

BRECOFLEX[®]move - timing belts

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More Power. Optimized tooth form. Versatile usable. Efficient.



updated
Edition 07/2020

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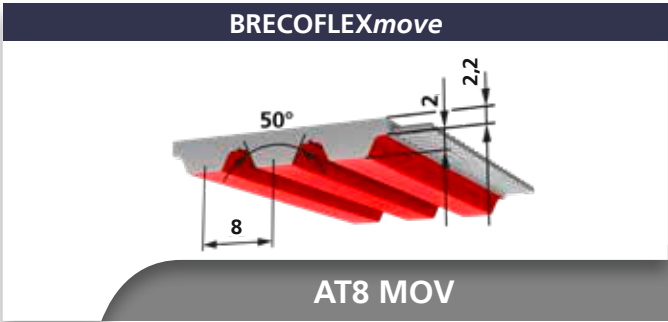


BRECOFLEX^{move}, that is

- a newly developed tension member for transmission of stronger forces
- a FEM-optimised tooth flank geometry
- minimised wear due to a laminate coating
- a space saver due to the option of choosing a narrower belt width

BRECO^{move}, additionally offers

- high power transmission specifically for applications in linear technology
- short settling time and high positioning accuracy due to maximum belt stiffness



Belt widths b [mm] (in-between belt widths on request)					
16	25	32	50	75	100

BRECOFLEXmove 75 AT8 MOV 2400	
Width b	
Type/pitch	
Length in mm	

BRECOFLEXmove AT8 MOV	Available lengths and versions
Standard delivery lengths	-
Winding width	100 mm
Any number of teeth available from	1408 mm up to 13000 mm
Minimum purchase amount	1 sleeve
Standard material	TPUST1
move-tension member (Standard)	steel
E-tension member	not available
VA-tension member	not available
Laminate coating on the tooth side (standard)	Standard, colour: red
Belt colour	white / red

BRECOFLEXmove AT8

The **BRECOFLEXmove** is a timing belt specifically designed for high-performance drives and traction drives with a particularly high stiffness requirement. A newly developed steel cord tension member increases belt stiffness and tear-resistance, making transmission of stronger forces possible. The tooth flank geometry has been optimised through the Finite Element Method (FEM). This leads to an optimisation of the contact pressure distribution and reduces the work of friction between the timing belts and tooth washer, thus minimising wear. In addition, a friction-optimised laminate coating is applied to the tooth side.

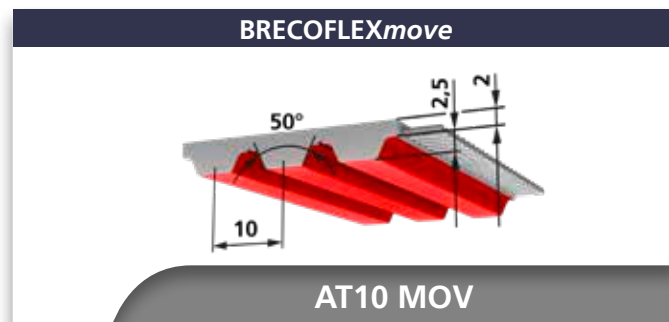
Selecting a narrower **BRECOFLEXmove** timing belt as an alternative to an endless standard timing belt makes a more compact drive design possible.

Your local BRECO sales partner can provide further information.

