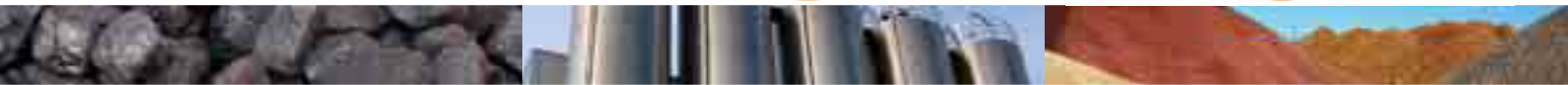


**Forged Chain & Sprockets**  
for the toughest applications



[www.go4b.com](http://www.go4b.com)



**Forged Chain Links & Pins**  
**Bolt 'n' Go Chain & Flight System**  
**Sprockets**  
**Trailers**  
**Accessories**



# CONTENTS

## YOUR SPECIALIST SUPPLIER FOR CHAIN

We offer heavy duty forged chain and round link chain for conveyors and bucket elevators for ALL applications.

Take advantage of our FREE detailed design service and technical support from our team of specialised engineers.



www.go4b.com



### FORGED CHAINS



Forged Chain

3/4

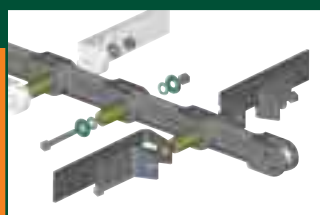


Forged Chain

Link & Pin General Design

3/4

### BOLT 'N' GO



Bolt 'n' Go

Forged Chain

5



Bolt 'n' Go

Round Link Chain

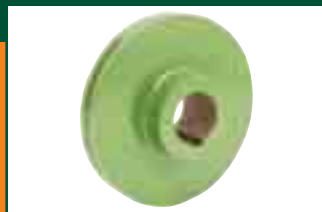
6

### SPROCKETS AND TRAILERS



Sprockets

7



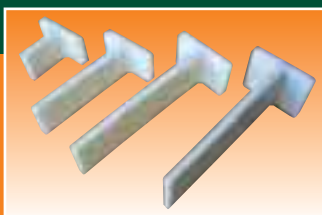
Trailers

8

**FREE** Engineering Design Service - Contact 4B

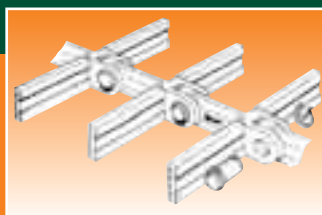
### ACCESSORIES

**ON DEMAND**  
Separate datasheets available



Nylon Flights for Scraper Chains

9



Plastic Flight Sleeves

9



Round Link Chain

9



Miscellaneous Conveyor Chain

9

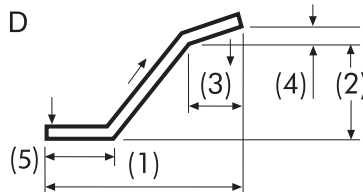
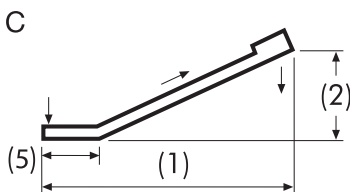
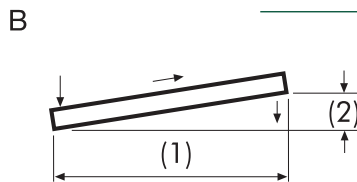
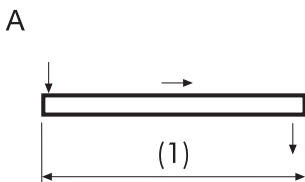
For more products, please visit: [www.go4b.com](http://www.go4b.com)

# CHAIN CONVEYOR

## Questionnaire

We can offer you a free design service for new or existing chain conveyors.  
If you require a new conveyor design or change of chain please fill in the questionnaire.

