

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

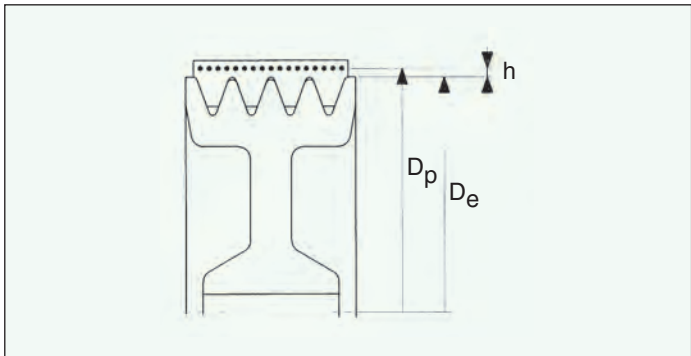
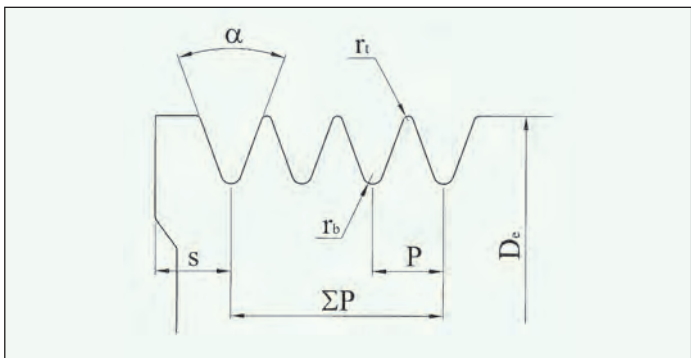
SIT Poly-V pulleys have a statically balanced degree of G6,3 at 1500 rpm in accordance with ISO 1940.

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
 $h = (D_p - D_e)/2$

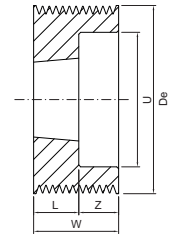
POLY-V PULLEYS - PYB

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

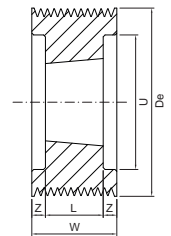


“PYB” Poly-V “L”

De [mm]	Number of grooves	Type	SER-SIT® Taper bushing	L [mm]	z [mm]	M [mm]	U [mm]
75	6	2	1210	26	12,5	56	38,5
	8	2	1210	26	22	56	48,0
	10	2	1215	42	15	56	57,0
	12	2	1215	42	25	56	67,0
80	6	2	1210	26	12,5	56	38,5
	8	2	1210	26	22	56	48,0
	10	2	1215	42	15	56	57,0
	12	2	1215	42	25	56	67,0
85	6	2	1210	26	12,5	61	38,5
	8	2	1210	26	22	61	48,0
	10	2	1215	42	15	61	57,0
	12	2	1215	42	25	61	67,0
	16	4	1215	42	22	61	86,0
90	6	2	1210	26	12,5	66	38,5
	8	2	1210	26	22	66	48,0
	10	2	1215	42	15	66	57,0
	12	2	1215	42	25	66	67,0
	16	4	1215	42	22	66	86,0
95	6	2	1210	26	12,5	71	38,5
	8	2	1210	26	22	71	48,0
	10	2	1215	42	15	71	57,0
	12	2	1215	42	25	71	67,0
	16	4	1215	42	22	71	86,0
100	6	2	1610	26	12,5	76	38,5
	8	2	1610	26	22	76	48,0
	10	2	2012	32	25	79	57,0
	12	2	2012	32	35	79	67,0
	16	4	2012	32	27	79	86,0
106	6	2	1610	26	12,5	82	38,5
	8	2	1610	26	22	82	48,0
	10	2	2012	32	25	82	57,0
	12	2	2012	32	35	82	67,0
	16	4	2012	32	27	82	86,0
112	6	2	1610	26	12,5	88	38,5
	8	2	1610	26	22	88	48,0
	10	2	2012	32	25	88	57,0
	12	2	2012	32	35	88	67,0
	16	4	2012	32	27	88	86,0
118	6	2	2012	32	6,5	94	38,5
	8	2	2012	32	16	94	48,0
	10	4	2517	45	6	97	57,0
	12	4	2517	45	11	97	67,0
	16	4	2517	45	20,5	97	86,0
	20	4	2517	45	30	97	105,0
125	6	2	2012	32	6,5	101	38,5
	8	2	2012	32	16	101	48,0
	10	4	2517	45	6	101	57,0
	12	4	2517	45	11	101	67,0
	16	4	2517	45	20,5	101	86,0
	20	4	2517	45	30	101	105,0
132	6	2	2012	32	6,5	108	38,5
	8	2	2012	32	16	108	48,0
	10	4	2517	45	6	108	57,0
	12	4	2517	45	11	108	67,0
	16	4	2517	45	20,5	108	86,0
	20	4	2517	45	30	108	105,0



