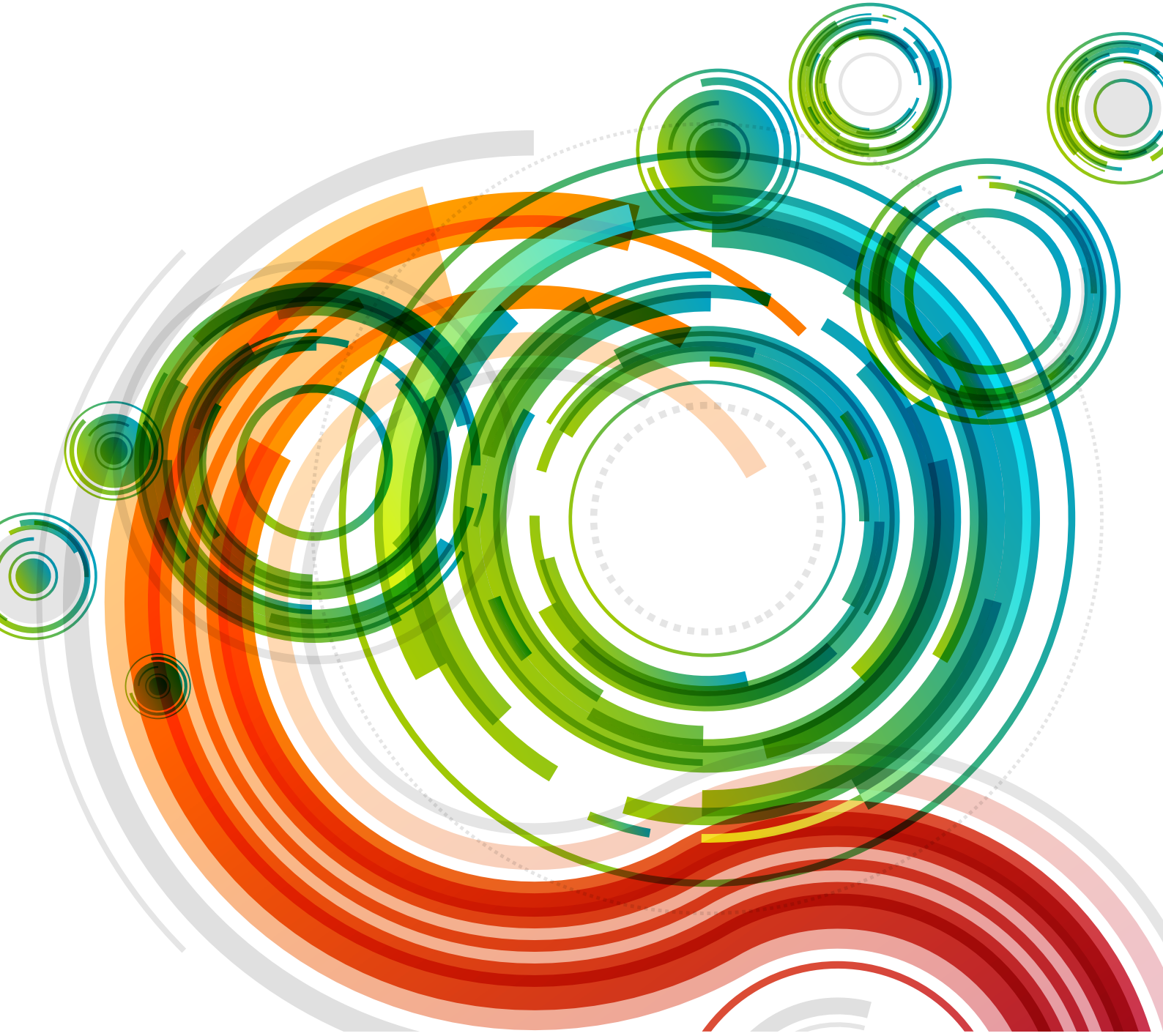
B-PA-05E

Invention & Innovation
NITTA

Belts for
Printing and Bookbinding industry



NITTA CORPORATION

The NITTA Advantage-Innovative Products and Solutions

Wide Variety

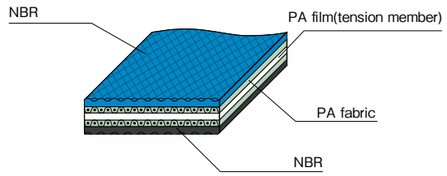
Long Life

Abrasion Resistance

High Flexibility

Anti-Static

PolyBelt™



Standard Elongation ··· 1%

Type Code

【PA Film Thickness (mm)×1000】
500 ··· 0.5 mmT×1000
350 ··· 0.35 mmT×1000

SG – 500
L – 350

【Surface material】
SG·····Slight green coated fabric
L ·····Light
M·····Middle
H·····Heavy

