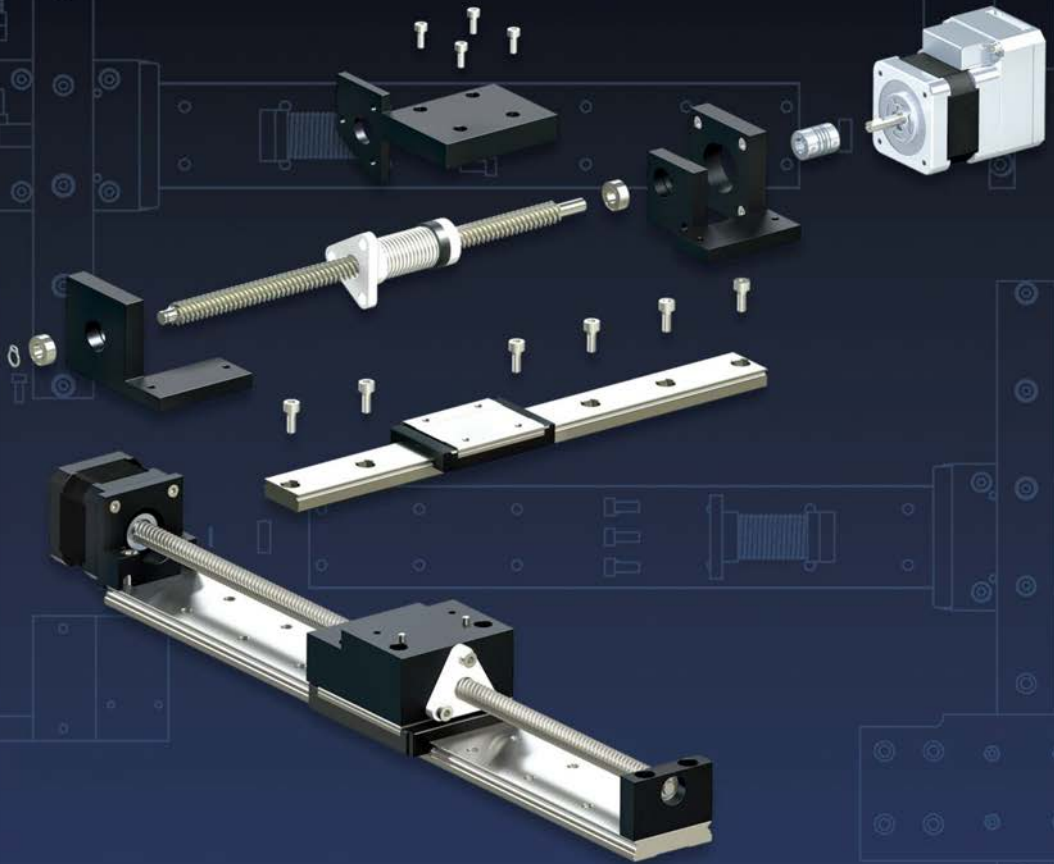




RELIANCE™

P R E C I S I O N



Precise Motion Control Solutions
Belts and Pulleys



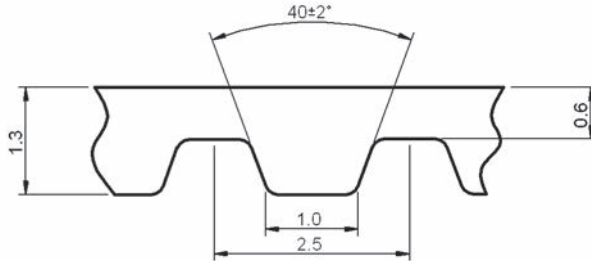
Section Contents

Timing Belts 2.5mm Pitch	Page 10-2
Timing Pulleys 2.5mm Pitch	Page 10-3
Timing Belts 5mm Pitch	Page 10-4
Timing Pulleys 5mm Pitch	Page 10-5
Technical Information.....	Page T10-1