Date	Conveyor Type - A, B, C or D
Client	Horizontal length (1) Mtrs
Address	First inlet to final outlet
	Vertical lift height (If inclined) (2) Mtrs
	or degree slope
	Second horizontal length (3) Mtrs
Email	Second lift height (4) Mtrs
Tel Fax	Initial horizontal length (5) Mtrs
Contact	Number of intakes Position
Location of Conveyor	Intake length Mtrs
	Number of outlets Position
Type of material to be handled	Outlet Length Mtrs
	If existing conveyor, give details
Material Density Kgs/M <sup>3</sup>	Type of chain
Particle or lump size	Case width mm
Details of material	Case height mm
	Sprocket type
Capacity required Tonnes per hour	Drive KW
	D/W shaft Dia mm
	T/E shaft Dia mm



**FREE Engineering  
Design Service**

# FORGED CHAIN



www.go4b.com

## Forged Chain for the toughest applications

4B drop forged chain is made of special heat treated alloy steel case hardened to Rockwell C57 with a ductile core hardness of Rockwell C40.

Heat treating is a complex process that is done to provide the optimum chain link with a more fracture resilient ductile core for shock resistance, and an extremely hard exterior surface for superior wear resistance.

4B drop forged chain is backed by an international network of companies with over 120 years of experience, and a global team of engineers that can provide you with practical solutions for all your material handling applications.



### Forged Chain

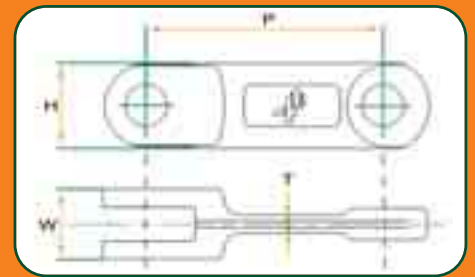


#### LINK SPECIFICATION

A - Alloy Steel - Case hardened, surface hardness RC 57min

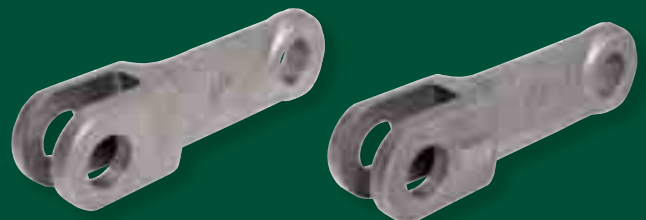
#### PIN SPECIFICATION

Alloy Steel - Case hardened, surface hardness RC 57min. effective case depth 0.6mm



Chain Link	102 N-A Drop Forged Chain	125 N-A Drop Forged Chain	142 N-A Drop Forged Chain	142 H-A Drop Forged Chain	150 N-A Drop Forged Chain	160 N-A Drop Forged Chain	216 N-A Drop Forged Chain	260 N-A Drop Forged Chain
<b>Minimum Breaking Load</b>	150 kn 33,000 lb	175 kn 39,375 lb	300 kn 67,500 lb	450 kn 101,000	250 kn 56,250	260 kn 58,500	600 kn 135,000 lb	700 kn 158,000 lb
<b>Case (MIN) Hardness</b>	Rockwell C57	Rockwell C57	Rockwell C57	Rockwell C57	Rockwell C57	Rockwell C57	Rockwell C57	Rockwell C57
<b>Case Depth</b>	0.5 mm	0.6 mm	0.7 mm	0.7 mm	0.7 mm	0.8 mm	1.0 mm	1.0mm
<b>Case Hardness</b>	Rockwell C40	Rockwell C40	Rockwell C40	Rockwell C40	Rockwell C40	Rockwell C40	Rockwell C40	Rockwell C40
<b>Weight (per link)</b>	0.38 kg	0.7 kg	1.08 kg	1.76 kg	1.2 kg	1.3 kg	3.66 kg	5.38 kg
<b>Bolt 'N' Go Compatible</b>	Yes	Yes	Yes	Yes	Yes	Yes	No	No
<b>Dimensions</b>								
<b>P</b>	102 mm	125 mm	142 mm	142 mm	150 mm	160 mm	216 mm	260 mm
<b>H</b>	36 mm	35 mm	50 mm	50 mm	49 mm	44.5 mm	75 mm	75 mm
<b>W</b>	28 mm	36 mm	42 mm	62 mm	36 mm	42 mm	60 mm	71 mm
<b>T</b>	7.62 mm	10 mm	11 mm	16.5 mm	13 mm	13 mm	19 mm	22 mm

\* See page 5-6 for Bolt 'N' Go chain on flight system.



