

SIT Poly-V pulleys

SIT POLY-V pulleys are designed and manufactured with extreme accuracy to ensure optimal lifetime and performance of the transmission systems.

SIT is able to provide custom made solution to fulfil any specific technical requirement.

For mounting taper bushing SER-SIT®

Material: steel for diameters up to 50 mm
grey cast iron (GG25) for diameters exceeding 50 mm.

Finishing: black manganese phosphating.

Sections:

- J
- K
- L
- M



Special executions

Besides the standard material on request are available special execution in aluminum, thermosetting plastics and thermoplastic. For peripheral speed exceeding 33 m/s it is strongly recommended to use steel as material of construction.

$$\text{peripheral speed [m/s]} = \frac{\text{pulley diameter [mm]} \cdot \text{rpm}}{19100}$$

Balancing

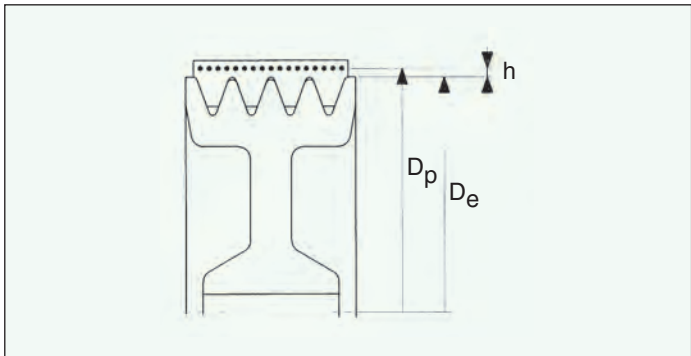
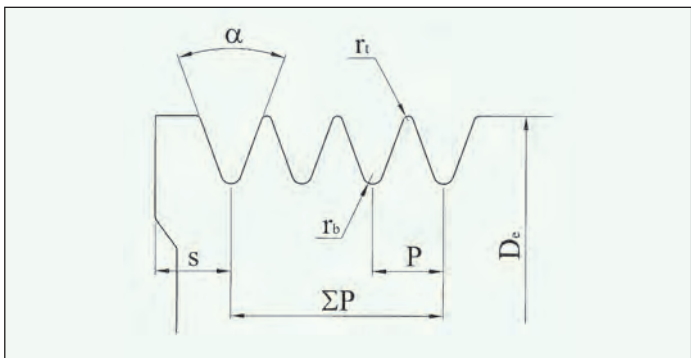
SIT Poly-V pulleys have a statically balanced degree of G6,3 at 1500 rpm in accordance with ISO 1940.

On request it is possible to perform static balancing at higher degrees or dynamic balancing.

GROOVES DIMENSIONS AND TOLERANCES

Complying with ISO 9982

Section	α°	P [mm]	Tolerance of ΣP [mm]	r_t min. [mm]	r_b min. [mm]	S min. [mm]	h [mm]
J	$40 \pm 0,5$	$2,34 \pm 0,03$	$\pm 0,03$	0,20	0,40	1,8	1,1
K	$40 \pm 0,5$	$3,56 \pm 0,05$	$\pm 0,03$	0,25	0,50	2,5	1,6
L	$40 \pm 0,5$	$4,70 \pm 0,05$	$\pm 0,03$	0,40	0,40	3,3	2,3
M	$40 \pm 0,5$	$9,40 \pm 0,08$	$\pm 0,03$	0,75	3,30	6,4	2,6



D_e = external diameter
 D_p = pitch length
 $h = (D_p - D_e)/2$

POLY-V PULLEYS - PYB

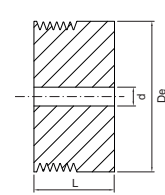
Dimensions of Poly-V pulleys - mounting taper bushing SER-SIT®

Pulleys with small diameter are supplied with solid hub execution prebored. (Ref. type 1)

