

GIGATORQUE



Strong, agile, quiet.



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DRIVE
SOLUTIONS

ADVANTAGES AND FEATURES

GigaTorque is the most powerful timing belt available in the market today. Made of a premium HNBR rubber and a high modulus carbon fiber cord, it is the most advanced solutions for heavy duty applications. GigaTorque construction allows user to design compact drives and have a greater power capability, resulting in lower shaft loads.

Maintenance free

- Minimal tension decay
- No need to retension
- Improved drive reliability
- No maintenance costs

Compact drive

- Higher power rating
- Reduced drive size and weight
- Lower shaft loads (i.e. smaller bearing)
- Total drive cost reduction



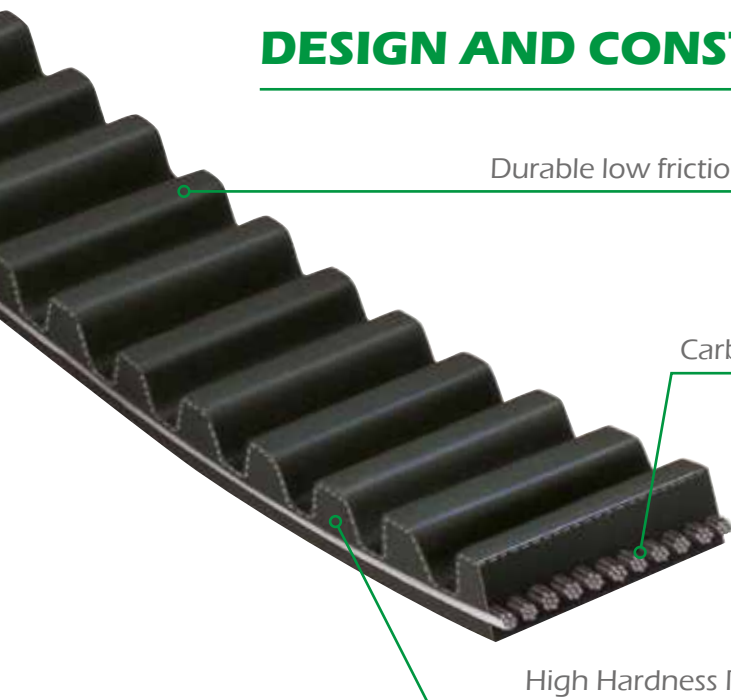
Reduced noise level

- Superior meshing
- High flexible HNBR rubber
- Special fabric
- Reduced friction
- Reduced sound insulation cost
- Improved health and safety

Durability

- State of the art development
- Enhanced compound for crack resistance
- Superior abrasion resistant fabric
- 20% more lifetime
- Greater return on investment

DESIGN AND CONSTRUCTION



Durable low friction fabric

Carbon fiber cord

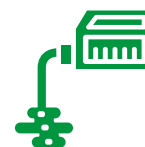
High Hardness Rubber Compound (HNBR)



-30 / +130 °C



40 m/s



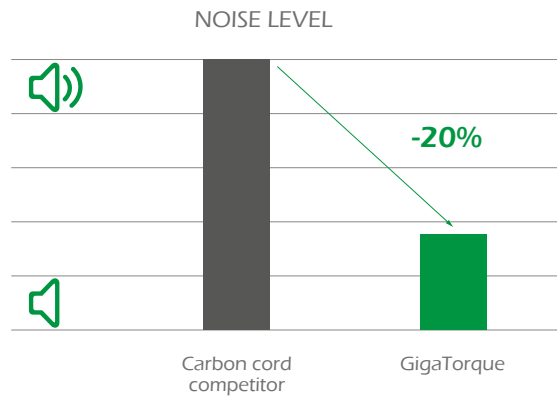
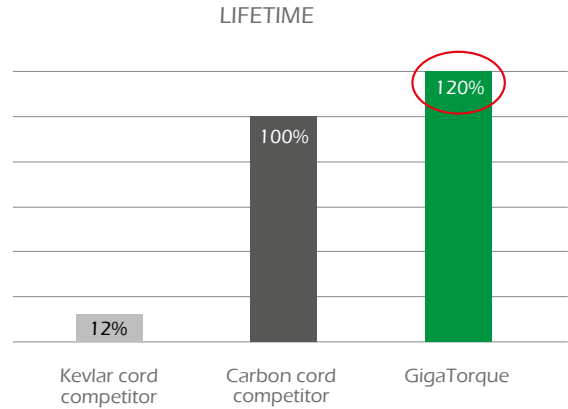
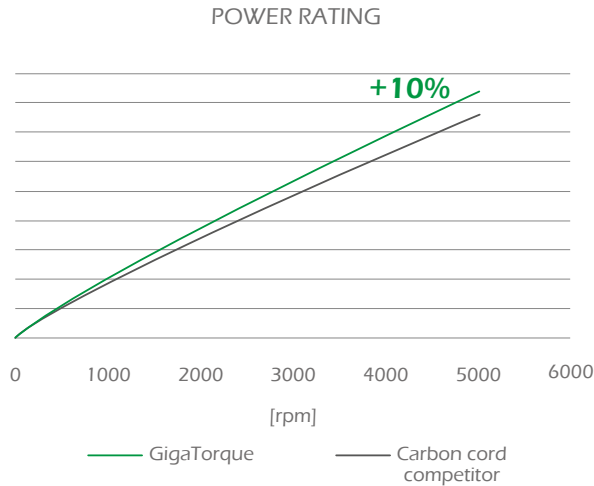
Excellent

