

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

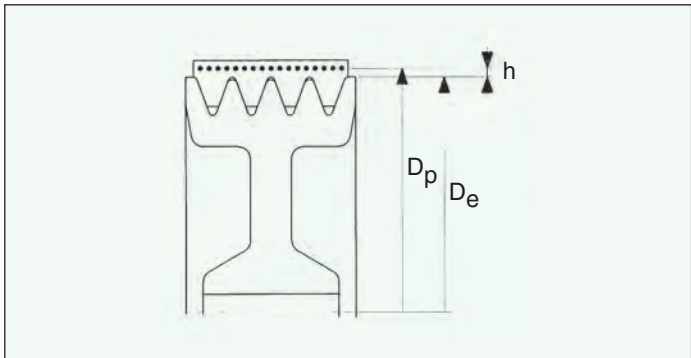
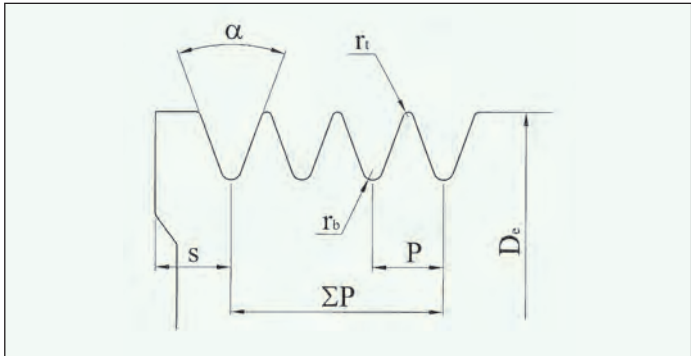
SIT Poly-V pulleys have a statically balanced degree of G6,3 at 1500 rpm in accordance with ISO 1940.

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
 $h = (D_p - D_e)/2$

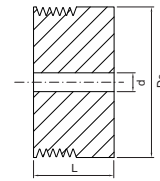
POLY-V PULLEYS - PYB

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

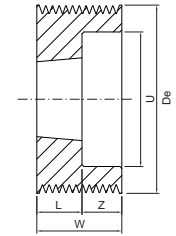


“PYB” Poly-V “K”

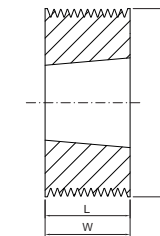
De [mm]	Number of grooves	Type	SER-SIT® Taper bushing	L [mm]	z [mm]	M [mm]	U [mm]	d [mm]	W [mm]
50	4	1	-	32	-	-	-	12	20,5
	6	1	-	40	-	-	-	12	28,5
	8	1	-	48	-	-	-	12	36,0
	10	1	-	54	-	-	-	12	42,0
	12	1	-	61	-	-	-	12	49,0
56	4	3	1108	20,5	-	-	-	-	20,5
	6	1	-	40	-	-	-	12	28,5
	8	1	-	48	-	-	-	12	36,0
	10	1	-	54	-	-	-	12	42,0
	12	1	-	61	-	-	-	12	49,0
60	4	3	1108	20,5	-	-	-	-	20,5
	6	2	1108	22	6,5	-	45	-	28,5
	8	1	-	48	-	-	-	12	36,0
	10	1	-	54	-	-	-	12	42,0
	12	1	-	61	-	-	-	12	49,0
63	4	3	1108	20,5	-	-	-	-	20,5
	6	2	1108	22	6,5	-	48	-	28,5
	8	1	-	48	-	-	-	12	36,0
	10	1	-	54	-	-	-	12	42,0
	12	1	-	61	-	-	-	12	49,0
67	4	3	1108	20,5	-	-	-	-	20,5
	6	2	1108	22	6,5	-	51	-	28,5
	8	1	-	48	-	-	-	12	36,0
	10	1	-	54	-	-	-	12	42,0
	12	1	-	61	-	-	-	12	49,0
71	4	3	1108	20,5	-	-	-	-	20,5
	6	2	1108	23	6,5	-	55	-	28,5
	8	2	1210	26	10	-	55	-	36,0
	10	3	1215	42	-	-	-	-	42,0
	12	2	1215	42	7	-	55	-	49,0
75	4	3	1108	20,5	-	-	-	-	20,5
	6	2	1210	26	2,5	-	59	-	28,5
	8	2	1210	26	10	-	59	-	36,0
	10	3	1215	42	-	-	-	-	42,0
	12	2	1215	42	7	-	59	-	49,0
80	4	7	1210	26	5,5	70	-	-	20,5
	6	2	1210	26	2,5	-	64	-	28,5
	8	2	1210	26	10	-	64	-	36,0
	10	3	1215	42	-	-	-	-	42,0
	12	2	1215	42	7	-	64	-	49,0
85	4	7	1210	26	5,5	70	-	-	20,5
	6	2	1210	26	2,5	-	69	-	28,5
	8	2	1210	26	10	-	69	-	36,0
	10	3	1215	42	-	-	-	-	42,0
	12	2	1215	42	7	-	69	-	49,0
90	4	7	1210	26	5,5	82	-	-	20,5
	6	2	1210	26	2,5	-	74	-	28,5
	8	2	1210	26	10	-	74	-	36,0
	10	3	1215	42	-	-	-	-	42,0
	12	2	1215	42	7	-	74	-	49,0
95	4	7	1610	26	5,5	90	-	-	20,5
	6	2	1610	26	2,5	-	79	-	28,5
	8	2	1610	26	10	-	79	-	36,0
	10	3	1615	42	-	-	-	-	42,0
	12	2	1615	42	7	-	79	-	49,0
100	4	7	1610	26	5,5	90	-	-	20,5
	6	2	1610	26	2,5	-	82	-	28,5
	8	2	1610	26	10	-	82	-	36,0
	10	3	1615	42	-	-	-	-	42,0
	12	2	1615	42	7	-	82	-	49,0