**FREE Engineering Design Service - Contact 4B**

# FORGED CHAIN



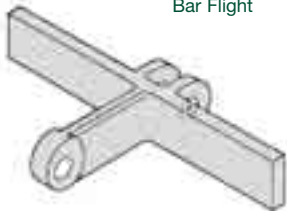
www.go4b.com

- **Ultimate Tensile Strengths:** Range from 150 kN to 700 kN
- **Availability:** Chain without flights – from stock. Chain with flights – quick delivery
- **Chain Links and Pins:** Case hardened special alloy steel to Rockwell "C" 57-62 with core typically RC-40
- **Stainless Steel Options**
- **'NEW' BOLT 'N' GO** – Bolt on Flight System, see pages 5-6
- Pins and accessories available in hardened stainless steel.
- Flights are manufactured and attached according to customer's specification.
- Other Link & Pin designs available to order.

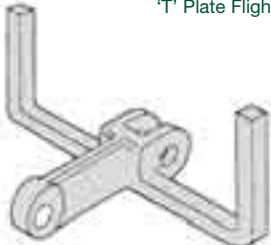
## Forged Chain - Pin Style



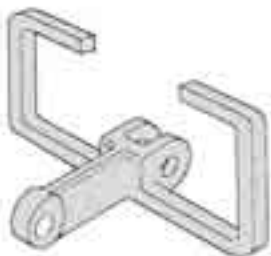
Bar Flight



'T' Plate Flight



U-Flight



Closed U-Flight



00 Flight

**Note:** Custom flights are available.



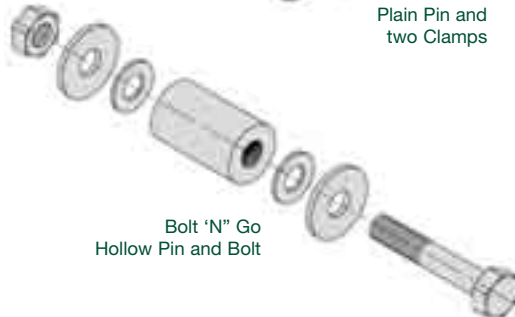
Forged Head Pin and one Clamp



Forged Head Pin, Collar and Roll Pin



Plain Pin and two Clamps



Bolt 'N' Go Hollow Pin and Bolt

**Note:** Clamps or roll pins must not be reused, install one time and discard after use.



**Pins:**  
Case Hardened to RC57min/64 x 0.6mm (0.02")

**Clamps:**  
Rockwell B63 (Do Not Re-Use)

**Sprockets & Trailers:**  
Through Hardened Type: Rockwell C45  
Case Hardened Type: RC60min x 1.5mm (0.06")

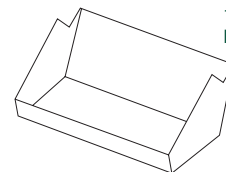
**Flight Material Specifications:**  
Low Carbon Steel

**Flight Attachment Procedure:**  
Remove case, bevel flight and weld as specified below.

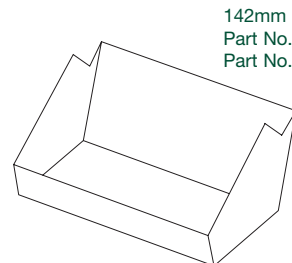
**Rod Specification:**  
Phillips 35S or #7018S

**Mig Weld Specification:**  
Wire: Linde #86 x .045"  
Gas: CO2: 25% Argon: 75%  
Voltage: 34-36  
Speed: 45-48 on 1-100

### Return Buckets



102mm  
Part No. GBRB4 = 4%



142mm  
Part No. GBRB5 = 5\*  
Part No. GBRB8 = 8\*

**FREE Engineering  
Design Service -  
Contact 4B**

# BOLT 'N' GO



www.go4b.com

## Flight Installation and Chain Assembly Made Easy!

The Bolt 'N' Go flight system is a revolutionary assembly method for drop forged and round link conveyor chain.