Super-strong polyamide core, extended-life skived joining, high operating duty cycles

High Strength, Long Life

High flexibility and rugged design for heavy-duty applications. Polyamide core accommodates shock loads, and wide choice of covers provide abrasion resistance, giving long, dependable service.

Electrically Conductive

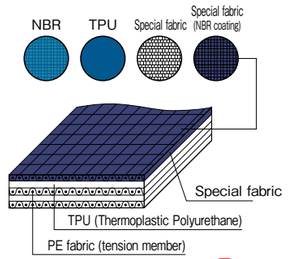
Materials with anti-static properties are used in specific layers to provide permanent conductivity, eliminating build-up of electro-static charges.

Environmental Resistance

Selected materials are not susceptible to oil contamination.
They demonstrate high energy efficiency and maintain high friction resistance.
Covers and polyamide core are designed for printing and paper processing with high tear resistance in folder, sheeter and finishing line paper jams.

PolySprint™

●PE fabric tension member type



Standard Elongation ··· 1%

Type Code

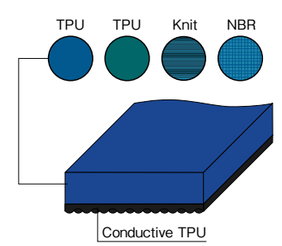
【Belt Thickness (mm)×10】

LA – 4E 14
FZ – 5E 12

【Belt Tension (N/mm)】
(1% Elongation at 200hrs running)

【Surface material】
LA····· Blue NBR on both surfaces
FZ····· Special Fabric+NBR on bottom side

●Elastic Type



Standard Elongation ··· 5%

Type Code

【Belt Thickness (mm)×10】

TA 09
GTD

【Surface material】
TA ····· Blue TPU
GTD ··· Dark blue NBR+TPU

Finger-spliceable, easy installation, quick-melt urethane, high-strength polyester core

Ease of Joining

A single action Nitta cutter eliminates the tedious task of multiple cuts that can lead to mismatched and non-aligned joints. Finger-splice joints are completed without adhesive. Nitta presetter guiderails assure alignment.

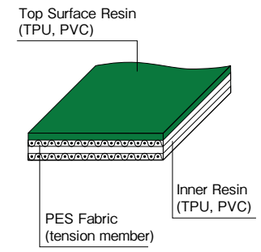
Dimensional Stability

Polyester fabric used as tension member provides high dimensional stability.
Selected materials are temperature and humidity tolerant.

Abrasion Resistance

High temperature friction resistant covers and fabric exclusively designed for printing and paper.

NLG™



Standard Elongation ··· 0.5%
(Depending on type)

Type Code

【Belt Construction】
A···Resin/Fabric
D···Fabric/Fabric

GUTW – 12 A
GU – 12 A

【Strength (N/mm)÷10】

【Surface material】
GUTW···· Green TPU+TW pattern
GU····· Green TPU

Hundreds of configurations, wide variety of surfaces

Extensive Selection

Nitta NLG (New Light Grip) and other product categories offer many possible options.

Many Applications

Light-/medium-duty use throughout pressrooms and binderies.

