

THERMOFORMING CHAINS






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UNIKINGCANADA.COM

Gripper Chains

SERIES	CLAMP DESIGN	CLAMP FEATURES				BASE CHAIN MATERIAL	CORROSION RESISTANCE	WEAR RESISTANCE
		FILM RETENTION	SPRING FORCE	CLAMP MATERIAL	SPRING MATERIAL			
TFK	 K STYLE CLAMP	VERY HIGH	55 N	SS	SS	S + NC	GOOD	EXCELLENT
						SS	EXCELLENT	GOOD
TF	 STANDARD CLAMP	HIGH	85 N	SS	SS	S + NC	GOOD	EXCELLENT
						SS	EXCELLENT	GOOD
TFO	 HORIZONTAL CLAMP	AVERAGE	60 N (30X2)	SS	SS	S + NC	GOOD	EXCELLENT
						SS	EXCELLENT	GOOD

MATERIALS

TYPE	DESCRIPTION	FEATURES
S + NC	CARBON STEEL + NICKEL PLATED	Through hardened carbon steel and electroless nickel plating for good corrosion resistance. Excellent strength and wear resistance.
SS	AUSTENITIC STAINLESS STEEL	Cr-Ni austenitic stainless steel. AISI 302-304 (Wn 1.4301). Excellent corrosion resistance.

PRODUCT FEATURES

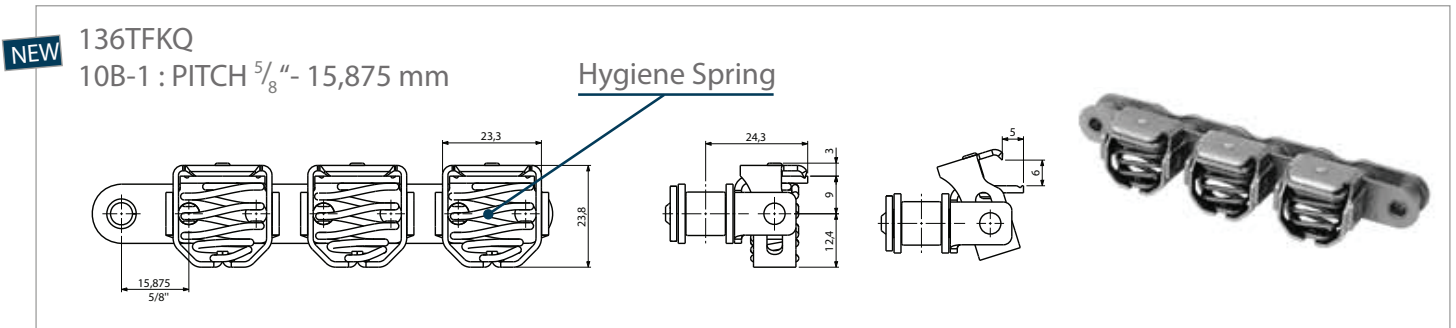
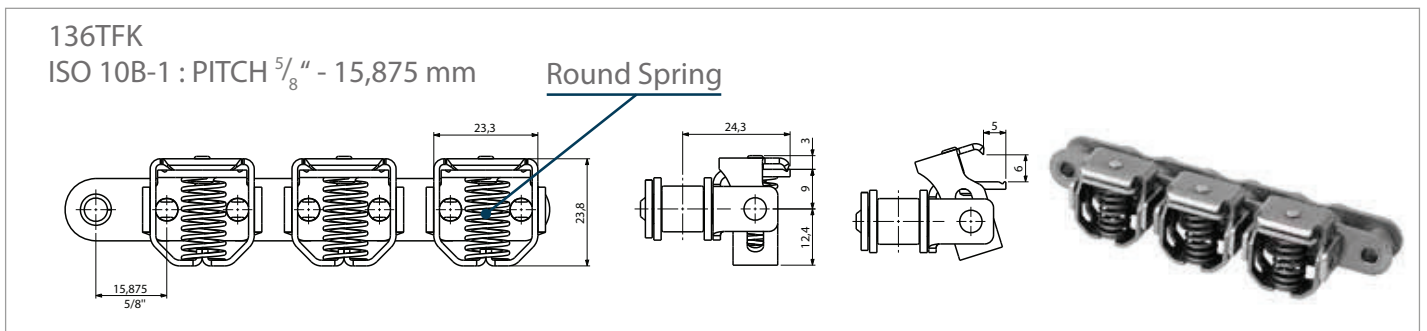
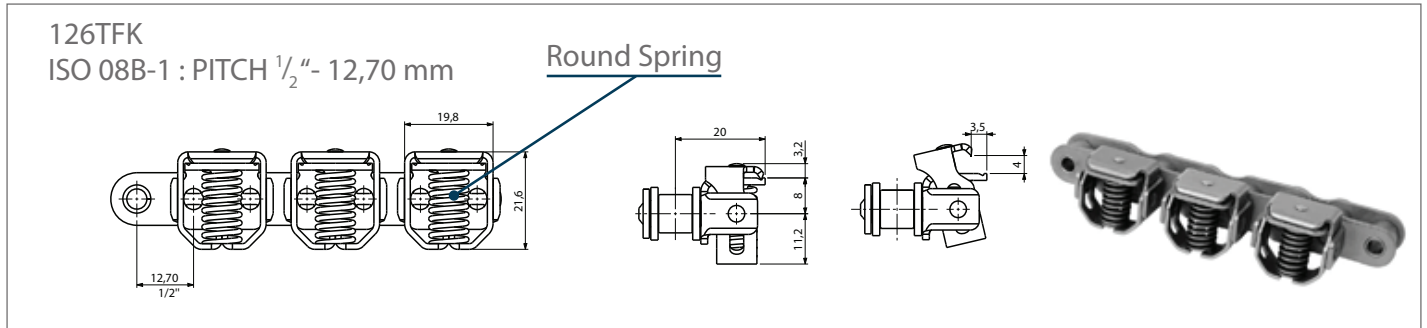
- All chains are available in nickel plated or stainless steel construction, for outstanding corrosion resistance.
- Improved clamp design for increased film retention and smooth operation.
- Supplied in pre-stretched and matched strands for trouble free machine set-up.
- Special lubrication applied at factory, FDA H1 approved grease, for higher wear and corrosion resistance.



