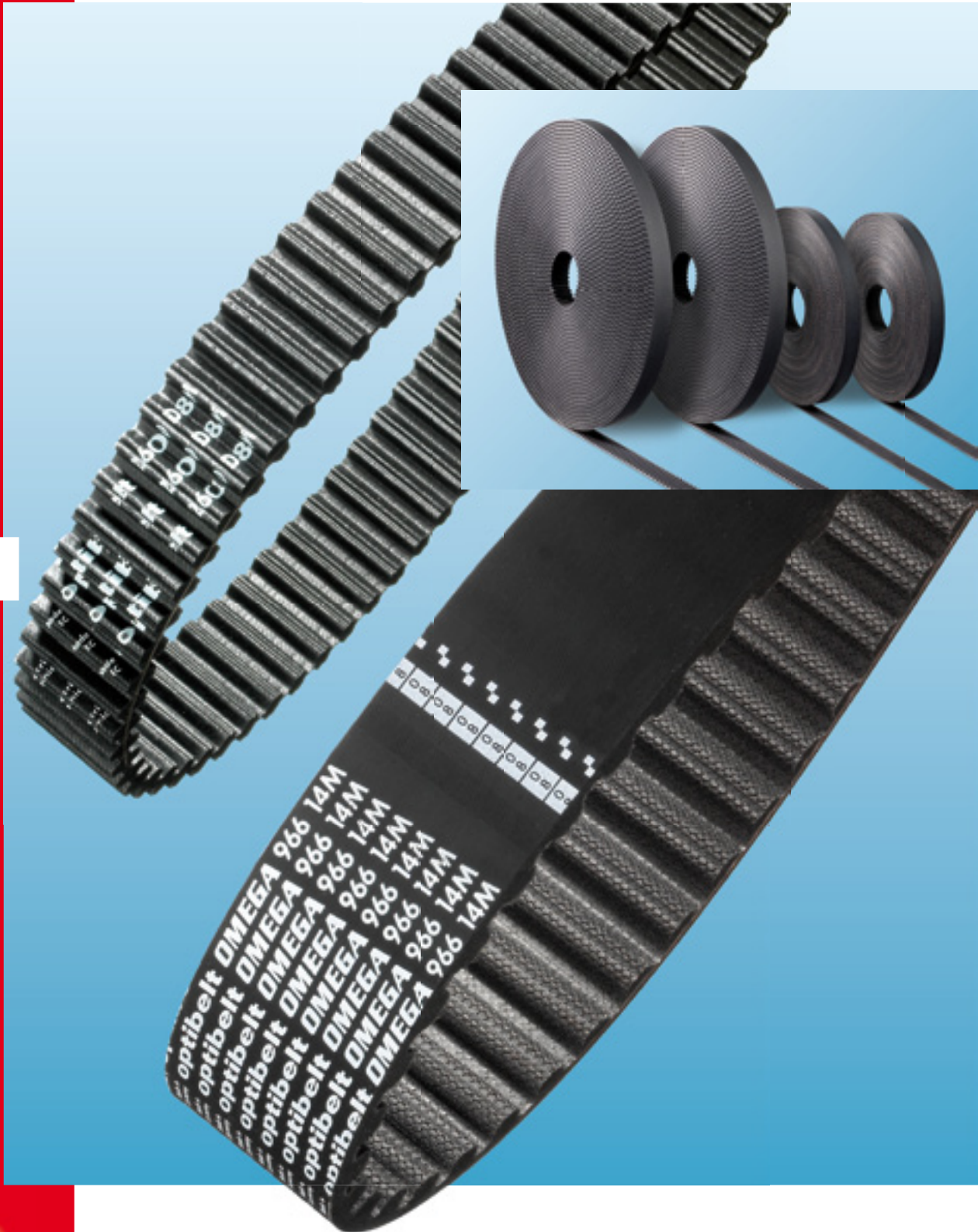


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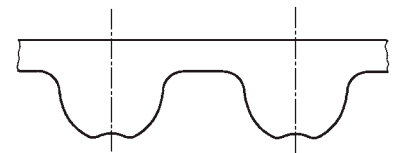
Products & Applications

optibelt *OMEGA*



Drive solutions with Optibelt

optibelt *OMEGA*



Sections

2M, 3M, 5M, 8M, 14M

The characteristics

- Optimised timing belt section
- Defined support of the tooth in the gap
- Smooth engagement of the teeth into the pulley gap
- Low noise level
- Small tooth gap clearance
- High performance

