

MPTA-B3c-2020

# SYNCHRONOUS DRIVE IDENTIFICATION



## MPTA INFORMATIONAL BULLETIN

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**Abstract**

This information bulletin categorizes current and discontinued synchronous drive products by tooth form.

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**Foreword**

This Foreword is provided for informational purposes only and is not to be construed to be part of any technical specification.

Suggestions for the improvement to or comments about this publication are welcome. They should be emailed to Mechanical Power Transmission Association at [www.mpta.org](http://www.mpta.org).

# Table of Contents

<b>SECTION &amp; TITLE</b>	<b>PAGE</b>
Table 1 Curvilinear .....	5
Table 2 Modified Curvilinear .....	5
Table 3 Parabolic .....	6
Table 4 Circular Side .....	7
Table 5 Helical Offset .....	7

**Table 1 – Curvilinear**



Company	Trade Name ®	Supplier		Manufacturer		Status		Mounting Type	Pitches						Comments	
		Belt	Pulley	Belt	Pulley	Belt	Pulley		2M	3M	5M	8M	14M	20M		
ABB Motors & Mechanical	HTD	no	yes	no	yes	discont.	current	QDB				X	X			
Altra - TB Wood's	HTD	yes	yes	no	yes	discont.	discont.	QDB			X	X	X	X		Superseded by Synchronous Plus
Altra - TB Wood's	Synchronous Plus	yes	yes	no	yes	current	current	MPB, QDB							X	
B & B	PowerHouse HTD	yes	yes	no	yes	current	current	MPB, QDB, TL		X	X	X	X			
Carlisle Belts by Timken	Synchro-Cog HT	yes	yes	no	no	current	N/A	N/A		X	X	X	X			
Custom Machine & Tool	HTD	yes	yes	no	yes	current	current	QDB, TL, MPB, CMT®	X	X	X	X				
Gates	HTD	yes	yes	yes	no	current	current	MPB, QDB	X	X	X	X	X	X		Superseded by Power Grip GT
Martin	HTD	no	yes	no	yes	current	current	QDB, TL, MPB, MST, MXT			X	X	X	X		Superseded by HTS
Maurey	HPD	yes	yes	no	yes	current	current	QDB				X	X			
Regal Beloit	HPT	yes	yes	no	yes	discont.	discont.	QDB			X	X	X	X		Superseded by HPT Plus
Torque Transmission	HTD	yes	yes	no	yes	current	current	CMT®	X	X	X	X				