Gripper Chains

K STYLE CLAMP "TFK SERIES"

The K style clamp allows a vertical movement combined with side rotation (kick-back) to ensure easy film engagement and scrap release.



REGINA REF.	BASE CHAIN MATERIAL	CLAMP MATERIAL	SPRING MATERIAL	CHAIN PITCH P		ROLLER DIAMETER Dr		INSIDE WIDTH W		CLAMPING FORCE N	
				mm	inches	mm	inches	mm	inches		
126TFK	S + NC	SS	ROUND	SS	12,70	$\frac{1}{2}$	8,51	,335	7,75	,305	50
SS126TFK	SS	SS	ROUND	SS	12,70	$\frac{1}{2}$	8,51	,335	7,75	,305	50
136TFK	S + NC	SS	ROUND	SS	15,875	$\frac{5}{8}$	10,16	,400	9,65	,380	55
SS136TFK	SS	SS	ROUND	SS	15,875	$\frac{5}{8}$	10,16	,400	9,65	,380	55
NEW 136TFKQ	S + NC	SS	HYGIENE	SS	15,875	$\frac{5}{8}$	10,16	,400	9,65	,380	55
NEW SS136TFKQ	SS	SS	HYGIENE	SS	15,875	$\frac{5}{8}$	10,16	,400	9,65	,380	55

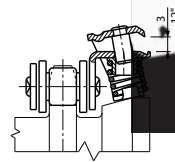
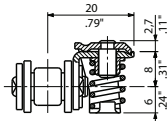
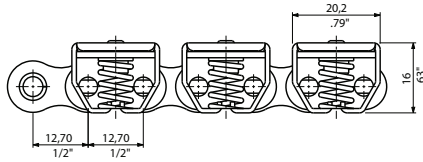


Gripper Chains

STANDARD CLAMP "TF SERIES"

126TF
ISO 08 B-1 : PITCH 1/2" - 12,70 mm

The standard clamp opens vertically with a slight side movement to follow the cam shape.

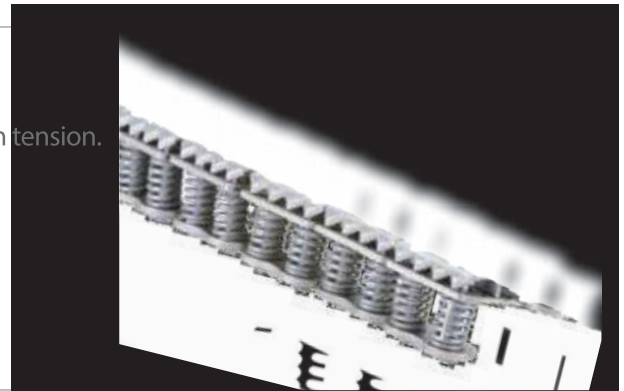
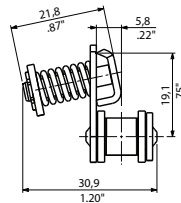
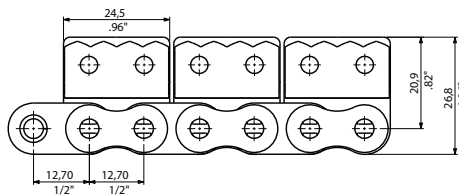


REGINA REF.	BASE CHAIN MATERIAL	CLAMP MATERIAL	SPRING MATERIAL	CHAIN PITCH P		ROLLER DIAMETER Dr		INSIDE WIDTH W		CLAMPING FORCE N
				mm	inches	mm	inches	mm	inches	
126TFNC/055	S + NC	SS	SS	12,70	1/2	8,51	,335	7,75	,305	85
SS126 TF/019	SS	SS	SS	12,70	1/2	8,51	,335	7,75	,305	85

HORIZONTAL CLAMP "TFO SERIES"

126TFO
ISO 08 B-1 : PITCH 1/2" - 12,70 mm

Two springs of 30N each for uniform film clamping and control of film tension.



REGINA REF.	BASE CHAIN MATERIAL	CLAMP MATERIAL	SPRING MATERIAL	CHAIN PITCH P		ROLLER DIAMETER Dr		INSIDE WIDTH W		CLAMPING FORCE N	ASSEMBLY SIDE
				mm	inches	mm	inches	mm	inches		
126 TFO/P003	S + NC	SS	SS	12,70	1/2	8,51	,335	7,75	,305	60	left
126 TFO/P004	S + NC	SS	SS	12,70	1/2	8,51	,335	7,75	,305	60	right
SS126 TFO/000	SS	SS	SS	12,70	1/2	8,51	,335	7,75	,305	60	left
SS126 TFO/001	SS	SS	SS	12,70	1/2	8,51	,335	7,75	,305	60	right

Since the horizontal Film Gripper Chains (TFO series) have a dedicated geometry for right or left assembly side, each ordered quantity has to be split in 50% right and 50% left version.

Gripper Chains



Version A

With 1 tip



Version B

With 2 tips



Version C

With flat clamps



Version D

With button clamps



Version E

NEW



Version F

NEW

With clamp F



All chains can be supplied with a high-quality food-grade initial lubricant!