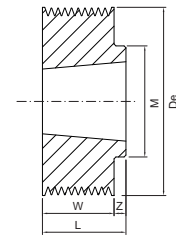
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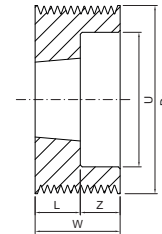
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Dimensions of Poly-V pulleys - mounting taper bushing SER-SIT®

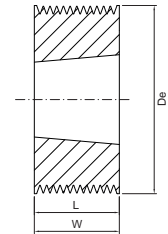


» “PYB” Poly-V “K”

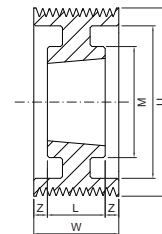
De [mm]	Number of grooves	Type	SER-SIT® Taper bushing	L [mm]	z [mm]	M [mm]	U [mm]	d [mm]
106	4	7	1610	26	5,5	90	-	20,5
	6	2	1610	26	2,5	-	88	28,5
	8	2	1610	26	10	-	88	36,0
	10	3	1615	42	-	-	-	42,0
	12	2	1615	42	7	-	88	49,0
112	4	7	1610	26	5,5	90	-	20,5
	6	2	1610	26	2,5	-	94	28,5
	8	2	1610	26	10	-	94	36,0
	10	3	1615	42	-	-	-	42,0
	12	2	1615	42	7	-	94	49,0
118	4	7	1610	26	5,5	90	-	20,5
	6	7	2012	32	3,5	110	-	28,5
	8	2	2012	32	4	-	98	36,0
	10	2	2012	32	10	-	98	42,0
	12	2	2012	32	17	-	98	49,0
125	4	8	1610	26	5,5	90	109	20,5
	6	7	2012	32	3,5	110	-	28,5
	8	2	2012	32	4	-	105	36,0
	10	2	2012	32	10	-	105	42,0
	12	2	2517	45	4	-	105	49,0
132	4	8	1610	26	5,5	90	116	20,5
	6	7	2012	32	3,5	110	-	28,5
	8	2	2012	32	4	-	112	36,0
	10	2	2012	32	10	-	112	42,0
	12	2	2517	45	4	-	112	49,0
140	4	8	1610	26	5,5	90	124	20,5
	6	7	2517	45	16,5	120	-	28,5
	8	7	2517	45	9	120	-	36,0
	10	7	2517	45	3	120	-	42,0
	12	2	2517	45	4	-	124	49,0
150	4	8	1610	26	5,5	90	134	20,5
	6	7	2517	45	16,5	120	-	28,5
	8	7	2517	45	9	120	-	36,0
	10	7	2517	45	3	120	-	42,0
	12	2	2517	45	4	-	130	49,0
160	4	8	2012	32	11,5	110	144	20,5
	6	8	2517	45	16,5	120	140	28,5
	8	8	2517	45	9	120	140	36,0
	10	8	2517	45	3	120	140	42,0
	12	2	2517	45	4	-	140	49,0
170	4	8	2012	32	11,5	110	154	20,5
	6	8	2517	45	16,5	120	150	28,5
	8	8	2517	45	9	120	150	36,0
	10	7	2517	45	3	120	150	42,0
	12	2	2517	45	4	-	150	49,0
180	4	6	2012	32	5,75	110	164	20,5
	6	6	2517	45	8,25	120	160	28,5
	8	6	2517	45	4,5	120	160	36,0
	10	6	2517	45	1,5	120	160	42,0
	12	5	2517	45	2	120	160	49,0
190	4	6	2012	32	5,75	110	174	20,5
	6	6	2517	45	8,25	120	170	28,5
	8	6	2517	45	4,5	120	170	36,0
	10	6	2517	45	1,5	120	170	42,0
	12	5	2517	45	2	120	170	49,0
200	4	6	2012	32	5,75	110	184	20,5
	6	6	2517	45	8,25	120	180	28,5
	8	6	2517	45	4,5	120	180	36,0
	10	6	2517	45	1,5	120	180	42,0
	12	5	2517	45	2	120	180	49,0