### Features

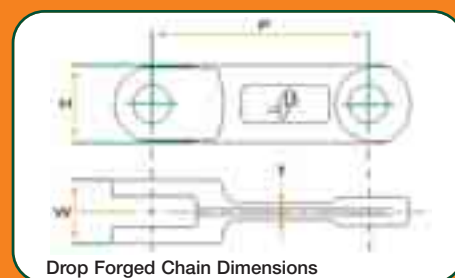
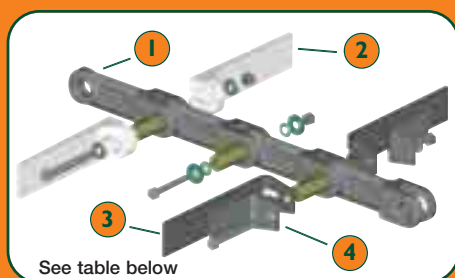
- Easy and simple assembly on site or in the shop
- Precise calculated flight bending forces
- No welding required
- Guaranteed and reliable pin attachment
- Condensed storage and shipping costs
- Forged chain and round link chain compatible
- Plastic flight option (high density polyethylene or nylon)
- Steel flight option (drop forged chain only)

### Drop Forged Chain

Link and flight assembly are made easy by using a standard bolt and nut with a high strength hollow pin. There are no circlips to become loose and there is no intricate assembly. There is no welding required on the flights, no need to remove chain form the conveyor for installation, and no issues with strength. Just bolt the links and the flights together. It's easy, simple and reliable!

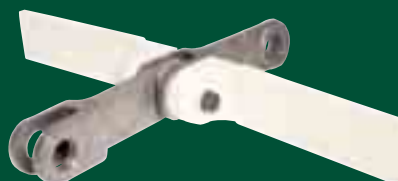
**U.S. Patent #7,080,728**  
**Other Patents Pending**

## Forged Chain with Bolt 'n' Go Flights



### Bolt 'n' Go System is available on 3 Drop Forged Chain sizes

No.	Description	102 N-A Link	142 N-A Link	142 H-A Link
1	Drop Forged Chain Link	GB0102BNA	GB0142BNA	GB0142BHA
2	Attachable Plastic Flight (Max.Width 600mm)	GB0102BFP (HDP) GB0102BFN (Nylon) (400mm)	GB0142BFP (HDP) GB0142BFN (Nylon)	GB0142BFP (HDP) GB0142BFN (Nylon)
3	Attachable Steel Flight (Max.Width 600mm)	GB0102BF (400mm)	GB0142BF (600mm)	GB0142BF (600mm)
4	Reinforcement Plate (For Flights Over 400mm)	Not Required	GB0142BBF	GB0142BBF
5	Bolt 'n' Go Assembly Kits (Pins included)	GB0102NPAC - No Flights GB0102NPAF - Flights	GB0142NPAC - No Flights GB0142NPAF - Flights	GB0142HPAC - No Flights GB0142HPAF - Flights



### Bolt 'n' Go - Drop Forged Chain Link

Link	P	H	A	T	Weight	Min. Breaking Load	Case Hardness	Case Depth	Core Hardness
<b>102 N-A</b>	102 mm 4.02 in	36 mm 1.42 in	28 mm 1.10 in	7.62 mm 0.30 in	0.38 Kg 0.80 Lbs	150 Kn 33,000 Lbs	Rockwell C59/64	0.5 mm 0.02 in	Rockwell C40
<b>142 N-A</b>	142 mm 5.59 in	50 mm 1.97 in	42 mm 1.65 in	11 mm 0.43 in	1.08 Kg 2.38 Lbs	300 Kn 67,500 Lbs	Rockwell C59/64	0.7 mm 0.03 in	Rockwell C40
<b>142 H-A</b>	142 mm 5.59 in	50 mm 1.97 in	62 mm 2.44 in	16.5 mm 0.65 in	1.76 Kg 3.88 Lbs	450 Kn 101,000 Lbs	Rockwell C59/64	0.7 mm 0.03 in	Rockwell C40