Gripper Chains

“1-tip” Grip Chains



“2-tip” Grip Chains



Technical features

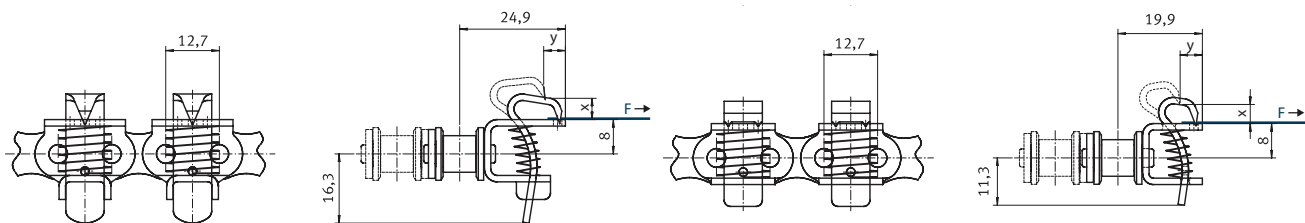
- **Single and duplex chain** 1/2 x 5/16" acc. to ISO 606
- Gripper with 1 tip, special designs on request
- Retention force is dependent on material conveyed and spring design – different number of coils and wire spring diameters available
- The gripper opens when it runs against a control disc (e.g. sprocket hub), causing it to swivel away outwards
- Food-grade initial lubrication
- Sprocket designs on request

Technical features

- **Single and duplex chain** 1/2 x 5/16" acc. to ISO 606
- Gripper with 2 tips, special designs on request
- Retention force is dependent on material conveyed and spring design – different number of coils and wire spring diameters available
- The gripper opens when it runs against a control disc (e.g. sprocket hub), causing it to swivel away outwards
- Higher retention force in comparison with 1-tip grip chain
- Food-grade initial lubrication
- Sprocket designs on request

Ref. no. iwis	DIN ISO	Pitch p (mm)	Ave. foil retention force (N) F*	Spring	x	y	Mat. no.
L 85 Grip	08 B-1	12,7	10	0,7x6	5	6	50007495
L 85 Grip	08 B-1	12,7	24	0,9x5	4	5	50034722
D 85 Grip	08 B-2	12,7	10	0,7x6	5	6	50007033

Ref. no. iwis	DIN ISO	Pitch p (mm)	Ave. foil retention force (N) F*	x	y	Mat. no.
L 85 Grip	08 B-1	12,7	35	3,0	4,5	50024958



Dimensions x and y are dependent on the springs used. These are maximum values for the opening stroke. A smaller opening stroke will increase life expectancy of the spring.
 * Reference films were used to determine the average film gripping force (F).
 Concrete values are dependent on the film used (material, surface, thickness). Deviations are possible.



Gripper Chains

“Flat clamp” Grip Chains



“Button clamp” Grip Chains



Technical features

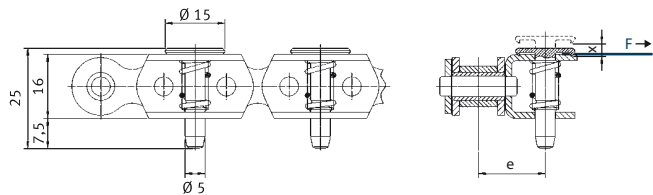
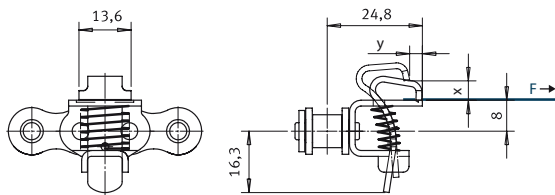
- **Single and duplex chain** 1/2 x 5/16" acc. to ISO 606
- Gripper with flat clamping surface
- Retention force is dependent on material conveyed and spring design – different number of coils and wire spring diameters available
- The gripper opens when it runs against a control disc (e.g. sprocket hub), causing it to swivel away outwards
- Gentle handling of materials
- Low transmission forces
- Sprocket designs on request

Technical features

- **Single chain** 1/2 x 5/16" or 5/8 x 3/8" acc. to ISO 606
- Rotationally symmetrical gripper element
- Extremely flat button clamp
- Retention force is dependent on material conveyed and spring design – different number of coils and wire spring diameters available
- **iwis patent** (spring without additional fixing elements)
- Does not swivel away outwards when opened
- Sprocket designs on request

Ref. no. iwis	DIN ISO	Pitch p (mm)	Ave. foil retention force (N) F*	Spring	x	y	Mat. no.
L 85 Grip	08 B-1	12,7	3	0,7x6	5	3,5	50037062
L 85 Grip	08 B-1	12,7	5	0,9x5	4	2,8	50035540
D 85 Grip	08 B-2	12,7	3	0,7x6	5	3,5	50032581

Ref. no. iwis	DIN ISO	Pitch p (mm)	Ave. foil retention force (N) F*	e	Mat. no.
M 106 Grip	10 B-1	15,875	70	16,8	50034301
L 85 Grip	08 B-1	12,7	70	15,8	50035491



X = 3,25 mm

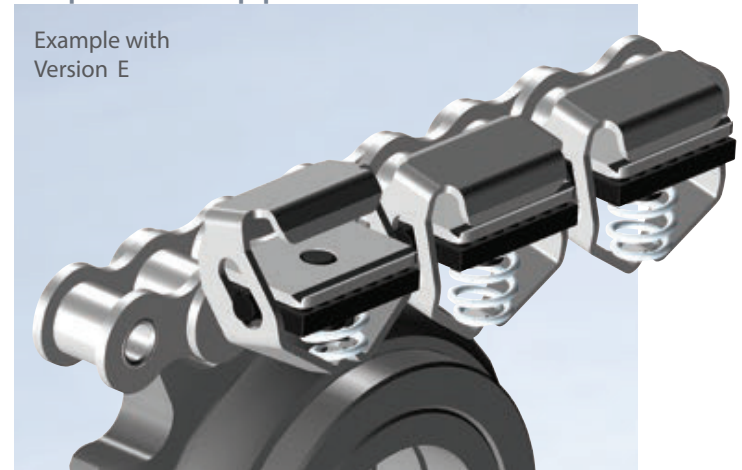
Dimensions x and y are dependent on the springs used. These are maximum values for the opening stroke. A smaller opening stroke will increase life expectancy of the spring.
 * Reference films were used to determine the average film gripping force (F).
 Concrete values are dependent on the film used (material, surface, thickness). Deviations are possible.

