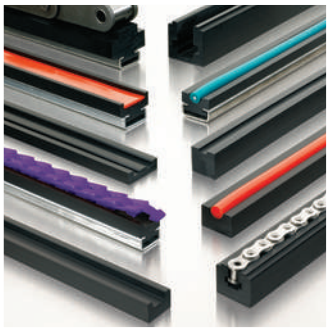
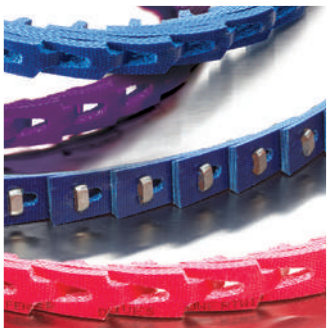








PRODUCT CATALOG | 2017 – 2018



Fenner Drives®

CONVEYING & POWER TRANSMISSION SOLUTIONS



CONVEYING SOLUTIONS. 5

Belting Selection – Round and V Belting . . . . . .6 – 7
Eagle O-Rings. 8
Fabricated Belts. 8
Round Belting & Products . . . . . 8 – 16
V Belting & Products . . . . . 17 – 22
Flat Belting 23
Eagle Taper Edge Bands 23
Eagle Welding Kits 24
Trackstar Guide, Channel & Rails 25
Chain Accessories. . . . . 26 – 28
T-Max Tensioner/Sprocket Assemblies. 28
T-Max Chain Tensioners 29
Engineering Data – Conveying Products . . . . . 30 – 34
Material Properties – Conveying Products . . . . . 35 – 36

POWER TRANSMISSION SOLUTIONS 37

V Belting & Wedge Belting 38
T-Max Belt & Chain Tensioners . . . . . 38 – 40
PowerMax DriveN Pulleys. 40
RotoShield Gearbox Torque Limiters 41
Material Properties – Power Transmission Products 41
Keyless Locking Devices Selection Assistance. . . . . 42 – 43
Trantorque Keyless Bushings. . . . . 44 – 52
B-LOC Keyless Locking Devices . . . . . 53 – 66
Keyless Locking Device Application Examples 67
Engineering Data – Keyless Locking Devices. . . . . 68 – 71
B-LOC Compression Hubs . . . . . 72 – 75
Engineering Data – B-LOC Compression Hubs. 76
B-LOC Shrink Discs . . . . . 77 – 78
B-LOC Split and Half Shrink Discs . . . . . 79 – 83
B-LOC Single Taper Shrink Discs . . . . . 84 – 85
Engineering Data – B-LOC Shrink Discs 86
B-LOC WK Rigid Couplings 87
Engineering Data – B-LOC WK Rigid Couplings. . 88 – 89

POWERMAX COMPOSITE SOLUTIONS 90

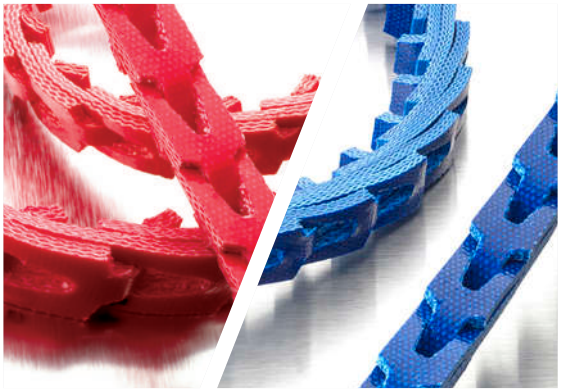
PowerMax Pulleys, Idlers, Sprockets, Carriage Rollers . . 91 – 92
PowerMax Pillow Blocks, Mounting Adapters, Pulleys 93
Engineering Data – Pulleys & Idlers 94
Material Properties – Pulleys & Idlers 94

POWERTWIST

POWERTWISt high performance link belting – the drop-in solution for ALL of your belting applications!

POWER TRANSMISSION

POWERTWIST DRIVE



- Engineered for Power Transmission Applications
- Fast, Easy Installation
- Lasts Longer in Harsh Environments
- Fit and Forget – No Re-tensioning Required
- Reduced Inventory





More Info: Pg 37

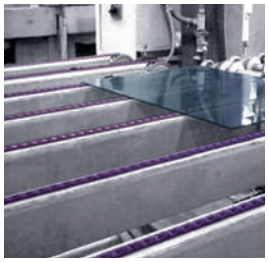
CONVEYING

POWERTWIST MOVE



- Engineered for Conveying Applications
- No Welding Required
- Unaffected by Extreme Conditions
- Simple Inventory Management
- Available with Special Top Surfaces





More Info: Pg 5

CONVEYING SOLUTIONS



POWERTWIST MOVE

POWERTWIST MOVE Conveyor Link Belting

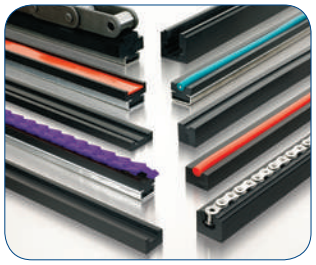
- Install in minutes without dismantling conveyor components – no welding required
- Unaffected by extremes of temperature, water, oils, grease and common solvents
- Whether your application requires reduced contact surface, high grip, abrasion resistance, non-marking, high temperature, oil, and chemical resistance, there's a Fenner Drives link belt to meet your need



EAGLE

Eagle Polyurethane Belting

- Comprehensive range of high quality non-reinforced and reinforced belting in round and V profiles; also available with special top surfaces
- Over 400 FDA compliant products
- Custom design capabilities: special profiles, dual durometer, static dissipative, UV stabilized, tracking features, ridged profiles



Trackstar

Trackstar UHMW Belt & Chain Guides

- Fight friction and reduce costs with long-wearing UHMW belt and chain guides
- Wide range of standard profiles for use in guiding belts, chain and cables
- Available from stock with same-day shipping
- Two-piece guide and channel design simplifies installation and replacement

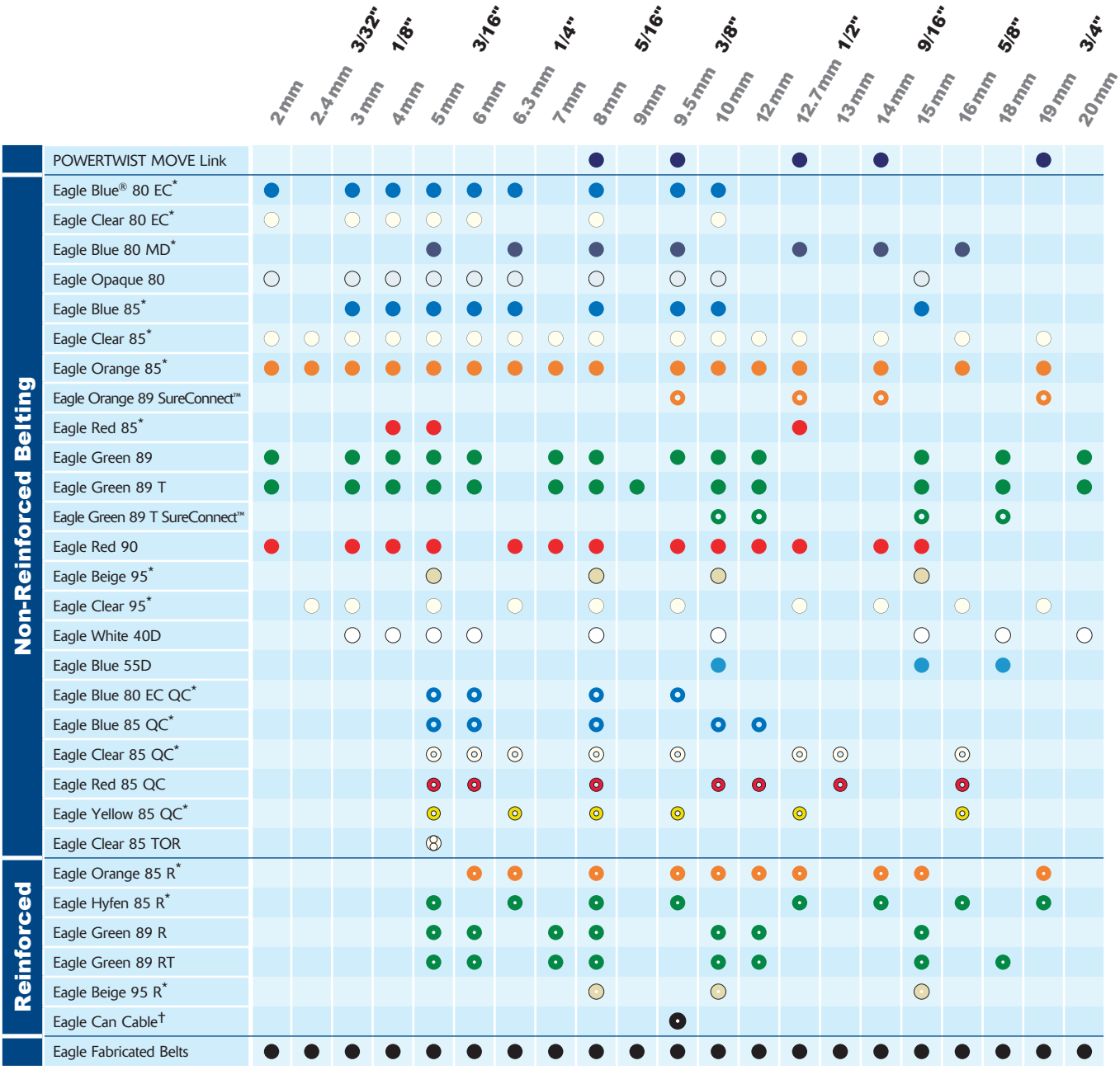


T-Max

T-Max Belt and Chain Tensioners

- Spring loaded tensioners automatically take up the slack – decreasing downtime, reducing operating costs and saving energy
- Constructed from high-quality materials for proven durability in harsh environments
- Wide range of tensioners to handle single and multiple strand belt and chain drives

BELTING SELECTION
ROUND BELTING



Abbreviation Key

CXF	*Co-extruded Flat*
CXR	*Co-extruded Ribbed*
EC	*Regulation (EC) 1935/2004*
LCF	*Low Coefficient of Friction*
MD	*Metal Detectable*
PU	*PolyUrethane*
PVC	*PolyVinyl Chloride*
QC	*Quick-Connect*
R	*Reinforced*
RCS	*Reduced Contact Surface*
RSGT	*Reinforced SuperGrip Top*
RT	*Reinforced Textured*
SGT	*SuperGrip Top*
T	*Textured*
TOR	*Twisted O-Rings*
TPE	*ThermoPlastic Elastomer*

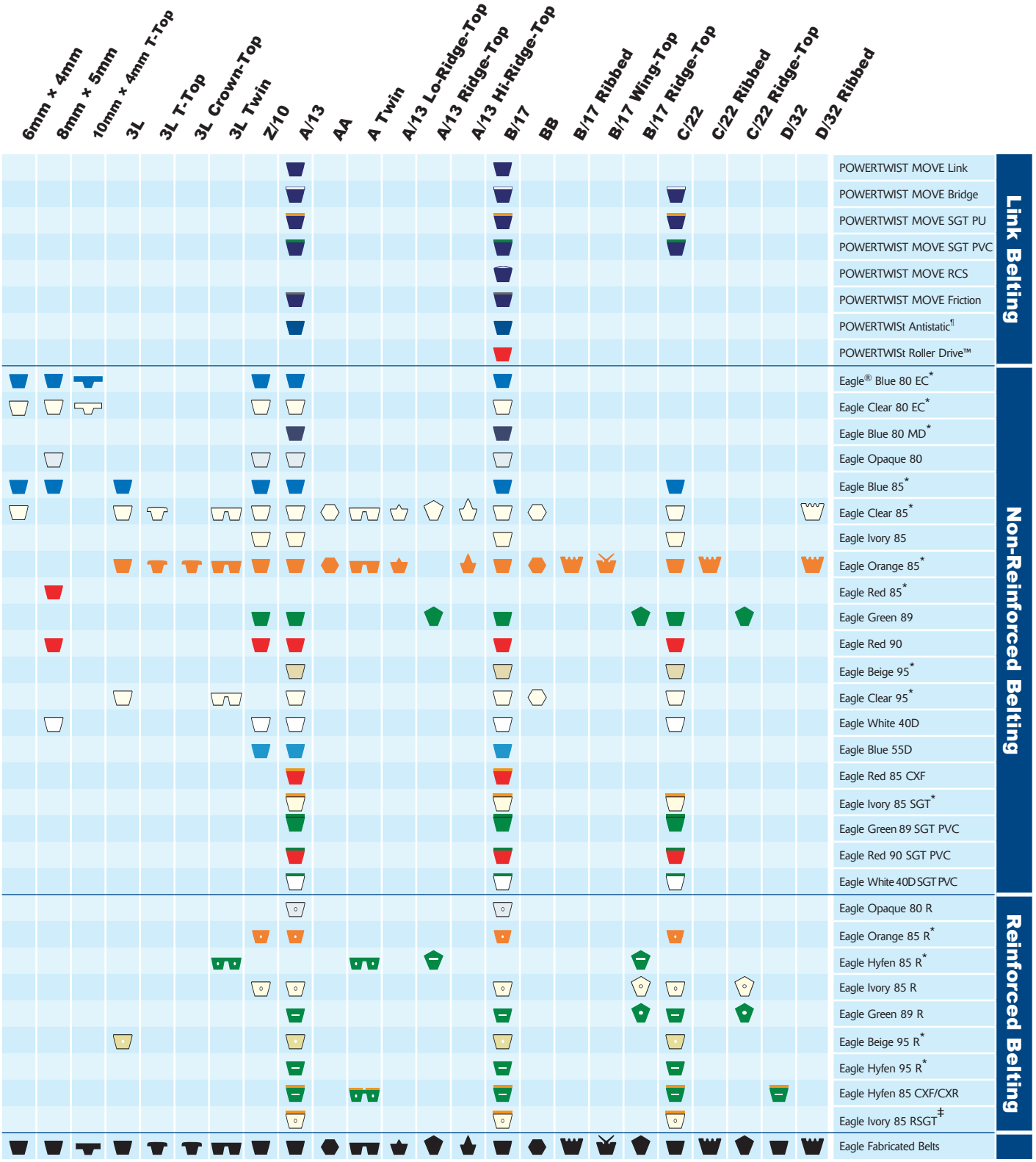
* *These belts are FDA compliant (unless cogged).*

† *Can Cable available in Red 50D LCF, Blue 55D, Blue 55D Aramid, Natural 55D, Green 63D, and Natural 63D.*

‡ *Eagle Ivory 85 SGT and RSGT available with PVC, PU or TPE top surface.*

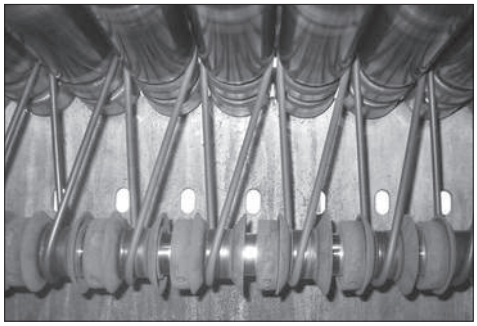
¶ *ISO 1813:1998 inspected and certified by Fenner Drives.*

- *Not all product in-stock, please call for availability.*
- *Some diameters and cross sections may be subject to minimum orders. Dimensions are for reference only.*
- *Flat belting available in Eagle Orange 85. Additional cross sections, colors, and durometers are available.*
- *Contact Applications Engineering at AE@fennerdrives.com for design assistance.*


6mm x 4mm
8mm x 5mm
10mm x 4mm T-Top
3L
3L T-Top
3L Crown-Top
3L Twin
Z/10
A/13
AA
A Twin
A/13 Lo-Ridge-Top
A/13 Ridge-Top
A/13 Hi-Ridge-Top
B/17
BB
B/17 Ribbed
B/17 Wing-Top
B/17 Ridge-Top
C/22
C/22 Ribbed
C/22 Ridge-Top
D/32
D/32 Ribbed
POWERTWIST MOVE Link
POWERTWIST MOVE Bridge
POWERTWIST MOVE SGT PU
POWERTWIST MOVE SGT PVC
POWERTWIST MOVE RCS
POWERTWIST MOVE Friction
POWERTWISt Antistatic¶
POWERTWISt Roller Drive™
Eagle® Blue 80 EC*
Eagle Clear 80 EC*
Eagle Blue 80 MD*
Eagle Opaque 80
Eagle Blue 85*
Eagle Clear 85*
Eagle Ivory 85
Eagle Orange 85*
Eagle Red 85*
Eagle Green 89
Eagle Red 90
Eagle Beige 95*
Eagle Clear 95*
Eagle White 40D
Eagle Blue 55D
Eagle Red 85 CXF
Eagle Ivory 85 SGT*
Eagle Green 89 SGT PVC
Eagle Red 90 SGT PVC
Eagle White 40D SGT PVC
Eagle Opaque 80 R
Eagle Orange 85 R*
Eagle Hyfen 85 R*
Eagle Ivory 85 R
Eagle Green 89 R
Eagle Beige 95 R*
Eagle Hyfen 95 R*
Eagle Hyfen 85 CXF/CXR
Eagle Ivory 85 RSGT‡
Eagle Fabricated Belts
Link Belting
Non-Reinforced Belting
Reinforced Belting

Eagle® O-Rings

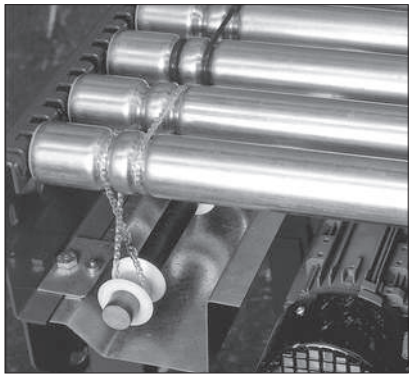
- O-Rings for line shaft, live roller and motion transfer conveyors
- High coefficient of friction
- Elastic with excellent memory
- Popular 1/8", 3/16", 1/4", 5mm and 6mm sizes in stock
- Contact Fenner Drives for part numbers



Twisted O-Rings

- Twisted O-Rings are an ideal fast fit solution for live roller conveyors
- Twisted loop construction packaged with metal hooks. Plastic hooks also available
- No need to dismantle drive components

TWISTED O-RINGS		
Material and Color	Part Number	Dimensions
Eagle Clear 85	5050003	3/16" × 6"
Eagle Clear 85	5050011	3/16" × 10"
Eagle Clear 85	5050015	3/16" × 10-1/2"
Eagle Clear 85	5050012	3/16" × 11"
Eagle Clear 85	5050911	3/16" × 11-1/2"
Eagle Clear 85	5050016	3/16" × 12"
Eagle Clear 85	5050005	3/16" × 12-1/2"
Eagle Clear 85	5050002	3/16" × 12-3/4"
Eagle Clear 85	5050006	3/16" × 12-7/8"
Eagle Clear 85	5050007	3/16" × 13"
Eagle Clear 85	5050017	3/16" × 13-1/4"
Eagle Clear 85	5050009	3/16" × 13-1/2"
Eagle Clear 85	5050014	3/16" × 13-3/4"
Eagle Clear 85	5050008	3/16" × 14"
Eagle Clear 85	5050010	3/16" × 14-1/2"



Eagle Twisted O-Rings easily installed without dismantling line shaft.

50 pieces per box, packaged with metal hooks. Plastic hooks also available.

Eagle Fabricated Belts

Let us do the work for you and take the hassle out of fabricating your own endless belts

- Available in all Eagle Belting colors and durometers (except Can Cable)
- Rapid order turnaround

2mm, 3/32", 3mm, 1/8" Round Cross Sections Round Belting

Round

NON-REINFORCED						Working Load @ Percent Tension								Weight	
		Dimensions Ø		Minimum Pulley Ø		4%		6%		8%		10%			
Material and Color	Part Number*	(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle Blue 80 EC	4928000		2	0.55	14	0.1	0.7	0.2	1	0.3	1.4	0.4	1.7	0.002	0.004
Eagle Clear 80 EC	4927000		2	0.55	14	0.1	0.7	0.2	1	0.3	1.4	0.4	1.7	0.002	0.004
Eagle Opaque 80	L04OP802M		2	0.55	14	0.2	0.9	0.4	1.6	0.5	2.2	0.6	2.7	0.003	0.004
Eagle Orange 85	L04OG852M		2	0.63	16	0.2	0.9	0.3	1.3	0.4	1.8	0.5	2.2	0.003	0.004
Eagle Clear 85	L04C852M		2	0.63	16	0.2	0.9	0.3	1.3	0.4	1.8	0.5	2.2	0.003	0.004
Eagle Green 89	4905402		2	0.71	18	0.3	1.4	0.5	2.4	0.7	3.2	0.9	4	0.003	0.004
Eagle Green 89 Textured	4905302		2	0.71	18	0.2	1	0.4	1.7	0.5	2.3	0.7	2.9	0.003	0.004
Eagle Red 90	4940017		2	0.79	20	1.1	4.7	1.5	6.8	1.9	8.5	2.2	10	0.003	0.004
Eagle Orange 85	1032003	3/32		0.75	19	0.3	1.2	0.4	1.9	0.6	2.5	0.7	3.1	0.004	0.005
Eagle Clear 85	4908003	3/32		0.75	19	0.3	1.2	0.4	1.9	0.6	2.5	0.7	3.1	0.004	0.005
Eagle Clear 95	4907003	3/32		0.94	24	0.5	2.3	0.8	3.4	1	4.3	1.2	5.1	0.004	0.005
Eagle Orange 85	1032004	1/8		1	25	0.5	2.2	0.7	3.3	1	4.4	1.2	5.5	0.006	0.01
Eagle Clear 85	4908006	1/8		1	25	0.5	2.2	0.7	3.3	1	4.4	1.2	5.5	0.006	0.01
Eagle Clear 95	4907006	1/8		1.25	32	0.9	4	1.3	6	1.7	7.7	2.1	9.1	0.007	0.01
Eagle Blue 80 EC	4928001		3	0.83	21	0.4	1.7	0.6	2.5	0.8	3.5	1	4.3	0.005	0.008
Eagle Clear 80 EC	4927001		3	0.83	21	0.4	1.7	0.6	2.5	0.8	3.5	1	4.3	0.005	0.008
Eagle Opaque 80	L04OP803M		3	0.83	21	0.5	2.1	0.8	3.5	1.1	4.9	1.4	6.2	0.006	0.009
Eagle Orange 85	L04OG853M		3	0.94	24	0.4	1.9	0.7	3	0.9	4	1.1	4.9	0.006	0.009
Eagle Clear 85	L04C853M		3	0.94	24	0.4	1.9	0.7	3	0.9	4	1.1	4.9	0.006	0.009
Eagle Blue 85	L04BL853M		3	0.94	24	0.4	1.9	0.7	3	0.9	4	1.1	4.9	0.006	0.009
Eagle Green 89	L04G893MS		3	1.06	27	0.7	3.2	1.2	5.2	1.6	7.2	2	9	0.006	0.009
Eagle Green 89 Textured	4905303		3	1.06	27	0.5	2.3	0.9	3.8	1.2	5.2	1.5	6.5	0.006	0.009
Eagle Red 90	4940020		3	1.18	30	2.4	10.5	3.4	15.1	4.3	19	5	22.2	0.006	0.009
Eagle White 40D	L04BY403M		3	1.42	36	1.9	8.3	2.9	12.8	3.8	16.8	4.5	20.2	0.006	0.008

* *Standard package length 100' / 30.5m*

Dimensions are for reference only.
All listed items subject to a minimum order quantity. Consult factory for restrictions and availability.

4mm, 5mm, 3/16" Round Cross Sections

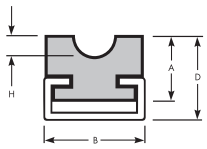
Round Belting

Round

NON-REINFORCED						Working Load @ Percent Tension								Weight	
Material and Color	Part Number*	Dimensions Ø (in)	(mm)	Minimum Pulley Ø (in)	(mm)	4% (lbs)	(N)	6% (lbs)	(N)	8% (lbs)	(N)	10% (lbs)	(N)	lbs/ft	kg/m
Eagle® Blue 80 EC	4928002		4	1.1	28	0.6	2.8	0.9	4.2	1.3	5.6	1.5	6.7	0.009	0.014
Eagle Clear 80 EC	4927002		4	1.1	28	0.6	2.8	0.9	4.2	1.3	5.6	1.5	6.7	0.009	0.014
Eagle Opaque 80	L04OP804		4	1.1	28	0.8	3.7	1.4	6.2	2	8.7	2.5	11	0.01	0.015
Eagle Orange 85	L04OG854		4	1.26	32	0.8	3.4	1.2	5.3	1.6	7	1.9	8.6	0.01	0.015
Eagle Clear 85	L04C854		4	1.26	32	0.8	3.4	1.2	5.3	1.6	7	1.9	8.6	0.01	0.015
Eagle Red 85	L04R8504		4	1.26	32	0.8	3.4	1.2	5.3	1.6	7	2	8.7	0.01	0.015
Eagle Blue 85	L04BL854		4	1.26	32	0.8	3.4	1.2	5.3	1.6	7	2	8.7	0.01	0.015
Eagle Green 89	4905404		4	1.42	36	1.3	5.7	2.1	9.3	2.9	12.8	3.6	16	0.01	0.015
Eagle Green 89 Textured	4905304		4	1.42	36	0.9	4.1	1.5	6.8	2.1	9.3	2.6	11.6	0.01	0.015
Eagle Red 90	4940021		4	1.57	40	4.2	18.6	6	26.8	7.6	33.8	8.9	39.5	0.01	0.015
Eagle White 40D	L04BY404		4	1.89	48	3.3	14.8	5.1	22.8	6.7	29.8	8.1	36	0.01	0.015
Eagle Blue 80 MD	4941100	3/16		1.31	33	0.8	3.5	1.2	5.4	1.6	7	1.9	8.6	0.013	0.02
Eagle Orange 85	1032006	3/16		1.5	38	1.1	4.9	1.7	7.5	2.2	10	2.8	12.3	0.014	0.021
Eagle Clear 85	4908009	3/16		1.5	38	1.1	4.9	1.7	7.5	2.2	10	2.8	12.3	0.014	0.021
Eagle Red 90	4940022	3/16		1.88	48	6	26.5	8.6	38.2	10.8	48.1	12.6	56.2	0.014	0.022
Eagle Clear 95	4907009	3/16		1.88	48	2	9.1	3	13.5	3.9	17.3	4.6	20.6	0.015	0.022
Eagle Clear 85 QC	4934009	.188 × .080†		1.5	38	0.5	2	0.7	3.1	0.9	4.2	1.2	5.2	0.012	0.018
Eagle Yellow 85 QC	4934021	.188 × .080†		1.5	38	0.5	2	0.7	3.1	0.9	4.2	1.2	5.2	0.012	0.018
Eagle Blue 80 EC	4928003		5	1.38	35	0.9	4.2	1.4	6.3	1.9	8.4	2.4	10.6	0.015	0.022
Eagle Clear 80 EC	4927003		5	1.38	35	0.9	4.2	1.4	6.3	1.9	8.4	2.4	10.6	0.015	0.022
Eagle Opaque 80	L04OP805M		5	1.38	35	1.3	5.7	2.2	9.7	3.1	13.6	3.9	17.2	0.016	0.024
Eagle Orange 85	4940100		5	1.57	40	1.2	5.4	1.9	8.3	2.5	11	3.1	13.6	0.016	0.024
Eagle Clear 85	L04C855M		5	1.57	40	1.2	5.3	1.9	8.2	2.5	11	3	13.5	0.016	0.024
Eagle Red 85	L04R855		5	1.57	40	1.2	5.3	1.9	8.2	2.5	11	3	13.5	0.016	0.024
Eagle Blue 85	L04BL855M		5	1.57	40	1.2	5.3	1.9	8.2	2.5	11	3	13.5	0.016	0.024
Eagle Green 89	4905405		5	1.77	45	2	8.9	3.3	14.6	4.5	20.1	5.6	25.1	0.016	0.023
Eagle Green 89 Textured	4905305		5	1.77	45	1.5	6.5	2.4	10.6	3.3	14.6	4.1	18.2	0.016	0.023
Eagle Red 90	L04R9005M		5	1.97	50	6	26.5	8.6	38.2	10.8	48.1	12.6	56.2	0.014	0.022
Eagle Beige 95	L04BE955M		5	1.97	50	5.3	23.6	7.5	33.4	9.4	41.8	11	48.8	0.016	0.024
Eagle White 40D	L04BY405M		5	2.36	60	5.2	23.1	8	35.5	10.5	46.6	12.6	56.2	0.015	0.023
Eagle Blue 80 EC QC	4928020		5 × 2†	1.38	35	0.4	1.8	0.6	2.8	0.8	3.7	1	4.6	0.012	0.018
Eagle Clear 85 QC	L04QC855M		5 × 2†	1.57	40	0.5	2.3	0.8	3.5	1.1	4.7	1.3	5.8	0.013	0.02
Eagle Red 85 QC	L04QR855M		5 × 2†	1.57	40	0.5	2.3	0.8	3.5	1.1	4.7	1.3	5.8	0.013	0.02
Eagle Blue 85 QC	L04QB855M		5 × 2†	1.38	35	0.5	2.3	0.8	3.5	1.1	4.7	1.3	5.8	0.013	0.02
QC Connectors	4935009	25/pack													

REINFORCED						Working Load @ Percent Tension								Weight	
Material and Color	Part Number*	Dimensions Ø (in)	(mm)	Minimum Pulley Ø (in)	(mm)	1% (lbs)	(N)	2% (lbs)	(N)	3% (lbs)	(N)	4% (lbs)	(N)	lbs/ft	kg/m
Eagle Hyfen 85	5218009	3/16		2.06	52	2.8	12.5	6.8	30.2	11.2	49.8	15.5	68.9	0.014	0.021
Eagle Green 89	L04G895MRS		5	1.97	50	1.7	7.4	5	22.2	10.2	45.4	15.7	70.1	0.016	0.023
Eagle Green 89 Textured	4940056		5	1.97	50	2.3	10.2	6.9	30.5	14	62.5	21.7	96.3	0.016	0.023

Trackstar® Round Belt Guides



	Part Numbers				Channel Type	A	B	D	H
	Galvanized Channel	Stainless Steel Channel	Aluminum Channel	UHMW Only					
Belt Guide w/ Mounting Channel	GB1006-3G	GB1006-3S	GB1006-3A	GB1006	C3	0.59	0.79	0.8	0.13

Trackstar Guides are stocked in North America and supplied in 120" standard lengths. Subject to a minimum order quantity. Dimensions are in inches and are for reference only.

* *Standard package length 100' / 30.5m*

† *QC dimensions are shown O.D x I.D. (O.D. is the outer diameter of the belt. I.D. is the inner diameter of the belt.)*

Dimensions are for reference only.
All listed items subject to a minimum order quantity. Consult factory for restrictions and availability.

