

POWERGRIP® - GT® BELTS

The POWERGRIP® - GT® range of belts represents the natural development of the HTD® curved profile belts.

The use of new materials has enabled better performance to be achieved, new production technologies ensure consistent optimum quality, new profiles ensure greater precision and silent operation.

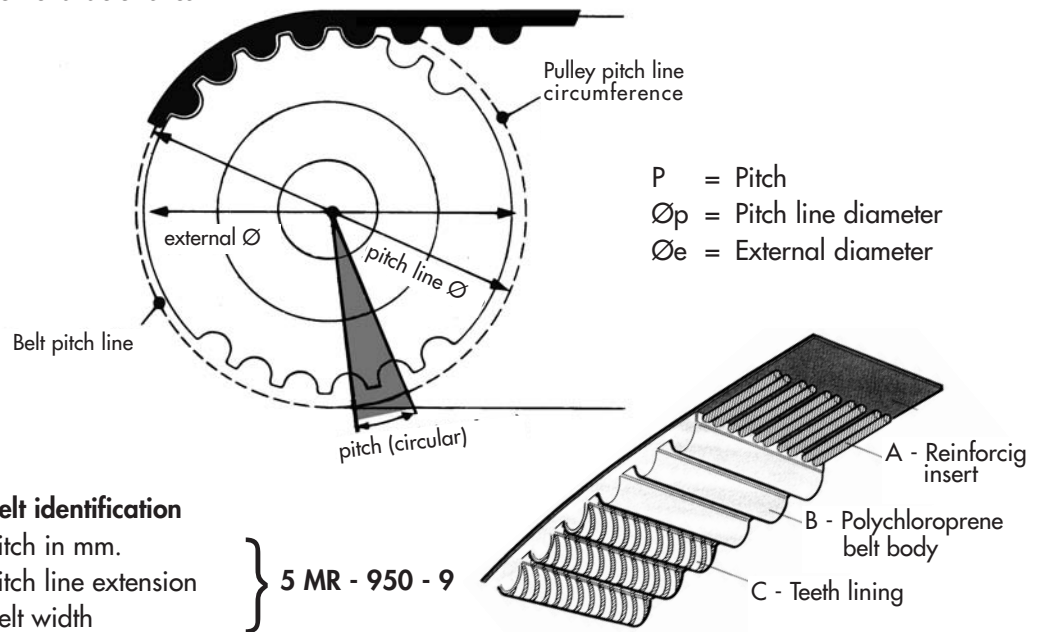
The POWERGRIP® - GT® range of belts can only operate in pulleys that have their specific profile.

These pulleys are manufactured having the following pitches: 2 - 3 - 5 mm; **CHIARAVALLI Trasmissioni S.p.A.** produce bars and pulleys having the following pitches: 3 and 5mm.

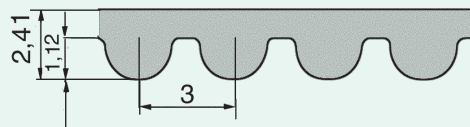
The applications of the POWERGRIP® - GT® range of belts are virtually unlimited but they are mainly recommended for the following:

- good power transmission in limited spaces - for example: electrical household appliances
- silent operation - for example: various office machines
- consistent precision - for example: machine tools and robots

