

# MASTER<sup>®</sup> V-Belts

- FOR INDUSTRIAL & AGRICULTURE V-BELTS
- AUTOMOTIVE V-BELTS
- CONVEYOR BELTING
- MECHANICAL POWER TRANSMISSION SOLUTIONS
- RUBBER SHEET / MAT



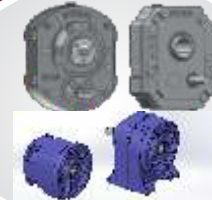
Wrapped V-Belts



REC Belts



Poly-V Belts



Gear Box



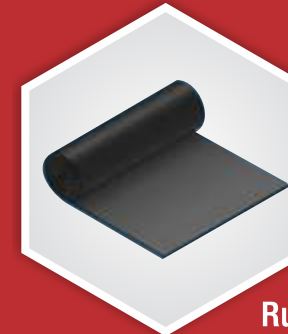
Couplings



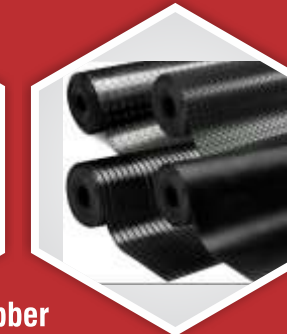
Conveyor



Pulleys



Rubber Sheet / Mat



## Jain Transmission FZC

(O) G13/20, Nr China Mall, Al Jurf,  
Ajman Free Zone, Ajman, UAE

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*"Quality : Our Commitment, Your Confidence"*

*"Quality : Our Commitment, Your Confidence"*

## Our Introduction

### Jain Transmission (India) Pvt. Ltd.

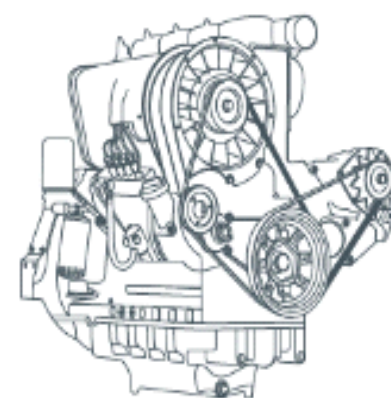
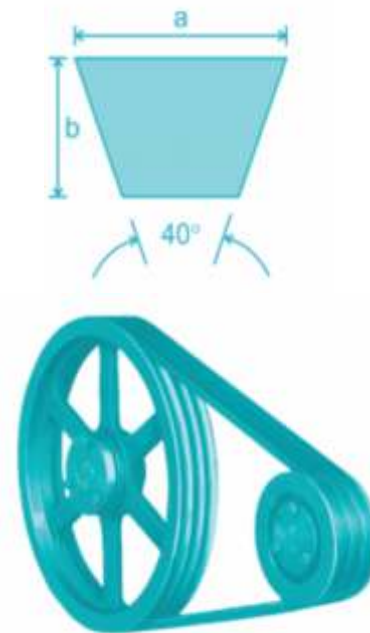
JTIL is fast growing manufacturer of world class Rubber Products, Headquarters at Indore, Madhya Pradesh, India. It involves a manufacturing of "Quality" Rubber Products and having a potential of manufacturing varies types of V-belts, Cogged V-belts, Multi ribbed Poly-V, Variable speed belts, Conical belts, Rubber conveyor belts, Gear boxes, Pulleys and Couplings for Industrial and Agricultural Applications. The Company has been established in 1991 and widely spread business all over Indian and International Market with the popular brand name of "**MASTER**" make Transmission Products.

The Company is ISO 9001 : 2015 certified by IAF accreditation.

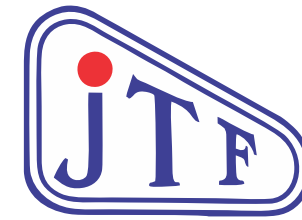
The Company has committed to full-fill the customer's needs and values by serving the "**Quality Products**" through up gradation of manufacturing techniques and technologies through involvement of our integrated and dedicated employees and workmanship.

**JTIL** is committed to achieve and maintained quality products and exceeds customer's needs and satisfaction through;

- Systematic Process Control systems
- Innovative Idea's
- Continuous Improvements
- Brainstorming
- Cost effective and Team Work
- Technology up gradation
- Customer Focus



*"Quality : Our Commitment, Your Confidence"*



#### INTERNATIONAL OFFICE - SALES & SERVICE

##### Jain Transmission FZC

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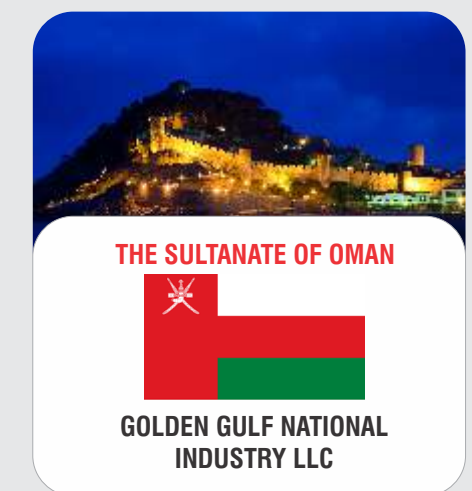
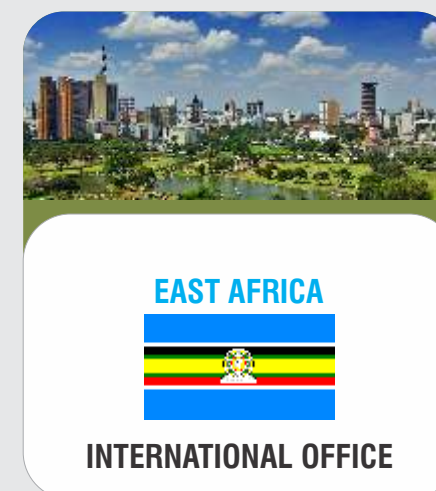
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V-Belts, Conveyor Belt Gearbox and Transmission solutions.

## OUR INTERNATIONAL ASSOCIATES



## From the desk of Chairman

We are happy to intained quality products and exceeds customer's needs and satisfaction through launching new product variants into the international and Domestic markets.

We are launching continuously new products and services, thereby providing the customers with the best quality at the best price. I am happy to take this opportunity to inform everyone that the company is in the process of expanding the business into the next level of growth in up coming years.

I want to acknowledge the invaluable efforts of our employees. Our teams are committed to keeping the key to the success of any collection in foresight is the application of knowledge, creativity and improving the best of our quality services towards the fulfilment of complete customer needs and satisfaction.



**Punyapal Surana**  
Chairman



*"Quality : Our Commitment, Your Confidence"*

## From the desk of R&D

The Company has maintains the R&D and Technology department with state-of-the-art, In-house laboratory with well equipped testing facilities.

Research and development activities focus on the innovation of new products or services in a company.

The objectives of "JTIL" R&D are to develop existing and new core competencies, launching of new products and Continuous development in existing and new business processes through invention and innovation.

In Our laboratory, We are able to do raw material, In-Process materials and rubber rheology test, density and hardness and Finished product testing etc.

- Alpha Tech Mooney Viscometer
- Alpha Tech Rheometer
- Auto Specific Gravity tester
- Shore A Hardness tester
- Tensile Testing Machine
- Abrasion tester

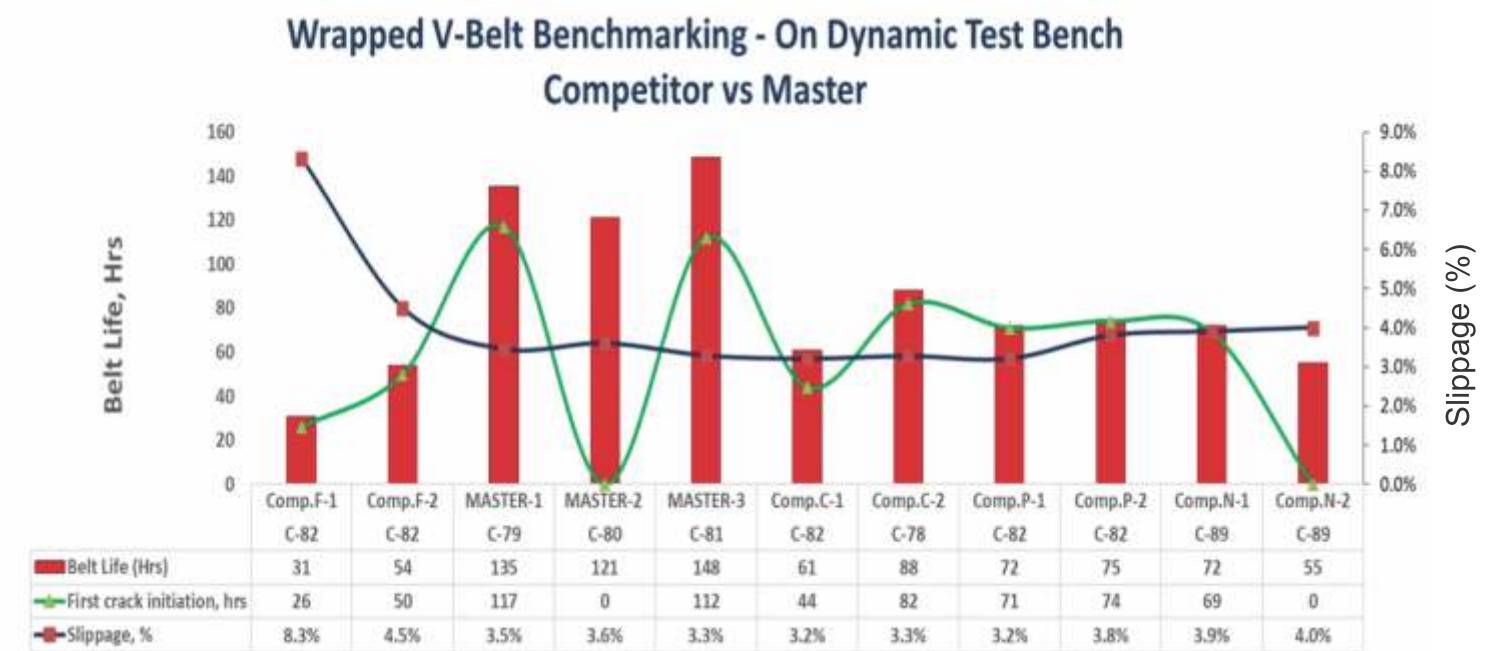


**MASTER Rubber Sheet / Mat**

				
Natural Rubber Sheet	SBR Rubber Sheet	EPDM Rubber Sheet		
				
Rubber Insertion Sheet	Silicone Rubber Sheet	Sponge Rubber Sheet		
				
Abra Rubber Sheet	Insertion Rubber Sheet	GP Rubber Sheet	EPDM Membrane	Butyl Rubber Sheet
				
Food Grade Rubber Sheet	EPDM Rubber Sheet	Natural Rubber Sheet	Hypalon Rubber Sheet	Silicone Rubber Sheet



For Finished Product validation, We having "Dynamic Test bench" In which we are able to test V-belts Life at evaluated temperature @60 to 90 deg. ambient temperature. It's a closed chamber test bench where V-belt size to be test from 70" to 90". Its fully automatic and computerizes on-line data logging system.



## Our Presence



Coal Mining



Industrial Engines



Textile Industries

*"MASTER" V-belts are available in either wrapped and Raw edge styles. A conventional wrapped V-belt will have an envelope of rubberized fabric covering the belt. A Raw edge cogged V-belt will have exposed rubber sidewalls and moulded cogs on the bottom that resemble teeth.*



Oil and Refinery



Industries



Automotive Engine

## EPDM Rubber Sheet

### Applications :

- Waterproofing & Weather Strips
- Roofing membrane
- potable drinking water applications
- steam sealing applications
- HVAC, Electrical Insulation etc.
- Electrical applications
- weather strips and acid-resistant applications
- Automotive Seals, Hoses, Door Window Seals

### Technical Specifications :

- Tensile Strength : 5.0 to 12.5 MPa
- Elongation at Break : 250 to 500%
- Specific Gravity : 1.10 to 1.50 (±0.05)
- Temperature Range : -40°C to +140°C
- Hardness : 40° to 75° Shore A (±5)
- Colour : Black

## Insertion Rubber Sheet

### Applications :

- Flange gaskets on pipes and tanks
- Isolation barriers
- Dust seals and covers
- Variety of sealing applications
- Flexible strip & pad
- Sealing
- Isolating and Protecting steel or others
- Conveyors & Skirting
- Dust & Rock Curtains

### Technical Specifications :

- Tensile Strength : 2.0 to 3.0 MPa
- Elongation at Break : 150% to 250%
- Specific Gravity : 1.55 to 1.65 (±0.05)
- Temperature Range : -10°C to +70°C
- Hardness : 70° Shore A (±5)
- Colour : Black

## SBR Rubber Sheet

We are SBR rubber sheet manufacturer and supplier and this is also known as commercial rubber sheet. Our SBR rubber sheet has long working life. And have resistance features from abrasion, ageing and wear. We are SBR rubber sheet suppliers in India at affordable prices. These are suitable at variety of industrial application with flexible and strong material properties.

We use high quality of material so that they effectively uses as lining rubber and belt cover of conveyor. These have similar feature like natural rubber sheet. Our SBR rubber sheets are available by blend virgin rubber and it has the feature of recycle. This is also known as styrene butadiene rubber.

