mm]
475	**3**	3	3535	25-90	-	170	89	2	419	85
500	3	3	3535	25-90	-	178	89	2	443	85
	4	9	3535	25-90	-	175	89	11	443	110,5
	5	9	4040	40-100	-	215	102	17	443	136
	6	9	4545	55-110	-	242	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

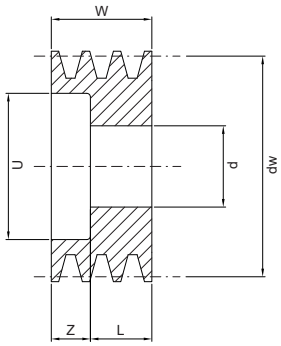
V-Pulleys with oversized hub are designed to be in stalled using Self Locking Device type **SIT-LOCK® CAL 8.**
Bore tolerances is H8.

PCT SPA

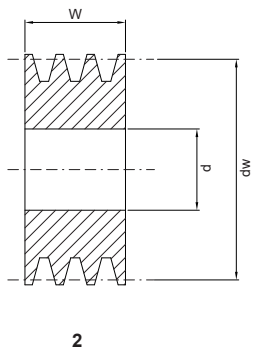
dw [mm]	Number of grooves	Type	d min-max [mm]	M [mm]	U [mm]	L [mm]	W [mm]	Z [mm]
090	2	2	55	-	-	35	35	-
100	2	2	65	-	-	35	35	-
	3	2	55	-	-	50	50	-
160	3	1	55	-	127	27	50	23,0
180	2	4	65	120	147	27	35	4,0
225	2	4	55	120	192	27	35	4,0

PCT SPB

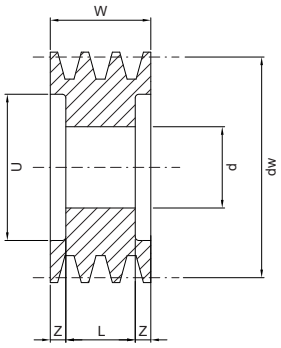
dw [mm]	Number of grooves	Type	d min-max [mm]	M [mm]	U [mm]	L [mm]	W [mm]	Z [mm]
120	2	1	65	-	78	27	44	17,0
125	4	1	55	-	83	27	82	55,0
130	3	1	80	-	88	27	63	35,0
	4	1	80	-	88	27	82	65,0
	5	1	80	-	88	27	101	74,0
140	2	1	65	-	98	27	44	17,0
	3	1	65	-	98	27	63	36,0
	4	1	65	-	98	27	82	55,0
150	2	1	65	-	108	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



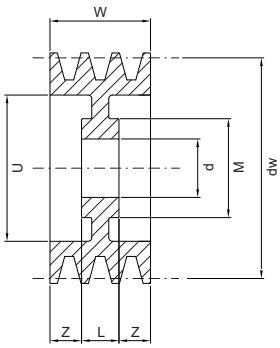
1



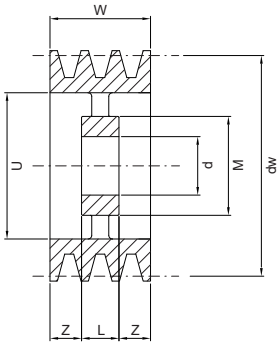
2



3



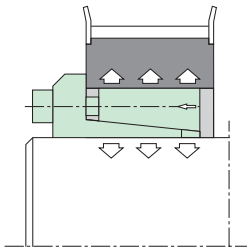
4

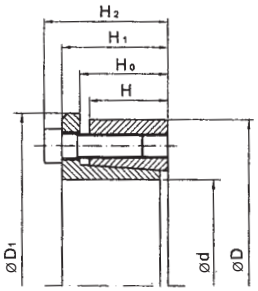


5

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

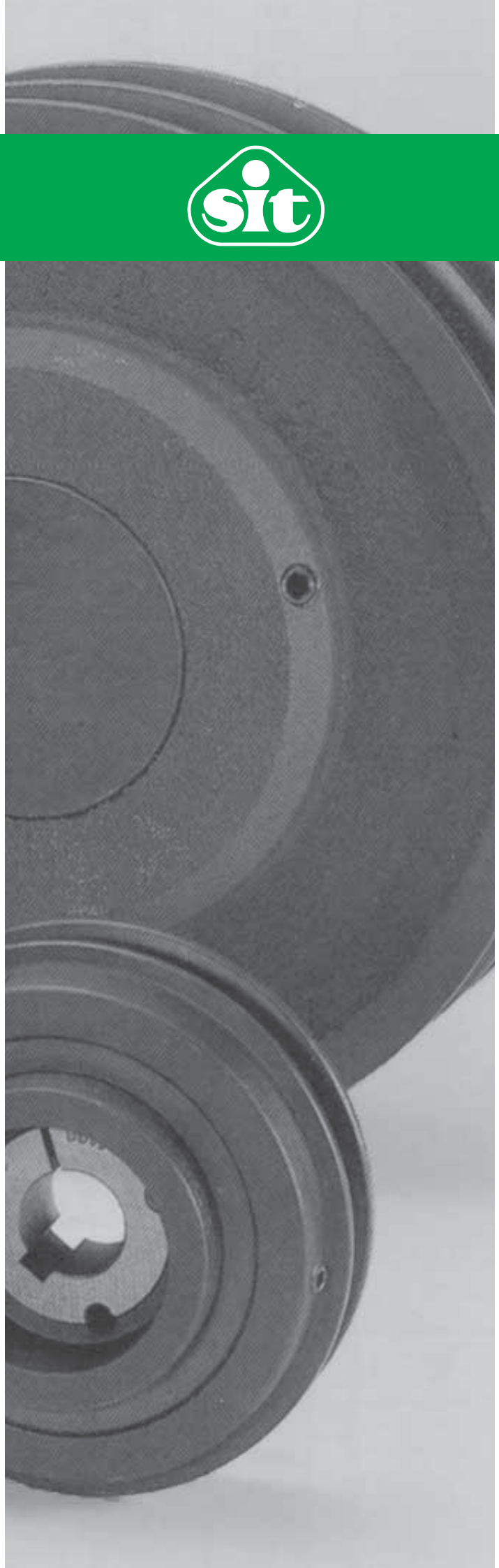
Dimensions [mm]						Performances		Pressure [N/mm²]		Clamping screws (DIN 912 - 12,9)		
d x D	H	H_0	H_1	H_2	D_1	M_T [Nm]	F_{ax} [kN]	p_w	p_n	N°	Type	M_S [Nm]
14 x 55	17	22	30	38	62	130	19	208	53	3	M8	25
16 x 55	17	22	30	38	62	149	19	182	53	3	M8	25
18 x 55	17	22	30	38	62	168	19	162	53	3	M8	25
19 x 55	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

Adjustable Pulleys



SIT Adjustable pulleys “PR DV” and “PBR DV”

Static adjustable pulleys “PR DV” and “PBR DV” are designed to allow adjustment of pitch diameters.
One flange is screwed on the threaded hub. The movable flange is provided with set screws for fixing into the required position. It is recommended to periodically grease the hub threads.

They are suitable for Z-SPZ-3V; A-SPA; B-SPB-5V; C-SPC section V-belts.
For the power rating, please see our V-belt catalogue, taking care about the minimum allowable diameter for the selected belt section an type.

PR DV pulleys - solid hub
Material: cast iron
Finishing: black manganese phosphating process.

V-groove pulleys suitable for normal application for use with the following belt types:

- **1DV**
- **2DV**

PBR DV pulleys - for mounting taper bushing SER-SIT®
Material: cast iron
Finishing: black manganese phosphating process.

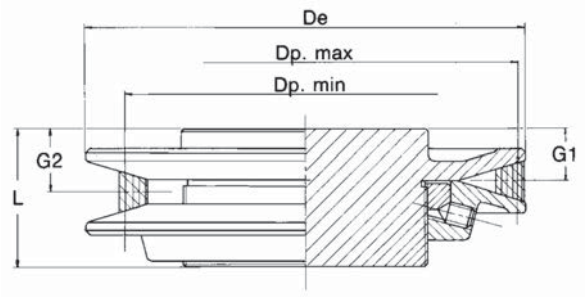
V-groove pulleys suitable for normal application for use with the following belt types:

- **1DV**
- **2DV**

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

Dimensions of adjustable pulleys PR DV - solid hub

PR 1DV



Part Number PR 1DV 121

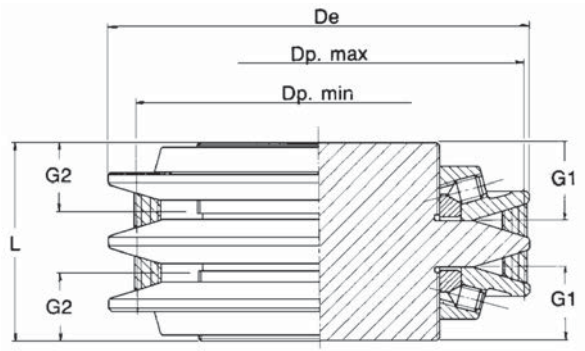
PR: Adjustable pulleys solid hub

Number of grooves (1 groove)

External diameter [mm]

Code	De [mm]	L [mm]	Belt SPZ					Belt SPA					Belt SPB				
			Dp max [mm]	Dp min [mm]	Variation range	G1 [mm]	G2 [mm]	Dp max [mm]	Dp min [mm]	Variation range	G1 [mm]	G2 [mm]	Dp max [mm]	Dp min [mm]	Variation range	G1 [mm]	G2 [mm]
PR1DV 59	59	36	54	38	1,42	11	13,4	53,4	40	1,34	12,5	14,5	-	-	-	-	-
PR1DV 73	73	40	68	52	1,31	14	16,4	67,4	54	1,25	15,5	17,5	66	60	1,1	16,8	17,7
PR1DV 83	83	46,5	71,5	56	1,27	16,5	18,9	77,4	58	1,33	17	20	76	64	1,19	18,3	20,2
PR1DV 95	95	46,5	83,5	68	1,23	16,5	18,9	89,4	70	1,28	17	20	88	76	1,16	18,3	20,2
PR1DV 105	105	47	90	74,5	1,21	17	19,4	99,4	77	1,29	17	20,5	98	82,5	1,19	18,3	20,7
PR1DV 121	121	48	106	90,5	1,17	17	19,4	115,4	93	1,24	17	20,5	114	98,5	1,16	18,3	20,7
PR1DV 136	136	48	121	105,5	1,15	17	19,4	130,4	108	1,21	17	20,5	129	113,5	1,14	18,3	20,7
PR1DV 152	152	48	137	121,5	1,13	17	19,4	146,4	124	1,18	17	20,5	145	129,5	1,12	18,3	20,7
PR1DV 167	167	48	152	136,5	1,11	17	19,4	161,4	139	1,16	17	20,5	160	144,5	1,11	18,3	20,7
PR1DV 232	232	59,5	206,5	184,5	1,12	25	27,1	220	197	1,12	25	28	221	202,5	1,09	25,0	28,2

