

# PRODUCT DESCRIPTION

## optibelt **SUPER TX M=S** V-BELTS

### RAW EDGE, MOULDED COGGED – DIN/ISO, RMA/MPTA

The advantages of optibelt SUPER TX M=S V-belts can best be seen when dealing with

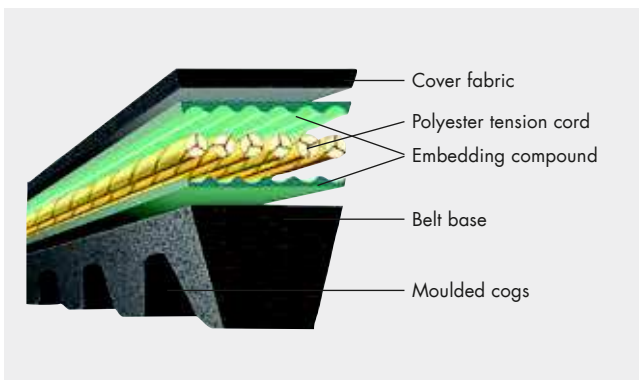
- extremely small pulley diameters
- high rotational speeds
- extremely high power requirements
- higher ambient temperatures

In these cases the use of wrapped V-belts is uneconomic and not recommended.

optibelt SUPER TX M=S V-belts in profiles ZX/X10, AX/X13, BX/X17 and CX/X22 offer the best technical and economic solutions under these conditions due to their high quality perfectly harmonised materials.

#### Structure/Properties

optibelt SUPER TX M=S consist of:



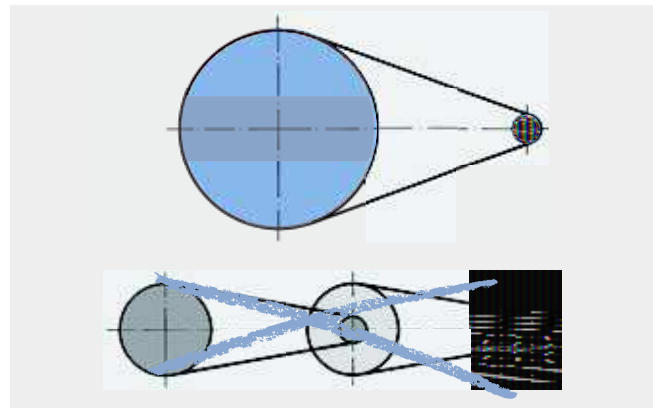
The belt base consists of a polychloroprene rubber compound with traverse fibres which support the tension cord.

This results in

- significant flexing rate
- extreme traverse stability
- significantly improved wear resistance and slip resistance
- electrically conductive according to DIN 1813
- low stretch

The specially prepared tension cord is embedded in a special compound. Even with high dynamic loads a perfect adhesion between all components is assured. The fabric layers of the upper structure support the tension cord. The fibre-reinforced substructure combined with the OPTIBELT tension cord and the moulded cogs allows for a higher dynamic power transmission. The moulded cogs decrease the flexing resistance, resulting in an excellent flexing rate. Thus, much smaller pulleys can be used compared to common wrapped V-belts.

optibelt SUPER TX M=S allows for drive ratios  $i = 1:12$ . Multi-stage drives can be eliminated.



Due to the use of high quality polychloroprene rubber compounds, the optibelt SUPER TX M=S has a higher oil and heat-resistance than wrapped V-belts. As high power transmission is possible, even with small pulley diameters and high engine speed, weight and space can be reduced thus also substantially reducing costs.

#### Drive calculation

Drive design using optibelt SUPER E-POWER M=S belts should be carried out according to the examples given on pages 85 to 87. The higher power ratings given in the relevant tables, apply. These are based on a theoretical laboratory running time of 25,000 hours.

#### V-grooved pulleys

optibelt SUPER TX M=S are used with pulleys to DIN 2211, DIN 2217, ISO 4183 and RMA/MPTA. Considerably smaller minimum pulley datum diameters are allowed.

