

Ceptor™-VI standard belt widths

Nominal width	60	100	150	200	250	400	600	800
Width (mm)	6	10	15	20	25	40	60	80
Ceptor-VI S3M	●	●	●					
Ceptor-VI S5M		●	●	●	●			
Ceptor-VI S8M			●	●	●	●	●	●

Note: For other belt widths than the above, please contact us.
The nominal width is indicated by a factor of ten of the belt width (mm).

Belt dimensional tolerance

Effective length (Unit: mm)

Length	Tolerance
256 or less	±0.20
Over 256 to 384 or less	±0.23
Over 384 to 512 or less	±0.25
Over 512 to 760 or less	±0.30
Over 760 to 1016 or less	±0.33
Over 1016 to 1272 or less	±0.38
Over 1272 to 1528 or less	±0.41
Over 1528 to 1776 or less	±0.43
Over 1776 to 2032 or less	±0.46
Over 2032 to 2288 or less	±0.48
Over 2288 to 2544 or less	±0.51
Over 2544 to 2792 or less	±0.53
Over 2792 to 3048 or less	±0.56
Over 3048 to 3304 or less	±0.58
Over 3304 to 3560 or less	±0.61
Over 3560 to 3808 or less	±0.64
Over 3808 to 4064 or less	±0.66
Over 4064 to 4320 or less	±0.69
Over 4320 to 4576 or less	±0.71

Note) The effective length tolerance is the tolerance of center distance in length measurement.

Belt width (S3M/S5M) (Unit: mm)

Belt width	Tolerance
6 or less	±0.3
Over 6 to 10 or less	±0.4
Over 10 to 20 or less	±0.5
Over 20 to 30 or less	±0.6
Over 30 to 40 or less	±0.7
Over 40 to 60 or less	±0.8

Belt width (S8M) (Unit: mm)

Belt width	Belt pitch length 840 or less	Belt pitch length 841~1680	Belt pitch length 1681 or more
Over 10 to 40 or less	+0.8 -0.8	+0.8 -1.2	+0.8 -1.2
Over 40 to 50 or less	+0.8 -1.2	+1.2 -1.2	+1.2 -1.6
Over 50 to 75 or less	+1.2 -1.6	+1.6 -1.6	+1.6 -2.0
Over 75 to 100 or less	+1.6 -1.6	+1.6 -2.0	+2.0 -2.0
Over 100	+2.4 -2.4	+2.4 -2.8	+2.4 -3.2

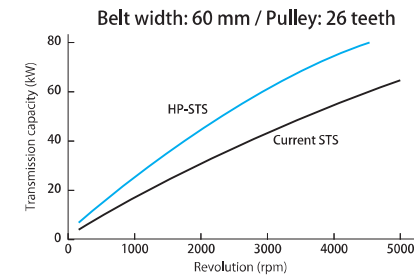
1. HP-ST/ST Product Introduction

As a result of recent demands for "space-saving" of industrial machinery, we have developed "HP-ST/ST/heavy duty type belts" utilizing our long-accumulated technology and experience.

Features

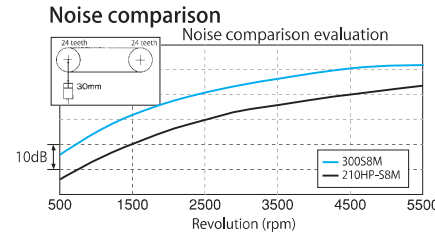
High-torque power transmission

The HP-ST/ST/HP-HTS belts provide higher torque and higher power transmission than normal trapezoidal teeth due to the mesh theory of the unique teeth profiles and have achieved high torque and high power transmission by using high-rigidity components. Although it varies depending on the field, it has a 1.4 to 1.8-fold transmission capacity compared to normal STS/HTS.



Low noise

As the belt width can be narrower than the standard specification, the noise can be reduced.



*The data shows STS data.