PERFORMANCE

+ Power Rating

+ Lifetime

- Noise Level

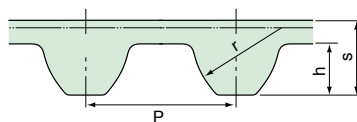


DATASHEET

8M belt width [mm]	Linear mass [kg/m]	Sleeve [mm]
12	0,059	470
21	0,103	
36	0,176	
62	0,304	

14M belt width [mm]	Linear mass [kg/m]	Sleeve [mm]
20	0,166	460
37	0,307	
68	0,564	
90	0,747	
125	1,038	

Section	P [mm]	s [mm]	h [mm]
8M	8	5,6	3,5
14M	14	9,8	6,1



Available in standard widths and lengths for carbon fiber belt drives.
Designed as drop in to be run in 8M and 14M sprockets per ISO 13050 - profile "G".

Minimum recommended pulley diameter		
Pitch	Number of teeth	Pitch diameter [mm]
8M	22	56,02
14M	28	124,78

Belt installation tension [N]

Belt width [mm]	Pitch 8M	
	Min.	Max.
12	191	260
21	336	456
36	579	782
62	999	1342

Belt width [mm]	Pitch 14M	
	Min.	Max.
20	821	1111
37	1517	2054
68	2788	3775
90	3691	4996
125	5127	6940

Belt length tolerances (ISO 13050)	
Belt length [mm]	Centre distance tolerance [mm]
≤ 254	±0.20
254 ÷ 381	±0.23
381 ÷ 508	±0.25
508 ÷ 762	±0.30
762 ÷ 1016	±0.33
1016 ÷ 1270	±0.38
1270 ÷ 1524	±0.41
1524 ÷ 1778	±0.43
1778 ÷ 2032	±0.46
2032 ÷ 2286	±0.49
2286 ÷ 2540	±0.52
2540 ÷ 2794	±0.54
2794 ÷ 3048	±0.56
3048 ÷ 3302	±0.58
3302 ÷ 3556	±0.60
3556 ÷ 3810	±0.63
3810 ÷ 4064	±0.66
4064 ÷ 4318	±0.69
4318 ÷ 4572	±0.72

Pitch	Nominal belt width [mm]	Width tolerance (Lp = pitch length) [mm]			
		Lp ≤ 351	351 < Lp ≤ 840	840 < Lp ≤ 1680	1680 < Lp
8M	12	± 0,60	± 0,60	± 0,60	± 0,60
	21	± 0,60	± 0,60	± 0,60	± 0,60
	36	± 0,60	± 0,60	± 0,60	± 0,60
	62	+ 1,00 - 1,30	+ 1,00 - 1,30	± 1,30	+ 1,30 - 1,60
14M	20	± 0,60	± 0,60	± 0,60	± 0,60
	37	± 0,60	± 0,60	± 0,60	± 0,60
	68	+ 1,00 - 1,30	+ 1,00 - 1,30	± 1,30	+ 1,30 - 1,60
	90	± 1,30	± 1,30	+ 1,30 - 1,60	± 1,60
	125	+ 1,30 - 1,60	± 2	+ 2,00 - 2,30	+ 2,00 - 2,60

AVAILABLE LENGTHS

8M [mm]				
640	1040	1760	2520	3600
720	1120	1792	2600	4000
800	1200	1800	2800	4400
880	1224	2000	2840	4480
896	1280	2200	3048	-
960	1440	2240	3200	-
1000	1600	2400	3280	-

14M [mm]				
994	1610	2310	2800	3920
1120	1750	2380	3136	4326
1190	1890	2450	3304	4410
1260	1960	2520	3360	-
1400	2100	2590	3500	-
1568	2240	2660	3850	-

Part number	CGT	2000	G8M	21
GigaTorque belt				
Pitch length [mm]				
Pitch [mm]				
Belt width [mm]				

PULLEY PROGRAM

Wide range of GTR pulleys warehoused in Italy, tooth profile according to ISO 13050 standard profile "G". Production capability at SIT plant to manufacture pulley according to customer design requirements.

Alternative shaft hub connections:

- Locking device SIT-LOCK®
- Taper lock SER-SIT®
- Hybrid SERLOCK®



Part number	PBG	34	G8M	36
GTR pulley				
Number of teeth				
Pitch [mm]				
Belt width [mm]				

SIT-LOCK®, SER-SIT® and SERLOCK® shaft connection device to be ordered separately.