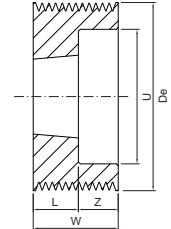


“PYB” Poly-V “J”

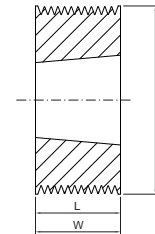
De [mm]	Number of grooves	Type	SER-SIT® Taper bushing	L [mm]	z [mm]	M [mm]	U [mm]	d [mm]	W [mm]
20	4	1	-	22,5	-	-	-	5,0	13,5
	8	1	-	32,0	-	-	-	5,0	23,0
	12	1	-	41,5	-	-	-	5,0	32,5
	16	1	-	51,0	-	-	-	5,0	42,0
	20	1	-	61,0	-	-	-	5,0	52,0
25	4	1	-	22,5	-	-	-	5,0	13,5
	8	1	-	32,0	-	-	-	5,0	23,0
	12	1	-	41,5	-	-	-	5,0	32,5
	16	1	-	51,0	-	-	-	5,0	42,0
	20	1	-	61,0	-	-	-	5,0	52,0
30	4	1	-	22,5	-	-	-	9,5	13,5
	8	1	-	32,0	-	-	-	9,5	23,0
	12	1	-	41,5	-	-	-	9,5	32,5
	16	1	-	51,0	-	-	-	9,5	42,0
	20	1	-	61,0	-	-	-	9,5	52,0
35	4	1	-	22,5	-	-	-	9,5	13,5
	8	1	-	32,0	-	-	-	9,5	23,0
	12	1	-	41,5	-	-	-	9,5	32,5
	16	1	-	51,0	-	-	-	9,5	42,0
	20	1	-	61,0	-	-	-	9,5	52,0
40	4	1	-	22,5	-	-	-	12,0	13,5
	8	1	-	32,0	-	-	-	12,0	23,0
	12	1	-	41,5	-	-	-	12,0	32,5
	16	1	-	51,0	-	-	-	12,0	42,0
	20	1	-	61,0	-	-	-	12,0	52,0
45	4	1	-	22,5	-	-	-	12,0	13,5
	8	1	-	32,0	-	-	-	12,0	23,0
	12	1	-	41,5	-	-	-	12,0	32,5
	16	1	-	51,0	-	-	-	12,0	42,0
	20	1	-	61,0	-	-	-	12,0	52,0
50	4	1	-	22,5	-	-	-	12,0	13,5
	8	1	-	32,0	-	-	-	12,0	23,0
	12	1	-	41,5	-	-	-	12,0	32,5
	16	1	-	51,0	-	-	-	12,0	42,0
	20	1	-	61,0	-	-	-	12,0	52,0
56	4	7	1108	23,0	9,5	50	-	-	13,5
	8	3	1108	23,0	-	-	-	-	23,0
	12	1	-	41,5	-	-	-	12,0	32,5
	16	1	-	51,0	-	-	-	12,0	42,0
	20	1	-	61,0	-	-	-	12,0	52,0
60	4	7	1108	23,0	9,5	50	-	-	13,5
	8	3	1108	23,0	-	-	-	-	23,0
	12	2	1108	23,0	9,5	-	45	-	32,5
	16	1	-	51,0	-	-	-	12,0	42,0
	20	1	-	61,0	-	-	-	12,0	52,0
63	4	7	1108	23,0	9,5	50	-	-	13,5
	8	3	1108	23,0	-	-	-	-	23,0
	12	2	1108	23,0	9,5	-	45	-	32,5
	16	1	-	51,0	-	-	-	12,0	42,0
	20	1	-	61,0	-	-	-	12,0	52,0
67	4	7	1108	23,0	9,5	50	-	-	13,5
	8	3	1108	23,0	-	-	-	-	23,0
	12	2	1108	23,0	9,5	-	51	-	32,5
	16	1	-	51,0	-	-	-	12,0	42,0
	20	1	-	61,0	-	-	-	12,0	52,0