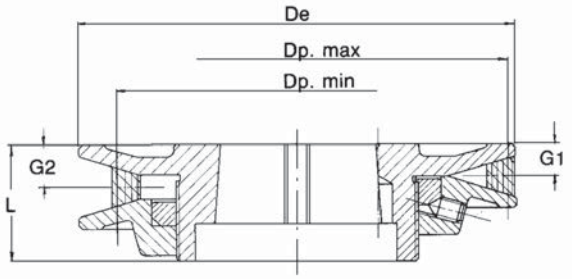
PR 2DV



Code	De [mm]	L [mm]	Belt SPZ					Belt SPA					Belt SPB				
			Dp max [mm]	Dp min [mm]	Variation range	G1 [mm]	G2 [mm]	Dp max [mm]	Dp min [mm]	Variation range	G1 [mm]	G2 [mm]	Dp max [mm]	Dp min [mm]	Variation range	G1 [mm]	G2 [mm]
PR2DV 105	105	76	90	74,5	1,21	30	27,6	99,4	77	1,29	30	26,5	98	82,5	1,19	30	27,6
PR2DV 121	121	76	106	90,5	1,17	30	27,6	115,4	93	1,24	30	26,5	114	98,5	1,16	30	27,6
PR2DV 136	136	76	121	105,5	1,15	30	27,6	130,4	108	1,21	30	26,5	129	113,5	1,14	30	27,6
PR2DV 152	152	76	137	121,5	1,13	30	27,6	146,4	124	1,18	30	26,5	145	129,5	1,12	30	27,6
PR2DV 167	167	76	152	136,5	1,11	30	27,6	161,4	139	1,16	30	26,5	160	144,5	1,11	30	27,6
PR2DV 232	232	90	206,5	184,5	1,12	34,5	32,4	220	197	1,12	34,5	31,5	221	202,5	1,09	34,5	31,3

Dimension of pulleys PBR DV - mounting taper bushing SER-SIT®

PBR 1DV

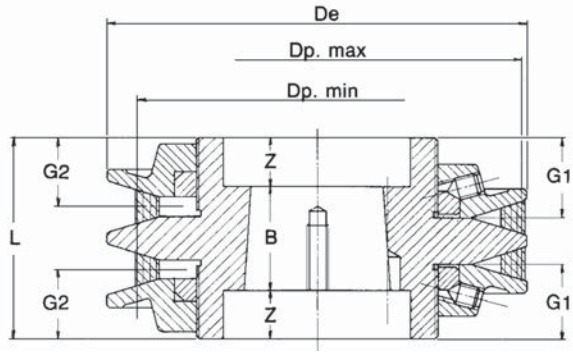


Part Number PBR 2DV 121

- PBR: Adjustable pulleys hub for taper bush
- Number of grooves (2 grooves)
- External diameter [mm]

Code	De [mm]	L [mm]	SER-SIT® Taper bushing	Belt SPZ					Belt SPA					Belt SPB				
				Dp max [mm]	Dp min [mm]	Variation range	G1 [mm]	G2 [mm]	Dp max [mm]	Dp min [mm]	Variation range	G1 [mm]	G2 [mm]	Dp max [mm]	Dp min [mm]	Variation range	G1 [mm]	G2 [mm]
PBR1DV 95	95	39,5	1008 (25.20)	83,5	68	1,23	9,5	11,9	89,4	70	1,28	10	13	88	76	1,16	11,3	13,2
PBR1DV 105	105	40	1108 (28.20)	90	74,5	1,21	10	12,4	99,4	77	1,29	10	13,5	98	82,5	1,19	11,3	13,7
PBR1DV 121	121	41	1108 (28.20)	106	90,5	1,17	10	12,4	115,4	93	1,24	10	13,5	114	98,5	1,16	11,3	13,7
PBR1DV 136	136	41	1210 (30.25)	121	105,5	1,15	10	12,4	130,4	108	1,21	10	13,5	129	113,5	1,14	11,3	13,7
PBR1DV 152	152	41	1610 (40.25)	137	121,5	1,13	10	12,4	146,4	124	1,18	10	13,5	145	129,5	1,12	11,3	13,7
PBR1DV 167	167	41	1610 (40.25)	152	136,5	1,11	10	12,4	161,4	139	1,16	10	13,5	160	144,5	1,11	11,3	13,7
PBR1DV 232	232	47,5	2012 (50.30)	206,5	184,5	1,12	13	15,1	220	197	1,12	13	16	221	202,5	1,09	13	16,2

PBR 2DV



Code	De [mm]	L [mm]	Z [mm]	B [mm]	SER-SIT® Taper bushing	Belt SPZ					Belt SPA					Belt SPB				
						Dp max [mm]	Dp min [mm]	Variation range	G1 [mm]	G2 [mm]	Dp max [mm]	Dp min [mm]	Variation range	G1 [mm]	G2 [mm]	Dp max [mm]	Dp min [mm]	Variation range	G1 [mm]	G2 [mm]
PBR2DV 105	105	76	27	22	1108 (28.20)	90	74,5	1,21	30	27,6	99,4	77	1,29	30	26,5	98	82,5	1,19	30	27,6
PBR2DV 121	121	76	17	42	1215 (30.40)	106	90,5	1,17	30	27,6	115,4	93	1,24	30	26,5	114	98,5	1,16	30	27,6
PBR2DV 136	136	76	17	42	1215 (30.40)	121	105,5	1,15	30	27,6	130,4	108	1,21	30	26,5	129	113,5	1,14	30	27,6
PBR2DV 152	152	76	17	42	1615 (40.40)	137	121,5	1,13	30	27,6	146,4	124	1,18	30	26,5	145	129,5	1,12	30	27,6
PBR2DV 167	167	76	17	42	1615 (40.40)	152	136,5	1,11	30	27,6	161,4	139	1,16	30	26,5	160	144,5	1,11	30	27,6
PBR2DV 232	232	90	21,5	47	2517 (65.45)	206,5	184,5	1,12	34,5	32,4	220	197	1,12	34,5	31,5	221	202,5	1,09	34,5	31,3

Variable Speed Pulleys

SIT Variable speed pulleys “VAR”

Description - VAR Pulleys

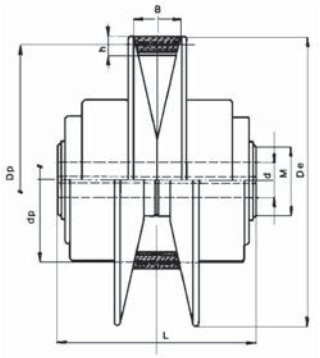
The variable speed pulley is a well established drive; designed to give continuous speed variation at a comparative low cost. Unfortunately it is well known that this design is subject to excsive flange wear due to the type of drive systems employed.

• The hub is made from induction hardened steel, hard chrome plated and ground to give uninterrupted slide fit with flanges. Keys are not used with this application.

• Moving flanges give a wide contact area therefore eliminating uneven belt pressure.

• The pulley flanges are coupled by means of nylon sleeve couplings to the outside of the flanges and by two flates machined on each end of the pulley hub. Two springs situated inside the nylon coupling give the desired pressure.

• There is provision for re-greasing the pulley slideways, although the grease chambers are pre-packed before leaving the factory.



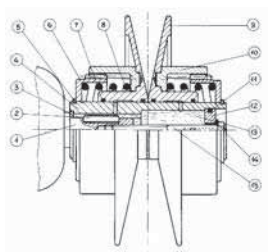
Part Number PV 160 VAR 22

- PV — Variable pulley
- 160 — External diameter [mm]
- VAR — Type “VAR”
- 22 — Finished bore diameter [mm]

Type	Power				Belt	De	L	Dw		Hub and bores			Variation range	Weight
	750 [rpm]	1000 [rpm]	1500 [rpm]	3000 [rpm]	a x b [mm]	[mm]	[mm]	Max Dp [mm]	Min dp [mm]	M (1) [mm]	d (2) [mm]	Finished bores (3) [mm]		[Kg]
VAR 100	0,25	0,33	0,50	1	13 x 6	100	65	97	37	23	10	11-12-14-16	2,61	0,90
VAR 130	0,37	0,50	0,75	1,5	22 x 8	130	88	126	46	27	10	14-18-19	2,73	1,69
VAR 160	0,75	1,0	1,50	3	28 x10	160	115	155	60	34	10	18-19-22-24	2,58	3,25
VAR 190	1,75	2,30	3,50	7	36 x12	190	131	184	65	39	10	19-22-24-25-28	2,83	4,85
VAR 240	2,75	3,65	5,50	-	46 x 13	240	170	233	72	43	10	24-25-28-32	3,22	8,60
VAR 300	5,00	6,60	10,0	-	54 x 16	300	200	292	91	54	10	32-38-42	3,21	15,00

(1) Diameter steel hubs (2) Diameter pilot hole tolerance H11 (3) Diameter bore holes H7 with keyway UNI

Installation instructions



1	Motor shaft
2	Key
3	Aluminium seal washer
4	Pulley shaft
5	Stop ring
6	Toothed bushing
7	OR packing
8	Spring
9	Flange
10	SM/23 resin sleeve
11	OR packing
12	Steel washer
13	Lubrification grease
14	Aluminium seal washer
15	Screw

Number operations

1	Take off the key (2) from the motor shaft (1)
2	Assemble the aluminium seal washer (1) on the motor shaft (3)
3	Reassemble the key (2) on the motor shaft (1)
4	Assemble the pulley
5	Lock the pulley on the motor shaft (1) by means of the screw (15) not forgetting to insert the aluminium seal washer (14)
6	IMPORTANT Flill up the grease chamber with the lubrification grease (13). Thick grease in preferred.

SIT Variable speed pulleys “FIXED”

Description - FIXED Pulleys

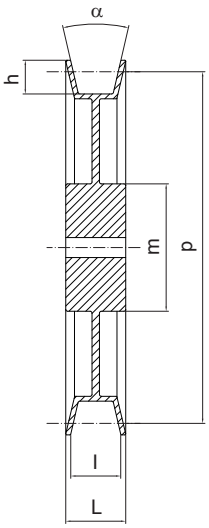
Fixed driven pulley have been specifically designed to be used with VAR pulleys. They are manufactured in grey cast iron (GG20 - GG25) and are treated with a black manganese phosphating process.