Gripper Chains

Grip chain with clamp F



Control sprockets for Grip Chain applications



Technical features

- Single and duplex chain 1/2 x 5/16" acc. to ISO 606
- Complete gripper element
- Gripper element with a continuous sharp-aged gripping flange
- Retention force is dependent on material conveyed
- Clamp and spring made of stainless steel spring steel
- Due to a special geometry of sprockets used, the gripper opens with a slight sideways movement
- Food-grade initial lubrication
- Sprocket designs on request

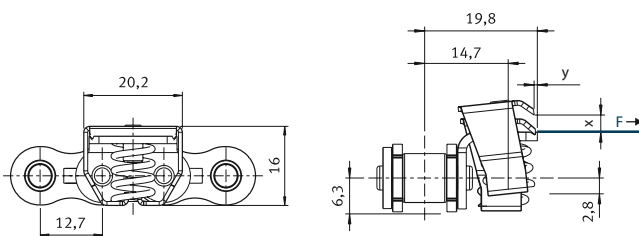
Sprocket recommendations

- For applications with 1/2" gripper chains, the recommended minimum number of teeth on the control sprocket is: **11**
- For applications with 5/8" gripper chains, the recommended minimum number of teeth on the control sprocket is: **14**
- For improved running characteristics, we recommend control sprockets with a minimum of 19 teeth.
- We recommend the use of a ramp for sprockets with fewer than 20 teeth. A ramp is optional if sprockets have more than 20 teeth.
- Different spring sizes require different control disc diameters.

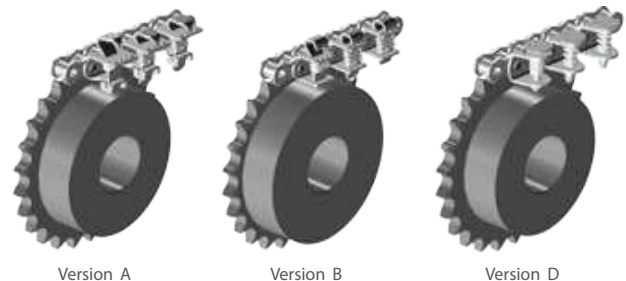
Customised designs

Sprockets can be supplied in accordance with customer specifications e.g. bearing seats, keyways, threads, special diameters, surfaces... Please advise us of the technical specifications and quantities you require.

Ref. no. iwis	DIN ISO	Pitch p (mm)	Average foil retention force (N) F*	Spring	x	y	Mat. no.
L 85 Grip	08 B-1	12,7	42	1,3x5,5	3	0,6	50045980

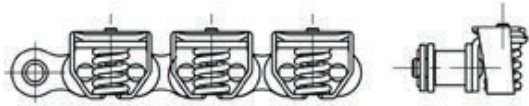


Dimensions x and y are dependent on the springs used. These are maximum values for the opening stroke. A smaller opening stroke will increase life expectancy of the spring.
 * Reference films were used to determine the average film gripping force (F).
 Concrete values are dependent on the film used (material, surface, thickness). Deviations are possible.

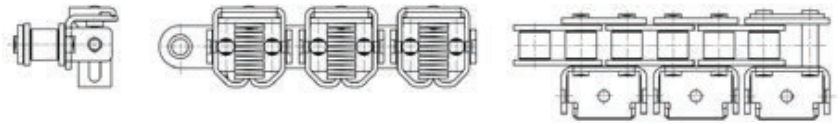


Gripper Chains

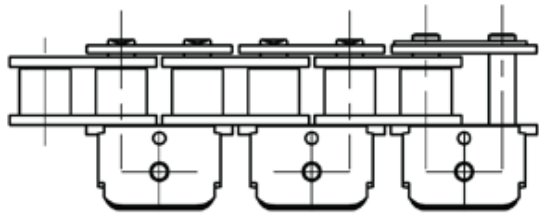
TYPE 1



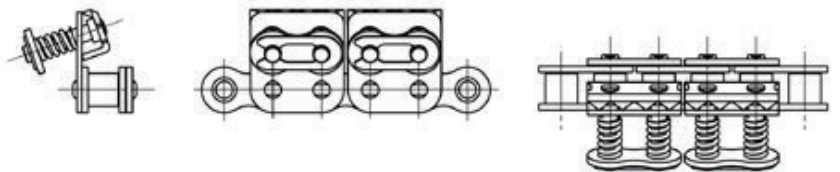
TYPE 2



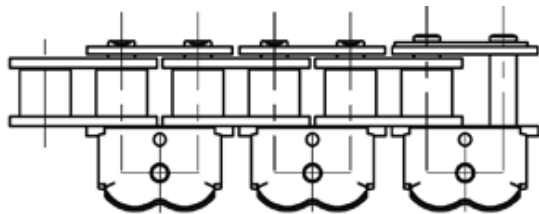
Straight Clamp Design



TYPE 3



Heart Clamp Design



- Springs available with 50N or 100N resistance
- Different shapes of stainless steel grippers available
- Delta® Titanium 2 or nickel-plated versions
- Pitches of 12.7mm and of 15.875mm

Large range of gripper chains. Please consult us.

Sticker Chains

STICKER CHAINS ARE USED TO CONVEY PLASTIC FILM IN THERMOFORMING MACHINES

Uniking Canada sticker chains are based on ISO 08B-2, 08A-1 and 10A-1 roller chains. Upon customer request, Uniking can custom design sticker chains based on the combination of the guide and attachment shape options reported below.



GUIDE OPTIONS

GUIDED ON CHAIN ROLLERS	GUIDED ON SADDLE	GUIDED ON EXTENDED PIN	GUIDED ON SINGLE OUTBOARD ROLLER	GUIDED ON DOUBLE OUTBOARD ROLLER

ATTACHMENT SHAPE OPTIONS

STANDARD	COINED	DEEP LINK	ASYMMETRIC	CHISEL

PRODUCT FEATURES

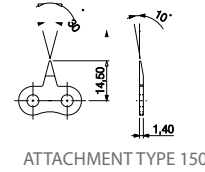
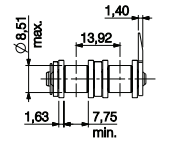
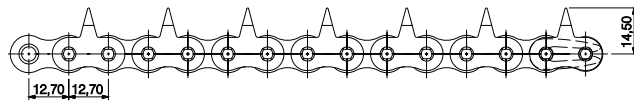
- Chains are pre-stretched and matched in pairs.
- Precise length tolerance for exact film positioning.
- High performance lubrication suitable for high temperature. On request with USDA H1 food approved prelubrication.
- Optimized plate hardness for improved wear resistance.

