QST SYSTEM

MEGADYNE

QST SYSTEM

The Sound of Silence

QST means Quiet Self Track.
With precise and continuous mesh between belt and pulley, the Megadyne QST System delivers an improved reduction in noise level, versus traditional types of trapezoidal and curvilinear tooth designs.

The key advantages of the QST System are:

- Low noise
- Self-tracking
- Dimensional stability
- High torque capacity
- Longer belt and pulley life

Belts

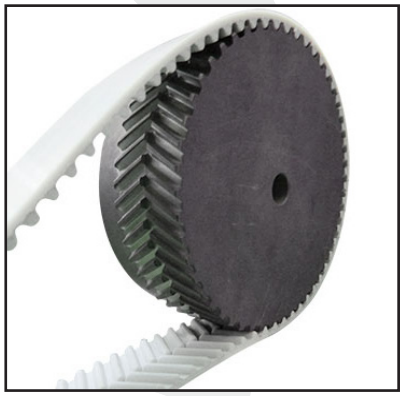
Megalinear QST is manufactured of a thermoplastic polyurethane 92° ShA, with high strength zinc coated steel tension members (S and Z torsion). The teeth are covered as standard with NFT (Nylon Faced Teeth).

Megalinear QST has an excellent resistance to;

- Ageing
- Hydrolysis, UVA
- Ozone
- Most acids and alkalis
- Oils, grease and fat
- 100% Made in Italy

Compatible for fabrication with other thermoplastic materials, Megalinear QST works at a temperature range of between -25°C and + 80C°.

Main features:



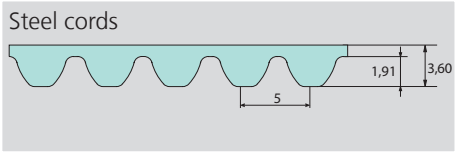
LOW NOISE
Megalinear QST provides a solution where current belt applications generate too much noise.
The Helical Offset Tooth design and continuous tooth engagement, allows MEGALINEAR QST to run quieter than any other timing product.

SELF-TRACKING, NO PULLEY FLANGES REQUIRED
The Megalinear QST design consists of a left and right helix, which guides the belt into the centre of the QST pulley, eliminating any belt wander and ensuring high precision linear positioning.
The self-tracking nature of the Helical Offset Tooth eliminates the need for pulley flanges.

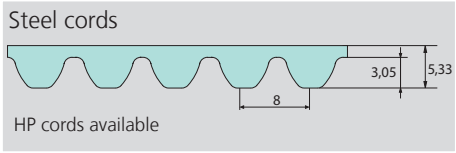
HIGH TORQUE CAPACITY
Megalinear QST features nylon facing on the Helical Offset Teeth increasing the tensile load capacity, allowing the teeth to deliver more torque.

Product Range

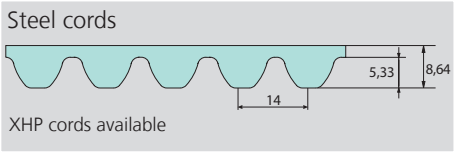
QST 5



QST 8

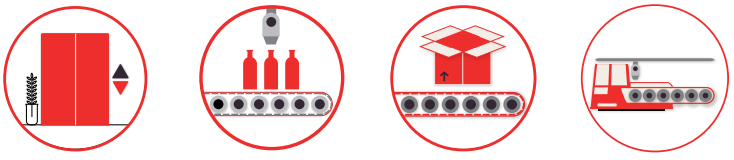


QST 14



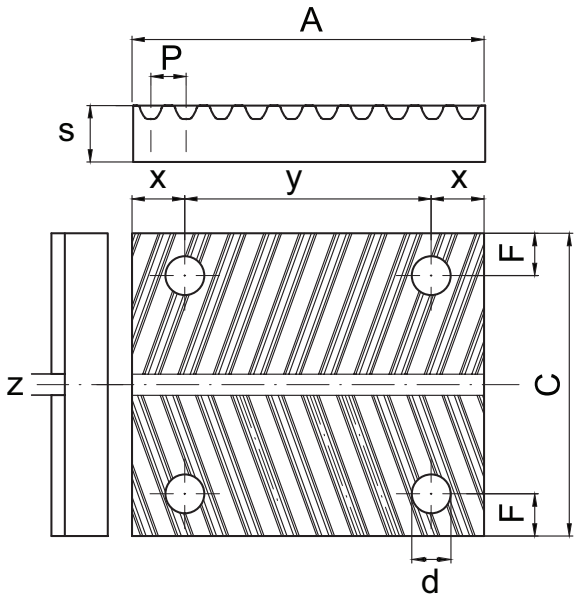
QST 10 available on request

Main Applications



Clamping Plates

The clamping plates are used to fix the tail of the open belts.
As the belt can't be stretched with the fixing plates we suggest to use other tension system.
The plates are delivered in aluminium alloy.
The Megadyne Technical Staff is ready to study special or particular applications.