6mm, 1/4" Round Cross Sections

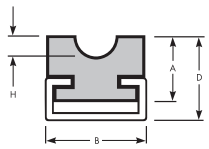
Round Belting


Round

NON-REINFORCED						Working Load @ Percent Tension								Weight	
		Dimensions Ø		Minimum Pulley Ø		4%		6%		8%		10%			
Material and Color	Part Number*	(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle® Blue 80 EC	4928004		6	1.65	42	1.3	5.9	2.1	9.1	2.8	12.3	3.4	15.2	0.021	0.032
Eagle Clear 80 EC	4927004		6	1.65	42	1.3	5.9	2.1	9.1	2.8	12.3	3.4	15.2	0.021	0.032
Eagle Opaque 80	L04OP806M		6	1.65	42	1.9	8.2	3.2	14	4.4	19.6	5.6	24.7	0.023	0.034
Eagle Orange 85	L04OG856M		6	1.89	48	1.7	7.7	2.7	11.8	3.5	15.8	4.4	19.4	0.023	0.034
Eagle Clear 85	L04C856M		6	1.89	48	1.7	7.7	2.7	11.8	3.5	15.8	4.4	19.4	0.023	0.034
Eagle Blue 85	L04BL856M		6	1.89	48	1.7	7.7	2.7	11.9	3.6	15.8	4.4	19.5	0.023	0.034
Eagle Green 89	4905406		6	2.13	54	2.9	12.8	4.7	21	6.5	28.9	8.1	36.1	0.023	0.034
Eagle Green 89 Textured	4905306		6	2.13	54	2.1	9.3	3.4	15.3	4.7	21	5.9	26.2	0.023	0.034
Eagle White 40D	L04BY406M		6	2.83	72	7.5	33.3	11.5	51.2	15.1	67.1	18.2	80.9	0.022	0.033
Eagle Blue 80 EC QC	4928021		6 × 2.5†	1.65	42	0.6	2.5	0.9	3.9	1.2	5.3	1.5	6.6	0.018	0.026
Eagle Clear 85 QC	L04QC856M		6 × 2.5†	1.89	48	0.7	3.2	1.1	5	1.5	6.7	1.9	8.3	0.019	0.028
Eagle Red 85 QC	L04QR856M		6 × 2.5†	1.89	48	0.7	3.2	1.1	5	1.5	6.7	1.9	8.3	0.019	0.028
Eagle Blue 85 QC	L04QB856M		6 × 2.5†	1.89	48	0.7	3.2	1.1	5	1.5	6.7	1.9	8.3	0.019	0.028
Eagle Blue 80 MD	4941101	1/4	6.3	1.75	44	1.3	6	2.1	9.2	2.8	12.3	3.4	15.3	0.024	0.035
Eagle Opaque 80	4940003	1/4	6.3	1.75	44	2.1	9.2	3.5	15.7	4.9	22	6.2	27.7	0.026	0.039
Eagle Orange 85	1032008	1/4	6.3	2	51	1.9	8.6	3	13.3	4	17.7	4.9	21.9	0.026	0.038
Eagle Clear 85	4908012	1/4	6.3	2	51	1.9	8.6	3	13.3	4	17.7	4.9	21.9	0.026	0.038
Eagle Red 90	4940023	1/4	6.3	2.5	64	10.6	47.2	15.3	67.9	19.2	85.5	22.5	100	0.026	0.038
Eagle Clear 95	4907012	1/4	6.3	2.5	64	3.6	16.1	5.4	24	6.9	30.8	8.2	36.6	0.026	0.039
Eagle Clear 85 QC	4934012	.250 × .098†		2	51	0.8	3.7	1.3	5.7	1.7	7.7	2.1	9.5	0.022	0.032
Eagle Yellow 85 QC	4934022	.250 × .098†		2	51	0.8	3.7	1.3	5.7	1.7	7.7	2.1	9.5	0.022	0.032
Eagle Blue 80 EC	4928005	1/4	6.3	1.74	44	1.5	6.6	2.3	10.2	3.1	13.7	3.8	17	0.023	0.035
Eagle Blue 85	L04BL856.3	1/4	6.3	2	51	1.9	8.6	3	13.3	4	17.7	4.9	21.8	0.025	0.037
QC Connectors	L04CON6S	25/pack													

REINFORCED						Working Load @ Percent Tension								Weight	
		Dimensions Ø		Minimum Pulley Ø		1%		2%		3%		4%			
Material and Color	Part Number*	(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle Orange 85	L04OG856MR		6	2.36	60	0.7	3.2	2.5	11	4.8	21.5	6.9	30.8	0.023	0.034
Eagle Green 89	L04G896MSR		6	2.36	60	2.4	10.6	7.2	32	14.7	65.5	22.7	100.9	0.023	0.034
Eagle Green 89 Textured	4940057		6	2.36	60	3.3	14.6	9.9	43.9	20.2	90	31.2	138.8	0.023	0.034
Eagle Orange 85	4940058	1/4	6.3	2.5	64	0.8	3.6	2.8	12.3	5.4	24.1	7.8	34.6	0.026	0.038
Eagle Hyfen 85	5218012	1/4	6.3	2.75	70	3.7	16.5	12.4	55.2	20	89	27.8	123.7	0.026	0.038

Trackstar® Round Belt Guides



	Part Numbers				Channel Type	A	B	D	H
	Galvanized Channel	Stainless Steel Channel	Aluminum Channel	UHMW Only					
Belt Guide w/ Mounting Channel	GB1000-3G	GB1000-3S	GB1000-3A	GB1000	C3	0.59	0.79	0.8	0.16

Trackstar Guides are stocked in North America and supplied in 120" standard lengths. Subject to a minimum order quantity. Dimensions are in inches and are for reference only.

* *Standard package length 100' / 30.5m*

† *QC dimensions are shown O.D x I.D. (O.D. is the outer diameter of the belt. I.D. is the inner diameter of the belt.)*

Dimensions are for reference only.
All listed items subject to a minimum order quantity. Consult factory for restrictions and availability.

7mm, 8mm, 5/16" Round Cross Sections

Round Link Belting

Round

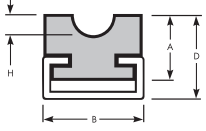
LINK BELTING	Part Number		Cross Section	Minimum Pulley Ø		Max Product Weight w/Idlers		Max Product Weight w/UHMW	
	25'	10m		(in)	(mm)	(lbs)	(kg)	(lbs)	(kg)
POWERTWIST MOVE Belting		0470133	8mm	2.0	51	74	33	25	11
POWERTWIST MOVE Belting	0470125		5/16"	2.0	51	74	33	25	11

Round Belting

NON-REINFORCED						Working Load @ Percent Tension								Weight	
Material and Color	Part Number*	Dimensions Ø (in)	(mm)	Minimum Pulley Ø (in)	(mm)	4% (lbs)	(N)	6% (lbs)	(N)	8% (lbs)	(N)	10% (lbs)	(N)	lbs/ft	kg/m
Eagle® Orange 85	L04OG857M		7	2.2	56	2.4	10.5	3.6	16.2	4.8	21.6	6	26.6	0.031	0.046
Eagle Clear 85	L04C857M		7	2.2	56	2.4	10.5	3.6	16.2	4.8	21.6	6	26.6	0.031	0.046
Eagle Green 89	4999637		7	2.48	63	3.9	17.4	6.4	28.6	8.8	39.3	11	49.1	0.031	0.046
Eagle Green 89 Textured	4905307		7	2.48	63	2.9	12.7	4.7	20.9	6.4	28.7	8.1	35.8	0.031	0.046
Eagle Red 90	L04R907		7	2.76	70	12.9	57.4	18.6	82.7	23.4	104.1	27.4	121.8	0.031	0.047
Eagle Blue 80 MD	4941102	5/16		2.19	56	2.1	9.4	3.3	14.5	4.3	19.3	5.5	24.3	0.037	0.055
Eagle Orange 85	1032010	5/16		2.5	64	3	13.5	4.7	20.8	6.2	27.7	7.7	34.1	0.04	0.059
Eagle Clear 85	4908015	5/16		2.5	64	3	13.5	4.7	20.8	6.2	27.7	7.7	34.1	0.04	0.059
Eagle Clear 95	4907015	5/16		3.13	79	5.7	25.2	8.4	37.4	10.8	48.1	12.9	57.2	0.041	0.061
Eagle Clear 85 QC	4934015	.313 × .126†		2.5	64	1.3	5.7	2	8.9	2.7	11.9	3.3	14.7	0.034	0.05
Eagle Yellow 85 QC	4934023	.313 × .126†		2.5	64	1.3	5.7	2	8.9	2.7	11.9	3.3	14.7	0.034	0.05
Eagle Blue 80 EC	4928006		8	2.2	56	2.4	10.5	3.6	16.2	4.8	21.5	6.1	26.9	0.038	0.056
Eagle Clear 80 EC	4927006		8	2.2	56	2.4	10.5	3.6	16.2	4.8	21.5	6.1	26.9	0.038	0.056
Eagle Opaque 80	L04OP808M		8	2.2	56	3.3	14.7	5.6	25	7.8	34.9	9.9	43.9	0.041	0.061
Eagle Orange 85	L04OG858M		8	2.52	64	3.1	13.7	4.7	21.1	6.3	28.1	7.8	34.7	0.041	0.06
Eagle Clear 85	L04C858		8	2.52	64	3.1	13.7	4.7	21.1	6.3	28.1	7.8	34.7	0.041	0.06
Eagle Blue 85	L04BL858M		8	2.52	64	3.1	13.7	4.7	21.1	6.3	28.1	7.8	34.7	0.041	0.06
Eagle Green 89	L04G898MS		8	2.83	72	5.1	22.8	8.4	37.4	11.5	51.3	14.4	64.1	0.04	0.06
Eagle Green 89 Textured	4905308		8	2.83	72	3.7	16.6	6.1	27.2	8.4	37.3	10.5	46.7	0.04	0.06
Eagle Red 90	4940024		8	3.15	80	16.8	74.9	24.3	107.9	30.5	135.8	35.7	158.9	0.041	0.061
Eagle Beige 95	L04BE958		8	3.15	80	13.6	60.5	19.3	85.7	24.1	107	28.1	125.1	0.042	0.062
Eagle White 40D	L04BY408M		8	3.78	96	13.3	59.2	20.5	91	26.8	119.3	32.3	143.8	0.04	0.059
Eagle Blue 80 EC QC	4928022		8 × 3.2†	2.2	56	1	4.6	1.6	7.1	2.2	9.6	2.7	11.9	0.032	0.047
Eagle Clear 85 QC	L04QC858M		8 × 3.2†	2.52	64	1.3	5.8	2	9	2.7	12.1	3.4	14.9	0.034	0.051
Eagle Red 85 QC	L04QR858M		8 × 3.2†	2.52	64	1.3	5.8	2	9	2.7	12.1	3.4	14.9	0.034	0.051
Eagle Blue 85 QC	L04QB858M		8 × 3.2†	2.52	64	1.3	5.7	2	8.9	2.7	11.9	3.3	14.6	0.034	0.051
QC Connectors	L04CON8S	25/pack													

REINFORCED						Working Load @ Percent Tension								Weight	
Material and Color	Part Number*	Dimensions Ø (in)	(mm)	Minimum Pulley Ø (in)	(mm)	1% (lbs)	(N)	2% (lbs)	(N)	3% (lbs)	(N)	4% (lbs)	(N)	lbs/ft	kg/m
Eagle Green 89	L04G897MRS		7	2.76	70	3.3	14.5	9.8	43.5	20.1	89.2	30.9	137.6	0.031	0.046
Eagle Green 89 Textured	4940050		7	2.76	70	4.5	19.9	13.5	59.9	27.6	122.7	42.5	189.2	0.031	0.046
Eagle Orange 85	4940059	5/16		3.13	79	1.3	5.6	4.3	19.3	8.5	37.6	12.1	54	0.04	0.059
Eagle Hyfen 85	5218015	5/16		3.44	87	3.7	16.5	12.4	55.2	20	89	27.8	123.7	0.04	0.059
Eagle Orange 85	L04OG858R		8	3.15	80	1.3	5.7	4.4	19.6	8.6	38.2	12.3	54.8	0.041	0.06
Eagle Green 89	L04G898MRS		8	3.15	80	4.3	18.9	12.8	56.8	26.2	116.4	40.4	179.5	0.04	0.06
Eagle Green 89 Textured	4940051		8	3.15	80	5.8	26	17.6	78.2	36	160.1	55.5	246.8	0.04	0.06
Eagle Beige 95	L04BE958R		8	3.78	96	3.8	16.9	7	31.1	10.4	46.3	13.6	60.5	0.042	0.062

Trackstar® Round Belt Guides



	Part Numbers				Channel Type	A	B	D	H
	Galvanized Channel	Stainless Steel Channel	Aluminum Channel	UHMW Only					
Belt Guide w/ Mounting Channel	GB1001-3G	GB1001-3S	GB1001-3A	GB1001	C3	0.59	0.79	0.8	0.19

Trackstar Guides are stocked in North America and supplied in 120" standard lengths. Subject to a minimum order quantity. Dimensions are in inches and are for reference only.

* *Standard package length 100' / 30.5m*

† *QC dimensions are shown O.D x I.D. (O.D. is the outer diameter of the belt. I.D. is the inner diameter of the belt.)*

Dimensions are for reference only.
All listed items subject to a minimum order quantity. Consult factory for restrictions and availability.

9mm, 9.5mm, 3/8" Round Cross Sections

Round Link Belting


Round

LINK BELTING	Part Number	Cross Section	Minimum Pulley Ø		Max Product Weight w/Idlers		Max Product Weight w/UHMW	
	25'		(in)	(mm)	(lbs)	(kg)	(lbs)	(kg)
POWERTWIST MOVE Belting	0470225	3/8"	3.0	76	190	86	65	30

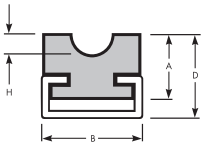
Round Belting

NON-REINFORCED						Working Load @ Percent Tension								Weight	
Material and Color	Part Number*	Dimensions Ø (in)	(mm)	Minimum Pulley Ø (in)	(mm)	4% (lbs)	(N)	6% (lbs)	(N)	8% (lbs)	(N)	10% (lbs)	(N)	lbs/ft	kg/m
Eagle® Green 89 Textured	L04G899		9	3.19	81	4.7	21	7.7	34.4	10.6	47.2	13.3	59	0.051	0.076
Eagle Blue 80 MD	4941103	3/8	9.5	2.63	67	3	13.5	4.7	20.9	6.3	27.9	7.8	34.8	0.054	0.08
Eagle Opaque 80	4940005	3/8	9.5	2.63	67	4.7	20.8	8	35.4	11.1	49.4	14	62.3	0.058	0.087
Eagle Orange 85	1032012	3/8	9.5	3	76	4.4	19.4	6.7	29.9	9	39.9	11.1	49.2	0.057	0.086
Eagle Orange 89 SureConnect	4934145	3/8	9.5	3	76	4.4	19.4	6.7	29.9	9	39.9	11.1	49.2	0.057	0.086
Eagle Clear 85	4908018	3/8	9.5	3	76	4.4	19.4	6.7	29.9	9	39.9	11.1	49.2	0.057	0.086
Eagle Red 90	4940025	3/8	9.5	3.75	95	23.9	106.1	34.4	152.9	43.3	192.4	50.6	225.1	0.058	0.086
Eagle Clear 95	4907018	3/8	9.5	3.75	95	8.2	36.3	12.1	53.9	15.6	69.3	18.5	82.4	0.059	0.088
Eagle Clear 85 QC	4934018	.375 × .152†		3	76	1.8	8.2	2.9	12.7	3.8	17.1	4.7	21	0.048	0.071
Eagle Yellow 85 QC	4934025	.375 × .152†		3	76	1.8	8.2	2.9	12.7	3.8	17.1	4.7	21	0.048	0.071
Eagle Blue 80 EC	4928007	3/8	9.5	2.62	67	3.4	15	5.2	23.2	7	31	8.7	38.7	0.053	0.079
Eagle Blue 85	L04BL859.5M	3/8	9.5	3	76	4.4	19.4	6.7	29.9	9	39.9	11.1	49.2	0.057	0.085
Eagle Green 89	L04G899.5MS	3/8	9.5	3.39	86	7.2	32.1	11.8	52.7	16.3	72.4	20.3	90.4	0.057	0.084
Eagle Blue 80 EC QC	4928023		9.5 × 3.8†	2.64	67	1.5	6.4	2.3	10.1	3	13.5	3.8	16.8	0.045	0.067
QC Connectors	L04CON10S	20/pack													
SureConnect Connectors	4935031	5/pack													
REINFORCED						**Working Load @ Percent Tension**								**Weight**	
Material and Color	Part Number*	Dimensions Ø (in)	(mm)	Minimum Pulley Ø (in)	(mm)	1% (lbs)	(N)	2% (lbs)	(N)	3% (lbs)	(N)	4% (lbs)	(N)	lbs/ft	kg/m
Eagle Orange 85	4940060	3/8	9.5	3.75	95	1.8	8	6.2	27.8	12.2	54.2	17.5	77.8	0.057	0.086
Eagle Hyfen 85	5218018	3/8	9.5	4.13	105	7.3	32.5	26.2	116.5	43.5	193.5	57.4	255.3	0.057	0.086

Can Cable

REINFORCED						Working Load @ Percent Tension								Weight	
Material and Color	Part Number‡	Dimensions Ø (in)	(mm)	Minimum Pulley Ø (in)	(mm)	1% (lbs)	(N)	2% (lbs)	(N)	3% (lbs)	(N)	4% (lbs)	(N)	lbs/ft	kg/m
Blue 55D Can Cable	4816019	3/8	9.5	12	305	18.1	80.4	42.9	190.6	79.4	353.1	118.4	526.5	0.057	0.086
Natural 55D Can Cable	4816018	3/8	9.5	12	305	18.1	80.4	42.9	190.6	79.4	353.1	118.4	526.5	0.057	0.086
Natural 63D Can Cable	4899006	3/8	9.5	12	305	18.1	80.4	42.9	190.6	79.4	353.1	118.4	526.5	0.058	0.087
Red 50D LCF Can Cable	4816020	3/8	9.5	10	254	23.8	105.9	57.8	257.2	104.3	463.8	152.3	677.2	0.058	0.087
Green 63D Can Cable	4817018	3/8	9.5	12	305	18.1	80.4	42.9	190.6	79.4	353.1	118.4	526.5	0.058	0.087
Blue 55D Aramid Can Cable	4899012	3/8	9.5	12	305	41.7	185.5	149.1	663.2	281.1	1250.4	–	–	0.057	0.086

Trackstar® Round Belt Guides



	Part Numbers			Channel Type	A	B	D	H
	Galvanized Channel	Stainless Steel Channel	UHMW Only					
Belt Guide w/ Mounting Channel	GB1002-5G	GB1002-5S	GB1002	C5	0.59	1.1	0.84	0.22

Trackstar Guides are stocked in North America and supplied in 120" standard lengths. Subject to a minimum order quantity. Dimensions are in inches and are for reference only.

* *Standard package length 100' / 30.5m*

† *QC dimensions are shown O.D x I.D. (O.D. is the outer diameter of the belt. I.D. is the inner diameter of the belt.)*

‡ *Standard Can Cable package length 500' reel*

Dimensions are for reference only.
All listed items subject to a minimum order quantity. Consult factory for restrictions and availability.

10mm, 12mm, 12.7mm, 1/2" Round Cross Sections

Round

Round Link Belting

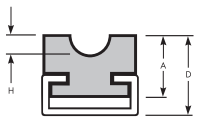
LINK BELTING	Part Number		Cross Section	Minimum Pulley Ø		Max Product Weight w/Idlers		Max Product Weight w/UHMW	
	25'	10m		(in)	(mm)	(lbs)	(kg)	(lbs)	(kg)
POWERTWIST MOVE Belting		0470233	10mm	3.0	76	190	86	65	30
POWERTWIST MOVE Belting	0470325		1/2"	3.0	76	255	116	85	39

Round Belting

NON-REINFORCED						Working Load @ Percent Tension								Weight	
Material and Color	Part Number*	Dimensions Ø (in)	(mm)	Minimum Pulley Ø (in)	(mm)	4% (lbs)	(N)	6% (lbs)	(N)	8% (lbs)	(N)	10% (lbs)	(N)	lbs/ft	kg/m
Eagle® Blue 80 EC	4928008		10	2.76	70	3.7	16.4	5.8	25.6	7.7	34.1	9.6	42.6	0.059	0.088
Eagle Clear 80 EC	4927008		10	2.76	70	3.7	16.4	5.8	25.6	7.7	34.1	9.6	42.6	0.059	0.088
Eagle Opaque 80	L04OP8010M		10	2.76	70	5.1	22.9	8.8	39	12.2	54.5	15.4	68.6	0.064	0.096
Eagle Orange 85	L04OG8510M		10	3.15	80	4.8	21.4	7.4	33	9.9	44	12.2	54.2	0.063	0.094
Eagle Clear 85	L04C8510M		10	3.15	80	4.8	21.4	7.4	33	9.9	44	12.2	54.2	0.063	0.094
Eagle Blue 85	L04BL8510M		10	3.15	80	4.8	21.4	7.4	33	9.9	44	12.2	54.2	0.063	0.094
Eagle Green 89	L04G8910MS		10	3.54	90	8	35.4	13.1	58.2	18	79.9	22.4	99.8	0.063	0.093
Eagle Green 89 Textured	4905310		10	3.54	90	5.8	25.8	9.5	42.3	13.1	58.1	16.3	72.5	0.063	0.093
Eagle Green 89 T SureConnect	4934141		10	3.54	90	5.8	25.8	9.5	42.3	13.1	58.1	16.3	72.5	0.063	0.093
Eagle Red 90	L04R9010M		10	3.94	100	26.3	116.9	37.9	168.4	47.6	211.9	55.7	248	0.064	0.095
Eagle Beige 95	L04BE9510M		10	3.94	100	21.2	94.5	30.1	133.8	37.6	167.2	43.9	195.5	0.065	0.097
Eagle White 40D	L04BY4010M		10	4.72	120	20.8	92.5	32	142.2	41.9	186.5	50.5	224.6	0.062	0.092
Eagle Blue 55D	L04BY5510M		10	5.12	130	39.3	174.6	60.4	268.7	78.5	349.2	93	413.8	0.063	0.094
Eagle Red 85 QC	L04QR8510M		10 × 3.8†	3.15	80	2.1	9.3	3.2	14.4	4.3	19.3	5.3	23.8	0.054	0.081
Eagle Blue 85 QC	L04QB8510M		10 × 3.8†	3.15	80	2.1	9.3	3.2	14.4	4.3	19.3	5.3	23.8	0.054	0.081
Eagle Orange 85	L04OG8512M		12	3.78	96	6.9	30.8	10.7	47.5	14.2	63.3	17.5	78	0.091	0.136
Eagle Clear 85	L04C8512M		12	3.78	96	6.9	30.8	10.7	47.5	14.2	63.3	17.5	78	0.091	0.136
Eagle Green 89	L04G8912MS		12	4.25	108	11.5	51.2	18.9	84.1	26	115.5	32.4	144.3	0.09	0.135
Eagle Green 89 Textured	4905312		12	4.25	108	8.4	37.3	13.8	61.2	18.9	84.1	23.6	105.1	0.091	0.135
Eagle Green 89 T SureConnect	4934142		12	4.25	108	8.4	37.3	13.8	61.2	18.9	84.1	23.6	105.1	0.091	0.135
Eagle Red 90	L04R9012M		12	4.72	120	37.8	168.4	54.5	242.5	68.6	305.2	80.3	357.2	0.092	0.137
Eagle Red 85 QC	L04QR8512M		12 × 5.2†	3.78	96	2.8	12.6	4.4	19.7	5.9	26.3	7.3	32.5	0.074	0.11
Eagle Blue 85 QC	L04QB8512		12 × 5.2†	3.78	96	2.8	12.6	4.4	19.7	5.9	26.3	7.3	32.5	0.074	0.11
Eagle Blue 80 MD	4941105	1/2	12.7	3.5	89	5.4	23.9	8.4	37.3	11.2	49.7	13.8	61.6	0.095	0.142
Eagle Orange 85	1032016	1/2	12.7	4	102	7.8	34.5	12	53.2	16	71	19.6	87.4	0.102	0.152
Eagle Orange 89 SureConnect	4934146	1/2	12.7	4	102	7.8	34.5	12	53.2	16	71	19.6	87.4	0.102	0.152
Eagle Clear 85	4908024	1/2	12.7	4	102	7.8	34.5	12	53.2	16	71	19.6	87.4	0.102	0.152
Eagle Red 90	4940026	1/2	12.7	5	127	42.4	188.6	61.1	271.7	76.9	342	90	400.2	0.103	0.153
Eagle Clear 95	4907024	1/2	12.7	5	127	14.5	64.6	21.6	95.9	27.7	123.1	32.9	146.4	0.105	0.156
Eagle Clear 85 QC	4934024	.500 × .205†		4	102	3.3	14.5	5.1	22.5	6.8	30.2	8.4	37.2	0.085	0.126
Eagle Yellow 85 QC	4934026	.500 × .205†		4	102	3.3	14.5	5.1	22.5	6.8	30.2	8.4	37.2	0.085	0.126
Eagle Red 85	L04R8512.7	1/2	12.7	4	102	7.8	34.5	12	53.2	16	71	19.6	87.4	0.102	0.152
Eagle Blue 85	L04BL8512.7	1/2	12.7	4	102	7.8	34.5	12	53.2	15.9	70.9	19.6	87.4	0.102	0.152
QC Connectors	L04CON10S	20/pack (Use for 3/8" and 10mm)													
QC Connectors	L04CON13S	20/pack (Use for 1/2" and 12-13mm)													
SureConnect Connectors	4935031	5/pack (Use for 10mm)													
SureConnect Connectors	4935032	5/pack (Use for 1/2" and 12mm)													

REINFORCED						Working Load @ Percent Tension								Weight	
Material and Color	Part Number*	Dimensions Ø (in)	(mm)	Minimum Pulley Ø (in)	(mm)	1% (lbs)	(N)	2% (lbs)	(N)	3% (lbs)	(N)	4% (lbs)	(N)	lbs/ft	kg/m
Eagle Orange 85	L04OG8510MR		10	3.94	100	2	8.8	6.9	30.6	13.4	59.7	19.3	85.7	0.063	0.094
Eagle Green 89	L04G8910MRS		10	3.94	100	6.6	29.5	20	88.8	40.9	181.9	63.1	280.5	0.063	0.093
Eagle Green 89 Textured	4940052		10	3.94	100	9.1	40.6	27.5	122.1	56.2	250.1	86.7	385.6	0.063	0.093
Eagle Beige 95	L04BE9510R		10	4.72	120	6	26.7	11	48.9	16.2	72.1	21.2	94.3	0.065	0.097
Eagle Orange 85	L04OG8512R		12	4.72	120	2.9	12.7	9.9	44.1	19.3	85.9	27.7	123.4	0.091	0.136
Eagle Green 89	L04G8912MRS		12	4.72	120	9.6	42.6	28.8	127.9	58.9	262	90.8	404	0.09	0.135
Eagle Green 89 Textured	4940053		12	4.72	120	13.2	58.5	39.5	175.9	81	360.2	124.9	555.4	0.09	0.135
Eagle Orange 85	4940061	1/2	12.7	5	127	3.2	14.2	11.1	49.4	21.6	96.3	31.1	138.3	0.102	0.152
Eagle Hyfen 85	5218024	1/2	12.7	5.5	140	7.3	32.5	26.2	116.5	43.5	193.5	57.4	255.3	0.102	0.152

Trackstar® Round Belt Guides



	Part Numbers			Channel Type	A	B	D	H
	Galvanized Channel	Stainless Steel Channel	UHMW Only					
Belt Guide w/ Mounting Channel	GB1003-5G	GB1003-5S	GB1003	C5	0.59	1.1	0.84	0.28

Trackstar Guides are stocked in North America and supplied in 120" standard lengths. Subject to a minimum order quantity. Dimensions are in inches and are for reference only.

13mm, 14mm 9/16" Round Cross Sections


Round

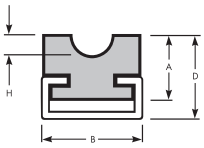
Round Link Belting

LINK BELTING	Part Number		Cross Section	Minimum Pulley Ø		Max Product Weight w/Idlers		Max Product Weight w/UHMW	
	25'	10m		(in)	(mm)	(lbs)	(kg)	(lbs)	(kg)
POWERTWIST MOVE Belting		0470333	13mm	3.0	76	255	116	85	39
POWERTWIST MOVE Belting		0470433	14mm	5.5	140	450	204	155	70
POWERTWIST MOVE Belting	0470425		9/16"	5.5	140	450	204	155	70

Round Belting

NON-REINFORCED						Working Load @ Percent Tension								Weight	
		Dimensions Ø		Minimum Pulley Ø		4%		6%		8%		10%			
Material and Color	Part Number*	(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle® Clear 85 QC	L04QC8513		13 x 5.2†	4.09	104	3.5	15.3	5.4	23.8	7.2	31.9	8.9	39.4	0.09	0.134
Eagle Red 85 QC	L04QR8513M		13 x 5.2†	4.09	104	3.5	15.3	5.4	23.8	7.2	31.9	8.9	39.4	0.09	0.134
Eagle Blue 80 MD	4941106	9/16		3.94	100	6.9	30.6	10.6	47.1	14.2	63	17.6	78.2	0.121	0.18
Eagle Orange 85	1032018	9/16		4.5	114	9.8	43.7	15.1	67.3	20.2	89.8	24.9	110.6	0.129	0.192
Eagle Orange 89 SureConnect	4934147	9/16		4.5	114	9.8	43.7	15.1	67.3	20.2	89.8	24.9	110.6	0.129	0.192
Eagle Clear 85	4908027	9/16		4.5	114	9.8	43.7	15.1	67.3	20.2	89.8	24.9	110.6	0.129	0.192
Eagle Red 90	4940036	9/16		5.63	143	53.7	238.6	77.3	343.8	97.3	432.7	113.8	506.3	0.13	0.194
Eagle Clear 95	4907027	9/16		5.63	143	18.4	81.7	27.3	121.3	35	155.8	41.7	185.3	0.133	0.197
QC Connectors	L04CON13S	20/pack													
SureConnect Connectors	4935033	5/pack													
REINFORCED						**Working Load @ Percent Tension**								**Weight**	
		Dimensions Ø		Minimum Pulley Ø		1%		2%		3%		4%			
Material and Color	Part Number*	(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle Orange 85	4940062	9/16		5.63	143	4.1	18	14	62.5	27.4	121.8	39.3	174.9	0.129	0.192
Eagle Hyfen 85	5218027	9/16		6.19	157	16.7	74.3	36.6	162.8	58	258	75.8	337.2	0.129	0.192

Trackstar® Round Belt Guides



	Part Numbers			Channel Type	A	B	D	H
	Galvanized Channel	Stainless Steel Channel	UHMW Only					
Belt Guide w/ Mounting Channel	GB1004-5G	GB1004-5S	GB1004	C5	0.59	1.1	0.84	0.32

Trackstar Guides are stocked in North America and supplied in 120" standard lengths. Subject to a minimum order quantity. Dimensions are in inches and are for reference only.

* *Standard package length 100' / 30.5m*

† *QC dimensions are shown O.D x I.D. (O.D. is the outer diameter of the belt. I.D. is the inner diameter of the belt.)*

Dimensions are for reference only.
All listed items subject to a minimum order quantity. Consult factory for restrictions and availability.

15mm, 16mm, 5/8" Round Cross Sections

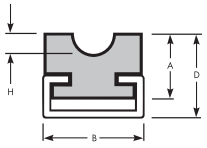
Round Belting

Round

NON-REINFORCED						Working Load @ Percent Tension								Weight	
Material and Color	Part Number*	Dimensions Ø (in)	(mm)	Minimum Pulley Ø (in)	(mm)	4% (lbs)	(N)	6% (lbs)	(N)	8% (lbs)	(N)	10% (lbs)	(N)	lbs/ft	kg/m
Eagle® Opaque 80	L04OP8015M		15	4.13	105	11.6	51.6	19.7	87.7	27.6	122.6	34.7	154.4	0.145	0.216
Eagle Blue 85	L04BL8515		15	4.72	120	10.8	48.1	16.7	74.2	22.2	99	27.4	121.9	0.142	0.212
Eagle Green 89	L04G8915MS		15	5.31	135	18	80	29.5	131.4	40.6	180.5	50.7	225.5	0.141	0.21
Eagle Green 89 Textured	4905315		15	5.31	135	13.1	58.1	21.5	95.4	29.5	131.1	36.8	163.8	0.141	0.21
Eagle Green 89 T SureConnect	4934143		15	5.31	135	13.1	58.1	21.5	95.4	29.5	131.1	36.8	163.8	0.141	0.21
Eagle Red 90	4999315		15	5.91	150	59.1	262.9	85.2	378.8	107.2	476.8	125.4	557.9	0.144	0.214
Eagle Beige 95	L04BE9515M		15	5.91	150	47.8	212.5	67.7	301.2	84.6	376.2	98.9	440	0.146	0.217
Eagle White 40D	L04BY4015		15	7.09	180	46.8	208.1	71.9	319.9	94.3	419.6	113.6	505.4	0.139	0.207
Eagle Blue 55D	L04BY5515		15	7.68	195	88.3	392.9	135.9	604.6	176.7	785.8	209.3	931	0.142	0.212
Eagle Blue 80 MD	4941107	5/8		4.38	111	8.4	37.5	13.1	58.2	17.4	77.6	21.7	96.4	0.149	0.222
Eagle Orange 85	1032020	5/8		5	127	12.1	53.9	18.7	83.1	24.9	110.8	30.7	136.5	0.16	0.238
Eagle Clear 85	4908030	5/8		5	127	12.1	53.9	18.7	83.1	24.9	110.8	30.7	136.5	0.16	0.238
Eagle Clear 95	4907030	5/8		6.25	159	22.7	100.9	33.7	149.8	43.2	192.3	51.4	228.7	0.164	0.243
Eagle Clear 85 QC	4934030	.625 × .273†		5	127	5	22.1	7.7	34.2	10.3	45.9	12.7	56.6	0.129	0.192
Eagle Yellow 85 QC	4934020	.625 × .273†		5	127	5	22.1	7.7	34.2	10.3	45.9	12.7	56.6	0.129	0.192
Eagle Clear 85 QC	L04QC8516M		16 × 6.8†	5.04	128	5.1	22.7	7.9	35.2	10.6	47.2	13.1	58.2	0.133	0.198
Eagle Red 85 QC	L04QR8516M		16 × 6.8†	5.04	128	5.1	22.7	7.9	35.2	10.6	47.2	13.1	58.2	0.133	0.198
QC Connectors	4935030	15/pack													
SureConnect Connectors	4935033	5/pack													

REINFORCED						Working Load @ Percent Tension								Weight	
Material and Color	Part Number*	Dimensions Ø (in)	(mm)	Minimum Pulley Ø (in)	(mm)	1% (lbs)	(N)	2% (lbs)	(N)	3% (lbs)	(N)	4% (lbs)	(N)	lbs/ft	kg/m
Eagle Orange 85	L04OG8515MR		15	5.91	150	4.5	19.9	15.5	68.9	30.2	134.3	43.3	192.8	0.142	0.212
Eagle Green 89	L04G8915MRS		15	5.91	150	15	66.5	44.9	199.9	92	409.3	141.9	631.2	0.141	0.21
Eagle Green 89 Textured	4940054		15	5.91	150	20.6	91.5	61.8	274.8	126.5	562.8	195.1	867.9	0.141	0.21
Eagle Beige 95	L04BE9515R		15	7.09	180	13.5	60.1	24.7	109.9	36.5	162.4	47.8	212.6	0.146	0.217
Eagle Hyfen 85	5218030	5/8		6.88	175	16.7	74.3	36.6	162.8	58	258	75.8	337.2	0.16	0.238

Trackstar® Round Belt Guides



	Part Numbers			Channel Type	A	B	D	H
	Galvanized Channel	Stainless Steel Channel	UHMW Only					
Belt Guide w/ Mounting Channel	GB1005-5G	GB1005-5S	GB1005	C5	0.71	1.1	0.94	0.35

Trackstar Guides are stocked in North America and supplied in 120" standard lengths. Subject to a minimum order quantity. Dimensions are in inches and are for reference only.