Part Number **PF 160/46**

Fixed pulley

External diameter [mm] / Groove width [mm]

Type	FIXED 100	FIXED 130	FIXED 160	FIXED 190	FIXED 240	FIXED 300
α	**25°**	**25°**	**25°**	**28°**	**28°**	**28°**
h [mm]	**12**	**16**	**18**	**20**	**26**	**32**
l [mm]	**13**	**22**	**28**	**36**	**46**	**54**
L [mm]	**20**	**26**	**32**	**43**	**52**	**70**
Diameter p [mm]	**Hub diameter m [mm]**					
80	30	30	35	-	-	-
90	35	38	38	-	-	-
100	35	38	38	-	-	-
112	40	42	42	50	-	-
125	40	46	46	54	-	-
140	40	48	48	54	55	-
160	45	48	48	60	68	-
170	45	55	55	62	70	-
180	50	58	58	68	75	80
200	50	68	68	70	78	82
224	60	70	70	70	85	90
250	60	70	75	75	88	92
280	60	70	78	78	90	92
315	60	80	80	80	90	100
355	-	85	90	90	90	95
400	-	-	90	90	90	95
450	-	-	-	90	95	95
500	-	-	-	-	95	105



Speed range and center distance for VAR and fixed pulleys assemblies

VAR 100

Pitch length [mm]	Speed range - center distances																														
	Speed range in rpm of driven pulley with drive VAR pulley (rpm)								Belts inside length in mm																						
	750		1000		1500		3000		500	525	550	600	650	675	700	750	800	850	900	950	1000	1060	1120	1180	1250	1320	1400	1500	1600
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Center distances in mm calculated with belts 13X6																				
80	876	355	1168	447	1752	671	3505	1343	122	135	147	172	197	210	222	247	272	297	322	347	372	402	432	462	497	532	572	-	-
90	782	299	1042	399	1564	599	3128	1199	115	127	140	165	190	202	215	240	265	290	315	340	365	395	425	455	490	525	565	-	-
100	706	270	941	360	1412	541	2825	1082	-	119	132	157	182	194	207	232	257	282	307	332	357	387	417	447	482	517	557	-	-
112	632	242	843	323	1265	485	2530	970	-	-	122	147	172	185	197	222	247	272	297	322	347	377	407	437	472	507	547	-	-
125	568	217	758	290	1137	435	2274	871	-	-	-	136	161	174	186	212	237	262	287	312	337	367	397	427	462	497	537	-	-
140	508	195	678	260	1017	390	2035	780	-	-	-	-	149	161	174	199	224	249	274	299	324	355	385	415	450	485	525	-	-
160	446	171	595	228	893	342	1786	684	-	-	-	-	-	143	156	182	207	232	257	283	308	338	368	398	433	468	509	-	-
170	420	161	561	215	841	322	1683	645	-	-	-	-	-	-	147	173	198	224	249	274	299	330	360	390	425	460	500	-	-
180	397	152	530	203	795	304	1591	609	-	-	-	-	-	-	-	163	189	215	240	265	291	321	351	381	417	452	492	-	-
200	358	137	478	183	717	274	1434	549	-	-	-	-	-	-	-	-	170	196	222	248	273	304	334	364	400	435	475	-	-
224	320	122	427	163	641	245	1282	491	-	-	-	-	-	-	-	-	-	-	199	225	251	282	313	343	379	414	455	-	-
250	287	110	383	147	575	220	1151	441	-	-	-	-	-	-	-	-	-	-	-	199	225	257	288	319	355	391	432	-	-
280	257	98	343	131	514	197	1029	394	-	-	-	-	-	-	-	-	-	-	-	164	193	226	259	290	327	363	405	-	-
315	228	87	305	117	457	175	915	351	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220	254	292	329	371	-	-

VAR 130

Pitch length [mm]	Speed range - center distances																														
	Speed range in rpm of driven pulley with drive VAR pulley (rpm)								Belts inside length in mm																						
	750		1000		1500		3000		500	525	550	600	650	675	700	750	800	850	900	950	1000	1060	1120	1180	1250	1320	1400	1500	1600
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Center distances in mm calculated with belts 22x8																				
80	1124	410	1498	547	2248	821	4496	1642	-	-	-	152	177	190	202	227	252	277	303	328	353	383	413	443	478	513	553	603	653
90	1004	367	1339	489	2009	734	4019	1468	-	-	-	145	170	182	195	220	245	270	295	320	345	375	405	435	470	505	545	595	645
100	908	331	1211	442	1816	663	3633	1327	-	-	-	137	162	175	187	212	237	262	287	312	337	367	397	427	462	497	537	587	637
112	814	297	1086	396	1629	595	3258	1190	-	-	-	128	153	166	178	203	228	253	278	303	328	358	388	418	453	488	528	578	628
125	732	267	976	356	1465	535	2930	1070	-	-	-	-	143	155	168	193	218	243	268	293	318	348	378	408	443	478	518	568	618
140	656	239	875	319	1312	479	2625	959	-	-	-	-	-	-	156	181	206	231	256	281	306	336	366	396	431	466	506	556	606
160	576	210	768	280	1152	421	2305	842	-	-	-	-	-	-	-	164	190	215	240	265	290	320	350	380	415	450	490	540	590
170	543	198	724	264	1086	396	2173	793	-	-	-	-	-	-	-	-	181	206	231	256	282	312	342	372	407	442	482	532	582
180	513	187	685	250	1027	375	2055	750	-	-	-	-	-	-	-	-	172	198	223	248	273	303	333	364	399	434	474	524	574
200	463	169	617	225	926	338	1853	677		-	-	-	-	-	-	-	-	180	205	231	256	286	317	347	382	417	457	508	558
224	414	151	552	202	829	303	1658	606	-	-	-	-	-	-	-	-	-	-	-	209	235	265	296	326	362	397	437	488	538
250	372	136	496	181	744	272	1498	544	-	-	-	-	-	-	-	-	-	-	-	-	210	241	272	303	339	374	415	465	516
280	333	121	444	162	666	243	1332	486	-	-	-	-	-	-	-	-	-	-	-	-	-	-	243	275	311	347	388	439	490
315	296	108	395	144	592	216	1185	433	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	239	277	314	356	407	459
355	263	96	351	128	526	192	1053	385	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	272	316	369	421	

VAR 160

Pitch length [mm]	Speed range - center distances																														
	Speed range in rpm of driven pulley with drive VAR pulley (rpm)								Belts inside length in mm																						
	750		1000		1500		3000		500	525	550	600	650	675	700	750	800	850	900	950	1000	1060	1120	1180	1250	1320	1400	1500	1600
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Center distances in mm calculated with belts 28x10																				
80	1384	535	1846	714	2769	1071	5538	2143	131	156	182	207	233	258	283	308	334	364	394	424	459	494	534	584	634	685	735	835	-
90	1237	478	1649	638	2474	957	4948	1915	-	149	175	200	226	251	276	301	326	356	386	416	452	487	527	577	627	677	727	827	-
100	1118	432	1490	577	2236	865	4472	1731	-	142	168	193	218	243	269	294	319	349	379	409	444	479	519	569	619	669	719	819	-
112	1002	387	1336	517	2004	775	4009	1551	-	-	159	184	209	234	260	285	310	340	370	400	435	470	510	560	610	660	710	810	-
125	901	348	1201	465	1802	697	3605	1395	-	-	-	175	200	225	250	2i5	300	330	360	390	425	460	500	550	600	650	700	800	-
140	807	312	1076	416	1614	624	3229	1249	-	-	-	-	188	213	238	263	288	318	348	378	413	448	488	538	588	638	688	788	-
160	708	274	945	365	1417	548	2835	1097	-	-	-	-	-	198	223	248	273	303	333	363	398	433	473	523	573	623	673	773	-
170	668	258	890	344	1336	517	2672	1034	-	-	-	-	-	190	215	240	265	295	325	355	390	425	465	515	565	615	665	765	-
180	631	244	842	326	1263	489	2526	978	-	-	-	-	-	181	206	231	256	287	317	347	382	417	457	507	557	607	657	757	-
200	569	220	759	294	1139	441	2279	882	-	-	-	-	-	-	-	215	240	270	300	330	365	400	441	491	541	591	641	741	-
224	509	197	679	263	1019	394	2039	789	-	-	-	-	-	-	-	-	219	250	270	310	345	381	421	471	521	571	621	721	-
250	457	177	610	236	915	354	1830	708	-	-	-	-	-	-	-	-	-	227	257	288	323	359	399	449	499	550	600	700	-
280	409	158	545	211	818	316	1636	633	-	-	-	-	-	-	-	-	-	-	229	250	296	332	373	423	474	524	575	675	-
315	364	141	485	188	728	282	1457	564	-	-	-	-	-	-	-	-	-	-	-	-	263	300	341	392	443	494	545	646	-
355	323	125	431	167	647	250	1294	501	-	-	-	-	-	-	-	-	-	-	-	-	-	-	302	355	407	458	509	611	-
400	287	111	383	148	575	222	1150	445	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	309	363	415	468	571	-

VAR 190

Pitch length [mm]	Speed range - center distances																														
	Speed range in rpm of driven pulley with drive VAR pulley (rpm)								Belts inside length in mm																						
	750		1000		1500		3000		500	525	550	600	650	675	700	750	800	850	900	950	1000	1060	1120	1180	1250	1320	1400	1500	1600
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Center distances in mm calculated with belts 36x12																				
112	1189	419	1586	559	2379	838	4759	1677	-	-	-	-	189	214	240	265	290	320	350	380	416	451	491	541	591	641	691	791	911
125	1069	377	1426	502	2139	754	4279	1508	-	-	-	-	180	205	230	255	280	311	341	371	406	441	481	531	581	631	681	781	901
140	958	337	1277	450	1916	675	3833	1350	-	-	-	-	-	194	219	244	269	299	329	359	394	429	470	520	570	620	670	770	890
160	841	296	1121	395	1682	593	3365	1186	-	-	-	-	-	-	204	229	254	284	314	344	379	414	454	504	554	604	654	754	874
170	793	279	1057	372	1586	558	3172	1117	-	-	-	-	-	-	196	221	246	276	306	336	371	406	446	496	546	596	646	746	866
180	750	264	1000	352	1500	528	3000	1057	-	-	-	-	-	-	-	214	239	269	299	329	364	399	439	489	539	589	639	739	859
200	676	238	901	317	1352	476	2705	953	-	-	-	-	-	-	-	-	223	253	283	313	348	383	423	473	523	573	623	723	843
224	605	213	806	284	1210	426	2420	853	-	-	-	-	-	-	-	-	-	233	263	293	328	363	403	453	504	554	604	704	824
250	543	191	724	255	1086	382	2173	765	-	-	-	-	-	-	-	-	-	-	241	271	307	342	382	432	482	532	583	683	803
280	485	171	647	228	971	342	1943	684	-	-	-	-	-	-	-	-	-	-	-	245	281	316	357	407	457	508	558	658	778
315	432	152	576	203	865	304	1730	609	-	-	-	-	-	-	-	-	-	-	-	-	-	-	326	376	427	478	528	629	749
355	384	135	512	180	768	270	1537	541	-	-	-	-	-	-	-	-	-	-	-	-	-	-	288	340	391	442	493	595	716
400	341	120	455	160	683	240	1366	481	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	348	401	452	555	677
450	303	107	405	142	607	214	1215	428	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	351	404	509	632