BRECOFLEXmove AT8 MOV				Tooth shear strength (specific belt tooth load bearing)			
R.p.m. n [min-1]	F _{Uspez} [N/cm]	M _{spez} [Ncm/cm]	P _{spez} [W/cm]	R.p.m. n [min-1]	F _{Uspez} [N/cm]	M _{spez} [Ncm/cm]	P _{spez} [W/cm]
0	90,560	14,416	0,000	2000	49,680	7,912	16,558
20	89,200	14,208	0,297	2200	48,080	7,640	17,618
40	88,000	14,008	0,586	2400	46,560	7,408	18,603
60	86,880	13,808	0,869	2600	45,120	7,184	19,539
80	85,760	13,640	1,143	2800	43,760	6,976	20,426
100	84,640	13,480	1,410	3000	42,480	6,776	21,277
200	80,080	12,752	2,674	3200	41,360	6,592	22,078
300	76,480	12,176	3,819	3400	40,320	6,408	22,829
400	73,280	11,680	4,891	3600	39,280	6,248	23,543
500	70,720	11,248	5,889	3800	38,320	6,088	24,234
600	68,400	10,880	6,838	4000	37,360	5,936	24,886
700	66,160	10,536	7,725	4500	35,120	5,592	26,365
800	64,320	10,240	8,574	5000	33,120	5,288	27,720
900	62,560	9,952	9,388	5500	31,440	5,000	28,829
1000	60,960	9,712	10,164	6000	29,840	4,744	29,814
1100	59,520	9,472	10,915	6500	28,320	4,496	30,677
1200	58,160	9,256	11,630	7000	26,880	4,272	31,416
1300	56,880	9,056	12,320	7500	25,600	4,064	32,032
1400	55,680	8,856	12,986	8000	24,320	3,880	32,525
1500	54,560	8,672	13,638	8500	23,200	3,696	32,894
1600	53,440	8,512	14,254	9000	22,080	3,520	33,141
1700	52,480	8,352	14,858	9500	21,120	3,352	33,387
1800	51,520	8,192	15,450	10000	20,080	3,200	33,510
1900	50,480	8,048	16,016				

BRECOFLEXmove AT8 MOV		Admissible tension cord strength F _{zul} / Belt weight					
Belt width	b [mm]	16	25	32	50	75	100
move tension member	F _{zul} [N]	4312	6750	8625	13470	20200	26940
Belt weight	[kg/m]	0,106	0,167	0,212	0,339	0,508	0,678

BRECOFLEXmove AT8 MOV		Flexibility (minimum tooth count/minimum diameter)	
		move tension member	
		Standard	
	Without contraflexure	z _{min}	22
		d _{min} [mm]	60
	With contraflexure	z _{min}	32
		d _{min} [mm]	120



Belt widths b [mm] (in-between belt widths on request)				
25	32	50	75	100

BRECOFLEXmove AT10 MOV	Available lengths and versions
Standard delivery lengths	see table on the right
Any number of teeth available from	1.400 - 30.500 mm
Intermediate lengths	Minimum order number on request
Standard material	TPUST1
move tension member (Standard)	Steel
E-tension member	not available
VA-tension member	not available
Laminate coating on the tooth side (standard)	red
Belt colour	white / red

BRECOFLEXmove 75 AT10 MOV 2650

Width b

Type/pitch

Length in mm

BRECOFLEXmove AT10

The **BRECOFLEXmove** is a timing belt specifically designed for high-performance drives and traction drives with a particularly high stiffness requirement. A newly developed steel cord tension member increases belt stiffness and tear-resistance, making transmission of stronger forces possible. The tooth flank geometry has been optimised through the Finite Element Method (FEM). This leads to an optimisation of the contact pressure distribution and reduces the work of friction between the timing belts and tooth washer, thus minimising wear. In addition, a friction-optimised laminate coating is applied to the tooth side.

Selecting a narrower **BRECOFLEXmove** timing belt as an alternative to an endless standard timing belt makes a more compact drive design possible.

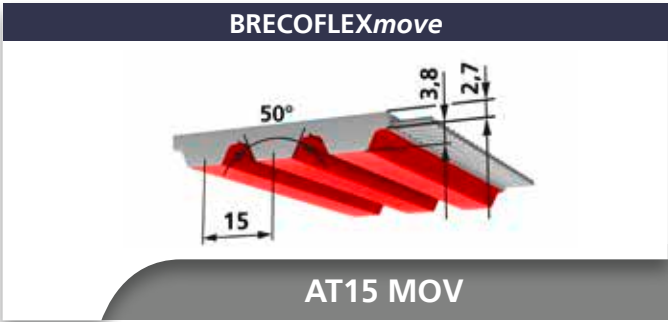
Your local BRECO sales partner can provide further information.