Miniaturized

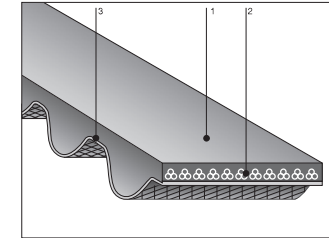
The high transmission capacity allows a narrower width and a smaller pulley diameter than the standard specifications, allowing compact designs.

Pulleys used

HP-ST/ST can be used with the standard STS pulleys and LT STS pulleys.

*Manufacturable with the STS standard belt sizes.
HP-HTS can be used with the standard HTS pulleys.

Structure



1. Back face rubber 2. Cord 3. Facing fabric

- **Back face rubber:** Adoption of a synthetic rubber with little tooth deformation and high hardness
- **Cord:** Glass cord taking the dimensional stability and flexibility into consideration
- **Facing fabric:** Low noise is achieved by providing irregularities on the facing fabric surface and with the low frictional factor Type S14M has two layers of facing fabric, further lowering the noise and enhancing the durability. HP-S5M has a clean facing fabric specification.

Tooth profile dimensions and indication method

Belt type	HP-ST/ST	
	Dimension (mm)	Belt indication method
HP-S5M		150 HP-S5M 800 Belt nominal width (15.0mm) Belt type (HP-S5M) Belt nominal length (800mm)
HP-S8M		600 HP-S8M 1000 Belt nominal width (60.0mm) Belt type (HP-S8M) Belt nominal length (1000mm)
HP-S14M		800 HP-S14M 1400 Belt nominal width (80.0mm) Belt type (HP-S14M) Belt nominal length (1400mm)
Belt type	HP-HTS	
	Dimension (mm)	Belt indication method
8M		1000 8M 50 Belt pitch length (1000mm) Belt type (8M) Belt width (50.0mm)

HP-ST/ST standard effective lengths

Type HP-S5M

Belt nominal length	Pitch length (mm)	No. of teeth
HP-S5M 225	225.00	45
HP-S5M 230	230.00	46
HP-S5M 255	255.00	51
HP-S5M 260	260.00	52
HP-S5M 275	275.00	55
HP-S5M 285	285.00	57
HP-S5M 295	295.00	59
HP-S5M 300	300.00	60
HP-S5M 305	305.00	61
HP-S5M 320	320.00	64
HP-S5M 325	325.00	65
HP-S5M 340	340.00	68
HP-S5M 350	350.00	70
HP-S5M 360	360.00	72
HP-S5M 370	370.00	74
HP-S5M 375	375.00	75
HP-S5M 380	380.00	76
HP-S5M 390	390.00	78
HP-S5M 400	400.00	80
HP-S5M 410	410.00	82
HP-S5M 415	415.00	83
HP-S5M 420	420.00	84
HP-S5M 425	425.00	85
HP-S5M 435	435.00	87
HP-S5M 440	440.00	88
HP-S5M 445	445.00	89
HP-S5M 450	450.00	90
HP-S5M 475	475.00	95
HP-S5M 490	490.00	98
HP-S5M 500	500.00	100
HP-S5M 520	520.00	104
HP-S5M 525	525.00	105
HP-S5M 530	530.00	106
HP-S5M 545	545.00	109
HP-S5M 550	550.00	110
HP-S5M 560	560.00	112
HP-S5M 565	565.00	113
HP-S5M 570	570.00	114
HP-S5M 575	575.00	115
HP-S5M 590	590.00	118
HP-S5M 595	595.00	119
HP-S5M 600	600.00	120
HP-S5M 625	625.00	125
HP-S5M 635	635.00	127
HP-S5M 640	640.00	128
HP-S5M 645	645.00	129
HP-S5M 650	650.00	130
HP-S5M 665	665.00	133
HP-S5M 670	670.00	134
HP-S5M 675	675.00	135
HP-S5M 690	690.00	138
HP-S5M 695	695.00	139
HP-S5M 700	700.00	140
HP-S5M 710	710.00	142
HP-S5M 720	720.00	144
HP-S5M 725	725.00	145
HP-S5M 730	730.00	146
HP-S5M 740	740.00	148
HP-S5M 750	750.00	150
HP-S5M 765	765.00	153
HP-S5M 770	770.00	154
HP-S5M 775	775.00	155
HP-S5M 780	780.00	156
HP-S5M 800	800.00	160
HP-S5M 810	810.00	162