# BOLT 'N' GO



www.go4b.com

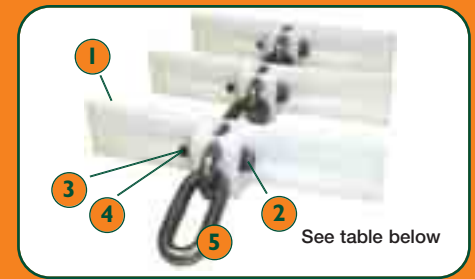
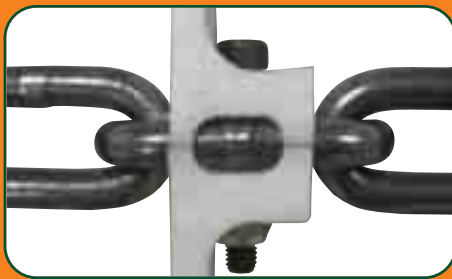
## Round Link Chain

Easy flight assembly by using a standard bolt and nut, connecting the flights directly to the link. The chain can be supplied in a coil together with the bolt on flights already assembled.



**FREE** Engineering Design Service - Contact 4B

## Round Link Chain with Bolt 'n' Go Flights



### Bolt 'N' Go - Round Link Chain Size 13 x 65mm

#### ABSORBED POWER (KW)

		Conveyor Length - Meters										
		15	20	25	30	35	40	45	50	60	70	80
Capacity t/h	50	1.7	2.2	2.8	3.4	3.9	4.5	5.0	5.6	6.7	7.9	9.0
	75	2.2	2.9	3.7	4.4	5.1	5.8	6.6	7.3	8.8	10.2	11.7
	100	3.1	4.1	5.1	6.1	7.2	8.2	9.2	10.2	12.3	14.3	16.4
	150	4.4	5.9	7.4	8.9	10.4	11.8	13.3	14.8	17.8	20.7	23.7
	200	5.8	7.8	9.7	11.7	13.6	15.6	17.5	19.5	23.4	27.3	31.2

#### CHAIN PULL (kN)

		Conveyor Length - Meters										
		15	20	25	30	35	40	45	50	60	70	80
Capacity t/h	50	2.8	3.7	4.7	5.6	6.5	7.5	8.4	9.3	11.2	13.1	15.0
	75	3.7	4.9	6.1	7.3	8.5	9.7	11.0	12.2	14.6	17.1	19.5
	100	4.4	5.8	7.3	8.8	10.2	11.7	13.2	14.6	17.5	20.5	23.4
	150	5.9	7.9	9.9	11.8	13.8	15.8	17.8	19.7	23.7	27.6	31.6
	200	7.3	9.7	12.2	14.6	17.1	19.5	21.9	24.4	29.2	34.1	39.0

#### MINIMUM CHAIN UTS (kN) - 5.1 SAFETY FACTOR

		Conveyor Length - Meters										
		15	20	25	30	35	40	45	50	60	70	80
Capacity t/h	50	14.0	18.7	23.4	28.0	32.7	37.4	42.1	46.7	56.1	65.4	-
	75	18.3	24.4	30.4	36.5	42.6	48.7	54.8	60.9	73.1	-	-
	100	21.9	29.2	36.5	43.9	51.2	58.5	65.8	73.1	-	-	-
	150	28.3	37.8	47.2	56.6	66.1	-	-	-	-	-	-
	200	33.7	44.9	56.2	67.4	-	-	-	-	-	-	-
	250	39.4	52.5	65.6	-	-	-	-	-	-	-	-
	300	45.0	60.0	-	-	-	-	-	-	-	-	-

#	Description	Part Number
1	Attachable Plastic Flight	GBI365BPF
2	M10 x 45 Bolt	GBI42BM1045HEX
3	Washer (Not Shown)	GBI42BM10W
4	Nylock Nut	GBI42BM1045NYL
5	Round Link Chain	GBI365BRL
6	Link Connector	GBI365BC

Link Material: Case Hardened Steel  
Flight Material: High Density Polyethylene  
Bolt Material: Carbon Steel