**Table 2 – Modified Curvilinear**



Company	Trade Name ®	Supplier		Manufacturer		Status		Mounting Type	Pitches						Comments	
		Belt	Pulley	Belt	Pulley	Belt	Pulley		2M	3M	5M	8M	14M	20M		
ABB Motors & Mechanical	HT150	yes	yes	no	yes	discont.	discont.	Taper-Lock®			X	X	X	X		Superseded by HT250
ABB Motors & Mechanical	HT200	yes	yes	no	yes	discont.	discont.	Taper-Lock®			X	X	X	X		Superseded by HT250
ABB Motors & Mechanical	HT250	yes	yes	no	yes	current	current	TL, QDB, MPB			X	X	X			
ABB Motors & Mechanical	HT500	yes	yes	no	yes	current	current	TL, QDB, MPB				X	X			
Altra - TB Wood's	QT Powerchain II Carbon	yes	yes	no	yes	current	current	TL, MPB				X	X			
B & B	PowerHouse	yes	yes	no	yes	current	current	MPB, QDB, TL	X	X	X	X	X			
B & B	PowerHouse MX	yes	yes	no	yes	current	current	MPB, QDB, TL			X	X	X			
Carlisle Belts by Timken	PantherXT	yes	yes	no	no	current	current	TL, QDB, MPB					X	X		
ContiTech	Falcon	yes	yes	yes	yes	current	current	Taper-Lock®				X	X			
Custom Machine & Tool	PowerGrip GT	yes	yes	no	yes	discont.	discont.	QDB, TL, MPB, CMT®	X	X	X	X	X			
Custom Machine & Tool	PowerGrip GT2	yes	yes	no	yes	current	current	QDB, TL, MPB, CMT®	X	X	X	X	X			
Custom Machine & Tool	PolyChain GT2	yes	yes	no	yes	current	current	QDB, TL, MPB, CMT®				X	X			
Gates	PowerGrip GT	yes	yes	yes	no	discont.	discont.	TL, QDB, MPB	X	X	X	X	X	X		Superseded by PowerGrip GT2
Gates	PowerGrip GT2	yes	yes	yes	no	discont.	current	TL, QDB, MPB	X	X	X	X	X	X		Superseded by PowerGrip GT3
Gates	PowerGrip GT3	yes	yes	yes	no	current	current	TL, QDB, MPB	X	X	X	X	X	X		Higher rated than PowerGrip GT2
Gates	PolyChain GT	yes	yes	yes	no	discont.	discont.	TL, QDB, MPB				X	X			Superseded by PolyChain GT2
Gates	PolyChain GT2	yes	yes	yes	no	discont.	current	TL, QDB, MPB			X	X	X			Superseded by PolyChain GTC
Gates	PolyChain GTC	yes	yes	yes	no	current	current	TL, QDB, MPB			X	X	X			Higher rated than PolyChain GT2
Martin	MGT	no	yes	no	yes	current	current	QDB, TL, MPB, MST, MXT	X	X	X	X	X	X		
Optibelt	DeltaChain Carbon	yes	yes	yes	no	current	current	Taper-Lock®				X				
Regal Beloit	HPT Plus	yes	yes	no	no	discont.	discont.	TL, QDB, MPB			X				X	
Regal Beloit	HPT Plus	yes	yes	no	no	current	current	TL, QDB, MPB				X	X			
Regal Beloit	HPT-Chain	yes	yes	no	no	current	current	TL, QDB, MPB				X	X			
Torque Transmission	Powergrip GT	no	yes	no	yes	current	current	CMT®	X	X	X	X				
Torque Transmission	Powergrip GT2	no	yes	no	yes	current	current	CMT®	X	X	X	X				

**Table 3 – Parabolic**



Company	Trade Name ®	Supplier		Manufacturer		Status		Mounting Type	Pitches					Comments	
		Belt	Pulley	Belt	Pulley	Belt	Pulley		2M	3M	5M	8M	14M		20M
ABB Motors & Mechanical	HTR	yes	yes	no	yes	discont.	discont.	Taper-Lock®				X	X		
ABB Motors & Mechanical	HTRC	yes	yes	no	yes	discont.	discont.	Taper-Lock®				X	X		
Altra - TB Wood's	RPP	yes	yes	no	yes	discont.	discont.	QDB			X	X	X		Superseded by RPP Plus
Altra - TB Wood's	HPR	yes	yes	no	yes	discont.	discont.	QDB				X	X		Superseded by RPP Plus
Altra - TB Wood's	RPP Plus	yes	yes	no	yes	discont.	discont.	QDB			X	X	X		Superseded by Synchronous Plus
Altra - TB Wood's	Synchronous Plus	yes	yes	no	yes	current	current	TL, QDB, MPB			X	X	X		
Altra - TB Wood's	QT Power Chain	yes	yes	no	yes	current	current	QDB, MPB				X	X		
B & B	RPP	no	yes	no	yes	current	current	TL, QDB, MPB		X	X	X	X		
Carlisle Belts by Timken	Synchro-Cog RPP	yes	yes	yes	no	discont.	discont.	QDB			X	X	X	X	Superseded by RPP Plus
Carlisle Belts by Timken	Synchro-Cog HPR	yes	yes	yes	no	discont.	discont.	QDB				X	X		Superseded by RPP Plus
Carlisle Belts by Timken	Synchro-Cog RPP Plus	yes	yes	yes	no	discont.	discont.	QDB			X	X	X	X	Superseded by Panther Plus
Carlisle Belts by Timken	RPP Panther	yes	yes	yes	no	discont.	discont.	QDB				X	X		Superseded by Panther Plus
Carlisle Belts by Timken	Panther	yes	yes	yes	no	current	current	QDB, TL				X	X	X	
ContiTech	HPPD Plus	yes	yes	yes	no	discont.	current	QDB, TL	X	X	X	X	X	X	Superseded by Hawk
ContiTech	Whitehawk	yes	yes	yes	no	discont.	current	QDB, TL				X	X		Superseded by Hawk
ContiTech	Hawk	yes	yes	yes	no	current	current	QDB, TL	X	X	X	X	X	X	Higher rated than HPPD Plus
ContiTech	Blackhawk	yes	yes	yes	no	current	current	QDB				X	X		Higher rated than Hawk
Custom Machine & Tool	RPP	yes	yes	no	yes	current	current	QDB, TL, MPB, CMT®			X	X	X	X	
Martin	HTS	no	yes	no	yes	N/A	current	QDB, TL, MPB, MST, MXT			X	X	X	X	
Martin	High HP HTS	no	yes	no	yes	N/A	current	QDB, TL, MPB, MST, MXT			X	X	X	X	Iron produced, Belts not offered
Optibelt	Omega	yes	yes	yes	no	current	current	Taper-Lock®	X	X	X	X	X		
Optibelt	Omega HP	yes	yes	yes	no	current	current	Taper-Lock®	X	X	X	X	X		Higher performance rating than standard Omega
Optibelt	Omega FanPower	yes	yes	yes	no	current	current	Taper-Lock®				X	X		Anti-static according to ISO 9563 for fan drives in the oil industry
Optibelt	Omega HL	yes	yes	yes	no	current	current	Taper-Lock®				X	X		Higher performance rating than Omega HP
Regal Beloit	HPT	yes	yes	no	yes	discont.	discont.	QDB			X	X	X	X	
Regal Beloit	RPP Panther	yes	yes	no	yes	discont.	discont.	Split Taper				X	X		Higher rated than HPT

