

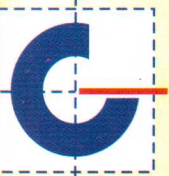


A **SPEED**™

IS : 2494

PART-1
CM/L-9362887

JAS-ANZ



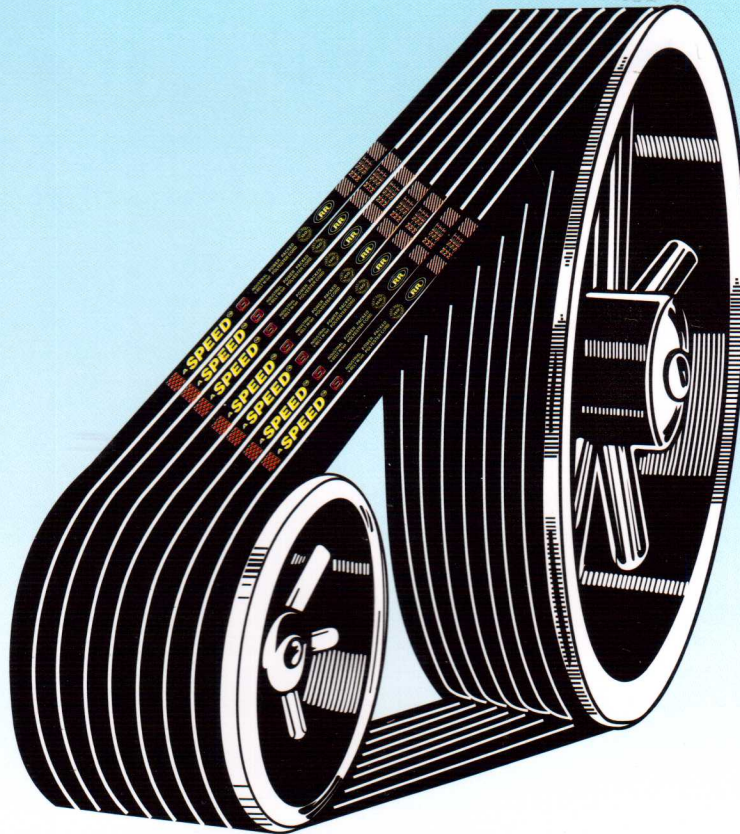
M-SET



V-BELTS & FAN BELTS

ISO 9001 : 2000 CERTIFICATION

Acc No.S19007991M



		IS : 2494 PART-1 CM/L-9362887	INDUSTRIAL V-BELT M-Set	POWER PACKED POLYESTER CORD				M-SET M-SET M-SET	
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MORE BELT PER BELT

"The Magic Power of Machine"

High technique, Top performance

PRESENTING NEW GENERATION A SPEED V-BELTS

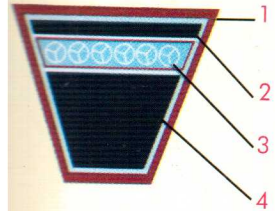
MORE BELT PER BELT

A SPEED V-BELT FOR THE CHANGING TIMES

A SPEED is the new generation V-Belts developed to meet the rigorous demand of industries. Free Set Belt built with a smooth international finish. Specially designed to provide more belt life under same drive conditions. Engineered to ensure more gain.

CONSTRUCTION

Classical, Wedge, Hexagonal, Banded & Harvester Belts



1. The Cover is manufactured from a cotton fabric impregnated with special compound of rubber. This cover resist external influence and secure uniform friction against pulley groves.
2. Cushion rubber maintains good adhesion of tension member and holds it in correct position.
3. The tension member is made of specially treated polyester cords, which have high tensile strength, low elongation and excellent resistance to bending fatigue.
4. For belt's long life specially compounded compressed rubber is used to resist extreme heat and compression.

PROPERTIES

Oil Resistant : Speed V-belts are resitant to damage from influence of grease, fats and mineral oils. These properties ensure longer belt life.

Heat Resistant : Speed V-belts have critical properties to prevent ageing and decomposition due ro high temperature. They have unique heat resistant properties.

Anti-Static : The compounding is made in such a way that the statical electricity generated during operation with inflammable materials is quickly dissipated, thereby avioding any damage to the belt / system.