SMOOTH TIP FINISHING FOR CLEANER PIERCING AND REDUCED POWDERING



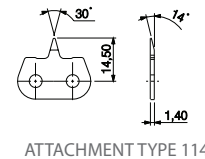
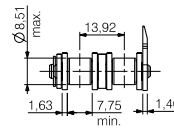
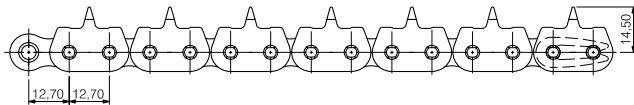
08B-2 BASE CHAIN

GUIDED ON CHAIN ROLLER - COINED AND DEEP LINK



ATTACHMENT TYPE 150

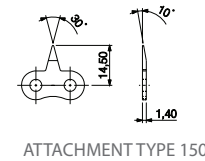
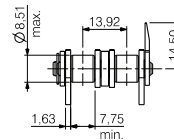
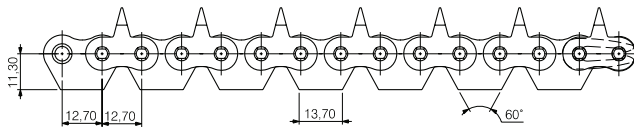
ILLIG /TFT/WM style



ATTACHMENT TYPE 1140

REGINA REF.	ISO REF.	CHAIN PITCH P		ROLLER DIAMETER DR		INSIDE WIDTH W		SPIKE ATTACHMENT TYPE	SPIKE ATTACHMENT FREQUENCY
		mm	inches	mm	inches	mm	inches		
226/903	08B-2	12,70	1/2	8,51	0,335	7,75	0,305	150	every 2nd pitch
226SR/P001	08B-2	12,70	1/2	8,51	0,335	7,75	0,305	1140	every 2nd pitch

GUIDED ON SADDLE - COINED

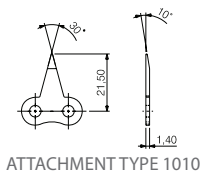
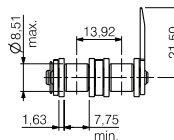
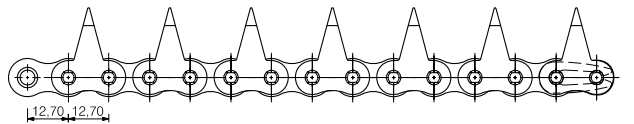


ATTACHMENT TYPE 150

BELLAPLAST style

REGINA REF.	ISO REF.	CHAIN PITCH P		ROLLER DIAMETER DR		INSIDE WIDTH W		SPIKE ATTACHMENT TYPE	SPIKE ATTACHMENT FREQUENCY
		mm	inches	mm	inches	mm	inches		
226/146	08B-2	12,70	1/2	8,51	0,335	7,75	0,305	150	every 2nd pitch

GUIDED ON CHAIN ROLLER - COINED



ATTACHMENT TYPE 1010

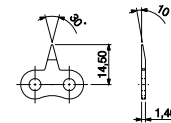
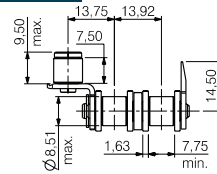
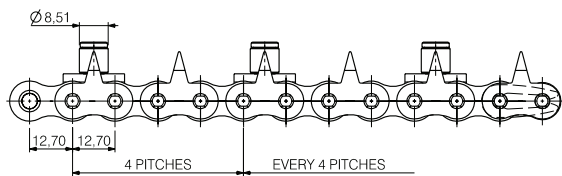
OMV style

REGINA REF.	ISO REF.	CHAIN PITCH P		ROLLER DIAMETER DR		INSIDE WIDTH W		SPIKE ATTACHMENT TYPE	SPIKE ATTACHMENT FREQUENCY
		mm	inches	mm	inches	mm	inches		
226/090	08B-2	12,70	1/2	8,51	0,335	7,75	0,305	1010	every 2nd pitch

Sticker Chains

08B-2 BASE CHAIN

GUIDED ON SINGLE OUTBOARD ROLLER - COINED

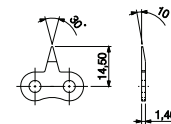
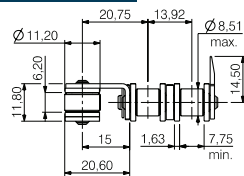
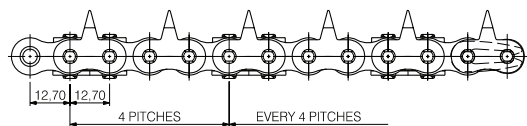


ATTACHMENT TYPE 150

KIEFEL/ GABLER style

REGINA REF.	ISO REF.	CHAIN PITCH P		ROLLER DIAMETER DR		INSIDE WIDTH W		SPIKE ATTACHMENT TYPE	SPIKE ATTACHMENT FREQUENCY
		mm	inches	mm	inches	mm	inches		
226/09F	08B-2	12,70	1/2	8,51	0,335	7,75	0,305	150	every 2nd pitch

GUIDED ON DOUBLE OUTBOARD ROLLER - COINED



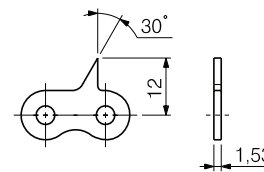
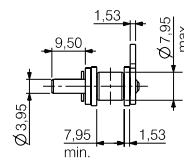
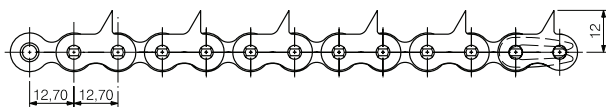
ATTACHMENT TYPE 150