Aluminium	Clamping plates for QST 5									
	Pitch	BELT'S WIDTH (mm)	**F**	**d**	**A**	**S**	**x**	**y**	**z**	**C**
	• QST 5	**12**	6	5,5	50	8	7,5	35	3	43
		24	6	5,5	50	8	7,5	35	3	43

Aluminium	Clamping plates for QST 8									
	Pitch	BELT'S WIDTH (mm)	**F**	**d**	**A**	**S**	**x**	**y**	**z**	**C**
	• QST 8	**16**	7,5	9	74	14,5	13	48	3	40
		25	8	9	74	14,5	13	48	3	50
		32	8	9	74	14,5	13	48	3	57
		50	8	9	74	14,5	13	48	3	75

Aluminium	Clamping plates for QST 14									
	Pitch	BELT'S WIDTH (mm)	**F**	**d**	**A**	**S**	**x**	**y**	**z**	**C**
	• QST 14	**35**	9,5	11	130	22	23	84	3	65
		52,5	9,5	11	130	22	23	84	3	82,5
		70	9,5	11	130	22	23	84	3	100
		105	10	11	130	22	23	84	3	136

• Available in customized length

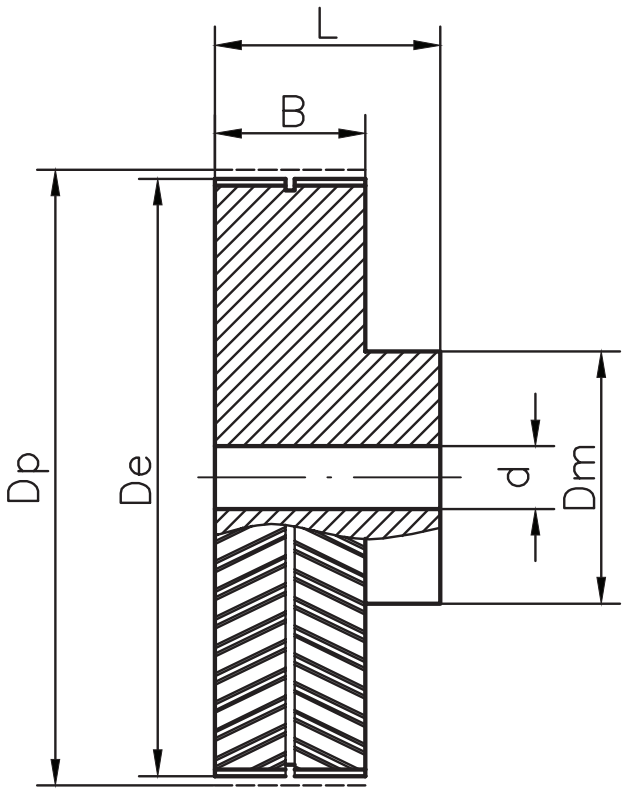
QST 10 fixing plates available on request.

Pulleys

100% Made in Italy, the QST pulleys are produced with innovative equipment and made in a high quality steel for better performance, reduced wear and ensuring a longer life of any transmission system.
The pulleys are treated to resist oxidation and wear.
The QST pulleys range includes: QST 5M, QST 8M and QST 14M
(QST 10M is available on request)
Megadyne QST System includes belts, pulleys and clamping plates: discover the wide range and find out the best combination for your application.

QST 5M 25

N. Of Teeth	Dp (mm)	De (mm)	Dm (mm)	B (mm)	L
16	25,46	24,50	19,0	26,0	32,0
18	28,65	27,69	22,0	26,0	32,0
20	31,83	30,87	25,0	26,0	34,0
21	33,42	32,46	26,0	26,0	34,0
22	35,01	34,05	28,0	26,0	34,0
24	38,20	37,24	32,0	26,0	34,0
26	41,38	40,42	35,0	26,0	34,0
28	44,56	43,60	38,0	26,0	34,0
30	47,75	46,79	41,0	26,0	34,0
32	50,93	49,97	44,0	26,0	34,0
36	57,30	56,34	51,0	26,0	34,0
40	63,66	62,70	57,0	26,0	37,0
44	70,03	69,07	63,0	26,0	37,0
48	76,39	75,43	70,0	26,0	37,0
60	95,49	94,53	89,0	26,0	37,0
72	114,59	113,63	108,0	26,0	37,0



QST 8M 16

N. Of Teeth	Dp (mm)	De (mm)	Dm (mm)	B (mm)	L
18	45,84	44,46	38,0	17,0	27,0
22	56,02	54,66	46,0	17,0	29,0
24	61,12	59,74	51,0	17,0	33,0
26	66,21	64,84	58,0	17,0	33,0
28	71,30	69,93	62,0	17,0	33,0
30	76,39	75,02	67,0	17,0	33,0
32	81,49	80,12	72,0	17,0	33,0
34	86,58	85,21	77,0	17,0	33,0
36	91,67	90,30	82,0	17,0	33,0
38	96,77	95,39	87,0	17,0	33,0
40	101,86	100,49	92,0	17,0	33,0
44	112,05	110,67	102,0	17,0	33,0
48	122,23	120,86	112,0	17,0	33,0
52	132,42	131,04	123,0	17,0	33,0
60	152,79	151,42	143,0	17,0	33,0