INDUSTRIAL V-BELTS

CLASSICAL V-BELT

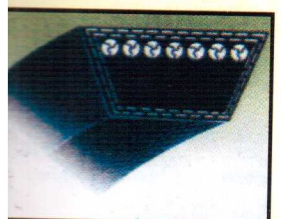
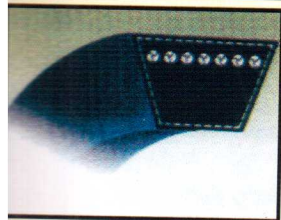
Cross Section	M	A	B	C	D	E
Top Width mm	10	13	17	22	32	38
Height (mm)	6	8	11	14	19	23
Angle (Deg.)	40	40	40	40	40	40
Belt Range (mm)	610-2032	610-6350	610-10160	915-11430	1905-15240	4572-15240
(Inch)	24-80	24-250	24-400	36-450	75-600	180-600

WEDGE V-BELT

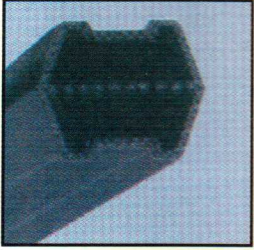
Cross Section	3V/SPZ	SPA	5V/SPB	SPC	8V
Top Width mm	9.5	13	17	22	22
Height (mm)	8	10	14	18	18
Angle (Deg.)	40	40	40	40	40
Belt Range (mm)	635-4445	661-6350	1270-8890	1270-12700	2540-12700
(Inch)	25-175	26-250	50-350	50-500	100-500

AGRICULTURE V-BELT

Cross Section	LA	LB	LC
Top Width mm	13	16.5	22
Height (mm)	8	10	12
Angle (Deg.)	40	40	40
Belt Range (mm)	686-3048	762-3302	890-3302
(Inch)	25-175	30-130	35-130



A SPEED INDUSTRIAL, AGRICULTURAL & AUTOMOTIVE V-BELTS



HEXAGONAL V-BELTS

Both bottom and top faces can be used for lower transmission. Best suited to multi pulley drive being highly flexible. Heat & oil resistant plus static conductive.

Cross Section	AA	BB	CC
Top Width (mm)	13	17	22
Thickness (mm)	10	13	17
Angle (Degree)	40°	40°	40°
Range (Inch)	50-140	60-250	132-300
Range (mm)	1270-3556	1524-6350	3352-7620

RANGE OF PRODUCTS REGULARLY MANUFACTURED WITH DETAILS

Section	Range	Section	Range
A	17 to 210	BB	75 to 150
B	20 to 425	Harvester Combine Belts	1900 to 4000
C	36 to 425	FHP (3L)	2170 to 2595
D	58 to 425	9.5	700 to 1650
E	180 to 425	12.5	870 to 1725

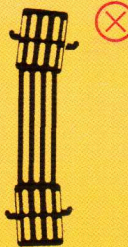


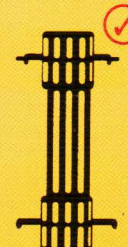
INSTALLATION AND TAKE-UP ALLOWANCES

The limiting values for the adjustment of centers for two transmission pulley shall be as follows :

Lower Limiting Value (Stack-off)	:	1.5% of belt pitch length
Higher Limiting Value (Take up)	:	3% of belt pitch length

ALIGNMENT

Correct alignment of pulley is important to avoid turnovers and excessive wear

			
1. Shafts are not parallel to one another	2. Shafts are not in correct alignment although they appear parallel when seen from above.	3. Shafts are parallel but pulleys are not in alignment	4. Correct installation both shafts and pulleys are parallel and in alignment

Check Sheave and Shaft Alignment :

After proper operating tension has been applied to the belts, a double check should be made to ascertain the followings :

1. The Parallel position of sheave shafts.
2. Correct alignment of sheave grooves.
3. Guards for drives are recommended to insure safety and cleanliness. Provision must be made for adequate circulation of air and the escape of developed heat which is injurious to belts.



**EFFECT OF UNDER-BELTING
A MULTIPLE V-BELT DRIVE**

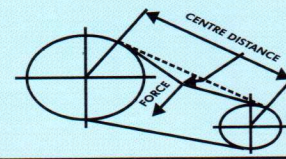
To ensure enough power transmitting capacity for the maximum load, always select sufficient number of V-Belts. The following table shows the detrimental effect of under-belting a multiple V-Belt drive. It is based on ten belts being the normal number required to drive the load. It will be seen that one V-Belt less decreases the life of the whole set by as much as 30%

No. of V-Belts	Percent life
10 (Normal number of V-Belts)	100
9	70
8	45
7	28
6	17

BELT TENSIONING PROCEDURE

1. Multiply the centre distance which is in metres by 16 to obtain the deflection distance in mm.
2. By using Belt Tension Indicator, apply the force (kgf) at the centre of the belt span to get the required deflection in mm. Compare this force

(kgf) to the values given in table 2. If the measured force falls within the values given, the drive is satisfactory.