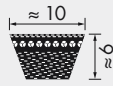
Table 12

Recommended minimum pulley diameter [mm] V-belts			
Profile	Raw edge, moulded cogged	Profile	Wrapped
<b>ZX/X10</b>	40	<b>Z/10</b>	50
<b>AX/X13</b>	63	<b>A/13</b>	71
<b>BX/X17</b>	90	<b>B/17</b>	112
<b>CX/X22</b>	140	<b>C/22</b>	180

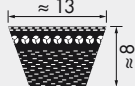
Profile	Top belt width $b_o \approx$	Datum width $b_d$	Belt height $h \approx$	Meter weight [kg/m] $\approx$
<b>ZX/X10</b>	10	8.5	6	0.062
<b>AX/X13</b>	13	11	8	0.099
<b>BX/X17</b>	17	14	11	0.165
<b>CX/X22</b>	22	19	14	0.276

# STANDARD RANGE

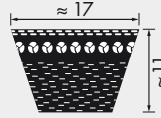
## optibelt **SUPER TX M=S** V-BELTS – RAW EDGE, MOULDED COGGED DIN 2215 / ISO 4184



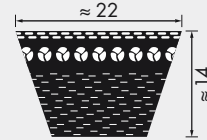
ZX/X10



AX/X13



BX/X17



CX/X22

Profile ZX/X10		Profile AX/X13				Profile BX/X17				Profile CX/X22	
Belt no.	Datum length ISO $L_d$ [mm]	Belt no.	Datum length ISO $L_d$ [mm]	Belt no.	Datum length ISO $L_d$ [mm]	Belt no.	Datum length ISO $L_d$ [mm]	Belt no.	Datum length ISO $L_d$ [mm]	Belt no.	Datum length ISO $L_d$ [mm]
ZX 23	597	AX 23	605	AX 62	1605	BX 23	610	BX 67	1740	CX 39	1058•
ZX 24	622	AX 23½	630	AX 63	1630	BX 25	670	BX 69	1790	CX 43	1148•
ZX 25	652	AX 24	640	AX 67	1730	BX 26	690	BX 71	1840	CX 49	1308•
ZX 26	672	AX 25	660	AX 70	1805	BX 28	750	BX 73	1890	CX 52	1378•
ZX 27	692	AX 26½	700	AX 71	1830	BX 29	765	BX 75	1940	CX 55	1458•
ZX 28	732	AX 27	716	AX 75	1930	BX 30	790	BX 79	2040	CX 59	1558•
ZX 29	752	AX 28	740	AX 79	2030	BX 31	815	BX 88	2280	CX 62	1632•
ZX 29½	772	AX 29	760	AX 88	2270	BX 32	840	BX 93	2400	CX 67	1758•
ZX 31½	822	AX 30	797	AX 93	2390	BX 33	876	BX 98	2540	CX 68	1785•
ZX 32	842	AX 31	805	AX 98	2530•	BX 34	890	BX 103	2656•	CX 71	1858•
ZX 33	847	AX 32	843	AX 104	2680•	BX 34½	915	BX 104	2690•	CX 75	1958•
ZX 33½	872	AX 33	871	AX 110	2830•	BX 35	929	BX 110	2840•	CX 79	2058•
ZX 35	897	AX 34	880	AX 118	3030•	BX 36	940	BX 118	3040•	CX 81	2118•
ZX 36	922	AX 35	919	AX 124	3180•	BX 37	965	BX 124	3190•	CX 85	2217•
ZX 37	947	AX 35½	930	AX 132	3380•	BX 38	1005	BX 132	3390•	CX 88	2298•
ZX 38	972	AX 36	944			BX 39	1040			CX 90	2344•
ZX 40	1038•	AX 37	955			BX 40	1056			CX 93	2418•
ZX 42	1082•	AX 37½	980			BX 41	1080			CX 96	2496•
ZX 46½	1202•	AX 38	995			BX 42	1100			CX 98	2558•
ZX 52	1342•	AX 39	1030			BX 43	1130			CX 110	2858•
ZX 55	1422•	AX 40	1046			BX 44	1160			CX 118	3058•
ZX 59	1522•	AX 41½	1080			BX 45	1190			CX 124	3208•
		AX 42	1090			BX 45½	1203			CX 132	3408•
		AX 43	1130			BX 46	1215				
		AX 44	1150			BX 46½	1220				
		AX 45½	1180			BX 47	1240				
		AX 46	1198			BX 48	1255				
		AX 47	1230			BX 49	1290				
		AX 48	1250			BX 50	1315				
		AX 49	1280			BX 51	1340				
		AX 50	1300			BX 52	1360				
		AX 51	1330			BX 53	1390				
		AX 52	1350			BX 54	1412				
		AX 53	1380			BX 55	1440				
		AX 54	1405			BX 57	1490				
		AX 55	1430			BX 58	1513				
		AX 56	1452			BX 59	1540				
		AX 57	1480			BX 61	1590				
		AX 58	1505			BX 62	1615				
		AX 59	1530			BX 63	1640				
Weight: ≈ 0.062 kg/m		Weight: ≈ 0.099 kg/m				Weight: ≈ 0.165 kg/m				Weight: ≈ 0.276 kg/m	
Datum length $L_d$ ≙ Pitch length $L_w/L_p$ Further sizes on request • Non stock items											