VAR 240

Pitch length [mm]	Speed range - center distances																	
	Speed range in rpm of driven pulley with drive VAR pulley (rpm)						Belts inside length in mm											
	750		1000		1500		995	1055	1115	1175	1245	1315	1395	1495	1595	1695	1795	2000	2240
	Min.	Max.	Min.	Max.	Min.	Max.	Center distances in mm calculated with belts 46x13												
140	1195	371	1594	494	2391	742	225	256	286	316	352	387	427	477	528	578	628	731	851
160	1052	326	1402	435	2104	653	-	241	272	302	337	372	412	462	513	563	613	715	835
170	992	308	1323	410	1984	616	-	234	264	294	330	365	405	455	505	555	605	708	828
180	939	291	1252	388	1878	583	-	227	257	287	322	357	397	447	497	547	597	700	820
200	848	263	1130	351	1696	526	-	-	242	272	307	342	382	432	482	532	582	685	805
224	759	235	1013	314	1519	471	-	-	-	253	288	323	363	413	463	513	563	666	786
250	682	211	910	282	1365	423	-	-	-	-	268	303	343	393	443	493	543	645	765
280	611	189	814	252	1222	379	-	-	-	-	-	278	318	368	419	469	519	621	741
315	544	169	726	225	1089	338	-	-	-	-	-	-	289	339	389	440	490	593	713
355	484	150	645	200	968	300	-	-	-	-	-	-	-	-	355	405	456	559	680
400	430	133	574	178	861	267	-	-	-	-	-	-	-	-	-	365	416	520	642
450	383	119	511	158	766	238	-	-	-	-	-	-	-	-	-	-	369	475	598
500	345	107	460	143	691	214	-	-	-	-	-	-	-	-	-	-	-	427	552

VAR 300

Pitch length [mm]	Speed range - center distances																	
	Speed range in rpm of driven pulley with drive VAR pulley (rpm)						Belts inside length in mm											
	750		1000		1500		995	1055	1115	1175	1245	1315	1395	1495	1595	1795	2000	2240
	Min.	Max.	Min.	Max.	Min.	Max.	Center distances in mm calculated with belts 54x16											
180	1164	362	1553	483	2339	724	-	-	-	-	280	316	356	407	457	558	658	778
200	1052	327	1403	436	2105	655	-	-	-	-	266	301	342	892	442	543	643	763
224	943	293	1258	391	1887	587	-	-	-	-	-	284	324	374	424	525	625	745
250	848	264	1131	352	1697	528	-	-	-	-	-	-	304	355	405	505	605	725
280	760	236	1013	315	1520	473	-	-	-	-	-	-	-	331	381	481	581	701
315	678	210	904	281	1356	421	-	-	-	-	-	-	-	-	354	454	554	674
355	603	187	804	250	1206	375	-	-	-	-	-	-	-	-	-	421	521	642
400	536	167	715	222	1073	334	-	-	-	-	-	-	-	-	-	383	484	604
450	478	148	637	198	956	297	-	-	-	-	-	-	-	-	-	-	440	562
500	431	134	574	178	862	268	-	-	-	-	-	-	-	-	-	-	394	517

Components

SIT Taper bushing SER-SIT®

Description

SER-SIT® taper lock bush is designed to give the following:
• perfect assembly
• rapid dismounting of the pulley and other transmission equipment
• no special tools requirementexcept hexagonal key.

The large range of available finished bores ensures that an immediate assembly can be made thus avoiding costly factory downtime. The bushes are machined with keyways in accordance with UNI and DIN specifications. This is in addition to clamping screws which, in many cases, are sufficient to meet the required torque. Fastening by SER-SIT® bushes allows the removal of any clearance between hub and bore so that fretting corrosion is positively eliminated. SER-SIT® bushes are interchangeable with all similar types sold throughout the world.

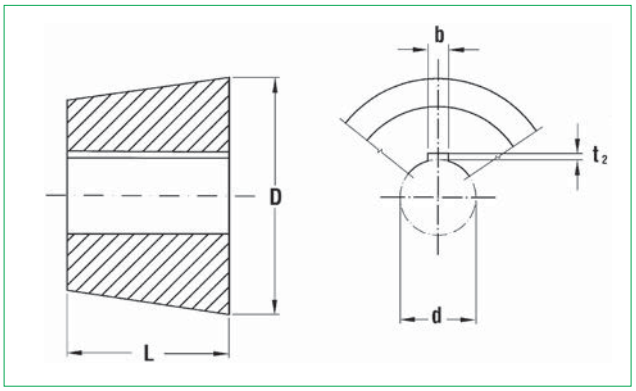
Keyway UNI 6604-69 / DIN 6885

Diameter of the bore [mm]	**b** [mm]	t_2 [mm]	Diameter of the bore [pitches]	**b** [pitches]	t_2 [pitches]
9 ÷ 10	3	1,4	**3/8 - 1/2**	1/8	1/16
11 ÷ 12	4	1,8	**9/16 - 3/4**	3/16	3/32
13 ÷ 17	5	2,3	**13/16 - 1**	1/4	1/8
18 ÷ 22	6	2,8	**1-1/16 - 1-1/4**	5/16	1/8
23 ÷ 30	8	3,3	**1-5/16**	3/8	1/8
31 ÷ 38	10	3,3	**1-5/8 - 1-3/4**	7/16	5/32
39 ÷ 44	12	3,3	**1-7/8 - 2**	1/2	5/32
45 ÷ 50	14	3,8	**2-1/8 - 2-1/2**	5/8	7/32
51 ÷ 58	16	4,3	**2-5/8 - 3**	3/4	1/4
59 ÷ 65	18	4,4	**3-1/8 - 3-1/2**	7/8	5/16
66 ÷ 75	20	4,9	**3-3/4 - 4**	1	3/8
76 ÷ 85	22	5,4	**4-1/4 ÷ 5**	1-1/4	7/16
86 ÷ 95	25	5,4			
96 ÷ 110	28	6,4			
111 ÷ 130	32	7,4			

Reduced keyway to be considered only for cases shown in the below table.

Diameter of the bore [mm]	Taper Bushing SER-SIT® type	**b** [mm]	t_2 [mm]
24 - 25	1008	8	1,3
28	1108	8	1,3
35	1310	10	1,3
42	1615	12	2,2
65	2517	18	3,3
Diameter of the bore [pitches]	Taper Bushing SER-SIT® type	**b** [pitches]	t_2 [pitches]
1	1008	1/4	1/16
1-1/8	1108	5/16	5/64
1-5/8 - 1-3/4	1615	7/16	1/8
3-1/2	3535	7/8	1/4
3-3/4 - 4	4040	1	1/4

Technical features of taper bushings SER-SIT®



Part Number	BC	4025	F20
Taper bushing SER-SIT®			
Size			
Bore diameter [mm]			

Taper Bushing SER-SIT® size			Diameter of the bore d	L [mm]	D [mm]	screws N°	screws Withworth	screws Length [mm]	screws Key [mm]	M_S [Nm]
1008	**(25.20)**	mm inches	11 12 14 15 16 18 19 20 22 **24*** **25*** 3/8 1/2 5/8 3/4 7/8 **1***	22,3	35	2	1/4	13	3	5,5
1108	**(28.20)**	mm inches	11 12 14 15 16 17 18 19 20 22 24 25 **26** **27** **28*** 3/8 1/2 5/8 3/4 7/8 1 **1 1/8***	22,3	38	2	1/4	13	3	5,5
1210	**(30.25)**	mm inches	11 12 14 15 16 18 19 20 22 24 25 26 28 **30** **32** 1/2 5/8 3/4 7/8 1 1 1/8 **1 1/4**	25,4	47	2	3/8	16	5	20
1215	**(30.40)**	mm inches	12 14 15 16 18 19 20 22 24 25 26 28 **30** **32** 1/2 5/8 3/4 7/8 1 1 1/8 **1 1/4**	38,1	47	2	3/8	16	5	20
1310	**(35.25)**	mm inches	14 16 18 19 20 22 24 25 28 30 32 **35*** 1/2 5/8 3/4 7/8 1 1 1/8 1 1/4 **1 3/8**	25,4	52	2	3/8	16	5	20
1610	**(40.25)**	mm inches	12 14 15 16 18 19 20 22 24 25 26 28 30 32 35 38 **40** **42** 3/8 1/2 5/8 3/4 7/8 1 1 1/8 1 1/4 1 3/8 1 1/2 **1 5/8**	25,4	57	2	3/8	16	5	20
1615	**(40.40)**	mm inches	12 14 15 16 18 19 20 22 24 25 26 28 30 32 35 38 **40** **42*** 1/2 5/8 3/4 7/8 1 1 1/8 1 1/4 1 3/8 1 1/2 **1 5/8*** **1 3/4***	38,1	57	2	3/8	16	5	20
2012	**(50.30)**	mm inches	14 15 16 18 19 20 22 24 25 26 28 30 32 35 38 40 42 45 48 **50** 5/8 3/4 7/8 1 1 1/8 1 1/4 1 3/8 1 1/2 1 5/8 1 3/4 1 7/8 **2**	31,8	70	2	7/16	22	5	30
2517	**(65.45)**	mm inches	18 19 20 22 24 25 28 30 32 35 38 40 42 45 48 50 55 60 **65*** 3/4 7/8 1 1 1/8 1 1/4 1 3/8 1 1/2 1 5/8 1 3/4 1 7/8 2 2 1/8 2 1/4 2 3/8 2 1/2	44,5	85	2	1/2	25	6	50
3020	**(75.50)**	mm inches	22 25 28 30 32 35 38 40 42 45 48 50 55 57 60 65 70 **75** 1 1/4 1 3/8 1 1/2 1 5/8 1 3/4 1 7/8 2 2 1/8 2 1/4 2 3/8 2 1/2 2 5/8 2 3/4 **2 7/8** **3**	50,8	108	2	5/8	32	8	90
3030	**(75.75)**	mm inches	25 28 30 32 35 38 40 42 45 47 48 50 55 60 65 70 **75** 1 1/4 1 3/8 1 1/2 1 5/8 1 3/4 1 7/8 2 2 1/8 2 1/4 2 3/8 2 1/2 2 5/8 2 3/4 **2 7/8** **3**	76,2	108	2	5/8	32	8	90
3535	**(90.90)**	mm inches	25 35 38 40 42 45 48 50 55 60 65 70 75 80 85 90 1 1/2 1 5/8 1 3/4 1 7/8 2 2 1/8 2 1/4 2 3/8 2 1/2 2 5/8 2 3/4 2 7/8 3 3 1/8 3 1/4 3 3/8 3 1/2*	88,9	127	3	1/2	38	10	115
4040	**(100.100)**	mm inches	40 42 45 50 55 60 65 70 75 80 85 90 95 100 1 3/4 2 2 3/4 3 1/2 3 3/4* 4*	101,6	146	3	5/8	44	14	170
4545	**(115.115)**	mm inches	55 60 65 70 75 80 85 90 95 100 105 110 3 3 1/2 4	114,3	162	3	3/4	51	14	195
5050	**(125.125)**	mm inches	50 60 65 70 75 80 85 90 95 100 110 115 120 125 3 1/2 4	127,0	178	3	7/8	57	17	275
6050**	**(150.125)**	mm inches	80-85-90-95-100-105-110-115-120-125-130-135-140-145-150	127,0	235	3	1-1/4	107	48	650

Taper bushing having bore diameters in **bold** type are made in steel instead of cast iron

M_S = screw tightening torque
* = reduced keyway
** = hexagonal head screw

Assembly and disassembling of SER-SIT® conical bushing

- Before fitting the bushing into the pulley, carefully clean the bore and the conical parts.
- Fit the bushing into the pulley taking care that the threaded half holes of the pulley are in coincidence of the unthreaded holes of the bushing.
- Hand tighten the screws.
- Fit the pulley to the shaft after having carefully cleaned it. Position it and tighten the screws alternately.
- Disassembly: remove screws and put a new one in the jacking hole tightening it until the hub is released.