3. A measured force below the lower value indicates under-tensioning.
4. A new drive should be tensioned to the higher value to allow for the normal drop in tension during the running in period.
5. Run the drive under load for 30 minutes, stop the drive, check the tension, reset to the required value, if necessary.
6. After the drive has been running for a few days the V-Belts would have seated in the grooves and the belt tension should be rechecked.

TROUBLE SHOOTING

PROBLEMS	CAUSES	REMEDIES
Excessive elongation	<ul style="list-style-type: none"> Worn or badly machined pulley grooves. New and used belts mixed on the drive. Belts of different make on one drive. 	<ul style="list-style-type: none"> Replace pulleys. Replace with a new belt set. Matched set used should be of one make.
Belt breaking after fitting.	<ul style="list-style-type: none"> Belt forced over pulley damaging tension member and cover fabric. Shock loads. Less than required belts or wrong section. Drive stalled. Foreign matter obstructs running. 	<ul style="list-style-type: none"> Reduce drive centre distance to fit belt. Recheck design. Check belt tension. Recheck design. and fit correct no. of belts. Check cause and correct. Install effective guard.
Belt wears rapidly	<ul style="list-style-type: none"> Incorrect pulley groove angles. Drive misaligned. Small pulley dia. Less than recommended. Mismatched belts. Belt slips. 	<ul style="list-style-type: none"> Use new pulley. Realign drive. Redesign drive. Replace with match free belts. Provide proper tension. Check and remove obstruction.
Belt turned over	<ul style="list-style-type: none"> Belt hits against protruding parts. Drive misaligned. Broken cord by forcing belt over pulleys. Incorrect pulley groove section or excessive groove wear. Shock loads. Excessive belt flap. High belt tension. 	<ul style="list-style-type: none"> Realign drive. Replace belt set correctly. Use new pulley. Apply proper tension. Use inside idler on slack. Retension.

PROBLEMS	CAUSES	REMEDIES
Excessive Belt Vibration	<ul style="list-style-type: none"> Insufficient belt on drive. Centre distance too long. Low belt tension. Unbalanced Pulleys 	<ul style="list-style-type: none"> Check drive design and modify. Reduce centres. Use inside idler Retension. Use suitably balanced pulleys.
Belt cannot be retensioned	<ul style="list-style-type: none"> Incorrect belt length. Belt from different make used on same drive. Stretch caused by insufficient belts or wrong. Belts section for drive. 	<ul style="list-style-type: none"> Use correct belt length. Use matched belts of one make. Check drive design
Noise	<ul style="list-style-type: none"> Drive misaligned. Incorrect belt tension. Overloaded drive. Unbalanced pulleys. 	<ul style="list-style-type: none"> Realign. Retension. Redesign drive. Use balanced pulleys.
Cuts & breaks in belts base rubber	<ul style="list-style-type: none"> Pulley diameter too small. Excessive belt slip. Ambient temperature too high (above 60°C). Outside idler pulley in use. Contamination by oils, chemicals. 	<ul style="list-style-type: none"> Redesign drive with correct pulley dia. Check belt tension. Protect belts from direct heat. Ensure good ventilation. Replace with inside idler on slack side. Increase the Size of existing idler pulley. Protect drive from contamination.

INSTALLATION :

In assembling a drive, the motor or prime mover should be moved towards the driven unit and the belts should be placed in the grooves by hand. Under no circumstances should belts be forced on to pulley with spanners, screwdrivers or such implements.

STORAGE

- V-Belts should be stored in cool and dry place & to be kept away from oil, grease & dust.
- V-Belts should be stored without stress i.e. without tension, pressure or any other form of deformation.
- Damp storage rooms are unsuitable. This leads to mildew formation which effects belt's jacket.
- Belts should preferably be hung on crescent-shaped pegs.
- Belt should not be stored in heavy bent and distorted condition.

RECOMMENDED MINIMUM PULLEY PITCH DIAMETERS (mm)

A	B	C	D	E	SPZ	SPA	SPB	SPC
80	125	200	315	500	67	90	90	224

Manufactured by :

AMSON RUBBERS

G.T. ROAD, DINANAGAR (DISTT. GURDASPUR) PUNJAB

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