* *Standard package length 100' / 30.5m*

† *QC dimensions are shown O.D x I.D. (O.D. is the outer diameter of the belt. I.D. is the inner diameter of the belt.)*

Dimensions are for reference only.
All listed items subject to a minimum order quantity. Consult factory for restrictions and availability.

18mm, 19mm, 20mm, 3/4" Round Cross Sections


Round

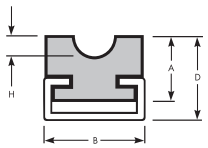
Round Link Belting

LINK BELTING	Part Number		Cross Section	Minimum Pulley Ø		Max Product Weight w/Idlers		Max Product Weight w/UHMW	
	25'	10m		(in)	(mm)	(lbs)	(kg)	(lbs)	(kg)
POWERTWIST MOVE Belting		0470533	19mm	8.5	216	360	163	120	54
POWERTWIST MOVE Belting	0470525		3/4"	8.5	216	360	163	120	54

Round Belting

NON-REINFORCED	Part Number*	Dimensions Ø		Minimum Pulley Ø		Working Load @ Percent Tension								Weight	
						4%		6%		8%		10%			
Material and Color		(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle® Green 89	L04G8918MS		18	6.38	162	25.9	115.2	42.5	189.2	58.4	259.9	73	324.6	0.203	0.303
Eagle Green 89 Textured	4940091		18	6.38	162	18.8	83.7	30.9	137.5	42.4	188.8	53	235.9	0.203	0.303
Eagle Green 89 T SureConnect	4934144		18	6.38	162	18.8	83.7	30.9	137.5	42.4	188.8	53	235.9	0.203	0.303
Eagle White 40D	L04BY4018		18	8.5	216	67.4	299.7	103.6	460.7	135.8	604.2	163.6	727.8	0.2	0.298
Eagle Blue 55D	L04BY5518		18	9.21	234	127.2	565.8	195.7	870.6	254.4	1131.6	301.4	1340.7	0.205	0.305
Eagle Orange 85	1032024	3/4		6	152	17.5	77.7	26.9	119.6	35.9	159.6	44.2	196.6	0.23	0.342
Eagle Orange 89 SureConnect	4934148	3/4		6	152	17.5	77.7	26.9	119.6	35.9	159.6	44.2	196.6	0.23	0.342
Eagle Clear 85	4908033	3/4		6	152	17.5	77.7	26.9	119.6	35.9	159.6	44.2	196.6	0.23	0.342
Eagle Clear 95	4907033	3/4		7.5	191	32.7	145.3	48.5	215.7	62.3	277	74	329.4	0.236	0.351
SureConnect Connectors	4935034	5/pack (Use for 18mm and 3/4")													
REINFORCED	**Part Number***	**Dimensions Ø**		**Minimum Pulley Ø**		**Working Load @ Percent Tension**								**Weight**	
						1%		2%		3%		4%			
Material and Color		(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle Green 89 Textured	4940055		18	7.09	180	29.6	131.7	89	395.7	182.2	810.5	280.9	1249.7	0.203	0.303
Eagle Orange 85	4940064	3/4		7.5	191	7.2	32.1	25	111.1	48.7	216.6	69.9	311	0.23	0.342
Eagle Hyfen 85	5218033	3/4		8.25	210	16.7	74.3	36.6	162.8	58	258	75.8	337.2	0.23	0.342

Trackstar® Round Belt Guides



	Part Numbers			Channel Type	A	B	D	H
	Galvanized Channel	Stainless Steel Channel	UHMW Only					
Belt Guide w/ Mounting Channel	GB1007-5G	GB1007-5S	GB1007	C5	1.02	1.1	1.26	0.41

Trackstar Guides are stocked in North America and supplied in 120" standard lengths. Subject to a minimum order quantity. Dimensions are in inches and are for reference only.

Round Belting — 20mm

NON-REINFORCED	Part Number*	Dimensions Ø		Minimum Pulley Ø		Working Load @ Percent Tension								Weight	
						4%		6%		8%		10%			
Material and Color		(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle Green 89	L04G8920MS		20	7.09	180	32	142.3	52.5	233.5	72.1	320.8	90.1	400.8	0.251	0.374
Eagle Green 89 Textured	4940092		20	7.09	180	23.2	103.4	38.1	169.7	52.4	233.1	65.5	291.2	0.251	0.374
Eagle White 40D	L04BY4020		20	9.45	240	83.2	370	127.9	568.7	167.7	745.9	202	898.6	0.247	0.368

* *Standard package length 100' / 30.5m*

† *w (width) is the widest part of the belt. h (height) is the tallest part of the belt, including the belting top surface.*

Dimensions are for reference only.

All listed items subject to a minimum order quantity. Consult factory for restrictions and availability.

6x4, 8x5, 10x4mm Cross Section

V Belting



NON-REINFORCED			Dimensions w × h†		Minimum Pulley Ø		Working Load @ Percent Tension								Weight	
							4%		6%		8%		10%			
Material and Color	Cross Section	Part Number*	(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle® Blue 80 EC	6mm × 4mm	4928009		6.5 × 4	1.1	28	0.8	3.7	1.5	6.7	2.1	9.4	2.7	12.1	0.015	0.023
Eagle Clear 80 EC	6mm × 4mm	4927009		6.5 × 4	1.1	28	0.8	3.7	1.5	6.7	2.1	9.4	2.7	12.1	0.015	0.023
Eagle Clear 85	6mm × 4mm	L04C850604		6.5 × 4	1.26	32	1	4.5	1.7	7.6	2.4	10.7	3	13.5	0.016	0.024
Eagle Blue 85	6mm × 4mm	L04BL850604		6.5 × 4	1.25	32	1	4.5	1.7	7.6	2.3	10.7	3	13.5	0.016	0.024
Eagle Blue 80 EC	8mm × 5mm	4928010		8 × 5	1.38	35	1.3	5.7	2.4	10.5	3.3	14.6	4.2	18.9	0.024	0.035
Eagle Clear 80 EC	8mm × 5mm	4927010		8 × 5	1.38	35	1.3	5.7	2.4	10.5	3.3	14.6	4.2	18.9	0.024	0.035
Eagle Opaque 80	8mm × 5mm	4940006		8 × 5	1.38	35	1.6	7.1	3.3	14.7	5.2	23.1	7	31.2	0.026	0.039
Eagle Red 85	8mm × 5mm	L04R8585M		8 × 5	1.57	40	1.5	6.8	2.6	11.5	3.6	16.2	4.6	20.5	0.025	0.038
Eagle Blue 85	8mm × 5mm	L04BL8585M		8 × 5	1.57	40	1.5	6.8	2.6	11.5	3.6	16.2	4.6	20.5	0.025	0.038
Eagle Red 90	8mm × 5mm	4940027		8 × 5	2	50	10.8	48.1	15.6	69.3	19.6	87.2	22.9	102	0.026	0.039
Eagle White 40D	8mm × 5mm	L04BY400805		8 × 5	2.36	60	6	26.5	10.2	45.3	14	62.4	17.3	77.2	0.025	0.037
Eagle Blue 80 EC	10mm × 4mm T-Top	4928011		10 × 4	1.1	28	1	4.6	1.9	8.5	2.7	11.8	3.4	15.3	0.019	0.028
Eagle Clear 80 EC	10mm × 4mm T-Top	4927011		10 × 4	1.1	28	1	4.6	1.9	8.5	2.7	11.8	3.4	15.3	0.019	0.028

Z/10, 3L Cross Section

Link V Belting



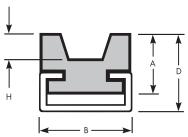
LINK BELTING	Part Number		Cross Section	Minimum Pulley Ø		Max Product Weight w/Idlers		Max Product Weight w/UHMW	
	25'	10m		(in)	(mm)	(lbs)	(kg)	(lbs)	(kg)
POWERTWIST MOVE Belting	0470625	0470633	Z/10		45	230	105	78	36

V Belting



NON-REINFORCED			Dimensions w × h†		Minimum Pulley Ø		Working Load @ Percent Tension								Weight	
							4%		6%		8%		10%			
Material and Color	Cross Section	Part Number*	(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle Orange 85	3L	1032030	3/8 × 7/32		1.75	44	2.1	9.5	3.6	16.1	5.1	22.6	6.4	28.6	0.035	0.053
Eagle Clear 85	3L	4912063	3/8 × 7/32		1.75	44	2.2	9.7	3.7	16.5	5.2	23.1	6.6	29.3	0.035	0.053
Eagle Blue 85	3L	L04BL853L	3/8 × 7/32		1.75	45	2.1	9.5	3.6	16.1	5.1	22.6	6.4	28.6	0.035	0.053
Eagle Clear 95	3L	4911063	3/8 × 7/32		2.19	56	4	17.9	6.6	29.2	8.8	39.3	10.8	47.9	0.036	0.054
Eagle Orange 85	3L Crown-Top	1032032	9/16 × 1/4		2	51	3	13.2	5	22.4	7.1	31.5	9	39.9	0.049	0.073
Eagle Orange 85	3L T-Top	1032031	9/16 × 19/64		2.38	60	3.5	15.7	6	26.5	8.4	37.2	10.6	47.2	0.058	0.087
Eagle Clear 85	3L T-Top	4912064	9/16 × 19/64		2.38	60	3.6	16.1	6.1	27.2	8.6	38.2	10.9	48.3	0.058	0.087
Eagle Orange 85	3L Twin	1032033	15/16 × 17/64		2.13	54	5.9	26.2	10	44.5	14	62.4	17.8	79	0.098	0.145
Eagle Clear 85	3L Twin	4912065	15/16 × 17/64		2.13	54	6	26.9	10.2	45.6	14.4	63.9	18.2	81	0.098	0.145
Eagle Clear 95	3L Twin	4911065	15/16 × 17/64		2.5	64	11.1	49.5	18.1	80.6	24.4	108.5	29.7	132.2	0.1	0.149
Eagle Blue 80 EC	Z/10	4928012		10 × 6.5	1.79	46	2.1	9.2	3.8	16.8	5.3	23.5	6.8	30.3	0.038	0.057
Eagle Clear 80 EC	Z/10	4927012		10 × 6.5	1.79	46	2.1	9.2	3.8	16.8	5.3	23.5	6.8	30.3	0.038	0.057
Eagle Opaque 80	Z/10	4940008		10 × 6.5	1.79	46	2.5	11.3	5.2	23.3	8.3	36.8	11.1	49.5	0.041	0.062
Eagle Orange 85	Z/10	4940114		10 × 6.5	1.88	52	2.5	10.9	4.2	18.5	5.8	26	7.4	32.9	0.041	0.061
Eagle Clear 85	Z/10	4940118		10 × 6.5	2.05	52	2.5	11.2	4.3	19	6	26.6	7.6	33.7	0.041	0.061
Eagle Ivory 85	Z/10	L04I85Z		10 × 6.5	2.05	52	6.9	30.8	10.6	47	13.9	61.7	16.8	74.8	0.04	0.06
Eagle Blue 85	Z/10	L04BL85Z		10 × 6.5	1.88	52	2.5	10.8	4.2	18.3	5.8	25.6	7.4	32.5	0.041	0.061
Eagle Green 89	Z/10	L04G89Z		10 × 6.5	2.3	59	12.4	55.3	19	84.5	24.9	110.6	30	133.4	0.04	0.06
Eagle Red 90	Z/10	4940028		10 × 6.5	2.5	65	16.9	75.2	24.3	108.3	30.6	136.3	35.9	159.5	0.041	0.061
Eagle White 40D	Z/10	L04BY40Z		10 × 6.5	3.07	78	9.4	41.9	16.1	71.6	22.2	98.7	27.4	122	0.039	0.058
Eagle Blue 55D	Z/10	L04BY55Z		10 × 6.5	3.33	85	37.1	165.2	54.6	242.8	68.5	304.8	79.3	352.9	0.041	0.061
REINFORCED							**Working Load @ Percent Tension**								**Weight**	
							1%		2%		3%		4%			
Material and Color	Cross Section	Part Number*	(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle Beige 95	3L	4940070	3/8 × 7/32		2.63	67	11.4	50.5	26.5	117.9	38.9	172.9	47.8	212.8	0.036	0.054
Eagle Hyfen 85	3L Twin	5299010	15/16 × 17/64		2.92	74	15.5	68.8	21.8	96.8	28.4	126.4	34.7	154.4	0.095	0.142
Eagle Orange 85	Z/10	4940065		10 × 6.5	2.38	65	2.4	10.7	5.7	25.3	9.1	40.4	12	53.3	0.04	0.06
Eagle Ivory 85	Z/10	L04I85ZR		10 × 6.5	2.56	65	3.1	13.7	9.3	41.3	14.8	65.7	18.8	83.8	0.04	0.06

Trackstar® V Belt Guides



Belt Section	Part Numbers				Channel Type	A	B	D	H
	Galvanized Channel	Stainless Steel Channel	Aluminum Channel	UHMW Only					
V Belt Guide with Mounting Channel	GB2000-3G	GB2000-3S	GB2000-3A	GB2000	C3	0.59	0.79	0.8	0.16

Trackstar Guides are stocked in North America and supplied in 120" standard lengths. Subject to a minimum order quantity. Dimensions are in inches and are for reference only.

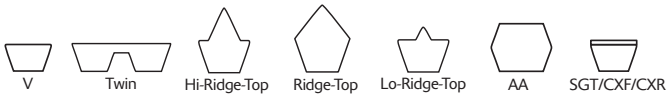
A Cross Section

Link V Belting



LINK BELTING	Part Number				Cross Section	Minimum Pulley Ø		Max Product Weight w/Idlers		Max Product Weight w/UHMW	
	25'	100'/30.5m	10m	30m		(in)	(mm)	(lbs)	(kg)	(lbs)	(kg)
POWERTWIST MOVE Belting	0470725		0470733		A	3.0	76	340	154	115	52
POWERTWIST MOVE SuperGrip Top PU		0430101			A	3.0	76	200	91	65	30
POWERTWIST MOVE SuperGrip Top PVC		0409100			A	3.0	76	200	91	65	30
POWERTWIST MOVE Friction Top®		0408081			A	2.5	64	200	91	65	30
POWERTWIST MOVE Bridge Top™		0499020			A	3.0	76	340	154	115	52
POWERTWISt Antistatic	0408505	0408501	040850010	0408500	A	3.0	76	340	154	115	52

V Belting

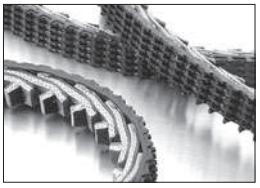


NON-REINFORCED							Working Load @ Percent Tension								Weight	
Material and Color	Cross Section	Part Number*	Dimensions w × h† (in)	(mm)	Minimum Pulley Ø (in)	(mm)	4% (lbs)	(N)	6% (lbs)	(N)	8% (lbs)	(N)	10% (lbs)	(N)	lbs/ft	kg/m
Eagle® Blue 80 EC	A/13	4928013		13 × 8	2.2	56	3.4	14.9	6.1	27.3	8.6	38.2	11.1	49.3	0.062	0.092
Eagle Clear 80 EC	A/13	4927013		13 × 8	2.2	56	3.4	14.9	6.1	27.3	8.6	38.2	11.1	49.3	0.062	0.092
Eagle Blue 80 MD	A/13	4941108	1/2 × 5/16	13 × 8	2.2	56	2.8	12.6	4.8	21.5	6.8	30.4	8.8	38.9	0.061	0.091
Eagle Opaque 80	A/13	4940009	1/2 × 5/16	13 × 8	2.2	56	4.1	18.1	8.4	37.3	13.2	58.8	17.8	79.2	0.066	0.099
Eagle Orange 85	A/13	1032038	1/2 × 5/16	13 × 8	2.5	64	4	17.6	6.7	29.9	9.4	41.9	11.9	53.1	0.066	0.098
Eagle Clear 85	A/13	4912066	1/2 × 5/16	13 × 8	2.5	64	4.1	18.1	6.9	30.6	9.7	43	12.2	54.4	0.066	0.098
Eagle Ivory 85	A/13	L04I85A	1/2 × 5/16	13 × 8	2.52	64	11.2	50	17.2	76.4	22.5	100.2	27.3	121.4	0.065	0.096
Eagle Blue 85	A/13	L04BL85A	1/2 × 5/16	13 × 8	2.5	64	4	18	6.8	30.4	9.5	42.7	12	54.1	0.066	0.098
Eagle Green 89	A/13	L04G89A	1/2 × 5/16	13 × 8	2.83	72	20.2	89.8	30.8	137.2	40.4	179.6	48.7	216.6	0.066	0.098
Eagle Red 90	A/13	4940029	1/2 × 5/16	13 × 8	3.13	80	27	120.2	38.9	173.1	49	217.9	57.3	255	0.066	0.098
Eagle Beige 95	A/13	L04BE95A	1/2 × 5/16	13 × 8	3.1	80	16.6	73.8	24.8	110.3	32	142.5	38.4	170.7	0.068	0.101
Eagle Clear 95	A/13	4911066	1/2 × 5/16	13 × 8	3.13	79	7.5	33.2	12.2	54.2	16.4	72.9	20	88.9	0.067	0.1
Eagle White 40D	A/13	L04BY40A	1/2 × 5/16	13 × 8	3.78	96	15.5	69.1	26.6	118.1	36.6	162.8	45.2	201.2	0.064	0.096
Eagle Blue 55D	A/13	L04BY55A	1/2 × 5/16	13 × 8	4.09	104	60.3	268.3	88.6	394.3	111.3	495	128.8	573.1	0.066	0.098
Eagle Red 85 CXF	A/13	4924320	0.50 × 0.41	13 × 10.54	3.28	83	4.6	20.5	7.3	32.3	9.9	44	12.3	54.8	0.091	0.135
Eagle Ivory 85 SGT PU	A/13	493030030M	0.50 × 0.47	13 × 12.06	3.28	83	11.2	50	17.2	76.4	22.5	100.2	27.3	121.4	0.085	0.127
Eagle Ivory 85 SGT PVC	A/13	L04I85ASG	0.50 × 0.53	13 × 13.51	3.28	83	11.2	50	17.2	76.4	22.5	100.2	27.3	121.4	0.095	0.142
Eagle Ivory 85 SGT TPE	A/13	493120030M	0.50 × 0.48	13 × 12.34	3.28	83	11.2	50	17.2	76.4	22.5	100.2	27.3	121.4	0.028	0.124
Eagle Green 89 SGT PVC	A/13	L04G89ASG	0.50 × 0.53	13 × 13.51	3.69	94	20.2	89.8	30.8	137.2	40.4	179.6	48.7	216.6	0.096	0.143
Eagle Red 90 SGT PVC	A/13	L04R90ASG	0.50 × 0.53	13 × 13.51	3.69	94	27	120.2	38.9	173.1	49	217.9	57.3	255	0.096	0.143
Eagle White 40D SGT PVC	A/13	L04BY40ASG	0.50 × 0.53	13 × 13.51	5.34	136	15.5	69.1	26.6	118.1	36.6	162.8	45.2	201.2	0.095	0.141
Eagle Orange 85	A/13 Hi-Ridge-Top	1032040	1/2 × 5/8		5	127	5.5	24.7	9.4	41.8	13.2	58.7	16.7	74.3	0.092	0.137
Eagle Clear 85	A/13 Hi-Ridge-Top	4911102	1/2 × 5/8		5	127	5.3	23.7	9	40.1	12.7	56.3	16	71.3	0.086	0.128
Eagle Orange 85	A/13 Lo-Ridge-Top	1032039	1/2 × 7/16		3.5	89	4.3	19.1	7.3	32.4	10.2	45.4	12.9	57.5	0.071	0.106
Eagle Clear 85	A/13 Lo-Ridge-Top	4912067	1/2 × 7/16		3.5	89	4.3	19.3	7.3	32.6	10.3	45.8	13	58	0.07	0.104
Eagle Green 89	A/13 Ridge-Top	L04G89AX		13 × 16	5.67	144	33	146.8	50.4	224.3	66	293.6	79.6	354.1	0.107	0.159
Eagle Orange 85	A Twin	1032041	1-3/16 × 5/16		2.5	64	9.3	41.4	15.8	70.2	22.1	98.5	28.1	124.8	0.154	0.23
Eagle Clear 85	A Twin	4912068	1-3/16 × 5/16		2.5	64	9.6	42.5	16.2	72	22.7	100.9	28.7	127.9	0.154	0.23
Eagle Orange 85	AA	1232550	1/2 × 13/32		3.25	83	5.6	25.1	9.6	42.5	13.4	59.6	17	75.5	0.093	0.139

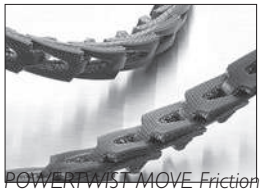
REINFORCED							Working Load @ Percent Tension								Weight	
Material and Color	Cross Section	Part Number*	Dimensions w × h† (in)	(mm)	Minimum Pulley Ø (in)	(mm)	1% (lbs)	(N)	2% (lbs)	(N)	3% (lbs)	(N)	4% (lbs)	(N)	lbs/ft	kg/m
Eagle Opaque 80	A/13	L04OP80AR	1/2 × 5/16	13 × 8	3.15	80	5.9	26.3	16	71.1	24	106.9	29.4	130.7	0.066	0.099
Eagle Orange 85	A/13	4940066	1/2 × 5/16	13 × 8	3.13	80	3.9	17.3	9.3	41.2	14.8	65.8	19.5	86.6	0.065	0.097
Eagle Ivory 85	A/13	L04I85AR	1/2 × 5/16	13 × 8	3.15	80	4.9	21.9	14.8	66	23.6	105.1	30.1	134.1	0.065	0.096
Eagle Green 89	A/13	L04G89AR	1/2 × 5/16	13 × 8	3.15	80	3.8	16.8	14.3	63.5	53.9	239.9	88.7	394.8	0.065	0.096
Eagle Beige 95	A/13	4940075	1/2 × 5/16	13 × 8	3.78	96	20.9	93	48.8	217.1	71.6	318.4	88.1	391.7	0.067	0.099
Eagle Beige 95	A/13 Cogged	4940071	1/2 × 5/16	13 × 8	2.78	71	20.9	93	48.8	217.1	71.6	318.4	88.1	391.7	0.067	0.099
Eagle Hyfen 95	A	5260200	1/2 × 3/8		3.75	95	18.3	81.3	26.6	118.2	34.1	151.8	41.3	183.6	0.077	0.114
Eagle Hyfen 95	A Cogged	5220000	1/2 × 3/8		2.75	70	18.3	81.3	26.6	118.2	34.1	151.8	41.3	183.6	0.077	0.114
Eagle Hyfen 85	A Ridge-Top	5299007	1/2 × 9/16		6.19	157	17.4	77.4	25.1	111.5	33.8	150.2	42.8	190.2	0.1	0.148
Eagle Hyfen 85	A Twin	5299019	1-3/16 × 5/16		3.44	87	45.5	202.2	34.4	153.2	44.9	199.9	54.9	244.2	0.151	0.224
Eagle Hyfen 85 CXF	A	5260520	0.50 × 0.51		4.53	115	17.4	77.4	25.1	111.5	33.8	150.2	42.8	190.2	0.103	0.153
Eagle Hyfen 85 CXR	A	5260525	1.19 × 0.41		4.53	115	17.4	77.4	25.1	111.5	33.8	150.2	42.8	190.2	0.088	0.131
Eagle Hyfen 85 CXF	A Twin	5260572	0.50 × 0.51		4.53	115	45.5	202.2	34.4	153.2	44.9	199.9	54.9	244.2	0.203	0.302
Eagle Hyfen 85 CXR	A Twin	5260577	1.19 × 0.41		4.53	115	45.5	202.2	34.4	153.2	44.9	199.9	54.9	244.2	0.174	0.259
Eagle Ivory 85 SGT PU	A/13	493060030M	0.50 × 0.47	13 × 12.06	4.11	104	4.9	21.9	14.8	66	23.6	105.1	30.1	134.1	0.085	0.127
Eagle Ivory 85 SGT PVC	A/13	L04I85ARSG	0.50 × 0.53	13 × 13.51	4.11	104	4.9	21.9	14.8	66	23.6	105.1	30.1	134.1	0.095	0.142
Eagle Ivory 85 SGT TPE	A/13	493150030M	0.50 × 0.48	13 × 12.34	4.11	104	4.9	21.9	14.8	66	23.6	105.1	30.1	134.1	0.084	0.124

* *Standard package length 100' / 30.5m*

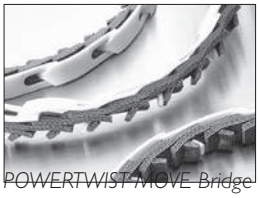
† *w (width) is the widest part of the belt. h (height) is the tallest part of the belt, including the belting top surface.*
Dimensions are for reference only.
All listed items subject to a minimum order quantity. Consult factory for restrictions and availability.



POWERTWIST MOVE SGT

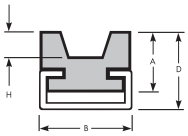


POWERTWIST MOVE Friction Top



POWERTWIST MOVE Bridge Top

Trackstar® V Belt Guides



	V Belt Size	Part Numbers				Channel Type	A	B	D	H
		Galvanized Channel	Stainless Steel Channel	Aluminum Channel	UHMW Only					
V Belt Guide with Mounting Channel	A	GB2001-3G	GB2001-3S	GB2001-3A	GB2001	C3	0.59	0.79	0.8	0.2
V Belt Guide with Mounting Channel	A Twin	GB2006-5G	GB2006-5S	–	GB2006	C5	0.59	1.42	0.84	0.2

Trackstar Guides are stocked in North America and supplied in 120" standard lengths. Subject to a minimum order quantity. Dimensions are in inches and are for reference only.

T-Max® Tensioner/Pulley Assembly



Assembly Part Number	Component	Component Part Number		
FS0578	Tensioner	RT1001	Force Range: 0-30 lb	
	Pulley	VA3001		
FS0581ZF	Tensioner	RT1001	Force Range: 0-30 lb	Zerk fitted to apply grease to the spring cavity.
	Pulley	VA3001		
FS0577ZF	Tensioner	RT1001-L	Force Range: 0-30 lb	Zerk fitted to apply grease to the shaft area.
	Pulley	VX3012		
FS0524	Tensioner	RT3001	Force Range: 0-42 lb	
	Pulley	VA3001		

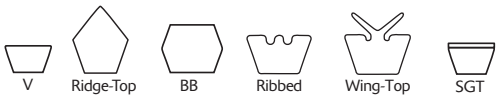
B Cross Section

Link V Belting



LINK BELTING	Part Number				Cross Section	Minimum Pulley Ø		Max Product Weight w/Idlers		Max Product Weight w/UHMW	
	25'	100'/30.5m	10m	30m		(in)	(mm)	(lbs)	(kg)	(lbs)	(kg)
POWERTWIST MOVE Belting	0470825		0470833		B	5.5	140	612	278	204	93
POWERTWIST MOVE Super Grip Top PU		0435101			B	5.5	140	400	181	135	61
POWERTWIST MOVE Super Grip Top PVC		0409200			B	5.5	140	400	181	135	61
POWERTWIST MOVE Friction Top®	0405082	0408082			B	5.0	127	400	181	135	61
POWERTWIST MOVE Bridge Top™	0499021	0499002			B	5.5	140	612	278	204	93
POWERTWIST MOVE Reduced Contact Surface (RCS)		0419300			B	5.5	140	612	278	204	93
POWERTWISt Roller Drive™	0410300-25	0410300	0411301	0411300	B	5.0	127	275	125	95	43
POWERTWISt Antistatic	0408605	0408601	040860010	0408600	B	5.5	140	612	278	204	93

V Belting

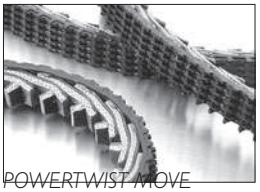


NON-REINFORCED			Dimensions w × h†		Minimum Pulley Ø		Working Load @ Percent Tension								Weight	
							4%		6%		8%		10%			
Material and Color	Cross Section	Part Number*	(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle® Blue 80 EC	B/17	4928014		17 × 11.5	3.17	81	6.1	27.3	11.2	49.9	15.7	69.9	20.3	90.2	0.113	0.168
Eagle Clear 80 EC	B/17	4927014		17 × 11.5	3.17	81	6.1	27.3	11.2	49.9	15.7	69.9	20.3	90.2	0.113	0.168
Eagle Blue 80 MD	B/17	4941109	21/32 × 7/16	17 × 11.5	3.17	81	5	22	8.4	37.3	11.8	52.6	15.1	67	0.113	0.168
Eagle Opaque 80	B/17	4940010	21/32 × 7/16	17 × 11.5	3.17	81	7.4	33.1	15.3	68	24.1	107.2	32.5	144.5	0.121	0.18
Eagle Orange 85	B/17	1032047	11/16 × 13/32	17.5 × 10	3.25	83	7	31.1	11.8	52.7	16.6	73.9	21.1	93.7	0.116	0.172
Eagle Clear 85	B/17	4912069	11/16 × 13/32	17.5 × 10	3.25	83	7.2	31.9	12.1	54	17	75.8	21.6	96	0.116	0.172
Eagle Ivory 85	B/17	L04I85B	21/32 × 7/16	17 × 11.5	3.62	92	20.6	91.6	31.4	139.8	41.2	183.4	49.9	222.2	0.118	0.175
Eagle Blue 85	B/17	L04BL85B	21/32 × 7/16	17 × 11.5	3.25	92	7.3	31	12.4	52.5	17.4	73.7	22	93.4	0.121	0.18
Eagle Green 89	B/17	L04G89B	21/32 × 7/16	17 × 11.5	4.07	104	37	164.4	56.4	251.1	73.9	328.7	89.1	396.4	0.12	0.178
Eagle Clear 95	B/17	4911069	11/16 × 13/32	17.5 × 10	4.13	105	13.2	58.6	21.5	95.5	28.9	128.6	35.2	156.8	0.119	0.177
Eagle White 40D	B/17	L04BY40B	21/32 × 7/16	17 × 11	5.2	132	27.6	122.6	47.1	209.5	64.9	288.9	80.3	357	0.114	0.17
Eagle Blue 55D	B/17	L04BY55B	21/32 × 7/16	17 × 11.5	5.89	150	110.4	491	162.2	721.6	203.6	905.8	235.8	1048.7	0.121	0.18
Eagle Red 90	B/17	4940030	21/32 × 7/16	17 × 11.5	4.5	115	49.3	219.3	71	315.9	89.4	397.5	104.6	465.2	0.12	0.178
Eagle Beige 95	B/17	L04BE95B	21/32 × 7/16	17 × 11.5	4.5	115	30.4	135.1	45.4	201.9	58.6	260.8	70.2	312.3	0.124	0.184
Eagle Orange 85	B/17 Ribbed	1032046	11/16 × 13/32	17.5 × 10	3.25	83	6.5	28.7	10.9	48.6	15.3	68.3	19.4	86.5	0.107	0.159
Eagle Green 89	B/17 Ridge-Top	L04G89BX		17 × 19.5	6.91	176	53.7	238.9	82	364.9	107.4	477.7	129.5	576.1	0.174	0.259
Eagle Orange 85	B/17 Wing-Top	1032048	11/16 × 5/8		5	127	7.8	34.6	13.2	58.7	18.5	82.3	23.5	104.3	0.129	0.192
Eagle Orange 85	BB	1232600	11/16 × 9/16		4.5	114	10.3	45.8	17.5	77.7	24.5	109	31.1	138.1	0.171	0.254
Eagle Clear 95	BB	4911070	11/16 × 9/16		5.63	143	19.4	86.5	31.7	140.9	42.6	189.6	52	231.1	0.175	0.26
Eagle Red 85 CXF	B/17	4924330	0.69 × 0.51	17.5 × 12.54	4.28	109	8.1	36.1	12.8	57	17.4	77.5	21.7	96.7	0.15	0.223
Eagle Ivory 85 SGT PU	B/17	493040030M	0.66 × 0.60	17 × 15.56	4.28	109	20.6	91.6	31.4	139.8	41.2	183.4	49.9	222.2	0.146	0.218
Eagle Ivory 85 SGT PVC	B/17	L04I85BSG	0.66 × 0.66	17 × 17.01	4.28	109	20.6	91.6	31.4	139.8	41.2	183.4	49.9	222.2	0.158	0.235
Eagle Ivory 85 SGT TPE	B/17	493130030M	0.66 × 0.61	17 × 15.84	4.28	109	20.6	91.6	31.4	139.8	41.2	183.4	49.9	222.2	0.039	0.215
Eagle Green 89 SGT PVC	B/17	L04G89BSG	0.66 × 0.66	17 × 17.01	4.82	122	37	164.4	56.4	251.1	73.9	328.7	89.1	396.4	0.16	0.238
Eagle Red 90 SGT PVC	B/17	L04R90BSG	0.66 × 0.66	17 × 17.01	4.82	122	49.3	219.3	71	315.9	89.4	397.5	104.6	465.2	0.16	0.238
Eagle White 40D SGT PVC	B/17	L04BY40BSG	0.66 × 0.66	17 × 17.01	6.96	177	27.6	122.6	47.1	209.5	64.9	288.9	80.3	357	0.154	0.229

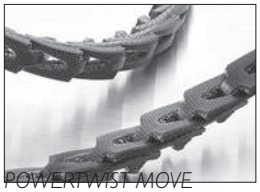
REINFORCED			Dimensions w × h†		Minimum Pulley Ø		Working Load @ Percent Tension								Weight	
							1%		2%		3%		4%			
Material and Color	Cross Section	Part Number*	(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle Hyfen 95	B	5260300	21/32 × 1/2		5	127	26.9	119.6	39.1	173.8	50.2	223.3	60.7	270.1	0.131	0.196
Eagle Hyfen 95	B Cogged	5230000	21/32 × 1/2		4	102	26.9	119.6	39.1	173.8	50.2	223.3	60.7	270.1	0.131	0.196
Eagle Hyfen 85	B Ridge-Top	5299009	21/32 × 11/16		7.56	192	25.7	114.4	37	164.6	49.9	221.7	63.2	280.9	0.161	0.239
Eagle Opaque 80	B/17	L04OP80BR	21/32 × 7/16	17 × 11.5	4.53	115	11	48.8	29.7	132	44.6	198.4	54.5	242.6	0.123	0.183
Eagle Orange 85	B/17	4940067	21/32 × 7/16	17 × 11.5	4.38	115	7.1	31.6	16.9	75.2	27	120	35.5	158	0.119	0.177
Eagle Ivory 85	B/17	L04I85BR	21/32 × 7/16	17 × 11.5	4.53	115	9	39.9	27.1	120.5	43.1	191.9	55	244.8	0.118	0.175
Eagle Green 89	B/17	4940127	21/32 × 7/16	17 × 11.5	4.53	115	7	31.2	26.5	117.9	100.1	445.3	164.7	732.8	0.12	0.178
Eagle Beige 95	B/17	4940076	21/32 × 7/16	17 × 11.5	5.43	138	38.8	172.7	90.6	403	132.9	591	163.5	727.2	0.124	0.184
Eagle Beige 95	B/17 Cogged	4940072	21/32 × 7/16	17 × 11.5	4.43	113	38.8	172.7	90.6	403	132.9	591	163.5	727.2	0.124	0.184
Eagle Ivory 85	B/17 Ridge-Top	L04I85BRXH		17 × 19.5	7.68	195	13.3	59	40.1	178.3	63.8	283.8	81.4	362	0.174	0.259
Eagle Green 89	B/17 Ridge-Top	L04G89BRXH		17 × 19.5	7.68	195	10.2	45.4	38.5	171.4	145.5	647.3	239.5	1065.1	0.174	0.259
Eagle Hyfen 85 CXF	B	5260530	0.66 × 0.51		5.89	150	25.7	114.4	37	164.6	49.9	221.7	63.2	280.9	0.141	0.21
Eagle Hyfen 85 CXR	B	5260535	0.66 × 0.51		5.89	150	25.7	114.4	37	164.6	49.9	221.7	63.2	280.9	0.122	0.181
Eagle Ivory 85 SGT PU	B/17	493020030M	0.60 × 0.60	17 × 15.56	5.36	136	9	39.9	27.1	120.5	43.1	191.9	55	244.8	0.146	0.218
Eagle Ivory 85 SGT PVC	B/17	L04I85BRSG	0.66 × 0.66	17 × 17.01	5.36	136	9	39.9	27.1	120.5	43.1	191.9	55	244.8	0.158	0.235
Eagle Ivory 85 SGT TPE	B/17	493160030M	0.66 × 0.61	17 × 15.84	5.36	136	9	39.9	27.1	120.5	43.1	191.9	55	244.8	0.144	0.215

* *Standard package length 100' / 30.5m*

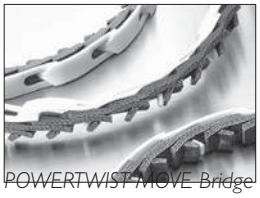
† *w (width) is the widest part of the belt. h (height) is the tallest part of the belt, including the belting top surface.*
Dimensions are for reference only.
All listed items subject to a minimum order quantity. Consult factory for restrictions and availability.