Note
Ensure that the top of the keyway doesn't get in contact with the bottom of the seat. It is recommended to keep a certain clearance.

SER-SIT® conical bushing: slip torques and allowable axial load

The slip torques have been calculated considering the nominal tightening torque for the screws (Ms), a friction coefficient value η = 0,14 and in case of assembly without keyway.

Taper Bushing SER-SIT®	Bore diameter d [mm]	Slip torque [Nm]	Allowable axial load [N]
1008	12 19 24	29 51 66	3990 4940 5490
1108	12 19 24 28	28 49 64 79	- 4630 5220 5720
1210 + 1215	16 19 24 32	82 105 142 210	8840 9800 10900 12300
1610 + 1615	19 24 38 42	98 135 240 265	- 9570 11900 12700
2012	24 38 42 48 50	165 310 340 400 420	11500 14400 15700 - 16700
2517	24 38 42 48 55 60	220 380 430 510 600 670	- 17000 18500 - 21000 22300
3020 + 3030	38 48 55 60 75	520 730 890 970 1300	23900 26100 29900 31500 34500
3535	42 60 75 90	1000 1580 2150 2600	41000 49800 54800 59000
4040	48 60 75 100	1700 2300 3150 4400	- 70200 77200 89400
4545	55 75 100 110	2500 3900 5500 6300	79600 93000 107700 -
5050	75 100 125	3950 5650 7370	91800 106600 119500

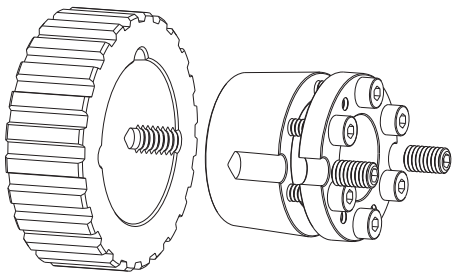
SIT SERLOCK®

SERLOCK® is the new patented, keyless self locking bushing for immediate use with all power transmission components suitable for the SER-SIT®, T/L or similar tapered bushings:

- Is directly interchangeable with SER-SIT® or T/L tapered bushings
- Available in 1108, 1210, 1610, 2012, 2517, 3020 sizes
- With bore diameters from 12 to 70 mm according to the bush sizes
- Allows infinite axial and angular adjustments

SERLOCK® is an innovative clamping system which combines all the advantages of SIT-LOCK® friction keyless bushings with the extensive availability of a wide range of PT components for tapered bushings such as:

- V and Poly-V Pulleys
- Timing Pulleys
- Couplings
- Sprockets



SERLOCK® eliminates:

- All problems related to conventional keyway systems (backlash, breakage, fretting corrosion, difficult disassembly, restrained axial and angular positioning of the component on the shaft);

- Additional machining on the component to be fixed on the shaft, required when using conventional cone/clamping elements.

With the following benefits:

- Immediate availability of the system (element to be clamped + advanced clamping system);
- Easy assembly and disassembly;
- Possibility of reducing the diameter of the shafts used by up to 25%;
- Easy angular and axial adjustment of the component with respect to the shaft;
- Possibility of using SERLOCK® also on shafts with keyway.

All this means an immediate advantage for the user as a result of the potential increase in productivity.

Assembly is extremely simple and fast:

1) Assemble SERLOCK® bushing to the hub by means of the two set screws;
2) Position the part on the shaft in the required axial and angular position;
3) Gradually tighten the set screws until the torque Ms, indicated in the technical tables, is achieved;
4) Tighten the clamping screws gradually and evenly according to the cross outline until the torque Ms, indicated in the technical tables is achieved.

NOTE:
Do not lubricate the SERLOCK® bushing or the shaft on which it is mounted.

To disassemble:

1) Disassemble the tightening screws;
2) Insert the screws in the threaded disassembly holes, tightening them until the tapered bushing is released;

In order to remove the outer ring, if necessary:

3) After having removed the inner bushing, loosen the set screws;
4) Keeping the loosened set screws in place, position the inner bushing rotated 30° in relation to the original position;
5) Insert the screws and tighten them gradually until the inner ring is released.

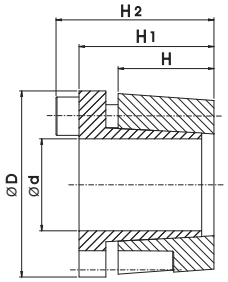
Order form

Part Number	SL	1108	F10

SL: SERLOCK®
Size
F...: bore diameter (mm)

Dimensions and performances of standard types

For different bore, sizes, or hollow shaft application, please contact our Technical Dept.
Shaft tolerance h8 or better if not otherwise specified, are shown in mm dimensions.



SERLOCK® 1108

Type	Dimensions [mm]					Performances		Screws				Setscrews			
	d	H	H1	H2	D	M_T [Nm]	F_{ax} [N]	N°	Tipo	M_S	Key	N°	Tipo	M_S	Key
SL1108F12	12	20	29,5	33,5	39	109	18200	6	M4	4,9	3	2	1/4 W	4,9	3
SL1108F14	14	20	29,5	33,5	39	128	18200	6	M4	4,9	3	2	1/4 W	4,9	3
SL1108F15	15	20	29,5	33,5	39	137	18200	6	M4	4,9	3	2	1/4 W	4,9	3
SL1108F16	16	20	29,5	33,5	39	146	18200	6	M4	4,9	3	2	1/4 W	4,9	3
SL1108F18	18	20	29,5	33,5	39	164	18200	6	M4	4,9	3	2	1/4 W	4,9	3
SL1108F19	19	20	29,5	33,5	39	173	18200	6	M4	4,9	3	2	1/4 W	4,9	3
SL1108F20	20	20	29,5	33,5	39	182	18200	6	M4	4,9	3	2	1/4 W	4,9	3
SL1108F22	22	20	29,5	33,5	39	201	18200	6	M4	4,9	3	2	1/4 W	4,9	3

SERLOCK® 1210

Type	Dimensions [mm]					Performances		Screws				Setscrews			
	d	H	H1	H2	D	M_T [Nm]	F_{ax} [N]	N°	Tipo	M_S	Key	N°	Tipo	M_S	Key
SL1210F14	14	25	37,5	43,5	49	246	35100	6	M6	14	5	2	3/8 W	14	5
SL1210F15	15	25	37,5	43,5	49	263	35100	6	M6	14	5	2	3/8W	14	5
SL1210F16	16	25	37,5	43,5	49	281	35100	6	M6	14	5	2	3/8 W	14	5
SL1210F18	18	25	37,5	43,5	49	316	35100	6	M6	14	5	2	3/8W	14	5
SL1210F19	19	25	37,5	43,5	49	333	35100	6	M6	14	5	2	3/8 W	14	5
SL1210F20	20	25	37,5	43,5	49	351	35100	6	M6	14	5	2	3/8W	14	5
SL1210F22	22	25	37,5	43,5	49	386	35100	6	M6	14	5	2	3/8 W	14	5
SL1210F24	24	25	37,5	43,5	49	421	35100	6	M6	14	5	2	3/8W	14	5
SL1210F25	25	25	37,5	43,5	49	438	35100	6	M6	14	5	2	3/8W	14	5

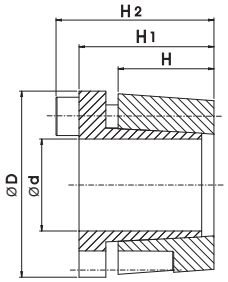
SERLOCK® 1610

Taglia	Dimensions [mm]					Performances		Screws				Setscrews			
	d	H	H1	H2	D	M_T [Nm]	F_{ax} [N]	N°	Tipo	M_S	Key	N°	Tipo	M_S	Key
SL1610F14	14	25	37,5	43,5	59	246	35100	6	M6	14	5	2	3/8 W	14	5
SL1610F15	15	25	37,5	43,5	59	263	35100	6	M6	14	5	2	3/8W	14	5
SL1610F16	16	25	37,5	43,5	59	281	35100	6	M6	14	5	2	3/8 W	14	5
SL1610F18	18	25	37,5	43,5	59	316	35100	6	M6	14	5	2	3/8W	14	5
SL1610F19	19	25	37,5	43,5	59	333	35100	6	M6	14	5	2	3/8 W	14	5
SL1610F20	20	25	37,5	43,5	59	351	35100	6	M6	14	5	2	3/8W	14	5
SL1610F22	22	25	37,5	43,5	59	386	35100	6	M6	14	5	2	3/8 W	14	5
SL1610F24	24	25	37,5	43,5	59	421	35100	6	M6	14	5	2	3/8W	14	5
SL1610F25	25	25	37,5	43,5	59	438	35100	6	M6	14	5	2	3/8W	14	5
SL1610F26	26	25	37,5	43,5	59	456	35100	6	M6	14	5	2	3/8W	14	5
SL1610F28	28	25	37,5	43,5	59	491	35100	6	M6	14	5	2	3/8 W	14	5
SL1610F30	30	25	37,5	43,5	59	526	35100	6	M6	14	5	2	3/8W	14	5
SL1610F32	32	25	37,5	43,5	59	561	35100	6	M6	14	5	2	3/8 W	14	5
SL1610F35	35	25	34,8	40,8	59	614	35100	6	M6	14	5	2	3/8W	14	5

M_T	Transmissible torque moment	Nm
M_S	Screw tightening torque	Nm
F_{ax}	Transmissible axial load	N

SERLOCK® 2012

Type	Dimensions [mm]					Performances		Screws				Setscrews			
	d	H	H1	H2	D	MT [Nm]	Fax [N]	N°	Tipo	Ms	Key	N°	Tipo	Ms	Key
SL2012F19	19	30	45,5	53,5	71	436	45900	6	M8	25	6	2	7/16 W	25	6
SL2012F20	20	30	45,5	53,5	71	459	45900	6	M8	25	6	2	7/16 W	25	6
SL2012F22	22	30	45,5	53,5	71	505	45900	6	M8	25	6	2	7/16 W	25	6
SL2012F24	24	30	45,5	53,5	71	551	45900	6	M8	25	6	2	7/16 W	25	6
SL2012F25	25	30	45,5	53,5	71	574	45900	6	M8	25	6	2	7/16 W	25	6
SL2012F26	26	30	45,5	53,5	71	597	45900	6	M8	25	6	2	7/16 W	25	6
SL2012F28	28	30	45,5	53,5	71	643	45900	6	M8	25	6	2	7/16 W	25	6
SL2012F30	30	30	45,5	53,5	71	689	45900	6	M8	25	6	2	7/16 W	25	6
SL2012F32	32	30	45,5	53,5	71	735	45900	6	M8	25	6	2	7/16 W	25	6
SL2012F35	35	30	45,5	53,5	71	804	45900	6	M8	25	6	2	7/16 W	25	6
SL2012F38	38	30	45,5	53,5	71	873	45900	6	M8	25	6	2	7/16 W	25	6
SL2012F40	40	30	45,5	53,5	71	919	45900	6	M8	25	6	2	7/16 W	25	6
SL2012F42	42	30	45,5	53,5	71	965	45900	6	M8	25	6	2	7/16 W	25	6



