Product Description

Timing Belts with optibelt OMEGA HL Sections





Overview of the advantages and characteristics of the Optibelt OMEGA HL

- dimensionally stable construction with high flexibility
- very low residual and elastic stretch of the cord
- friction and abrasion resistant, fabric with high shear strength, therefore,
- up to 2.5 times higher power transmission capability (an increase of up to 150%) compared to standard OMEGA timing belts in the standard construction
- approx. up to 15% increase of the power transmission compared to the established high performance construction OMEGA HP
- suitable for low and high speed, high powered drives
- good resistance to medium and high shock loading
- further extended, very large range of applications

Advantages and characteristics of a drive with Optibelt OMEGA HL timing belts in these areas application

- reduced drive volume compared to OMEGA HP and in particular to OMEGA timing belts in standard construction, therefore,
- reduced costs for belts and pulleys
- greater options for drive design
- reduced shaft diameters and smaller bearings
- reduced running noise levels
- improved efficiency

Significant cost reduction for the system and high operational reliability for further improvements in the economic efficiency of the new drives

For additional advantages and characteristics, see Optibelt OMEGA on page 20.

Comparing power ratings

Section and construction	8M HL	8M HP	8M
Pitch [mm]	8	8	8
Width [mm]	20	20	20
Pulley diameter [mm]	96.77	96.77	96.77
Speed [min ⁻¹]	600	600	600
Nominal power [kW]	6.86	5.96	2.82

Preferred areas of application

- Textile machines
- Machine tools
- Compressors
- Printing machines
- Wood working machines
- Paper machines

Product Description optibelt OMEGA HP Timing Belts





Overview of the advantages and characteristics of the Optibelt OMEGA HP

- dimensionally stable construction with high flexibility
- low residual and elastic stretch of the cord
- friction and abrasion resistant fabric with high shear strength, thus,
- approximately double the power transmission capability, (section 5M HP approximately treble the power transmission capacity) compared to OMEGA timing belts in their standard construction
- suitable for low and high speed, high load drives
- good resistance and smooth operation, low and medium shock load
- large range of applications
- electrical conductivity according to ISO 9563 can be proven on request

Advantages and characteristics of a drive with Optibelt OMEGA HP timing belts in these areas of application

- considerably reduced drive volume compared to OMEGA timing belts in standard construction, thus,
- reduced costs for belts and pulleys
- greater options for drive design
- reduced shaft diameters and smaller bearings
- reduced running noise levels
- improved efficiency

Significant cost reduction for the system and high operational reliability for optimum efficiency of the new drives

For additional advantages and characteristics, see Optibelt OMEGA on page 20.

Comparing power ratings

Section and construction	8M HP	8M	н
Pitch [mm]	8	8	12.7
Width [mm]	20	20	19.05
Pulley diameter [mm]	96.77	96.77	97.02
Speed [min ⁻¹]	2850	2850	2850
Nominal power [kW]	24.4	10.8	6.0

Preferred areas of application

- Textile machines
- Machine tools
- Compressors
- Printing machines
- Wood working machines
- Paper machines

Calculation optibelt OMEGA HL Timing Belts

Guidelines for the Selection





Speed of the small pulley n_k [min⁻¹]

Design power $P_B = P \cdot c_2 [kW]$

Calculation optibelt OMEGA HP, optibelt OMEGA FanPower Timing Belts

Guidelines for the Selection





Speed of the small pulley n_k [min⁻¹]

Calculation optibelt OMEGA Timing Belts

Guidelines for the Selection





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