POWERTWIST MOVE SGT



POWERTWIST MOVE Friction Top



POWERTWIST MOVE Bridge Top

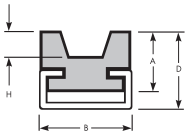


POWERTWIST MOVE RCS



POWERTWISt Roller Drive

Trackstar® V Belt Guides



	V Belt Size	Part Numbers			Channel Type	A	B	D	H
		Galvanized Channel	Stainless Steel Channel	UHMW Only					
V Belt Guide with Mounting Channel	B	GB2002-5G	GB2002-5S	GB2002	C5	0.59	1.1	0.84	0.29

Trackstar Guides are stocked in North America and supplied in 120" standard lengths. Subject to a minimum order quantity. Dimensions are in inches and are for reference only.

T-Max® Tensioner/Pulley Assembly



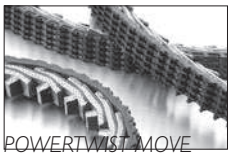
Assembly Part Number	Component	Component Part Number	
FS0566	Tensioner	RT3001	Force Range: 0-42 lb
	Pulley	VA5001	

C and D Cross Sections

Link V Belting

V SGT

LINK BELTING	Part Number			Cross Section	Minimum Pulley Ø		Max Product Weight w/Idlers		Max Product Weight w/UHMW	
	25'	100'/30.5m	10m		(in)	(mm)	(lbs)	(kg)	(lbs)	(kg)
POWERTWIST MOVE Belting	0470925		0470933	C	9.0	229	815	370	275	125
POWERTWIST MOVE Super Grip Top PU		0440101		C	9.0	229	650	295	220	100
POWERTWIST MOVE Super Grip Top PVC		0409300		C	9.0	229	650	295	220	100



POWERTWIST MOVE SGT

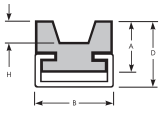
V Belting

V Ribbed Ridge-Top SGT/CXF/CXR

NON-REINFORCED							Working Load @ Percent Tension								Weight	
			Dimensions w × h†		Minimum Pulley Ø		4%		6%		8%		10%			
Material and Color	Cross Section	Part Number*	(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle® Orange 85	C/22	1032072	29/32 × 17/32	23 × 13.5	4.25	108	12.2	54.1	20.6	91.7	28.9	128.6	36.6	163	0.201	0.3
Eagle Clear 85	C/22	4912072	29/32 × 17/32	23 × 13.5	4.25	108	12.5	55.5	21.1	94	29.6	131.8	37.5	167	0.201	0.3
Eagle Ivory 85	C/22	L04I85C	7/8 × 9/16	22 × 14.5	4.57	116	33.9	150.6	51.7	229.8	67.8	301.7	82.1	365.4	0.194	0.289
Eagle Blue 85	C/22	L04BL85C	7/8 × 9/16	22 × 14.5	4.5	116	12	54	20.3	91.5	28.5	128.4	36.2	162.6	0.199	0.296
Eagle Green 89	C/22	L04G89C	7/8 × 9/16	22 × 14.5	5.14	131	60.8	270.3	92.8	412.9	121.5	540.5	146.5	651.9	0.197	0.293
Eagle Red 90	C/22	4999306	7/8 × 9/16	22 × 14.5	5.75	145	81.1	360.8	116.8	519.7	147.1	654.1	172.1	765.4	0.197	0.293
Eagle Beige 95	C/22	L04BE95C	7/8 × 9/16	22 × 14.5	5.7	145	49.9	222.2	74.6	332	96.4	428.9	115.5	513.6	0.204	0.303
Eagle Clear 95	C/22	4911072	29/32 × 17/32	23 × 13.5	5.31	135	22.9	102	37.4	166.2	50.3	223.7	61.3	272.7	0.206	0.307
Eagle White 40D	C/22	L04BY40C	7/8 × 9/16	22 × 14.5	6.85	174	46.8	208	79.9	355.4	110.2	490	136.1	605.6	0.194	0.288
Eagle Orange 85	C/22 Ribbed	1032054	29/32 × 17/32		4.25	108	11.3	50.3	19.2	85.3	26.9	119.7	34.1	151.7	0.187	0.279
Eagle Green 89	C/22 Ridge-Top	4999514		22 × 24.5	8.68	221	85.6	380.7	130.7	581.4	171.1	761.2	206.4	917.9	0.278	0.413
Eagle Green 89	C/22 Ridge-Top	L04G89CX		22 × 28.5	10.1	257	98.7	439.2	150.8	670.8	197.4	878.1	238.1	1059	0.32	0.477
Eagle Ivory 85 SGT PU	C/22	493050030M	0.88 × 0.72	22 × 18.56	5.28	134	33.9	150.6	51.7	229.8	67.8	301.7	82.1	365.4	0.227	0.338
Eagle Ivory 85 SGT PVC	C/22	L04I85CSG	0.88 × 0.78	22 × 20.01	5.28	134	33.9	150.6	51.7	229.8	67.8	301.7	82.1	365.4	0.245	0.365
Eagle Ivory 85 SGT TPE	C/22	493140030M	0.88 × 0.73	22 × 18.84	5.28	134	33.9	150.6	51.7	229.8	67.8	301.7	82.1	365.4	0.045	0.334
Eagle Green 89 SGT PVC	C/22	L04G89CSG	0.88 × 0.78	22 × 20.01	5.94	151	60.8	270.3	92.8	412.9	121.5	540.5	146.5	651.9	0.248	0.37
Eagle Red 90 SGT PVC	C/22	L04R90CSG	0.88 × 0.78	22 × 20.01	5.94	151	81.1	360.8	116.8	519.7	147.1	654.1	172.1	765.4	0.248	0.369
Eagle White 40D SGT PVC	C/22	L04BY40CSG	0.88 × 0.78	22 × 20.01	8.59	218	46.8	208	79.9	355.4	110.2	490	136.1	605.6	0.24	0.358

REINFORCED							Working Load @ Percent Tension								Weight	
			Dimensions w × h†		Minimum Pulley Ø		1%		2%		3%		4%			
Material and Color	Cross Section	Part Number*	(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle Hyfen 95	C	5260400	7/8 × 5/8		6.25	159	39.8	177.2	57.9	257.6	74.4	330.8	90	400.3	0.226	0.337
Eagle Hyfen 95	C Cogged	5240000	7/8 × 5/8		5.25	133	39.8	177.2	57.9	257.6	74.4	330.8	90	400.3	0.226	0.337
Eagle Orange 85	C/22	4940068	7/8 × 9/16	22 × 14.5	5.62	145	11.7	52	27.8	123.7	44.4	197.4	58.4	260	0.196	0.291
Eagle Ivory 85	C/22	L04I85CR	7/8 × 9/16	22 × 14.5	5.71	145	14.8	65.7	44.6	198.3	71	315.7	90.5	402.7	0.194	0.289
Eagle Green 89	C/22	L04G89CR		22 × 14.5	5.71	145	11.5	51.3	43.6	193.9	164.6	732.4	270.9	1205.1	0.197	0.293
Eagle Beige 95	C/22	4940077	7/8 × 9/16	22 × 14.5	6.85	174	63.8	284	149	662.7	218.5	971.9	268.8	1195.9	0.204	0.303
Eagle Beige 95	C/22 Cogged	4940073	7/8 × 9/16	22 × 14.5	5.85	149	63.8	284	149	662.7	218.5	971.9	268.8	1195.9	0.204	0.303
Eagle Ivory 85	C/22 Ridge-Top	5299103		22 × 24.5	9.65	245	21.7	96.6	65.6	291.7	104.4	464.3	133.2	592.4	0.285	0.424
Eagle Ivory 85	C/22 Ridge-Top	L04I85CRXH		22 × 28.5	11.22	285	24.4	108.5	73.7	327.7	117.3	521.6	149.6	665.4	0.32	0.477
Eagle Green 89	C/22 Ridge-Top	4999524		22 × 24.5	9.65	245	16.2	72.3	61.4	273.1	231.8	1031.3	381.5	1697	0.278	0.413
Eagle Green 89	C/22 Ridge-Top	L04G89CRXH		22 × 28.5	11.22	285	18.7	83.4	70.8	315.1	267.5	1189.8	440.1	1957.8	0.32	0.477
Eagle Hyfen 85 CXF	C	5260540	0.88 × 0.63		7.7	196	38	169.1	54.7	243.4	73.7	327.9	93.4	415.4	0.241	0.358
Eagle Hyfen 85 CXR	C	5260545	0.88 × 0.63		7.7	196	38	169.1	54.7	243.4	73.7	327.9	93.4	415.4	0.215	0.32
Eagle Ivory 85 SGT PU	C/22	493070030M	0.88 × 0.72	22 × 18.56	6.61	168	14.8	65.8	44.6	198.3	71	315.7	90.5	402.7	0.227	0.338
Eagle Ivory 85 SGT PVC	C/22	L04I85CRSG	0.88 × 0.78	22 × 20.01	6.61	168	14.8	65.8	44.6	198.3	71	315.7	90.5	402.7	0.245	0.365
Eagle Ivory 85 SGT TPE	C/22	493170030M	0.88 × 0.73	22 × 18.84	6.61	168	14.8	65.8	44.6	198.3	71	315.7	90.5	402.7	0.224	0.334

Trackstar® V Belt Guides



	V Belt Size	Part Numbers			Channel Type	A	B	D	H
		Galvanized Channel	Stainless Steel Channel	UHMW Only					
V Belt Guide with Mounting Channel	C	GB2003-5G	GB2003-5S	GB2003	C5	0.71	1.1	0.96	0.4

Trackstar Guides are stocked in North America and supplied in 120" standard lengths. Subject to a minimum order quantity. Dimensions are in inches and are for reference only.

D Cross Section

Link V Belting

V

LINK BELTING	Part Number		Cross Section	Minimum Pulley Ø		Max Product Weight w/Idlers		Max Product Weight w/UHMW	
	25'	10m		(in)	(mm)	(lbs)	(kg)	(lbs)	(kg)
POWERTWIST MOVE Belting	0471025	0471033	D	13.2	335	1625	737	550	250

* *Standard package length 100' / 30.5m*

† *w (width) is the widest part of the belt. h (height) is the tallest part of the belt, including the belting top surface. Dimensions are for reference only. All items subject to minimum order quantity.*

V Belting

Ribbed CXF/CXR

NON-REINFORCED							Working Load @ Percent Tension								Weight	
			Dimensions w × h†		Minimum Pulley Ø		4%		6%		8%		10%			
Material and Color	Cross Section	Part Number*	(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle Orange 85	D/32 Ribbed	1032062	1-5/16 x 3/4	33.5 x 19	6	152	22.9	101.8	38.8	172.5	54.4	242	68.9	306.7	0.379	0.564

REINFORCED							Working Load @ Percent Tension								Weight	
			Dimensions w × h†		Minimum Pulley Ø		1%		2%		3%		4%			
Material and Color	Cross Section	Part Number*	(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle Hyfen 85 CXF	D	5260550	1.25 x 0.85		10.88	276	77.1	343	111	493.6	149.5	665	189.4	842.4	0.448	0.667
Eagle Hyfen 85 CXR	D	5260555	1.25 x 0.85		10.88	276	77.1	343	111	493.6	149.5	665	189.4	842.4	0.412	0.612

Flat Belting

Flat Belting

Flat | Flat with Guide

NON-REINFORCED					Minimum Pulley Ø		Working Load @ Percent Tension								Weight	
			Dimensions w × h†				4%		6%		8%		10%			
Material and Color	Cross Section	Part Number*	(in)	(mm)	(in)	(mm)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	(lbs)	(N)	lbs/ft	kg/m
Eagle Orange 85	.055" × .375"	1032121	.055 × .375		0.44	11	0.6	2.6	0.9	3.9	1.1	5	1.4	6.1	0.011	0.016
Eagle Orange 85	.062" × .5"	1032126	.062 × .500		0.5	13	0.9	3.9	1.3	5.8	1.7	7.6	2.1	9.2	0.016	0.024
Eagle Orange 85	.062" × .75"‡	1032210	.062 × .750		0.5	13	2.3	10.1	3.4	15.1	4.4	19.7	5.4	23.9	0.042	0.062
Eagle Orange 85	.062" × 1.5"	1032148	.062 × 1.50		0.5	13	2.6	11.6	3.9	17.4	5.1	22.7	6.2	27.6	0.048	0.072
Eagle Orange 85	.062" × 1.75"	1032155	.062 × 1.75		0.5	13	3	13.5	4.6	20.3	6	26.5	7.2	32.2	0.056	0.084
Eagle Orange 85	.062" × 2"	1032160	.062 × 2.00		0.5	13	3.5	15.5	5.2	23.2	6.8	30.3	8.3	36.8	0.064	0.096
Eagle Orange 85	.062" × 3"	1032170	.062 × 3.00		0.5	13	5.2	23.2	7.8	34.8	10.2	45.5	12.4	55.2	0.097	0.144
Eagle Orange 85	.078" × .75"	1032136	.075 × .750		0.62	16	1.6	7.3	2.4	10.9	3.2	14.2	3.9	17.3	0.03	0.045
Eagle Orange 85	.090" × 1"	1032142	.090 × 1.00		0.72	18	2.5	11.2	3.8	16.8	4.9	21.9	6	26.6	0.047	0.069
Eagle Orange 85	.090" × 1.25"	1032146	.090 × 1.25		0.72	18	3.1	14	4.7	21	6.2	27.4	7.5	33.3	0.058	0.087
Eagle Orange 85	.090" × 1.5"	1032151	.090 × 1.50		0.72	18	3.8	16.8	5.7	25.2	7.4	33	9	40	0.07	0.104
Eagle Orange 85	.090" × 2"	1032163	.090 × 2.00		0.72	18	5	22.4	7.6	33.6	9.9	44	12	53.4	0.093	0.139
Eagle Orange 85	.125" × .625"	1032133	.125 × .625		1	25	2.2	9.7	3.3	14.5	4.3	19	5.2	23	0.04	0.06
Eagle Orange 85	.125" × 1"	1032143	.125 × 1.00		1	25	3.5	15.5	5.2	23.3	6.9	30.5	8.3	37	0.065	0.096
Eagle Orange 85	.250" × .625"	1032134	.250 × .625		2	51	4.4	19.4	6.5	29	8.5	38	10.4	46.1	0.081	0.12

* *Standard package length 100' / 30.5m*
† *w (width) is the widest part of the belt. h (height) is the tallest part of the belt, including the belting top surface.*
‡ *Belt has a .156" radius guide.*
Dimensions are for reference only.
All listed items subject to a minimum order quantity. Consult factory for restrictions and availability.

Eagle® Blue-Green Driver Pad

- Manufactured to OEM specifications
- Always a consistent profile with ideal hole alignment
- Contains 100% virgin material, allowing maximum performance
- Always in stock, ready to go to you!

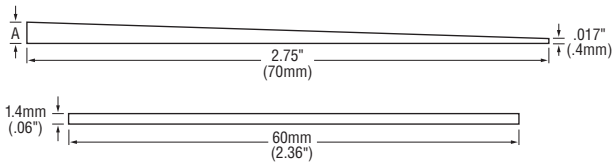


Part Number	Package Length
4912092	250'
4912096	500'

Eagle® Taper Edge Bands

- Long lasting, minimal stretch replacement for PVC Bands on wallboard forming lines. Significantly increased life on lines exceeding 350'/min
- Fit and forget installation reduces labor and downtime costs
- Negligible band stretch — the same perfect impression day 1 and day 100
- Temperature resistance up to 180°F (82°C)





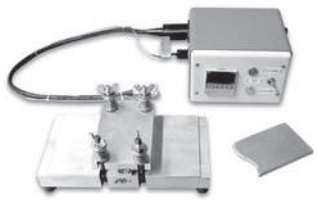
COLOR	Part Number		A† inches (mm)
	Left Side*	Right Side*	
Blue	4938280BL	4938280BR	0.085 (2.2)
Red	4938281BL	4938281BR	0.075 (1.9)
Green	4938282BL	4938282BR	0.105 (2.7)

COLOR	Profile	Part Number	Dimensions mm (inches)
Natural	Square‡	4938286	1.4 x 60 (.06 x 2.36)

* *As belt travels toward you*
† *Also available in A dimensions .065" and .070" (1.7mm and 1.8mm)*
‡ *Non-stock product, minimum order quantity applies*

Taper Edge Band Welding Kit

- Thermal splicing for a tough, seamless, flexible joint that maintains a perfect indentation
- Full weld in 12 minutes
- No board scrap generated from joint

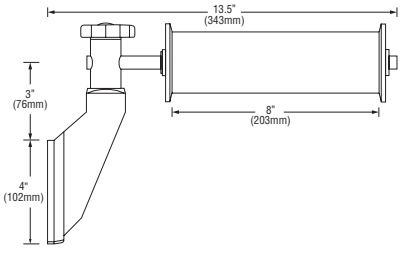


Profile	Part Number	Voltage	Plug
Blue	5700301	115v	US
Red	5700304	115v	US
Green	5700305	115v	US
Blue	5700306	240v	UK
Red	5700307	240v	UK
Green	5700308	240v	UK
Square	5700309	240v	UK

Kit includes: Platen Assembly, Controller, Cutting Shears, Finger Splice Template, Instructional Disc

Taper Edge Band Return Roller

- Prevents surface scoring due to Eagle Taper Edge Band rubbing against worn return support brackets
- Easy to install mounting bracket with hand knob for quick adjustment and release
- Solid polymer plain bearing allows low-friction rotation



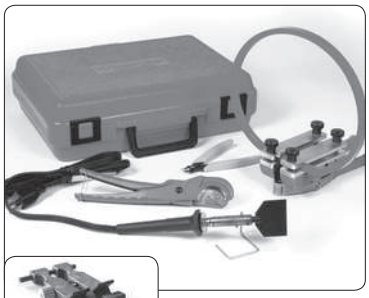
	Part Number
Bracket and Roller Assembly	DA0041
Roller	FX0395

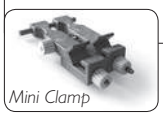
Roller dimensions:
2.375" diameter x 8" width
(60.3mm diameter x 203.2mm width)

Eagle® Welding Kits

Butt Welding Kit & Components – 120V	Part Numbers
Butt Welding Kit 120V – Large Clamp (US Plug)	**5700200**
Mini Butt Welding Kit 120V – Mini Clamp (US Plug)	**5700231**
Butt Welding Clamp	5700201
Mini Clamp	5700227
Hot Knife 120V with holder and 2" blade	5700228
Double Iron Hot Knife 120V with holder and 3" blade	5700220
Hot Knife Holder	5700202
Hot Knife Blade – 2"	5700233
Hot Knife Blade – 3" (Use with 5700220)	5700218
Cutting Shears	5700153
Flash Cutter	1448000
Clamping Plate (2 pcs)	5700208
Flat/V belt adapter Plate (2 pcs)	5700209
Black Knurled Knob (5 pcs)	5700212
Case	5700203

Butt Welding Kit & Components – 240V	Part Numbers
Butt Welding Kit 240V – Large Clamp (US Plug)	**5700223**
Butt Welding Kit 240V – Large Clamp (UK Plug)	**L04FULLWELD240V**
Butt Welding Kit 240V – Large Clamp (Euro Plug)	**L04FULLWELD240E**
Mini Butt Welding Kit 240V – Mini Clamp (US Plug)	**5700232**
Mini Butt Welding Kit 240V – Mini Clamp (UK Plug)	**L04MINIWELD240V**
Mini Butt Welding Kit 240V – Mini Clamp (Euro Plug)	**L04MINIWELD240E**
Butt Welder Clamp	5700201
Mini Clamp	5700227
Hot Knife 240 V (US Plug)	5700170
Hot Knife 240 V (UK Plug)	L04HKNIFE240
Cutting Shears	L04SHEARS
Flash Cutter	L04FCUTTER
Hot Knife Blade – 2"	L04S
Case (Large Clamp)	L04CASEBKST
Case (Mini Clamp)	L04CASEBLM





Mini Clamp

Butt Welding Kit & Components – 110V*	Part Numbers
Butt Welding Kit 110V* – Large Clamp	**L04FULLWELD110V**
Mini Butt Welding Kit 110V* – Mini Clamp	**L04MINIWELD110V**

Kit Includes: Hot Knife, Large Clamp or Mini Clamp, Flash Cutters, Cutting Shears, Carrying Case

** Unit designed to plug into a power transformer*

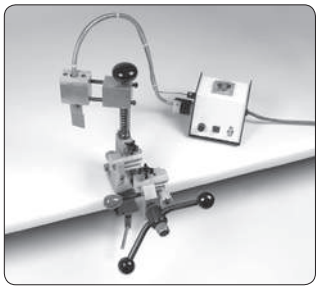
Eagle Freestyle® Cordless Welding	Part Numbers
Freestyle Welding Kit (US Plug)	**5700539**
Freestyle Welder	5700537
Freestyle Welder Blade Assembly	5700366
Freestyle Welder End Cap	5700367
Blade Replacement Tape 10/pk	5700542
Pack of 2 D cell NiMH batteries	5700541
Cutting Shears	5700153
Flash Cutter	1448000



Kit includes: Welder, Flat Plate Adapters, Professional Battery Charger, (4) D Cell NiMH Batteries, Blade Release Tape, Cutting Shears, Flash Cutters, Tool Bag

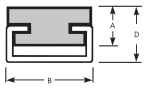
Overlap Welding Kit & Components	Part Numbers
Overlap Welding Kit 120V (US Plug)	**5700160K**
Overlap Welding Kit 240V (UK Plug)	**5700161K**
Flash Cutter	5700152
Case	5700164
Temperature Controller w/Control Box 120V (US Plug)	5700300
Temperature Controller w/Control Box 240V (UK Plug)	5700310
Heating Tip (Z Block)	5700325
Thumb Nuts	5700330
Hold Down Pin	5700340
Thermocouple Wire	5700350
Thermocouple Connector	5700355
Heating Element, Power Cord and Plug 120V (US Plug)	5700360
Heating Element, Power Cord and Plug 240V (UK Plug)	5700361
Plug Adapter – UK to EU	5700351
Spring	5700380
Heating Assembly Knob	5700390
1/4" and 5/16" Die Set	5700400
3/8" and 1/2" Die Set	5700410
9/16", 5/8" and 16mm Die Set	5700420
3/4" and 19mm Die	5700430
5mm Die	5700600
6mm Die	5700601

Overlap Welding Kit & Components	Part Numbers
7mm Die	5700602
8mm Die	5700603
9mm Die	5700604
10mm Die	5700605
12mm Die	5700606
18mm Die	5700608
20mm Die	5700620
Z/10 Die Set	5700610
A Hyfen Die Set	5700440
A/13 Die Set	5700611
A Ridge–Top Die Set	5700470
B Hyfen Die Set	5700453
B/17 Die Set	5700612
B Ridge-Top Die Set	5700490
C Hyfen Die Set	5700457
C/22 Die Set	5700613
D Hyfen Die Set	5700460
A Die Set for Hyfen CXF and CXR	5700480
B Die Set for Hyfen CXF and CXR	5700472
C Die Set for Hyfen CXF and CXR	5700476
D Die Set for Hyfen CXF and CXR	5700474



Kit Includes: Welder, Control Box, Set of Dies, Flash Cutters, Cutting Shears, Carrying Case

Trackstar® Flat Belt Guides

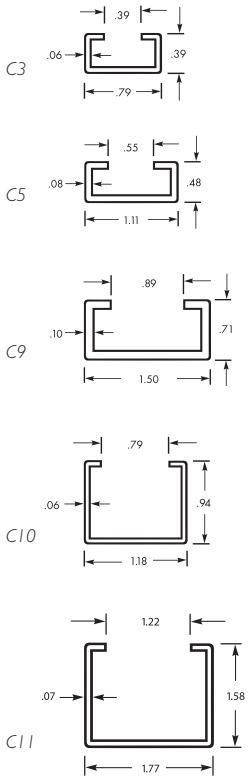


	Part Numbers				Channel Type	A	B	D
	Galvanized Channel	Stainless Steel Channel	Aluminum Channel	UHMW Only				
Flat Guide with Mounting Channel	GR2001-3G	GR2001-3S	GR2001-3A	GR2001	C3	0.39	0.79	0.60
	GR2002-5G	GR2002-5S	–	GR2002	C5	0.39	1.10	0.64
	GR2003-9G	GR2003-9S	–	GR2003	C9	0.59	1.50	0.96

Trackstar Guides are stocked in North America and supplied in 120" standard lengths. Subject to a minimum order quantity. Dimensions are in inches and are for reference only.

Trackstar Mounting Channels

Installation is simple with standard 120" C channels in galvanized steel, 304 stainless steel, or anodized aluminum (C3 only). Either tack weld or bolt into place with optional mounting holes.

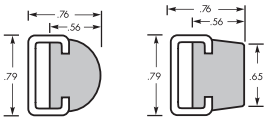


	Part Numbers	Material	Mounting Holes	Centers
C3 Mounting Channel	MC 0500	Anodized Aluminum	None	–
	MC 1000	Galvanized Steel	None	–
	MC 1001	Galvanized Steel	.20 Diameter	12 inch
	MC 1500	#304 Stainless Steel	None	–
	MC 1501	#304 Stainless Steel	.20 Diameter	12 inch
C5 Mounting Channel	MC 2000	Galvanized Steel	None	–
	MC 2001	Galvanized Steel	.20 Diameter	12 inch
	MC 2500	#304 Stainless Steel	None	–
	MC 2501	#304 Stainless Steel	.20 Diameter	12 inch
C9 Mounting Channel	MC 3000	Galvanized Steel	None	–
	MC 3500	#304 Stainless Steel	None	–
C10 Mounting Channel	MC 4500	#304 Stainless Steel	None	–
C11 Mounting Channel	MC 5000	Galvanized Steel	None	–
	MC 5500	#304 Stainless Steel	None	–

Trackstar Channels are stocked in North America and supplied in 120" standard lengths. Subject to a minimum order quantity. Dimensions are in inches and are for reference only.

Trackstar Guide Rails

The "C" channel design features a two-piece construction for quick and easy replacement of UHMW inserts. "C" channel guide rails are available in Black or FDA/USDA approved White.

