



**MEGADYNE**



*EN*

## **QST SYSTEM**

PRODUCT  
BROCHURE

# MEGALINEAR 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

## CHARACTERISTICS

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 + 80°C.

## ADVANTAGES

### 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.

## MAIN INDUSTRIES



ELEVATORS  
& LIFTS



PACKAGING



MATERIAL  
HANDLING



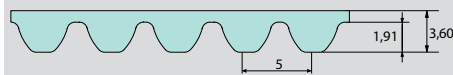
MACHINE  
TOOLS



### RANGE

#### QST 5

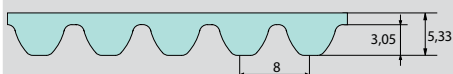
Steel cords



QST 10 available on request

#### QST 8

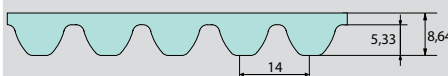
Steel cords



HP cords available

#### QST 14

Steel cords



XHP cords available

QST SYSTEM

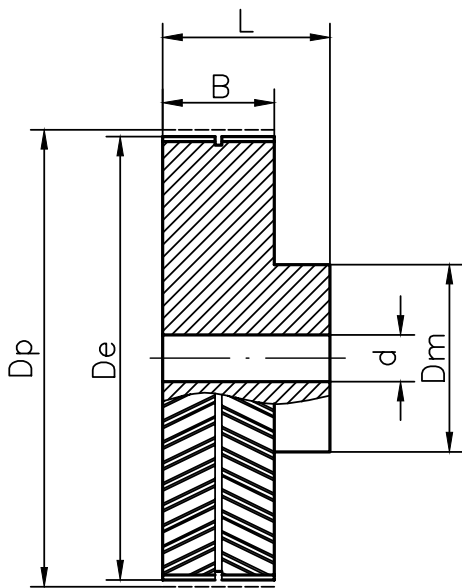
[megadynegroup.com](http://megadynegroup.com)

# MEGALINEAR QST SYSTEM

## 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



# MEGALINEAR QST SYSTEM

## PULLLEYS

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.



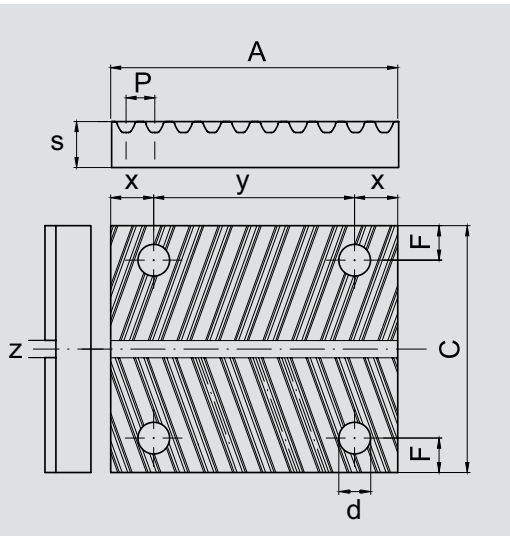
# MEGALINEAR QST SYSTEM

## 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 WIDTH	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 WIDTH	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	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 | Dimensions in mm

# DATA SHEET

## CUSTOMER DATA

Company Name \_\_\_\_\_ Date \_\_\_\_\_

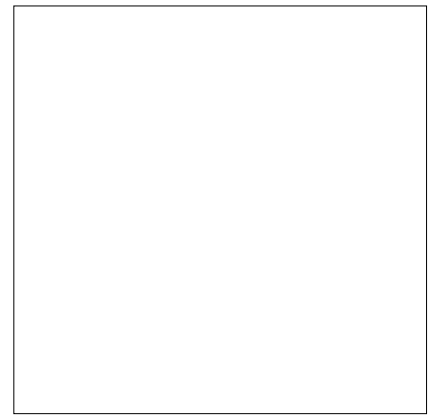
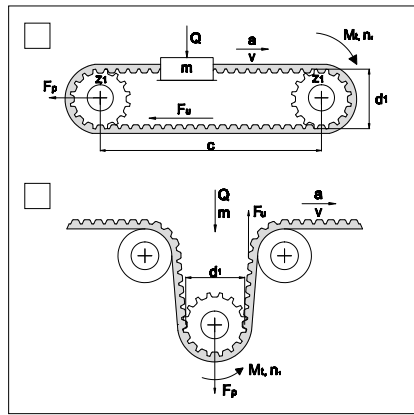
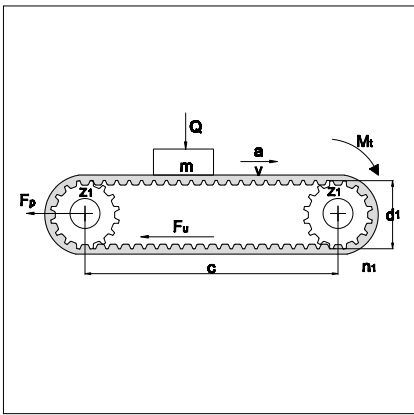
Address \_\_\_\_\_ Zip Code \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Country \_\_\_\_\_

Customer Name/Surname \_\_\_\_\_

Office \_\_\_\_\_ Tel. \_\_\_\_\_ e-mail \_\_\_\_\_

## DRIVE INFORMATION TRANSMISSION LAYOUT



Conveyor

Linear motion (choose between the layout above)

Other (If layout is different please sketch it above)

## DRIVE INFORMATION (FOR CONVEYOR)

Driver pulley's diameter \_\_\_\_\_ Driven pulley's diameter \_\_\_\_\_

Center distance \_\_\_\_\_ Minimum safety factor needed \_\_\_\_\_

Are there any size limitation?  Yes  No

(if yes, please indicate *Max diameter*, *Max width* and *Max center distance*):

Max diameter \_\_\_\_\_ Max width \_\_\_\_\_ Max center distance \_\_\_\_\_

Linear speed \_\_\_\_\_ Acceleration \_\_\_\_\_ Mass \_\_\_\_\_

Is there any sliding surface?  Yes  No (if yes please indicate friction coefficient): \_\_\_\_\_

Is there any cover on the back?  Yes  No (if yes please indicate the type) \_\_\_\_\_

Are cleats required?  Yes  No (if yes please indicate cleats code, otherwise attach drawings) \_\_\_\_\_

Working time  < 8h  From 8h up to 16h  24h

# DATA SHEET

## DRIVE INFORMATION (FOR LINEAR MOTION)

Driver pulley's diameter \_\_\_\_\_ Driven pulley's diameter \_\_\_\_\_

Center distance \_\_\_\_\_ Minimum safety factor needed \_\_\_\_\_

Are there any size limitation?  Yes  No

(if yes, please indicate *Max diameter*, *Max width* and *Max center distance*):

Max diameter \_\_\_\_\_ Max width \_\_\_\_\_ Max center distance \_\_\_\_\_

Linear speed \_\_\_\_\_ Acceleration \_\_\_\_\_ Mass \_\_\_\_\_

Working time  < 8h  From 8h up to 16h  24h

## WORK'S ENVIRONMENT INFORMATION (FOR ALL LAYOUT TRANSMISSION SYSTEM)

Work Temperature ( please indicate constant temperature and in case peaks) \_\_\_\_\_

Humidity  Standard  No standard  Other \_\_\_\_\_

Chemical agents: (oils, grass, aggressive compounds)  Yes  No

In case please indicate type and percentage \_\_\_\_\_

# Discover Your Local Contacts

The local partner of choice  
for sustainable power transmission belting solutions  
around the globe.

**General contact information:**

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Italy



Scan the QR code  
and find your local  
contact