All dimensions in mm
Material: High tensile steel
reinforced polyurethane

Associated Products
Timing pulleys: page 10-3



Part number selection table

Example Part No:-		TXM25 F6- 168			
Basic Part Number	Belt Width	Standard Lengths [#]			
		Number of Pitches	Length mm	Number of Pitches	Length mm
TXM25	6 mm F6-	48	120.0	127	317.5
		58	145.0	132	330.0
		64	160.0	152	380.0
		71	177.5	168	420.0
		72	180.0	192	480.0
		73	182.5	200	500.0
		80	200.0	240	600.0
		92	230.0	248	620.0
		98	245.0	260	650.0
		106	265.0	312	780.0
		114	285.0	380	950.0
		116	290.0		

[#] The belt thickness may differ if a non-standard length is ordered

i Features and options

- Temperature range: -10°C to +80°C
- Maximum allowable peripheral load:
6 mm wide = 65 N
- Maximum peripheral speed: 80 m/s
- Special polyurethanes available
- Double-sided belt available
- Alternative lengths available[#]
- Alternative colours available
- Kevlar tension members available
- Anti-static belts available

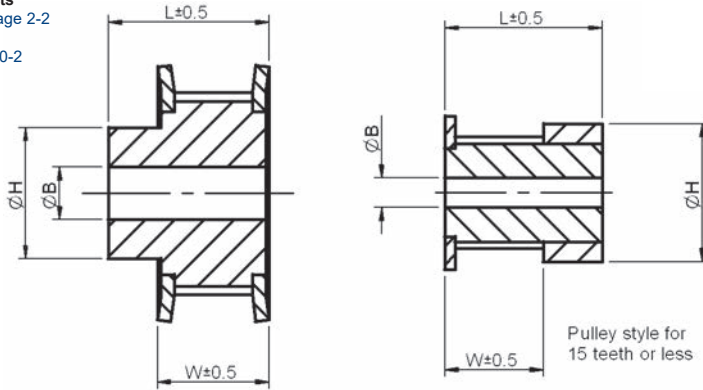
? Technical support

- Technical information - see page T10-1
- Design guidelines - see page T10-2



Associated Products
 Intelligent motors: page 2-2
 Shafts: page 11-2
 Timing belts: page 10-2

All dimensions in mm
 Materials: Aluminium alloy
 pulley with zinc plated
 steel flanges



Part number selection table

When belt width = 6, W=10 & L=16

Example Part No:- TPMP25 F6- 60					
Basic Part Number	Belt Width	No. of Teeth	Pitch Diameter	Bore ØB (H8)	Hub Diameter ØH ±1.0
TPMP25	6 mm F6-	12	9.55	3	13
		14	11.14		15
		15	11.94		15
		18	14.32	4	10
		19	15.12		10
		20	15.92		11
		24	19.10		12
		25	19.89	6	13
		30	23.87		16
		32	25.46		16
		36	28.65		20
		40	31.83	8	22
		48*	38.20		26
		60*	47.75		34

*Pulleys with 48 and 60 teeth are unflanged

i Features and options

- Zero-backlash pulleys
- Other numbers of teeth available
- 0, 1 or 2 flanges available
- Tapped holes in hubs available
- Alternative bore diameters available
- Alternative mountings available
- Keyed bores available

? Technical support

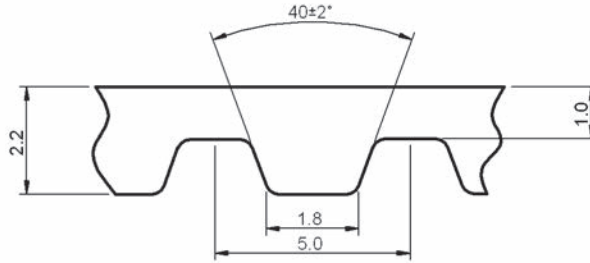
- Technical information - see [page T10-1](#)
- Design guidelines - see [page T10-2](#)

Belts and Pulleys



All dimensions in mm
Material: High tensile steel
reinforced polyurethane

Associated Products
Timing pulleys: page 10-5



Part number selection table

Example Part No:- **TXM50 F10- 168**

Basic Part Number	Belt Width	Standard Lengths [#]					
		Number of Pitches	Length mm	Number of Pitches	Length mm	Number of Pitches	Length mm
TXM50	10 mm F10-	20	100	66	330	126	630
		30	150	68	340	138	690
		33	165	73	365	140	700
		36	180	80	400	145	725
		37	185	82	410	150	750
		40	200	84	420	156	780
		42	210	91	455	163	815
		43	215	96	480	168	840
		45	225	100	500	180	900
	49	245	102	510	185	925	
	16 mm F16-	50	250	105	525	188	940
		52	260	110	550	198	990
		54	270	115	575	215	1,075
		56	280	122	610	243	1,215
		59	295	124	620	276	1,380