## Nitrile Rubber Sheet

We are one of the leading manufacturer and supplier in Nitrile Rubber Sheet in India. Our Nitrile Rubber Sheet is applicable at different places due to its resistance feature. It provides resistance from most of the petroleum based applications. We use high quality of rubber sheet that makes Nitrile Rubber Sheet strong enough to sustain for long period of time.

Our Nitrile Rubber Sheet are different from other because it has excellent specification like petroleum, lubricated oil, acid, alkali, impermeable to gases, ozone and weathering, oxidation, water resistance. Our Nitrile Rubber Sheet price are matched with the features and are available at affordable prices.

## Natural Rubber Sheet

### Applications :

- Packing protection
- Light impact protection
- Gaskets & seals
- Flooring
- Worktop cover

### Technical Specifications :

- Tensile Strength : 2.0 to 25.0 MPa
- Elongation at Break : 150% to 750%
- Specific Gravity : 0.98 to 1.8 (± 0.05)
- Temperature Range : -10°C to +70°C
- Hardness : 38° to 80° Shore A (±5)
- Colour : Black

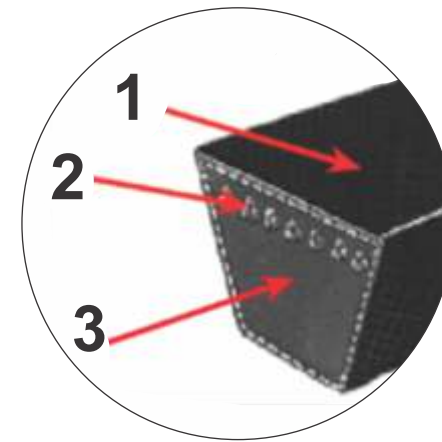


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## Wrapped V-Belt

1. **Rubberized Fabric Cover** : Cover envelopes with Polychloroprene rubber impregnated fabric to entire belt which protects the belt core.
2. **Load Carrying Section** : Cords (also known as tensile members) give the ability to transmit power and ensure uniform load distribution during service.
3. **Compression Section** : Elastomer resists compression fatigue and dissipates internal heat build-up, providing firm lateral pressure against sheave/pulley sidewall and distributes the load to the cords.



### Technical Specifications :

Neoprene Rubber Sheets are supplied as per following specifications:

A	Specific Gravity (gm / cm <sup>3</sup> )	1.25
B	Hardness (Shore A, ±5)	65
C	Tensile Strength, min (kg / cm <sup>2</sup> )	110
D	Elongation at break, min(%)	300
E	Compression Set , at 70°C for 22 hrs (%)	45
F	Service Temperature Range	-25° C to +120° C

### Applications :

- Gaskets, Hoses, Corrosion Resistant Coatings.
- Vibration absorption pads
- Rubber lining seals
- Sealing applications in sound studios, construction site, general/industrial gasket application & marine applications

### Technical Specifications :

- Tensile Strength : 4.0 to 17.0 MPa
- Elongation at Break : 250% to 500%
- Specific Gravity : 1.20 to 1.60 (±0.05)
- Temperature Range : -30°C to +120°C
- Hardness : 40 °to 75 °Shore A (±5)
- Colour : Black

We are the best manufacturer and supplier of neoprene rubber sheet in India. Our neoprene sheet has excellent elastic property that provides high strength and flexibility. We are here to provide high quality of neoprene sponge rubber sheet at affordable prices. Our neoprene rubber sheets are easily fitted different places like gaskets, automobile parts, linings, weather strips, V-belts, sleeves and various external applications.

We are neoprene sheet suppliers that provide high resist features in our product. It resists different applications from fire, high temperature, oil, fuel and different weather condition. These are available in different size, features, gravity; tensile strength, temperature range, hardness, surface finishing and color.





## Neoprene Rubber Sheets

MASTER is the Odorless **Neoprene Rubber Sheets Manufacturers in India**. Neoprene Rubber Sheets are renowned for their remarkable resistance to heat, oil, acids, alkalis, solvents, weather, ozone, and aging. This durability ensures that they can withstand harsh conditions without losing their integrity. Whether you're in the petrochemical, chemical, steel, or pharmaceutical industry, these sheets have you covered.

We are the most Rust-proof **Neoprene Rubber Sheets Suppliers**. One notable feature of Neoprene Rubber Sheets is their excellent adhesion to metal. This property is invaluable in applications where a strong bond between rubber and metal is required. It ensures that the sheets stay in place and provide reliable insulation and protection.

We are the most Maintenance-free **Neoprene Rubber Sheets Exporters From India**. Neoprene Rubber Sheets are crafted from a blend of chloroprene polymer, carbon black, filler, and rubber processing chemicals. This combination results in a material that offers the perfect balance of strength and flexibility, making it ideal for a wide range of applications. These rubber sheets are available in thicknesses ranging from 1mm to 50mm. This versatility allows you to choose the right thickness for your application, whether it's for packing, insulation, or adhesion.



### Size : (Length x Width)

- 1 Mtr x 2 Mtr,
- 1Mtrs x Long length,
- 1.2 Mtrs x Long length,
- 1.2 Mtrs x Long length &
- OR As Per customer's requirement.

### Thickness :

NR Rubber Sheets are Available in 1mm to 50mm thickness.

### Surface :

- Smooth on both sides
- Fabric impression on one side

## Product Range



### Classical Section V-belts

Section	Dimensions			Size Range		Nominal Length (inch)
	Top Width (mm)	Thickness (mm)	Angle (Deg)	Min (mm)	Max (mm)	
Z	10.0	6.0	40	460	3050	Li
M	10.0	6.0	40	460	3050	La
A	13.0	8.0	40	460	5588	Li
B	17.0	11.0	40	508	13210	Li
C	22.0	14.0	40	835	16510	Li
D	32.0	19.0	40	1830	18000	Li
E	38.0	23.0	40	3810	18000	Li



### Wedge Section V-belts

Section	Dimensions			Size Range		Nominal Length (inch)
	Top Width (mm)	Thickness (mm)	Angle (Deg)	Min (mm)	Max (mm)	
SPZ	10.0	8.0	40	850	3550	Lp
SPA	13.0	10.0	40	900	5500	Lp
SPB	17.0	14.0	40	1600	8500	Lp
SPC	22.0	18.0	40	2360	16500	Lp

## Wrapped V-Belt



### Narrow Section V-belts

Section	Dimensions			Size Range		Nominal Length (inch)
	Top Width (mm)	Thickness (mm)	Angle (Deg)	Min (mm)	Max (mm)	
3V	9.7	8.0	40	850	3550	La
5V	15.8	14.0	40	1650	5500	La
8V	25.0	23.0	40	1600	12500	La



### Hexagonal Section V-belts

Section	Dimensions			Size Range		Nominal Length (inch)
	Top Width (mm)	Thickness (mm)	Angle (Deg)	Min (mm)	Max (mm)	
AA	13.0	10.0	40	1750	4500	Li / Le
BB	17.0	14.0	40	1750	6000	Li / Le
CC	22.0	17.0	40	1800	7500	Li / Le

### Special Section V-belts

Section	Dimensions			Size Range		Nominal Length (inch)
	Top Width (mm)	Thickness (mm)	Angle (Deg)	Min (mm)	Max (mm)	
FM	9.7	8.0	40	900	3050	La
HM / 50x22	50.0	22.0	30	1850	4500	Li / Lp

## CHART FOR BELT SELECTION

CHART FOR BELT SELECTION												
BELT DESIGNATION		FULL BELT TENSILE STRENGTH KN/m	MAXIMUM RECOMMENDED WORKING TENSION		Nominal Carcass Thickness (mm)	Nominal Carcass Weight Kg/cm/mtr	Maximum Belt Width (mm) for adequate load support Bulk Density (T/m <sup>3</sup> )			Minimum Belt width (mm) For adequate Troughing		
TYPE	RATING		Vulcanised Splice (kN/m)	Mechanical Fasteners (kN/m)			Upto 1.0	Upto 1.5	Upto 2.5	20 Deg. Idlers	30 Deg. Idlers	45 Deg. Idlers
GENERAL DUTY	200/2	200	20	20	2.4	0.022	650	500	–	300	400	500
	250/2	250	25	25	2.5	0.023	650	600	–	300	400	500
	315/2	315	31	31	2.7	0.024	900	650	500	300	400	500
	315/3	315	31	31	3.2	0.025	1000	800	650	400	500	500
	400/2	400	40	40	2.8	0.025	1000	800	650	400	500	500
	400/3	400	40	40	3.4	0.027	1200	900	650	500	500	500
	500/3	500	50	*	3.4	0.030	1200	900	650	500	500	500
630/3	630	63	*	3.5	0.031	1200	1000	800	500	500	500	
HEAVY DUTY	200/2	200	20	20	2.8	0.026	800	650	500	400	400	500
	250/2	250	25	25	3.0	0.028	800	650	500	400	400	500
	315/2	315	31	31	3.1	0.029	1000	800	650	400	500	500
	315/3	315	31	31	3.6	0.030	1200	1000	800	500	500	500
	400/2	400	40	40	3.2	0.030	1200	1000	800	500	500	500
	400/3	400	40	40	3.6	0.032	1200	1000	800	500	500	650
	400/4	400	44	40	4.5	0.044	1200	1000	800	500	500	650
	500/3	500	50	*	3.7	0.034	1400	1000	800	500	500	650
	500/4	500	55	*	4.5	0.040	1400	1200	900	500	650	650
	630/3	630	63	*	3.9	0.036	1600	1400	1200	650	800	800
	630/4	630	70	*	5.0	0.049	1800	1600	1400	650	800	900
	800/4	800	90	*	5.4	0.051	1800	1600	1600	650	900	900
	1000/4	1000	110	*	5.8	0.054	2000	1800	1600	800	900	1000
1000/5	1000	110	*	6.6	0.066	2000	1800	1600	800	900	1000	
1250/4	1250	140	*	6.5	0.062	2000	2000	1600	800	900	1000	
1250/5	1250	140	*	7.1	0.080	2000	2000	1600	900	900	1000	
EXTRA HEAVY DUTY	400/4	400	44	*	4.8	0.058	1200	1000	800	500	500	500
	500/4	500	55	*	4.8	0.060	1600	1200	900	500	500	500
	630/4	630	70	*	5.6	0.063	1800	1400	1200	500	650	800
	800/4	800	90	*	6.0	0.065	1800	1600	1400	650	800	900
	800/5	800	90	*	6.5	0.068	1800	1600	1400	650	650	800
	1000/4	1000	110	*	6.2	0.068	1800	1800	1400	800	800	900
	1000/5	1000	110	*	7.0	0.075	2000	1800	1600	800	900	1000
	1250/4	1250	140	*	6.8	0.076	2000	1800	1600	800	800	900
	1250/5	1250	140	*	7.5	0.089	2000	1800	1800	800	900	1000
	1400/4	1400	145	*	7.2	0.077	2000	1800	1800	800	900	1000
1400/5	1400	155	*	8.2	0.089	2000	1800	1800	800	900	1200	
1600/4	1600	180	*	7.4	0.081	2000	2000	1800	800	900	1200	
1600/5	1600	180	*	8.8	0.100	2000	2000	1800	800	1000	1200	
1800/6	1800	190	*	10.6	0.110	2000	2000	2000	900	1000	1200	

NOTE:

- IN THE ABOVE BELT STRENGTH DESIGNATIONS, THE FIRST SET OF FIGURES DENOTE THE BELT STRENGTH IN KN/M AND THE SECOND SET OF FIGURES DENOTES THE NUMBER OF FABRIC PLYS.
- \* DENOTES THAT MECHANICAL FASTNERS ARE NOT RECOMMENDED.
- THE ABOVE FIGURES REPRESENT THE STANDARD CONSTRUCTION OF CONVEYOR BELTS. SPECIAL CONSTRUCTION CAN BE DESIGNED AND MANUFACTURED AGAINST SPECIFIED REQUIREMENTS.
- THE ABOVE FIGURES ARE APPROXIMATE VALUES AND SHOULD BE TAKEN INTO ACCOUNT FOR THE PURPOSE OF DESIGN AND ESTIMATION ONLY AND NOT FOR THE PURPOSE OF INSPECTION. "JTF" RESERVES THE RIGHT TO CHANGE THE SPECIFICATION/PARAMETERS, WITHOUT NOTICE, IN LIGHT OF TECHNICAL DEVELOPMENT.

## SELECTION CHART FOR GRADS OF COVER RUBBER

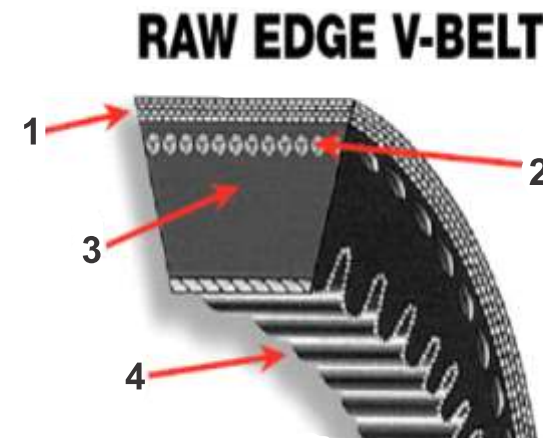
Belt Cover are made of Super Abrasive Resistance (SAR).