Standard lengths [mm] / Number of teeth			
Length	Number of teeth	Length	Number of teeth
720	72	3000	300
780	78	3150	315
840	84	3350	335
980	98	3550	355
1080	108	3750	375
1150	115	4000	400
1240	124	4250	425
1400	140	4500	450
1500	150	4750	475
1600	160	5000	500
1700	170	5300	530
1800	180	5600	560
1900	190	6000	600
2000	200	6300	630
2120	212	6700	670
2240	224	7100	710
2360	236	7500	750
2500	250	8000	800
2650	265	9000	900
2800	280		

BRECOFLEXmove AT10 MOV				Tooth shear strength (specific belt tooth load bearing)			
R.p.m. n [min ⁻¹]	F _{Uspez} [N/cm]	M _{spez} [Ncm/cm]	P _{spez} [W/cm]	R.p.m. n [min ⁻¹]	F _{Uspez} [N/cm]	M _{spez} [Ncm/cm]	P _{spez} [W/cm]
0	113,2	18,02	0,000	2000	62,1	9,89	20,698
20	111,5	17,76	0,371	2200	60,1	9,55	22,022
40	110,0	17,51	0,733	2400	58,2	9,26	23,254
60	108,6	17,26	1,086	2600	56,4	8,98	24,424
80	107,2	17,05	1,429	2800	54,7	8,72	25,533
100	105,8	16,85	1,763	3000	53,1	8,47	26,596
200	100,1	15,94	3,342	3200	51,7	8,24	27,597
300	95,6	15,22	4,774	3400	50,4	8,01	28,536
400	91,6	14,60	6,114	3600	49,1	7,81	29,429
500	88,4	14,06	7,361	3800	47,9	7,61	30,292
600	85,5	13,60	8,547	4000	46,7	7,42	31,108
700	82,7	13,17	9,656	4500	43,9	6,99	32,956
800	80,4	12,80	10,718	5000	41,4	6,61	34,650
900	78,2	12,44	11,735	5500	39,3	6,25	36,036
1000	76,2	12,14	12,705	6000	37,3	5,93	37,268
1100	74,4	11,84	13,644	6500	35,4	5,62	38,346
1200	72,7	11,57	14,538	7000	33,6	5,34	39,270
1300	71,1	11,32	15,400	7500	32,0	5,08	40,040
1400	69,6	11,07	16,232	8000	30,4	4,85	40,656
1500	68,2	10,84	17,048	8500	29,0	4,62	41,118
1600	66,8	10,64	17,818	9000	27,6	4,40	41,426
1700	65,6	10,44	18,572	9500	26,4	4,19	41,734
1800	64,4	10,24	19,312	10000	25,1	4,00	41,888
1900	63,1	10,06	20,020				

BRECOFLEXmove AT10 MOV		Admissible tension cord strength F _{zul} / Belt weight				
Belt width	b [mm]	25	32	50	75	100
move tension member	F _{zul} [N]	6750	8625	13470	20200	26940
Belt weight	[kg/m]	0,173	0,222	0,347	0,520	0,693

BRECOFLEXmove AT10 MOV		Flexibility (minimum tooth count/minimum diameter)	
		move tension member	
		Standard	
 z _{min} d _{min}	Without contraflexure	z _{min}	18
		d _{min} [mm]	60
 z _{min} d _{min}	With contraflexure	z _{min}	25
		d _{min} [mm]	120



Belt widths b [mm] (in-between belt widths on request)				
25	32	50	75	100

BRECOFLEXmove 75 AT15 MOV 3000

Width b

Type/pitch

Length in mm

BRECOFLEXmove AT15 MOV	Lieferbare Längen und Ausführungen
Standard delivery lengths	-
Winding width	b=100 mm
Minimum purchase amount	1 sleeve
Any number of teeth available from	1410 mm up to 30495 mm
Standard material	TPUST1
Move-tension member (Standard)	Steel
E-tension member	not available
VA-tension member	not available
Laminate coating on the tooth side (standard)	red
Belt colour	white / red

BRECOFLEXmove AT15

The BRECOFLEXmove is a timing belt specifically designed for high-performance drives and traction drives with a particularly high stiffness requirement. A newly developed steel cord tension member increases belt stiffness and tear-resistance, making transmission of stronger forces possible. The tooth flank geometry has been optimised through the Finite Element Method (FEM). This leads to an optimisation of the contact pressure distribution and reduces the work of friction between the timing belts and tooth washer, thus minimising wear. In addition, a friction-optimised laminate coating is applied to the tooth side.

