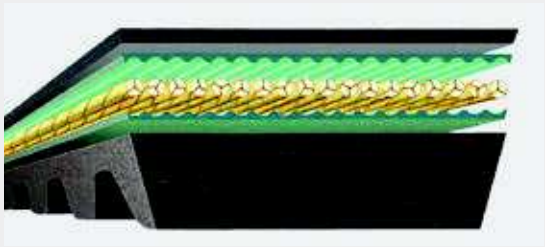
PRODUCT DESCRIPTION

optibelt VARIO POWER VARIABLE SPEED BELTS
RAW EDGE, MOULDED COGGED / DOUBLE-COGGED – DIN 7719 / ISO 1604

optibelt VARIO POWER variable speed belts – raw edge, moulded cogged



Increasing demands on variable speed belts due to the continuous increase of power transmission levels initiated the development of the raw edge, moulded cogged variable speed belts.
The base compound consists of a polychloroprene rubber compound with traverse fibres. The high quality and extremely low-stretch polyester or aramid tension cord is embedded in a rubber compound. It is effectively supported by an upper and substructure. The special characteristics of the raw edge, moulded cogged variable speed belt are:

- high power transmission
- excellent flexibility in running direction
- high traverse stability
- exceptionally smooth running
- wear and slip resistance
- long operational life
- electrically conductive according to ISO 1813

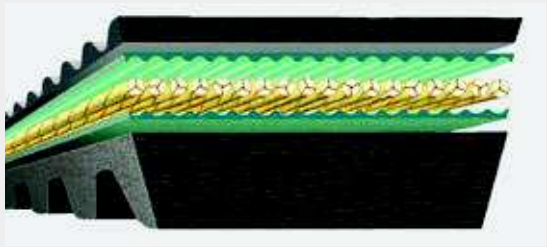
Profiles
Belt widths of up to 100 mm
Belt heights of 5-25 mm

Dimensions
Lengths up to 5000 mm
Standardised dimensions to BS/DIN/ISO and USA standard RMA/MPTA

Application areas

Industrial machinery:	special drives
Variable speed drives:	compact units
Printing machinery:	multi-colour offset drives
Gearboxes:	variable diameter pulley sets
Agricultural machinery:	thresher drum drives
Textile machinery:	winding machinery
Machine tools:	lathes
Automotive technology:	snowmobile drives

optibelt VARIO POWER variable speed belts – raw edge, double-cogged



Further increases in demand on the performance of drive elements and the trend towards designing ever smaller, space saving drive units, led to the development of the double-cogged, raw edge optibelt VARIO POWER variable speed belt.
Double-cogged OPTIBELT variable speed belts allow for the smallest pulley diameters, even below standard recommendations. The double-cogged design improves heat emission, thereby significantly reducing the belt running temperature.
The production methods and the structure of the belt have been derived from the raw edge VARIO POWER variable speed belt. Depending upon the application and application range, this belt can also be equipped with layers of special cross-cord material in the base compound. The belt is double-cogged, with the depth and spacing of the cogs matching with the specific belt profile. The polyester or aramid tension cord ensures ideal power transmission, increased service life, and extremely low-stretch characteristics.
The features of the VARIO POWER variable speed belt can be summarised as follows:

- extremely high acceptance of axial loads
- high flexibility and flexing rate
- better heat emission
- use with small pulley diameters
- high running smoothness with high belt speeds
- long operational life
- electrically conductive according to ISO 1813

Profiles
Belt widths of 20-85 mm
Belt heights of 10-30 mm

Dimensions
Length ranges from 600-3500 mm
Profiles and dimensions following DIN/ISO and USA standard RMA/MPTA

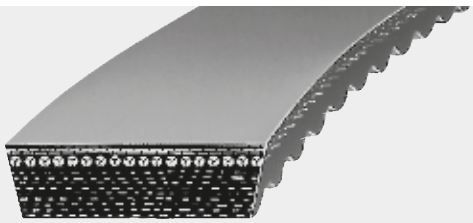
optibelt VS variable speed belts – wrapped

The optibelt VS is the first generation of variable speed belts. Its structure complies with the standard constructions of wrapped, classic V-belts or wedge belts.