COVER GRADE CHARACTERISTICS AND APPLICATION	PHYSICAL PROPERTIES							
	STANDARD	BEFORE AGEING		Temperature of Ageing °C	Duration of Ageing hrs.	AFTER AGEING		MAXIMUM ABRASION LOSS MM <sup>3</sup>
		Tensile Strength MPa	Elongation %			Change in Tensile Strength %	Change in Elongation %	
<b>GENERAL PURPOSE BELTING</b>								
<b>GRADE M-24</b>								
This Grade is recommended for conveying heavy, sharp, highly abrasive materials like metallic ores, granite, lime stone, coal, Blast furnace slag & clinker etc.	IS 1891 PART-I BS 490 PART-I ISO 4195/1 DIN 22102	24.0	450	70	72	+10 -20	+10 -25	150
<b>GRADE N-17</b>								
Recommended for conveying less severe and moderately abrasive material like sized coal, ash, chalk, bauxite etc.	IS 1891 PART-I BS 490 PART-I ISO 4195/1 DIN 22102	17.0	400	70	72	+10 -20	+10 -25	200
<b>GRADE N-17 SYNTHETIC</b>								
Composed of Synthetic Rubber mainly, this grade is suitable for arduous application as M-24 and has similar wear resistance properties.	IS 1891 PART-I	17.0	400	70	72	+10 -20	+10 -25	150
<b>HEAT RESISTANT BELTING</b>								
<b>GRADE HR (T-1)</b>								
This grade is recommended for conveying hot material and suitable for fines up to 100°C and coarse material upto 125°C.	IS 1891 PART-II	12.5	350	100	72	-25	-40	200
<b>GRADE HR (T-2)</b>								
This grade is recommended for conveying hot material and suitable for fines up to 125°C and lumps upto 150°C.	IS 1891 PART-II	12.5	350	125	72	-35	-50	250
<b>SUPER HEAT ULTIMA</b>								
Specially blended with a compound of EPDM and Chlorobutyl, this grade is recommended for applications where material temperatures beyond 150°C are involved.	"JT" STANDARD	12.5	350	125	72	-35	-50	250
<b>FIRE RESISTANT BELTING</b>								
<b>GRADE FR</b>								
Having fire resistance and antistatic properties, this grade is recommended for use where a fire hazard exists eg. Thermal Plants, Underground Mines.	CSA-M422-M87 IS 1891 PART-V DIN 22103 JISK. 6324-1977	17.0	350	70	72	+10 -20	+10 -25	NOT SPECIFIED
<b>OIL RESISTANT BELTING</b>								
<b>GRADE OR</b>								
Composed of Synthetic Rubber Compounds this grade is resistant to mineral, vegetable, animal oils and fats.	IS 1891 PART-III	12.0	250	70	72	±35	±35	NOT SPECIFIED
<b>HYGIENIC BELTING</b>								
<b>GRADE HYGIENIC</b>								
This cover grade is specially designed with nontoxic Rubber Compounds for use in the food processing, pharmaceutical Industry.	IS 1891 PART-IV	10.0	350	70	72	+10 -25	+10 -45	NOT SPECIFIED
<b>CHEMICAL RESISTANT BELTING</b>								
<b>GRADE CMR</b>								
This specially designed grade of Conveyor Belting incorporates a Top Cover of Nitrile Rubber and Bottom Cover of PVC to withstand the chemical and abrasive action of material like Potash, Urea, etc. It also overcomes the problem of "Reverse Toughing" faced in conveying such material on Belting with normal Cover Grades.	IS 1891 PART-I	24.0	450	70	72	+10 -20	+10 -25	150



## Moulded Cogged V-Belt

- Top Fabric :** Synthetic rubberized top fabric Provides heat and oil resistance.
- Load Carrying Section :** Cords (also known as tensile members) give the ability to transmit power and ensure uniform load distribution during service.
- Compression Section :** Elastomer resists compression fatigue and dissipates internal heat build-up, providing firm lateral pressure against sheave/pulley sidewall and distributes the load to the cords.
- Precision molded cogs :** Provide additional flexibility, allowing for use of smaller pulley diameters, aiding in heat dissipation.



### Features:

- "MASTER" Raw edge cogged V-belts have a precision cogged profile base which is designed for uniform stress distribution and superior heat dissipation.
- The construction permits greater flexibility and a higher Power rating capacity for exceptional performance on small diameter pulleys using FHP, Classical, Wedge and Narrow section drives. The robust construction is specially designed to fit the pulley grooves exactly, which allows maximum wedging action.
- The belts are built with High modulus and low stretch stiff polyester tensile members to resist fatigue and shock loads. The cord and polychloroprene rubber are bonded to prevent separation and reinforcement layers on both sides of the tensile member improve cord stability. All belts are oil & heat resistant and static conducting.



## MINIMUM PULLEY DIAMETERS FOR CONVEYORS BELTS

Carcass thickness (mm)						Recommended Minimum Diameter in mm for Percentage of RMBT Used								
Cotton		100 Percent Polyamide		Polyester Polyamide		Over 60 Up to 100 percent			Over 30 Up to 60 percent			Upto 30 percent		
From	To	From	To	From	To	Type of Pulley			Type of Pulley			Type of Pulley		
						A	B	C	A	B	C	A	B	C
-	1.2	-	1.1	-	0.9	100	-	-	-	-	-	-	-	-
1.3	1.5	1.2	1.3	1.0	1.1	125	100	-	100	-	-	-	-	-
1.6	2.0	1.4	1.7	1.2	1.4	160	125	100	125	100	-	100	100	-
2.1	2.5	1.8	2.2	1.5	1.8	200	160	125	160	125	100	125	125	100
2.6	3.1	2.3	2.7	1.9	2.3	250	200	160	200	160	125	150	160	125
3.2	3.9	2.8	3.5	2.4	2.9	315	250	200	250	200	160	200	200	160
4.0	5.0	3.6	4.4	3.0	3.7	400	315	250	315	250	200	250	250	200
5.1	6.2	4.5	5.5	3.8	4.6	500	400	315	400	315	250	315	315	250
6.3	7.8	5.6	7.0	4.7	5.8	630	500	400	500	400	315	400	400	315
7.9	10.0	7.1	8.8	5.9	7.4	800	630	500	630	500	400	500	500	400
10.1	12.5	8.9	11.1	7.5	9.2	1000	800	630	800	630	500	630	630	500
12.6	15.6	11.2	13.8	9.3	11.5	1250	1000	800	1000	800	630	1000	1000	630
15.7	17.5	13.9	15.5	11.6	12.9	1400	1250	1000	1250	1000	800	1000	1000	800
17.6	20.0	15.6	17.7	13.0	14.8	1600	1250	1000	1250	1000	800	1000	1000	800
		17.8	20.0	14.9	16.6	1800	1400	1250	1400	1250	1000	1250	1250	1000
				16.7	18.5	2000	1600	1250	1600	1250	1000	1250	1250	1000

RMBT denotes "Recommended Maximum Belt Tension"

A - Driving Pulleys and Pulleys exposed to High Belt Tension.

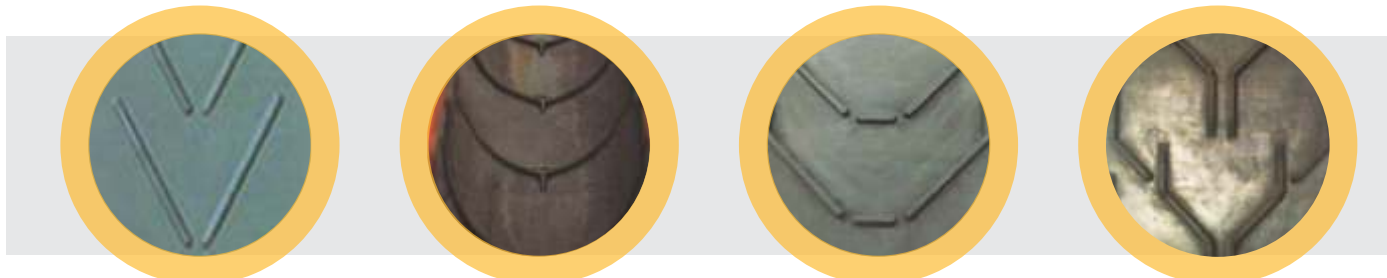
B - Snub Pulleys in the return run under Lower Belt Tension.

C - Bend Pulleys for a change of directions of Belt of Less Than 30 Degree.

## SPECIAL & STANDARD BELTS

### CHEVRON / CLEATED BELTS

STF offers a wide range of Profiled Chevron Cleated Belts which make increased angles of 30 Degree to 40 Degree inclination possible. The advantage of high angle of inclination is that less space is needed to reach the desired conveying inclination/angle.



V-CLEATS

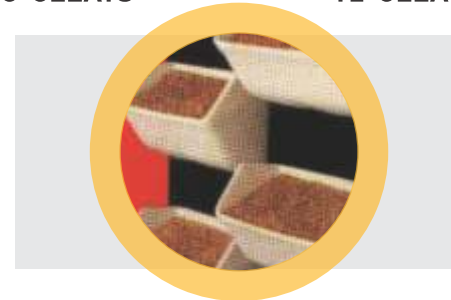
Y1-CLEATS

C-CLEATS

Y2-CLEATS

### ELEVATOR BELTS

These Belts are suitable for vertical transportation of materials. STF offers special elevators belts with minimum elongation characteristics, available in various grades M-24, HR, SHR, HOR, Oil Resistant & White.

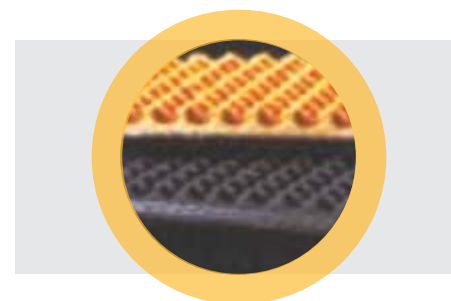


### CHEMICAL RESISTANT BELT

These belts stand up to aggressive acids and high concentrations of various chemicals such as sulphur potassium nitrate or hydrochloric acid

### ROUGH TOP BELT

Rough Top belts designed for transport of sacks, boxes and parcels. The top cover is made of wear resistant rubber with a non-slip surface.



### WAVY TOP BELT

Belts with wavy impression on top. Suitable for loaders and weigh feeders & bag carrying.

### Classical Section - Raw Edge Cogged V-belts

Section	Dimensions			Size Range		Nominal Length (inch)
	Top Width (mm)	Thickness (mm)	Angle (Deg)	Min (mm)	Max (mm)	
ZX	10.0	6.0	36	600	3500	Li
AX	13.0	8.0	36	600	4010	Li
BX	17.0	11.0	36	635	4010	Li
CX	22.0	14.0	36	965	4120	Li

### Wedge Section V-belts - Raw Edge Cogged V-belts

Section	Dimensions			Size Range		Nominal Length (inch)
	Top Width (mm)	Thickness (mm)	Angle (Deg)	Min (mm)	Max (mm)	
XPZ	9.7	8.0	36	850	3550	Lp
XPA	12.7	10.0	36	900	5500	Lp
XPB	16.7	14.0	36	1600	8500	Lp
XPC	22.0	18.0	36	2000	16500	Lp

### Narrow Section V-belts - Raw Edge Cogged V-belts

Section	Dimensions			Size Range		Nominal Length (inch)
	Top Width (mm)	Thickness (mm)	Angle (Deg)	Min (mm)	Max (mm)	
3VX	9.7	8.0	38	760	3550	La
5VX	15.8	14.0	38	1270	5700	La
8VX	25.4	23.0	38	1800	5700	La

### Special Section V-belts - Raw Edge Cogged V-belts

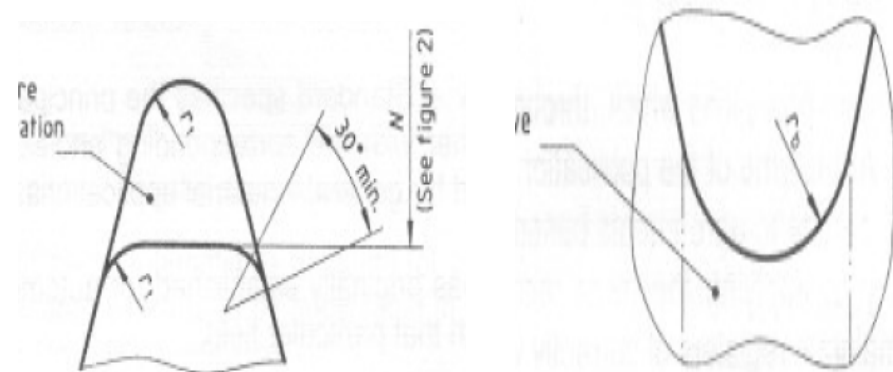
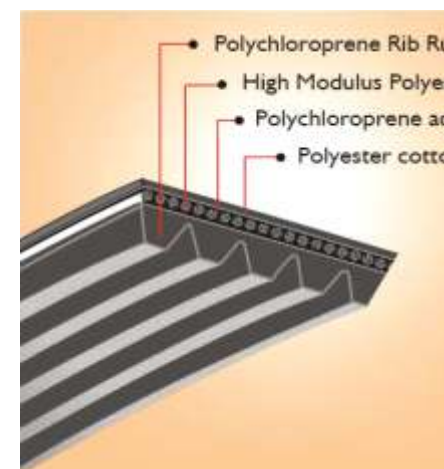
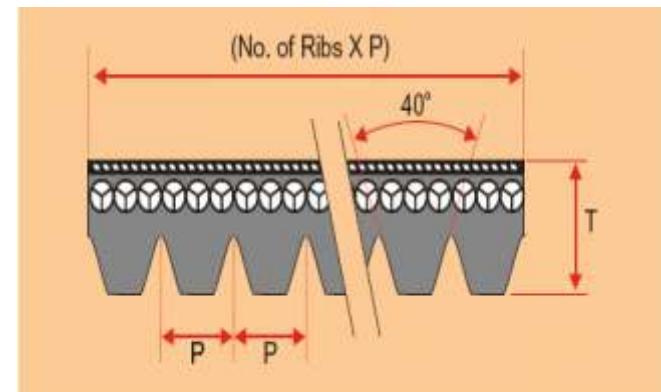
Section	Dimensions			Size Range		Nominal Length (inch)
	Top Width (mm)	Thickness (mm)	Angle (Deg)	Min (mm)	Max (mm)	
FMX	9.5	8.0	36	600	3000	La
X12.5	12.5	10.0	38	600	3500	La
AVX10	10.0	8.0	38	600	3500	La
AVX13	13.0	10.0	38	600	3500	La

## "MASTER" - Multi Ribbed Poly-V Belts

### Description:

Its have high transmission ratio because of tooth of poly-V belt, So its have high transmission power about 30% - 50% higher up than normal V-belts and it have lower vibration, Oil and Heat resistance and save space.