Type HP-S5M

Belt nominal length	Pitch length (mm)	No. of teeth
HP-S5M 830	830.00	166
HP-S5M 845	845.00	169
HP-S5M 850	850.00	170
HP-S5M 860	860.00	172
HP-S5M 870	870.00	174
HP-S5M 890	890.00	178
HP-S5M 900	900.00	180
HP-S5M 920	920.00	184
HP-S5M 930	930.00	186
HP-S5M 940	940.00	188
HP-S5M 950	950.00	190
HP-S5M 965	965.00	193
HP-S5M 975	975.00	195
HP-S5M 1000	1000.00	200
HP-S5M 1025	1025.00	205
HP-S5M 1050	1050.00	210
HP-S5M 1055	1055.00	211
HP-S5M 1085	1085.00	217
HP-S5M 1090	1090.00	218
HP-S5M 1100	1100.00	220
HP-S5M 1105	1105.00	221
HP-S5M 1115	1115.00	223
HP-S5M 1120	1120.00	224
HP-S5M 1125	1125.00	225
HP-S5M 1135	1135.00	227
HP-S5M 1145	1145.00	229
HP-S5M 1160	1160.00	232
HP-S5M 1165	1165.00	233
HP-S5M 1195	1195.00	239
HP-S5M 1225	1225.00	245
HP-S5M 1250	1250.00	250
HP-S5M 1260	1260.00	252
HP-S5M 1270	1270.00	254
HP-S5M 1295	1295.00	259
HP-S5M 1330	1330.00	266
HP-S5M 1350	1350.00	270
HP-S5M 1420	1420.00	284
HP-S5M 1475	1475.00	295
HP-S5M 1500	1500.00	300
HP-S5M 1505	1505.00	301
HP-S5M 1530	1530.00	306
HP-S5M 1595	1595.00	319
HP-S5M 1605	1605.00	321
HP-S5M 1680	1680.00	336
HP-S5M 1715	1715.00	343
HP-S5M 1800	1800.00	360
HP-S5M 2000	2000.00	400

Type HP-S8M

Belt nominal length	Pitch length (mm)	No. of teeth
HP-S8M 352	352.00	44
HP-S8M 384	384.00	48
HP-S8M 408	408.00	51
HP-S8M 424	424.00	53
HP-S8M 440	440.00	55
HP-S8M 456	456.00	57
HP-S8M 480	480.00	60
HP-S8M 496	496.00	62
HP-S8M 512	512.00	64
HP-S8M 520	520.00	65
HP-S8M 528	528.00	66
HP-S8M 560	560.00	70
HP-S8M 584	584.00	73
HP-S8M 600	600.00	75
HP-S8M 632	632.00	79
HP-S8M 640	640.00	80
HP-S8M 656	656.00	82
HP-S8M 672	672.00	84
HP-S8M 680	680.00	85
HP-S8M 712	712.00	89
HP-S8M 720	720.00	90
HP-S8M 728	728.00	91
HP-S8M 760	760.00	95
HP-S8M 800	800.00	100
HP-S8M 824	824.00	103
HP-S8M 840	840.00	105
HP-S8M 848	848.00	106
HP-S8M 880	880.00	110
HP-S8M 888	888.00	111
HP-S8M 896	896.00	112
HP-S8M 920	920.00	115
HP-S8M 944	944.00	118
HP-S8M 960	960.00	120
HP-S8M 976	976.00	122
HP-S8M 984	984.00	123
HP-S8M 1000	1000.00	125
HP-S8M 1032	1032.00	129
HP-S8M 1040	1040.00	130
HP-S8M 1056	1056.00	132
HP-S8M 1080	1080.00	135
HP-S8M 1096	1096.00	137
HP-S8M 1120	1120.00	140
HP-S8M 1136	1136.00	142
HP-S8M 1152	1152.00	144
HP-S8M 1160	1160.00	145
HP-S8M 1184	1184.00	148
HP-S8M 1192	1192.00	149
HP-S8M 1200	1200.00	150
HP-S8M 1216	1216.00	152
HP-S8M 1224	1224.00	153
HP-S8M 1240	1240.00	155
HP-S8M 1248	1248.00	156
HP-S8M 1272	1272.00	159
HP-S8M 1280	1280.00	160
HP-S8M 1296	1296.00	162
HP-S8M 1312	1312.00	164
HP-S8M 1344	1344.00	168
HP-S8M 1352	1352.00	169
HP-S8M 1360	1360.00	170
HP-S8M 1384	1384.00	173
HP-S8M 1392	1392.00	174
HP-S8M 1400	1400.00	175
HP-S8M 1424	1424.00	178
HP-S8M 1440	1440.00	180
HP-S8M 1480	1480.00	185
HP-S8M 1520	1520.00	190
HP-S8M 1552	1552.00	194