Specifications

PolyBelt™ *PolySprint*™ NLG™

Products		Belt type	Thickness (mm)	Surface material (color)※1	Tension member	Minimum pulley diameter (mm)	Tension@ standard elongation (N/mm) ※3	Standard elongation (%)	Recommended elongation range (%)	Weight (kg/㎡)	Antistatic	Temperature range (℃)	Maximum width (mm)		Printing processes				Bookbinding processes					Features	Finger Splice	Skiver Splice	Splicing Tool Number (Page 9-10)
															Offset Sheet Fed Press	Offset Web Press	Gravure Rotary Press	Newspaper Rotary Press	Collator	Folding machine	Saddle stitcher line	Bookbinder	Conveyor				
PolyBelt		**TPS-3SN** NEW	1.10	PA special fabric (purple) / NBR coating fabric (black)	PA	φ30	3.4	1	1~3	0.8	○	−20~+80	300			●								Abrasion resistance, top is high slip, bottom is moderate coefficient of friction		●	12・13
		KCS-350	1.10	PA fabric (blue) / NBR coating fabric (black)	PA	φ30	2.6	1	1~3	0.8	○	−20~+80	300			●								Top is high slip, bottom is moderate coefficient of friction		●	12・13
		KCS-500	1.20	PA fabric (blue) / NBR coating fabric (black)	PA	φ40	3.75	1	1~3	1.0	○	−20~+80	300			●								Top is high slip, bottom is moderate coefficient of friction		●	12・13
		SG-250	0.80	NBR coating fabric (green) / NBR coating fabric (black)	PA	φ20	1.5	1	1~3	0.8	○	−20~+80	300		●									Moderate slip, strong grip		●	12・13
		SG-350	0.95	NBR coating fabric (green) / NBR coating fabric (black)	PA	φ30	2.6	1	1~3	0.9	○	−20~+80	300		●			●	●		●		●	Moderate slip, strong grip		●	12・13
		SG-500	1.10	NBR coating fabric (green) / NBR coating fabric (black)	PA	φ40	3.75	1	1~3	1.1	○	−20~+80	300		●	●				●	●			Moderate slip, strong grip, flange resistance, high-speed application		●	12・13
		SGL-500	1.30	NBR coating fabric (green) / NBR (black)	PA	φ50	3.75	1	1~3	1.4	○	−20~+80	300			●								Moderate slip, strong grip, flange resistance, high-speed application		●	12・13
		SG-750-2P	1.10	NBR coating fabric (green) / PA (clear)	PA	φ50	5.6	1	1~3	1.2	-	−20~+80	300					●						Ink-repellent, flange resistance		●	12・13
		L-250	1.25	NBR (blue) / NBR (black)	PA	φ25	1.5	1	1~3	1.4	○	−20~+80	300										●	Stable coefficient of friction and high abrasion resistance		●	12・13
		L-350	1.40	NBR (blue) / NBR (black)	PA	φ35	2.6	1	1~3	1.6	○	−20~+80	300			●				●			●	Stable coefficient of friction and high abrasion resistance		●	12・13
		L-500	1.55	NBR (blue) / NBR (black)	PA	φ50	3.75	1	1~3	1.8	○	−20~+80	300			●				●				Flange resistance, high-speed application		●	12・13
		LS-350	1.20	NBR (blue) / NBR coating fabric (black)	PA	φ35	2.6	1	1~3	1.2	○	−20~+80	300							●				Stable coefficient of friction and high abrasion resistance		●	12・13
		LS-500	1.35	NBR (blue) / NBR coating fabric (black)	PA	φ50	3.75	1	1~3	1.4	○	−20~+80	300							●				Stable coefficient of friction and high abrasion resistance		●	12・13
		IRTA-350	1.15	NBR(green)/ PA fabric (blue)	PA	φ30	2.6	1	1~3	1.2	○	−20~+80	300			●								Top is high coefficient of friction, Bottom is high slip		●	12・13
		GLTA-350	1.45	NBR(green)/ PA fabric (blue)	PA	φ35	2.6	1	1~3	1.6	○	−20~+80	300			●							●	Top is high coefficient of friction, Bottom is high slip		●	12・13
PolySprint	PE fabric tension member type	**TTP-8E18N** NEW	1.80	Special fabric (purple) / Special fabric (white)	PE	φ40	8	1	0.5~2	1.8	○	−20~+60	100				●	●						Quick & easy splicing, durability of splicing point, abrasion resistance	●		1・6・8・9・10