It's a low stretch belt. The continuous high tensile synthetic cord makes maximum utilization of the face width and ensures a uniform tension through the belt.



Profile	UOM	PJ	PK
Rib Pitch, P	mm	2.34	3.56
Total belt Height, T	mm	4.00	5.00
Groove Height, h	mm	1.60	2.30
Root radius, rb (Min.)	mm	0.40	0.50
Root radius, rt (Max.)	mm	0.20	0.25

## GENERAL BELT

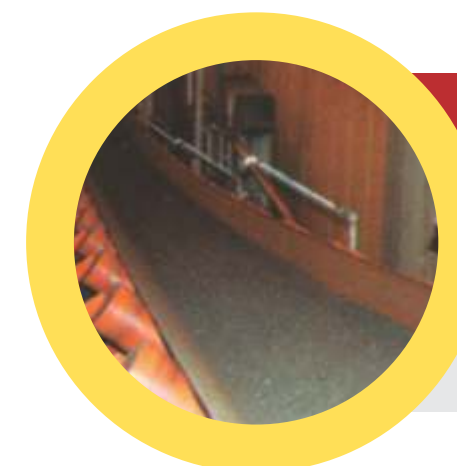
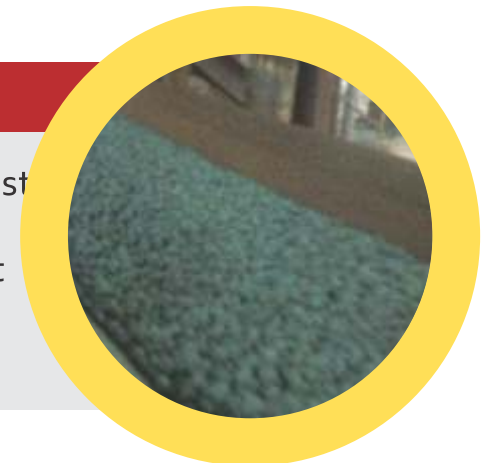


### GENERAL DUTY RYDER CONVEYOR BELT

General Duty Conveyor Belt made from technologically superior rubber compounds with better ageing characteristics, available in a variety of grades; carcass available in both Nylon or Polyester Fabric (EP).

### HEAT - RESISTANT BELTS

The rubber cover protects the fabric of the belt against hot materials such as alumina, ash, granite, iron and copper, grit etc, available in various grades: **HR** (Heat Resistant) | **SHR** (Super Heat Resistant) | **UHR** (Ultra Heat Resistant) | **HOR** (Heat & Oil Resistant)



### FIRE - RETARDANT

Fire - Retardant Belts is a Self - Extinguishing design prevent fires from spreading over the entire belt.

### OIL RESISTANT

The synthetic fabric is impervious to oil, turps, moisture and rot. The top and bottom covers are made of oil and terpene - resistant black rubber, so that they retain their shape, hardness and surface characteristics, also available OHR (Oil and Heat resistant) belt.



## WHY MASTER ?

Due to our rich knowledge and experience in the domain, we are engaged in providing high quality High Duty Conveyor Belt, Heat Resistant Conveyor Belt, Oil Resistant Conveyor Belt, Fire Resistant Conveyor Belt, Chemical Resistant Conveyor Belt, Cold Resistant Conveyor Belt, Sidewall Conveyor Belt, Bucket Conveyor Belt, Chevron Conveyor Belt, Fabricated Conveyor Belt etc.

### PRODUCT FEATURES

- The features for which we have received appreciation from our clients includes -
- ▶ Experienced team of Professionals.
  - ▶ Ethical Business Practices.
  - ▶ Well-Established Infra Structural Unit.
  - ▶ Timely Delivery
  - ▶ Client Centric Approach
  - ▶ Reasonable Price

### SERVING INDUSTRIES

- ▶ Stone Quarries ▶ Metal crusher ▶ Coir Industries
- ▶ Paper Mills ▶ Tea Estates ▶ Coal Mining
- ▶ Steel Industries ▶ Power Plants
- ▶ Ports ▶ Cement Industries ▶ Food Industries
- ▶ Packing Industries
- ▶ Special Purpose Industries/ Special Purpose Machines
- ▶ Other Material Handling Equipment ▶ Reasonable price

### QUALITY STANDARDS

- We supplies all relevant Indian and International Standards.
- ▶ Bureau of Indian Standards - BIS
  - ▶ International Standards Organization - ISO
  - ▶ British Standards - BS
  - ▶ German Standards - DIN
  - ▶ Reasonable Price

### CONVEYOR BELTING

#### Nylon/Nylon (NN) Carcass

- ▶ Lower longitudinal elongation
- ▶ Higher tensile strength
- ▶ Good flexibility and trough ability
- ▶ Good resistance to mildew, moisture and rotting
- ▶ Good resistance to edge wear
- ▶ Excellent impact resistance
- ▶ Unaffected by alkalis and weak acids
- ▶ Suitable for conveying material over long distances

#### Polyester / Nylon (EP) Carcass

Besides having the advantages as listed for NN carcass belts, EP belts have the additional advantage of lower longitudinal elongation.

## "MASTER" - Multi Ribbed Poly-V Belts

### THE POLY V HAS MULTIPLE APPLICATION BENEFITS:

"Improved transmission ratio is possible (Poly V 1 : 60 vs V belt 1 : 20). Does away with the need for stepped pulleys." Reduced diameters (diameters up to 9mm with the H profil compared to 50mm with V belts). Reduced belt width for a given geometry and the same power transfer. A single belt can drive several accessories: serpentine belt drive. Driving accessories, such as Idlers and drive pulleys from the back of the belt.



### REDUCED COSTS:

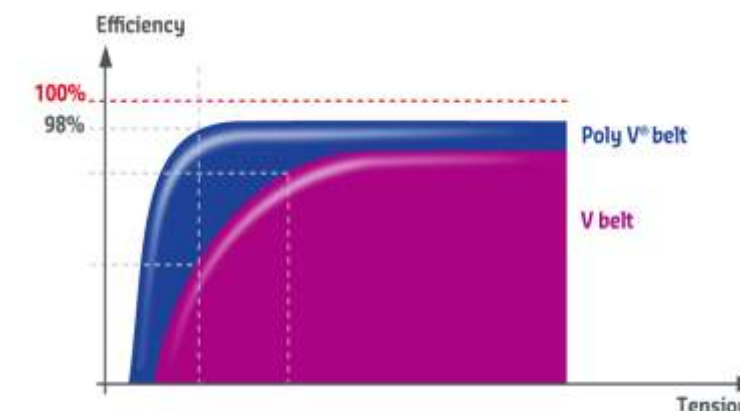
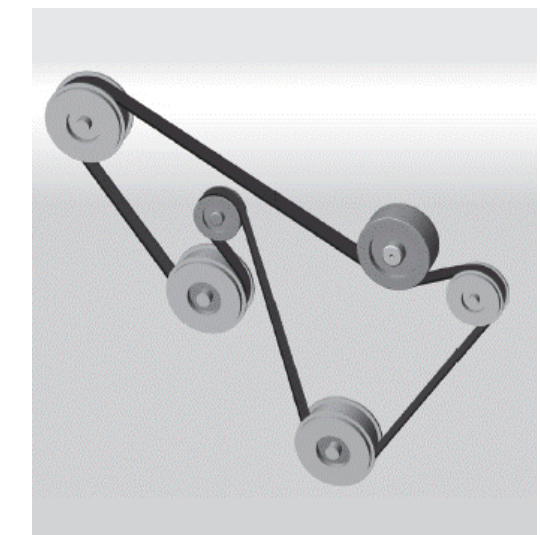
- Reduced diameter and pulley width.
- Reduced belt length.
- No need for inertia flywheels in some cases.
- Machining of pulleys is facilitated: the Poly V can be used on smooth pulleys (receivers).

### MAINTENANCE:

- Rapid set up (1 Poly V can replace up to 15 V belts).
- No need for matching.
- Increased life span.

### OPERATING:

- Reduced consumption due to high output.



**ABOUT US**



**JAIN TRANSMISSION FZC**

Established in the year 2007, in Indore, Madhya Pradesh, India, We "JAIN TRANSMISSION FZC" are the leading manufacturer, exporter and supplier of an efficient range of High Duty Conveyor Belt, Heat Resistant Conveyor Belt, Oil Resistant Conveyor Belt, Fire Resistant, Conveyor Belt, Chemical Resistant Conveyor Belt, Cold Resistant Conveyor Belt, Bucket Conveyor Belt, Chevron Conveyor Belt etc. The offered products are manufactured using latest technology and quality tested raw material in adherence to international quality. These products are known for their high strength, heat resistance, precisely manufactured, easy to install, flexibility and stretch ability. Conveyor Belt is being produced and marketed under the brand name of "Master". It has capacity to produce "Master" Brand Conveyor Belting up to a width of 1500 mm and (M-24/N-17), Heat Resistant (HR), Chemical Resistant (CR) and Fire Retardant (FR), as indicated in our Technical Literature. In addition to this, we are providing Cold Vulcanizing Solution to our clients.

Our R&D department consists of a laboratory equipped with a complete range of testing and quality control equipment including rheometers, tensile testing machines capable of testing full belts, DIN abrasion testing rig, aging ovens and a chemical lab. The laboratory is staffed by qualified technicians with decades of experience.

JTF is the only Indian group that can supply the entire range of products and services needed by a conveyor belt user providing Design, Manufacture, Supply, Installation, Commissioning, Maintenance and Operation.

JTF guarantee that every belts supplied to its customers will be of the highest standards of material and workmanship.

**INFRASTRUCTURE**

We are backed by ultra-modern state-of-the-art infra structural unit that is furnished with latest tools and machinery. We have categorized our infrastructure into several sub-units like procurement, manufacturing, quality control, R & D, sales and marketing, warehouse and logistics. Our provided products are checked by our quality experts using advanced testing tools and devices. In order to meet the specific requirements of our customer, we provide these products in different specifications. We have gained a remarkable position in the industry. Our ethical business policies, on-time delivery, transparent dealings, easy payment modes and client-centric approach have made us the best option of our valuable clients.

**TEAM**

Backed by our team of talented professional, we have been able to provide our clients best quality range of products. We have appointed our team of professionals on the basis of their rich experience and knowledge in the domain. Our team of professionals works round the clock in order to achieve the target of the firm. In order to keep our experts update with latest market advancements, we organize important programs, training sessions and seminars.

1



**Bush Type Flexible Couplings**

2



**Tyre Couplings**

**Couplings**

**Jaw Flex / Esses Coupling**



3

**HRC**



4





## “Energy-Optimised Conveyor Belts”



### ADVANTAGES OF RTI CONVEYOR BELTS

#### GOOD BONDING

The Bonding Is Good with No Ply Separation in Service

#### ENDLESS JOINT

Ability To Be Joined And Be Made Endless

#### LOW ELONGATION

JTF Belts Having Minimal Elongation

#### HIGH MODULUS

JTF Belts have high modulus, so can carry more loads.

#### GOOD WEAR RESISTANCE

Excellent Abrasion Resistance.

#### VERY GOOD TEAR RESISTANCE

By Special Compounding Escon Belts Have Very Low Cut Propagation And With Stand Damage

#### FLEXIBILITY

Longitudinally to Flex Around the Pulleys and Transversely for Roughing if Desired.



### JAIN TRANSMISSION FZC

supplies of rubber conveyor belts in India. Industrial conveyor belts constitute Nylon/Nylon (NN), Polyester/Nylon (EP). It has carcass with Straight Ply, reverse stepped Ply, Breaker ply and "Edge-Lock" where required. The above constructions, with a wide range of protective rubber covers, are manufactured in widths up to 1500 mm in a most modern automated plant, using the finest raw material inputs.

JAIN TRANSMISSION FZC

## Bush Type Flexible Couplings, For Industrial

The "MASTER" Bush Type Flexible Coupling of the cushioned drive type, transmits the torque through high tensile steel bolts to the machine input shaft. Highly developed rubber compounds are used in bushes to absorb shock loads, torsional vibrations and slight misalignments.

The function of a flexible coupling is to transmit torque from one shaft to another in cases where limited misalignment may occur and also to absorb shock loads.