REGINA REF.	ISO REF.	CHAIN PITCH P		ROLLER DIAMETER DR		INSIDE WIDTH W		SPIKE ATTACHMENT TYPE	SPIKE ATTACHMENT FREQUENCY
		mm	inches	mm	inches	mm	inches		
2265R/009	08B-2	12,70	1/2	8,51	0,335	7,75	0,305	150	every 2nd pitch

08A-1 / A40 BASE CHAIN

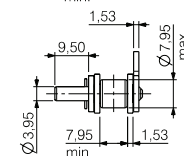
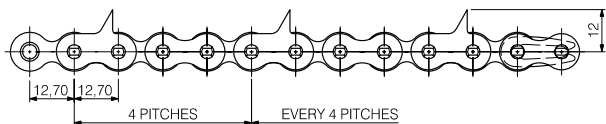
GUIDED ON EXTENDED PIN - ASYMMETRIC

STICKER ATTACHMENT EVERY 2ND PITCH



IRWIN style

STICKER ATTACHMENT EVERY 4TH PITCH

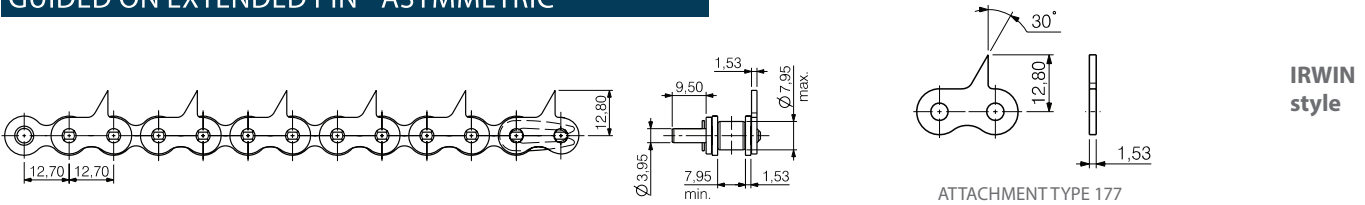


ATTACHMENT TYPE 167

REGINA REF.	ISO REF.	CHAIN PITCH P		ROLLER DIAMETER DR		INSIDE WIDTH W		SPIKE ATTACHMENT TYPE	SPIKE ATTACHMENT FREQUENCY	ASSEMBLY SIDE
		mm	inches	mm	inches	mm	inches			
A40/0BB	08A	12,70	1/2	7,92	0,312	7,85	0,309	167	every 2nd pitch	right
A40/0BD	08A	12,70	1/2	7,92	0,312	7,85	0,309	167	every 2nd pitch	left
A40/11C	08A	12,70	1/2	7,92	0,312	7,85	0,309	167	every 4th pitch	right
A40/11D	08A	12,70	1/2	7,92	0,312	7,85	0,309	167	every 4th pitch	left

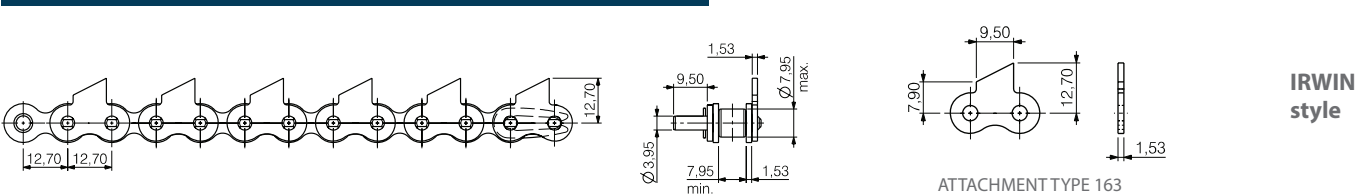
08A-1 / A40 BASE CHAIN

GUIDED ON EXTENDED PIN - ASYMMETRIC



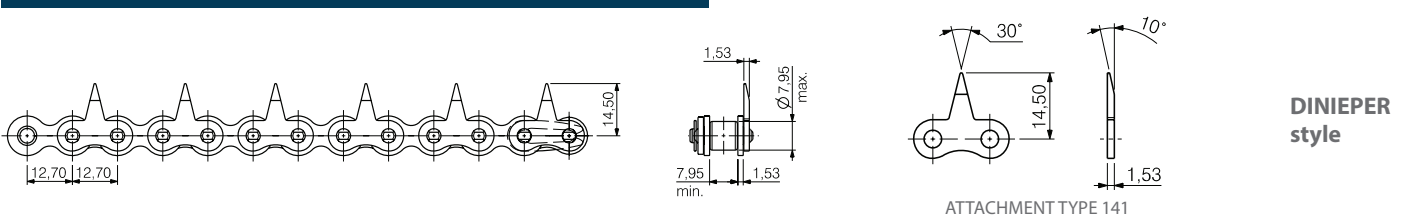
REGINA REF.	ISO REF.	CHAIN PITCH P		ROLLER DIAMETER DR		INSIDE WIDTH W		SPIKE ATTACHMENT TYPE	SPIKE ATTACHMENT FREQUENCY	ASSEMBLY SIDE
		mm	inches	mm	inches	mm	inches			
A40/P004	08A	12,70	1/2	7,92	0,312	7,85	0,309	177	every 2nd pitch	left
A40/P003	08A	12,70	1/2	7,92	0,312	7,85	0,309	177	every 2nd pitch	right

GUIDED ON EXTENDED PIN - CHISEL



REGINA REF.	ISO REF.	CHAIN PITCH P		ROLLER DIAMETER DR		INSIDE WIDTH W		SPIKE ATTACHMENT TYPE	SPIKE ATTACHMENT FREQUENCY	ASSEMBLY SIDE
		mm	inches	mm	inches	mm	inches			
A40/0B5	08A	12,70	1/2	7,92	0,312	7,85	0,309	163	every 2nd pitch	left
A40/0B7	08A	12,70	1/2	7,92	0,312	7,85	0,309	163	every 2nd pitch	right