		TTZ-4E10LF NEW	1.00	Special fabri c(white) / Special fabric (NBRcoating) (green)	PE	φ30	4	1	0.5~2	1.0	○	−20~+60	100		●	●		●	●	●	●	●	●	Quick & easy splicing, durability of splicing point, abrasion resistance, moderal slip	●		1・6・8・9・10
		TTF-4E10	1.00	Special fabric (gray) / Special fabric (gray)	PE	φ15	4	1	0.5~2	1.0	○	−20~+60	100		●						●	●	●	Quick & easy splicing, soft surface	●		1・6・8・9・10
		FZ-5E12	1.25	Special fabric (NBRcoating) / NBR (green)	PE	φ35	5	1	0.5~2	1.2	○	−20~+60	100		●	●		●	●	●	●	●	●	Quick & easy splicing, durability of splicing point, abrasion resistance, moderal slip	●		1・6・8・9・10
		LA-4E14	1.40	NBR (blue) / NBR (blue)	PE	φ25	4	1	0.5~2	1.5	○	−20~+60	100							●	●	●	●	Quick & easy splicing, durability of splicing point, abrasion resistance, high flexibility, general use	●		1・6・8・9・10
		TFL-15E20	2.00	NBR (dark blue) / NBR (black)	PE	φ40	15	1	0.5~2	2.2	○	0~+60	100					●					●	Quick & easy splicing, durability of splicing point, abrasion resistance, high flexibility, high tension	●		3 or 5・7・9・10
		DB-4E14	1.40	TPU(blue)/TPU(blue)	PE	φ25	4	1	0.5~2	1.6	○	−20~+60	100										●	Quick & easy splicing	●		1・6・8・9・10
		SLA-8E14	1.40	NBR (blue) / NBR (blue)	PE	φ25	4	1	0.5~2	1.6	○	−20~+60	100					●	●				●	Quick & easy splicing, high flexibility, high tension	●		2 or 4・8・9・10
	Elastic Type	**GTD** NEW	1.35	NBR (dark blue) / TPU (black)	—	φ25	1.1	5	3~8	1.7	○	0~+60	100						●	●	●	●	●	Quick & easy splicing, elastic type, abrasion resistance, high tear resistance	●		1・6・8・9・10
		NTD NEW	1.35	Knit (blue) / TPU (black)	—	φ25	1	5	3~8	1.3	○	0~+60	100						●	●	●	●	●	Quick & easy splicing, elastic type, moderal slip, high tear resistance	●		1・6・8・9・10
		TA09	0.90	TPU (blue) / TPU (black)	—	φ20	0.5	5	3~8	0.9	○	−20~+60	100						●	●	●	●	●	Quick & easy splicing, elastic type, thin type	●		1・6・8・9・10
		TA12	1.20	TPU (blue) / TPU (black)	—	φ25	0.7	5	3~8	1.1	○	−20~+60	100						●	●	●	●	●	Quick & easy splicing, elastic type, general use	●		1・6・8・9・10
		TA-S6	0.90	TPU (blue) / TPU (black)	Knit	φ25	0.7	5	3~8	1.0	○	−20~+60	100						●	●	●	●	●	Quick & easy splicing, elastic type, high tear resistance	●		1・6・8・9・10
		HTA09	0.90	Hard TPU (green) / TPU (black)	—	φ25	0.5	5	3~8	0.9	○	−20~+60	100						●	●	●	●	●	Quick & easy splicing, elastic type, moderal slip	●		1・6・8・9・10
		NTA	1.00	Knit (blue) / TPU (black)	—	φ25	0.5	5	3~8	0.9	○	−20~+60	100						●	●	●	●	●	Quick & easy splicing, elastic type, moderal slip	●		1・6・8・9・10
		TC	1.40	TPU (green) / TPU (black)	—	φ40	0.8	5	3~8	1.5	○	−20~+60	100						●	●	●	●	●	Quick & easy splicing, elastic type, high tension	●		1・6・8・9・10
NLG		**GUF-12A-G**	1.30	Fluororesin (gray) / PE (white)	PE	φ50※2	2	0.5	0.3~1	1.3	○	−20~+80	1000										●	Slipping of the belt surface, releasability, ink-repellent	●	●	—
		GUTW-12A	1.80	TPU (green) / PE (white)	PE	φ30※2	2	0.5	0.3~1	1.7	○	−20~+80	1500										●	Stable and high coefficient of friction	●	●	—
		GU-12A	1.30	TPU (green) / PE (white)	PE	φ20※2	2	0.5	0.3~1	1.3	○	−20~+80	1500										●	General use	●	●	—
		GUSRB-14ANL	2.10	Soft TPU (green) / PE (white)	PE	φ40※2	2	0.5	0.3~1	1.8	○	−20~+80	1500										●	Strong grip, slant conveyor	●	●	—
		GU-12DS	1.00	Special fabric (green) / PE (white)	PE	φ40	2	0.5	0.3~1	1.0	○	−20~+80	1500										●	Soft surface, slipping of the belt surface		●	—