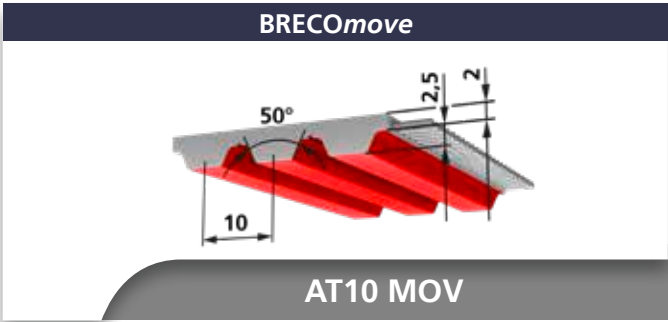
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Your local BRECO sales partner can provide further information.

BRECOFLEXmove AT15 MOV				Tooth shear strength (specific belt tooth load bearing)			
R.p.m. n [min-1]	F _{Uspez} [N/cm]	M _{spez} [Ncm/cm]	P _{spez} [W/cm]	R.p.m. n [min-1]	F _{Uspez} [N/cm]	M _{spez} [Ncm/cm]	P _{spez} [W/cm]
0	168,000	40,127	0,000	1600	92,927	22,196	37,187
20	165,244	39,469	0,827	1700	90,899	21,712	38,649
40	162,670	38,854	1,627	1800	88,972	21,251	40,055
60	160,255	38,278	2,405	1900	87,135	20,813	41,407
80	157,982	37,734	3,161	2000	85,382	20,394	42,709
100	155,833	37,221	3,898	2200	82,094	19,608	45,171
200	146,574	35,010	7,332	2400	79,063	18,884	47,458
300	139,098	33,224	10,437	2600	76,250	18,213	49,584
400	132,827	31,726	13,288	2800	73,626	17,586	51,561
500	127,427	30,436	15,935	3000	71,168	16,999	53,399
600	122,685	29,304	18,411	3200	68,856	16,447	55,109
700	118,457	28,294	20,739	3400	66,674	15,925	56,697
800	114,643	27,383	22,939	3600	64,607	15,432	58,171
900	111,170	26,553	25,024	3800	62,644	14,963	59,538
1000	107,981	25,792	27,007	4000	60,775	14,516	60,802
1100	105,033	25,087	28,897	4500	56,462	13,486	63,547
1200	102,292	24,433	30,701	5000	52,578	12,558	65,751
1300	99,732	23,821	32,427	5500	49,047	11,715	67,468
1400	97,329	23,247	34,080	6000	45,809	10,942	68,743
1500	95,066	22,707	35,665	6500	42,819	10,227	69,611

BRECOFLEXmove AT15 MOV		Admissible tension cord strength F _{zul} / Belt weight				
Belt width	b [mm]	25	32	50	75	100
move tension member	F _{zul} [N]	8450	11050	17550	26000	35100
Belt weight	[kg/m]	0,237	0,303	0,473	0,710	0,946

BRECOFLEXmove AT15 MOV		Flexibility (minimum tooth count/minimum diameter)	
		move tension member	
		Standard	
	Without contraflexure	z _{min}	20
		d _{min} [mm]	95
	With contraflexure	z _{min}	25
		d _{min} [mm]	120

