

TECHNICAL SPECIFICATIONS

→ Cover grade	pages	66 to 67
→ Resistance of covers to products conveyed	pages	68 to 75
→ Diameter of pulleys	pages	76 to 79
→ Tension travel	pages	80 to 81
→ Trough transition lengths	pages	82 to 83
→ Radius of curvature	pages	84 to 85
→ Turnover	page	86
→ Idler clearance	page	87
→ Roller skirt spacing	page	88
→ Splicing	pages	88 to 90

Our company, which provides a global service, will assist you in the study of your installations, whether new or undergoing modification.

If necessary, our technical departments can advise you on the most appropriate choices concerning:

- The widths, in accordance with the outputs conveyed, the grain size and the type of material.
- The position and the appropriate number of drive and tension pulleys.
- The value of the radii of curvature.
- The trough transition lengths
- Conveyors with curves in the horizontal plane.
- Belt turnover
- Determining of the forces in the belt leading to the choice of the appropriate type of belt.

TECHNICAL INFORMATION

COVER GRADE

SEMPERTRANS® belts can be supplied in a wide range of cover grades enabling most existing standards to be met. The table below summarises the main grades available. Other grades may be produced on request.

The characteristics of the product conveyed (grain size, temperature, chemical characteristics, etc.) and the operating conditions determine the choice of the grade and thicknesses of the covers.

	Designation	Elastomer	Other basic	Standards relating to designations	Characteristics	Main applications
ANTI-ABRASIVE	D	SBR	L RMA I RMA II N 17 JIS G	ISO 10247 US standard US standard BS 490 JIS K6322 – K6369	Abrasion guaranteed less than or equal to 120 mm ³⁽¹⁾	Standard applications
	Y	SBR / BR / IR	Y JIS S	DIN 22102 - 22131 JIS K6322 – K6369	Abrasion guaranteed less than or equal to 150 mm ³⁽¹⁾	Standard applications
	X	NR/SBR	H X M24 Grade S	ISO 10247 DIN 22102 / 22131 BS 490 PL74/C-94143	Abrasion guaranteed less than or equal to 120 mm ³⁽¹⁾	Abrasive materials Large grain size Sharp edges

IMPORTANT NOTICE: This brochure has been prepared carefully, to advise our customers. The information stated therein is state of the art and the results of different tests carried out over several years. Individual operating conditions affect any product, which means that a product can only offer the safety that can be expected on the basis of the data provided in our product information. In the event that the product is used otherwise than in conformity with the specifications, such safety may not be assumed. Our responsibility is limited exclusively to delivery of the conveyor belt in accordance with the specifications.

The figures stated in our documents are mean approximate values for information but no specified or warranted values.

Please note: Before using the product in new areas of application which are not covered by the product information a Sempertrans engineer **MUST** be asked for advice. Stocking, care and maintenance of all our products must be performed according to our stocking, care and maintenance guidelines and according to ISO 5285 standard ;

Subject to errors and printing errors.
Reproduction of any kind - also of excerpts - only upon express written consent of Sempertrans.
The brochure shall remain the property of Sempertrans and is the most recent version.
All transactions shall be exclusively subject to our general terms and conditions.
Date of publication 06/2007 1st edition
Subject to changes.

COVER GRADE

	Designation	Elastomer	Other basic	Standards relating to designations	Characteristics	Main applications
ANTIABRASIVE	W	IR / BR	D W	ISO 10247 DIN 22102 i	Abrasion guaranteed less than or equal to 90 mm ³ (1)	Very abrasive fine materials
	Z	SBR	Z Grade 2	DIN 22102 PL74/C-94143	Abrasion guaranteed less than or equal to 250 mm ³ (1)	
FIRE RESISTANT	K	Fireproof SBR	K	ISO 340 EN 20340	Flame resistance as per ISO 340 with cover	Application in which the fire risk or danger of explosion must be eliminated
	S	Fireproof SBR	S	ISO 340 EN 20340 DIN EN 20340 NF EN 20340 BS EN 20340 MSHA	Flame resistance as per ISO 340 with and without cover	Underground mines Excluding coal
	CR	Chlorinated butadiene	DIN 22109	DIN 22109 DMH 50 Approved belts	Meets numerous safety standards	Underground coal mines, proved belts
HEAT RESISTANT	TEA/T1	Reinforced SBR				Materials of temperature under 150°C
	TEB	EPDM / Butyl				Materials of max. temp. 180°/200°C
	TEC	EPM				Materials of max. temp. 200°/220°C
	T2	EPM				Materials of max. temp. 180°/200°C
	CW	Fireproof reinforced SBR	ISO 340 EN 20340 DIN EN 20340 NF EN 20340 BS EN 20340			Coke Warf, max. temperature 120°C
RESISTANT TO OILS AND GREASES	G	NBR			28-day expansion tests at ambient temperature, ASTM no. 3<5%	Resistant to oils and greases of mineral origin
	GM	BR/SBR			28-day expansion tests at ambient temperature, ASTM no. 2<5% ASTM no. 3 < 30%	Resistant to vegetable oils and greases
	JGM	Fireproof NBR/SBR	ISO 340 EN 20340 DIN EN 20340 NF EN 20340 BS EN 20340		Flame resistance as per ISO 340 with cover	Application in which the fire risk or danger of explosion must be eliminated + Resistant to vegetable oils and greases
	JGF	Fireproof NBR	ISO 340 EN 20340 DIN EN 20340 NF EN 20340 BS EN 20340		Flame resistance as per ISO 340 with cover	Application in which the fire risk or danger of explosion must be eliminated + Resistant to oils and greases of mineral origin
	JGS	Fireproof NBR/SBR		Fireproof as per: ISO 340 DIN EN 20340 NF EN 20340 EN 20340	Flame resistance as per ISO 340 with and without cover	Special for elevator belts Ministerial order ATEP 987 026A of 29/07/98
COLD RESISTANT	R			GOST 2085		For use at temperatures below 0°C down to -60°C

(1) Tests as per ISO 4649 – DIN 53516

IMPORTANT NOTICE: This brochure has been prepared carefully, to advise our customers. The information stated therein is state of the art and the results of different tests carried out over several years. Individual operating conditions affect any product, which means that a product can only offer the safety that can be expected on the basis of the data provided in our product information. In the event that the product is used otherwise than in conformity with the specifications, such safety may not be assumed. Our responsibility is limited exclusively to delivery of the conveyor belt in accordance with the specifications.

The figures stated in our documents are mean approximate values for information but no specified or warranted values.

Please note: Before using the product in new areas of application which are not covered by the product information a Sempertrans engineer MUST be asked for advice. Stocking, care and maintenance of all our products must be performed according to our stocking, care and maintenance guidelines and according to ISO 5285 standard ;

Subject to errors and printing errors.
Reproduction of any kind - also of excerpts - only upon express written consent of Sempertrans.
The brochure shall remain the property of Sempertrans and is the most recent version.
All transactions shall be exclusively subject to our general terms and conditions.
Date of publication 06/2007 1st edition
Subject to changes.