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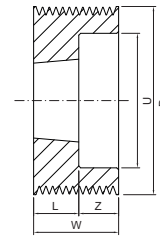
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Dimensions of Poly-V pulleys - mounting taper bushing SER-SIT®

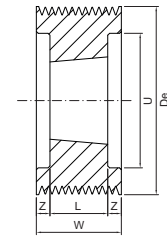


» “PYB” Poly-V “L”

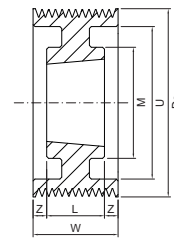
De [mm]	Number of grooves	Type	SER-SIT® Taper bushing	L [mm]	z [mm]	M [mm]	U [mm]	d [mm]
140	6	7	2517	45	6,5	120	-	38,5
	8	2	2517	45	3	-	116	48,0
	10	4	2517	45	6	-	116	57,0
	12	4	2517	45	11	-	116	67,0
	16	4	2517	45	20,5	-	116	86,0
	20	4	3020	52	26,5	-	116	105,0
150	6	7	2517	45	6,5	120	-	38,5
	8	2	2517	45	3	-	126	48,0
	10	4	2517	45	6	-	126	57,0
	12	4	2517	45	11	-	126	67,0
	16	4	2517	45	20,5	-	126	86,0
	20	4	3020	52	26,5	-	126	105,0
160	6	7	2517	45	6,5	120	-	38,5
	8	2	2517	45	3	-	136	48,0
	10	4	2517	45	6	-	136	57,0
	12	4	2517	45	11	-	136	67,0
	16	4	3020	52	17	-	136	86,0
	20	4	3020	52	26,5	-	136	105,0
170	6	8	2517	45	6,5	120	146	38,5
	8	2	2517	45	3	-	146	48,0
	10	4	2517	45	6	-	146	57,0
	12	4	2517	45	11	-	146	67,0
	16	4	3020	52	17	-	146	86,0
	20	4	3020	52	26,5	-	146	105,0
180	6	6	2517	45	3,25	120	156	38,5
	8	5	2517	45	1,5	120	156	48,0
	10	5	2517	45	6	120	156	57,0
	12	5	2517	45	11	120	156	67,0
	16	4	3020	52	17	-	156	86,0
	20	4	3020	52	26,5	-	156	105,0
190	6	6	2517	45	3,25	120	166	38,5
	8	5	2517	45	1,5	120	166	48,0
	10	5	2517	45	6	120	166	57,0
	12	5	2517	45	11	120	166	67,0
	16	5	3020	52	17	146	166	86,0
	20	5	3020	52	26,5	146	166	105,0
200	6	6	2517	45	3,25	120	176	38,5
	8	5	2517	45	1,5	120	176	48,0
	10	5	3020	52	2,5	146	176	57,0
	12	5	3020	52	7,5	146	176	67,0
	16	5	3020	52	17	146	176	86,0
	20	4	3535	89	8	-	176	105,0
212	6	6	2517	45	3,25	120	188	38,5
	8	5	2517	45	1,5	120	188	48,0
	10	5	3020	52	2,5	146	188	57,0
	12	5	3020	52	7,5	146	188	67,0
	16	5	3020	52	17	146	188	86,0
	20	4	3535	89	8	-	188	105,0
224	6	6	2517	45	3,25	120	202	38,5
	8	5	2517	45	1,5	120	202	48,0
	10	5	3020	52	2,5	146	202	57,0
	12	5	3020	52	7,5	146	202	67,0
	16	5	3020	52	17	146	202	86,0
	20	5	3535	89	8	178	202	105,0
236	6	6	2517	45	3,25	120	214	38,5
	8	5	2517	45	1,5	120	214	48,0
	10	5	3020	52	2,5	146	214	57,0
	12	5	3020	52	7,5	146	214	67,0
	16	5	3020	52	17	146	214	86,0
	20	5	3535	89	8	178	214	105,0