SERLOCK® 2517

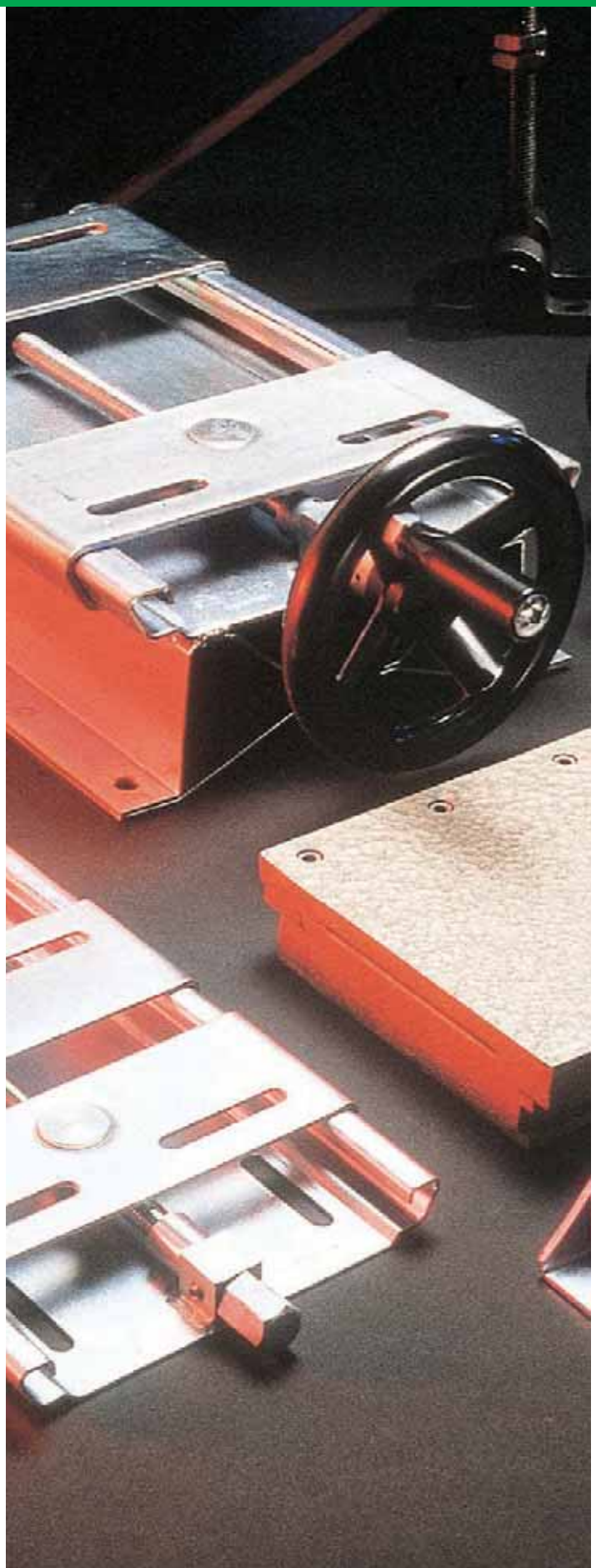
Type	Dimensions [mm]					Performances		Screws				Setscrews			
	d	H	H1	H2	D	MT [Nm]	Fax [N]	N°	Tipo	Ms	Key	N°	Tipo	Ms	Key
SL2517F24	24	45	60,5	68,5	86	551	45900	6	M8	25	6	2	1/2 W	35	6
SL2517F25	25	45	60,5	68,5	86	574	45900	6	M8	25	6	2	1/2 W	35	6
SL2517F26	26	45	60,5	68,5	86	597	45900	6	M8	25	6	2	1/2 W	35	6
SL2517F28	28	45	60,5	68,5	86	643	45900	6	M8	25	6	2	1/2 W	35	6
SL2517F30	30	45	60,5	68,5	86	689	45900	6	M8	25	6	2	1/2 W	35	6
SL2517F 32	32	45	60,5	68,5	86	735	45900	6	M8	25	6	2	1/2 W	35	6
SL2517F35	35	45	60,5	68,5	86	804	45900	6	M8	25	6	2	1/2 W	35	6
SL2517F38	38	45	60,5	68,5	86	873	45900	6	M8	25	6	2	1/2 W	35	6
SL2517F40	40	45	60,5	68,5	86	919	45900	6	M8	25	6	2	1/2 W	35	6
SL2517F42	42	45	60,5	68,5	86	965	45900	6	M8	25	6	2	1/2 W	35	6
SL2517F45	45	45	60,5	68,5	86	1034	45900	6	M8	25	6	2	1/2 W	35	6
SL2517F48	48	45	60,5	68,5	86	1103	45900	6	M8	25	6	2	1/2 W	35	6
SL2517F50	50	45	60,5	68,5	86	1148	45900	6	M8	25	6	2	1/2 W	35	6
SL2517F55	55	45	60,5	68,5	86	1263	45900	6	M8	25	6	2	1/2 W	35	6

SERLOCK® 3020

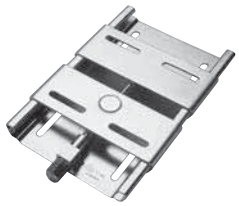
Type	Dimensions [mm]					Performances		Screws				Setscrews			
	d	H	H1	H2	D	MT [Nm]	Fax [N]	N°	Tipo	Ms	Key	N°	Tipo	Ms	Key
SL3020F30	30	50	68,5	78,5	108	993	66200	6	M10	49	8	2	5/8 W	65	8
SL3020F32	32	50	68,5	78,5	108	1059	66200	6	M10	49	8	2	5/8 W	65	8
SL3020F35	35	50	68,5	78,5	108	1159	66200	6	M10	49	8	2	5/8 W	65	8
SL3020F38	38	50	68,5	78,5	108	1258	66200	6	M10	49	8	2	5/8 W	65	8
SL3020F40	40	50	68,5	78,5	108	1324	66200	6	M10	49	8	2	5/8 W	65	8
SL3020F42	42	50	68,5	78,5	108	1391	66200	6	M10	49	8	2	5/8 W	65	8
SL3020F45	45	50	68,5	78,5	108	1490	66200	6	M10	49	8	2	5/8 W	65	8
SL3020F48	48	50	68,5	78,5	108	1589	66200	6	M10	49	8	2	5/8 W	65	8
SL3020F50	50	50	68,5	78,5	108	1655	66200	6	M10	49	8	2	5/8 W	65	8
SL3020F55	55	50	68,5	78,5	108	1821	66200	6	M10	49	8	2	5/8 W	65	8
SL3020F60	60	50	68,5	78,5	108	1986	66200	6	M10	49	8	2	5/8 W	65	8
SL3020F65	65	50	68,5	78,5	108	2152	66200	6	M10	49	8	2	5/8 W	65	8
SL3020F70	70	50	68,5	78,5	108	2318	66200	6	M10	49	8	2	5/8 W	65	8

M_T	Transmissible torque moment	Nm
M_S	Screw tightening torque	Nm
F_{ax}	Transmissible axial load	N

Motor Bases

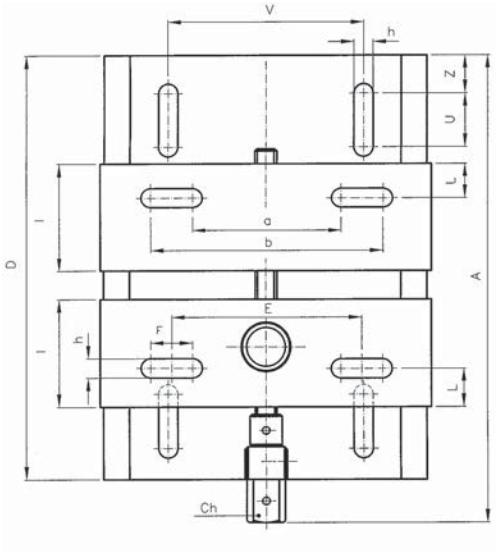


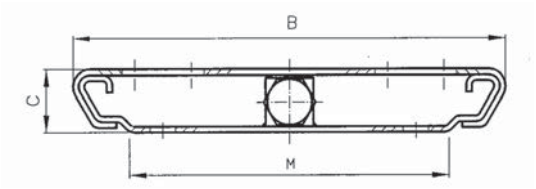
MOTOR BASES COMPATTA - TC



Description

COMPATTA motor base is very easy to install, it is suitable for any motor type and it has a reduced height.
The motor base setting is adjustable by spanner without moving the motor bolts and without compromising the drive alignment. The motor base have been designed to allow a wide adjustment range. The six models described below are available at stock. This motor base series is manufactured in galvanized steel, other material like stainless steel are available on request.
SIT is capable to manufacture customized motor bases in accordance with customer requirements.





Part Number **TC** **MEDIA**

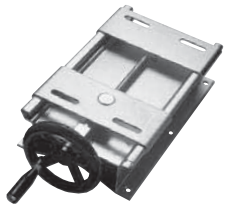
TC: motor bases Compatta

Size

Motor Bases Type	Motor size	56M	63M	71M	80M	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
TC 80 (mignon)	Max adjustment [mm]	98	88	76	63	-	-	-	-	-	-	-	-	-	-	-	-	-
TC 90 (piccola)		-	-	118	105	90	90	-	-	-	-	-	-	-	-	-	-	-
TC 112 (junior)		-	-	-	169	154	154	134	105	-	-	-	-	-	-	-	-	-
TC 132 (media)		-	-	-	-	208	208	188	158	132	132	-	-	-	-	-	-	-
TC 180 (maxi)		-	-	-	-	-	-	-	-	-	-	176	176	151	151	-	-	-
TC 225 (magnum)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	182	144	144