Bolt 'N' Go System Round Link Chain Application on a Conveyor

# SPROCKETS

Our range of replaceable sprockets

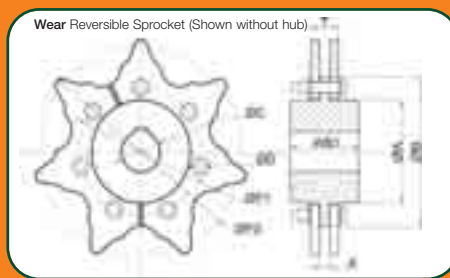
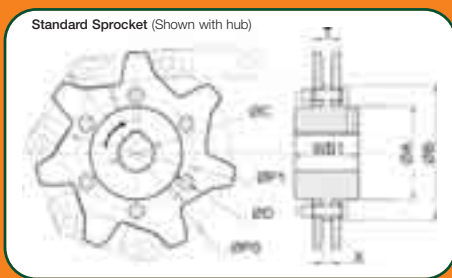


www.go4b.com

- Manufactured from high grade heat treated steel to 57RC (MIN)
- Most sizes from stock
- Hubs machined to size and appropriate bore and keyway size
- Fast delivery

**FREE** Engineering Design Service - Contact 4B

## Sprockets



Chain Ref.	No. of Teeth	ØPS (mm)	ØP1 (mm)	ØA (mm)	ØB (mm)	ØC (mm) Max	ØD (mm)	N No. of holes	T (mm)	X (mm)	WB1 (mm)
<b>GB0102NA</b>	6	204.0	-	105.0	135.0	70	-	-	30	10	83
	7	235.1	146.0	108.0	173.0	70	M12	6	30	10	83
	8	266.5	170.0	144.0	196.0	85	M12	6	30	10	83
	9	298.2	200.0	174.0	232.0	105	M12	6	30	10	83
	10	330.1	241.3	179.0	264.0	105	M12	8	30	10	83
<b>GB0142NA</b>	6	284.0	168.3	136.5	190.5	85	M12	6	46	16	112
	7	327.3	200.0	162.0	234.0	105	M16	6	46	16	112
	8	371.1	241.3	187.3	282.0	115	M20	8	46	16	127
	9	415.2	285.8	240.0	330.0	150	M20	8	46	16	127
	10	459.5	285.8	240.0	330.0	150	M20	8	46	16	127
	11	504.0	368.3	310.0	419.0	170	M20	8	46	16	150
	12	548.6	415.0	345.0	465.0	170	M20	8	46	16	150
	13	593.1	470.0	380.0	521.0	170	M20	8	46	16	150
<b>GB0142HA</b>	14	638.1	470.0	380.0	546.0	170	M20	10	46	16	150
	7	327.3	200.0	162.0	234.0	105	M16	6	69	19	127
	8	371.1	241.3	187.3	282.0	115	M20	8	69	19	150
	9	415.2	285.8	240.0	330.0	150	M20	8	69	19	150
	10	459.5	285.8	310.0	419.0	170	M20	8	69	19	150
	12	548.6	415.0	345.0	465.0	170	M20	8	69	19	150
	13	593.1	470.0	280.0	521.0	170	M20	8	69	19	180
14	638.1	470.0	380.0	546.0	170	M20	10	69	19	180	

We offer any bore size to suit your requirements - please consult our engineers for recommended shaft diameter.

**Split Hubs and Trailers NOW AVAILABLE!**

# TRAILERS

## Our range of trailers

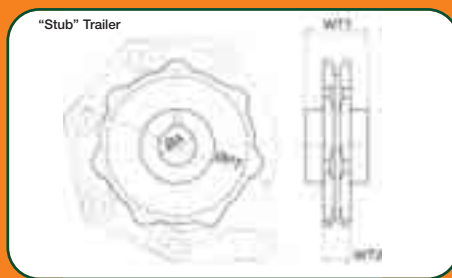
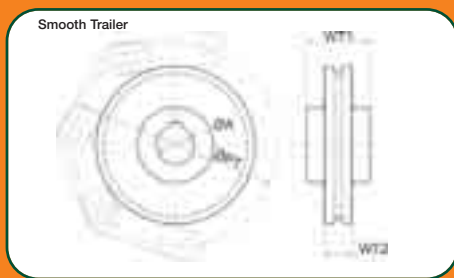
- Heat treated and machined to size with appropriate bore and keyway to customers specification
- Fast delivery