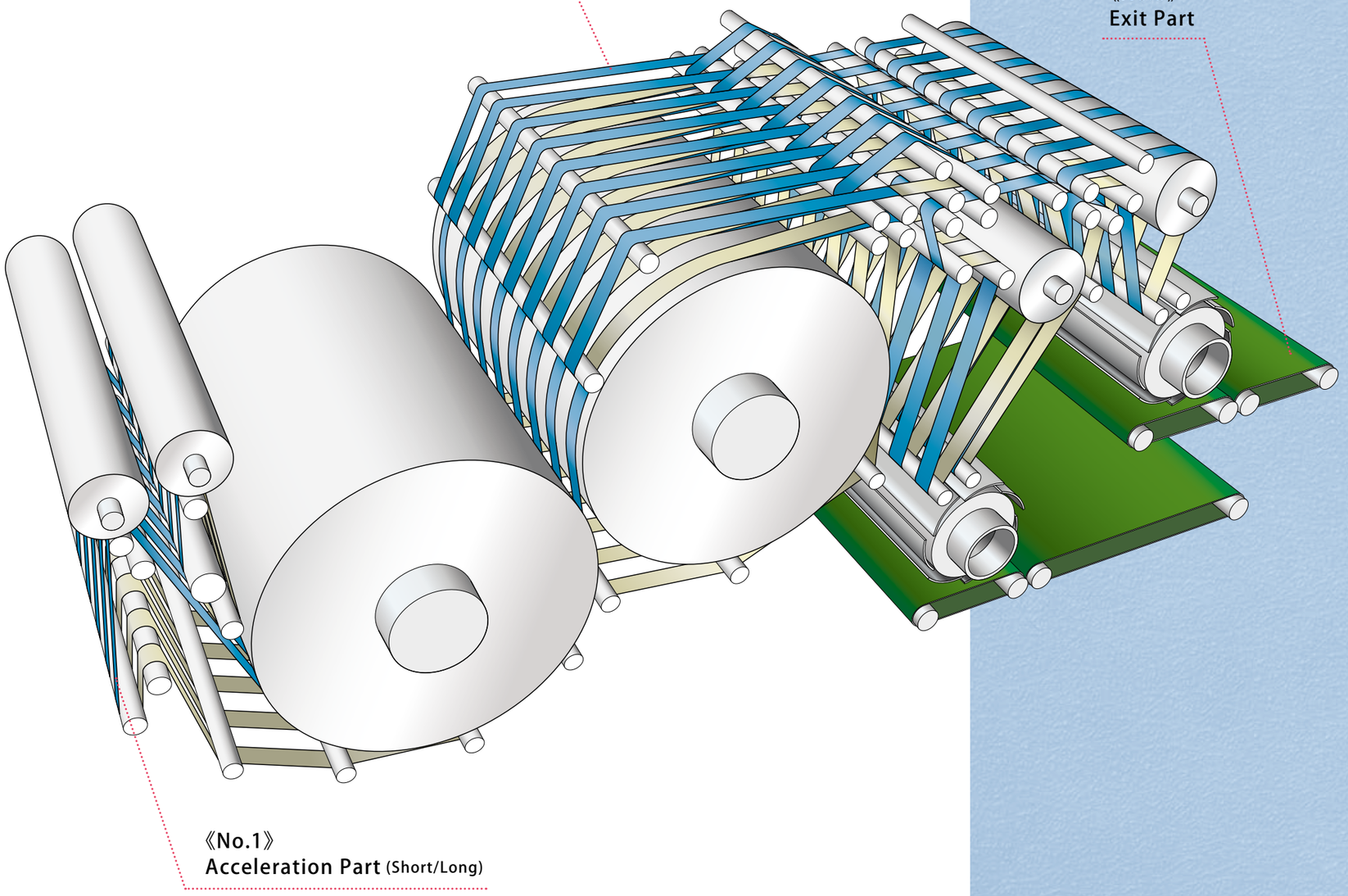
※1: Also possible to use the reverse side depending on application.
Material PA: Polyamide PE: Polyester TPU: Thermoplastic Polyurethane NBR: Nitrile Rubber
※2: For finger splice.
※3: Tension measured after running for 200 hours.