The advantages

- Replaceability of the belt in existing pulleys
- Universal fields of application
- Running capability without performance losses in existing pulleys
- High operational reliability
- Maintenance-free
- Temperature resistant from $-30\text{ }^{\circ}\text{C}$ to $+100\text{ }^{\circ}\text{C}$
- Efficiency of up to 98 %

The optimised tooth section will improve the service life and the noise development. The small tooth clearance increases the positioning stability in linear drives.



Power Transmission

The design

Tension cord: A glass fibre tension body twined from many cords transmits the tangential force at the pulleys. Its length stability guarantees maintenance-free operation and exact entrance of the belt into the pulley.

Fabric: A polyamide fabric on the tooth surface protects from wear and guarantees an optimal efficiency due to a low friction value.

Teeth and belt top surface: Teeth and belt top surface are made from a shear-resistant and solid polychloroprene compound. All components are vulcanised to one unit in one process step.

The high performance Optibelt OMEGA timing belts are the result of consequent further development.

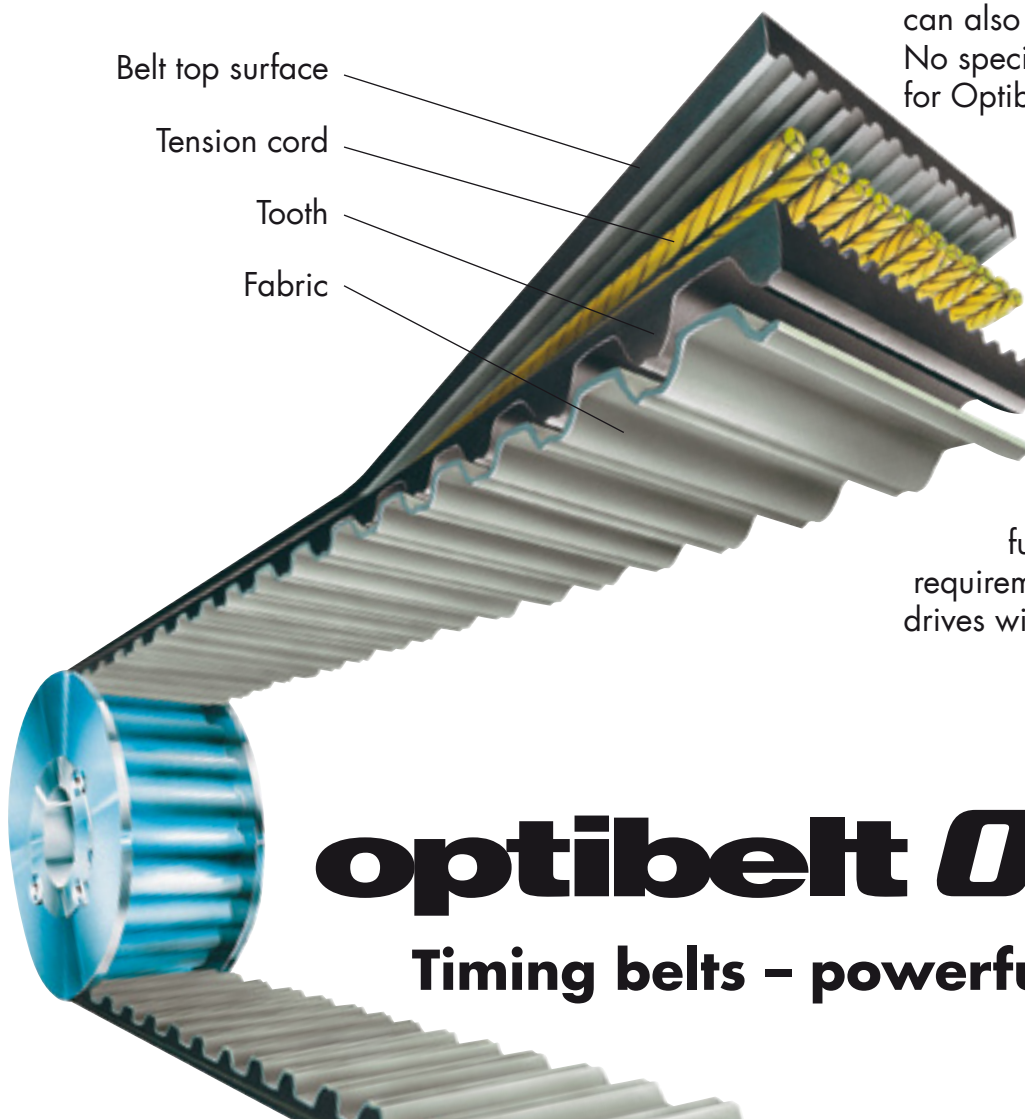
The versatile experience with the Optibelt ZR and the Optibelt HTD® is the basis of this belt generation. Open-ended OMEGA timing belts are ideal for synchronous performance drives and positioning drives.