QST 8M 25

N. Of Teeth	Dp (mm)	De (mm)	Dm (mm)	B (mm)	L
18	45,84	44,46	38,0	26,0	38,0
22	56,02	54,66	46,0	26,0	38,0
24	61,12	59,74	51,0	26,0	42,0
26	66,21	64,84	58,0	26,0	42,0
28	71,30	69,93	62,0	26,0	42,0
30	76,39	75,02	67,0	26,0	42,0
32	81,49	80,12	72,0	26,0	42,0
34	86,58	85,21	77,0	26,0	42,0
36	91,67	90,30	82,0	26,0	42,0
38	96,77	95,39	87,0	26,0	42,0
40	101,86	100,49	92,0	26,0	42,0
44	112,05	110,67	102,0	26,0	42,0
48	122,23	120,86	112,0	26,0	42,0
60	152,79	151,42	143,0	26,0	42,0

Pulleys

QST 8M 32

N. Of Teeth	Dp (mm)	De (mm)	Dm (mm)	B (mm)	L
18	45,84	44,46	38,0	33,0	43,0
22	56,02	54,66	46,0	33,0	45,0
24	61,12	59,74	51,0	33,0	49,0
26	66,21	64,84	58,0	33,0	49,0
28	71,30	69,93	62,0	33,0	49,0
30	76,39	75,02	67,0	33,0	49,0
32	81,49	80,12	72,0	33,0	49,0
34	86,58	85,21	77,0	33,0	49,0
36	91,67	90,30	82,0	33,0	49,0
38	96,77	95,39	87,0	33,0	49,0
40	101,86	100,49	92,0	33,0	49,0
44	112,05	110,67	102,0	33,0	49,0
48	122,23	120,86	112,0	33,0	49,0
52	132,42	131,04	123,0	33,0	49,0
60	152,79	151,42	143,0	33,0	49,0

QST 8M 50

N. Of Teeth	Dp (mm)	De (mm)	Dm (mm)	B (mm)	L
18	45,84	44,46	38,0	51,0	63,0
22	56,02	54,66	46,0	51,0	63,0
24	61,12	59,74	51,0	51,0	67,0
26	66,21	64,84	58,0	51,0	67,0
28	71,30	69,93	62,0	51,0	67,0
30	76,39	75,02	67,0	51,0	67,0
32	81,49	80,12	72,0	51,0	67,0
34	86,58	85,21	77,0	51,0	67,0
36	91,67	90,30	82,0	51,0	67,0
38	96,77	95,39	87,0	51,0	67,0
40	101,86	100,49	92,0	51,0	67,0
44	112,05	110,67	102,0	51,0	67,0
48	122,23	120,86	112,0	51,0	67,0
60	152,79	151,42	143,0	51,0	67,0

QST 14M 35

N. Of Teeth	Dp (mm)	De (mm)	Dm (mm)	B (mm)	L
32	142,60	139,81	123,0	37,0	53,0
34	151,52	148,72	132,0	37,0	53,0
36	160,43	157,63	141,0	37,0	53,0
38	169,34	166,55	150,0	37,0	53,0
40	178,25	175,46	159,0	37,0	53,0
48	213,90	211,11	195,0	37,0	53,0

QST 14M 52,5

N. Of Teeth	Dp (mm)	De (mm)	Dm (mm)	B (mm)	L
32	142,60	139,81	126,5	54,5	74,5
34	151,52	148,72	135,5	54,5	74,5
36	160,43	157,63	141,0	54,5	70,5
38	169,34	166,55	150,0	54,5	70,5
40	178,25	175,46	159,0	54,5	70,5
48	213,90	211,11	195,0	54,5	70,5

QST 14M 70

N. Of Teeth	Dp (mm)	De (mm)	Dm (mm)	B (mm)	L
32	142,60	139,81	126,5	72,0	98,0
34	151,52	148,72	135,5	72,0	98,0
36	160,43	157,63	144,0	72,0	98,0
38	169,34	166,55	153,0	72,0	98,0
40	178,25	175,46	162,0	72,0	98,0
48	213,90	211,11	197,0	72,0	88,0

QST 14M 105

N. Of Teeth	Dp (mm)	De (mm)	Dm (mm)	B (mm)	L
32	142,60	139,81	126,5	107,0	133,0
34	151,52	148,72	135,5	107,0	133,0
36	160,43	157,63	144,0	107,0	133,0
38	169,34	166,55	153,0	107,0	133,0
40	178,25	175,46	162,0	107,0	133,0
48	213,90	211,11	197,0	107,0	123,0

QST 10 pulleys available on request.