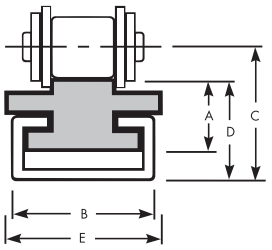


Crowned *Flat*

	Profile/Color	Part Numbers			
		Galvanized Channel	Stainless Steel Channel	Aluminum Channel	UHMW Only
C3 Guide Rail	Crowned/Black	GR1000-3G120.00	GR1000-3S120.00	GR1000-3A120.00	GR1000
	Crowned/White	GR1001-3G120.00	GR1001-3S120.00	GR1001-3A120.00	GR1001
	Flat/Black	GR1100-3G120.00	GR1100-3S120.00	GR1100-3A120.00	GR1100
	Flat/White	GR1101-3G120.00	GR1101-3S120.00	GR1101-3A120.00	GR1101

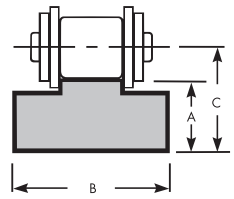
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Trackstar® Single Chain Guide with Mounting Channel



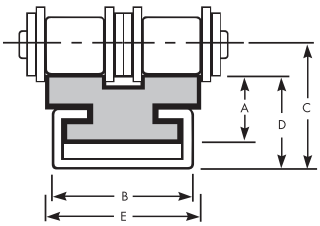
ANSI Chain	Part Number				Channel Type	A	B	C	D	E
	Galvanized	Stainless Steel	Aluminum	UHMW Only						
25-1	GC1025-3G	GC1025-3S	GC1025-3A	GC1025	C3	0.59	0.79	0.86	0.80	0.79
35-1	GC1035-3G	GC1035-3S	GC1035-3A	GC1035	C3	0.59	0.79	0.90	0.80	0.79
40-1	GC1040-3G	GC1040-3S	GC1040-3A	GC1040	C3	0.59	0.79	0.95	0.80	0.79
50-1	GC1050-3G	GC1050-3S	GC1050-3A	GC1050	C3	0.59	0.79	1.00	0.80	0.79
60-1	GC1060-5G	GC1060-5S	–	GC1060	C5	0.59	1.10	1.06	0.83	1.10
80-1	GC1080-5G	GC1080-5S	–	GC1080	C5	0.71	1.10	1.26	0.95	1.34
81X	GC1081-5G	GC1081-5S	–	GC1081	C5	1.25	1.10	1.95	1.50	1.75
100-1	GC1100-9G	GC1100-9S	–	GC1100	C9	0.79	1.50	1.54	1.16	1.75
120-1	GC1120-9G	GC1120-9S	–	GC1120	C9	0.79	1.50	1.60	1.16	2.12

Trackstar Single Chain Guide



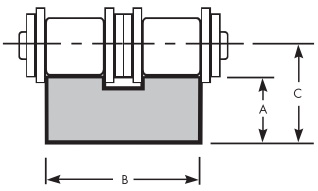
ANSI Chain	Part Number	A	B	C
25-1	NC1025	0.59	0.79	0.66
35-1	NC1035	0.59	0.79	0.69
40-1	NC1040	0.59	0.79	0.75
50-1	NC1050	0.59	0.79	0.79
60-1	NC1060	0.59	1.10	0.82
80-1	NC1080	0.71	1.34	1.02
81X	NC1081	1.00	1.75	1.45
100-1	NC1100	1.00	1.61	1.38
120-1	NC1120	1.25	2.01	1.69
140-1	NC1140	1.50	2.17	2.00
160-1	NC1160	1.50	2.61	2.06
180-1	NC1180	1.50	2.88	2.20

Trackstar Double Chain Guide with Mounting Channel



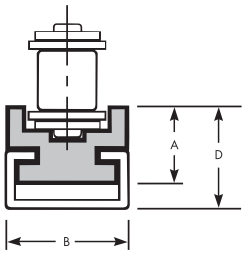
ANSI Chain	Part Number				Channel Type	A	B	C	D	E
	Galvanized	Stainless Steel	Aluminum	UHMW Only						
25-2	GC2025-3G	GC2025-3S	GC2025-3A	GC2025	C3	0.44	0.79	0.72	0.65	0.79
35-2	GC2035-3G	GC2035-3S	GC2035-3A	GC2035	C3	0.59	0.79	0.89	0.80	0.57*
40-2	GC2040-3G	GC2040-3S	GC2040-3A	GC2040	C3	0.59	0.79	0.95	0.80	0.85
50-2	GC2050-5G	GC2050-5S	–	GC2050	C5	0.59	1.10	1.03	0.84	1.06
60-2	GC2060-5G	GC2060-5S	–	GC2060	C5	0.59	1.10	1.06	0.84	1.34
80-2	GC2080-9G	GC2080-9S	–	GC2080	C9	0.79	1.50	1.47	1.16	1.75
100-2	GC2100-9G	GC2100-9S	–	GC2100	C9	0.79	1.50	1.54	1.16	2.12

Trackstar Double Chain Guide



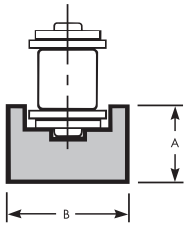
ANSI Chain	Part Number	A	B	C
25-2	NC2025	0.59	0.78	0.66
35-2	NC2035	0.59	0.78	0.69
40-2	NC2040	0.85	0.85	1.00
50-2	NC2050	1.07	1.07	1.27
60-2	NC2060	1.34	1.34	1.57
80-2	NC2080	1.75	1.75	2.06

Trackstar Single Chain Guide with Mounting Channel



ANSI Chain	Part Number				Channel Type	A	B	D
	Galvanized	Stainless Steel	Aluminum	UHMW Only				
25-1	GC3525-3G	GC3525-3S	GC3525-3A	GC3525	C3	0.59	0.79	0.80
35-1	GC3535-3G	GC3535-3S	GC3535-3A	GC3535	C3	0.59	0.79	0.80
40-1	GC3540-3G	GC3540-3S	GC3540-3A	GC3540	C3	0.59	0.79	0.80
50-1	GC3550-5G	GC3550-5S	–	GC3550	C5	0.71	1.10	0.96
60-1	GC3560-5G	GC3560-5S	–	GC3560	C5	0.71	1.10	0.96
80-1	GC3580-9G	GC3580-9S	–	GC3580	C9	0.79	1.50	1.16

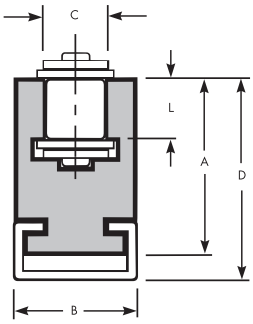
Trackstar Single Chain Guide



ANSI Chain	Part Number	A	B
25-1	NC3525	0.59	0.78
35-1	NC3535	0.59	0.78
40-1	NC3540	0.59	0.78
50-1	NC3550	0.71	1.10
60-1	NC3560	0.71	1.10
80-1	NC3580	0.79	1.50

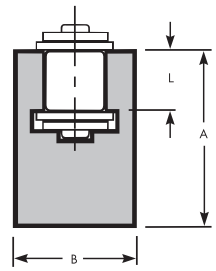
Trackstar Guides are stocked in North America and supplied in 120" standard lengths. Subject to a minimum order quantity.
Dimensions are in inches and are for reference only.

Trackstar® Single Chain Guide with Mounting Channel



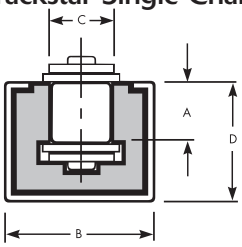
ANSI Chain	Part Number				Channel Type	A	B	C	D	L
	Galvanized	Stainless Steel	Aluminum	UHMW Only						
25-1	GC3625-3G	GC3625-3S	GC3625-3A	GC3625	C3	0.80	0.79	0.15	1.01	0.11
35-1	GC3635-3G	GC3635-3S	GC3635-3A	GC3635	C3	0.80	0.79	0.22	1.01	0.17
40-1	GC3640-5G	GC3640-5S	–	GC3640	C5	1.01	1.10	0.33	1.25	0.29
50-1	GC3650-9G	GC3650-9S	–	GC3650	C9	1.24	1.50	0.42	1.61	0.35
60-1	GC3660-9G	GC3660-9S	–	GC3660	C9	1.66	1.50	0.50	2.03	0.47
80-1	GC3680-9G	GC3680-9S	–	GC3680	C9	2.26	1.50	0.65	2.63	0.60

Trackstar Single Chain Guide



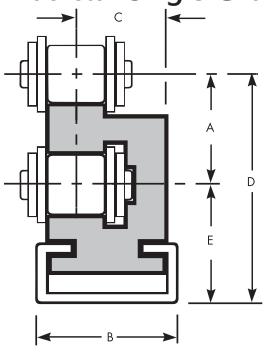
ANSI Chain	Part Number	A	B	L
25-1	NC3625	0.88	0.79	0.11
35-1	NC3635	0.88	0.79	0.17
40-1	NC3640	1.05	1.10	0.29
50-1	NC3650	1.43	1.50	0.35
60-1	NC3660	1.85	1.50	0.47

Trackstar Single Chain Guide with Mounting Channel



ANSI Chain	Part Number			Channel Type	A	B	C	D
	Galvanized	Stainless Steel	UHMW Only					
25-1	GS1025-9G	GS1025-9S	GS1025	C9	0.11	1.50	0.15	0.71
35-1	GS1035-0G	GS1035-0S	GS1035	C10	0.17	1.19	0.22	0.94
40-1	GS1040-0G	GS1040-0S	GS1040	C10	0.29	1.19	0.33	0.94
50-1	GS1050-0G	GS1050-0S	GS1050	C10	0.35	1.19	0.42	0.94
60-1	GS1060-0G	GS1060-0S	GS1060	C10	0.47	1.19	0.49	1.05
80-1	GS1080-1G	GS1080-1S	GS1080	C11	0.60	1.77	0.65	1.58
100-1	GS1100-1G	GS1100-1S	GS1100	C11	0.73	1.77	0.78	1.58

Trackstar Single Chain Guide with Mounting Channel



ANSI Chain	Part Number				Channel Type	A	B	C	D	E
	Galvanized	Stainless Steel	Aluminum	UHMW Only						
35-1	GT1035-3G	GT1035-3S	GT1035-3A	GT1035	C3	0.67	0.79	0.71	1.24	0.57
40-1	GT1040-3G	GT1040-3S	GT1040-3A	GT1040	C3	0.59	0.79	0.65	1.16	0.57
50-1	GT1050-3G	GT1050-3S	GT1050-3A	GT1050	C3	0.77	0.79	0.62	1.46	0.69
60-1	GT1060-5G	GT1060-5S	–	GT1060	C5	0.89	1.11	0.87	1.60	0.70

Chain Breakers



Part Number	Description
5810100	#1 Chain Breaker 25-60 Chain
5810200	#2 Chain Breaker 60-100 Chain
5810300	#3 Chain Breaker 100-160 Chain

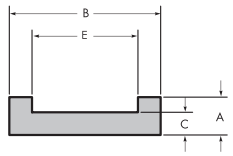
Chain Pullers



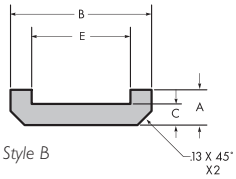
Part Number	Description
5800350	#35 Chain Puller 35 - 60 Chain
5800500	#50 Chain Puller 40 - 80 Chain
5800800	#80 Chain Puller 80 - 240 Chain

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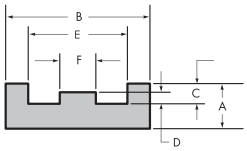
Double Pitch Chain Guides



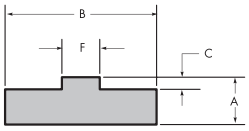
Style A



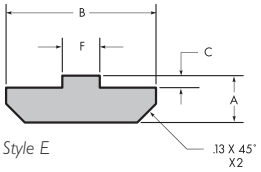
Style B



Style C



Style D



Style E

Part Number	Chain Number	Dimensions (inches)					
		A	B	C	D	E	F
STYLE A							
DPA2040	2040	0.31	1.25	0.19	-	0.88	-
DPA2050	2050	0.38	1.25	0.22	-	1.00	-
DPA2060	2060	0.38	1.50	0.19	-	1.25	-
DPA2080	2080	0.50	2.00	0.25	-	1.56	-
DPA2100	2100	0.63	2.25	0.31	-	1.88	-
DPA2120	2120	0.63	2.75	0.25	-	2.25	-
DPA2081	81X	1.00	3.00	0.38	-	2.50	-
STYLE B							
DPB2040	2040	0.31	1.25	0.19	-	0.88	-
DPB2050	2050	0.38	1.25	0.22	-	1.00	-
DPB2060	2060	0.38	1.50	0.19	-	1.25	-
DPB2080	2080	0.50	2.00	0.25	-	1.56	-
DPB2100	2100	0.63	2.25	0.31	-	1.88	-
DPB2120	2120	0.63	2.75	0.25	-	2.25	-
STYLE C							
DPC2040	2040	0.31	1.00	0.14	0.08	0.69	0.25
DPC2050	2050	0.38	1.25	0.19	0.10	0.81	0.31
DPC2060	2060	0.50	1.50	0.21	0.12	1.13	0.44
DPC2080	2080	0.50	2.00	0.25	0.13	1.44	0.56
STYLE D							
DPD2040	2040	0.31	1.00	0.08	-	-	0.25
DPD2050	2050	0.31	1.25	0.10	-	-	0.31
DPD2060	2060	0.31	1.25	0.12	-	-	0.44
DPD2080	2080	0.38	1.50	0.13	-	-	0.56
DPD2100	2100	0.50	2.00	0.21	-	-	0.69
DPD2120	2120	0.50	2.25	0.26	-	-	0.94
STYLE E							
DPE2040	2040	0.31	1.00	0.08	-	-	0.25
DPE2050	2050	0.31	1.25	0.10	-	-	0.31
DPE2060	2060	0.31	1.25	0.12	-	-	0.44
DPE2080	2080	0.38	1.50	0.13	-	-	0.56
DPE2100	2100	0.50	2.00	0.21	-	-	0.69
DPE2120	2120	0.50	2.25	0.26	-	-	0.94

T-Max® Tensioner/Sprocket Assemblies

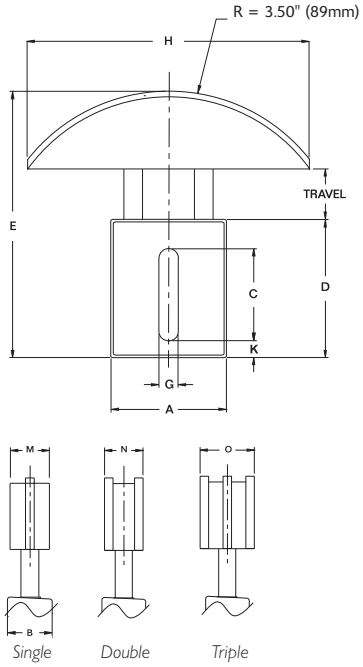
Assembly Part Number	Component	Component Part Number	Rotation (Degrees)	Force (lbs)
#35 Chain				
FS0142	Tensioner Sprocket	RT1001 CS3502	15	16
			30	23
			45	30
FS0658	Tensioner Sprocket	RT1601-L CS3502	15	10
			30	13
			45	16
#40 Chain				
FS0651	Tensioner Sprocket	RT1001 CS4002	15	16
			30	23
			45	30
FS0652	Tensioner Sprocket	RT1601 CS4002	15	20
			25	23
			35	26
FS0644	Tensioner Sprocket	RT1601-L CS4002	15	10
			30	13
			45	16
FS0557	Tensioner Sprocket	RT3001 CS4002	0 - 70	0 - 42
#50 Chain				
FS0653	Tensioner Sprocket	RT1001 CS5002	15	16
			30	23
			45	30
FS0654	Tensioner Sprocket	RT1601 CS5002	15	20
			25	23
			35	26
FS0659	Tensioner Sprocket	RT1601-L CS5002	15	10
			30	13
			45	16
FS0567	Tensioner Sprocket	RT3001 CS5002	0 - 70	0 - 42
#60 Chain				
FS0655	Tensioner Sprocket	RT1001 CS6002	15	16
			30	23
			45	30
FS0656	Tensioner Sprocket	RT1601 CS6002	15	20
			25	23
			35	26
FS0568	Tensioner Sprocket	RT3001 CS6002	0 - 70	0 - 42
#80 Chain				
FS0657	Tensioner Sprocket	RT1001 CS8002	15	16
			30	23
			45	30

Fenner Drives has several tensioner/sprocket assemblies not shown here. Contact us for availability.



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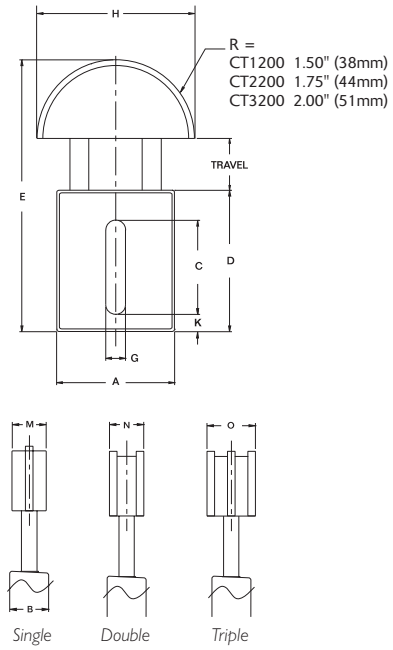
T-Max® Chain Tensioners
CT Series: CT1100, CT2100 & CT3100†



Series	Dimensions*								Travel	Force ‡
	A	B	C	D	E	G	H	K	(in)	(lbs)
INCH										
CT1100	2.31	0.98	1.82	2.91	5.6	0.41	5.5	0.46	1.05	15 - 40
CT2100	2.95	1.18	2.27	3.52	6.4	0.49	5.5	0.45	1.20	20 - 60
CT3100	3.54	1.38	2.91	4.25	7.5	0.53	5.5	0.49	1.50	45 - 100
METRIC									(mm)	(N)
CT1100	59	25	46	74	142	10	140	11	27	67 - 178
CT2100	75	30	58	89	163	12	140	11	31	89 - 267
CT3100	90	35	74	108	191	13	140	12	38	200 - 445

Single Chain			Double Chain			Triple Chain			Travel	Force ‡
Part Number	Chain	M*	Part Number	Chain	N*	Part Number	Chain	O*	(in)	(lbs)
INCH										
CT1101-L	#35	0.79	CT1103-L	#35	0.79	CT1105-L	#35	0.98	1.05	5 - 30
CT1101	#35	0.79	CT1103	#35	0.79	CT1105	#35	0.98	1.05	15 - 40
CT1102	#40	0.79	CT1104	#40	0.79	CT1106	#40	1.37	1.05	15 - 40
CT2101	#50	0.87	CT2103	#50	0.98	CT2105	#50	1.75	1.20	20 - 60
CT2102	#60	0.87	CT2104	#60	1.37				1.20	20 - 60
CT3101	#80	0.98	CT3103	#80	1.75				1.50	45 - 100
CT3102	#100	0.98							1.50	45 - 100
CT3102-H	#100	0.98							1.00	30 - 200
CT3196	#81X	2.15							1.50	45 - 100
METRIC									(mm)	(N)
CT1111-L	06B	20	CT1113-L	06B	20				27	22 - 133
CT1111	06B	20	CT1113	06B	20				27	67 - 178
CT1112	08B	20	CT1114	08B	20				27	67 - 178
CT2111	10B	22	CT2112	10B	25				31	89 - 267
CT2109	12B	22	CT2110	12B	35				31	89 - 267
CT3111	16B	25	CT3113	16B	44				38	200 - 445
CT3112	20B	25							38	200 - 445
CT3112-H	20B	25							25	134 - 890

CT Series: CT1200, CT2200 & CT3200†



Series	Dimensions*								Travel	Force ‡
	A	B	C	D	E	G	H	K	(in)	(lbs)
INCH										
CT1200	2.31	1	1.82	2.91	5.47	0.41	3	0.46	1.05	15 - 40
CT2200	2.95	1	2.27	3.52	6.47	0.49	3.5	0.45	1.20	20 - 60
CT3200	3.54	1	2.91	4.25	7.8	0.53	4	0.49	1.50	45 - 100
METRIC									(mm)	(N)
CT1200	59	25	46	74	139	10	76	11	27	67 - 178
CT2200	75	30	58	89	164	12	89	11	31	89 - 267
CT3200	90	35	74	108	198	13	102	12	38	200 - 445

Single Chain			Double Chain			Triple Chain			Travel	Force ‡
Part Number	Chain	M*	Part Number	Chain	N*	Part Number	Chain	O*	(in)	(lbs)
INCH										
CT1201-L	#35	1	CT1203-L	#35	0.79	CT1205-L	#35	0.98	1.05	5 - 30
CT1201	#35	1	CT1203	#35	0.79	CT1205	#35	0.98	1.05	15 - 40
CT1202	#40	1	CT1204	#40	0.79	CT1206	#40	1.37	1.05	15 - 40
CT2201	#50	1	CT2203	#50	0.98	CT2205	#50	1.75	1.20	20 - 60
CT2202	#60	1	CT2204	#60	1.37				1.20	20 - 60
CT3201	#80	0.98	CT3203	#80	1.75				1.50	45 - 100
CT3202	#100	0.98							1.50	45 - 100
CT3202-H	#100	0.98							1.00	30 - 200
METRIC									(mm)	(N)
CT1211-L	06B	20	CT1213-L	06B	20				27	22 - 133
CT1211	06B	20	CT1213	06B	20				27	67 - 178
CT1212	08B	20	CT1214	08B	20				27	67 - 178
CT2208	10B	22	CT2209	10B	25				31	89 - 267
CT2206	12B	22	CT2207	12B	35				31	89 - 267
CT3211	16B	25	CT3213	16B	44				38	200 - 445
CT3212	20B	25							38	200 - 445
CT3212-H	20B	25							25	134 - 890

* *Inch dimensions are in inches; metric dimensions are in millimeters.*
† *These tensioners can be used on chain sizes up to ANSI #160 or BS/DIN #24B. Contact Fenner Drives Applications Engineering group at AE@fennerdrives.com for head dimensions.*
‡ *All forces are nominal.*

Round Belting

Round belts are commonly run in pulleys with a round groove; see Figure 1a. In the absence of round groove pulleys, they can also be used in V-groove pulleys (Figure 1b). The table at right shows the dimensional data for a round belt used in a V-groove pulley.

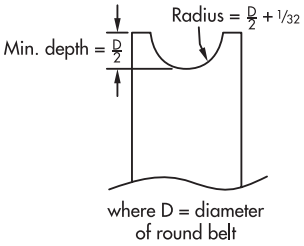


Figure 1a

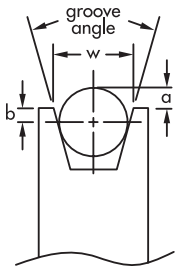


Figure 1b

Pulley Size	Pulley Diameter (inches)	Groove Angle	Round Belt	Dimensions (inches)		
				w	a	b
2L	Under 1.50"	32°	3/16"	.240	.010	.084
2L	1.50" to 1.99" O.D.	34°	3/16"	.243	.016	.078
			1/4"	.243	.153	–.028
2L	2.00" to 2.50" O.D.	36°	3/16"	.246	.020	.074
			1/4"	.246	.151	–.026
2L	Over 2.50" O.D.	38°	3/16"	.250	.020	.074
			1/4"	.250	.146	–.021
3L	Under 2.20" O.D.	32°	1/4"	.360	–.049	.174
			5/16"	.360	.094	.062
3L	2.20" to 3.19" O.D.	34°	1/4"	.364	–.043	.168
			5/16"	.364	.094	.062
3L	3.20" to 4.20" O.D.	36°	1/4"	.368	–.037	.062
			5/16"	.368	.095	.061
3L	Over 4.20" O.D.	38°	1/4"	.372	–.031	.156
			5/16"	.372	.095	.061
A/13	2.60" to 5.40" D.D.	34°	5/16"	.494	–.118	.274
			3/8"	.494	.019	.168
			1/2"	.494	.297	–.047
A/13	Over 5.40" D.D.	38°	5/16"	.504	–.097	.253
			3/8"	.504	.030	.157
			1/2"	.504	.286	.036
B/17	4.60" to 7.00" D.D.	34°	1/2"	.637	.062	.188
			9/16"	.637	.199	.082
			5/8"	.637	.340	–.027
B/17	Over 7.00" D.D.	38°	1/2"	.650	.074	.176
			9/16"	.650	.200	.081
			5/8"	.650	.331	–.018
C/22	7.00" to 7.99" D.D.	34°	5/8"	.879	–.056	.369
			3/4"	.879	.218	.157
C/22	8.00" to 12.00" D.D.	36°	5/8"	.887	–.041	.354
			3/4"	.887	.222	.153
C/22	Over 12.00" D.D.	38°	5/8"	.895	–.027	.340
			3/4"	.895	.226	.149

Note: above dimensions are belt fit in groove under no tension.
Dimensions in inches unless otherwise indicated.

V Belting

V belts in "classical" A, B, C, D and light duty 3L cross sections are designed to fit RMA compliant pulleys as per the groove details illustrated in Figure 2.

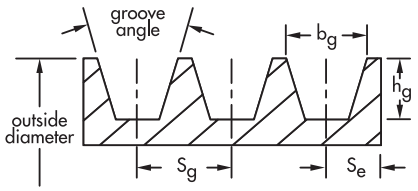


Figure 2

Cross Section	Datum Diameter Range	Groove Angle	b_g (inches)	h_g min (inches)	S_g (inches)	S_e (inches)
A/13	Up thru 5.4"	34° ±0.33°	.494 ±.005	.460	.625 ± .025	.375 +.090 –.062
	Over 5.4"	38° ±0.33°	.504			
B/17	Up thru 7.0"	34° ±0.33°	.637 ±.006	.550	.750 ± .025	.500 +.120 –.065
	Over 7.0"	38° ±0.33°	.650			
C/22	Up thru 7.99"	34° ±0.33°	.879	.750	1.000 ± .025	.688 +.160 –.070
	8.0" thru12.0"	36° ±0.33°	.887 ±.007			
	Over 12.0"	38° ±0.33°	.895			
D/32	Up thru 12.99"	34° ±0.33°	1.259	1.020	1.438 ± .025	.875 +.220 –.080
	13.0" thru 17.0"	36° ±0.33°	1.271 ±.008			
	Over 17.0"	38° ±0.33°	1.283			
3L	2.2" thru 3.1"	34° ±0.33°	.364 ±.005	.406	.500 ± .025	.313 +.062 –.032
	3.2" thru 4.2"	36° ±0.33°				
	Over 4.2"	38° ±0.33°				

Dimensions in inches unless otherwise indicated.

Flat Belting

All flat belts have a natural tendency to move laterally. Therefore a flat or straight pulley is not recommended, as the belt would walk off the pulley. To keep the belt in the center of the pulley it must have a crown. Figure 3a illustrates a round crown and is the preferred method. A modified round crown as illustrated in Figure 3b is also acceptable. A flat pulley with guide flanges (Figure 3c) is not recommended. Even with the guide flanges the belt will move laterally and potentially could climb up onto them.

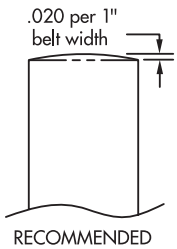


Figure 3a

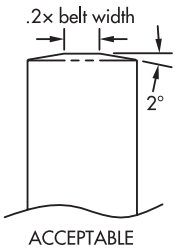


Figure 3b

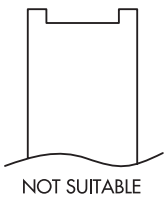


Figure 3c

Round Belting

Round belts are commonly run in pulleys with a round groove; see Figure 1a. In the absence of round groove pulleys, they can also be used in V-groove pulleys (Figure 1b). The table at right shows the dimensional data for a round belt used in a V-groove pulley.

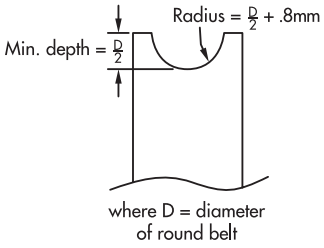


Figure 1a

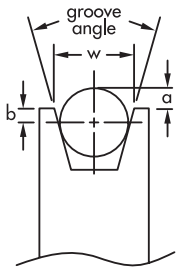


Figure 1b

Pulley Size	Pulley Diameter (mm)	Groove Angle	Round Belt	Dimensions (mm)		
				w	a	b
Z/10	Up thru 80mm	34°	7	9.7	-0.39	3.89
			8	9.7	1.82	2.18
			9.5	9.7	5.14	-0.39
Z/10	Over 80mm	38°	7	9.7	0.17	3.34
			8	9.7	2.19	1.81
			9.5	9.7	5.25	-0.50
A/13	Up thru 118mm	34°	9.5	12.7	0.23	4.52
			10	12.7	1.33	3.67
			12	12.7	5.75	0.25
A/13	Over 118mm	38°	9.5	12.7	0.90	3.85
			10	12.7	1.91	3.09
			12	12.7	5.98	0.02
B/17	Up thru 190mm	34°	12	16.3	-0.14	6.14
			15	16.3	6.50	1.00
			16	16.3	8.71	-0.71
B/17	Over 190mm	38°	12	16.3	0.76	5.24
			15	16.3	6.87	0.63
			16	16.3	8.90	-0.90
C/22	Up thru 315mm	34°	20	22	8.22	1.78
C/22	Over 315mm	38°	20	22	9.00	1.23

Note: above dimensions are belt fit in groove under no tension.
Dimensions in millimeters unless otherwise indicated.

V Belting

V belts in "classical" Z/10, A/13, B/17, C/22 and D/32 cross sections are designed to fit ISO and DIN 2215 compliant pulleys as per the groove details illustrated in Figure 2.

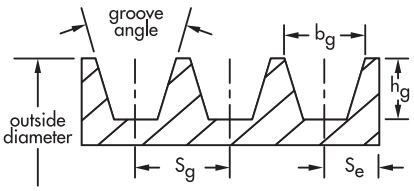


Figure 2

Cross Section	Datum Diameter Range	Groove Angle	b_g (mm)	h_g Min (mm)	S_g (mm)	S_e (mm)
Z/10	Up thru 80mm Over 80mm	34° ±1° 38° ±1°	9.7	11	12 ±0.3	8 ±0.6
A/13	Up thru 118mm Over 118mm	34° ±1° 38° ±1°	12.7	14	15 ±0.3	10 ±0.6
B/17	Up thru 190mm Over 190mm	34° ±1° 38° ±1°	16.3	18	19 ±0.4	12.5 ±0.8
C/22	Up thru 315mm Over 315mm	34° ±1° 38° ±30′	22	24	25.5 ±0.5	17 ±1.0
D/32	Up thru 500mm Over 500mm	36° ±30′ 38° ±30′	32	28	37 ±0.6	24 ±2.0

Dimensions in millimeters unless otherwise indicated.

Flat Belting

All flat belts have a natural tendency to move laterally. Therefore a flat or straight pulley is not recommended, as the belt would walk off the pulley. To keep the belt in the center of the pulley it must have a crown. Figure 3a illustrates a round crown and is the preferred method. A modified round crown as illustrated in Figure 3b is also acceptable. A flat pulley with guide flanges (Figure 3c) is not recommended. Even with the guide flanges the belt will move laterally and potentially could climb up onto them.

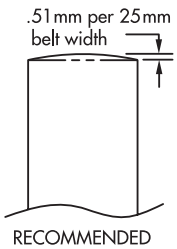


Figure 3a

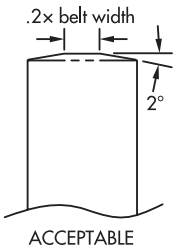


Figure 3b

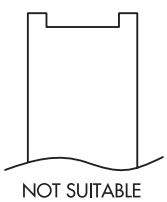


Figure 3c

Belt Installation Tension

All belts require a certain amount of tension to function properly in the application. The specific installation tension is determined from several factors including belt type, construction and working load. Belt details are in the Technical Data section of this catalog and working load is derived from your application.

Non-Reinforced Belting: When non-reinforced belting is stretched and released, elasticity is the property that brings the material back to its original shape. This "memory" is what gives our non-reinforced belting its self-tensioning properties. When a non-reinforced belt is first installed (stretched) the material does not return to 100% of its original length and continues to lose elasticity over its life span. This loss in elasticity is evident as tension decay. To overcome tension decay effects, a non-reinforced belt requires a relatively high install tension. Installation tensions ranging from 6% to 10% will normally be sufficient for most applications. If higher tensions are required, the application may exceed the belt's load capacity.

Reinforced Belting: Reinforced belts contain a reinforcing tensile member which increases the belt's modulus of elasticity. This reduces the belt's ability to stretch and minimizes tension decay. This allows a reinforced belt to carry a greater load than a non-reinforced belt. Since an endless reinforced belt is essentially a fixed length, it cannot be stretched on like a non-reinforced belt. Consequently, reinforced belts require a mechanical take-up mechanism to apply the appropriate installation tension as well as accommodating any eventual small amount of tension decay that may occur. This mechanism should accommodate at least 4% of the belt's length.

Belt Installation Length

In this section, we will refer to two different lengths that are defined as follows:

1. Reference Length: The length determined by taking a measuring tape and following the path of the belt around all of the pulleys, or through computer aided design (CAD) techniques. This length may also be obtained from the equation below. Take up mechanisms should be adjusted to the minimum position to allow for maximum adjustment of the belt prior to taking or calculating length. Note: this equation applies to two-pulley drives only.

$$L = 2C + \frac{\pi}{2}(D + d) + \frac{(D - d)^2}{4C}$$

where:
- L = reference length
- C = center of pulley shaft to center of pulley shaft distance
- D = pitch diameter of large pulley
- d = pitch diameter of small pulley

2. Install Length: The length the belt is made to prior to welding or joining.

Apply the following formulas to determine the Install Length from Reference Length:

Butt weld non-reinforced: Install Length = Reference Length ÷ (1 + % tension) Example: Reference Length for a non-reinforced belt is 44" (1120mm), requires 8% tension and will be butt welded. Install Length is calculated on right.	Install Length = 44" ÷ (1 + 8%) = 44" ÷ 1.08 = 40.7"	Install Length = 1120mm ÷ (1 + 8%) = 1120mm ÷ 1.08 = 1037mm
Overlap weld reinforced: Install Length = Reference Length + 1.5" (38mm) Example: Reference Length for a reinforced belt is 44" (1120mm) and will be overlap welded. The overlap weld consumes 1.5" (38mm) of belt length. Install Length is calculated on right.	Install Length = 44" + 1.5" = 45.5"	Install Length = 1120mm + 38mm = 1158mm
Butt weld reinforced: Install Length = Reference Length Example: Reference Length for a reinforced belt is 44" (1120mm) and will be butt welded. The weld consumes a negligible amount of belt length, consequently, Install Length and Reference Length are the same. Install Length is calculated on right.	Install Length = 44"	Install Length = 1120mm
Link Belting: Install length = Reference Length minus (1 - 2%) Example: Reference Length for a link belt is 44" (1120mm). Install Length removing 2% is calculated on right. Remove links to get as close as possible to Install Length.	Install Length = 44" - (44 x .02) = 44" - 0.88" = 43.12"	Install Length = 1120mm - (1120 x .02) = 1120mm - 22.40 = 1097.60mm

Temperature

The temperature range of polyurethane belting is determined by the thermoplastic resin. Like all thermoplastic resins its physical properties change with changes in temperature. At higher temperatures the material will soften, lose strength and can elongate excessively to the point of premature failure. At lower temperatures the material will become more brittle and stiff which can result in cracking. The temperature ranges are for guidance and listed under each individual belt type in the Material Properties section.

Minimum Pulley Diameter

The most common serious mistake in designing belt drives is the selection of a pulley diameter that is too small. In most cases, non-reinforced belts can operate on smaller diameter pulleys than belts with a reinforcing tensile member. Reinforced belts require a larger pulley diameter to prevent premature flex fatigue failure of the tensile member. Listed under each individual belt type's technical data is the recommended minimum pulley diameter. Smaller diameters can be used only if a reduction in belt service life is acceptable.