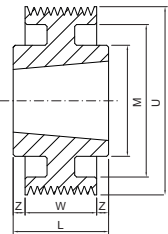
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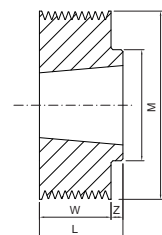
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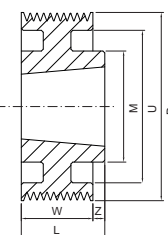
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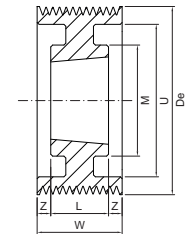
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Dimensions of Poly-V pulleys - mounting taper bushing SER-SIT®

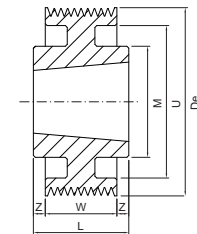


» “PYB” Poly-V “K”

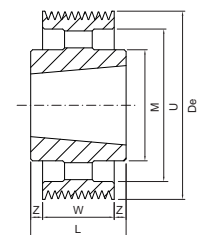
De [mm]	Number of grooves	Type	SER-SIT® Taper bushing	L [mm]	z [mm]	M [mm]	U [mm]	d [mm]
212	4	6	2012	32	5,75	110	196	20,5
	6	6	2517	45	8,25	120	192	28,5
	8	6	2517	45	4,5	120	192	36,0
	10	6	2517	45	1,5	120	192	42,0
	12	5	2517	45	2	120	192	49,0
224	4	6	2012	32	5,75	110	208	20,5
	6	6	2517	45	8,25	120	204	28,5
	8	6	2517	45	4,5	120	204	36,0
	10	6	2517	45	1,5	120	204	42,0
	12	5	2517	45	2	120	204	49,0
236	4	6	2012	32	5,75	110	220	20,5
	6	6	2517	45	8,25	120	216	28,5
	8	6	2517	45	4,5	120	216	36,0
	10	6	2517	45	1,5	120	216	42,0
	12	5	2517	45	2	120	216	49,0
250	4	9	2012	32	5,75	110	234	20,5
	6	6	2517	45	8,25	120	230	28,5
	8	6	2517	45	4,5	120	230	36,0
	10	6	2517	45	1,5	120	230	42,0
	12	5	2517	45	2	120	230	49,0
280	4	9	2012	32	5,75	110	264	20,5
	6	9	2517	45	8,25	120	260	28,5
	8	9	2517	45	4,5	120	260	36,0
	10	9	3020	52	5	146	256	42,0
	12	9	3020	52	1,5	146	256	49,0
315	4	9	2012	32	5,75	110	299	20,5
	6	9	2517	45	8,25	120	295	28,5
	8	9	2517	45	4,5	120	295	36,0
	10	6	3020	52	5	146	285	42,0
	12	9	3020	52	1,5	146	285	49,0
355	4	9	2517	45	12,25	120	339	20,5
	6	9	2517	45	8,25	120	339	28,5
	8	9	3020	52	8	146	335	36,0
	10	9	3020	52	5	146	335	42,0
	12	9	3020	52	1,5	146	335	49,0
400	4	9	2517	45	2,25	120	380	20,5
	6	9	2517	45	8,25	120	380	28,5
	8	9	3020	52	8	146	370	36,0
	10	9	3020	52	5	146	370	42,0
	12	9	3020	52	1,5	146	370	49,0
450	4	9	2517	45	12,25	120	420	20,5
	6	9	2517	45	8,25	120	420	28,5
	8	9	3020	52	8	146	420	36,0
	10	9	3020	52	5	146	420	42,0
	12	9	3020	52	1,5	146	420	49,0
500	4	9	2517	45	12,25	120	470	20,5
	6	9	2517	45	8,25	120	470	28,5
	8	9	3020	52	8	146	470	36,0
	10	9	3020	52	5	146	470	42,0
	12	9	3020	52	1,5	146	470	49,0



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