Type HP-S8M

Belt nominal length	Pitch length (mm)	No. of teeth
HP-S8M 1600	1600.00	200
HP-S8M 1648	1648.00	206
HP-S8M 1680	1680.00	210
HP-S8M 1728	1728.00	216
HP-S8M 1760	1760.00	220
HP-S8M 1776	1776.00	222
HP-S8M 1800	1800.00	225
HP-S8M 1808	1808.00	226
HP-S8M 1856	1856.00	232
HP-S8M 1880	1880.00	235
HP-S8M 1912	1912.00	239
HP-S8M 1952	1952.00	244
HP-S8M 2000	2000.00	250
HP-S8M 2040	2040.00	255
HP-S8M 2120	2120.00	265
HP-S8M 2160	2160.00	270
HP-S8M 2240	2240.00	280
HP-S8M 2304	2304.00	288
HP-S8M 2400	2400.00	300
HP-S8M 2496	2496.00	312
HP-S8M 2560	2560.00	320
HP-S8M 2600	2600.00	325
HP-S8M 2800	2800.00	350
HP-S8M 2880	2880.00	360
HP-S8M 2944	2944.00	368
HP-S8M 3200	3200.00	400
HP-S8M 3600	3600.00	450
HP-S8M 3720	3720.00	465
HP-S8M 3904	3904.00	488
HP-S8M 4400	4400.00	550

Type HP-S14M

Belt nominal length	Pitch length (mm)	No. of teeth
HP-S14M 1008	1008.00	72
HP-S14M 1120	1120.00	80
HP-S14M 1190	1190.00	85
HP-S14M 1246	1246.00	89
HP-S14M 1358	1358.00	97
HP-S14M 1400	1400.00	100
HP-S14M 1540	1540.00	110
HP-S14M 1610	1610.00	115
HP-S14M 1652	1652.00	118
HP-S14M 1778	1778.00	127
HP-S14M 1806	1806.00	129
HP-S14M 1890	1890.00	135
HP-S14M 1904	1904.00	136
HP-S14M 1960	1960.00	140
HP-S14M 2002	2002.00	143
HP-S14M 2100	2100.00	150
HP-S14M 2240	2240.00	160
HP-S14M 2310	2310.00	165
HP-S14M 2380	2380.00	170
HP-S14M 2450	2450.00	175
HP-S14M 2506	2506.00	179
HP-S14M 2590	2590.00	185
HP-S14M 2660	2660.00	190
HP-S14M 2800	2800.00	200
HP-S14M 3150	3150.00	225
HP-S14M 3248	3248.00	232
HP-S14M 3500	3500.00	250
HP-S14M 3556	3556.00	254
HP-S14M 3850	3850.00	275
HP-S14M 4004	4004.00	286
HP-S14M 4060	4060.00	290
HP-S14M 4326	4326.00	309
HP-S14M 4508	4508.00	322
HP-S14M 5012	5012.00	358