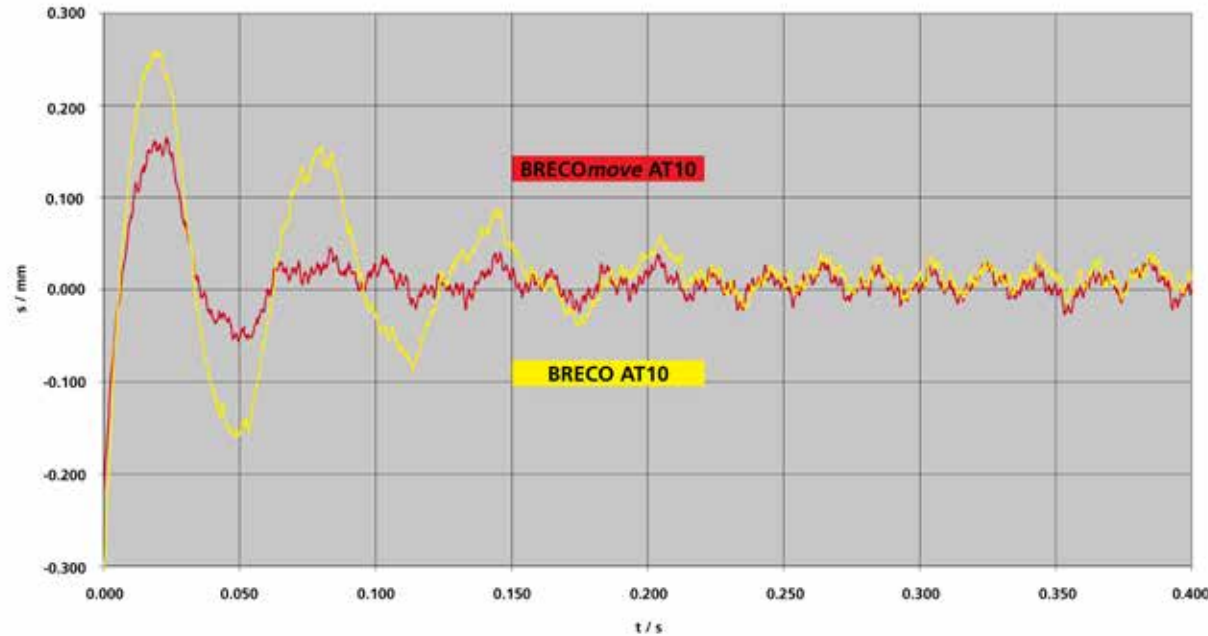


Belt widths b [mm] (in-between belt widths on request)				
25	32	50	75	100

BRECOmove AT10 MOV	Available lengths and versions
Standard delivery lengths	50 or 100 m rolls
Cut to lengths/lengths > 100 m	on request
Standard material	TPUST1
move-tension member	Steel
E-tension member	not available
VA-tension member	not available
Laminate coating on the tooth side (standard)	red
Belt colour	white / red

BRECOmove AT10

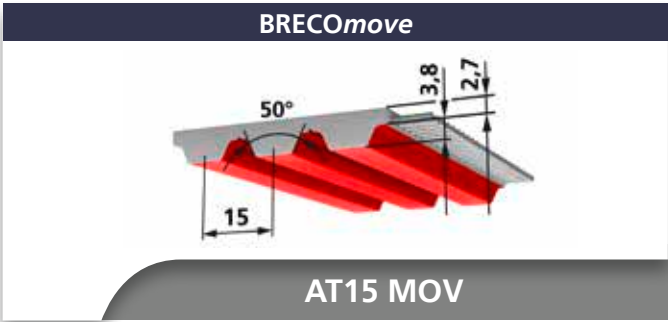
The BRECOmove timing belt demonstrates its strengths, in addition to high power transmission, particular in linear technology applications. The very high stiffness of the belt is the basis for excellent dynamic behaviour with short settling times and high positioning accuracy. This makes BRECOmove an excellent alternative to comparable timing belts, offering great potential for optimisation.