GUIDED ON CHAIN ROLLER - COINED



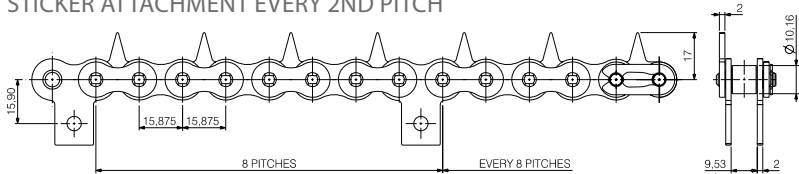
REGINA REF.	ISO REF.	CHAIN PITCH P		ROLLER DIAMETER DR		INSIDE WIDTH W		SPIKE ATTACHMENT TYPE	SPIKE ATTACHMENT FREQUENCY
		mm	inches	mm	inches	mm	inches		
A40/0B9	08A	12,70	1/2	7,92	0,312	7,85	0,309	141	every 2nd pitch

Sticker Chains

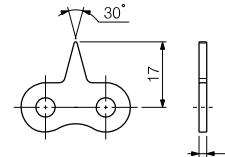
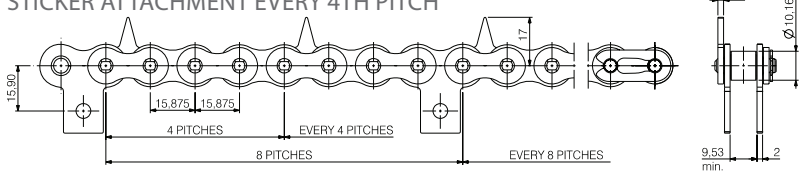
10A-1 / A50 BASE CHAIN

GUIDED ON SADDLE - STANDARD

STICKER ATTACHMENT EVERY 2ND PITCH



STICKER ATTACHMENT EVERY 4TH PITCH

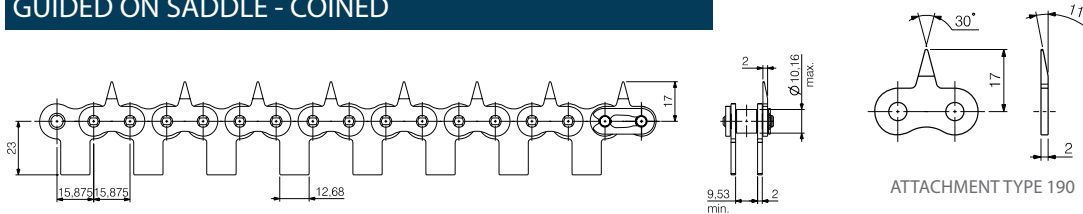


ATTACHMENT TYPE 177

BROWN style

REGINA REF.	ISO REF.	CHAIN PITCH P		ROLLER DIAMETER DR		INSIDE WIDTH W		SPIKE ATTACHMENT TYPE	SPIKE ATTACHMENT FREQUENCY	ASSEMBLY SIDE
		mm	inches	mm	inches	mm	inches			
A50SR/P001	10A-1	15,875	5/8	10,16	0,400	9,65	0,380	177	every 2nd pitch	right
A50SR/P002	10A-1	15,875	5/8	10,16	0,400	9,65	0,380	177	every 2nd pitch	left
A50/P008	10A-1	15,875	5/8	10,16	0,400	9,65	0,380	177	every 4th pitch	right
A50/P009	10A-1	15,875	5/8	10,16	0,400	9,65	0,380	177	every 4th pitch	left

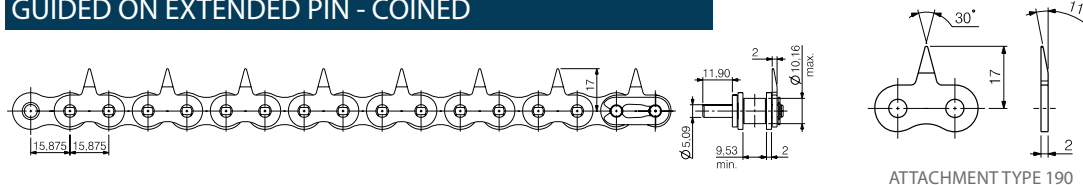
GUIDED ON SADDLE - COINED



ATTACHMENT TYPE 190

REGINA REF.	ISO REF.	CHAIN PITCH P		ROLLER DIAMETER DR		INSIDE WIDTH W		SPIKE ATTACHMENT TYPE	SPIKE ATTACHMENT FREQUENCY
		mm	inches	mm	inches	mm	inches		
A50/1FF	10A-1	15,875	5/8	10,16	0,400	9,65	0,380	190	every 2nd link

GUIDED ON EXTENDED PIN - COINED



ATTACHMENT TYPE 190

REGINA REF.	ISO REF.	CHAIN PITCH P		ROLLER DIAMETER DR		INSIDE WIDTH W		SPIKE ATTACHMENT TYPE	SPIKE ATTACHMENT FREQUENCY
		mm	inches	mm	inches	mm	inches		
A50/P005	10A-1	15,875	5/8	10,16	0,400	9,65	0,380	190	every 2nd link

