RUBBER CHAIN RED

DUNLOP proudly introduces the new Rubber Chain Red timing belt drive, the latest development in high performance systems. It significantly improves the traditional specific power capacity and offers new application opportunities against alternative systems like gears or chains which always have a disadvantage in terms of weight, noise, lubrication and maintenance costs.

The new **DUNLOP** Rubber Chain Red is a rubber based timing belt, which solves the problems related to steel and aramide cords, thanks to the development and usage of its innovative 'Dual Core' hybrid cord technology. Rubber chain red reaches the highest level of performances incorporating this cord in a new rubber matrix and covering the teeth with a special and unique heavy fabric.

STRUCTURE

THE BELT BODY.
An innovative design and blend of HNBR elastomer's, uniquely cross linked to increase teeth rigidity and shear resistance, up to +25% in comparison to rubber chain yellow belts. Despite the high levels of rigidity and hardness, this compound guarantees and exceptional resistance to flex fatigue, preventing the appearance of cracks when working with very small pulleys.

Tests made have showed an incredible improvement in the flex fatigue resistance up to 10 times more than the previous rubber chain yellow version, running on the smallest pulley diameters under the same load conditions.

Furthermore this compound is formulated to considerably resist the effects of mineral oils (test conditions 22h at 100°C in ASTM3 oil; -25% less absorption than rubber chain yellow), offering an incredible wide range of working temperatures: from -35°C to +115°C.

TENSION MEMBERS.
The tensile member is made from an innovative 'Dual Core' hybrid cord technology and it constitutes the load carrying elements inside the new rubber chain red belt. The 'Dual Core' technology gives excellent characteristics to this cord, which grant extreme dimension stability under static and dynamic tensions, together with a superior flex fatigue resistance. These performances can eliminate any kind of re-tensioning procedure, providing a maintenance-free operation and guarantees a perfect tooth meshing for longer service life with a reduction of abrasion, vibrations and noise.

TOOTH FACING FABRIC.
A hard wearing poly-amide fabric is bonded to the tooth surface, to improve torque carrying capacity and tooth shear resistance. Its special surface impregnation process confers self lubricating properties, a lower friction and increased drive efficiency.

FEATURES

Thanks to the innovative materials used, rubber chain red is a reliable, lower maintenance and economical alternative to drive systems with chains and gears. It is particularly recommended for efficient, compact drives with high or pulse torque loads, offering:

- Increased basic power capacity by up to 40% compared to the current rubber chain yellow.
- Use existing pulleys, keeping a full functional interchange with other deep pulley profile systems, like HTD, etc.
- Allows existing drives to be upgraded without the necessity to replace the pulleys.
- Reduction of noise thanks to narrower belts due to the higher performance rating of the system.
- Low noise characteristics compared to drive systems using polyurethane, steel etc. due to the rubber matrix and its teeth with parabolic profile shape, recognised as the quietest system on the market.
- A wide, continuous range of possible operating temperature, like no other system, which makes rubber chain red the only solution for extreme working conditions.
- Temperature range -35°C to + 115°C

DUNLOP TIMING BELTS

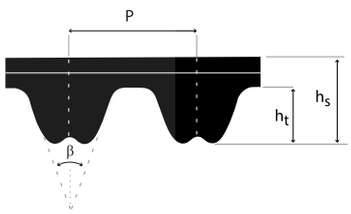
RPP TIMING BELTS RUBBER CHAIN RED

Description

The new RPP parabolic profile is deeper than the equivalent competitors standard tooth profile. The increased depth and sturdiness of the tooth results in an increased torque transmission capability and reduced interference during meshing. The recess in the top of the tooth allows local deformation of the belt when meshing with the pulley, and this contributes to the ability to absorb shock loads and reduced interference during meshing. Other benefits include a reduction in transmission noise, an increase in tooth jump resistance, an increase in power transmitted and an increase resistance to tooth shear.

Part numbers are identified by a 3 or 4 digit number (e.g. 960) which represents the pitch length in mm, a number and letter (e.g. 8M) the belts pitch and a 2 or 3 digit number (e.g. 30) the belts width. 960-8M-30 etc.

Belt type	Pitch	ß	h_s	h_t
8M	8mm	32°	5.40	3.46
14M	14mm	32°	9.70	6.10



Interchange table

Dunlop	Gates	Contitech	Optibelt	Goodyear
Rubber Chain Red	Polychain Carbon	Not Available	Not Available	Not Available

Note: Manufacturers part numbers are used for descriptive purposes only and may not be direct equivalent products.