The geometry of the Optibelt OMEGA tooth shape was adapted to the common, rounded timing pulleys, making it possible to use Optibelt OMEGA timing belts in HTD® pulleys in the sections 3M, 5M, 8M and 14M. Optibelt ZRS HTD® timing pulleys are standard items for cylindrical bores or for Optibelt TB taper bushes. In addition, all OMEGA timing belts can also be used in RPP® pulleys. No special timing pulleys are required for Optibelt OMEGA timing belts.

optibelt OMEGA

The Optibelt OMEGA timing belt has the performance level of the established Optibelt HTD® timing belt.

The latter is replaced by the Optibelt OMEGA. It now fulfils medium performance requirements for low-speed to fast-speed drives without special shock loading.

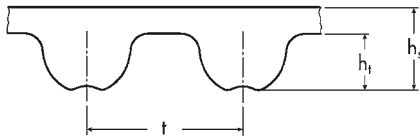
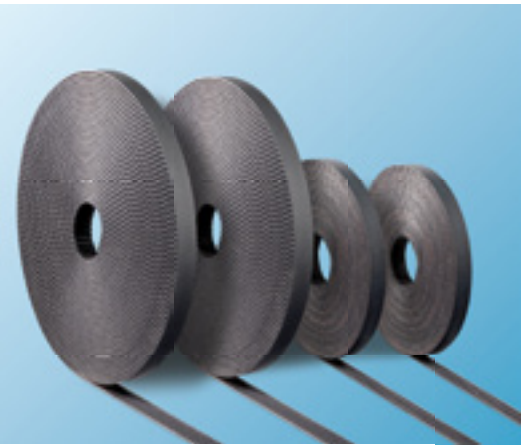


optibelt OMEGA

Timing belts – powerful and universal

optibelt *OMEGA HP linear*

optibelt *OMEGA linear*



Sections

3M, 5M, 8M

Range; sections, width

OMEGA 3M 9*

OMEGA 5M 10, 5M 15,
5M 25

OMEGA 8M 10, 8M 15,
8M 20, 8M 25

OMEGA HP 3M 9*

OMEGA HP 5M 10*,
5M 15*, 5M 25*

OMEGA HP 8M 10*,
8M 15*, 8M 20*, 8M 25*

* Non stock items

Special designs

- Anti-static to ISO 9563
- Enhanced oil resistance
- Expanded temperature range

Optibelt OMEGA linear timing belts are open-ended timing belts with glass fibre tension cord made from sleeves using the spiral cut method.