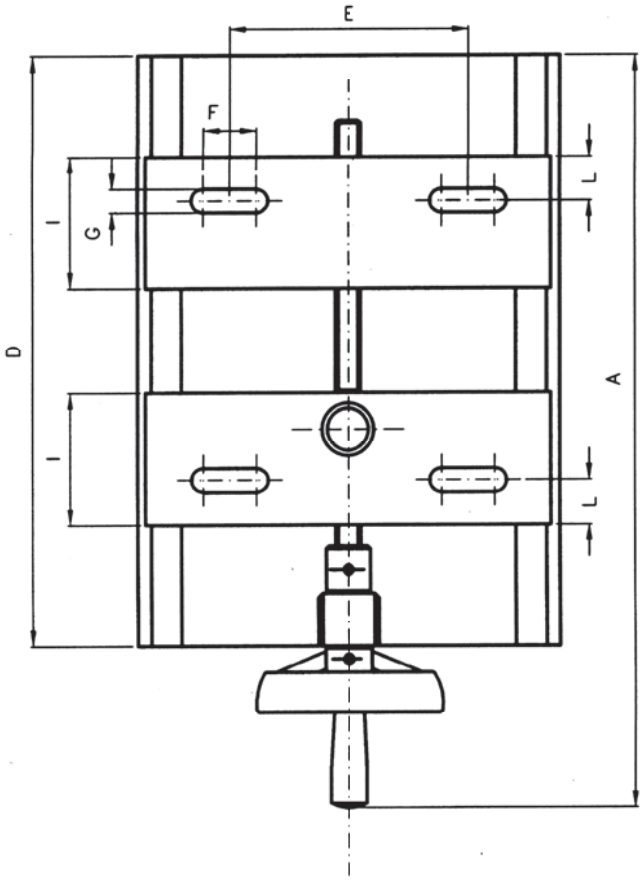
Motor Base Type	Electric Motor Size	Electric Motor Power 2 poles (2.800 giri/min) [kW]	Electric Motor Power 4 poles (1.400 giri/min) [kW]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	I [mm]	L [mm]	M [mm]	Ch [mm]	V [mm]	Z [mm]	U [mm]	a x b x h [mm]	Weight [kg]
TC 80 (mignon)	56÷80	0,12-1,1	0,1-0,75	240	154	22	220	85	25	50	16	113	15	90	25	40	60x110x9	1,5
TC 90 (piccola)	71÷90	0,37-2,2	0,25-1,5	293	180	25	270	90	45	70	20	134	16	110	25	40	45x135x9	2,0
TC 112 (junior)	80÷112	0,75-4	0,55-4	365	220	30	340	110	43,5	85	23	163	17	130	25	50	66,5x153,5x13	3,5
TC 132 (media)	90÷132	1,5-9	1,1-7,5	430	250	35	400	134	47,5	100	26	185	22	150	25	60	86,5x181,5x13	5,8
TC 180 (maxi)	160÷180	15-25	11-22	532	380	40	500	220	60	125	35	305	24	260	25	60	160x280x15	12,0
TC 225 (magnum)	200÷225	30-45	30-45	635	448	50	600	280	55	160	50	338	27	300	30	70	225x335x18	22,5

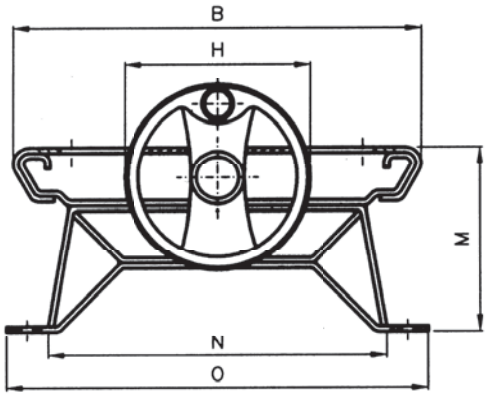
MOTOR BASES VAREX - TX

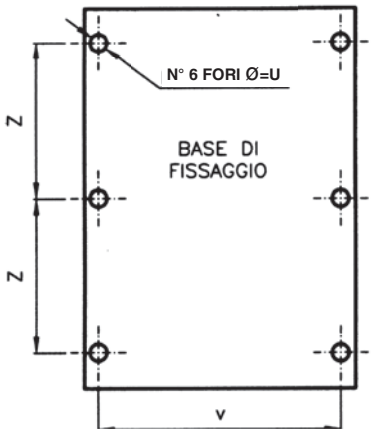


Description

The VAREX motor bases (made of galvanized steel), are an economical and optimal solution in the variable speed systems made with variable speed pulley in which the axial displacement of the electric motor allows a continuous speed variation of the driven shaft.







Motor Bases Type	Motor size	56M	63M	71M	80M	90S	90L	100L	112M	132S	132M
TX (mignon)	Max adjustment [mm]	98	88	76	63	-	-	-	-	-	-
TX (piccola)		-	-	118	105	90	90	-	-	-	-
TX (media)		-	-	-	-	208	208	188	158	132	132

Part Number **TX** **MEDIA**

TX: motor bases Varex

Size

Motor Bases Type	Electric Motor Size	Electric Motor Power 2 poles (2.800 giri/min) [kW]	Electric Motor Power 4 poles (1.400 giri/min) [kW]	A [mm]	B [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	L [mm]	M [mm]	N [mm]	O [mm]	U [mm]	V [mm]	Z [mm]	Weight [kg]
TX (mignon)	55-80	0,12-1,1	0,1-0,75	323	158	220	85	25	9	100	50	16	73	116	160	8,5	134	95	2,8
TX (piccola)	71-90	0,37-2,2	0,25-1,5	394	182	270	90	45	9	120	70	20	90	140	184	8,5	164	110	4,0
TX (media)	90-132	1,5-9	1,1-7,5	545	250	400	134	47	13	156	100	26	110	192	248	10,5	220	180	10,0

MOTOR BASES LINEA - TT

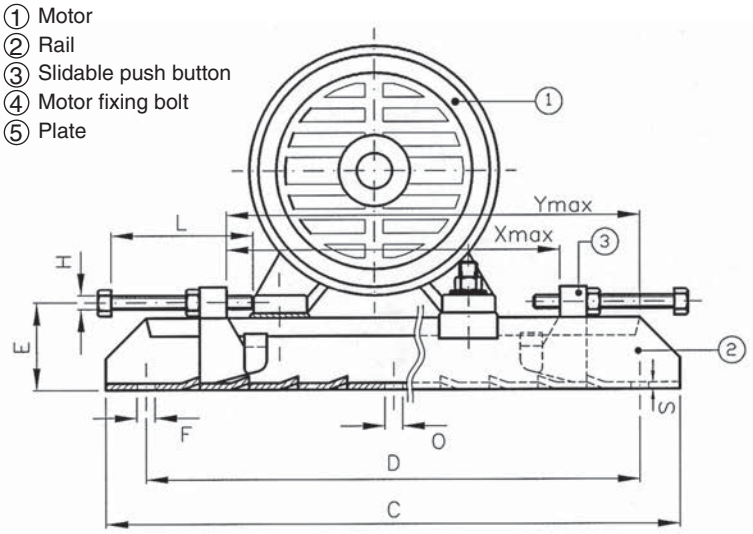
Description

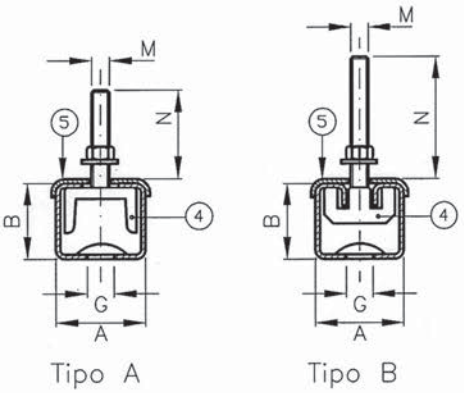
This new range of universal motor bases “LINEA” (made of galvanized steel) allows the mounting and adjustment of all types of electric motors in almost all positions. In case of mounting upside-down, please consult our technical department.
The very strong construction of the “LINEA” motor bases and the special fixing elements allow all types of combinations by the positioning of the adjusting threaded elements.

The mounting of the electric motors is made easy by a reduced number of standard components and by the correct keeping of position of the fixing element in the motor base.
The “LINEA” motor bases may be fixed to their basement by means of bolts as well as by welding when the basement is steel made.

Part Number	TT	100/10
TT: motor bases Linea		
Size		

① Motor
② Rail
③ Slidable push button
④ Motor fixing bolt
⑤ Plate





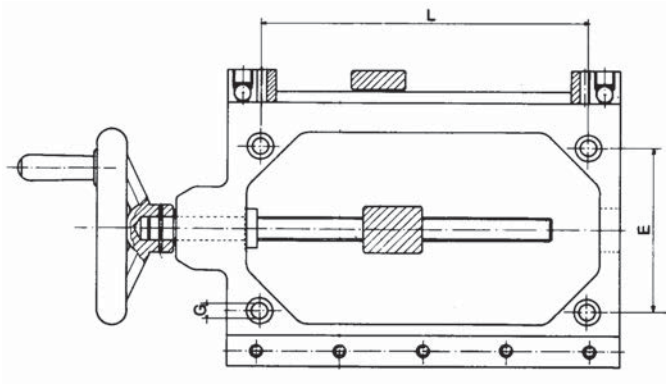
Stirrup Type	Motor Base Type	Motor	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	L [mm]	M [mm]	N [mm]	X max. [mm]	Y max. [mm]	S [mm])	Weight [kg]
Tipo A	**TT71/6**	56-71	47	31	312	280	38	13	18	M8	80	M6	25	180	220	2,5	2,4
	TT80/8	80	47	31	375	343	38	13	18	M8	80	M8	30	240	280	2,5	2,7
	TT90/8	80-90	59	36	395	355	45	13	21	M10	100	M8	35	245	300	3	4,3
	TT100/10	100	59	36	395	355	45	13	21	M10	100	M10	40	245	300	3	4,4
	TT112/10	100-112	59	36	495	455	45	13	21	M10	100	M10	40	345	400	3	5,2
Tipo B	**TT132/10**	100-132	65	40	530	480	52	17	26	M12	120	M10	45	360	420	3,5	7,8
	TT160/12	160	65	40	630	580	52	17	26	M12	120	M12	50	460	520	3,5	8,8
	TT180/12	160-180	75	42	700	630	57	17	26	M12	120	M12	50	520	580	4	12,0
	TT225/16	200-225	82	50	864	800	68	17	27	M16	140	M16	65	670	740	5	20,4
	TT280/20	250-280	116	70	1072	1000	90	20	27	M18	150	M20	80	870	940	6	43,0
	TT355/24	315-355	116	70	1330	1250	90	24	27	M18	150	M24	100	1130	1200	6	52,0
	TT400/30	400	116	70	1430	1350	90	24	30	M18	150	M30	100	1230	1300	6	58,0

MOTOR BASES TV 909

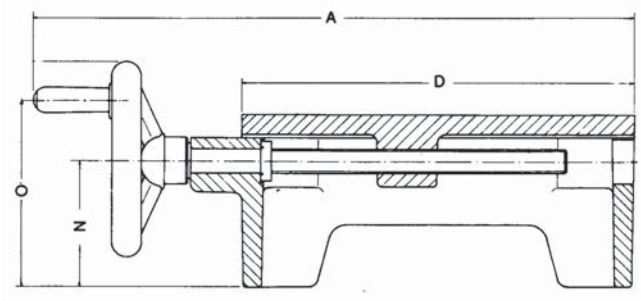
Description

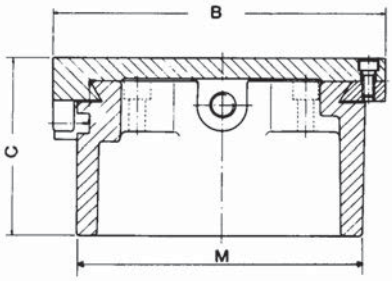
The motor bases TV909, made in cast iron, have been designed to allow speed variation through the axial displacement of the electric motor equipped with a variable speed pulley.
The rigidity and the possibility of fine regulation of this motor base by means of a system made by a hand wheel guided screw, allow to solve applications where the speed of the driven shaft must be set very precisely.

The sliding is ensured by two dovetail guides largely dimensioned that allow a very easy setting.
To fix the motor base it is sufficient to move the top surface in both directions turning the handwheel, in order to uncover the fixing holes.