www.go4b.com

**FREE Engineering Design Service - Contact 4B**

### Trailers



Chain Ref.	No. of Teeth (mm)	Max shaft Dia. ØA (mm)	Pitch circle Dia. ØPT (mm)	Rim width Dia. WT1 (mm)	Hub width Dia. WT2 (mm)
<b>GB0102NA</b>	6	65	209.5	57	35
	7	65	235.0	57	35
	8	65	270.1	57	35
	9	65	292.9	57	35
	10	65	327.5	75	35
<b>GB0142NA</b>	6	85	287.4	74	45
	7	85	323.8	74	45
	8	85	371.3	77	45
	9	115	418.6	77	45
	10	115	449.2	77	45
	11	115	518.6	105	45
	12	115	559.4	105	45
<b>GB0142HA</b>	7	115	323.7	110	75
	8	115	370.5	110	75
	9	115	419.3	120	75
	10	115	448.7	120	75
	11	140	515.8	120	75
	13	115	605.0	120	75
<b>GB216NA</b>	6	140	321.0	120	75
	7	140	392.0	120	75
	8	140	448.0	120	75
	10	115	510.0	165	75
	13	115	710.0	165	75

We offer any bore size to suit your requirements - please consult our engineers for recommended shaft diameter.

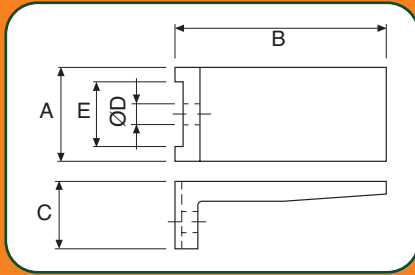
**Split Hubs and Trailers NOW AVAILABLE!**

# ACCESSORIES

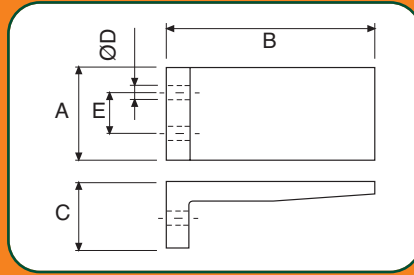
- Easy to install or replace, cutting down the installation and maintenance costs
- Eliminates the need for a bottom liner in the conveyor
- Reduces conveyor noise