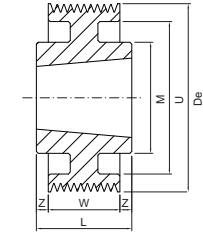
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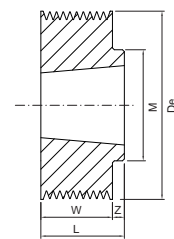
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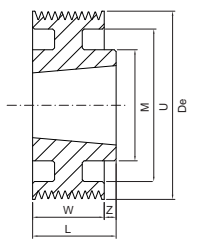
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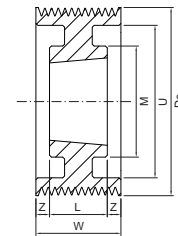
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Dimensions of Poly-V pulleys - mounting taper bushing SER-SIT®

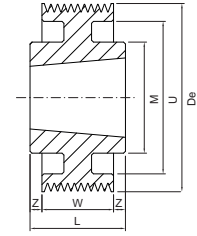


» "PYB" Poly-V "L"

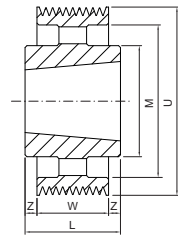
De [mm]	Number of grooves	Type	SER-SIT® Taper bushing	L [mm]	z [mm]	M [mm]	U [mm]	d [mm]
250	6	9	2517	45	3,25	120	228	38,5
	8	5	2517	45	1,5	120	228	48,0
	10	5	3020	52	2,5	146	228	57,0
	12	5	3020	52	7,5	146	228	67,0
	16	5	3020	52	17	146	228	86,0
	20	5	3535	89	8	178	226	105,0
280	6	6	2517	45	3,25	120	256	38,5
	8	6	3020	52	2	146	256	48,0
	10	5	3020	52	2,5	146	256	57,0
	12	5	3020	52	7,5	146	256	67,0
	16	6	3535	89	1,5	178	256	86,0
	20	5	3535	89	8	178	256	105,0
315	6	9	2517	45	3,25	120	285	38,5
	8	9	3020	52	2	146	285	48,0
	10	6	3535	89	16	178	285	57,0
	12	6	3535	89	11	178	285	67,0
	16	6	3535	89	1,5	178	285	86,0
	20	5	4040	102	1,5	215	285	105,0
355	6	9	3020	52	6,75	146	325	38,5
	8	9	3020	52	2	146	325	48,0
	10	9	3535	89	16	178	325	57,0
	12	9	3535	89	11	178	325	67,0
	16	9	3535	89	1,5	178	325	86,0
	20	5	4040	102	1,5	215	325	105,0
400	6	9	3020	52	6,75	146	370	38,5
	8	9	3020	52	2	146	370	48,0
	10	9	3535	89	16	178	370	57,0
	12	9	3535	89	11	178	370	67,0
	16	9	3535	89	1,5	178	370	86,0
	20	10	4040	102	1,5	215	370	105,0
450	6	9	3020	52	6,75	146	420	38,5
	8	9	3020	52	2	146	420	48,0
	10	9	3535	89	16	178	420	57,0
	12	9	3535	89	11	178	420	67,0
	16	9	3535	89	1,5	178	420	86,0
	20	9	4040	102	1,5	215	420	105,0
500	6	9	3020	52	6,75	146	470	38,5
	8	9	3020	52	2	146	470	48,0
	10	9	3535	89	16	178	470	57,0
	12	9	3535	89	11	178	470	67,0
	16	9	3535	89	1,5	178	470	86,0
	20	9	5050	127	11	267	470	105,0
630	6	9	3020	52	6,75	146	600	38,5
	8	9	3020	52	2	146	600	48,0
	10	9	3535	89	16	178	600	57,0
	12	9	3535	89	11	178	600	67,0
	16	9	4040	102	8	215	600	86,0
	20	9	5050	127	11	267	600	105,0
800	6	9	3535	89	25,2	178	770	38,5
	8	9	3535	89	20,5	178	770	48,0
	10	9	4040	102	22,5	215	770	57,0
	12	9	4040	102	17,5	215	770	67,0
	16	9	5050	127	20,5	267	770	86,0
	20	9	5050	127	11	267	770	105,0



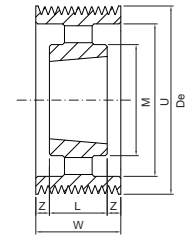
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