[#] The belt thickness may differ if a non-standard length is ordered

i Features and options

- Temperature range: -10°C to +80°C
- Maximum allowable peripheral load:
10 mm wide = 330 N, 16 mm wide = 570 N
- Maximum peripheral speed: 80 m/s
- Special polyurethanes available
- Double-sided belt available
- Alternative lengths available[#]
- Alternative colours available
- Kevlar tension members available
- Anti-static belts available

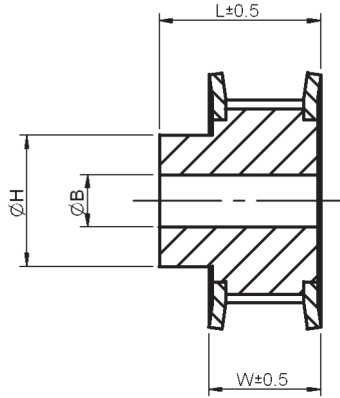
? Technical support

- Technical information - see [page T10-1](#)
- Design guidelines - see [page T10-2](#)



Associated Products
 Intelligent motors: page 2-2
 Shafts: page 11-2
 Timing belts: page 10-4

All dimensions in mm
 Materials: Aluminium alloy
 pulley with zinc plated
 steel flanges



Part number selection table

When belt width = 10, W=15 & L=21
 When belt width = 16, W=21 & L=27

Example Part No:- TPMP50 F10- 60					
Basic Part Number	Belt Width	No. of Teeth	Pitch Diameter	Bore ØB (H8)	Hub Diameter ØH ±1.0
TPMP50	10 mm F10-	10	15.92	4	8
		12	19.10		11
		14	22.28	6	13
		15	23.87		16
		16	25.46		18
		18	28.65		20
		19	30.24		22
		20	31.83		23
		24	38.20		26
		25	39.79		26
	27	42.97	30		
	16 mm F16-	30	47.75	8	34
		32	50.93		38
		36	57.30		38
		40	63.66		40
		48*	76.39		50
		60*	95.49		65

*Pulleys with 48 and 60 teeth are unflanged













i Features and options

- Zero-backlash pulleys
- Other numbers of teeth available
- 0, 1 or 2 flanges available
- Tapped holes in hubs available
- Alternative bore diameters available
- Alternative mountings available
- Keyed bores available

? Technical support

- Technical information - see [page T10-1](#)
- Design guidelines - see [page T10-2](#)



	<i>Introduction to Reliance</i>	<i>i</i>
	<i>Systems Overview</i>	<i>1</i>
	Intelligent Motors and Motorised Actuators	2
	Planetary and Right Angle Gearboxes	3
	Brass, Ground and Precision Spur Gears	4
	Worms and Wheels, Bevels and Internal Gears	5
	Round and Rectangular Racks and Pinions	6
	Leadscrews and Leadscrew Assemblies	7
	Flexible Shaft Couplings, Clutches and Collars	8
	Linear Guides and Slides	9
	Belts and Pulleys	10
	Gear Clamps and Accessories	11
	Bearings and Spacers	12
	Machine Screws, Dowel Pins and Hardware	13
	<i>Technical Information</i>	<i>14</i>
	<i>Appendices and Index</i>	<i>15</i>

Systems Overview	1
Intelligent Motors and Motorised Actuators	2
Planetary and Right Angle Gearboxes	3
Brass, Ground and Precision Spur Gears	4
Worms and Wheels, Bevels and Internal Gears	5
Round and Rectangular Racks and Pinions	6
Leadscrews and Leadscrew Assemblies	7
Flexible Shaft Couplings, Clutches and Collars	8
Linear Guides and Slides	9
Belts and Pulleys	10
Gear Clamps and Accessories	11
Bearings and Spacers	12
Machine Screws, Dowel Pins and Hardware	13
Technical Information	14



RELIANCE™
PRECISION

Rowley Mills, Penistone Road, Lepton
Huddersfield, HD8 0LE, England

+44 (0) 1484 601002
www.reliance.co.uk
sales@reliance.co.uk

RG36 Issue B1