**Table 4 – Circular Side**



Company	Trade Name ®	Supplier		Manufacturer		Status		Mounting Type	Pitches						Comments	
		Belt	Pulley	Belt	Pulley	Belt	Pulley		2M	3M	5M	8M	14M	20M		
B & B	STPD	yes	yes	no	yes	current	current	TL, QDB, MPB		X	X	X	X	X		
ContiTech	STPD	yes	yes	yes	no	current	N/A	N/A	X	X	X	X	X			
Custom Machine & Tool	STPD	yes	yes	no	yes	current	current	QDB, TL, MPB, CMT®		X	X	X	X			
Martin	STS	no	yes	no	yes	current	current	QDB, TL, MPB, MST, MXT		X	X	X	X			
Optibelt	STD	yes	no	yes	no	current	N/A	N/A	X	X	X	X	X			
Optibelt	STD HP	yes	no	yes	no	current	N/A	N/A	X	X	X	X	X			Higher performance rating than standard STD
Optibelt	STD HL	yes	no	yes	no	current	N/A	N/A				X				Higher performance rating than STD HP

**Table 5 – Helical Offset**



Company	Trade Name ®	Supplier		Manufacturer		Status		Mounting Type	Pitches						Comments	
		Belt	Pulley	Belt	Pulley	Belt	Pulley		2M	3M	5M	8M	14M	20M		
ContiTech	SilentSync	yes	yes	yes	yes	current	current	QDB				X	X			

- Notes:**
1. See Contributors List for complete listing of Contributing Company Names
  2. Many pulleys are readily available for Bored-to-Size mounting in addition to the bushed mounting system listed.
  3. Pulleys listed are those that are readily available. Many manufacturers can furnish other designs upon request.
  4. Mixing belt profiles may result in reduced life.
  5. Trade names indicated are registered by the manufacturer indicated, except HTD® which is a registered tradename of Gates Corporation and Taper-Lock® (TL) which is a registered tradename of Baldor Electric Co.
  6. QDB sold under tradenames such as Q-D® registered to Regal Beloit and Sure-Grip® registered to TB Wood's Incorporated.

**END OF DOCUMENT**