Engineering Data — Selection Procedure, Conveying

1. Refer to the Technical Data chart for the belt material and cross section selected.
2. Use the following formula that meets your application requirements (Note: if belt supported by rollers use .17 for μ):
   a. Horizontal Transport with Slider Bed
   $T_e = W_t \times \mu + B_{wt}$
   b. Horizontal Transport with Slider Bed and Product Accumulation
   $T_e = W_t \times \mu + B_{wt} + A_{wt}$
   c. Incline or Decline Transport with Slider Bed
   $T_e = \frac{W_t}{C} \times (H_t + \mu \times \sqrt{C^2 + H_t^2}) + B_{wt}$
   d. Incline or Decline Transport with Slider Bed and Product Accumulation
   $T_e = \frac{W_t}{C} \times (H_t + \mu \times \sqrt{C^2 + H_t^2}) + B_{wt} + A_{wt}$

Where:

T_e = Effective Tension
W_t = Total Weight on Conveyor
C = Conveyor Center Distance
B_{wt} = Belt weight/unit length × C
A_{wt} = Accumulating weight × μ´
(where μ´ is the COF between belt and product)
H_t = Incline or decline height
μ = COF on slider bed material from chart

3. Determine Tight Tension (T_1).
   Flat and round belts: $T_1 = T_e \times 2$
   V belts: $T_1 = T_e \times 1.25$
4. Refer to the Technical Data chart for the material and cross section selected and compare T_1 to the Working Load at maximum % tension. If only one belt is desired, T_1 may not be greater than the Working Load at maximum % tension. If more than one belt is required, divide T_1 by the Working Load at maximum % tension to arrive at number of belts. Round up to the nearest whole number of belts.
5. Find load per belt by dividing T_1 by number of belts. From the Technical Data chart, determine the percent installed tension for the load per belt.

To determine the required belt length, please refer to the "Belt Installation Length" section on the previous page.

Engineering Data — Selection Example

NON-REINFORCED						Working Load @ Percent Tension								Weight	
Color	Part Number	Dimensions Ø (in)	(mm)	Minimum Pulley Ø (in)	(mm)	4% (lbs)	(N)	6% (lbs)	(N)	8% (lbs)	(N)	10% (lbs)	(N)	lbs/ft	kg/m
Eagle® Orange 85	L04OG856M		6	1.89	48	1.7	7.7	2.7	11.8	3.5	15.8	4.4	19.4	0.023	0.034
Eagle Orange 85	1032008	1/4	6.3	2	51	1.9	8.6	3	13.3	4	17.7	4.9	21.9	0.026	0.038

NON-REINFORCED Product	Hardness	FDA Compliant	Coefficient of Friction			Contact Temperature Range	
			Stainless Steel	Steel	UHMW	°F	°C
Eagle Orange 85	85A	Yes	0.70	0.60	0.45	-22 to +150	-30 to +66

Example 1

Type of belt being considered = Eagle Orange 85 in ¼" round
Head-to-tail center distance (C) = 10 feet
Incline or decline = none
Product accumulation on belt(s)? = no
Total weight on belt(s) = 15 lbs.
Type of belt support = UHMW slider bed

2. Horizontal Transport with Slider Bed.
Since the belt will run in UHMW slider bed the COF(μ) of .45 is used from Technical Data chart. From the chart the belt weight is .026 lbs/ft giving a total belt weight of .26 lbs (.026 × 10').
T_e = 15 lbs × .45 + .26 = 7.01

3. Determine Tight Tension (T_1).
round belts T_1 = 7.01 × 2 = 14.02

4. Refer to the Technical Data chart for the material and cross section selected and compare T_1 to the Working Load at 10% tension. If only one belt is desired, T_1 may not be greater than the Working Load at 10% tension. If more than one belt is required, divide T_1 by the Working Load at 10% tension to arrive at number of belts. Round up to the nearest whole number of belts.
¼" round rated 4.9 lbs @ 10% tension. 14.02 ÷ 4.9 = 2.86 use 3 belts

5. Find load per belt by dividing T_1 by number of belts. From the Technical Data chart, determine the percent installed tension for the load per belt.
Load/belt = 14.02 ÷ 3 = 4.67 lbs
Corresponding installed tension = 9.7%

Example 2

Eagle Orange 85 in 6mm round
Head-to-tail center distance (C) = 3 meters
Incline or decline = none
Product accumulation on belt(s)? = no
Total weight on belt(s) = 6 kg
Type of belt support = UHMW slider bed

2. Horizontal Transport with Slider Bed.
Since the belt will run in UHMW slider bed the COF(μ) of .45 is used from Technical Data chart. From the chart the belt weight is .034 kgs/m giving a total belt weight of .102 kg (.034 × 3m).
T_e = 6 kg × .45 + .102 = 2.802 kg

3. Determine Tight Tension (T_1).
round belts T_1 = 2.802 × 2 = 5.604kg = 54.98 Newtons (5.604 × 9.81)

4. Refer to the Technical Data chart for the material and cross section selected and compare T_1 to the Working Load at 10% tension. If only one belt is desired, T_1 may not be greater than the Working Load at 10% tension. If more than one belt is required, divide T_1 by the Working Load at 10% tension to arrive at number of belts. Round up to the nearest whole number of belts.
6mm round rated 19.4 N @ 10% tension. 54.98 ÷ 19.4 = 2.83 use 3 belts

5. Find load per belt by dividing T_1 by number of belts. From the Technical Data chart, determine the percent installed tension for the load per belt.
Load/belt = 54.98 N ÷ 3 = 18.33 Newtons
Corresponding installed tension = 9.6%

Eagle® Belting Chemical Resistance Chart

Polyurethane is extremely resistant to many industrial oils and chemicals, but not all. Below are a wide variety of oils and chemicals found in industrial applications. Consult Fenner Drives Applications Engineering group for assistance on projects with design criteria outside these parameters, or obtain a sample belt and determine its compatibility in the precise operating conditions.

Acids	Rating
Acetic, 5%	C
Boric, 4%	C
Chromic	C
Citronic	C
Formic	C
HCl	B
Hydrochloric, 10%	C
Lactic	C
Nitric, >1%	C
Oleic	C
Phosphoric	C
Sulfuric, <20%	B
Sulfuric, >20%	C

Alkalines	Rating
Ammonia, >10%	C
Detergent, 1%	A
Potassium Hydroxide	B
Soap, 1%	A
Sodium Hydroxide, 10%	C

Aqueous Solutions	Rating
Aluminum Chloride, 10%	C
Ammonium Chloride, 10%	C
Bleaching Agent, 40%	B
Bleaching Agent, 100%	C
Calcium Chloride, 40%	C
Caustic Soda, 10%	B
Cola	A
Ferric Chloride, 10%	C
Hydrogen Peroxide, 3%	B
Isopropanol, 50%	C
Magnesium Chloride, 30%	C
Potassium Chloride, 40%	C
Potassium Dichromate, 10%	C
Potassium Permanganate, 5%	C
Sea Water	B
Sodium Bisulfate, 10%	C
Sodium Chloride, 10%	C
Sodium Hypochlorite, 5%	C
Sodium Thiosulfate, 20%	A
Water, Deionized	A

Fuels	Rating
ASTM Fuel A	A
ASTM Fuel B	C
ASTM Fuel C	C
Diesel Fuel	B
Gasoline, Premium	C
Gasohol (10-15% Methanol)	C
Jet Fuel, JP-4	A
Kerosene	A

Greases	Rating
Calcium Grease	B
Sodium Grease	B
Teflon Grease	A

Miscellaneous	Rating
Dioctyl Phthalate (DOP)	A
Ethylene Chloride	C
Ethylene Dichloride	C
Ethylene GlycoWater 50/50	C
Household Cleaner	B
Naptha	A
Silage (Silo) Juice	C
Natural Perspiration	B
Tincture of Iodine	C
Tricresyl Phosphate	C

Oils	Rating
ASTM Oil #1	A
ASTM Oil #2	A
ASTM Oil #3	A
Brake Fluid (ATE or ATS)	C
Gear Box Oil (SAE 90)	A
Hydraulic Fluid	C
Hydraulic/Water Emulsion	C
Mineral Oil	A
Motor Oil	A
Paraffin Oil	A
Petroleum (Texas Sour Crude)	A
Power Steering Fluid	B
Skydrol 500 Oil	C
Transmission Oil A	A

Solvents	Rating
Acetone	C
Aniline	C
Benzene	C
Benzyl Alcohol	C
Butane	C
Butyl Acetate	C
Butyl Alcohol	C
Carbon Tetrachloride	C
Chlorobenzane	C
Chloroform	C
Cyclohexane	C
Ethanol	C
Ether	C
Ethyl Acetate	C
Freon 11, 12, 22	C
Freon 113	A
Glycerine, Glycerol, Glycol	A
Heptane	B
Hexane	C
Isopropyl Alcohol	C
Methanol	C
Methyl Acetate	C
Methyl Ethyl Ketone	C
Methyl Glycol	C
Methylene Chloride	C
N-Methyl Pyrrolidone	C
Perchloroethylene	C
Pyridine	C
Turpentine	A
Tetrachloroethylene	C
Tetrahydrofuran	C
Toluene	C
Trichloroethylene	C
Xylene	C

Rating Key
A - Fluid has little or no effect
B - Fluid has minor to moderate effect
C - Fluid has severe effect

Trackstar® Chemical Resistance Chart

	UHMW-PE
Acids, Weak	S
Acids, Strong	L
Alkalies, Weak	S
Alkalies, Strong	S
Hydrocarbons, Aromatic	L
Hydrocarbons, Aliphatic	S
Ketones	S
Ethers	S
Esters	S
Alcohols	S
Inorganic Salt Solutions	S
Continuous Sunlight	U

S – Suitable
L – Limited Suitability
U – Unsuitable

Disclaimer: Fenner Drives accepts no responsibility nor makes any claims regarding suitability for a particular use or purpose.

For assistance, contact Fenner Drives Applications Engineering group at AE@fennerdrives.com.

EAGLE®
POLYURETHANE BELTING & O-RINGS

NON-REINFORCED Material and Color	Hardness	Compliancy	Coefficient of Friction			Contact Temperature Range	
			Stainless Steel	Steel	UHMW	°F	°C
Eagle Blue 80 EC	80A	EC, FDA	0.80	0.70	0.55	-22 to +150	-30 to +66
Eagle Clear 80 EC	80A	EC, FDA	0.80	0.70	0.55	-22 to +150	-30 to +66
Eagle Blue 80 MD	80A	FDA	0.75	0.65	0.50	-22 to +150	-30 to +66
Eagle Opaque 80	80A	–	0.75	0.65	0.50	-22 to +150	-30 to +66
Eagle Orange 85	85A	FDA	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Clear 85	85A	FDA	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Ivory 85	85A	–	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Red 85	85A	FDA	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Blue 85	85A	FDA	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Green 89	89A	–	0.65	0.55	0.40	-22 to +150	-30 to +66
Eagle Green 89 Textured	89A	–	0.50	0.40	0.30	-22 to +150	-30 to +66
Eagle Green 89 T SureConnect*	89A	–	0.50	0.40	0.30	-22 to +150	-30 to +66
Eagle Orange 89 SureConnect*	89A	–	0.65	0.55	0.40	-22 to +150	-30 to +66
Eagle Red 90	90A	–	0.60	0.50	0.38	-22 to +150	-30 to +66
Eagle Beige 95	95A	FDA	0.55	0.45	0.35	-22 to +150	-30 to +66
Eagle Clear 95	95A	FDA	0.55	0.45	0.35	-22 to +150	-30 to +66
Eagle White 40D	40D	–	0.55	0.45	0.35	-22 to +176	-30 to +80
Eagle Blue 55D	55D	–	0.50	0.40	0.30	-22 to +176	-30 to +80
Eagle Blue 80 EC QC	80A	EC, FDA	0.50	0.40	0.30	-22 to +150	-30 to +66
Eagle Clear 85 QC	85A	FDA	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Red 85 QC	85A	–	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Yellow 85 QC	85A	FDA	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Blue 85 QC	85A	FDA	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Red 85 CXF	85A Base, 60A Top	–	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Ivory 85 SGT PU	85A Base, 70A PU Top	–	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Ivory 85 SGT PVC	85A Base, 50A PVC Top	–	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Ivory 85 SGT TPE	85A Base, 55A TPE Top	–	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Green 89 SGT PVC	89A Base, 50A PVC Top	–	0.65	0.55	0.40	-22 to +150	-30 to +66
Eagle Red 90 SGT PVC	90A Base, 50A PVC Top	–	0.60	0.50	0.38	-22 to +150	-30 to +66
Eagle White 40D SGT PVC	40D Base, 50A PVC Top	–	0.55	0.45	0.35	-22 to +150	-30 to +66
REINFORCED Material and Color	**Hardness**	**Compliancy**	**Coefficient of Friction**			**Contact Temperature Range**	
			Stainless Steel	**Steel**	**UHMW**	**°F**	**°C**
Eagle Opaque 80	80A	–	0.75	0.65	0.50	-22 to +150	-30 to +66
Eagle Orange 85	85A	FDA	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Hyfen 85	85A	FDA	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Ivory 85	85A	FDA	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Green 89	89A	–	0.65	0.55	0.40	-22 to +150	-30 to +66
Eagle Green 89 Textured	89A	–	0.50	0.40	0.30	-22 to +150	-30 to +66
Eagle Beige 95	95A	FDA	0.55	0.45	0.35	-22 to +150	-30 to +66
Eagle Hyfen 95	95A	FDA	0.55	0.45	0.35	-22 to +150	-30 to +66
Eagle Red 50D LCF Can Cable	50D	–	n/a	n/a	n/a	-22 to +150	-30 to +66
Eagle Blue 55D Can Cable	55D	–	n/a	n/a	n/a	-22 to +176	-30 to +80
Eagle Blue 55D Aramid Can Cable	55D	–	n/a	n/a	n/a	-22 to +176	-30 to +80
Eagle Natural 55D Can Cable	55D	–	n/a	n/a	n/a	-22 to +176	-30 to +80
Eagle Green 63D Can Cable	63D	–	n/a	n/a	n/a	-22 to +176	-30 to +80
Eagle Natural 63D Can Cable	63D	–	n/a	n/a	n/a	-22 to +176	-30 to +80
Eagle Ivory 85 RSGT PU	85A Base, 70A PU Top	–	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Ivory 85 RSGT PVC	85A Base, 50A PVC Top	–	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Ivory 85 RSGT TPE	85A Base, 55A TPE Top	–	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Hyfen 85 CXF V	85A Base, 60A Top	–	0.70	0.60	0.45	-22 to +150	-30 to +66
Eagle Hyfen 85 CXR V	85A Base, 60A Top	–	0.70	0.60	0.45	-22 to +150	-30 to +66

** Eagle SureConnect Connectors are Alloy Steel with a RoHS Compliant Zinc Coating*

Note: Cogged Belting is not FDA compliant.

EAGLE®
TAPER EDGE BAND

NON-REINFORCED Material and Color	Hardness	Compliancy	Contact Temperature Range	
			°F	°C
Eagle Taper Edge Band	60D	–	-22 to +176	-30 to +80

POWERTWIST MOVE POWERTWIST

Product	Color	Compliancy	Material	Temperature Range °F	Temperature Range °C
POWERTWIST MOVE Belting	Purple	RoHS	Composite Polyester/Polyurethane	-40 to +240	-40 to +116
POWERTWIST MOVE SuperGrip Top PU	Purple, Orange Top	RoHS	Composite Polyester/Polyurethane Polyurethane grip top surface	-22 to +150	-30 to +66
POWERTWIST MOVE SuperGrip Top PVC	Purple, Green Top	RoHS	Composite Polyester/Polyurethane PVC grip top surface	-22 to +150	-30 to +66
POWERTWIST MOVE Friction Top®	Purple	RoHS	Composite Polyester/Polyurethane	-22 to +150	-30 to +66
POWERTWIST MOVE Bridge Top™	Purple, White Inserts	RoHS	Composite Polyester/Polyurethane PTFE inserts	-40 to +450*	-40 to +232*
POWERTWIST MOVE RCS	Purple, White Tabs	RoHS	Composite Polyester/Polyurethane Polyurethane tabs	-22 to +150	-30 to +66
POWERTWISt Roller Drive™	Red	RoHS	Composite Polyester/Polyurethane	-22 to +150	-30 to +66
POWERTWISt Antistatic†	Blue	RoHS	Composite Polyester/Polyurethane	-40 to +240	-40 to +116

* *Contact temperature*
† *ISO 1813:1998 inspected and certified by Fenner Drives.*

Trackstar® UHMW BELT & CHAIN GUIDES

Our Trackstar Guides are produced using only the highest quality virgin black UHMW-PE material to ensure minimum friction and maximum wear resistance.

	ASTM Test	UHMW-PE
Density (gm/cm3)	D792	.930 – .936
Tensile Strength at yield (psi at 73° F)	D638	3100
Elongation at break (% at 73° F)	D638	350
Relative volumetric abrasion loss*	N/A	100
Coefficient of friction on steel 73° F Static	N/A	.15 – .20
Coefficient of friction on steel 73° F Dynamic	N/A	.10 – .20
Hardness 73° F (Shore D)	D785	62 – 66
Coefficient of linear thermal expansion (in/in/° F)	D696	1.1×10^{-4}
Continuous Service Temp in air (max) (°F)	D696	180
Volume Resistivity (Ohm/cm)	D257	$>10^{15}$

* *Industry standard testing method using slurry of 60% aluminum oxide and 40% water at a rotation speed of 1750 rpm for two hours. A lower number indicates better abrasion resistance.*

T-MAX® BELT & CHAIN TENSIONERS

Tensioner Series	Construction: Body	Construction: Arm	Operating Temperature Range °F	Operating Temperature Range °C
RT1000, RT1600	Die Cast Aluminum	Die Cast Aluminum	-10 to +300	-23 to +149
RT3000	Die Cast Aluminum	Heavy Duty Stamped Steel	-20 to +350	-29 to +177
RT4000	Die Cast Aluminum	Heavy Duty Stamped Steel	-20 to +350	-29 to +177
CT1000, 2000, 3000	Die Cast Aluminum	UHMW Head	-10 to +180	-23 to +82

POWER TRANSMISSION SOLUTIONS



POWERTWIST DRIVE
SUPER T LINK
NU T LINK

POWERTWIST DRIVE, SuperTLink, and NuTLink V-Belting

- Provide time and cost saving benefits to maintenance engineers and equipment designers
- Longer belt life in even the harshest environments
- Easier, faster installation without tear-downs or struggling with motor bases
- Install on captive drives and fixed center drives
- Make matching sets
- Better drive efficiency due to minimal belt elongation
- Reduced noise, longer bearing life due to low belt vibration



T-MAX

T-Max Belt and Chain Tensioners

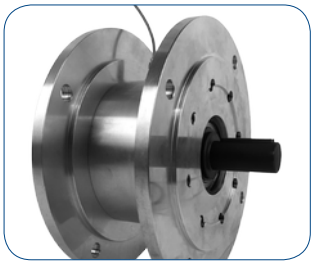
- Automatically take up the slack – decreasing downtime, reducing operating costs and saving energy
- Constructed from high-quality materials for proven durability in harsh environments
- Wide range of tensioners to handle single and multiple strand belt and chain drives



Trantorque®
B-LOC®

Trantorque and B-LOC Keyless Locking Devices

- A true zero backlash shaft-to-hub connection with none of the operational drawbacks of keyways, shrink fits, or splines
- Extensive inventory – same day shipment available for stock bore sizes: 1/8 – 8", 3 – 600mm
- 18 different internal and external locking devices for any application
- Made-to-Order keyless locking devices for your most demanding applications



RotoShield™

RotoShield Gearbox Torque Limiters

- Protect your most expensive machine components from destructive torque overloads
- Instantly disengages before damage occurs
- Easy, fast installation – bolts directly to the motor and gearbox

Link Belting

V Wedge Double-V Round

POWERTWIST DRIVE LINK BELTING	Classical Cross Section	Nominal Width		Part Numbers							Minimum Pulley Ø		Ride Height Above Rim			
		inches	mm	5' Sleeve	6' Sleeve	2m Sleeve	25'	100'	10m	30m	inches	mm	Min(in.)	Max(in.)	Min(mm)	Max(mm)
POWERTWIST DRIVE	3L	3/8		0418010SL			0405010	0408010			2.00		0.12	0.17	3.0	4.2
POWERTWIST DRIVE	Z/10		10			04100202			0410020	0418023		45	0.14	0.20	3.6	5.2
POWERTWIST DRIVE	A/4L/13	1/2	13	0418030SL		04090502M	0405030	0408030	0410030	0418033	3.00	80	0.08	0.16	2.1	4.0
POWERTWIST DRIVE	B/5L/17	5/8	17		0418050SL	04090302M	0405050	0408050	0410050	0418053	5.00	125	0.14	0.22	3.4	5.6
POWERTWIST DRIVE	C/22	7/8	22				0405070	0408070	0410070	0418073	9.00	229	0.07	0.22	1.8	5.6
POWERTWIST DRIVE	D/32	1-1/4	32				0405090	0408090	0410090	0418093	13.2	335	0.08	0.21	2.0	5.3

POWERTWIST DRIVE LINK BELTING	Wedge Cross Section	Nominal Width		Part Numbers				Minimum Pulley Ø		Ride Height Above Rim			
		inches	mm	5m	25'	100'	20m	inches	mm	Min(in.)	Max(in.)	Min(mm)	Max(mm)
POWERTWIST DRIVE	3V	3/8	10		0460025	0460000		2.65		0.18	0.30	4.5	7.5
POWERTWIST DRIVE	5V	5/8	17		0460125	0460100		5.5		0.20	0.44	5.0	11.0
POWERTWIST DRIVE	SPZ		10	0460616			0460666		67	0.18	0.30	4.5	7.5
POWERTWIST DRIVE	SPA		13	0460716			0460766		90	0.16	0.41	4.1	10.3
POWERTWIST DRIVE	SPB		17	0460816			0460866		140	0.20	0.44	5.0	11.0

POWERTWIST SPECIALTY LINK BELTING	Cross Section	Nominal Width		Part Numbers				Minimum Pulley Ø	
		inches	mm	25'	100'	10m	30m	inches	mm
POWERTWISt Antistatic	A/4L/13	1/2	13	0408505	0408501	040850010	0408500	3.00	80
POWERTWISt Antistatic	B/5L/17	5/8	17	0408605	0408601	040860010	0408600	5.00	125
POWERTWISt Double-V	AA	1/2	13	0405230	0408230		0419230	3.00	80
POWERTWISt Double-V	BB	5/8	17	0405250	0408250		0419250	5.00	125
POWERTWISt Double-V	CC	7/8	22	0405270	0408270		0418270	9.00	229
POWERTWISt Ground Round®	5/16"	5/16"	8	04051050	04081050		04191050	2.00	51
POWERTWISt Ground Round	3/8"	3/8"	10	04051060	04081060		0419110	3.00	76
POWERTWISt Ground Round	1/2"	1/2"	13	04051040	04081040		0419120	3.00	76
POWERTWISt Ground Round	9/16"	9/16"	14	04051070	04081070		04151070	5.50	140
POWERTWISt Ground Round	3/4"	3/4"	19		04081080		0415110	8.50	216

SUPERTLINK BELTING	Wedge Cross Section	Nominal Width		Part Numbers				Minimum Pulley Ø		Ride Height Above Rim			
		inches	mm	5m	25'	100'	20m	inches	mm	Min(in.)	Max(in.)	Min(mm)	Max(mm)
SuperTLink®	3V	0.45	11		0407025	0407100		2.8		0.18	0.40	4.6	10.0
SuperTLink	5V	0.66	17		0417025	0417100		5.5		0.06	0.20	1.4	5.1
SuperTLink	SPZ		10	L02Z5N			L02Z20N		71	0.18	0.40	4.6	10.0
SuperTLink	SPA		13	L02A5N			L02A20N		90	0.14	0.36	3.6	9.1
SuperTLink	SPB	0.66	17	L02B5			L02B20		140	0.06	0.20	1.4	5.1
SuperTLink	SPC		22	L02C5			L02C20		224	0.05	0.33	1.3	8.4
TLink Installation Tool	L02NT10 (10pk)												

NUTLINK BELTING	Classical Cross Section	Nominal Width		Part Numbers		Minimum Pulley Ø		Ride Height Above Rim			
		inches	mm	5m	20m	inches	mm	Min(in.)	Max(in.)	Min(mm)	Max(mm)
NuTLink®	Z/10		10	L01Z5	L01Z20		45	0.06	0.18	1.6	4.6
NuTLink	A/13	1/2	13	L01A5	L01A20	3.00	80	0.08	0.31	2.0	7.8
NuTLink	B/17	5/8	17	L01B5	L01B20	5.00	125	0.09	0.37	2.2	9.3
NuTLink	C/22	7/8	22	L01C5	L01C20	9.00	229	0.00	0.23	0.1	5.8
TLink Installation Tool	L02NT10 (10pk)										

T-Max® Belt & Chain Tensioners

Use the following charts to guide your tensioner selection for belt & chain drives.

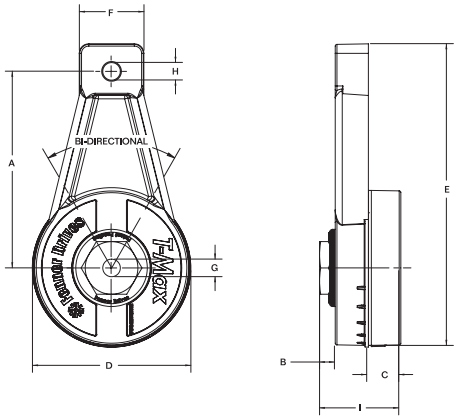
V Belt Tensioners	1 Groove						2 Groove						3 Groove						4 Groove					
	Z	A	SPZ	SPA/3V	B	SPB/5V	Z	A	SPZ	SPA/3V	B	SPB/5V	Z	A	SPZ	SPA/3V	B	SPB/5V	Z	A	SPZ	SPA/3V	B	SPB/5V
RT1000-L	X	X	X	X	X																			
RT1000		X	X	X	X	X																		
RT3000					X	X	X	X	X	X	X	X	X	X										
RT4000											X	X	X	X	X	X	X	X	X	X	X	X	X	X

Chain Tensioners	Single Chain						Double Chain				
	35	40	50	60	80	100	35	40	50	60	80
	06B	08B	10B	12B	16B	20B	06B	08B	10B	12B	16B
RT1600-L	X	X	X				X	X			
RT1600		X	X	X	X		X	X	X	X	
RT1000	X	X	X	X	X		X	X	X	X	
RT3000				X	X					X	X
RT4100											X
RT4900											X
CT1000-L	X	X	X				X	X			
CT1000	X	X	X	X	X	X	X	X	X	X	X
CT2000			X	X	X	X			X	X	X
CT3000					X	X					X
CT3000-H						X					

Note: Consult Fenner Drives Applications Engineering for any belt or chain application concerns.

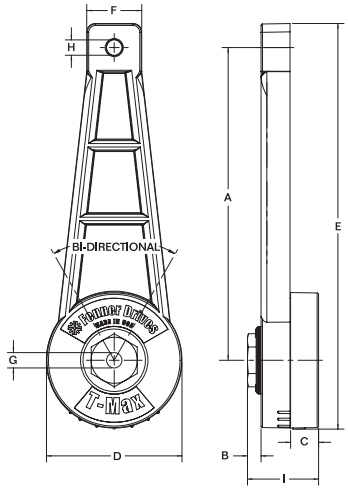
T-Max® Belt & Chain Tensioners

RT1000 Series*†



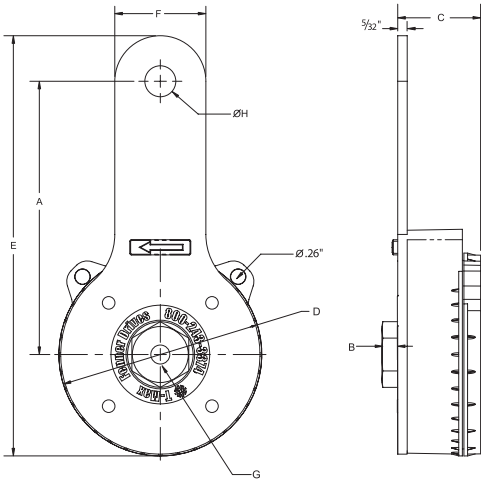
Part Number	Dimensions (inches)									Rotation (degrees)	Force ‡ (lbs)
	A	B	C	D	E	F	G	H	I		
RT1001	3.50	0.29	0.59	2.76	5.37	1.15	3/8-16	3/8-16	1.45	15	16
										30	23
										45	30
RT1003	3.50	0.29	0.59	2.76	5.37	1.15	0.40	3/8-16	1.45	15	16
										30	23
										45	30
RT1054ZF	3.50	0.29	0.59	2.76	5.37	1.15	3/8-16	3/8-16	1.45	15	16
	Zerk fitted to apply grease to the spring cavity.									30	23
										45	30
RT1056ZF	3.50	0.29	0.59	2.76	5.37	1.15	3/8-16	3/8-16	1.45	15	16
	Zerk fitted to apply grease to the shaft area.									30	23
										45	30

RT1600 Series *†



Part Number	Dimensions (inches)									Rotation (degrees)	Force ‡ (lbs)
	A	B	C	D	E	F	G	H	I		
RT1601-L	6.37	0.29	0.59	2.76	8.24	1.12	3/8-16	3/8-16	1.45	15	10
										30	13
										45	16
RT1603-L	6.37	0.29	0.59	2.76	8.24	1.12	0.40	3/8-16	1.45	15	10
										30	13
										45	16
RT1601	6.37	0.29	0.59	2.76	8.24	1.12	3/8-16	3/8-16	1.45	15	20
										25	23
										35	26
RT1603	6.37	0.29	0.59	2.76	8.24	1.12	0.40	3/8-16	1.45	15	20
										25	23
										35	26

RT3000 Series *

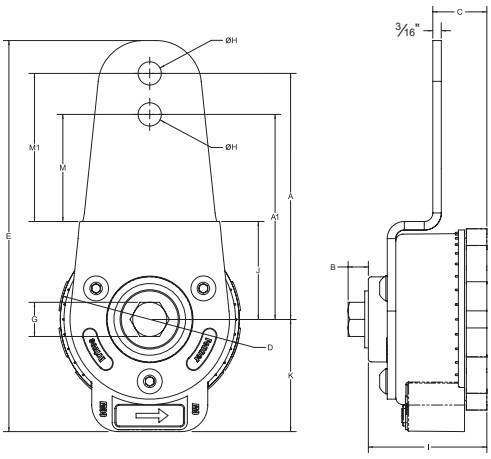


Part Number	Dimensions (inches)								Rotation (degrees)	Force ‡ (lbs)
	A	B	C	D	E	F	G	H		
RT3000	4.50	0.28	1.35	3.34	6.92	1.50	3/8-16	0.51	0 - 70	0 - 42
RT3001	4.50	0.28	1.35	3.34	6.92	1.50	0.40	0.51	0 - 70	0 - 42

* *Maximum load no more than 1" distance from front face of tensioner to centerline of idler.*
† *Do not use on reciprocating applications such as IC engines and piston devices.*
‡ *All forces (lbs.) are nominal.*

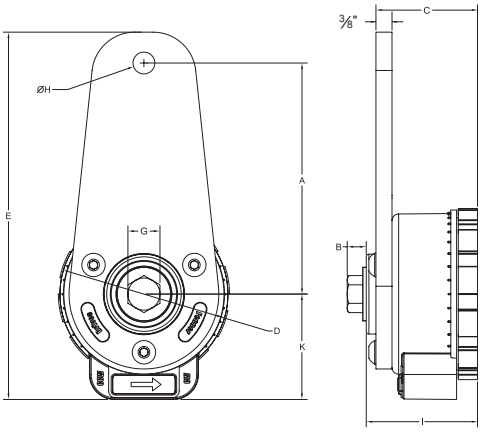
T-Max® Tensioners

RT4100 Series*†



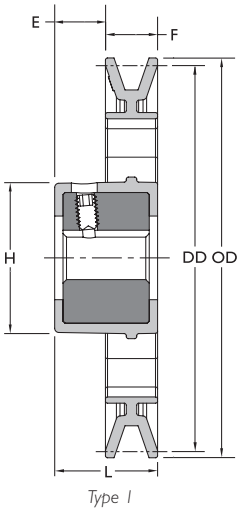
Part Number	Dimensions (inches)													Rotation	Force ‡
	A	A1	B	C	D	E	G	H	I	J	K	M	M1	(degrees)	(lbs)
RT4100	5.40	4.50	0.47	1.19	4.00	8.58	1/2 - 13	0.51	2.60	2.15	2.46	2.35	3.25	0 - 85	0 - 85
RT4101	5.40	4.50	N/A	1.19	4.00	8.58	0.51	0.51	2.60	2.15	2.46	2.35	3.25	0 - 85	0 - 85

RT4900 Series*†

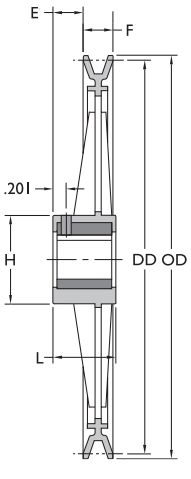


Part Number	Dimensions (inches)									Rotation §	Force §
	A	B	C	D	E	G	H	I	K	(degrees)	(lbs)
RT4900	5.40	N/A	2.37	4.00	8.58	0.51	0.51	2.60	2.46	0 - 85	0 - 70
RT4902	5.40	0.47	2.37	4.00	8.58	1/2 - 13	0.51	2.60	2.46	0 - 85	0 - 70

PowerMax DriveN Pulleys



Type 1



Type 2

Base Part Number	Dimensions (inches)					Belt Size	Diameter (inches)		Number Spokes	Spoke Style
	Type	E	F	H	L		Outside	Datum		
AFD44	1	0.79	0.74	2.17	1.53	A/4L	4.25	4	–	–
AFD49	1	0.79	0.74	2.17	1.53	A/4L	4.75	4.5	4	I-Beam
AFD59	1	0.79	0.74	2.17	1.53	A/4L	5.75	5.5	4	I-Beam
AFD74	1	0.79	0.74	2.17	1.53	A/4L	7.25	7	4	I-Beam
AFD84	2	0.76	0.75	2.22	1.6	A/4L	8.25	8	6	Cross
AFD94	2	0.76	0.75	2.22	1.6	A/4L	9.25	9	6	Cross
AFD104	2	0.76	0.75	2.22	1.6	A/4L	10.25	10	6	Cross
AFD112	2	0.76	0.75	2.22	1.6	A/4L	10.98	10.73	6	Cross
AFD124	2	0.75	0.75	2.22	1.6	A/4L	12.25	12	6	I-Beam

Shaft Size	Keyseat
5/8", 3/4"	3/16" x 3/32"
1"	1/4" x 1/8"

Part Number Ordering Guide

Base Part Number	+	Shaft Size	=	Complete Part Number
AFD44		5/8"		AFD4458
AFD94		1"		AFD94100

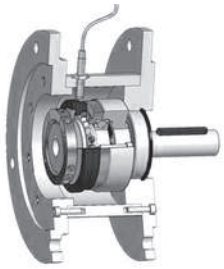
Note: PowerMax DriveN Pulleys are not recommended to be used as driveR pulleys.