- High tensile strength
- Low stretch
- High positioning stability
- Lower noise level than Optibelt HTD®, Optibelt ZR and polyurethane timing belts
- Angular deviation max. 0.67° (depending on the width)
- Maintenance-free
- For medium and high loads
- Following ISO 13050
- Standard roller length 30 m

Ordering example

for 30 metres OMEGA HP,
section 8M 15 mm:

OMEGA HP 8M 15, 30 m

Further sizes on request.

Examples of application

Office machines:

Printers
Copying machines
Fax machines
Paper shredders

Household appliances:

Food processors
Graters
Vacuum cleaner brushes
Sewing machines
Garden machinery

Automotive:

Window regulators
Seat adjustments
Retractable roofs
Mirror adjustments

Industry:

Textile machinery
Spinning machines
Weaving machines
Printing machines
Paper machines
Woodworking machines
Machine tools
Linear units
Roller conveyors
Skid systems
Packaging machines
Gate and door openers
Hoisting devices
Mixers
Extruders
Compressors

optibelt *OMEGA*

Timing belts – powerful and universal

Available timing belt types:

optibelt <i>OMEGA</i> 2M		optibelt <i>OMEGA</i> 3M				optibelt <i>OMEGA</i> 5M				optibelt <i>OMEGA</i> 8M				optibelt <i>OMEGA</i> 14M	
Pitch length mm	Number of teeth	Pitch length mm	Number of teeth	Pitch length mm	Number of teeth	Pitch length mm	Number of teeth	Pitch length mm	Number of teeth	Pitch length mm	Number of teeth	Pitch length mm	Number of teeth	Pitch length mm	Number of teeth
74	37	111	37	435	145	120	24	835	167	288	36	1344	168	966	69
90	45	117	39	447	149	180	36	850	170	320	40	1360	170	1092	78
100	50	120	40	462	154	225	45	860	172	352	44	1400	175	1190	85
104	52	123	41	474	158	255	51	890	178	376	47	1424	178	1400	100
112	56	126	42	477	159	265	53	900	180	416	52	1432	179	1456	104
118	59	129	43	480	160	270	54	925	185	424	53	1440	180	1610	115
120	60	141	47	486	162	280	56	935	187	480	60	1480	185	1778	127
124	62	144	48	489	163	295	59	940	188	512	64	1520	190	1890	135
130	65	150	50	495	165	300	60	950	190	520	65	1552	194	2100	150
140	70	156	52	501	167	305	61	965	193	560	70	1584	198	2310	165
148	74	159	53	513	171	325	65	975	195	576	72	1600	200	2450	175
180	90	165	55	519	173	330	66	980	196	600	75	1680	210	2590	185
184	92	168	56	522	174	340	68	1000	200	608	76	1696	212	2800	200
188	94	171	57	525	175	345	69	1025	205	624	78	1728	216	3150	225
200	100	174	58	531	177	350	70	1035	207	632	79	1760	220	3360	240
208	104	177	59	537	179	360	72	1050	210	640	80	1800	225	3500	250
210	105	180	60	558	186	365	73	1100	220	656	82	1904	238	3850	275
216	108	183	61	564	188	370	74	1125	225	680	85	1936	242	4004	286
224	112	186	62	570	190	375	75	1135	227	712	89	2000	250	4326	309
232	116	192	64	582	194	385	77	1200	240	720	90	2080	260	4578	327
250	125	195	65	591	197	400	80	1270	254	760	95	2104	263		
256	128	201	67	594	198	415	83	1380	276	776	97	2240	280		
266	133	204	68	597	199	420	84	1400	280	784	98	2248	281		
274	137	207	69	600	200	425	85	1420	284	800	100	2272	284		
280	140	210	70	606	202	450	90	1425	285	824	103	2400	300		
288	144	213	71	612	204	460	92	1500	300	840	105	2504	313		
304	152	216	72	615	205	475	95	1595	319	848	106	2600	325		
308	154	225	75	633	211	490	98	1690	338	856	107	2800	350		
310	155	237	79	648	216	500	100	1790	358	880	110	3048*	381		
318	159	240	80	669	223	520	104	1800	360	896	112	3280	410		
328	164	243	81	672	224	525	105	1870	374	912	114	3600*	450		
330	165	246	82	675	225	535	107	1895	379	920	115	4400*	550		
336	168	249	83	708	236	540	108	2000	400	936	117				
340	170	252	84	711	237	550	110	2110	422	960	120				
368	184	255	85	738	246	560	112	2350	470	976	122				
370	185	267	89	753	251	565	113	2525	505	1000	125				
386	193	276	92	804	268	575	115			1040	130				
406	203	282	94	816	272	580	116			1056	132				
426	213	285	95	843	281	600	120			1064	133				
448	224	288	96	882	294	610	122			1080	135				
558	279	291	97	888	296	615	123			1096	137				
560	280	294	98	945	315	620	124			1120	140				
710	355	300	100	960	320	630	126			1128	141				
930	465	306	102	1041	347	635	127			1160	145				
984	492	312	104	1062	354	640	128			1184	148				
1066	533	315	105	1068	356	645	129			1200	150				
1224	612	318	106	1071	357	650	130			1216	152				
		330	110	1125	375	665	133			1224	153				
		333	111	1176	392	670	134			1248	156				
		336	112	1245	415	700	140			1256	157				
		339	113	1263	421	710	142			1264	158				
		345	115	1500	500	720	144			1280	160				
		357	119	1530	510	740	148			1304	163				
		363	121	1569	523	750	150			1320	165				
		366	122	1863	621	755	151			1328	166				
		384	128			775	155								
		390	130			790	158								
		411	137			800	160								
		420	140			825	165								
		426	142			830	166								