Simple and compact in construction, the DriveTech Coupling is capable of transmitting high torques at maximum speeds. The flanges are manufactured with cast iron, grade 20 of IS. 210. This type of coupling permits drive in either direction and requires neither lubrication nor adjustment after fitting. The flexible bushes remain unaffected by water, dust and atmospheric conditions.



### Coupling Selection :

Details required for coupling selection are:

1. Type of driven machine and operating hours per day.
2. Speed and power absorbed by driven machine (If absorbed power is not known, it is calculated based on power rating of the prime mover).
3. Diameter of shafts to be connected.

### Procedure :

- a) **Service Factor :** Determine the required service factor from Table -1
- b) **Design Power :** Multiply the normal running power by the service factor. This gives the Design Power which is used as a basis for selecting the coupling.
- c) **Coupling Size :** Refer to Table -3 and from the appropriate speed, read across until a power greater than that required in step (b) is found. The size of Coupling required is given at the head of that column.
- d) **Bore Size :** Check from dimension in Table -2, whether the chosen flanges can accommodate the required bores.

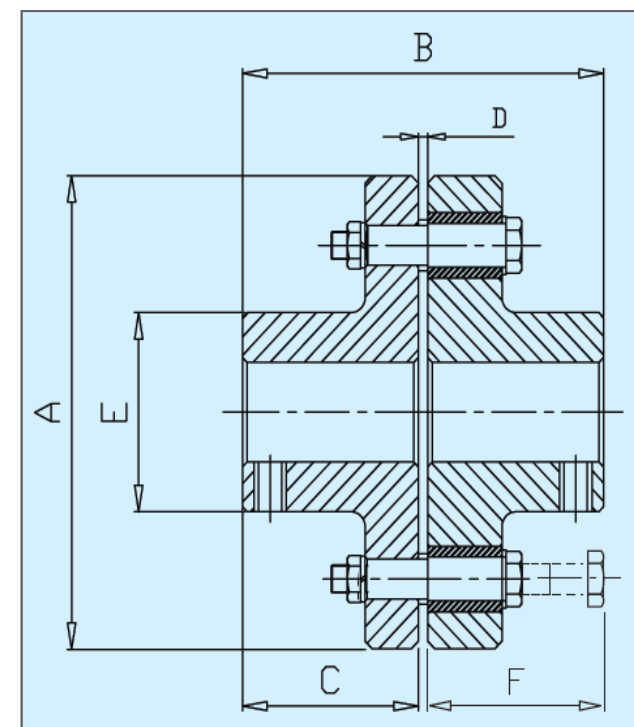
**Table-1: Service Factors**

Driven Machine	Prime Mover				
	Electrical Motor Steam Turbine Shafting	Steam Engine Water Turbine	IC Engine Multi-Cylinder	IC Engine Single-Cylinder Diesel Multi Cylinder	Diesel Engine Single Cylinder
Even Torque Machines: Smooth Loads, Generators, Centrifugal Pumps, Blowers, Small Fans, Line Shafting.	1.0	1.2	1.5	2.0	2.5
Machine Tools (light), Beaters, Exhausters, Wood-working Machines (light), Alternators, Welding Generators, Textile Machines.	1.2	1.5	1.7	2.2	2.7
Multi-Crank Compressors and Pumps, Generators (fluctuating loads), Rotary Dryers & Screens, Rotary Compressors, Planers, Wood-working Machines (heavy), Pulp Grinders, Shakers, Mine Fans.	1.5	1.7	2.0	2.7	3.0
Wire Mills, Cement Mills, Small Printing Presses.	1.7	2.0	2.2	3.0	3.2
Single Crank Compressors & Pumps, Hammers, Ball & Tube Mills, Rolling Mills (light), Shearing Machines, Punches, Rock & Stone Crushers, Brick Making and similar Machines, Printing Presses (large), Grinders, Pulverisors, Cranes & Winches, Mechanical Shovels & Dredges, Winding Gears and Drums.	2.0	2.2	2.5	3.2	3.5
Heavy Rolling Mill Drives, Continuous, Prolonged & Reversing Drives, Severe Traction and Haulage Loads.	2.2	2.5	2.7	3.5	3.7

## BUSH TYPE FLEXIBLE COUPLINGS

**Notes:**

- | All dimensions are in millimeters.
- | Simple maintenance. No lubrication required.
- | Accommodate larger bore diameters.
- | Dampens the shock and vibration.
- | Grub screw is provided on the hub for locking of key in finish bore couplings.
- | Standard range is available with cast iron flanges.
- | For special application, we can provide forged steel flanges.
- | It is recommended to use coupling guard for better safety.



**RI Series**

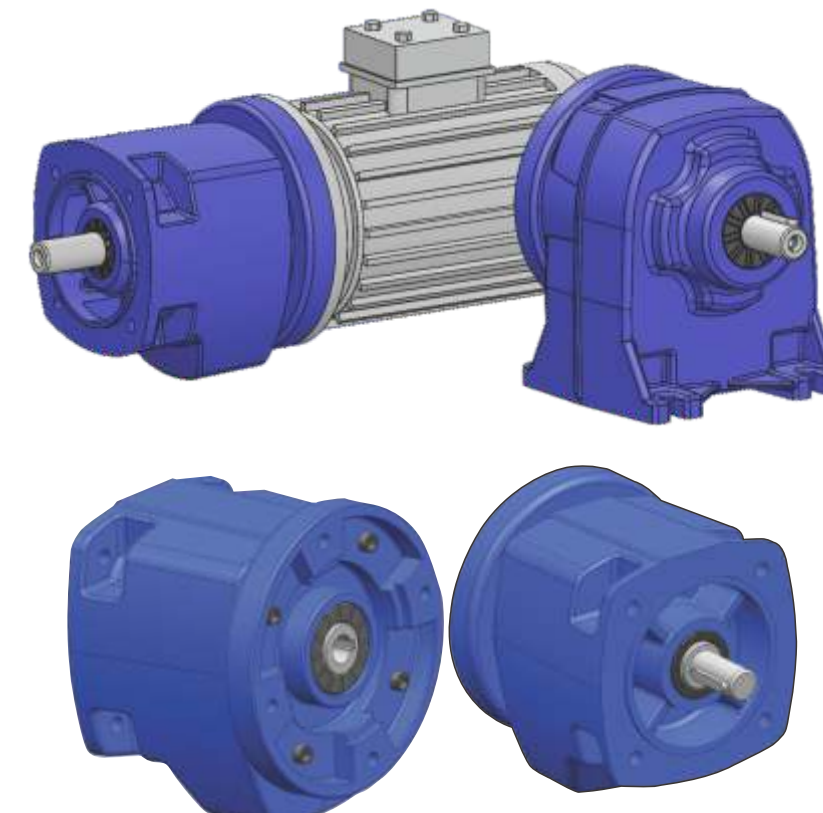
These are the inlined Helical Gear Head and Geared Motor available in the following 3 popular sizes. Geared Motors 'RI Series' available for suitable upto power transmission range of 5.5 Kw

Sr	Model	I/P RPM	Rated Max Torque	Output RPM	Ratio
1	RI 128	1440	200Nm	14-500	3 to 100
2	RI 142	1440	300Nm	32-300	4 to 45
3	RI 162	1440	500Nm	32-390	3 to 45

**RS Series**

These are also inlined Helical Geared Motors available in 3 Sizes suitable for the power transmission range upto 20 Kw

Sr	Model	I/P RPM	Rated Max Torque	Output RPM	Ratio
1	RS 160	1440	600Nm	8-180	8 to 360
2	RS 180	1440	900Nm	6-240	6 to 300
3	RS 195	1440	1100Nm	5-288	5 to 330



**WE BELIEVE OUR SMALLER SIZE HELPS US RESPOND MORE QUICKLY AND PROFESSIONALLY THAN OUR LARGER COMPETITORS.**

“Master” was incorporated in the year of 2007, in Indore, Madhya Pradesh, INDIA, with an aim to provide 100% quality products in Transmission Sector. vis-a-vis "RI Series" type which are available with power transmission range upto 5.5 kw and "RS Series" type which are available upto power transmission range 20 kw.

Furthermore, “Master” with its continuous development and technical knowhow along with the above mentioned has designed and developed various types of Reduction Gear Boxes (Speed Reducers) MASTER has also started to manufacture inlined Helical Geared Motored and Gear Head Model "RI Series and RS Series".

“Master” has been a market leader in terms of new developments and market reach. Today the company continues to grow as an aggressive manufacturer of different types of Gear Boxes used in various industries like conveying equipments for the crusher, quarry plants, mining, cement & textile, minerals & chemical, iron and steel industries etc. The manufacturing plant is based in Indore with modern machines for manufacturing World Class Gear Boxes.

The owners of our company also remain involved in all facets of the business and are available to assist as and when required, which helps us to ensure that decisions are made quickly and all efforts are made to keep our customers satisfied.

## THE GEAR UNIT

### Gear wheels

Gear wheels are carburized and hardened helical and shaved and grounded.

### Castings:

Casing and adapter casting are GG15-GG20 cast iron as standard.

### Bearings:

All casing ball bearing are sufficient dimensioned, Input bearing are 2RS ball bearing with C3 design.

### Shafts:

Output shafts made of quenched and tempered steel.

### Lubrication:

Splash lubrication with gear oil SS-320 or Synthetic oil, Input bearing is self lubricated 2RS type.

### Seals:

Radial shaft seals, with dust lip at output side

### Efficiency:

The efficiency of a gear unit is primarily determined by splash losses, bearing and gearing friction. On an average across all size the efficiency measures approximately 99% for standard gear unit.

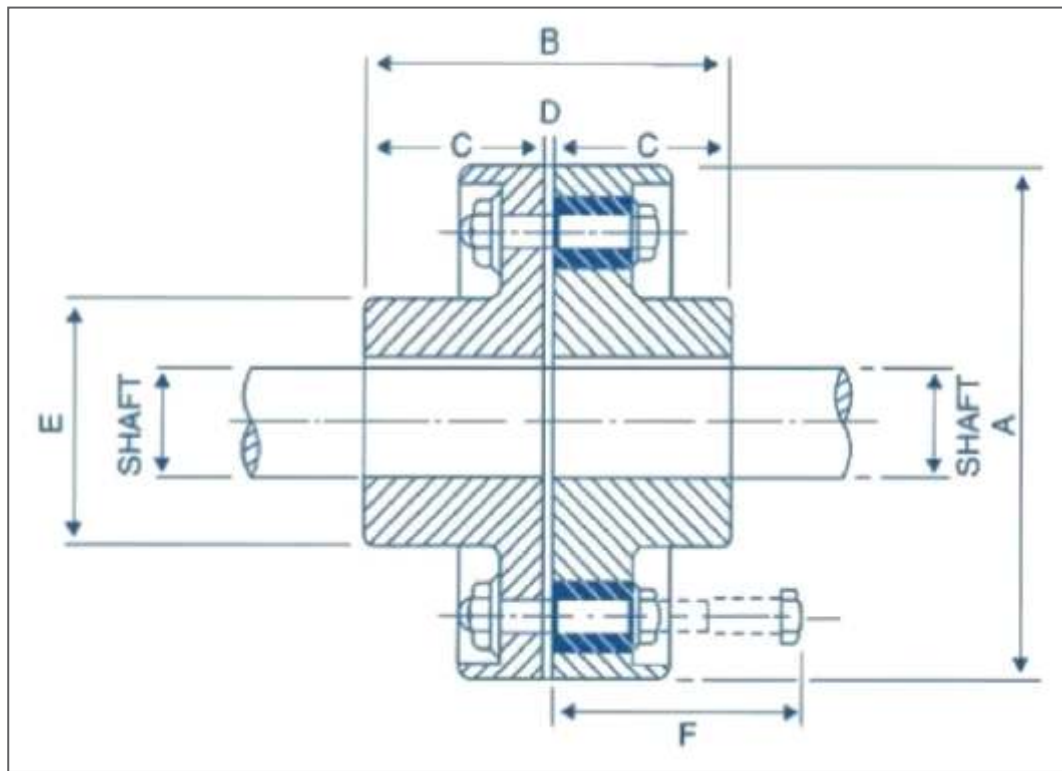
**Table-3: Power Rating (Kw) - MASTER - Bush Type Couplings**