* *Maximum load no more than 1½" distance from front face of tensioner arm to centerline of idler.*
† *Requires a fixed head, hook style spanner wrench for tensioning (supplied with unit).*
‡ *Dimension A: 1° rotation = .83 lb. force.*
Dimension A1: 1° rotation = 1 lb. force. All forces (lbs.) are nominal.
§ *1° rotation = .83 lb. force. All forces (lbs.) are nominal.*

RotoShield™ Gearbox Torque Limiters



Base Part Number	NEMA Motor size	Torque Range in-lb	Flange OD inch	Bolt Circle Diameter inch	Unit Width inch	Shaft/Bore Diameter inch	Shaft Length inch	Max Speed rpm	Weight lb
GTL56	56C	44.3 - 442.5	6.6	5.875	3.07	5/8 H7/h7	1.88	4000	16.3
GTL143	143 TC	44.3 - 442.5	6.6	5.875	3.07	7/8 H7/h7	2.25	4000	16.3
GTL184	184 TC	177 - 1770.1	8.9	7.250	4.4	1-1/8 H7/h7	2.75	2500	39.6
GTL215	215 TC	309.8 - 3673.1	8.9	7.250	4.64	1-3/8 H7/h7	3.38	2000	42.9
GTL256	256 TC	309.8 - 3673.1	8.9	7.250	5.26	1-5/8 H7/h7	4.00	2000	48.4



Base Part Number	IEC Motor size	Torque Range Nm	Flange OD mm	Bolt Circle Diameter mm	Unit Width mm	Shaft/Bore Diameter mm	Shaft Length mm	Max Speed rpm	Weight kg
GTL63	63	3 - 23	140	115	52.5	11 H7/h7	23	4000	4
GTL71	71	3 - 23	160	130	55	14 H7/h7	30	4000	4.5
GTL80	80	5 - 50	200	165	78	19 H7/h7	40	4000	8.5
GTL90	90	9 - 100	200	165	90	24 H7/h7	50	3000	10
GTL100	100La	20 - 200	250	215	110	28 H7/h7	60	2500	18
GTL132	132M	35 - 415	300	265	110	38 H7/h7	80	2000	25.5
GTL160	160	75 - 720	350	300	126	42 H7/h7	110	1850	35
GTL180	180	75 - 720	350	300	126	48 H7/h7	110	1850	35

Note: All units are IP67 rated

PART NUMBER BUILDER				
Base Part Number		Torque*		Complete Part Number
GTL56	+	115	=	GTL56-115

** Torque in in-lb for NEMA and Nm for IEC.*



PRX – Inductive Proximity Sensor

- Electric contact 7 - 30 VCC/Vdc and working frequency 4000 Hz
- Operating temperature: -13°F to +158°F (-25°C to +70°C)
- Cable length: 6.5ft (2m)

Material Properties

POWERTWIST DRIVE POWERTWIST SUPERTLINK® NUTLINK®

Product	Color	Compliancy	Material	Temperature Range °F	Temperature Range °C
POWERTWIST DRIVE	Red (classical) Blue (wedge)	RoHS, Reach	Composite Polyester/Polyurethane	-40 to +240	-40 to +116
POWERTWISt Ground Round®	Red	RoHS, Reach	Composite Polyester/Polyurethane	-40 to +240	-40 to +116
POWERTWISt Antistatic*	Blue	RoHS	Composite Polyester/Polyurethane	-40 to +240	-40 to +116
SuperTLink	Blue	RoHS	Composite Polyester/Polyurethane Steel Rivets	-40 to +240	-40 to +116
NuTLink	Orange	RoHS	Composite Polyester/Polyurethane Steel Rivets	-40 to +240	-40 to +116

** ISO 1813:1998 inspected and certified by Fenner Drives.*

T-MAX® BELT & CHAIN TENSIONERS

Tensioner Series	Construction Body	Construction Arm	Operating Temperature Range °F	Operating Temperature Range °C
RT1000, RT1600	Die Cast Aluminum	Die Cast Aluminum	-10 to +300	-23 to +149
RT3000	Die Cast Aluminum	Heavy Duty Stamped Steel	-20 to +350	-29 to +177
RT4000	Die Cast Aluminum	Heavy Duty Stamped Steel	-20 to +350	-29 to +177
CT1000, 2000, 3000	Die Cast Aluminum	UHMW Head	-10 to +180	-23 to +82

Trantorque® or B-LOC®: the Enduring Question

Once you have decided that a keyless locking device is the right solution, your next big decision is which series of Fenner Drives Trantorque or B-LOC Keyless Locking Device to choose. While the underlying engineering principle for both Trantorque and B-LOC is exactly the same, the functionality of each may appeal to different applications and situations.

SELECTION ASSISTANCE	Shaft Size Range	Overall Length Range	Torque Transmission	Axial Movement	Self Centering	Concentricity
Trantorque GT	⅝ – 3 in; 15 – 75mm	1½ – 4¼ in; 38.1 – 108mm	153 – 1,444 ft lb; 196 – 1,939 Nm	~0.075 in (1.9mm)	Yes	Excellent
Trantorque Mini	⅛ – ⅝ in; 3 – 16mm	¾ – 1⅛ in; 19 – 29mm	91 – 1,234 in lb; 10 – 140 Nm	~0.045 in (1.1mm)	Yes	Excellent
Trantorque Micro	⅛ – ⅝ in; 3 – 16mm	⅝ – 1½ in; 15.8 – 38.1mm	44 – 282 ft lb; 5 – 32 Nm	~0.0375 in (0.95mm)	Yes	Excellent
Trantorque OE	11⁄16 – 1½ in; 17 – 35mm	1 5⁄32 – 1 25⁄32 in; 29 – 43mm	162 – 492 ft lb; 211 – 658 Nm	~0.075 in (1.9mm)	Yes	Excellent
Trantorque NT	3⁄16 – 2 in	1 1⁄16 – 4 3⁄64 in	7 – 561 ft lb	No	Yes	Excellent
B-LOC B109	¼ – 1⅜ in; 6 – 35mm	0.650 – 1.102 in; 16.5 – 28.5mm	167 – 5,929 in lb; 19 – 683 Nm	No	Yes	Excellent
B-LOC B103	¾ – 8 in; 15 – 400mm	1.122 – 2.559 in; 21.5 – 116mm	247 – 48,913 ft lb; 115 – 489,701 Nm	~0.032 in (0.8mm)	Yes	Excellent
B-LOC B106	⅝ – 8 in; 14 – 400mm	0.846 – 2.559 in; 20.5 – 116mm	55 – 37,959 ft lb; 68 – 372,590 Nm	No	Yes	Excellent
B-LOC B800	¼ – 4 15⁄16 in; 6 – 130mm	0.866 – 5.039 in; 22 – 128mm	16 – 18,362 ft lb; 22 – 25,742 Nm	No	Yes	Excellent
B-LOC B400	¾ – 8 in; 18 – 500mm	0.787 – 2.047 in; 20 – 102mm	234 – 53,827 ft lb; 302 – 814,734 Nm	No	No	Fair
B-LOC B112	1 – 8 in; 24 – 600mm	1.575 – 5.866 in; 40 – 203mm	600 – 110,469 ft lb; 755 – 1,756,139 Nm	No	Yes	Excellent
B-LOC B115	2¾ – 8 in; 70 – 600mm	2.441 – 4.134 in; 62 – 160mm	5,261 – 70,109 ft lb; 7,118 – 1,228,856 Nm	No	Yes	Excellent
B-LOC B113	180 – 560mm	231 – 280mm	223,566 – 2,342,897 Nm	No	Yes	Excellent
B-LOC B117	180 – 600mm	122 – 178mm	87,000 – 1,080,000 Nm	No	Yes	Excellent
B-LOC Compression Hubs	½ – 3 in; 12 – 75mm	0.708 – 2.224 in 18.1 – 56.6mm	48 - 4797 ft lb; 65 – 6400 Nm	No	Yes	Fair to Excellent
B-LOC Shrink Discs	⅝ – 21.26 in; 15 – 540mm	0.71 – 11.26 in; 22 – 286 mm	139 – 3,267,568 ft lb	No	Yes	Excellent
B-LOC WK Couplings	⅝ - 4-¼ in; 16 – 105mm	1.339 – 4.960 in; 34 -126mm	132 – 19810 ft-lb; 179 – 26859 Nm	No	Yes	Excellent

	Balance	Self-Locking Tapers	Recessed Installation Without Counterbore	RoHS Compliant
	Excellent	Yes	No	Yes
	Very Good	Yes	No	Yes
	Very Good	No	No	Yes
	Excellent	Yes	No	Yes
	Very Good	Yes	No	Yes
	Excellent	Yes	No	Yes
	Excellent	Yes	Yes	Yes
	Excellent	Yes	No	Yes
	Excellent	Yes	No	Yes
	Very Good	No	Yes	No
	Excellent	Yes	Yes	Yes
	Excellent	Yes	Yes	Yes
	Excellent	Yes	Yes	Yes
	Excellent	Yes	No	Yes
	Excellent	No	N/A	Yes
	Excellent	No	N/A	No
	Excellent	No	N/A	Yes

Internal or External

At the broadest level, keyless locking devices may be split into two categories, internal locking devices (Trantorque and B-LOC Keyless Bushings) and external locking devices (B-LOC Shrink Discs, WK Couplings, and Compression Hubs). Selecting an external locking device is relatively straightforward. If you are joining two solid shafts at their ends, see the section on B-LOC WK Couplings. To connect most industry standard coupling hubs or flanges, gearboxes with hollow-shaft outputs, or other similar geometries see the B-LOC Shrink Disc section. If the component you are mounting has a narrow hub or has a short length through-bore, like a plate sprocket, see the section on B-LOC Compression Hubs.

Most applications, however, consist of a shaft and bored component that require the use of a keyless bushing. Many more factors play into the proper selection of a keyless bushing and are briefly addressed below and in the accompanying table.

Shaft Size

Shaft size may immediately determine whether you use a Trantorque or B-LOC Keyless Bushing. A Trantorque can accommodate shaft sizes as small as 1/8" (3mm) while the smallest shaft a B-LOC will fit is 1/4" (6mm). At the other end of the spectrum, Trantorque tops out at 3" (75mm) and the largest B-LOC will accommodate shafts approaching 24" (600mm). Larger and smaller versions of all units may be available as MTOs (Made To Order).

As a practical matter, under most circumstances our Application Engineers will recommend a Trantorque for shaft sizes 1-1/2" and under and a B-LOC for shaft sizes over 1-1/2". These are considered the optimal ranges for the product lines taking maximum advantage of each product's unique installation method.

Installation

The most obvious difference when comparing a B-LOC to a Trantorque Keyless Bushing is the installation method. All B-LOC units use a plurality of screws; all Trantorque units use a single hex nut. Your particular application will be your guide as to which method is preferred.

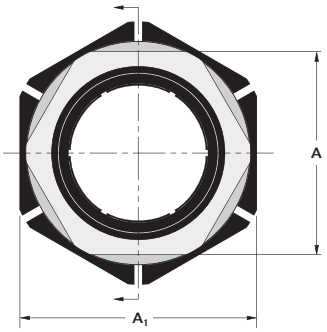
The advantages of a single hex nut, as used in a Trantorque Keyless Bushing, are speed and simplicity of installation and removal. For installation, simply tighten the single hex nut to the specified installation torque and your connection is complete. Removal is just as straightforward. Merely loosen the same hex nut and the unit will disengage. The cost for this simplicity is a relatively high installation torque requirement, which may present a challenge for larger units.

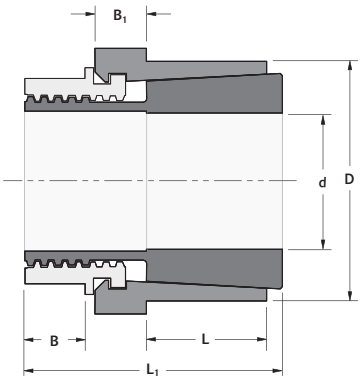
Since the force needed to draw the mating tapers of a B-LOC Keyless Bushing together is distributed among many screws, the installation torque of an individual screw is relatively low. This allows for effortless installation of even the largest units. The price paid for this low installation torque is a more timely and complex installation and removal process. The screws must be slowly and equally tightened in series until the final installation torque is achieved. Since most B-LOC units have self locking tapers, the removal process requires loosening all screws and backing off the unit.

Other Considerations

There are several other design points that may help guide you in your selection process. OD to ID ratios vary widely from product to product. If your design requires a small OD/ID ratio, consider either a B-LOC B800 or a Trantorque OE. While all Fenner Drives Keyless Bushings are designed to transmit high torque loads, if you have an extremely demanding application, a double taper B-LOC B112, B113 or B115 may be required. If you are mounting plate sprockets or other thin components, B-LOC Compression Hubs could be the solution. Other factors to consider include axial movement, recessed installation, corrosion protection, and RoHS compliance. The table is designed to help make your selection process easier, but if you are ever in doubt, please contact a Fenner Drives Applications Engineer at AE@fennerdrives.com. We will be happy to guide you to the perfect keyless locking device solution.

Trantorque® GT Inch





TOLERANCE (T_L)

T_L for shaft and bore is ± .003" for all sizes

Trantorque GT – Inch

Part Number				d (inch)	D (inch)	L (inch)	L_1 (inch)	Wrench Size		B (inch)	B_1 (inch)	M_a	Shipping Weight (lb)
Steel	Electroless Nickel Plated Steel	Thin Dense Chrome Coated Steel	Stainless Steel					A (inch)	A_1 (inch)			Install Torque (ft lb)	
6202120UP	6202120EN	6202120DC	6990120	5/8	1 1/2	3/4	1 1/2	1 1/4	1 1/2	5/16	5/16	100	0.5
6202140UP	6202140EN	6202140DC	6990140	11/16	1 1/2	3/4	1 1/2	1 1/4	1 1/2	5/16	5/16	100	0.5
6202160UP	6202160EN	6202160DC	6990160	3/4	1 1/2	3/4	1 1/2	1 1/4	1 1/2	5/16	5/16	100	0.5
6202190UP	6202190EN	6202190DC	6990190	13/16	1 3/4	7/8	1 7/8	1 1/2	1 3/4	7/16	3/8	125	0.7
6202200UP	6202200EN	6202200DC	6990200	7/8	1 3/4	7/8	1 7/8	1 1/2	1 3/4	7/16	3/8	125	0.7
6202220UP	6202220EN	6202220DC	6990220	15/16	1 3/4	7/8	1 7/8	1 1/2	1 3/4	7/16	3/8	125	0.7
6202240UP	6202240EN	6202240DC	6990240	1	1 3/4	7/8	1 7/8	1 1/2	1 3/4	7/16	3/8	125	0.7
6202270UP	6202270EN	6202270DC	6990270	1 1/16	2	1	2 1/4	1 3/4	2	1/2	9/16	167	1.1
6202280UP	6202280EN	6202280DC	6990280	1 1/8	2	1	2 1/4	1 3/4	2	1/2	9/16	167	1.1
6202300UP	6202300EN	6202300DC	6990300	1 3/16	2	1	2 1/4	1 3/4	2	1/2	9/16	167	1.1
6202320UP	6202320EN	6202320DC	6990320	1 1/4	2	1	2 1/4	1 3/4	2	1/2	9/16	167	1.1
6202350UP	6202350EN	6202350DC	6990350	1 5/16	2 3/8	1 1/2	2 3/4	2	2 3/8	9/16	1/2	192	1.1
6202360UP	6202360EN	6202360DC	6990360	1 3/8	2 3/8	1 1/2	2 3/4	2	2 3/8	9/16	1/2	192	1.9
6202380UP	6202380EN	6202380DC	6990380	1 7/16	2 3/8	1 1/2	2 3/4	2	2 3/8	9/16	1/2	192	1.8
6202400UP	6202400EN	6202400DC	6990400	1 1/2	2 3/8	1 1/2	2 3/4	2	2 3/8	9/16	1/2	192	1.8
6202430UP	6202430EN	6202430DC	6990430	1 9/16	2 5/8	1 11/16	3 1/8	2 1/4	2 5/8	9/16	11/16	234	2.5
6202440UP	6202440EN	6202440DC	6990440	1 5/8	2 5/8	1 11/16	3 1/8	2 1/4	2 5/8	9/16	11/16	234	2.4
6202460UP	6202460EN	6202460DC	6990460	1 11/16	2 5/8	1 11/16	3 1/8	2 1/4	2 5/8	9/16	11/16	234	2.4
6202480UP	6202480EN	6202480DC	6990480	1 3/4	2 5/8	1 11/16	3 1/8	2 1/4	2 5/8	9/16	11/16	234	2.3
6202510UP	6202510EN	6202510DC	6990510	1 13/16	2 7/8	2	3 9/16	2 1/2	2 7/8	5/8	3/4	409	3.5
6202520UP	6202520EN	6202520DC	6990520	1 7/8	2 7/8	2	3 9/16	2 1/2	2 7/8	5/8	3/4	409	3.4
6202540UP	6202540EN	6202540DC	6990540	1 15/16	2 7/8	2	3 9/16	2 1/2	2 7/8	5/8	3/4	409	3.3
6202560UP	6202560EN	6202560DC	6990560	2	2 7/8	2	3 9/16	2 1/2	2 7/8	5/8	3/4	409	3.2
6202562UP	6202562EN	6202562DC	6990562	2 1/16	3 1/8	2 1/8	3 3/4	2 3/4	3 1/8	5/8	13/16	442	3.8
6202564UP	6202564EN	6202564DC	6990564	2 1/8	3 1/8	2 1/8	3 3/4	2 3/4	3 1/8	5/8	13/16	442	4
6202566UP	6202566EN	6202566DC	6990566	2 3/16	3 1/8	2 1/8	3 3/4	2 3/4	3 1/8	5/8	13/16	442	3.8
6202568UP	6202568EN	6202568DC	6990568	2 1/4	3 1/8	2 1/8	3 3/4	2 3/4	3 1/8	5/8	13/16	442	3.7
6202570UP	6202570EN	6202570DC	6990570	2 5/16	3 3/8	2 1/4	3 7/8	3	3 3/8	11/16	3/4	467	4.4
6202572UP	6202572EN	6202572DC	6990572	2 3/8	3 3/8	2 1/4	3 7/8	3	3 3/8	11/16	3/4	467	4.5
6202574UP	6202574EN	6202574DC	6990574	2 7/16	3 3/8	2 1/4	3 7/8	3	3 3/8	11/16	3/4	467	4.4
6202576UP	6202576EN	6202576DC	6990576	2 1/2	3 3/8	2 1/4	3 7/8	3	3 3/8	11/16	3/4	467	4.2
6202580UP	6202580EN	6202580DC	6990580	2 9/16	3 5/8	2 3/8	4 1/16	3 1/4	3 5/8	11/16	13/16	500	5
6202582UP	6202582EN	6202582DC	6990582	2 5/8	3 5/8	2 3/8	4 1/16	3 1/4	3 5/8	11/16	13/16	500	5.1
6202584UP	6202584EN	6202584DC	6990584	2 11/16	3 5/8	2 3/8	4 1/16	3 1/4	3 5/8	11/16	13/16	500	5
6202586UP	6202586EN	6202586DC	6990586	2 3/4	3 5/8	2 3/8	4 1/16	3 1/4	3 5/8	11/16	13/16	500	5
6202590UP	6202590EN	6202590DC	6990590	2 13/16	3 7/8	2 1/2	4 1/4	3 1/2	3 7/8	3/4	13/16	550	6
6202592UP	6202592EN	6202592DC	6990592	2 7/8	3 7/8	2 1/2	4 1/4	3 1/2	3 7/8	3/4	13/16	550	6
6202594UP	6202594EN	6202594DC	6990594	2 15/16	3 7/8	2 1/2	4 1/4	3 1/2	3 7/8	3/4	13/16	550	6
6202596UP	6202596EN	6202596DC	6990596	3	3 7/8	2 1/2	4 1/4	3 1/2	3 7/8	3/4	13/16	550	5

Trantorque®
GT
Inch



Performance Data Table

d (inch)	M_t Maximum Transmitted Torque (ft lb)	Th Maximum Transmitted Thrust (lbs)	P_h* Hub Pressure (psi)
5/8	164	6282	14316
11/16	180	6282	14316
3/4	196	6282	14316
13/16	222	6554	10015
7/8	239	6554	10015
15/16	256	6554	10015
1	273	6554	10015
1 1/16	333	7524	8917
1 1/8	353	7524	8917
1 3/16	372	7524	8917
1 1/4	392	7524	8917
1 5/16	412	7529	5194
1 3/8	431	7529	5194
1 7/16	452	7529	5194
1 1/2	471	7529	5194
1 9/16	535	8219	4599
1 5/8	557	8219	4599
1 11/16	578	8219	4599
1 3/4	599	8219	4599
1 13/16	979	12963	5639
1 7/8	1013	12963	5639
1 15/16	1047	12963	5639
2	1080	12963	5639
2 1/16	1087	12650	4781
2 1/8	1120	12650	4781
2 3/16	1153	12650	4781
2 1/4	1186	12650	4781
2 5/16	1181	12260	4064
2 3/8	1213	12260	4064
2 7/16	1245	12260	4064
2 1/2	1277	12260	4064
2 9/16	1295	12127	3554
2 5/8	1326	12127	3554
2 11/16	1358	12127	3554
2 3/4	1390	12127	3554
2 13/16	1452	12394	3233
2 7/8	1485	12394	3233
2 15/16	1517	12394	3233
3	1549	12394	3233

MULTIPLIERS	
Steel	*1.0*
Electroless Nickel Plated Steel	*0.6*
Thin Dense Chrome Coated Steel	*1.1*
Stainless Steel	*0.3*

The data in the Performance Data Table is for a steel unit. To obtain data for other materials, use the multiplier provided.

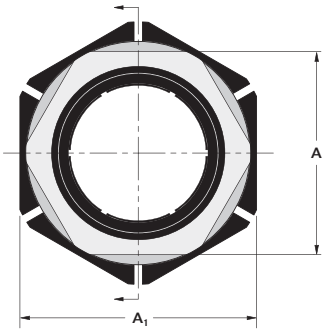
For example, you require a 2" (d) Electroless Nickel Plated Trantorque GT.

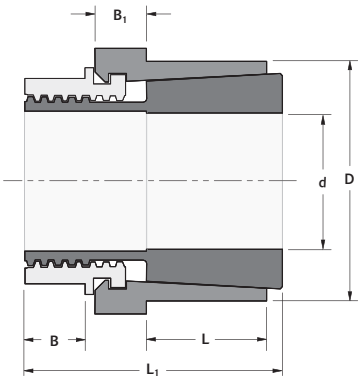
Find 2" (d) in Performance Data Table and use the multiplier of 0.6 for Electroless Nickel Plated Steel.

M_t : 1087 x 0.6 = 652
T_h : 12963 x 0.6 = 7778
**P_h : 5639 x 0.6 = 3983*

**IMPORTANT:*
After hub pressure (P_h) is determined, record D, L and Ph and refer to page 70 to calculate the minimum hub diameter.

Trantorque® GT Metric





TOLERANCE (T_L)

T_L for shaft and bore is ± .08mm for all sizes

Trantorque GT – Metric

Part Number				d (mm)	D (mm)	L (mm)	L_1 (mm)	Wrench Size		B (mm)	B_1 (mm)	M_a	Shipping Weight (kg)
Steel	Electroless Nickel Plated Steel	Thin Dense Chrome Coated Steel	Stainless Steel					A (mm)	A_1 (inch)			Install Torque (Nm)	
6202800UP	6202800EN	6202800DC	6990800	15	38.0	19.1	38.1	32	1 1/2	8.0	8.9	136	0.2
6202803UP	6202803EN	6202803DC	6990803	16	38.0	19.1	38.1	32	1 1/2	8.0	8.9	136	0.2
6202804UP	6202804EN	6202804DC	6990804	17	38.0	19.1	38.1	32	1 1/2	8.0	8.9	136	0.2
6202805UP	6202805EN	6202805DC	6990805	18	38.0	19.1	38.1	32	1 1/2	8.0	8.9	136	0.2
6202808UP	6202808EN	6202808DC	6990808	19	38.0	19.1	38.1	32	1 1/2	8.0	8.9	136	0.2
6202811UP	6202811EN	6202811DC	6990811	20	45.0	22.2	47.6	38	1 3/4	11.1	9.5	170	0.4
6202815UP	6202815EN	6202815DC	6990815	22	45.0	22.2	47.6	38	1 3/4	11.1	9.5	170	0.4
6202820UP	6202820EN	6202820DC	6990820	24	45.0	22.2	47.6	38	1 3/4	11.1	9.5	170	0.3
6202825UP	6202825EN	6202825DC	6990825	25	45.0	22.2	47.6	38	1 3/4	11.1	9.5	170	0.3
6202830UP	6202830EN	6202830DC	6990830	28	51.0	25.4	57.2	46	2	12.7	14.3	225	0.5
6202835UP	6202835EN	6202835DC	6990835	30	51.0	25.4	57.2	46	2	12.7	14.3	225	0.5
6202840UP	6202840EN	6202840DC	6990840	32	51.0	25.4	57.2	46	2	12.7	14.3	225	0.5
6202845UP	6202845EN	6202845DC	6990845	34	60.5	38.1	69.9	50	2 3/8	14.3	12.7	260	0.9
6202850UP	6202850EN	6202850DC	6990850	35	60.5	38.1	69.9	50	2 3/8	14.3	12.7	260	0.9
6202855UP	6202855EN	6202855DC	6990855	36	60.5	38.1	69.9	50	2 3/8	14.3	12.7	260	0.9
6202860UP	6202860EN	6202860DC	6990860	38	60.5	38.1	69.9	50	2 3/8	14.3	12.7	260	0.8
6202865UP	6202865EN	6202865DC	6990865	40	67.0	42.9	79.4	60	2 5/8	14.3	17.4	316	1.2
6202870UP	6202870EN	6202870DC	6990870	42	67.0	42.9	79.4	60	2 5/8	14.3	17.4	316	1.1
6202876UP	6202876EN	6202876DC	6990876	45	73.0	50.8	90.5	65	2 7/8	15.9	19.1	554	1.6
6202880UP	6202880EN	6202880DC	6990880	48	73.0	50.8	90.5	65	2 7/8	15.9	19.1	554	1.6
6202885UP	6202885EN	6202885DC	6990885	50	73.0	50.8	90.5	65	2 7/8	15.9	19.1	554	1.5
6202900UP	6202900EN	6202900DC	6990900	55	80.0	54.0	95.3	70	3 1/8	15.9	20.7	600	1.8
6202910UP	6202910EN	6202910DC	6990910	60	86.0	57.2	98.4	75	3 3/8	17.5	19.1	635	2
6202920UP	6202920EN	6202920DC	6990920	65	92.0	60.3	103.2	82	3 5/8	17.5	20.7	680	2
6202930UP	6202930EN	6202930DC	6990930	70	92.0	60.3	103.2	82	3 5/8	17.5	20.7	680	2
6202940UP	6202940EN	6202940DC	6990940	75	100.0	63.5	108.0	90	3 7/8	19.1	20.7	750	3

Trantorque®
GT
Metric



Performance Data Table

d (mm)	M_t Maximum Transmitted Torque (Nm)	Th Maximum Transmitted Thrust (kN)	P_h* Hub Pressure (N/mm^2)
15	210	28	99
16	224	28	99
17	238	28	99
18	252	28	99
19	266	28	99
20	292	29	68
22	322	29	68
24	351	29	68
25	366	29	68
28	466	33	61
30	499	33	61
32	532	33	61
34	569	33	36
35	585	33	36
36	602	33	36
38	636	33	36
40	728	36	31
42	765	36	31
45	1296	58	39
48	1383	58	39
50	1440	58	39
55	1549	56	33
60	1641	55	28
65	1759	54	25
70	1894	54	25
75	2079	55	22

MULTIPLIERS	
Steel	*1.0*
Electroless Nickel Plated Steel	*0.6*
Thin Dense Chrome Coated Steel	*1.1*
Stainless Steel	*0.3*

The data in the Performance Data Table is for a steel unit. To obtain data for other materials, use the multiplier provided.

For example, you require a 30mm (d) Electroless Nickel Plated Trantorque GT.

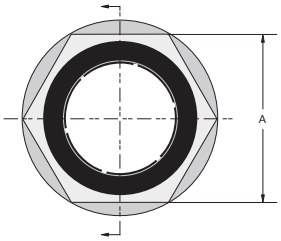
Find 30mm (d) in Performance Data Table and use the multiplier of 0.6 for Electroless Nickel Plated Steel.

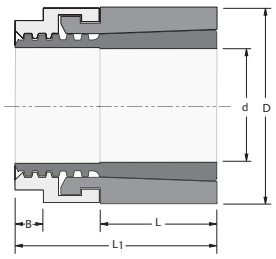
M_t : 499 x 0.6 = 299
T_h : 33 x 0.6 = 20
**P_h : 61 x 0.6 = 37*

**IMPORTANT:*
After hub pressure (P_h) is determined, record D, L and Ph and refer to page 70 to calculate the minimum hub diameter.