Our product range is constantly enlarged.

*Section on request.

Optibelt Service Tools

Economic situations are now demanding that belt drives be properly installed and maintained to ensure that all available cost savings are realized. Large energy savings can be realized as well as time! All these costs are not usually associated to belt installations or the belt drives themselves; however using the proper belt effectively ensures a cost savings many times the cost of the individual drive components! The total drive cost or cost of ownership has to be understood in order to evaluate the savings realized by Optibelt products and the service tools we make available to the market.

The implementation of cost/energy reductions can take place easily and quickly with our technical devices. These devices are easy to use and operate. The wide range of tools has been expanded with a new offering that encompasses all installation and maintenance requirements in one kit! This economically priced SERVICE KIT contains a variety of technical devices that optimize the efficiency and operation of existing drives as well ensuring the proper initial installation on new equipment. The SERVICE KIT contains the following aids:

- Optibelt Service-Box: a selection of useful aids for quick help on site
- Optibelt laser pointer II: for correct pulley alignment
- Optibelt Tension Notebox: for the durable documentation of the tension values on the respective drive
- Optibelt TT mini S frequency tension tester: for the simple measurement of ideal belt tension

optibelt Service-Box

When dealing with V-belts and ribbed belts, a level of tension that is too low results in unnecessary slipping of the belts, an issue that is difficult to notice and is rarely realized. This additional friction leads to increased energy consumption, and decreased belt life. The friction ages and hardens the belt resulting in mechanical efficiency losses that result in energy costs being realized that could easily be eliminated. In addition the reduction in belt life extends more costs by shutting down equipment more often to maintain and replace belt components. Not to mention the opportunity costs of working on these drives instead of something else. A level of tension that is too high leads to an increased bearing and shaft loads which can damage other components of the equipment. Also it can apply a distortion of the belt composition that is undesirable. When dealing with timing belts, the teeth may not engage cleanly with a low or a high tension value being introduced. It is easy to avoid these issues with the tools provided in the service-box.



optibelt *SERVICE KIT*



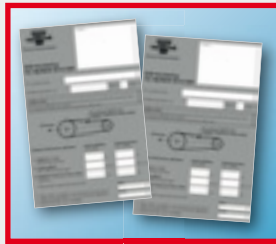
optibelt laser pointer II

On top of this, the mechanic can quickly and precisely align many types of drives, as well as other equipment. Reducing the friction in a belt drive means less pulley wear, longer running drive components, increased time between replacements and energy cost reductions. Total cost of ownership is reduced! Use of the Optibelt laser pointer II usually pays for itself in less than one month when dealing with multiple or large drives.