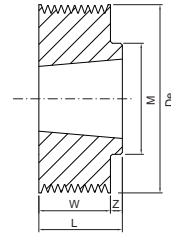
1



2



3



7

Part Number

PYB 200 J 8

Poly-V pulley for taper bushing

External diameter in mm

Profile

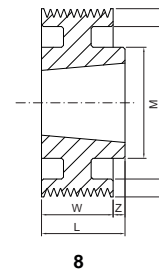
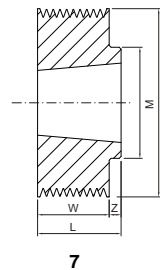
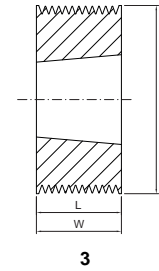
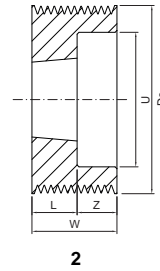
Number of ribs

Dimensions of Poly-V pulleys - mounting taper bushing SER-SIT®



» “PYB” Poly-V “J”

De [mm]	Number of grooves	Type	SER-SIT® Taper bushing	L [mm]	z [mm]	M [mm]	U [mm]	d [mm]
71	4	7	1108	23	9,5	60	-	13,5
	8	3	1108	23	-	-	-	23,0
	12	2	1108	23	9,5	-	55	32,5
	16	3	1215	42	-	-	55	42,0
	20	2	1215	42	10,0	-	55	52,0
75	4	7	1108	23	9,5	60	-	13,5
	8	3	1108	23	-	-	-	23,0
	12	2	1210	26	6,5	-	59	32,5
	16	2	1610	26	16,0	-	59	42,0
	20	2	1615	42	10,0	-	59	52,0
80	4	7	1310	26	12,5	70	-	13,5
	8	7	1310	26	3,0	70	-	23,0
	12	2	1610	26	6,5	-	64	32,5
	16	2	1610	26	16,0	-	64	42,0
	20	2	1615	42	10,0	-	64	52,0
85	4	7	1310	26	12,5	70	-	13,5
	8	7	1310	26	3,0	70	-	23,0
	12	2	1610	26	6,5	-	69	32,5
	16	2	1610	26	16,0	-	69	42,0
	20	2	1615	42	10,0	-	69	52,0
90	4	7	1610	26	12,5	82	-	13,5
	8	7	1610	26	3,0	82	-	23,0
	12	2	1610	26	6,5	-	74	32,5
	16	2	1610	26	16,0	-	74	42,0
	20	2	1615	42	10,0	-	74	52,0
95	4	7	1610	26	12,5	82	-	13,5
	8	7	1610	26	3,0	82	-	23,0
	12	2	1610	26	6,5	-	79	32,5
	16	2	1610	26	16,0	-	79	42,0
	20	2	1615	42	10,0	-	79	52,0
100	4	7	1610	26	12,5	82	-	13,5
	8	7	1610	26	3,0	82	-	23,0
	12	2	1610	26	6,5	-	82	32,5
	16	2	1610	26	16,0	-	82	42,0
	20	2	1615	42	10,0	-	82	52,0
106	4	7	1610	26	12,5	88	-	13,5
	8	7	1610	26	3,0	88	-	23,0
	12	2	1610	26	6,5	-	88	32,5
	16	2	1610	26	16,0	-	88	42,0
	20	2	1615	42	10,0	-	88	52,0
112	4	7	1610	26	12,5	90	-	13,5
	8	7	1610	26	3,0	90	-	23,0
	12	2	1610	26	6,5	-	94	32,5
	16	2	1610	26	16,0	-	94	42,0
	20	2	1615	42	10,0	-	94	52,0
118	4	7	1610	26	12,5	90	-	13,5
	8	7	1610	26	3,0	90	-	23,0
	12	2	2012	32	0,5	-	98	32,5
	16	2	2012	32	10,0	-	98	42,0
	20	2	2012	32	20,0	-	98	52,0
125	4	8	1610	26	12,5	90	109	13,5
	8	8	1610	26	3,0	90	109	23,0
	12	2	2012	32	0,5	-	105	32,5
	16	2	2012	32	10,0	-	105	42,0
	20	2	2517	45	7,0	-	105	52,0



