

Timing Pulleys -MXL-

-Pitch:0.080"-



These Timing Pulleys are for use with MXL standard Timing Belts with 0.080 inch tooth pitch, in 1/4 inch width or 3/8 inch width belts. The pulleys are available in aluminum and steel. We offer various configuration and modification options so the pulleys are ready to use when they arrive. See P.307 for matching Timing Belts. See application examples on P.292.



U-ATP MXL025
MXL037

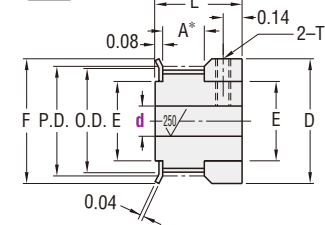
U-MTP MXL025
MXL037

Material		Surface Treatment	Type
Pulley	Flange		
2017 Aluminum	5052 Aluminum	Clear Anodizing	U-ATP
1045 Steel	Cold Rolled Steel	-	U-MTP

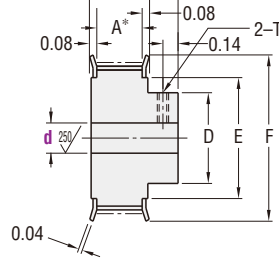
Material Characteristics P.628, 629

Pulley Shapes

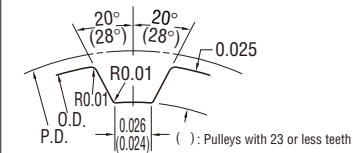
K Shape



B Shape



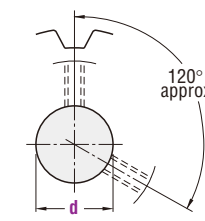
Tooth Shape (ISO Standard Rack Dimension)



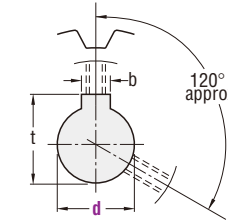
*Crimped flanges and set screws included.

Bore Configurations Bore may not be plated.

P Straight Bore



S Keyed Bore (ANSI B17.1-1989)



P Straight Bore

Callout	d (Bore Diameter)			T (Set Screw Size)
	Nominal	Tolerance		
0.13	1/8	0.1255	0.1250	#5-40
0.19	3/16	0.1880	0.1875	#5-40
0.25	1/4	0.2506	0.2500	#8-32
0.31	5/16	0.3131	0.3125	#8-32
0.38	3/8	0.3756	0.3750	#8-32
0.50	1/2	0.5007	0.5000	#8-32
0.63	5/8	0.6257	0.6250	#8-32

S Keyed Bore

d	Width		Height		Applicable Square Key Size*
	Width	Tolerance	Height	Tolerance	
0.31	3/32	0.094	0.096	0.352	3/32
0.38	3/32	0.094	0.096	0.416	3/32
0.50	1/8	0.125	0.127	0.560	1/8
0.63	3/16	0.188	0.190	0.709	3/16

*ANSI B17.1-1989

Keyed bore is not available for d ≤ 0.25

Type	Part No.	Number of Teeth	Belt Type & Width	Pulley Shapes	Bore Configurations	Bore Diameter Selection							
						1/8	3/16	1/4	5/16	3/8	1/2	5/8	
U-ATP	14	14	MXL025 *A : 0.295 *W : 0.453 *L : 0.709	K	P Straight bore with 2 set screws at 120 deg.	0.13	0.19						
	15	15				0.13	0.19						
	16	16				0.13	0.19						
	17	17				0.13	0.19						
	18	18				0.13	0.19						
	19	19				0.13	0.19						
	20	20				0.19							
	21	21				0.19							
	22	22				0.19							
	23	23				0.19					0.25		
	24	24				0.19					0.25		
	25	25				0.19					0.25		
	26	26				0.19					0.25		
	27	27				0.19					0.25		
28	28	0.19					0.25						
30	30	0.19					0.25	0.31					
32	32	0.19					0.25	0.31					
34	34	0.19					0.25	0.31					
36	36	0.25					0.25	0.31					
38	38	0.25					0.25	0.31					
40	40	0.25					0.25	0.31	0.38				
42	42	0.25					0.25	0.31	0.38				
44	44	0.31					0.31	0.38	0.50				
46	46	0.31					0.31	0.38	0.50				
48	48	0.31					0.31	0.38	0.50				
50	50	0.38					0.38	0.50					
60	60	0.38					0.38	0.50	0.63				
72	72	0.50					0.50	0.63					

*Bore Config. can be found at the top of next page.



Standard

6 Days

Express

4 Days

Specify Express A \$8.00/piece

P.30

Non-Returnable P.30

A flat charge of \$21.60 for 3 or more identical pieces.



Optional Modifications

Part No.

Type Number of Teeth Belt Type & Width

U-ATP 32 MXL 025

Pulley Shapes

B

Bore Config. + d

P 0.25

Ordering Code

(STC, KC90, MTC...etc)

KC 90

Optional Modifications	Set Screw Angle Modification	Disassembled Flanges	Surface Treatment Modification		
	Ordering Code	KC90	NFC	STC	MTC
Details	Changes the set screw angle to 90°.	Ships the flanges disassembled.	Applies Black Oxide Plating on U-MTP type pulleys.	Applies Electroless Nickel Plating on U-MTP type pulleys.	Not available for U-ATP.
\$ Price Adder	Free of Charge	Free of Charge	3.00	5.00	

When using Optional Modifications, add the "Price Adder" to the standard "Unit Price".