BRECOmove AT10 MOV							
R.p.m. n [min-1]	F _{Uspez} [N/cm]	R.p.m. n [min-1]	F _{Uspez} [N/cm]	R.p.m. n [min-1]	F _{Uspez} [N/cm]	R.p.m. n [min-1]	F _{Uspez} [N/cm]
0	113,2	800	80,4	2000	62,1	5000	41,4
20	111,5	900	78,2	2200	60,1	5500	39,3
40	110,0	1000	76,2	2400	58,2	6000	37,3
60	108,6	1100	74,4	2600	56,4	6500	35,4
80	107,2	1200	72,7	2800	54,7	7000	33,6
100	105,8	1300	71,1	3000	53,1	7500	32,0
200	100,1	1400	69,6	3200	51,7	8000	30,4
300	95,6	1500	68,2	3400	50,4	8500	29,0
400	91,6	1600	66,8	3600	49,1	9000	27,6
500	88,4	1700	65,6	3800	47,9	9500	26,4
600	85,5	1800	64,4	4000	46,7	10000	25,1
700	82,7	1900	63,1	4500	43,9		

BRECOmove AT10 MOV							
M	Belt width	b [mm]	25	32	50	75	100
	move-tension member	F _{zul} [N]	7395	9135	14790	22185	29580
	Spec. elasticity	C _{spez} [N]	1,85 · 10 ⁶	2,28 · 10 ⁶	3,70 · 10 ⁶	5,55 · 10 ⁶	7,40 · 10 ⁶
	Belt weight	[kg/m]	0,175	0,221	0,351	0,526	0,701

BRECOmove AT10 MOV		Flexibility (minimum tooth count/minimum diameter)	
		move tension member	
		Standard	
	Without contraflexure	z _{min}	18
		d _{min} [mm]	60
	With contraflexure	z _{min}	25
		d _{min} [mm]	120



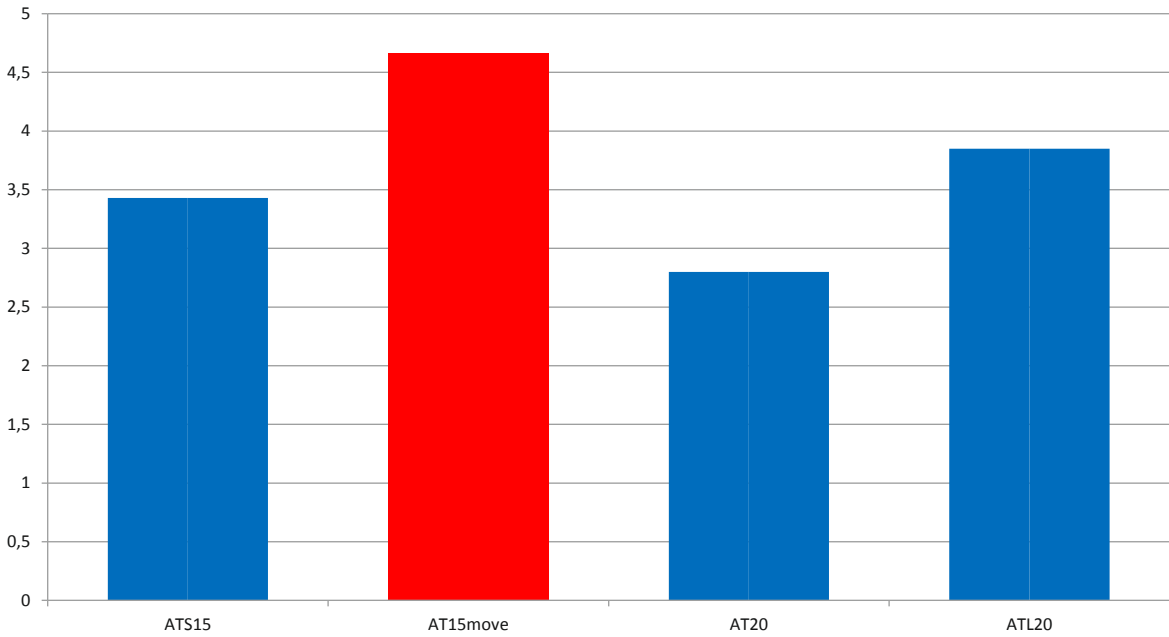
Belt widths b [mm] (in-between belt widths on request)			
50	75	100	150

BRECOMove AT15 MOV	Available lengths and versions
Standard delivery lengths	50 or 100 m - rolls
Cut to lengths/lengths > 100 m	on request
Standard material	TPUST1
move-tension member (Standard)	Steel
E-tension member	not available
VA-tension member	not available
Laminate coating on the tooth side (standard)	red
Belt colour	white / red

BRECOMove AT15

The BRECOMove timing belt demonstrates its strengths, in addition to high power transmission, particular in linear technology applications. The very high stiffness of the belt is the basis for excellent dynamic behaviour with short settling times and high positioning accuracy. This makes BRECOMove an excellent alternative to comparable timing belts, offering great potential for optimisation.

