



# Elatech<sup>®</sup> SYNCRO MAX<sup>®</sup>



# ELATECH® SYNCRO MAX® – Extra-wide

ELATECH® SYNCRO MAX® Extra-wide Polyurethane Belts extend the advantages of synchronous timing belts to wider surfaces and to the typical applications of flat and modular conveyor belts.

Made of polyurethane and reinforced with aramid cords, ELATECH® SYNCRO MAX® Extra-wide Belts provide positive drive and synchronous conveying resulting in no slippage, better tracking, higher indexing/positioning precision, smaller drive pulley requirements, lower belt tension, lower shaft loads and consequently power saving. Open or joined, coated with Silicon, Rubber, PU or PVC

backings, perforated or grooved with complex design, and equipped with a wide range of tracking guides and profiles of different shapes and dimensions.

ELATECH® SYNCRO MAX® Extra-wide Belts offer the best solution for a great number of applications such as the production of baby diapers and feminine hygiene products and the production of tires as well as in many other industrial fields like food, tobacco, metal, wood, glass, and of course conveying and packaging.

## Product overview

- Natural colour PU compound material
- High durability
- Cut resistant
- Grease, chemicals and water resistant
- Non-marking
- Kevlar (Aramid) parallel cord reinforcement
- No cords exposure on belt edges
- Even cord tension

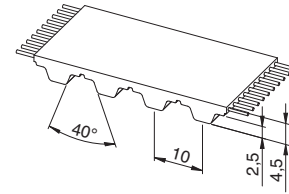
## Available options

- PU compound for food contact
- PAZ/PAR for noise reduction
- Tracking guides on teeth and/or on back
- Silicon, PU, PVC and rubber backings
- Wide range of cleats, flights and profiles
- Perforation by high precision water-jet cutting technology



**BELT CHARACTERISTICS**

- Polyurethane timing belt with aramid tension cords
- Tooth profile according to ISO 17396
- Metric pitch 10 mm
- Natural colour PU compound 92 Sh A
- Standard roll length = 50 m



**STANDARD TOLERANCES**

WIDTH TOLERANCE: ±1,0 [mm]  
 THICKNESS TOLERANCE: ±0,3 [mm]

**TECHNICAL DATA**

**Standard aramid cord**

Belt width b [mm]		250	300	350	400	450	500/510
Allowable tensile load	$F_{Tzul}$ [N]*	10210	12280	14360	16430	18500	20570
Breaking load	$F_{Br}$ [N]	39088	47016	54945	62874	70802	78731
Specific spring rate	$C_{spez}$ [N]	1276250	1535000	1795000	2053750	2312500	2571250
Weight	[kg/m]	0,95	1,14	1,33	1,52	1,71	1,90

Other widths are available on request

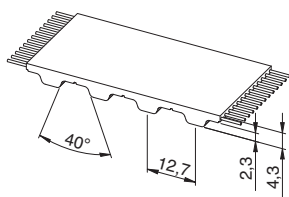
**Tooth shear strength**

rpm	0	20	40	60	80	100	200	300	400	500	600	700	800	900	1000	1100
$F_{Uspez}$ [N/cm]	51,80	50,32	49,04	47,92	46,95	46,11	42,75	40,28	38,36	36,80	35,49	34,35	33,34	32,44	31,63	30,89
rpm	1200	1300	1400	1440	1500	1600	1700	1800	1900	2000	2200	2400	2600	2800	3000	3200
$F_{Uspez}$ [N/cm]	30,21	29,58	28,99	28,76	28,44	27,92	27,43	26,97	26,53	26,12	25,34	24,63	23,97	23,36	22,78	22,25
rpm	3400	3600	3800	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000
$F_{Uspez}$ [N/cm]	21,74	21,27	20,81	20,39	19,40	18,51	17,70	16,97	16,29	15,66	15,07	14,52	14,00	13,51	13,05	12,61

**Flexibility**

Minimum pulley number of teeth and minimum idler diameter	Drive without reverse bending		Drive with reverse bending	
	$z_{min}$	idler $d_{min}$	$z_{min}$	idler $d_{min}$
STANDARD	15	60 mm	20	60 mm

**Elatech® V Joined informations**  
 Allowable tensile load of joined belt is 50% of M - open end [\*]


**BELT CHARACTERISTICS**

- Polyurethane timing belt with aramid tension cord
- Tooth profile according to UNI/ISO 5296
- Imperial pitch 1/2" = 12,7 mm
- Natural colour PU compound 92 Sh A
- Standard roll length = 50 m

**STANDARD TOLERANCES**

WIDTH TOLERANCE: ±1,0 [mm]  
 THICKNESS TOLERANCE: ±0,3 [mm]

**TECHNICAL DATA**
**Standard aramid cord**

Belt width b [inch]/[mm]		10 / 254	12 / 304,8	14 / 355,6	16 / 406,4	18 / 457,2	20 / 508
Allowable tensile load	$F_{Tzul}$ [N]*	10210	12280	14360	16430	18500	20570
Breaking load	$F_{Br}$ [N]	39088	47016	54945	62874	70802	78731
Specific spring rate	$C_{spez}$ [N]	1276250	1535000	1795000	2053750	2312500	2571250
Weight	[kg/m]	0,90	1,05	1,24	1,42	1,60	1,80

Other widths are available on request

**Tooth shear strength**

rpm	0	20	40	60	80	100	200	300	400	500	600	700	800	900	1000	1100
$F_{Uspez}$ [N/cm]	45,30	43,95	42,78	41,77	40,88	40,11	37,22	35,07	33,41	32,05	30,90	29,91	29,04	28,26	27,55	26,90
rpm	1200	1300	1400	1440	1500	1600	1700	1800	1900	2000	2200	2400	2600	2800	3000	3200
$F_{Uspez}$ [N/cm]	26,31	25,76	25,25	25,05	24,77	24,32	23,89	23,49	23,11	22,74	22,07	21,44	20,87	20,34	19,84	19,37
rpm	3400	3600	3800	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000
$F_{Uspez}$ [N/cm]	18,93	18,51	18,12	17,75	16,88	16,11	15,41	14,76	14,17	13,62	13,11	12,63	12,18	11,75	11,35	10,96

**Flexibility**

Minimum pulley number of teeth and minimum idler diameter	Drive without reverse bending		Drive with reverse bending	
	$z_{min}$	idler $d_{min}$	$z_{min}$	idler $d_{min}$
STANDARD	14	60 mm	20	80 mm

**Elatech® V Joined informations**

Allowable tensile load of joined belt is 50% of M - open end [\*]