8M - RUBBER CHAIN RED

8M - CROSS SECTION			BELT WIDTH			
Part Number	Length (mm)	Number of teeth	12mm	21mm	36mm	62mm
640-8M-RCR	640	80	12	21	36	62
720-8M-RCR	720	90	12	21	36	62
800-8M-RCR	800	100	12	21	36	62
896-8M-RCR	896	112	12	21	36	62
920-8M-RCR	920	115	12	21	36	62
960-8M-RCR	960	120	12	21	36	62
1000-8M-RCR	1000	125	12	21	36	62
1040-8M-RCR	1040	130	12	21	36	62
1120-8M-RCR	1120	140	12	21	36	62
1200-8M-RCR	1200	150	12	21	36	62
1224-8M-RCR	1224	153	12	21	36	62
1280-8M-RCR	1280	160	12	21	36	62
1440-8M-RCR	1440	180	12	21	36	62
1600-8M-RCR	1600	200	12	21	36	62
1760-8M-RCR	1760	220	12	21	36	62
1792-8M-RCR	1792	224	12	21	36	62
2000-8M-RCR	2000	250	12	21	36	62
2200-8M-RCR	2200	275	12	21	36	62
2240-8M-RCR	2240	280	12	21	36	62
2400-8M-RCR	2400	300	12	21	36	62
2520-8M-RCR	2520	315	12	21	36	62
2600-8M-RCR	2600	325	12	21	36	62
2800-8M-RCR	2800	350	12	21	36	62
2840-8M-RCR	2840	355	12	21	36	62
3048-8M-RCR	3048	381	12	21	36	62
3600-8M-RCR	3600	450	12	21	36	62
4000-8M-RCR	4000	500	12	21	36	62
4400-8M-RCR	4400	550	12	21	36	62

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RPP TIMING BELTS

DUNLOP

14M - RUBBER CHAIN RED

14M - CROSS SECTION			BELT WIDTH				
Part Number	Length (mm)	Number of teeth	20mm	37mm	68mm	90mm	125mm
1120-14M-RCR	1120	80	20	37	68	90	125
1190-14M-RCR	1190	85	20	37	68	90	125
1260-14M-RCR	1260	90	20	37	68	90	125
1400-14M-RCR	1400	100	20	37	68	90	125
1442-14M-RCR	1442	103	20	37	68	90	125
1568-14M-RCR	1568	112	20	37	68	90	125
1610-14M-RCR	1610	115	20	37	68	90	125
1750-14M-RCR	1750	125	20	37	68	90	125
1890-14M-RCR	1890	135	20	37	68	90	125
1960-14M-RCR	1960	140	20	37	68	90	125
2100-14M-RCR	2100	150	20	37	68	90	125
2240-14M-RCR	2240	160	20	37	68	90	125
2310-14M-RCR	2310	165	20	37	68	90	125
2380-14M-RCR	2380	170	20	37	68	90	125
2450-14M-RCR	2450	175	20	37	68	90	125
2520-14M-RCR	2520	180	20	37	68	90	125
2660-14M-RCR	2660	190	20	37	68	90	125
2800-14M-RCR	2800	200	20	37	68	90	125
3136-14M-RCR	3136	224	20	37	68	90	125
3304-14M-RCR	3304	236	20	37	68	90	125
3360-14M-RCR	3360	240	20	37	68	90	125
3500-14M-RCR	3500	250	20	37	68	90	125
3850-14M-RCR	3850	275	20	37	68	90	125
3920-14M-RCR	3920	280	20	37	68	90	125
4326-14M-RCR	4326	309	20	37	68	90	125
4410-14M-RCR	4410	315	20	37	68	90	125

HTD TIMING BELT CROSS REFERENCE

BRAND	MINIMUM	PERFORMANCE			MAXIMUM
DUNLOP	RUBBER CHAIN WHITE	RUBBER CHAIN BLUE		RUBBER CHAIN YELLOW	RUBBER CHAIN RED
GATES	HTD	Powergrip GT	Powergrip GT2-GT3	POLYCHAIN GT2	POLYCHAIN CARBON
CONTITECH	HTD	GT	CXP	CXA SYNCHRO-CHAIN	
OPTIBELT	OMEGA	OMEGA-B	OMEGA HP	OMEGA HL	
GOOD YEAR	STPD	HAWK Pd HPPD Plus	WHITE HAWK Pd	EAGLE Pd FALCON Pd BLACK HAWK	

Note; Manufacturers part numbers are used for descriptive purposes only and may not give equivalent performance in every application, it is strongly recommended that testing is carried out to determine correct product suitability.

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