## NYLON FLIGHTS FOR SCRAPER CHAINS

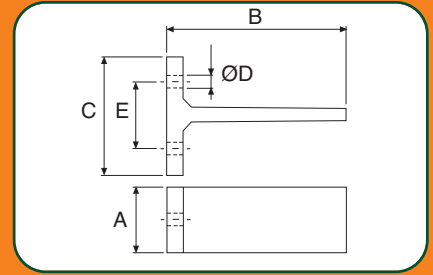
“L” Shape with 1 fixing hole



“L” Shape with 2 fixing holes



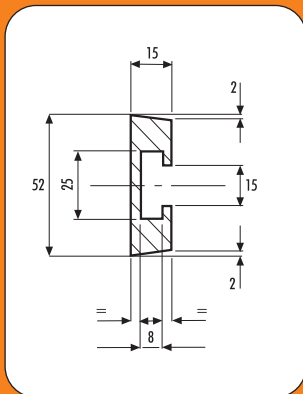
“T” Shape with 2 fixing holes



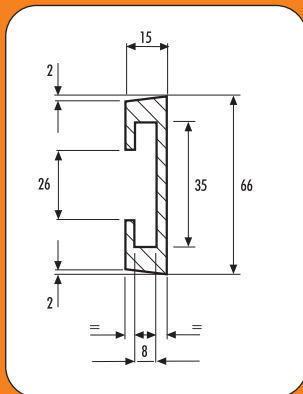
Ref.	A	B	C	D	E	Ref.	A	B	C	D	E	Ref.	A	B	C	D	E
<b>FL45/I</b>	45	From 100 to 200	32	10	30	<b>FL45/I</b>	45	From 100 to 200	26	6	20	<b>FL44</b>	44	From 100 to 200	80	8	45
<b>FL55/I</b>	55	From 100 to 200	32	10	40	<b>FL55/I</b>	55	From 100 to 200	26	8	25	<b>FL54</b>	54	From 100 to 200	80	8	45
<b>FL70/I</b>	70	From 100 to 200	32	12	60	<b>FL70/I</b>	70	From 100 to 200	26	8	30	<b>FL64</b>	64	From 100 to 200	80	8	45



## NYLON FLIGHT SLEEVES FOR 102 NA CHAIN AND 142 NA CHAIN



102 NA



142 NA



## ROUND LINK CHAIN



**ON DEMAND**  
Separate datasheets available

## MISCELLANEOUS CONVEYOR CHAIN



**ON DEMAND**  
Separate datasheets available

# ALSO IN THE 4B RANGE



www.go4b.com



## 4B ELEVATOR BUCKETS & BOLTS

- The world's largest range of elevator buckets
- Pressed seamless steel, stainless steel and welded steel
- High density polyethylene, nylon and polyurethane
- For agricultural and industrial applications
  
- Wide range of elevator bolts all manufactured in-house, including EURO BOLTS, EASIFIT BOLTS, REF 70, FANG BOLTS



## 4B ELEVATOR BELTING

- SBR – Low Stretch / Anti Abrasive
- NBR – Low Stretch / Oil Resistant
- FRASOR – ISO 340/284  
Flame Retardant / Anti-Static / Oil Resistant
- HOT OIL / Fire Retardant
- FDA – White Food Quality
- T150 – High Heat Belt
- STEEL WEB BELTING



## 4B HAZARD MONITORS & LEVEL CONTROLS

- Misalignment Monitors
- Speed Switches
- Bearing Temperature Controls
- Level & Choke Switches
- BUS Systems
- Inductive Sensors



**IECEX**

4B catalogues also available:

- Elevator Buckets
- Bolts & Fasteners
- Belting
- Electronics

Please contact us on:

+44 (0) 113 246 1800

4b-uk@go4b.com



[www.go4b.com](http://www.go4b.com)



#### 4B BRAIME ELEVATOR COMPONENTS

**Head Office**  
Hunslet Road  
Leeds LS10 1JZ  
**UK**  
Tel: +44 (0) 113 246 1800  
Fax: +44 (0) 113 243 5021  
Email: 4b-uk@go4b.com

#### 4B SETEM

9 Route de Corbie  
80800 Lamotte Warfusée  
**FRANCE**  
Tel: +33 (0) 3 22 42 32 26  
Fax: +33 (0) 3 22 42 37 33  
Email: 4b-france@go4b.com

#### 4B COMPONENTS

729 Sabrina Drive  
East Peoria, IL 61611-3578  
**USA**  
Tel: 309-698-5611  
Fax: 309-698-5615  
Email: 4b@go4b.com

#### 4B DEUTSCHLAND

9 Route de Corbie  
80800 Lamotte Warfusée  
**FRANCE**  
Tel: +49 (0) 700-22424091  
Fax: +49 (0) 700-22423733  
Email: 4b-deutschland@go4b.com

#### 4B ASIA PACIFIC

12/6 Moo 7, Bang Na Trad,  
K.M 17 Bangplee, Samutprakam 10540  
**THAILAND**  
Tel: 00 662 750 9602  
Fax: 00 662 750 9601  
Email: 4b-asiapacific@go4b.com

#### 4B SUDAMERICA

Arcos 2967  
1429 Buenos Aires  
**ARGENTINA**  
Tel: (54) 114 702 2364  
Fax: (54) 114 701 5075  
Email: 4b-sudamerica@go4b.com

#### 4B AFRICA

PO Box 1489  
Jukskei Park  
Johannesburg 2153  
**SOUTH AFRICA**  
Tel: +27 (0)11 7044373  
Fax: +27 (0)11 7043464  
Email: 4b-africa@go4b.com