Notes; ・Minimum endless length is 400mm.(except SLA-8E14, TFL-15E20, which are 1000mm)
・Please contact us for minimum endless length of PolyBelt and NLG.
・Please contact us for NLG splicing tools.

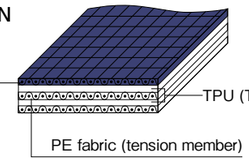
Belts for Printing

【Features】

- Abrasion Resistance
- High Accuracy in Conveyance
- Long Life



PolySprint TTP-8E18N



- Excellent abrasion resistance of the surface fabric
- PE fabric as a tension member protected by the inner layers

→ Prevent drastic tension change due to worn fabric on the surface

Gravure Rotary Press

No.	Part	Recommended belt type		Features
		Products	Type	
1	Acceleration Part (Short/Long)	PolySprint	TTP-8E18N	Durability of splicing point, abrasion resistance
2	Delivery Part (after folding part)	PolySprint	TTP-8E18N	Durability of splicing point, abrasion resistance
3	Exit Part	NLG	GUSRB-14ANL GUTW-12A etc.	Strong grip due to coefficient of friction, general use

Offset Sheet Fed Press

Part	Recommended belt type		Features
	Products	Type	
Sheet Feeder	PolySprint	FZ-5E12 TTZ-4E10LF TTF-4E10 etc.	Abrasion resistance, stable coefficient of friction
	PolyBelt	TPS-3SN SG types	