HP-HTS standard effective lengths

Type HP-8M

Belt nominal length	Pitch length (mm)	No. of teeth
384 HP-8M	384.00	48
424 HP-8M	424.00	53
480 HP-8M	480.00	60
560 HP-8M	560.00	70
600 HP-8M	600.00	75
624 HP-8M	624.00	78
640 HP-8M	640.00	80
656 HP-8M	656.00	82
680 HP-8M	680.00	85
720 HP-8M	720.00	90
760 HP-8M	760.00	95
800 HP-8M	800.00	100
840 HP-8M	840.00	105
856 HP-8M	856.00	107
880 HP-8M	880.00	110
896 HP-8M	896.00	112
920 HP-8M	920.00	115
960 HP-8M	960.00	120
1000 HP-8M	1000.00	125
1040 HP-8M	1040.00	130
1056 HP-8M	1056.00	132
1064 HP-8M	1064.00	133
1080 HP-8M	1080.00	135
1120 HP-8M	1120.00	140
1152 HP-8M	1152.00	144
1160 HP-8M	1160.00	145
1184 HP-8M	1184.00	148
1192 HP-8M	1192.00	149
1200 HP-8M	1200.00	150
1224 HP-8M	1224.00	153
1248 HP-8M	1248.00	156
1264 HP-8M	1264.00	158
1280 HP-8M	1280.00	160
1304 HP-8M	1304.00	163
1360 HP-8M	1360.00	170
1392 HP-8M	1392.00	174
1400 HP-8M	1400.00	175
1424 HP-8M	1424.00	178
1440 HP-8M	1440.00	180
1480 HP-8M	1480.00	185
1512 HP-8M	1512.00	189
1520 HP-8M	1520.00	190
1584 HP-8M	1584.00	198
1600 HP-8M	1600.00	200
1680 HP-8M	1680.00	210
1728 HP-8M	1728.00	216
1760 HP-8M	1760.00	220
1800 HP-8M	1800.00	225
1904 HP-8M	1904.00	238
2000 HP-8M	2000.00	250
2056 HP-8M	2056.00	257
2080 HP-8M	2080.00	260
2104 HP-8M	2104.00	263
2160 HP-8M	2160.00	270
2240 HP-8M	2240.00	280
2248 HP-8M	2248.00	281
2272 HP-8M	2272.00	284
2400 HP-8M	2400.00	300
2504 HP-8M	2504.00	313
2600 HP-8M	2600.00	325

Belt standard widths

Nominal width (S tooth profile)	100	150	200	250	300	400	500	600	800	850	1000	1200
Nominal width (HTS tooth profile)	10	15	20	25	30	40	50	60	80	85	100	120
Width (mm)	10	15	20	25	30	40	50	60	80	85	100	120
HP-S5M	●	●	●	●								
HP-S8M		●		●		●		●				
HP-S14M						●		●	●		●	●
HP-8M			●	●	●	●	●	●		●		

Note: For other belt widths than the above, please contact us.
* For the S tooth profile, the nominal width is ten times the belt width. For the HTS tooth profile, the nominal width is the belt width.

Belt dimensional tolerance

Effective length		(Unit: mm)
Length	Tolerance	
256 or less	±0.20	
Over 256 to 384 or less	±0.23	
Over 384 to 512 or less	±0.25	
Over 512 to 760 or less	±0.30	
Over 760 to 1016 or less	±0.33	
Over 1016 to 1272 or less	±0.38	
Over 1272 to 1528 or less	±0.41	
Over 1528 to 1776 or less	±0.43	
Over 1776 to 2032 or less	±0.46	
Over 2032 to 2288 or less	±0.48	
Over 2288 to 2544 or less	±0.51	
Over 2544 to 2792 or less	±0.53	
Over 2792 to 3048 or less	±0.56	
Over 3048 to 3304 or less	±0.58	
Over 3304 to 3560 or less	±0.61	
Over 3560 to 3808 or less	±0.64	
Over 3808 to 4064 or less	±0.66	
Over 4064 to 4320 or less	±0.69	
Over 4320 to 4576 or less	±0.71	

Note) The effective length tolerance is the tolerance of center distance in length measurement.