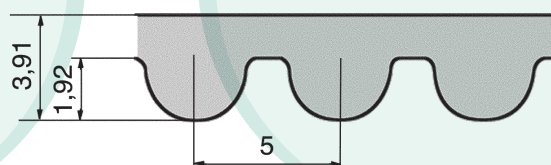
Belt characteristics



GT® 3MR



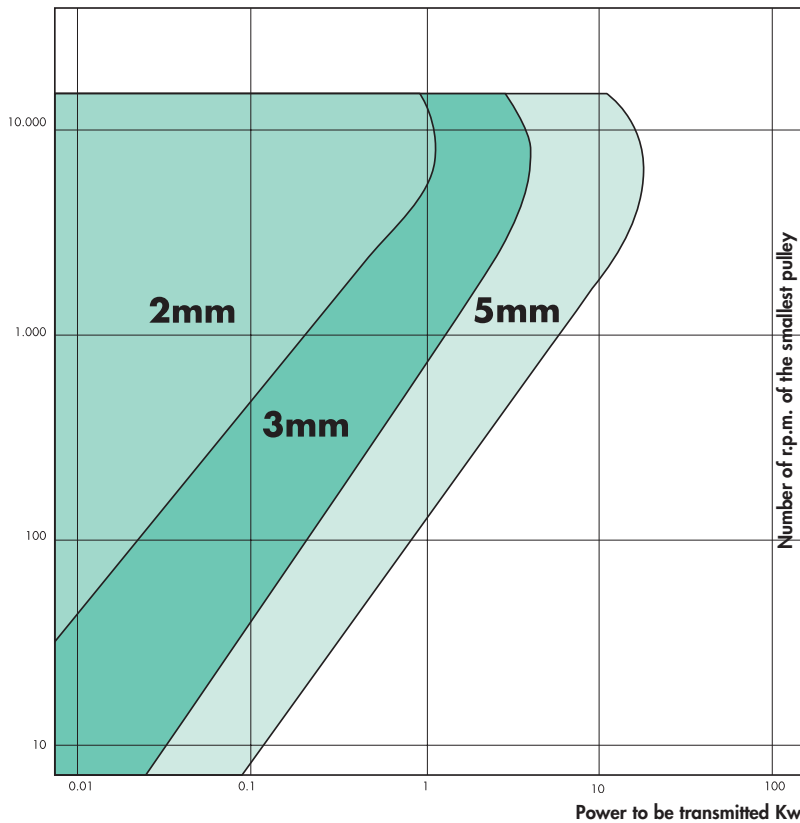
GT® 5MR



POWERGRIP® GT® "GATES®" BELTS

Belt tolerances along the pitch line length are limited, to achieve the correct belt tension therefore, it is necessary to be able to adjust the centres distance or tension the belt using a tensioning roller.

POWERGRIP® - GT® BELT PITCH SELECTION



"GATES" GT® 3MR (3mm. pitch)

No. of Teeth	Pitch line length	Belt type
40	120	3MR 120
50	150	3MR 150
55	165	3MR 165
60	180	3MR 180
65	195	3MR 195
70	210	3MR 210
75	225	3MR 225
80	240	3MR 240
84	252	3MR 252
85	255	3MR 255
90	270	3MR 270
95	285	3MR 285
100	300	3MR 300
110	330	3MR 330
120	360	3MR 360
130	390	3MR 390
140	420	3MR 420
150	450	3MR 450
160	480	3MR 480
170	510	3MR 510
180	540	3MR 540
190	570	3MR 570
200	600	3MR 600

"GATES" GT® 5MR (5mm. pitch)

No. of Teeth	Pitch line length	Belt type
55	275	5MR 275
65	325	5MR 325
70	350	5MR 350
75	375	5MR 375
80	400	5MR 400
85	425	5MR 425
90	450	5MR 450
95	475	5MR 475
100	500	5MR 500
105	525	5MR 525
106	530	5MR 530
110	550	5MR 550
120	600	5MR 600
130	650	5MR 650
140	700	5MR 700
150	750	5MR 750
160	800	5MR 800
170	850	5MR 850
180	900	5MR 900
190	950	5MR 950
200	1000	5MR 1000
230	1150	5MR 1150
420	2100	5MR 2100

POWER GRIP® - GT® BELT WIDTHS

PITCH	GT 3MR	GT 5MR
BELT WIDTHS mm.	6 9 15	9 15 25

TOLERANCES ON CENTRES DISTANCES

These values can be found when the belt is subjected to a measurement load.

BELTS PITCH LINE LENGTH	TOLERANCE ON CENTRES DISTANCE mm
from 127 to 254	±0.2
from 255 to 381	±0.23
from 382 to 508	±0.25
from 509 to 762	±0.30
from 763 to 1016	±0.33
from 1017 to 1270	±0.38
from 1271 to 1524	±0.41
from 1525 to 1778	±0.43
longer than 1779	add ± 0.03 for every 250 mm. of additional length.

TOLERANCES ON GT® BELTS LENGTH

BELT WIDTH	TOLERANCE mm. FOR LENGTHS from 0 to 500	TOLERANCE mm. FOR LENGTHS from 501 to 1500	TOLERANCE mm. FOR LENGTHS from 1500 and longer
Up to 5	+ 0.4 - 0.4	+ 0.5 - 0.5	-
from 5.01 to 15	+ 0.6 - 0.6	+ 0.7 - 0.7	+ 0.8 - 0.8
from 15.01 to 25	+ 0.7 - 0.7	+ 0.8 - 0.8	+ 0.9 - 0.9
from 25.01 to 40	+ 0.8 - 0.8	+ 1.0 - 1.0	+ 1.2 - 1.2
from 40.01 to 55	+ 1.0 - 1.0	+ 1.2 - 1.2	+ 1.4 - 1.4
from 55.01 to 75	+ 1.2 - 1.2	+ 1.5 - 1.5	+ 1.8 - 1.8
from 75.01 to 100	+ 1.6 - 1.6	+ 1.8 - 1.8	+ 2.0 - 2.0
from 100.01 to 175	+ 2.4 - 2.4	+ 2.6 - 2.6	+ 2.8 - 2.8
longer than 175.01	-	-	+ 5.6 - 5.6