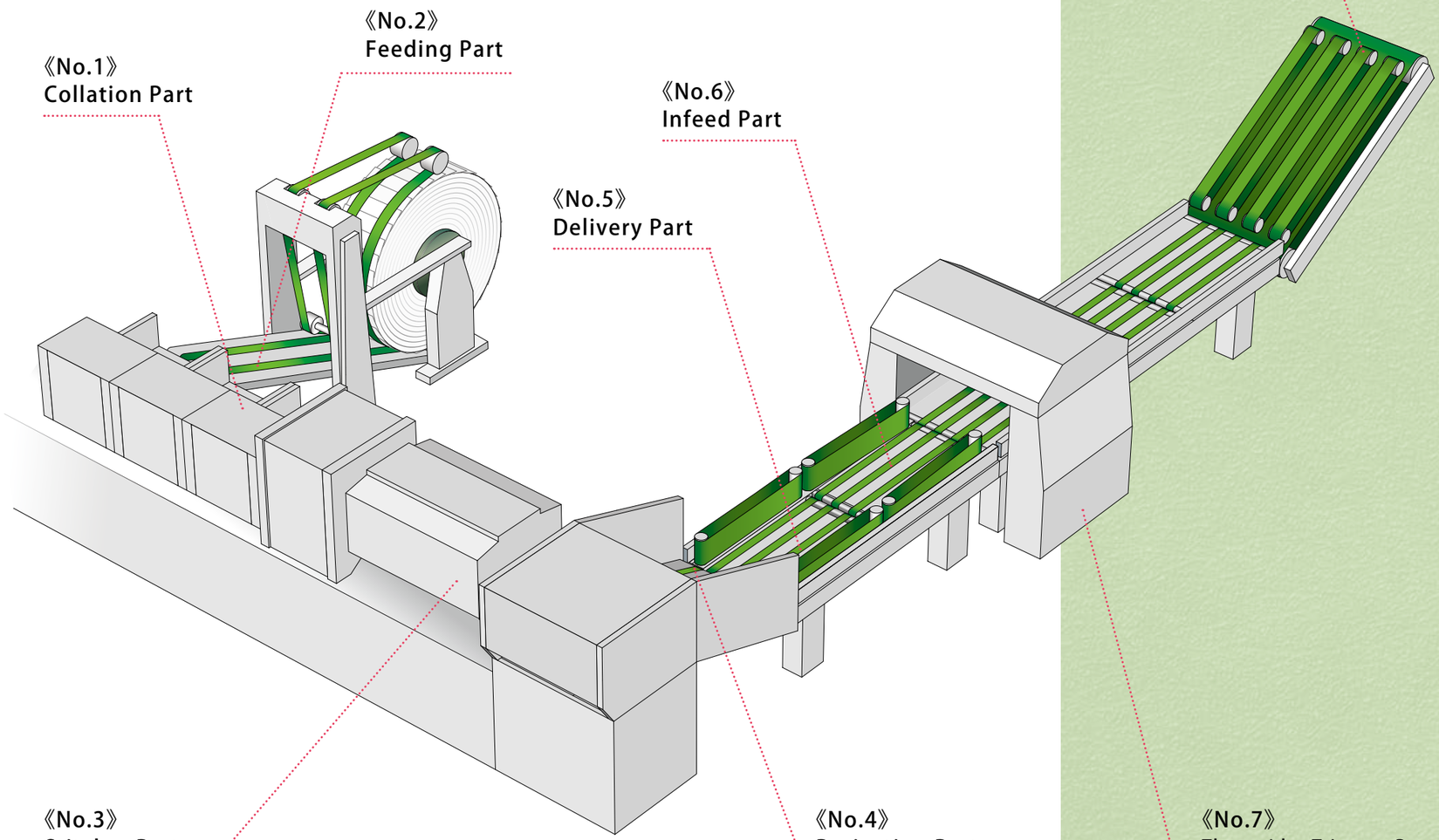
Offset Web Press

Part	Recommended belt type		Features
	Products	Type	
Folder	PolySprint	TTZ-4E10LF etc.	Moderate slip, abrasion resistance, flange resistance
	PolyBelt	TPS-3SN SG types L types	
Chopper	PolySprint	FZ-5E12 TTZ-4E10LF	Moderate slip, abrasion resistance, flange resistance, high tension
	PolyBelt	SG types	
Exit, stacker	NLG	GUSRB-14ANL GUTW-12A etc.	Strong grip

Belts for Bookbinding

【Features】

- Friction Coefficient
  Suitable for Convering Paper ····· Suitable for Convering Paper---Stable conveyance, abrasion resistance.
- Soft Fabric on the Surface
  Avoids Damage to paper ····· Intermittent running, Stopper part. Minimizes wet ink transfer.
- Finger Splicing ····· Easy splicing process. Change belts out quickly, no adhesive and no experience required.Outstandingly smooth surface of splice does not catch paper.
- Dimensional Stability
  (Polyester Fabric Member) ····· Tension less affected by temperature changes, High accuracy in conveying and reducing trial running.



Inside-Binding Bookbinder

No.	Part	Recommended belt type		Features
		Products	Type	
1	Collation Part	PolySprint	LA-4E14 FZ-5E12	High flexibility
2	Feeding Part	PolySprint	FZ-5E12	Strong grip due to coefficient of friction
		NLG	GUSRB-14ANL etc.	
3	Stitcher Part	—	—	—
4	Projection Part	PolySprint	FZ-5E12 TTZ-4E10LF	Strong grip, abrasion resistance
5	Delivery Part	PolySprint	FZ-5E12 TTZ-4E10LF	Stable coefficient of friction, flange resistance
6	Infeed Part	PolySprint	FZ-5E12 TTZ-4E10LF	Stable coefficient of friction, twist resistance
7	Three sidesTrimmer Part	PolySprint	FZ-5E12 TTF-4E10 TTZ-4E10LF	Soft Surface, high flexibility
8	Stacker Part	PolySprint	FZ-5E12 TTZ-4E10LF	Stable coefficient of friction, flange resistance

Collator

Part	Recommended belt type		Features
	Products	Type	
Vertical Conveyance	PolySprint	LA-4E14 SLA-8E14	Stable coefficient of friction
Exit	PolySprint	TA09 TA12 HTA09 GTD NTD etc.	Elastic type, stable tension

Folding machine

Part	Recommended belt type		Features
	Products	Type	
Feeding	PolySprint	LA-4E14 SLA-8E14 FZ-5E12 TTZ-4E10LF	Stable coefficient of friction
	PolyBelt	L types	
Folding	PolySprint	FZ-5E12 TTZ-4E10LF etc.	Moderate slip, abrasion resistance, flange resistance
	PolyBelt	SG types	

Splicing Tools (*PolySprint*™, PolyBelt™)

PolySprint™

Quick and Easy Splicing (No Experience Required)
Finger Splicing (No Adhesive Needed)

■ Nitta's PolySprint tools make it quick and easy to replace broken belts with minimal downtime. Our presses are designed with small profiles to fit into tight spaces, so there is no need to disassemble the machine.