Speed rev/min	Coupling Sizes																			
	MTBC1	MTBC2	MT8C2A	MTBC3	MTBC4	MTBC4A	MTBC5	MTBC6	MTBC&A	MTBC&B	MTBC7	MTBC7A	MTBCI	MTBCIA	MTBCIB	MTIC9	MTBC9A	MTBC10	MTIC10A	MTBC11
100	0.8	3.2	5.4	6.5	8.7	13.0	17.4	24.7	30.7	37.0	43.0	54.4	60.9	76.1	91.4	104	139	151	189	240
200	1.6	6.5	10.8	13.0	17.4	26.0	34.8	49.4	61.4	74.0	87.0	108.8	121.8	152.2	182.8	208	278	302	378	498
300	2.4	9.7	16.2	19.5	26.1	39.0	52.2	74.1	92.1	111.0	130.5	163.2	182.7	228.3	274.2	312	417	453	567	747
400	3.2	13.0	21.6	26.0	34.8	52.0	69.6	98.8	122.8	148.0	174.0	217.6	243.6	304.4	365.6	416	556	604	756	996
500	4.0	16.2	27.0	32.5	43.5	ss.o	87.0	123.5	153.5	185.0	217.5	272.0	304.5	380.5	457.0	520	695	755	945	1245
600	4.9	9.5	32.4	39.0	52.2	78.0	104.2	148.2	184.2	222.0	261.0	326.4	365.4	456.6	548.4	624	834	906	1134	1494
700	5.7	22.7	37.8	45.5	60.9	91.0	121.8	172.9	214.9	259.0	304.5	380.8	426.3	532.7	639.8	728	973	1057	1323	1743
720	5.8	23.4	38.9	46.8	62.6	93.6	125.3	177.8	221.0	266.4	313.2	391.7	438.5	547.9	658.0	749	1001	1087	1361	1793
800	6.5	26.0	43.2	52.0	69.6	104.0	139.2	197.6	245.6	296.0	348.0	435.2	487.2	608.8	731.2	832	1112	1208	1512	1992
900	7.3	29.2	48.6	58.5	78.3	117.0	156.6	223.3	276.0	333.0	391.5	489.6	548.1	684.9	822.6	936	1251	1359	1701	2241
960	7.8	31.2	51.8	62.4	83.5	124.8	167.0	237.1	294.7	355.2	417.6	522.2	584.6	730.6	877.4	998	1334	1450	1814	2390
1000	8.1	32.5	54.0	65.0	87.0	130.0	174.0	247.0	307.0	370.0	435.0	544.0	609.0	761.0	914.0	1040	1390	1510	1890	2490
1200	9.7	39.0	64.8	78.0	104.4	156.0	208.8	296.4	368.4	444.0	522.0	652.8	730.8	913.2	1097	1248	668	1812	2268	
1400	11.3	45.5	75.6	91.0	121.8	182.0	236.6	345.8	429.8	518.0	609.0	761.6	852.6	1065	1280					
1440	11.7	46.8	77.8	93.6	125.3	187.2	250.6	355.7	442.0	532.8	626.4	783.4	877.0	1096	1316					
1600	13.0	52.0	86.4	104.0	139.2	208.0	278.4	395.2	491.0	592.0	696.0	870.4	974.4	1218	1462					
1800	14.6	58.5	97.2	117.0	156.6	234.0	313.2	444.6	552.6	666.0	783.0	979.2								
2000	16.2	65.0	108.0	130.0	174.0	260.0	338.0	494.0	614.0	740.0										
2200	17.8	71.5	118.8	143.0	191.4	286.0	382.8	543.4	675.4	814.0										
2400	19.4	78.0	129.6	156.0	208.8	312.0	407.6													
2600	21.1	84.5	140.4	169.0	226.2	338.0	452.4													
2800	22.7	91.0	151.2	182.0	243.6	364.0														
2880	23.3	93.6	155.5	187.2	250.6	374.4														
3000	24.3	97.5	162.0	195.0	261.0	390.0														
3500	28.3	113.7	189.0	260.0																
4000	32.4	130.0	216.0																	
4500	36.4	146.2																		

## PIN BUSH COUPLING

## MASTER - Bush Type Couplings

## PRODUCT SPECIFICATION



### STANDARD HUB KEYWAYS

#### STANDARD METRICS KEYS WAYS

#### STANDARD INCH KEYS WAYS

STANDARD HUB BORE (mm)	HUB KEYWAYS	KEY SIZE	STANDARD HUB BORE (Inch)	KEY SIZE
35	10 x 3.3	10 x 8	1.5"	3/8" x 1/4"
40	12 x 3.3	12 x 8	2"	1/2" x 5/16"
50	14 x 3.8	14 x 9	2.5"	5/8" x 7/16"
55	16 x 4.3	16 x 10	3"	7/8" x 5/8"
65	18 x 4.6	18 x 11	4"	1" x 3/4"
75	20 x 4.9	20 x 12		
85	22 x 5.4	22 x 14		
100	28 x 6.4	28 x 16		

### ADDITIONAL ACCESSORIES FOR "Master" GEAR BOX

#### BACKSTOPS (HOLD BACK OR RETURN LOCK)

Backstops are designed to prevent reverse rotation or to hold a device to prevent reverse rotation in application such as conveyor. Backstop are not recommended for use on systems that are designed for handling people, such as elevators, man lifts, sky lifts etc. Back stop cannot be use as a brake. The Backstop does not need additional lubrication as it gets oil from the gearbox.

#### MOTOR MOUNT

Motor mounting options are available to fit directly onto the gear unit through special motor mounting tools for shaft mounted gear units. (Recommended to consult to "Master" Team for clarify the technical droughts) Motor mounting tools are designed with robust base plate which accommodates wide range of motor frame sizes. Each size of motor mount has sufficient adjustment to ensure that belt can be fitted and tensioned whenever required throughout life of belts.

#### TAPER LOCK BUSH

Taper Lock Bush and bushes are manufactured from special tool to permanently remove any possibility of corrosion. The unique taper lock bush locking system is custom-designed to overcoming the challenges faced by other mounting methods in corrosive conditions. Bores of varied sizes are available for taper lock bush to facilitate quick and easy mounting on different shaft sizes.

#### LUBRICATION

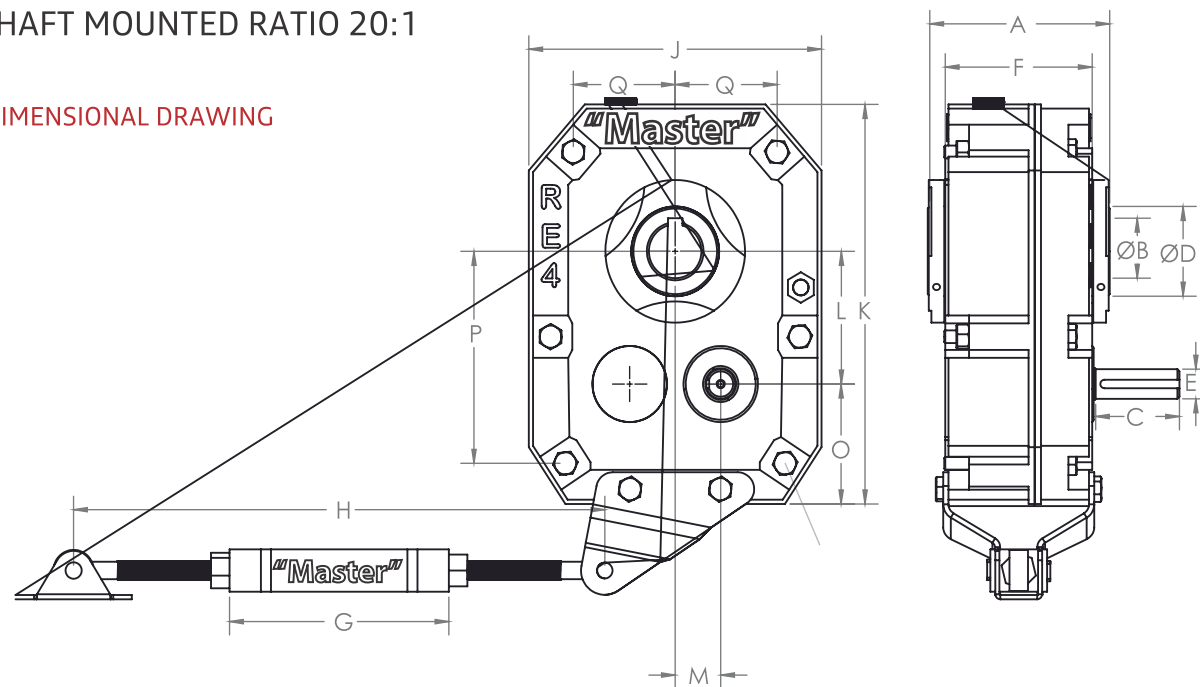
"Master" SMSR GEARBOX are dispatched without oil. Before running they should be filled with an appropriate amount of the correct recommended lubrication depending on the mounting positions as explained in the installation & maintenance manual book let.

SIZE	No. of Pins	Torque Nm	Min. Bore (mm)	Max. Bore (mm)	Max. Speed rev/min	A	B	C	D	E	F
MBC1	3	77	12.7	28	6100	95	79	38	3	40	58
MBC2	4	310	12.7	30	5100	114	99	48	3	42	70
MBC2A	6	516	16	42	4400	130	105	51	3	60	70
MBC3	4	621	16	48	3600	160	107	51	5	68	114
MBC4	4	831	20	65	3000	191	125	60	5	90	114
MBC4A	6	1241									
MBC5	6	1662	25	75	2600	225	157	76	5	105	114
MBC6	8	2359									
MBC6A	10	2932	45	95	2300	254	183	89	5	135	114
MBC6B	12	3533									
NMBC7	12	4154	60	115	1950	290	235	115	5	170	114
NMBC7A	14	5195	60	120	1900	300	235	115	5	180	130
NMBCS	16	5816	65	130	1850	310	255	125	5	195	130
NMBC8A	18	7268	65	135	1650	340	265	130	5	200	130
NMBCBB	12	8729	70	140	1590	360	276	135	6	210	200
NMBC9	13	9932	80	150	1470	390	316	155	6	225	200
NMBC9A	15	13274	90	160	1400	410	336	165	6	240	200
NMBC10	16	14420	100	170	1300	440	366	180	6	255	200
NMBC10A	17	18050	110	180	1200	480	386	190	6	270	212
NMBC11	20	23780	120	190	1080	530	406	200	6	285	212

## PRODUCT SPECIFICATION

### SHAFT MOUNTED RATIO 20:1

#### DIMENSIONAL DRAWING



MODEL	A	B	C	D	E	F	G	H	
								MIN	MAX
R-D3	152	50	72	75	25	124	175	330	435
R-E4	165	50	81	85	28	142	175	330	435
R-F5	193	65	90	95	32	151	175	330	435
R-G6	216	75	105	105	42	182	215	440	575

J	K	L	M	N	O	P	Q	APPROX MASS (Kg)	OIL CAPACITY (Ltr.)
261	344	112	45	120	97	195	40	35	1.5 - 2
283	380	125.6	44	133	116	225	44	50	2.5 - 3
307	410	142	50	150	119	247	76	68	3.5 - 4
348	455	158	56	167	133	275	62	100	4 - 4.5

### STANDARD AND ALTERNATE HUB BORE

"Master" offers various options in alternative hub bore sizes with F7 tolerances.

REDUCER SIZE	STANDARD HUB BORE (mm)	STANDARD HUB BUSH BORE (mm)	UPPER ALTERNATIVE HUB BORE (mm)	ALTERNATIVE HUB BORE (Inches)
R-D3	50	40 and 45	50	2"
R-E4	55	45 and 50	65	2" and 2.5"
R-F5	65	50, 55 and 60	75	2" 2.5" and 3"
R-G6	75	60, 65 and 70	85	2.5" and 3"
R-H7	85	70, 75 and 80	95	2.5" and 3"
R-J8	100	90 and 95	120	2.5", 3" and 4"

## Tyre Couplings, For Industrial



### DESCRIPTION

#### Standard Tyre

"MASTER" Tyre type couplings are able to operate with and tolerate larger amounts of misalignment are highly elastic and lubrication free. Simple installation and inspection without disturbing the drive system. Tyre couplings have excellent shock absorbing properties while reducing torsional oscillations and vibrations.

- | Simple maintenance and visual inspection
- | All dimensions Time saving and simple installation - machine and motor remain undisturbed whilst tyre is changed
- | All dimensions Large misalignment capability, up to 6mm parallel and 8mm axial and 4° angular
- | All dimensions Tyres are available in standard and FRAS (Fire Resistant Anti Static)
- | All dimensions Taper Bore and pilot bore flanges available