POLY-V PULLEYS - PYB

Dimensions of Poly-V pulleys - mounting taper bushing SER-SIT®



» “PYB” Poly-V “J”

De [mm]	Number of grooves	Type	SER-SIT® Taper bushing	L [mm]	z [mm]	M [mm]	U [mm]	d [mm]
132	4	8	1610	26	12,5	90	116	13,5
	8	8	1610	26	3,0	90	116	23,0
	12	2	2012	32	0,5	-	112	32,5
	16	2	2012	32	10,0	-	112	42,0
	20	2	2517	45	7,0	-	112	52,0
140	4	8	1610	26	12,5	90	124	13,5
	8	8	1610	26	3,0	90	124	23,0
	12	7	2517	45	12,5	120	-	32,5
	16	7	2517	45	3,0	120	-	42,0
	20	2	2517	45	7,0	-	124	52,0
160	4	8	2012	32	18,5	110	144	13,5
	8	8	2012	32	9,0	110	144	23,0
	12	8	2517	45	12,5	120	140	32,5
	16	8	2517	45	3,0	120	140	42,0
	20	2	2517	45	7,0	-	140	52,0
180	4	6	2012	32	9,3	110	164	13,5
	8	6	2012	32	4,5	110	164	23,0
	12	6	2517	45	6,3	120	160	32,5
	16	6	2517	45	1,5	120	160	42,0
	20	5	2517	45	3,5	120	160	52,0
200	4	6	2012	32	9,3	110	185	13,5
	8	6	2012	32	4,5	110	185	23,0
	12	6	2517	45	6,3	120	180	32,5
	16	6	2517	45	1,5	120	180	42,0
	20	5	2517	45	3,5	120	180	52,0
224	4	6	2012	32	9,3	110	208	13,5
	8	6	2012	32	4,5	110	208	23,0
	12	6	2517	45	6,3	120	204	32,5
	16	6	2517	45	1,5	120	204	42,0
	20	5	2517	45	3,5	120	204	52,0
250	4	9	2012	32	9,3	110	234	13,5
	8	9	2012	32	4,5	110	234	23,0
	12	6	2517	45	6,3	120	230	32,5
	16	6	2517	45	1,5	120	230	42,0
	20	5	2517	45	3,5	120	230	52,0
280	4	9	2012	32	9,3	110	264	13,5
	8	9	2012	32	4,5	110	264	23,0
	12	9	2517	45	6,3	120	260	32,5
	16	9	2517	45	1,5	120	260	42,0
	20	10	2517	45	3,5	120	260	52,0
315	4	9	2012	32	9,3	110	299	13,5
	8	9	2012	32	4,5	110	299	23,0
	12	9	2517	45	6,3	120	295	32,5
	16	9	2517	45	1,5	120	295	42,0
	20	10	2517	45	3,5	120	295	52,0
355	4	9	2517	45	15,7	120	339	13,5
	8	9	2517	45	11,0	120	339	23,0
	12	9	2517	45	6,3	120	335	32,5
	16	9	3020	52	5,0	146	335	42,0
	20	10	3020	52	-	146	335	52,0
400	4	9	2517	45	15,8	120	380	13,5
	8	9	2517	45	11,0	120	380	23,0
	12	9	2517	45	6,3	120	380	32,5
	16	9	3020	52	5,0	146	380	42,0
	20	10	3020	52	-	146	380	52,0