▼Finger Puncher

Item No.	Type	Appearance	Features	Max. Belt Width (mm)	Max. Belt Thickness (mm)	Size W (mm)	Size L (mm)	Size H (mm)	Wt. (kg)	Finger Length × Pitch (mm)
1	FP30-10-50N		Single action punching system	50	2.0	135	400	390	3.4	30×10
	FP30-10-100		Single action punching system	100	2.0	200	500	504	7.0	30×10
2	FP70-10-50		Precise indexing system, Allows user to punch aligned 10mm pitch fingers in stages across the width of the belt	50	6.0	180	600	250	9.0	70×10
3	FP120-10-50									120×10
4	FP70-10-100		Precise indexing system, Allows user to punch aligned 10mm pitch fingers in stages across the width of the belt	100	6.0	230	610	250	10.4	70×10
5	FP120-10-100									120×10

▼Heating Press

Item No.	Type	Appearance	Features	Max. Belt Width (mm)	Max. Belt Thickness (mm)	Size W (mm)	Size L (mm)	Size H (mm)	Wt. (kg)	Finger Length × Pitch (mm)	Power	Temp. (℃)
6	NPS-3050 H1 (PS E)		Heat press for Finger Splicing, Heat press with digital temperature readout	50	2.0	84	250	100	1.5	30×10	100V	~200
	NPS-3050 H2 CE										200V	
	NPS-0310 H1 (PS E)		Heat press for Finger Splicing, Heat press with digital temperature readout	100	2.0	107	365	112	4.1	30×10	100V	~200
	NPS-0310 H2 CE										200V	
7	NPS-1210-1 (PS E)		Automated heating and cooling press	100	6.0	230	320	180	9.5	70×10 120×10	100V	~200
	NPS-1210-2 CE										200V	

▼Cooling Press

Item No.	Type	Appearance	Features	Max. Belt Width (mm)	Max. Belt Thickness (mm)	Size W (mm)	Size L (mm)	Size H (mm)	Wt. (kg)	Finger Length × Pitch (mm)
8	NPS-3050C		Cooling press for Finger Splicing no power required.	50	2.0	80	224	92	0.6	30×10
	NPS-0310C		Cooling press for Finger Splicing no power required.	100	2.0	102	311	102	2.4	30×10

▼Accessories

Item No.	Type	Appearance	Features
9	Presetter		Guide rails to hold joint straight when pressing
10	Clamp (2 Pieces)		Clamps for holding presetter together when pressing (Press 6&8)
11	PolySprint Toolkit Complete 30mm Finger Joining Kit		FP30-10-50N, NPS3050H, NPS3050C, Presetter, Clamps and Case

PolyBelt™

▼Poly Skiver

Item No.	Type	Appearance	Features	Max. Belt Width (mm)	Max. Belt Thickness (mm)	Size W (mm)	Size L (mm)	Size H (mm)	Wt. (kg)	Power
12	PS153		PolyBelt skiver for making a skived splicing. Highly reliable and widely accepted	150	3.0	400	380	435	33	100V or 200V

▼Poly Press

Item No.	Type	Appearance	Features	Max. Belt Width (mm)	Max. Belt Thickness (mm)	Size W (mm)	Size L (mm)	Size H (mm)	Wt. (kg)	Power	Temp. (℃)
13	PP051 (PI-50) (PS E)		PolyBelt press for skiver splicing Lightweight, easy to use and widely accepted	50	2.5	112	160	90	1.3	100V or 200V	110
	PP103 (PS E)		PolyBelt press for skiver splicing Highly reliable and widely accepted	100	5.0	140	295	150	3.1	100V or 200V	110

*PolyBelt splicing tools require the correct type of chemical adhesive (polybond) for the belt being made endless.

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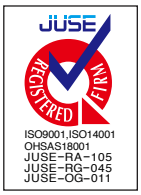

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