Part Number	TV909	G2
TV: motor bases TV909		
Size		



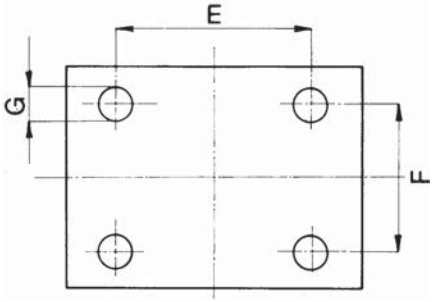


Motor Base Type	A [mm]	B [mm]	C [mm]	D mm]	E [mm]	G [mm]	L [mm]	M [mm]	N [mm]	O [mm]	Max Adjustment [mm]	Weight [kg]
TV909 G1	332	163	87	201	85	8,0	163	135	62	97	98	6,7
TV909 G2	400	217	114	254	118	10,5	211	189	83	128	158	13,6
TV909 G3	568	293	128	354	180	13,0	303	258	96	151	217	24,5

MOTOR BASES TV 910

Description

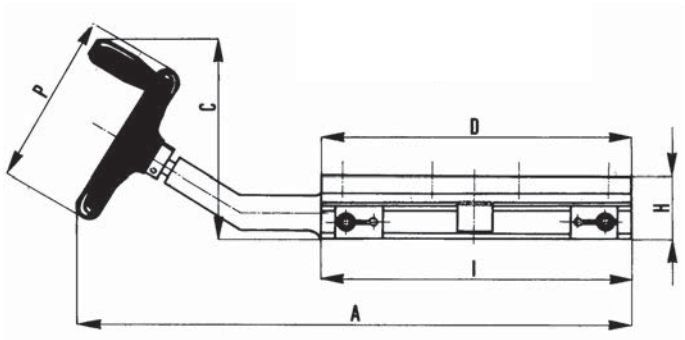
The motor bases TV910, made of cast iron, have the same technical characteristics of the 909 model but they have been designed with a reduced thickness in order to solve problems where compact design is needed.
The handwheel is mounted on the top of tail support and the connection between its axis and the screw adjustment system is made by an universal joint that allows a backlash free transmission.
The handwheel is located higher than the basement allowing, in that way, the use of these motor bases where the encumbrance limits do not allow the use of other products.

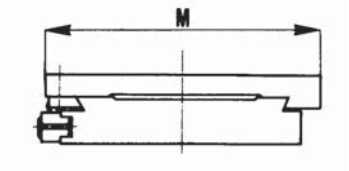


Part Number **TV910** **G2**

TV: motor bases TV910

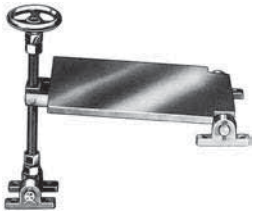
Size





Motor Base Type	A [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	M [mm]	P [mm]	Max Adjustment [mm]	Weight [kg]
TV910 G1	345	135	189	130	65	10,5	44	188	151	100	78	6,1
TV910 G2	420	147	228	150	80	10,5	44	230	177	100	131	8,9
TV910 G3	475	170	267	185	108	12,5	55	269	222	123	171	14,5

Adjustable Motor Bases TB 911

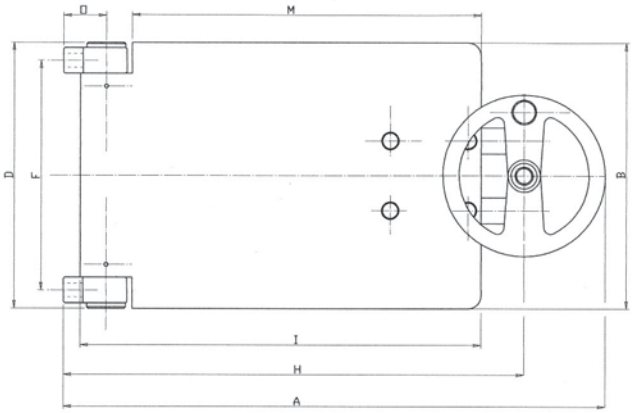


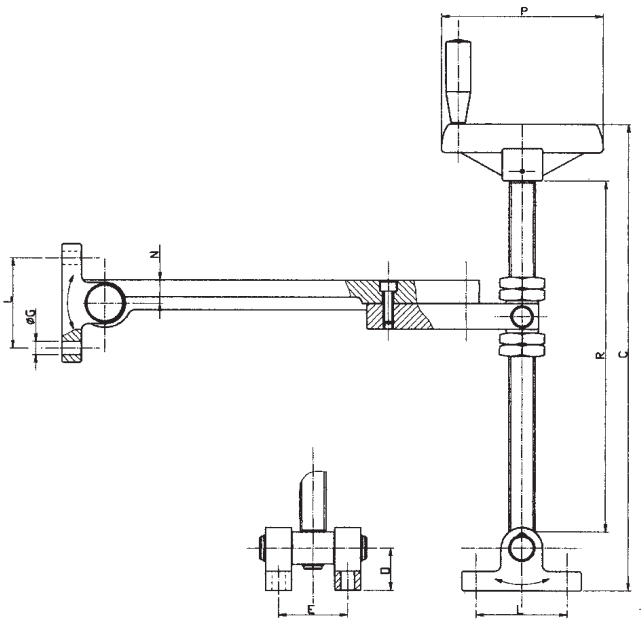
Description

The adjustable pivot plate motor bases TB 911, made-up of cast iron and steel, have been designed for speed variation application with variable speed pulley in which the displacement of the motor can be made only by pivoting.
These motor bases consist of a jointed fixing plate and a screw regulation system with hand wheel jointed as well in order to allow pivoting.

The outfit is kept in two different planes by jointing axis and double pillow blocks dimensioned to give a high rigidity to the mounting. The designed reduction is sufficient to have the regulation range desired in all applications. This type of motor base may equally be used to ensure the belt tensioning between an electric motor and a driven machine in those cases where the encumbrance does not allow the use of conventional motor bases.

Part Number	TB	1
TB: motor bases TB911		
Size		





Motor Base Type	A* [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H* [mm]	I [mm]	L [mm]	M [mm]	N [mm]	O [mm]	P [mm]	R [mm]	Weight [kg]
TB 1	413	206	346	206	53	172	11	351	308	70	268	18	33	125	273	9,4
TB 2	548	316	520	315	58	280	11	486	436	70	391	22	36	125	443	20,0

* With 90° angle between handwheel axle and basement

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.	

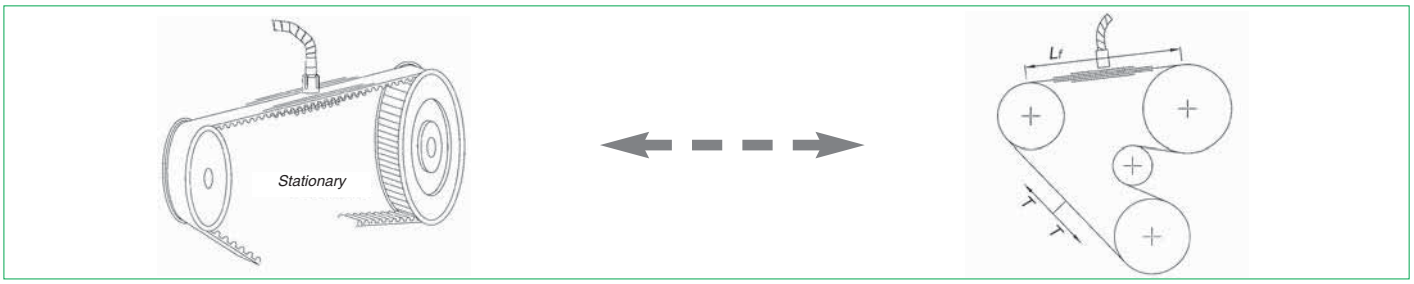
Key features

- 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.

SIT LINE-LASER® - pulleys alignment laser device

In order to get the proper performances and lifetime of the belt drive, pulley must be correctly aligned. The LINE-LASER® is the ideal solution for the perfect and quick alignment.

Light and reliable, it combines the laser technology precision with the easy use.

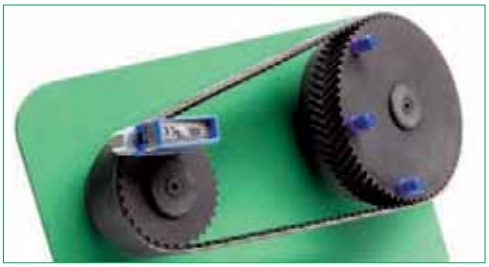
Advantages

- Belts, pulleys and bearings longer life
- Suitable for any pulley type
- Vibrations reduction
- It corrects axial and angular misalignments
- Lower friction and energy consumption
- Three control references

Characteristics

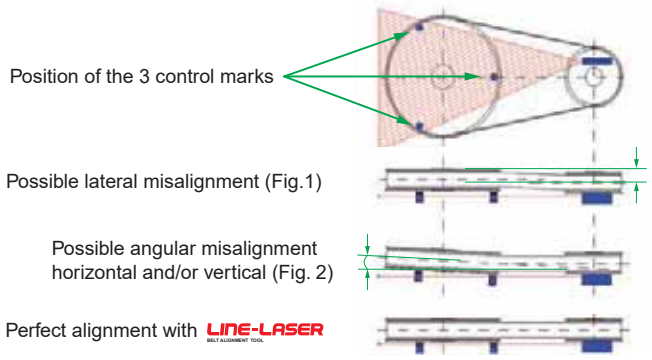
- Max allowable center distance: 2 meters (more than can be used, but the beam width is added to the error of pointing)
- Maximum error: 1 mm per meter

Note: The device, by shocks (eg. Accidental fall) could lose the alignments.
Check periodically on a reference surface the tool alignment.



Drive alignment

Synchronous belts are very sensitive to misalignment. Tension carrying members are generally twisted, multiple strands, of fibre-glass cord. Fibreglass has a high tensile strength and resistance to elongation, resulting in a very stable belt product. Any misalignment will lead to inconsistent belt wear, uneven load distribution and premature tensile failure. In general, synchronous drives should not be used where misalignment is a problem.
Misalignment should be limited to 1/4 degree or 4.3 mm per metre of centre distance.
Misalignment can be defined in one of two ways. First, if two sprockets are not located equally on shafts, sprockets are then misaligned, as in Fig. 1. Second, shafts may not be parallel, resulting in misalignment, as in Fig. 2.



Misaligned

Any degree of misalignment will reduce belt life and cause edge wear. Therefore, LINE-LASER® should be used to check proper alignment verifying that sprockets and shafts are parallel.
Misalignment, at times, may cause tracking problems. Although some tracking is normal and won't affect belt performance, it may be caused by poorly aligned sprockets. Flanges may control a tracking problem. Considering a two sprocket drive, belt contact on a single flange is acceptable. Belt contact with the opposite flanges of two sprockets should be avoided.

Aligned

Misalignment can also be attributed to the improper installation of a bushing or loose drive framework. Refer to sprocket manufacture guidelines for proper bushing installation. Secure motor and framework to eliminate vibration centre to centre fluctuations.

Belt storage

The transmission belts must be stored at a temperature between the 15 and the 20 °C , in a dry and clean place. They must be stored in a horizontal position to avoid deformations.

The belts must never be bent or hung on spikes or hooks. A long exposure to the direct sunlight and light can damage belts.