#### Feature Attributes

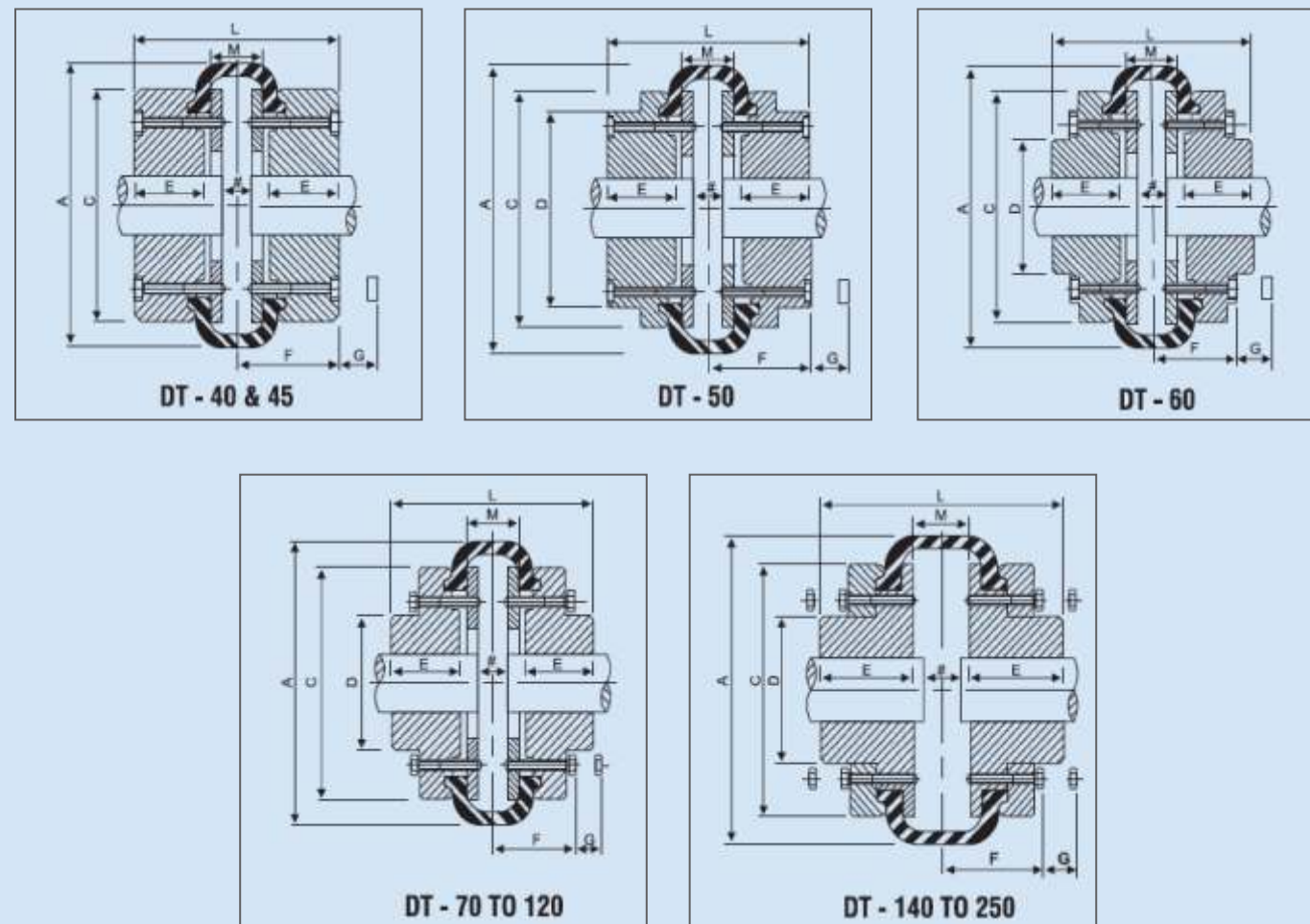
Flange Type : Coupling Elements:

F mm : Standard Tyre

# Tyre Couplings, For Industrial

## TYRE COUPLING

### B Type Couplings



## PRODUCT SPECIFICATION

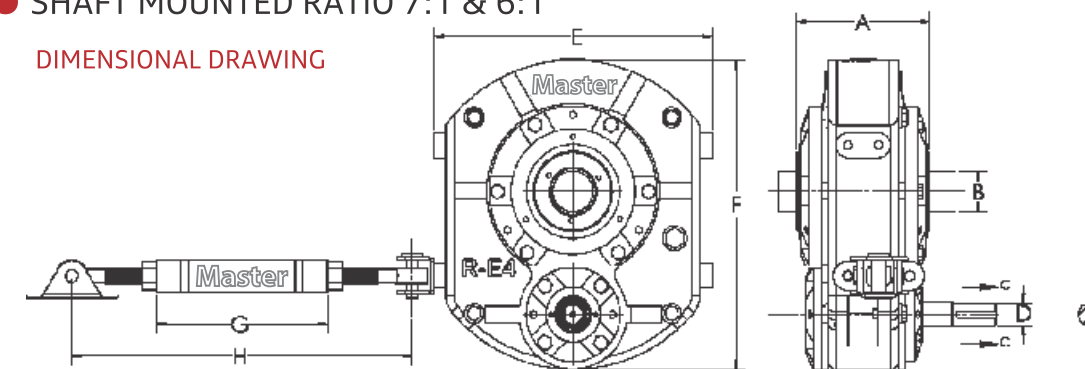
POWER RATING (kW) 20 : 1 UNITS (DOUBLE REDUCTION)

20:1 UNITS				
OUTPUT REV/MIN	R-D3	R-E4	R-F5	R-G6
10	0.79	1.25	1.82	3.15
12	0.97	1.53	2.23	3.87
14	1.15	1.8	2.64	4.58
16	1.33	2.08	3.06	5.29
18	1.51	2.37	3.47	6.01
20	1.69	2.65	3.89	6.71
22	1.87	2.93	4.3	7.43
24	2.05	3.22	4.71	8.15
26	2.22	3.5	5.12	8.86
28	2.41	3.78	5.53	9.57
30	2.59	4.05	5.94	10.3
32	2.76	4.34	6.36	11
34	2.95	4.62	6.77	11.7
38	3.12	4.9	7.18	12.4
40	3.3	5.18	7.6	13.1
42	3.48	5.47	8.01	13.9
46	3.66	5.75	8.42	14.6
50	3.84	6.03	8.84	15.3
52	4.02	6.31	9.24	16
54	4.2	6.59	9.65	16.7
58	4.38	6.87	10.1	17.4
62	4.56	7.15	10.5	18.1
66	4.73	7.43	10.9	18.9
70	4.92	7.72	11.3	19.6
74	5.1	8	11.7	20.3
78	5.28	8.29	12.1	21.0
80	5.46	8.57	12.5	21.6
85	5.75	9.02	13.2	22.9
85	6.08	9.54	14	24.2
90	6.41	10.1	14.7	25.5
95	6.73	10.6	15.5	26.8
100	6.73	10.6	15.5	26.8
Torque at 10 rpm (Nm)	819	1300	2100	3277



SHAFT MOUNTED RATIO 7:1 & 6:1

DIMENSIONAL DRAWING



MODEL	RATIO	A	B	C	D	INPUT SHAFT KEY WAY	E	F	G	H		APPROX MASS (KG)	OIL CAPACITY
										MIN	MAX		
R-E4	07:01	185	65	55	28	8x3.5	355	380	175	330	435	50	3.5
R-F5	06:01	193	65	80	38	10x4.5	380	420	175	330	435	60	4.5
R-G6	06:01	205	75	80	38	10x4.5	400	456	215	440	575	80	5
R-H7	06:01	210	80	85	48	14x5.2	450	505	215	440	575	110	6.5
R-J8	06:01	230	100	85	48	14x5.2	555	450	215	440	575	130	8.5

## PRODUCT SPECIFICATION

### SERVICE FACTOR

TYPE OF DRIVEN MACHINE	OPERATION HOURS PER DAY		
	UPTO 10 HRS	10 TO 16 HRS	OVER 16 HRS
<b>UNIFORM</b> • Agitators and Mixers –liquid or semi-liquid Blowers-Centrifugal, bottling Machine, Conveyors and Elevators Uniformly Loaded Cookers Laundry Washing Machines – Non reversing Line Shafts, Pumps-Centrifugal and gear, Wire Drawing machines.	1	1.12	1.25
<b>MODERATE SHOCK</b> • Agitators and Mixture – Variable density. • Conveyors – Non-Uniformly Loaded. • Cranes – Travel motion and hoisting. • Draw bench, Feeders – Pulsating load Hoists Kilns, Laundry Tumbler, Lifts. • Piston Pumps – with 3 or more cylinders Pulp and Paper making Machinery Rubber Mixers and Calendars. • Rotary Screens, Textile Machinery	1.25	1.4	1.6
<b>HEAVY SHOCK</b> • Brick Press, Briquetting Machine. • Conveyors – reciprocating and shaker Crushers Feeders – reciprocating. • Hammer Mills, Piston Pumps -1 or 2 cylinders Rubber Masticators, Vibrating Machine.	1.6	1.8	2

### UNIT SELECTION FOR “MASTER DRIVE GEARS & “MASTER SMSR GEAR BOX

#### SERVICE FACTOR

From the above table select the service factor applicable to the drive.

#### DESIGN POWER

Multiply the absorbed power (if absorbed power not known, refer motor power) by the service factor chose in step (A).  
 Note: Ensure that design power exceeds motor rated power.

#### UNIT SELECTION

Using the value from Step (B) refer to the following power rating table and select the correct size of unit. The selection of single and double reduction gearbox will be determined by the output speed required. The normal operating speeds for each of the gearbox models are shown in power rating tables.

### POWER RATING (kW) 7:1 & 6:1 UNITS (SINGLE REDUCTION)

7:1 UNITS			6:1 UNITS					
GEAR BOX INPUT SPEED (N1)	GEAR BOX OUTPUT SPEED (N2)	RATIO 7:1 UNITS R-E4	GEAR BOX INPUT SPEED (N1)	GEAR BOX OUTPUT SPEED (N2)	RATIO 6:1 UNITS			
					R-F5	R-G6	R-H7	R-J8
300	42.9	1.08	300	50	5.6	9	14.6	23
327	46.7	1.18	327	54.5	7.5	11.9	19.4	25.1
350	50	1.26	350	58.3	8	12.7	20.8	26.9
360	51.4	1.3	360	60	8.4	13.4	21.9	27.6
375	53.6	1.35	375	62.5	8.8	14	22.8	28.8
400	57.1	1.5	400	66.7	9.6	15.4	25	30.7
425	60.7	1.59	425	70.8	10	16.4	26.6	32.6
450	64.3	1.69	450	75	11	17.9	29.2	34.5
500	71.4	1.88	500	83.3	13	19.9	32.4	38.3
600	85.7	2.25	600	100	15	23.9	38.9	46
700	100	2.63	700	116.7	18	27.8	45.4	53.7
800	114.3	3	800	133.3	20	31.8	51.9	61.3
900	128.6	3.38	900	150	23	35.8	58.4	69
1000	142.9	3.75	1000	166.7	25	39.8	64.9	76.7
1100	157.1	4.13	1100	183.3	28	43.8	71.4	84.3
1200	171.4	4.5	1200	200	30	47.7	77.9	92
1300	185.7	4.88	1300	216.7	33	51.7	84.4	99.7
1400	200	5.25	1400	233.3	35	55.7	90.8	107.3
1500	214.3	5.63	1500	250	38	59.7	97.3	115

## Jaw Flex / Essex Couplings, For Industrial



“MASTER” Essex Jaw Coupling are low weight and torque transmission Coupling with bore range from 15 to 90 mm. Axial plug-in, easy assembly and maintenance free.”

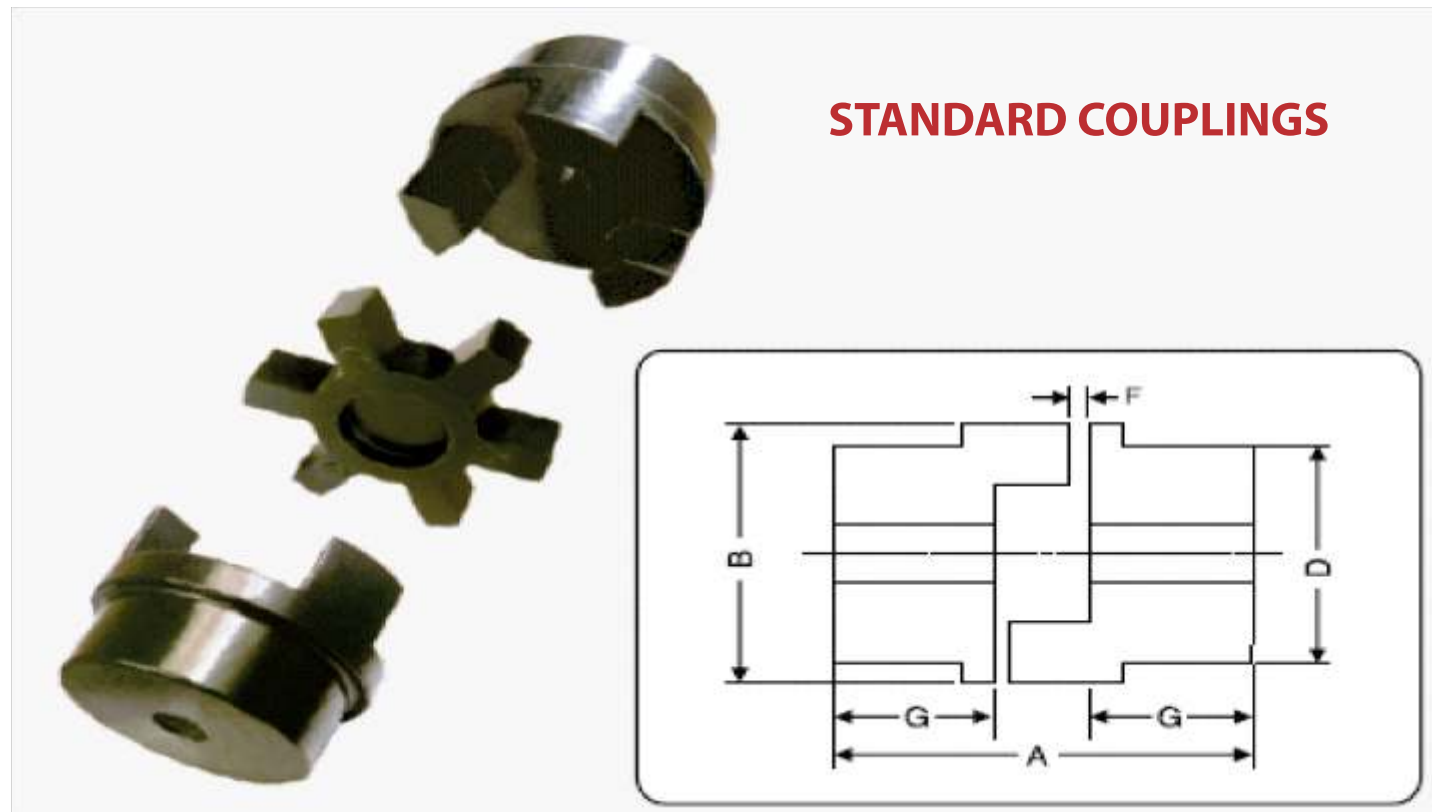
#### “MASTER” Jaw Flex / Essex Couplings are

- ▮ Flexible inserts cater for incidental angular, parallel and axial misalignments
- ▮ Quick and easy installation
- ▮ Range of Standard, External Spider & Cushion Type with power rating from 0.21 kW to 22.40 kW at 100 rpm
- ▮ Simple construction - quick easy installation - No special tools required.
- ▮ Absorbs shock loads and damps small amplitude vibration.
- ▮ Insert design presets correct distance between hubs, using raised pads on each leg of the insert.
- ▮ Available in a range of stock bore sizes. Can also be supplied with finished Dore 8 key way.
- ▮ Uaffected by moisture, grease and oils-including non. aromatic and non-ketone solvents and temperatures within the range -40°C to 100°C.
- ▮ Spacer coupling with spacer size depending upon the distance between two shaft ends (DBSE)

#### Typical Applications

- ▮ Pumps including back-pull-out type
- ▮ Conveyors
- ▮ Elevators
- ▮ Packaging Machinery
- ▮ Food Processing Plants
- ▮ Compressors
- ▮ General Machine Tools
- ▮ Blowers
- ▮ Paper Mill Beaters and Calenders, etc.

