

PRODUCT DESCRIPTION

optibelt SUPER TX M=S V-BELTS

RAW EDGE, COGGED – DIN/ISO, ARPM/MPTA



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

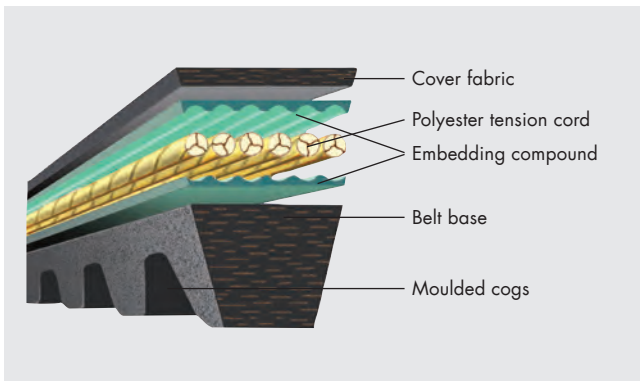
- extremely small pulley diameters
- high rotational speeds
- extremely high power requirements
- higher ambient temperatures

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

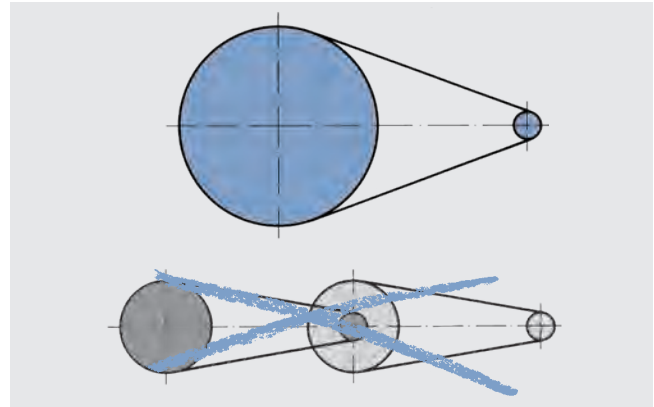
- significant flexing rate
- extreme traverse stability
- significantly improved wear resistance and slip resistance
- electrically conductive according to DIN 1813
- low stretch

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 TX M=S belts should be carried out according to the examples given on pages 83 to 85. 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 ARPM/MPTA. Considerably smaller minimum pulley datum diameters are allowed.

Table 12

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

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