optibelt Tension Notebox

While setting the correct drive tension is of great importance, it is equally important to be able to repeat the action and achieve the cost savings into the future and with other people that may be involved. The proven Optibelt "Tension notes" adhesive labels document the set values for the correct

tension methods. This provides the service technician at a future date the required information in a reliable manner without having to search through documentation of equipment. These adhesive labels can then be attached where appropriate for quick access to the information. As a result the maintenance and installation work can be carried out quicker and in a more accurate manner. Costs are subsequently reduced.



optibelt *TT mini S*

... with a flexible swan neck for effortless measurements at difficult-to-reach places

The Optibelt TT mini S frequency tension tester is an appliance that is used to check the tension of drive belts by means of measuring frequency. Thanks to its compact design, this tension tester offers universal application possibilities for drives in machine construction, in the automotive industry and many



other application areas. The Optibelt TT mini S can even be used in difficult-to-reach places. V-belts, ribbed belts and timing belts can be simply and quickly reached in order to check their tension values. The Optibelt TT mini S offers more advantages with its Hertz [Hz] display, large measuring range from 10-600 Hz, simple and repeat measurement accuracy, small and compact construction (size of a mobile telephone), automatic switch-off function, plant calibration and CE approval.



Lieferprogramm Product Range



1 5	optibelt RED POWER II optibelt KB RED POWER II Hochleistungs-Schmalkeilriemen, wartungsfrei <i>High performance wedge belts, maintenance-free</i>	1	2	3	4	14	optibelt OMEGA HL optibelt OMEGA HP optibelt OMEGA FanPower optibelt OMEGA linear Zahnriemen aus Chloropren <i>Chloroprene timing belts</i>
2 6	optibelt BLUE POWER optibelt KB BLUE POWER Hochleistungs-Schmalkeilriemen <i>High performance wedge belts</i>	5	6	7	8	15	optibelt ALPHA Power optibelt ALPHA optibelt ALPHA linear / V optibelt ALPHAflex Zahnriemen aus Polyurethan <i>Polyurethane timing belts</i>
3 7	optibelt SK optibelt KB SK Schmalkeilriemen <i>Wedge belts</i>	9	10	11	12	16	optimat OE Endliche Keilriemen DIN 2216, gelocht <i>Open-ended V-belt, punched</i>
4 8	optibelt VB optibelt KB VB Klassische Keilriemen <i>Classical V-belts</i>	13	14	15	16	17	optibelt DK Doppelkeilriemen <i>Double section V-belts</i>
9	optibelt Super X-POWER M-S Keilriemen, flankenoffen, formgezahnt <i>V-belts, raw edge, moulded cogged</i>	17	18	19	20	18	optimat RB Rippenbänder <i>Ribbed belts</i>
10	optibelt Super KBX-POWER Kraftbänder, flankenoffen <i>Kraftbands, raw edge</i>	21	22	23	24	19	optibelt RB Rippenbänder <i>Ribbed belts</i>
11	optibelt SUPER VX Breitkeilriemen, flankenoffen, formgezahnt <i>Variable speed belts, raw edge, moulded cogged</i>					20	optibelt RR / RR PLUS Kunststoffrundriemen <i>Plastic round section belting</i>
12	optibelt SUPER DVX Doppel-Breitkeilriemen, flankenoffen, formgezahnt <i>Double section variable speed belts, raw edge, moulded cogged</i>					21	optibelt KK Kunststoffkeilriemen <i>Plastic V-belt</i>
13	optibelt ZR optibelt ZR linear Zahnriemen aus Chloropren <i>Chloroprene timing belts</i>					22	optibelt KS Keilrillenscheiben <i>V-grooved pulleys</i>
						23	optibelt ZRS Zahnriemenscheiben <i>Timing belt pulleys</i>
						24	optibelt RBS Rippenbandscheiben <i>Ribbed belt pulleys</i>
							optibelt SERVICE KIT

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