Specific elasticity in 10⁶ N (Belt widths 50mm, 0,4%-limit)

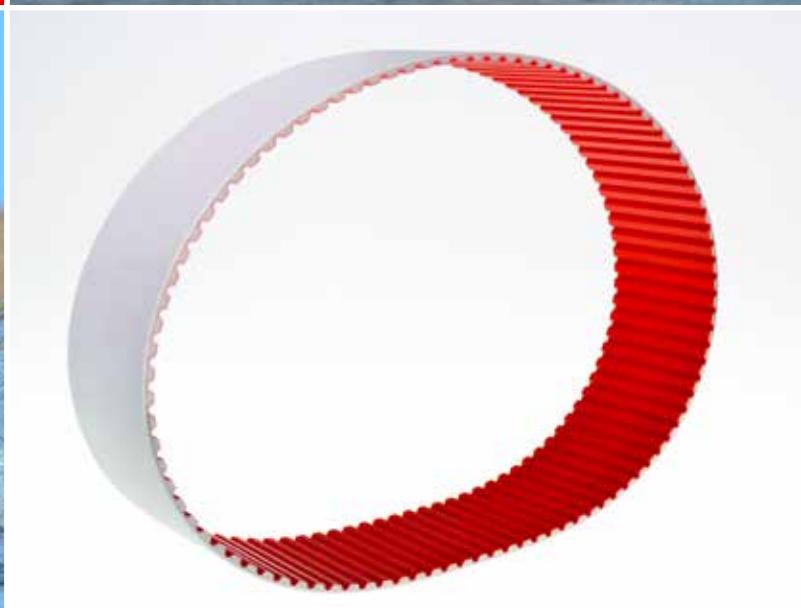


BRECOMove AT15 MOV							
R.p.m. n [min-1]	F _{Uspez} [N/cm]	R.p.m. n [min-1]	F _{Uspez} [N/cm]	R.p.m. n [min-1]	F _{Uspez} [N/cm]	R.p.m. n [min-1]	F _{Uspez} [N/cm]
0	168,000	800	114,643	2000	85,382	5000	52,578
20	165,244	900	111,170	2200	82,094	5500	49,047
40	162,670	1000	107,981	2400	79,063	6000	45,809
60	160,255	1100	105,033	2600	76,250	6500	42,819
80	157,982	1200	102,292	2800	73,626		
100	155,833	1300	99,732	3000	71,168		
200	146,574	1400	97,329	3200	68,856		
300	139,098	1500	95,066	3400	66,674		
400	132,827	1600	92,927	3600	64,607		
500	127,427	1700	90,899	3800	62,644		
600	122,685	1800	88,972	4000	60,775		
700	118,457	1900	87,135	4500	56,462		

BRECOMove AT15 MOV						
M	Belt width	b [mm]	50	75	100	150
	move tension member	F _{zul} [N]	18200	27300	36400	54600
	Spec. elasticity	C _{spez} [N]	4,55 · 10 ⁶	6,82 · 10 ⁶	9,10 · 10 ⁶	13,65 · 10 ⁶
	Belt weight	[kg/m]	0,502	0,753	1,004	1,506

BRECOMove AT15 MOV		Flexibility (minimum tooth count/minimum diameter)	
		move tension member	
		Standard	
	Without contraflexure	z _{min}	20
		d _{min} [mm]	100
	With contraflexure	z _{min}	25
		d _{min} [mm]	120

BRECOFLEXmove - timing belts
BRECOMove - timing belts
More Power. Optimized tooth form. Versatile usable. Efficient.



All of the relevant technical details about BRECOFLEXmove and its wide-ranging applications can be obtained from your BRECO sales partner.