Quantity Discount Rate

Quantity Rate	1-4	5-9	10-19	20-
		5%	10%	15%

Quantity discount rate only applies to the main body price.

Bore Config. S (Keyed Bore): For total pulley price, please add the Bore Config. Price Adder to the main body with P Bore price.

For larger quantity orders "Days to Ship" may differ from published catalog term. P.29

Order Example

The part number consists only of the fields with blue characters.

Please refer to the table below for technical information.

Part No. Pulley Shapes Bore Config. + d

Type Number of Teeth Belt Type & Width
U-ATP 32 MXL 025 B P 0.25

For compatible Timing Belts, refer to P.307.

Technical Information

Number of Teeth	P.D. (Pitch Diameter)	O.D. (Outer Diameter)	D		F		E	
			Inch	mm	Inch	mm	Inch	mm
14	0.357	0.337	0.47	12	0.47	12	0.24	6
15	0.382	0.362	0.47	12	0.47	12	0.24	6
16	0.407	0.387	0.55	14	0.55	14	0.31	8
17	0.433	0.413	0.55	14	0.55	14	0.31	8
18	0.458	0.438	0.55	14	0.55	14	0.31	8
19	0.484	0.464	0.55	14	0.55	14	0.31	8
20	0.509	0.489	0.35	9	0.71	18	0.43	11
21	0.535	0.515	0.35	9	0.71	18	0.43	11
22	0.560	0.540	0.35	9	0.71	18	0.43	11
23	0.586	0.566	0.43	11	0.79	20	0.51	13
24	0.611	0.591	0.43	11	0.79	20	0.51	13
25	0.637	0.617	0.43	11	0.79	20	0.51	13
26	0.662	0.642	0.47	12	0.87	22	0.55	14
27	0.687	0.667	0.47	12	0.87	22	0.55	14
28	0.713	0.693	0.47	12	0.87	22	0.55	14
30	0.764	0.744	0.55	14	0.98	25	0.63	16
32	0.815	0.795	0.55	14	0.98	25	0.63	16
34	0.866	0.846	0.55	14	0.98	25	0.63	16
36	0.917	0.897	0.63	16	1.10	28	0.71	18
38	0.968	0.948	0.63	16	1.10	28	0.71	18
40	1.019	0.999	0.71	18	1.18	30	0.79	20
42	1.070	1.050	0.71	18	1.18	30	0.79	20
44	1.120	1.100	0.79	20	1.26	32	0.91	23
46	1.171	1.151	0.79	20	1.26	32	0.91	23
48	1.222	1.202	0.87	22	1.38	35	0.98	25
50	1.273	1.253	0.87	22	1.38	35	0.98	25
60	1.528	1.508	1.10	28	1.73	44	1.26	32
72	1.833	1.813	1.18	30	2.05	52	1.57	40

Bore Selection Table

Callout	Nominal	P	S
		Straight Bore	Keyed Bore
0.13	1/8	○	○
0.19	1/5	○	N/A
0.25	1/4	○	N/A
0.31	5/16	○	○
0.38	3/8	○	○
0.50	1/2	○	○
0.63	5/8	○	○

30, 32, 34 teeth are not available with S0.31.

Number of Teeth	U-ATP Main Body with P Bore: \$ Price (Qty. 1-4)		U-MTP Main Body with P Bore: \$ Price (Qty. 1-4)		\$ Bore Config. Price Adder
	MXL025	MXL037	MXL025	MXL037	
14	13.90	16.70	15.40	18.20	-
15	14.00	16.60	15.40	18.10	-
16	14.50	17.20	15.90	18.70	-
17	14.70	17.40	16.10	18.90	-
18	15.20	18.20	16.60	19.60	-
19	15.20	18.20	16.60	19.60	-
20	15.90	18.70	17.30	20.30	-
21	16.10	18.70	17.50	20.30	-
22	16.40	19.60	17.90	21.00	-
23	16.80	19.60	18.20	21.00	-
24	17.20	20.20	18.60	21.60	-
25	17.50	20.40	19.00	21.80	-
26	17.70	20.80	19.20	22.30	-
27	17.90	21.00	19.40	22.50	-
28	18.20	21.00	19.60	22.50	-
30	18.50	21.60	20.10	23.10	-
32	19.00	21.80	20.40	23.30	-
34	19.00	21.80	20.40	23.30	-
36	19.70	23.00	21.20	24.60	2.10
38	19.70	23.00	21.20	24.60	2.10
40	22.20	24.70	23.70	26.20	2.10
42	22.20	26.00	23.70	27.40	2.10
44	23.50	27.50	25.00	28.90	4.00
46	23.50	27.50	25.00	28.90	4.00
48	24.90	29.00	26.50	30.50	4.30
50	24.90	29.00	26.50	30.50	4.30
60	27.50	36.50	29.00	37.90	4.30
72	30.20	42.80	31.70	44.20	4.30