Belt width (S5M)		(Unit: mm)
Belt width	Tolerance	
6 or less	±0.30	
Over 6 to 10 or less	±0.40	
Over 10 to 20 or less	±0.50	
Over 20 to 30 or less	±0.60	
Over 30 to 40 or less	±0.70	
Over 40 to 60 or less	±0.80	

Belt width (S8M/8M • S14M)				(Unit: mm)
Belt width	Belt pitch length 840 or less	Belt pitch length 841~1680	Belt pitch length 1681 or more	Tolerance
	Over 10 to 40 or less	+0.80 -0.80	+0.80 -1.20	
Over 40 to 50 or less	+0.80 -1.20	+1.20 -1.20	+1.20 -1.60	
Over 50 to 75 or less	+1.20 -1.60	+1.60 -1.60	+1.60 -2.00	
Over 75 to 100 or less	+1.60 -1.60	+1.60 -2.00	+2.00 -2.00	
Over 100	+2.40 -2.40	+2.40 -2.80	+2.40 -3.20	

ST5-eco (Super-Torque Synchronous Belt Eco)

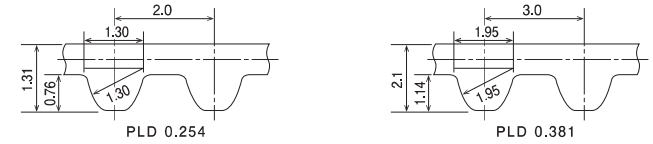
Product Introduction

This synchronous belt is designed considering reduction of environmentally hazardous substances.

The mainstream rubber material that had been used in the previous synchronous belts was chloroprene rubber, which contains chlorine. The ecological specification developed this time is composed of ethylene propylene diene monomer (EPDM), which is gaining attention as an environmentally friendly halogen-free polymer, at all rubber sections including adhesion of the cords.

Product Name and Type Super-Torque Synchronous Belt Eco (ST5-eco) Type: S2M-S3M

Dimensions



Features

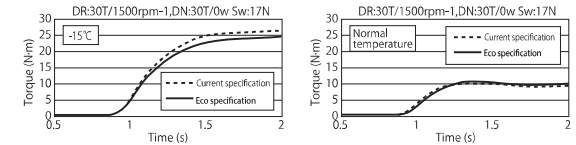
- ① Halogen-free specification (Not containing chlorine)
- ② Excellent ozone resistance
- ③ Excellent cold resistance characteristics

Ozone resistance

Ozone concentration	Crack occurrence time (hrs)	
	Current specification	Eco specification
10ppm	Condition 1	4
	Condition 2	360 or more
50ppm	Condition 1	360 or more
	Condition 2	360 or more

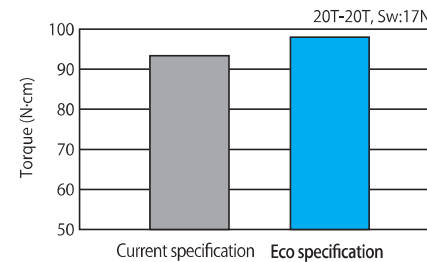
Condition 1 S2M was wound around a 20-tooth pulley and left, and the time of an occurrence of a crack in the back face was checked.
Condition 2 S2M was left in a free condition, and the time of an occurrence of a crack in the back face was checked.

Cold resistance (starting torque)

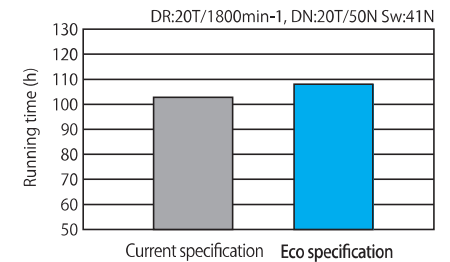


Belt performance

1 Skip torque (Type S2M Width of 4 mm)



2 Load durability (40S2M260)



*Avoid using this belt in conditions in which oil, grease, or the like adheres to the belt.
*For compatible sizes, please contact us.
*For belt design, please contact us.