Profiles and dimensions: on request

STANDARD RANGE

optibelt VARIO POWER VARIABLE SPEED BELTS – RAW EDGE, MOULDED COGGED DIN 7719 / ISO 1604



Profile/ inside length L_i [mm]	ISO designation (datum length) L_d
13 x 5	
468	
500	
17 x 5	
426	W 16 450
476	W 16 500
536	W 16 560
570	W 16 600
606	W 16 630
776	W 16 800
21 x 6	
530	W 20 560
600	W 20 630
610	W 20 640
675	W 20 710
770	W 20 800
870	W 20 900
970	W 20 1000
1220	W 20 1250
22 x 8	
485	
525	
565	
650	
700	
750	
800	
850	
900	
950	
1000	
1060	
1185	

Profile/ inside length L_i [mm]	ISO designation (datum length) L_d
26 x 8	
655	W 25 690
672	W 25 710
710	W 25 750
750	W 25 790
762	W 25 800
800	W 25 840
862	W 25 900
962	W 25 1000
1082	W 25 1120
28 x 8	
600	
650	
700	
750	
800	
850	
900	
950	
1000	
1060	
1120	
1180	
1250	
1320	
1400	
1500	
30 x 10	
650	
665	
700	
800	
850	
875	
900	
950	
1000	
1035	
1120	
1200	
1340	
1500	
1600	

Profile/ inside length L_i [mm]	ISO designation (datum length) L_d
32 x 10	
750	W 31,5 800
790	W 31,5 840
820	W 31,5 870
850	W 31,5 900
900	W 31,5 950
950	W 31,5 1000
1000	W 31,5 1050
1073	W 31,5 1120
1120	W 31,5 1170
1180	W 31,5 1230
1200	W 31,5 1250
1353	W 31,5 1400
37 x 10	
660	
800	
850	
900	
950	
1000	
1020	
1060	
1120	
1180	
1250	
1320	
1400	
1500	
1600	
1700	
1800	
41 x 13	
925	W 40 990
1000	W 40 1060
1040	W 40 1100
1060	W 40 1120
1120	W 40 1180
1180	W 40 1240
1190	W 40 1250
1250	W 40 1310
1340	W 40 1400
1440	W 40 1500
1600	W 40 1660
1740	W 40 1800
1940	W 40 2000

Profile/ inside length L_i [mm]	ISO designation (datum length) L_d
47 x 13	
1000	
1060	
1120	
1180	
1250	
1320	
1400	
1500	
1600	
1700	
1800	
52 x 16	
1180	W 50 1250
1250	W 50 1320
1325	W 50 1400
1400	W 50 1480
1525	W 50 1600
1600	W 50 1680
1725	W 50 1800
1925	W 50 2000
2165	W 50 2240
2240	W 50 2320
55 x 16	
1400	
1500	
1600	
1700	
1800	
65 x 20	
1706	W 63 1800
1906	W 63 2000

Profile/ inside length L_i [mm]	ISO designation (datum length) L_d
70 x 18	
1600	
1700	
1800	
1900	
2000	
2240	
2500	

Standard production data
Belt length up to 5000 mm L_i
Belt top width up to 100 mm
Belt height 5 to 25 mm
24° angle for profile 13 x 5; 17 x 5
30° angle for profile 52 x 16; 55 x 16; 65 x 20 and 70 x 18
27° angle for all other profiles. Sizes according to USA standard RMA/MPTA as well as variable speed belts with angles from 22° to 42° can be produced on request. Minimum order quantities are required.

Further sizes as well as double-cogged variable speed belts on request

Tolerances
Length tolerance ± 1 % of the belt nominal length
Angle tolerance ± 1.5° of the nominal angle
Height tolerance ≤ 8 mm = ± 0.8 mm
> 8 to 20 mm = ± 1.0 mm
> 20 mm = ± 1.5 mm
Width tolerance ± 0.75 mm