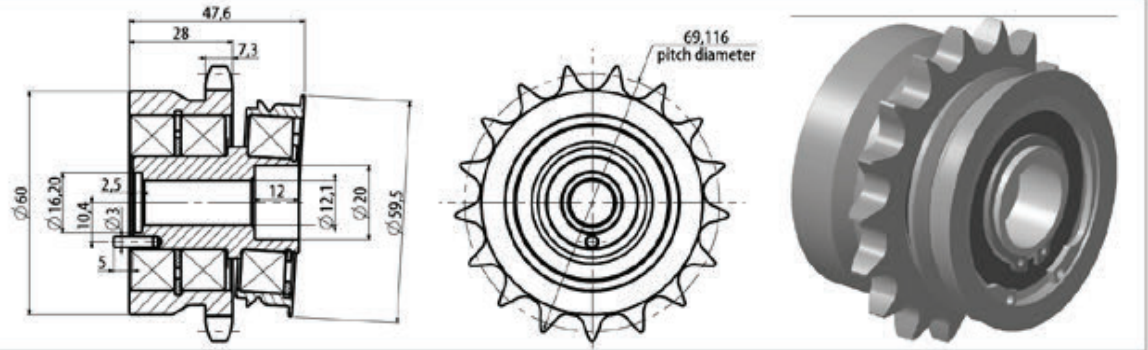
Sticker Chains



- ILLIG® is a registered trademark of ILLIG Maschinenbaum GmbH
- TFT® is a registered trademark of WM Wrapping Machinery SA
- OMV® is a registered trademark of OMV Machinery Srl
- Kiefel® is a registered trademark of Kiefel GmbH
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- Dinieper® is a registered trademark of Dinieper Ind. Metalurgica
- Brown® is a registered trademark of Brown Machine LLC

Cam Sprockets

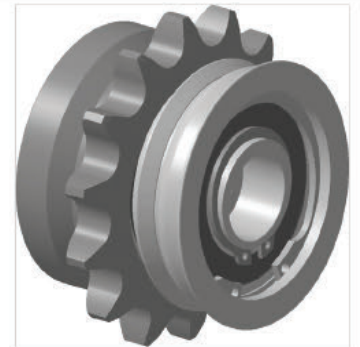
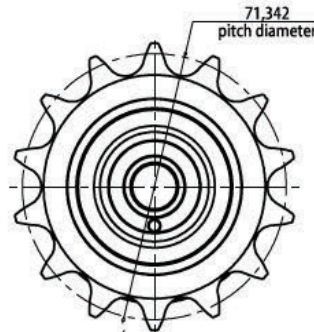
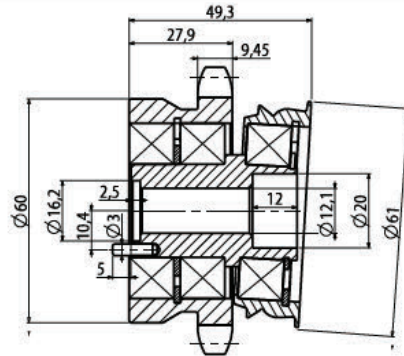
CAM SPROCKET FOR CHAIN 126TFK (P= 1/2") - 12,70 MM

PART N° GS 89
Z = 17

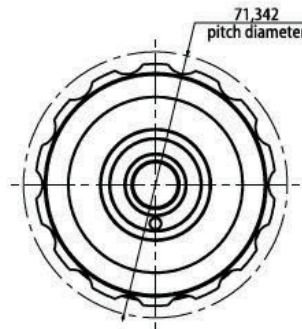
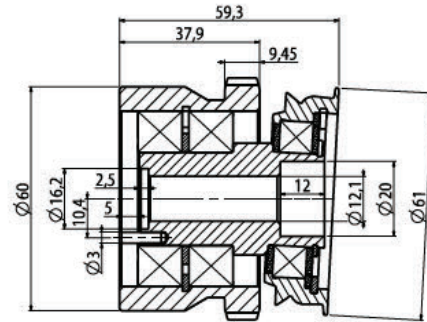
Cam Sprockets

CAM SPROCKETS FOR CHAIN 136TFK (P= 5/8") - 15,875 MM

PART N° GS 88
Z = 14

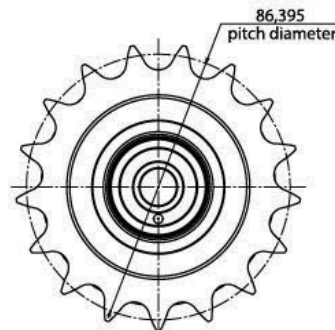
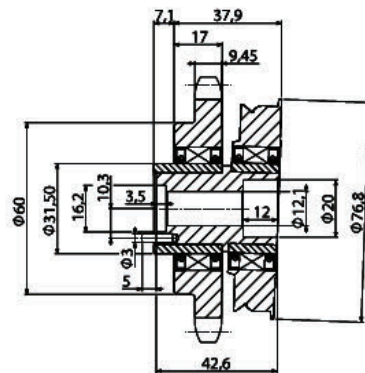


PART N° GS 106
Z = 14



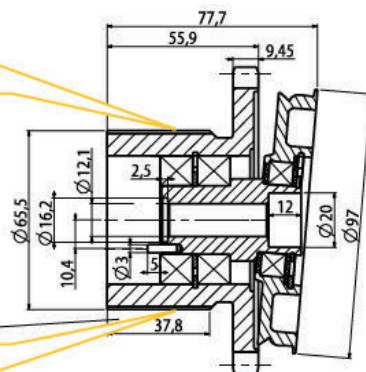
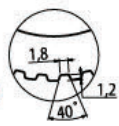
NEW

PART N° GS 160
Z = 17

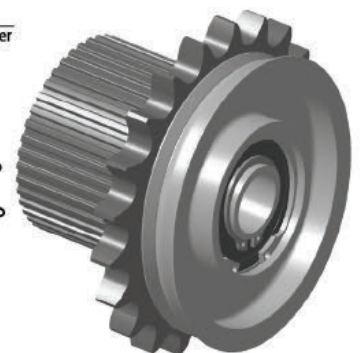
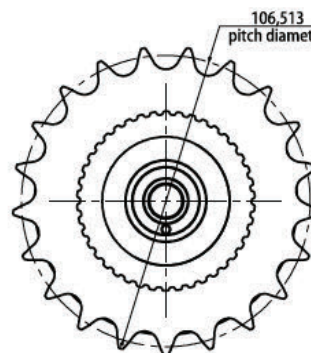


PART N° GS 107
Z = 21

Belt type T5



106.513
pitch diameter



PART N° GS 174
Z = 21

Belt Type AT5