## Jaw Flex / Essex Couplings, For Industrial



**STANDARD COUPLINGS**

Size	Power per 100 rev/min kW	Bore in mm		Dimensions in mm				
		Min.	Max.	A	B	D	F	G
ML - 095	0.21	15	28	63	54	49	2	25
ML - 099	0.39	20	30	72	65	51	2	27
ML - 0100	0.50	20	38	88	65	57	2	35
ML - 0110	0.92	20	42	108	85	76	3	43
ML - 0150	1.50	30	48	115	96	80	3	45
ML - 0190	2.02	36	55	133	115	102	3	54
ML - 0225	2.75	40	60	153	127	108	3	64

### TYPICAL APPLICATIONS

Pumps including back-pull-out type, Conveyors, Elevators, Packaging Machinery, Food Processing Plants, Compressors, General Machine Tools, Blowers, Paper Mill Beaters and Calenders etc.

## ABOUT COMPANY

“WE BELIEVE OUR SMALLER SIZE HELPS US RESPOND MORE QUICKLY AND PERSONALLY THAN OUR LARGER COMPETITORS.”

“MASTER” was incorporated in the year of 2007, in Indore, Madhya Pradesh, INDIA, with sole aim of providing 100% performing quality products in Transmission Sector. Initially, Master started with conveyor belts & Group of company Jain transmission Pvt. Ltd. For V-Belts were the main products and Supplying Largely to Major Crusher, Power, Cements, Sugar, Industrial Sectors and O.E.M. in India & Abroad.

Further, “MASTER” with continuous development and technical knowhow “MASTER” has designed and developed various types of Reduction Gear Boxes (Speed Reducers).

“MASTER” has been a market leader in terms of new developments and market reach. Today the company continues to grow as an aggressive manufacturer of different types of Gear Boxes used in various industries like conveying equipments for the crusher, quarry plants, mining, cement & textile, minerals & chemical, iron and steel industries etc. The manufacturing plant is based in Indore with modern machines for manufacturing World Class Gear Boxes.

“MASTER” customers include OEM’s & private companies & publicly traded multinationals. Regardless of the size of our customers, we remain committed to providing personal services & excellent responsiveness.

Our Company’s owner is also remain involved in all facets of the business and are available to help in any situations, which helps ensure that decisions are made quickly and all affords are made to keep our customers satisfactions.

### MASTER DRIVE GEARBOX

Shaft Mounted Speed Reducers are high performing and quality products submitted to intense quality control and manufactured with highest precision. “MASTER” DRIVE are compact, totally enclosed and are designed for direct mounting to ensure positive drive and permanent alignment minimize space requirement.

### BENEFITS AND FEATURES OF “MASTER” SHAFT MOUNT

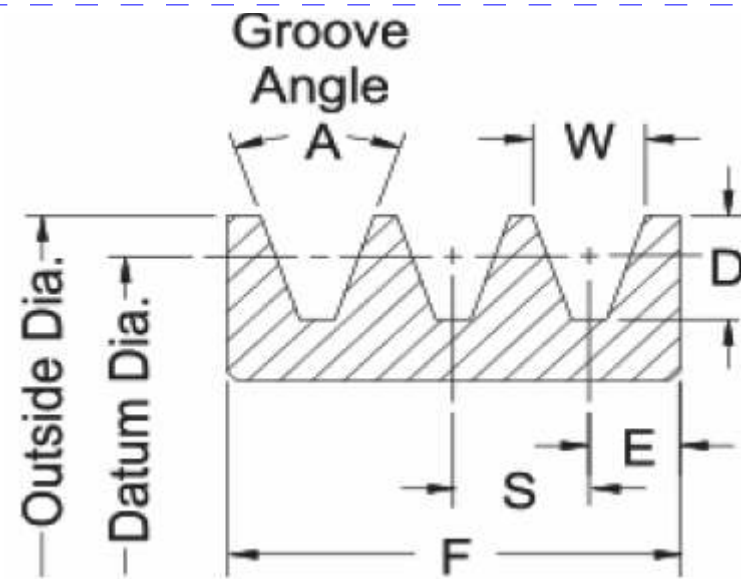
- All gears are of high grade alloy steel for higher efficiency.
- Each units supplied with corrosion resistant torque arm and double lip oil seals.
- Torque arm supplied as standard accessories.
- Perfect design derived from software gives long life for Gear and Bearings.
- All mounting positions possible.
- Easy to mount & space saving.
- Low Noise Level less 60 Db.

### SPECIFICATIONS

- RATIOS : Available in 6 : 1, 7 : 1 & 20 : 1.
- POWER : Higher Power Ratings for maximum torque from 3 HP to 30 HP.
- MODELS : R - E4 / R-F5/ R-G6/ R-H7/ R-J8.
- LUBRICATION : VG-320 - Explained in maintenance manual book.
- HOUSING : Cast Iron Case Construction.
- BORE SIZE : 50 mm/ 55 mm/ 60 mm/ 65 mm / 70 mm/75 mm/ 80 mm & 2 inch / 2.5 inch / 3 inch







$F = S(N-1) + 2E$        $N = \text{Number of Grooves}$   
 $F = \text{Face Width of Sheave}$        $E = \text{End Spacing}$   
 $S = \text{Groove Spacing}$

### HRC Couplings, For Industrial



#### "MASTER" HRC Couplings:

The HRC coupling has a rubber spider that reduces shock and vibration, thereby prolonging the lifespan of related mechanical equipment.

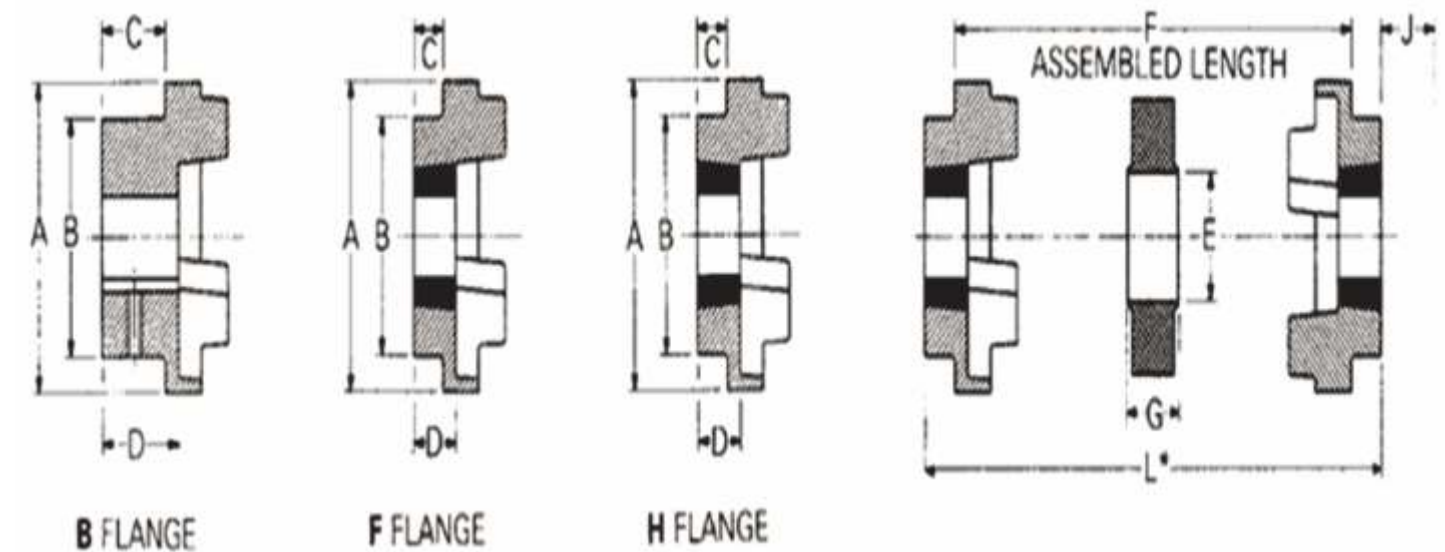
It is an extension type that is easy to maintain and repair, does not require lubrication, and is easy to disassemble and repair.

Assembly is simple...

#### Pulley Groove Dimensions

Groove / Belt Size	Datum Dia.	Outside Dia.	A	Dimensions			
				W	D	S	E
3V	Under 3.45	Under 3.50	36	0.350	0.350	0.406	0.344
	3.45 to 5.95	3.50 to 6.00	38	0.350	0.350	0.406	0.344
	6.05 to 11.95	6.10 to 12.00	40	0.350	0.350	0.406	0.344
	Over 11.95	Over 12.00	42	0.350	0.350	0.406	0.344
5V	Under 9.90	Under 10.00	38	0.600	0.600	0.688	0.500
	9.90 to 15.90	10.00 to 16.00	40	0.600	0.600	0.688	0.500
	Over 15.90	Over 16.00	42	0.600	0.600	0.688	0.500
8V	Under 15.80	Under 16.00	38	1.000	1.000	1.125	0.750
	15.80 to 22.20	16.00 to 22.40	40	1.000	1.000	1.125	0.750
	Over 22.20	Over 22.40	42	1.000	1.000	1.125	0.750
A-B	3.00 to 6.40	A Belt: 75*	34	0.612	0.625	0.750	0.500
	Over 6.60	B Belt .35*	38	0.625	0.625	0.750	0.500
C	5.40 to 7.99	.40*	34	0.879	0.780	1.000	0.688
	8.00 to 12.00		36	0.887	0.780	1.000	0.688
	Over 12.00		38	0.895	0.780	1.000	0.688
D	12.00 to 12.99	.60*	34	1.259	1.050	1.438	0.875
	13.00 to 17.00		36	1.271	1.050	1.438	0.875
	Over 17.00		38	1.283	1.050	1.438	0.875

\* Outside Diameter is nominal to Datum Diameter.



## HRC Couplings, For Industrial

### PHYSICAL DIMENSIONS AND CHARACTERISTICS

Size	Common Dimensions					Type F&H					Type B					
	A	B	E	F	G	Bush Size	Max Bore		C	D	Jt	Bore Dia's		Screw Over Key	C	D
							mm	ins.				Max.	Pilot H9			
70	69	60	31	25.0	18.0	1008	25	1"	20.0	23.5	29	32	8	M 6	20	23.5
90	85	70	32	30.5	22.5	1108	28	1/8	19.5	23.5	29	42	10	M 6	26	30.0
110	112	100	45	45.0	29.0	1610	42	15/8	18.5	26.5	38	55	10	M10	37	45.0
130	130	105	50	53.0	36.0	1610	42	15/8	18.0	26.5	38	60	15	M10	39	47.5
150	150	115	62	60.0	40.0	2012	50	2	23.5	33.5	42	70	20	M10	46	56.0
180	180	125	77	73.0	49.0	2517	60	2 1/2	34.5	46.5	48	80	25	M10	58	70.0
230	225	155	99	85.5	59.5	3020	75	3	39.5	52.5	55	100	25	M12	77	90.0
280	275	206	119	105.5	74.5	3525	100	4	51.0	66.5	67	115	30	M16	90	105.5



## MASTER - Taper Lock V-profile Pulleys



"MASTER" Taper Lock Z/SPZ, A/SPA, B/SPB, C/SPC V-belt pulleys for Taper bushes are the basic type of V-belt pulleys. They are produced in standard series and dimensions from gray cast iron. Their design is based on the ISO 4183 (DIN 2211) standard. Taper lock bushes are used to link a shaft to a sprocket or pulley mechanically. With the matching component, it is snugly secured to the shaft via its tapered surface. It allows the primary component to be flexible enough to work with a variety of shaft sizes."

"We are one of the most reputed Taper lock Pulleys suppliers. Standard size range include SPA Pulley, SPB Pulley, SPC Drives Pulley in Best Quality. Each pulley can be used safely and reliably."



"Here are some reasons as to why "MASTER" Taper Lock Pulley Manufactured are greatly favoured in domestic and international markets. • Robust Construction • Long Durability • Corrosion Resistance • Cost effective • Low maintenance • Highly durable • Great reliability • Excellent finish • Enhanced versatility We are manufacturing the highest quality of taper lock pulleys from the good quality of raw materials. The main component which is used in taper lock pulley is stainless steel and aluminium."