Trantorque® Mini
Inch and Metric







TOLERANCE (T_L)

T_L for shaft and bore is ± .0015" (.04mm) for all sizes

Trantorque Mini – Inch

Part Number				d (inch)	D (inch)	L (inch)	L_1 (inch)	Wrench Size A (inch)	B (inch)	M_a† Install Torque (in lb)	Shipping Weight (lb)
Steel	Electroless Nickel Plated Steel	Thin Dense Chrome Coated Steel	Stainless Steel								
6410013	6202102EN	6410013DC	6990102	1/8	5/8	3/8	3/4	1/2	1/8	125	0.1
6410019	6202103EN	6410019DC	6990103	3/16	5/8	3/8	3/4	1/2	1/8	125	0.1
6410025	6202105EN	6410025DC	6990105	1/4	5/8	3/8	3/4	1/2	1/8	125	0.1
6410031	6202107EN	6410031DC	6990107	5/16	3/4	7/16	7/8	5/8	1/8	250	0.1
6410038	6202109EN	6410038DC	6990109	3/8	3/4	7/16	7/8	5/8	1/8	250	0.1
6410044	6202110EN	6410044DC	6990110	7/16	7/8	1/2	1	3/4	3/16	390	0.1
6410050	6202112EN	6410050DC	6990112	1/2	7/8	1/2	1	3/4	3/16	390	0.1
6410056	6202114EN	6410056DC	6990114	9/16	1	5/8	1 1/8	7/8	3/16	585	0.1
6410063	6202115EN	6410063DC	6990115	5/8	1	5/8	1 1/8	7/8	3/16	585	0.1

Trantorque Mini – Metric

Part Number				d (mm)	D (mm)	L (mm)	L_1 (mm)	Wrench Size A (mm)	B (mm)	M_a† Install Torque (Nm)	Shipping Weight (kg)
Steel	Electroless Nickel Plated Steel	Thin Dense Chrome Coated Steel	Stainless Steel								
TTQM0316	TTQM0316EN	TTQM0316DC	TTQM0316SS	3	16	10	19	13	3	14	0.02
TTQM0416	TTQM0416EN	TTQM0416DC	TTQM0416SS	4	16	10	19	13	3	14	0.02
TTQM0516	TTQM0516EN	TTQM0516DC	TTQM0516SS	5	16	10	19	13	3	14	0.02
TTQM0616	TTQM0616EN	TTQM0616DC	TTQM0616SS	6	16	10	19	13	3	14	0.02
TTQM0720	TTQM0720EN	TTQM0720DC	TTQM0720SS	7	20	11	22	16	3	28	0.03
TTQM0820	TTQM0820EN	TTQM0820DC	TTQM0820SS	8	20	11	22	16	3	28	0.03
TTQM0920	TTQM0920EN	TTQM0920DC	TTQM0920SS	9	20	11	22	16	3	28	0.03
TTQM1023	TTQM1023EN	TTQM1023DC	TTQM1023SS	10	23	13	26	19	5	44	0.05
TTQM1123	TTQM1123EN	TTQM1123DC	TTQM1123SS	11	23	13	26	19	5	44	0.05
TTQM1223	TTQM1223EN	TTQM1223DC	TTQM1223SS	12	23	13	26	19	5	44	0.05
TTQM1426	TTQM1426EN	TTQM1426DC	TTQM1426SS	14	26	16	29	22	5	66	0.06
TTQM1526	TTQM1526EN	TTQM1526DC	TTQM1526SS	15	26	16	29	22	5	66	0.06
TTQM1626	TTQM1626EN	TTQM1626DC	TTQM1626SS	16	26	16	29	22	5	66	0.06

Performance Data Tables

d (inch)	M_t† Maximum Transmitted Torque (in lb)	Th Maximum Transmitted Thrust (lbs)	P_h* Hub Pressure (psi)
1/8	100	1608	18193
3/16	151	1608	18193
1/4	201	1608	18193
5/16	404	2584	20890
3/8	485	2584	20890
7/16	737	3368	20421
1/2	842	3368	20421
9/16	1223	4349	18459
5/8	1359	4349	18459

d (mm)	M_t† Maximum Transmitted Torque (Nm)	Th Maximum Transmitted Thrust (kN)	P_h* Hub Pressure (N/mm^2)
3	11	7	123
4	14	7	123
5	18	7	123
6	21	7	123
7	40	11	136
8	46	11	136
9	51	11	136
10	75	15	136
11	82	15	136
12	90	15	136
14	135	19	124
15	145	19	124
16	155	19	124

MULTIPLIERS	
Steel	*1.0*
Electroless Nickel Plated Steel	*0.8*
Thin Dense Chrome Coated Steel	*1.0*
Stainless Steel	*0.35*

(continued on page 49)

Trantorque Mini Performance Data *(continued from page 48)*

The data in the Performance Data Table is for a steel unit. To obtain data for other materials, use the multiplier provided.

For example, you require a 1/4" (d) Electroless Nickel Plated Trantorque Mini.

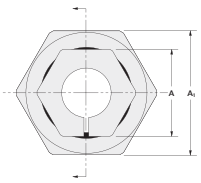
Find 1/4" (d) in Performance Data Table and use the multiplier of 0.8 for Electroless Nickel Plated Steel.

M_t *: 201 x 0.8 = 161*
T_h *: 1608 x 0.8 = 1286*
**P_h *: 18193 x 0.8 = 14554*

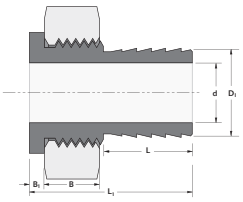
* *IMPORTANT:*
After hub pressure (P_h) is determined, record D, L and Ph and refer to page 70 to calculate the minimum hub diameter.

† *When installing Trantorque Mini with an open-ended wrench, a reduction in installation torque by 50% is recommended. This will result in a Transmitted Torque (M_t) reduced by 50%.*

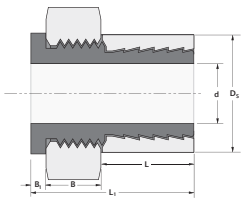




Integrated Bore



Smooth Bore



Trantorque® Micro
Inch and Metric

TOLERANCE (T_L)

T_L for shaft and bore is ± .0015" (.04mm) for all sizes

Trantorque Micro – Inch

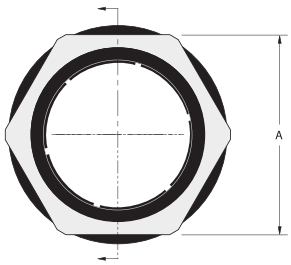
Size (inch)	d (inch)	Integrated Bore D_i (inch)	Smooth Bore D_s (inch)	L (inch)	L_1 (inch)	Wrench Size A (inch)	Wrench Size A_1 (inch)	B (inch)	B_1 (inch)	M_a† Install Torque (in lb)	Shipping Weight (lb)	M_t† Maximum Transmitted Torque (in lb)	Th Maximum Transmitted Thrust (lbs)	Smooth Bore Hub Pressure (PSI)
1/8	0.125	0.369	0.563	0.38	0.65	0.44	0.63	0.20	0.06	125	0.032	53	846	9275
3/16	0.188	0.369	0.613	0.38	0.65	0.44	0.63	0.20	0.06	150	0.032	83	885	10221
1/4	0.250	0.369	0.613	0.38	0.69	0.44	0.63	0.23	0.06	150	0.038	111	885	10221
5/16	0.313	0.431	0.625	0.44	0.75	0.50	0.75	0.23	0.06	200	0.041	161	1028	7478
3/8	0.375	0.550	0.750	0.50	0.91	0.56	0.88	0.29	0.09	250	0.074	194	1034	5008
7/16	0.438	0.550	0.750	0.63	1.03	0.63	0.88	0.29	0.09	250	0.078	226	1034	5008
1/2	0.500	0.666	0.875	0.75	1.24	0.75	1.06	0.35	0.11	300	0.142	259	1036	3767
9/16	0.563	0.666	0.875	0.88	1.38	0.81	1.13	0.35	0.13	300	0.134	291	1036	3139
5/8	0.625	0.791	1.000	0.94	1.50	0.88	1.25	0.41	0.13	300	0.193	280	895	2533

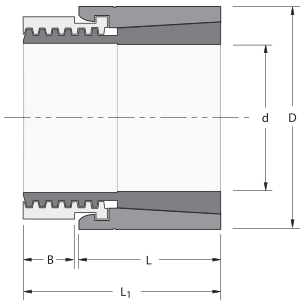
Trantorque Micro – Metric

Size (mm)	d (mm)	Integrated Bore D_i (mm)	Smooth Bore D_s (mm)	L (mm)	L_1 (mm)	Wrench Size A (mm)	Wrench Size A_1 (mm)	B (mm)	B_1 (mm)	M_a† Install Torque (Nm)	Shipping Weight (kg)	M_t† Maximum Transmitted Torque (Nm)	Th Maximum Transmitted Thrust (kN)	Smooth Bore Hub Pressure (PSI)
3	3	9.4	0.563	9.5	16.6	11	16	5.1	1.5	14	0.015	5	3.2	9275
4	4	9.4	0.563	9.5	16.6	11	16	5.1	1.5	17	0.015	8	3.9	11130
5	5	9.4	0.613	9.5	16.6	11	16	5.1	1.5	17	0.017	10	3.9	10221
6	6	9.4	0.613	9.5	16.6	11	16	5.1	1.5	17	0.019	12	3.9	10221
7	7	10.9	0.613	9.5	17.4	13	19	5.9	1.5	17	0.019	14	3.9	8902
8	8	10.9	0.625	11.1	19.0	13	19	5.9	1.5	17	0.022	14	3.4	7478
9	9	14.0	0.750	11.1	20.5	14	24	7.5	2.4	17	0.023	15	3.4	5008
10	10	14.0	0.750	12.7	23.0	14	24	7.5	2.4	17	0.033	14	2.8	5850
11	11	14.0	0.750	12.7	23.0	14	24	7.5	2.4	23	0.034	21	3.7	5850
12	12	14.0	0.750	15.9	26.2	16	24	7.5	2.4	23	0.050	22	3.7	4680
13	13	16.9	0.875	15.9	27.8	20	29	9.0	2.4	26	0.110	22	3.5	3767
14	14	16.9	0.875	19.1	31.4	20	29	8.9	2.4	26	0.111	24	3.5	3139
15	15	16.9	0.875	19.1	31.4	20	29	8.9	2.8	26	0.122	26	3.5	3139
16	16	19.6	1.000	22.2	36.5	24	34	10.5	3.2	34	0.197	32	4.0	2533

**All Trantorque Micro orders are subject to a 25 piece minimum.*

Trantorque® OE Inch





TOLERANCE (T_L)

T_L for shaft and bore is ± .003" for all sizes

Trantorque OE – Inch

Part Number				d (inch)	D (inch)	L (inch)	L_1 (inch)	Wrench Size	B (inch)	M_a†	Shipping Weight (lb)
Steel	Electroless Nickel Plated Steel	Thin Dense Chrome Coated Steel	Stainless Steel					A (inch)		Install Torque (ft lb)	
6410069	6410069EN	6410069DC	6410069SS	11/16	1 1/4	7/8	1 5/32	1 1/8	1/4	82	0.2
6410075	6410075EN	6410075DC	6410075SS	3/4	1 1/4	7/8	1 5/32	1 1/8	1/4	82	0.2
6410081	6410081EN	6410081DC	6410081SS	13/16	1 3/8	15/16	1 1/4	1 1/4	1/4	111	0.2
6410088	6410088EN	6410088DC	6410088SS	7/8	1 3/8	15/16	1 1/4	1 1/4	1/4	111	0.2
6410094	6410094EN	6410094DC	6410094SS	15/16	1 1/2	1	1 11/32	1 3/8	5/16	137	0.4
6410100	6410100EN	6410100DC	6410100SS	1	1 1/2	1	1 11/32	1 3/8	5/16	137	0.3
6410106	6410106EN	6410106DC	6410106SS	1 1/16	1 5/8	1 1/16	1 15/32	1 1/2	3/8	155	0.4
6410113	6410113EN	6410113DC	6410113SS	1 1/8	1 5/8	1 1/16	1 15/32	1 1/2	3/8	155	0.4
6410119	6410119EN	6410119DC	6410119SS	1 3/16	1 3/4	1 1/8	1 19/32	1 5/8	7/16	177	0.5
6410125	6410125EN	6410125DC	6410125SS	1 1/4	1 3/4	1 1/8	1 19/32	1 5/8	7/16	177	0.5
6410131	6410131EN	6410131DC	6410131SS	1 5/16	1 7/8	1 3/16	1 11/16	1 3/4	1/2	196	0.6
6410138	6410138EN	6410138DC	6410138SS	1 3/8	1 7/8	1 3/16	1 11/16	1 3/4	1/2	196	0.6
6410144	6410144EN	6410144DC	6410144SS	1 7/16	2	1 1/4	1 25/32	1 7/8	1/2	196	0.7
6410150	6410150EN	6410150DC	6410150SS	1 1/2	2	1 1/4	1 25/32	1 7/8	1/2	196	0.6

Performance Data Table

d (inch)	M_t† Maximum Transmitted Torque (ft lb)	Th Maximum Transmitted Thrust (lbs)	P_h* Hub Pressure (psi)
11/16	166	5805	20843
3/4	181	5805	20843
13/16	241	7113	21014
7/8	259	7113	21014
15/16	311	7963	19639
1	332	7963	19639
1 1/16	364	8224	17211
1 1/8	386	8224	17211
1 3/16	431	8712	15664
1 1/4	454	8712	15664
1 5/16	489	8938	14004
1 3/8	512	8938	14004
1 7/16	500	8336	11469
1 1/2	512	8336	11469

MULTIPLIERS	
Steel	*1.0*
Electroless Nickel Plated Steel	*0.6*
Thin Dense Chrome Coated Steel	*0.9*
Stainless Steel	*0.3*

The data in the Performance Data Table is for a steel unit. To obtain data for other materials, use the multiplier provided.

For example, you require a 1" (d) Electroless Nickel Plated Trantorque OE.

Find 1" (d) in Performance Data Table and use the multiplier of 0.6 for Electroless Nickel Plated Steel.

M_t : 332 x 0.6 = 199
T_h : 7963 x 0.6 = 4778
**P_h : 19639 x 0.6 = 11621*

**IMPORTANT:*
After hub pressure (P_h) is determined, record D, L and Ph and refer to page 70 to calculate the minimum hub diameter.

† When installing Trantorque OE with an open-ended wrench, a reduction in installation torque by 50% is recommended. This will result in a Transmitted Torque (M_t) reduced by 50%.

Trantorque® OE Metric



TOLERANCE (T_L)

T_L for shaft and bore is ± .08mm for all sizes

Trantorque OE – Metric

Part Number				d (mm)	D (mm)	L (mm)	L_1 (mm)	Wrench Size A (mm)	B (mm)	M_a† Install Torque (Nm)	Shipping Weight (kg)
Steel	Electroless Nickel Plated Steel	Thin Dense Chrome Coated Steel	Stainless Steel								
TTQM1732	TTQM1732EN	TTQM1732DC	TTQM1732SS	17	32	22	29	30	6	110	0.1
TTQM1832	TTQM1832EN	TTQM1832DC	TTQM1832SS	18	32	22	29	30	6	110	0.1
TTQM1932	TTQM1932EN	TTQM1932DC	TTQM1932SS	19	32	22	29	30	6	110	0.1
TTQM2035	TTQM2035EN	TTQM2035DC	TTQM2035SS	20	35	24	32	32	7	150	0.1
TTQM2235	TTQM2235EN	TTQM2235DC	TTQM2235SS	22	35	24	32	32	7	150	0.1
TTQM2438	TTQM2438EN	TTQM2438DC	TTQM2438SS	24	38	25	34	36	7	185	0.2
TTQM2538	TTQM2538EN	TTQM2538DC	TTQM2538SS	25	38	25	34	36	7	185	0.2
TTQM2845	TTQM2845EN	TTQM2845DC	TTQM2845SS	28	45	29	41	46	11	240	0.3
TTQM3045	TTQM3045EN	TTQM3045DC	TTQM3045SS	30	45	29	41	46	11	240	0.3
TTQM3250	TTQM3250EN	TTQM3250DC	TTQM3250SS	32	50	30	43	50	11	265	0.4
TTQM3550	TTQM3550EN	TTQM3550DC	TTQM3550SS	35	50	30	43	50	11	265	0.3

Performance Data Table

d (mm)	M_t† Maximum Transmitted Torque (Nm)	Th Maximum Transmitted Thrust (kN)	P_h* Hub Pressure (N/mm^2)
17	218	26	142
18	231	26	142
19	244	26	142
20	315	32	144
22	347	32	144
24	425	35	136
25	443	35	136
28	539	38	106
30	577	38	106
32	618	39	84
35	676	39	84

MULTIPLIERS	
Steel	*1.0*
Electroless Nickel Plated Steel	*0.6*
Thin Dense Chrome Coated Steel	*0.9*
Stainless Steel	*0.3*

The data in the Performance Data Table is for a steel unit. To obtain data for other materials, use the multiplier provided.

For example, you require a 20mm (d) Electroless Nickel Plated Trantorque OE.

Find 20mm (d) in Performance Data Table and use the multiplier of 0.6 for Electroless Nickel Plated Steel.

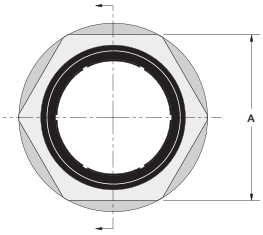
M_t : 315 x 0.6 = 189
T_h : 32 x 0.6 = 19
**P_h : 144 x 0.6 = 86*

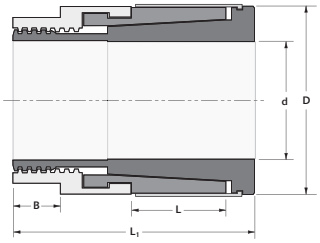
**IMPORTANT:*
After hub pressure (P_h) is determined, record D, L and Ph and refer to page 70 to calculate the minimum hub diameter.

† When installing Trantorque OE with an open-ended wrench, a reduction in installation torque by 50% is recommended. This will result in a Transmitted Torque (M_t) reduced by 50%.

Trantorque® NT Inch







TOLERANCE (T_L)

T_L for shaft and bore is .0015" for Part Numbers 6980103UP – 6980119UP

T_L for shaft and bore is .003" for all other Trantorque NT

Trantorque NT – Inch

Part Number					Wrench Size		M_a	M_t	Th	P_h*
								Maximum Transmitted		
Steel	d (inch)	D (inch)	L (inch)	L_1 (inch)	A (inch)	B (inch)	Install Torque (in lb)	Torque (ft lb)	Thrust (lbs)	Hub Pressure (psi)
6980103UP	3/16	5/8	3/8	1 1/16	1/2	1/8	125	7	876	9918
6980105UP	1/4	5/8	3/8	1 1/16	1/2	1/8	125	9	876	9918
6980107UP	5/16	3/4	7/16	1 3/16	5/8	1/8	150	11	845	6833
6980109UP	3/8	3/4	7/16	1 3/16	5/8	1/8	150	13	845	6833
6980110UP	7/16	7/8	1/2	1 5/16	3/4	3/16	175	15	824	4995
6980112UP	1/2	7/8	1/2	1 5/16	3/4	3/16	175	17	824	4995
6980114UP	9/16	1	5/8	1 7/16	7/8	3/16	200	19	811	3440
6980115UP	5/8	1	5/8	1 7/16	7/8	3/16	200	21	811	3440
6980119UP	3/4	1 1/4	3/4	1 11/16	1 1/16	1/4	700	73	2326	6581
6980120UP	5/8	1 1/2	11/16	1 13/16	1 1/4	5/16	1200	91	3484	8960
6980140UP	11/16	1 1/2	11/16	1 13/16	1 1/4	5/16	1200	100	3484	8960
6980160UP	3/4	1 1/2	11/16	1 13/16	1 1/4	5/16	1200	109	3484	8960
6980190UP	13/16	1 3/4	13/16	2 3/16	1 1/2	7/16	1500	122	3594	6704
6980200UP	7/8	1 3/4	13/16	2 3/16	1 1/2	7/16	1500	131	3594	6704
6980220UP	15/16	1 3/4	13/16	2 3/16	1 1/2	7/16	1500	140	3594	6704
6980240UP	1	1 3/4	13/16	2 3/16	1 1/2	7/16	1500	150	3594	6704
6980270UP	1 1/16	2	15/16	2 9/16	1 3/4	1/2	2000	183	4137	5853
6980280UP	1 1/8	2	15/16	2 9/16	1 3/4	1/2	2000	194	4137	5853
6980300UP	1 3/16	2	15/16	2 9/16	1 3/4	1/2	2000	205	4137	5853
6980320UP	1 1/4	2	15/16	2 9/16	1 3/4	1/2	2000	215	4137	5853
6980350UP	1 5/16	2 3/8	1 7/16	3 3/32	2	9/16	2300	225	4113	3196
6980360UP	1 3/8	2 3/8	1 7/16	3 3/32	2	9/16	2300	236	4113	3196
6980380UP	1 7/16	2 3/8	1 7/16	3 3/32	2	9/16	2300	246	4113	3196
6980400UP	1 1/2	2 3/8	1 7/16	3 3/32	2	9/16	2300	257	4113	3196
6980430UP	1 9/16	2 5/8	1 5/8	3 15/32	2 1/4	9/16	2800	291	4466	2777
6980440UP	1 5/8	2 5/8	1 5/8	3 15/32	2 1/4	9/16	2800	302	4466	2777
6980460UP	1 11/16	2 5/8	1 5/8	3 15/32	2 1/4	9/16	2800	314	4466	2777
6980480UP	1 3/4	2 5/8	1 5/8	3 15/32	2 1/4	9/16	2800	326	4466	2777
6980510UP	1 13/16	2 7/8	1 15/16	4 3/64	2 1/2	5/8	4900	531	7029	3347
6980520UP	1 7/8	2 7/8	1 15/16	4 3/64	2 1/2	5/8	4900	549	7029	3347
6980540UP	1 15/16	2 7/8	1 15/16	4 3/64	2 1/2	5/8	4900	567	7029	3347
6980560UP	2	2 7/8	1 15/16	4 3/64	2 1/2	5/8	4900	586	7029	3347

*IMPORTANT: *Please refer to page 70 to calculate your minimum hub diameter.*

Consult factory for weights and availability.

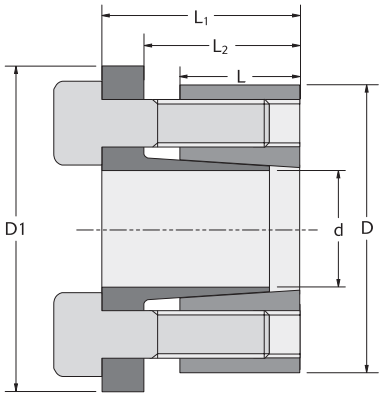
B-LOC® B109 Inch and Metric



Locking screws transfer to integrated push-off holes for disassembly.

Metric socket head locking screws ISO 4762 grade 12.9 (See M_a for install torque).

Screw head height = screw diameter (mm)



TOLERANCE (T_L)

Tolerance (T_L) for shaft and bore is ± .001" (.025mm) for all sizes.

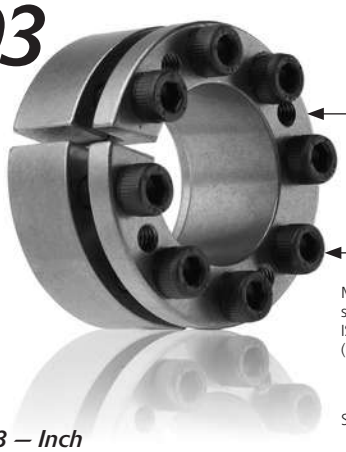
B109 — Inch

Part Number	d (inch)	D (inch)	D_1 (inch)	L (inch)	L_1 (inch)	L_2 (inch)	Locking Screws Qty	Locking Screws Size	M_a Install Torque (in lb)	Mt Maximum Transmitted Torque (in lb)	Th Maximum Transmitted Thrust (lbs)	Ph Hub Pressure (psi)	Shipping Weight (lb)
T902004	1/4	13/16	15/16	0.394	0.650	0.516	3	M4 x 12	36.0	167	1336	11073	0.1
T902005	5/16	7/8	1	0.394	0.650	0.516	3	M4 x 12	42.5	246	1572	12096	0.1
T902006	3/8	15/16	1 1/16	0.394	0.650	0.516	3	M4 x 12	42.5	295	1572	11290	0.1
B902008	1/2	1 1/16	1 3/16	0.394	0.650	0.516	4	M4 x 12	42.5	524	2096	13282	0.1
T902010	5/8	1 3/16	1 5/16	0.472	0.807	0.594	6	M4 x 14	42.5	983	3144	14880	0.2
B902012	3/4	1 5/16	1 7/16	0.472	0.807	0.594	6	M4 x 14	42.5	1179	3144	13463	0.2
T902014	7/8	1 9/16	1 3/4	0.591	0.984	0.754	6	M5 x 18	87.0	2264	5174	14863	0.4
B902100	1	1 11/16	1 7/8	0.591	0.984	0.754	8	M5 x 18	87.0	3449	6899	18349	0.4
T902102	1 1/8	1 7/8	2	0.669	1.102	0.829	9	M5 x 18	87.0	4366	7761	16412	0.6
T902103	1 3/16	1 15/16	2 1/16	0.669	1.102	0.829	10	M5 x 18	87.0	5120	8623	17647	0.6
B902104	1 1/4	2	2 1/8	0.669	1.102	0.829	10	M5 x 18	87.0	5390	8623	17096	0.6
B902106	1 3/8	2 1/8	2 1/4	0.669	1.102	0.829	10	M5 x 18	87.0	5929	8623	16090	0.6

B109 — Metric

Part Number	d (mm)	D (mm)	D_1 (mm)	L (mm)	L_1 (mm)	L_2 (mm)	Locking Screws Qty	Locking Screws Size	M_a Install Torque (Nm)	Mt Maximum Transmitted Torque (Nm)	Th Maximum Transmitted Thrust (N)	Ph Hub Pressure (N/mm^2)	Shipping Weight (kg)
T901006	6	20.64	23.81	10	16.5	13.1	3	M4 x 12	4.3	19	6192	80	0.05
T901008	8	22.23	25.40	10	16.5	13.1	3	M4 x 12	5	29	7285	87	0.05
B901010	10	23.81	27.00	10	16.5	13.1	3	M4 x 12	5	36	7285	81	0.05
T901011	11	26.99	30.16	10	16.5	13.1	4	M4 x 12	5	53	9713	95	0.05
T901012	12	26.99	30.16	10	16.5	13.1	4	M4 x 12	5	58	9713	95	0.05
T901014	14	30.16	33.34	12	20.5	15.1	6	M4 x 14	5	102	14569	107	0.05
T901015	15	30.16	33.34	12	20.5	15.1	6	M4 x 14	5	109	14569	107	0.09
T901016	16	30.16	33.34	12	20.5	15.1	6	M4 x 14	5	117	14569	107	0.09
T901019	19	33.34	36.51	12	20.5	15.1	6	M4 x 14	5	138	14569	97	0.09
T901020	20	39.69	44.45	15	25	19.2	6	M5 x 18	10	234	23414	104	0.18
T901022	22	39.69	44.45	15	25	19.2	6	M5 x 18	10	258	23414	104	0.18
T901024	24	42.86	47.62	15	25	19.2	8	M5 x 18	10	375	31219	129	0.18
T901025	25	42.86	47.62	15	25	19.2	8	M5 x 18	10	390	31219	129	0.18
T901028	28	47.62	50.80	17	28	21.06	9	M5 x 18	10	492	35121	115	0.27
T901030	30	49.21	52.39	17	28	21.06	10	M5 x 18	10	585	39024	124	0.27
T901032	32	50.80	53.97	17	28	21.06	10	M5 x 18	10	624	39024	120	0.27
T901035	35	53.98	57.15	17	28	21.06	10	M5 x 18	10	683	39024	113	0.27

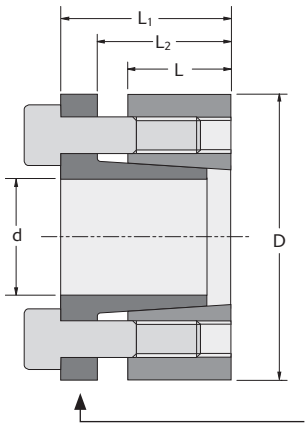
B-LOC®
B103
Inch



Locking screws transfer to integrated push-off holes for disassembly.

Metric socket head locking screws
ISO 4762 grade 12.9
(See M_a for install torque).

Screw head height = screw diameter (mm)



TOLERANCE (T_L)

Bore diameter machined to D -0/+T_L
T_L = .002" for bores up to 4.724"
.003" for bores up to 12.008"
.004" for bores over 12.008"

d = Shaft diameter machined to d +0/-T_L

Note: Flange of Series B103 locking assemblies should be located inside of hub bore.

B103 — Inch

Part Number	d (inch)	D (inch)	L (inch)	L_1 (inch)	L_2 (inch)	Locking Screws Qty	Locking Screws Size	M_a Install Torque (ft lb)	M_t Maximum Transmitted Torque (ft lb)	Th Maximum Transmitted Thrust (lbs)	P_h Hub Pressure (psi)	Shipping Weight (lb)
B302012	3/4	1.850	0.669	1.122	0.886	5	M6 x 20	10	247	7918	16959	0.6
T302014	7/8	1.850	0.669	1.122	0.886	5	M6 x 20	10	289	7918	16959	0.6
B302100	1	1.969	0.669	1.122	0.886	6	M6 x 20	10	396	9502	19130	0.7
B302102	1 1/8	2.165	0.669	1.122	0.886	6	M6 x 20	10	445	9502	17391	0.8
B302103	1 3/16	2.165	0.669	1.122	0.886	6	M6 x 20	10	470	9502	17391	0.7
B302104	1 1/4	2.362	0.669	1.122	0.886	8	M6 x 20	10	660	12669	21256	0.9
B302106	1 3/8	2.362	0.669	1.122	0.886	8	M6 x 20	10	726	12669	21256	0.8
B302107	1 7/16	2.559	0.669	1.122	0.886	8	M6 x 20	10	759	12669	19621	1.0
B302108	1 1/2	2.559	0.669	1.122	0.886	8	M6 x 20	10	792	12669	19621	1.0
B302110	1 5/8	2.953	0.787	1.358	1.043	7	M8 x 25	25	1439	21250	24245	1.7
T302111	1 11/16	2.953	0.787	1.358	1.043	7	M8 x 25	25	1494	21250	24245	1.6
B302112	1 3/4	2.953	0.787	1.358	1.043	7	M8 x 25	25	1550	21250	24245	1.6
T302114	1 7/8	3.150	0.787	1.358	1.043	7	M8 x 25	25	1660	21250	22729	1.8
B302115	1 15/16	3.150	0.787	1.358	1.043	7	M8 x 25	25	1716	21250	22729	1.7
B302200	2	3.150	0.787	1.358	1.043	7	M8 x 25	25	1771	21250	22729	1.6
T302202	2 1/8	3.346	0.787	1.358	1.043	8	M8 x 25	25	2150	24286	24448	1.9
B302203	2 3/16	3.346	0.787	1.358	1.043	8	M8 x 25	25	2214	24286	24448	1.8
B302204	2 1/4	3.543	0.787	1.358	1.043	8	M8 x 25	25	2277	24286	23090	2.1
T302206	2 3/8	3.543	0.787	1.358	1.043	8	M8 x 25	25	2403	24286	23090	1.9
B302207	2 7/16	3.740	0.787	1.358	1.043	9	M8 x 25	25	2775	27322	24609	2.2
B302208	2 1/2	3.740	0.787	1.358	1.043	9	M8 x 25	25	2846	27322	24609	2.2
T302209	2 9/16	3.740	0.787	1.358	1.043	9	M8 x 25	25	2917	27322	24609	2.1
T302211	2 11/16	4.331	0.945	1.594	1.201	8	M10 x 30	50	4411	39387	25532	3.8
T302212	2 3/4	4.331	0.945	1.594	1.201	8	M10 x 30	50	4513	39387	25532	3.7
T302214	2 7/8	4.528	0.945	1.594	1.201	8	M10 x 30	50	4718	39387	24422	4.0
B302215	2 15/16	4.528	0.945	1.594	1.201	8	M10 x 30	50	4821	39387	24422	3.9
B302300	3	4.724	0.945	1.594	1.201	8	M10 x 30	50	4923	39387	23404	4.4
T302304	3 1/4	4.921	0.945	1.594	1.201	9	M10 x 30	50	6000	44311	25277	4.5
T302306	3 3/8	4.921	0.945	1.594	1.201	9	M10 x 30	50	6231	44311	25277	4.3
B302307	3 7/16	5.118	0.945	1.594	1.201	9	M10 x 30	50	6347	44311	24305	4.8
T302308	3 1/2	5.118	0.945	1.594	1.201	9	M10 x 30	50	6462	44311	24305	4.6
T302312	3 3/4	5.315	0.945	1.594	1.201	10	M10 x 30	50	7693	49234	26005	4.7
T302315	3 15/16	5.709	1.024	1.772	1.299	8	M12 x 35	90	9944	60608	27512	6
T302400	4	5.709	1.024	1.772	1.299	8	M12 x 35	90	10101	60608	27512	6
T302407	4 7/16	6.102	1.024	1.772	1.299	8	M12 x 35	90	11206	60608	25737	6
T302412	4 3/4	6.496	1.024	1.772	1.299	9	M12 x 35	90	13495	68184	27200	7
T302415	4 15/16	7.087	1.339	2.165	1.614	9	M14 x 40	135	18113	88043	24620	11
B302500	5	7.087	1.339	2.165	1.614	9	M14 x 40	135	18342	88043	24620	11
T302507	5 7/16	7.480	1.339	2.165	1.614	9	M14 x 40	135	19947	88043	23324	12
T302515	5 15/16	7.874	1.339	2.165	1.614	10	M14 x 40	135	24202	97825	24620	12
T302607	6 7/16	8.858	1.732	2.559	2.008	12	M14 x 40	135	31488	117391	20292	20
T302615	6 15/16	9.252	1.732	2.559	2.008	12	M14 x 40	135	33933	117391	19429	20
B302700	7	9.252	1.732	2.559	2.008	12	M14 x 40	135	34239	117391	19429	20
T302707	7 7/16	9.843	1.732	2.559	2.008	15	M14 x 40	135	45474	146738	22829	22
T302715	7 15/16	10.236	1.732	2.559	2.008	15	M14 x 40	135	48531	146738	21951	23
T302800	8	10.236	1.732	2.559	2.008	15	M14 x 40	135	48913	146738	21951	21

B-LOC® B103 Metric

TOLERANCE (T_L)

Bore diameter machined to D -0/+T_L
T_L = .05mm for bores up to 120mm
.08mm for bores up to 305mm
.10mm for bores over 305mm

d = Shaft diameter machined to d +0/-T_L

B103 — Metric

Part Number	d (mm)	D (mm)	L (mm)	L_1 (mm)	L_2 (mm)	Locking Screws		M_a	M_t	Th	P_h	Shipping Weight (kg)
								Install Torque (Nm)	Maximum Transmitted		Hub Pressure (N/mm^2)	
						Qty	Size		Torque (Nm)	Thrust (N)		
T301015	15	32	14	21.5	18	4	M4 x 12	5	115	15390	91	0.1
T301018	18	47	17	28.5	22.5	5	M6 x 20	14	327	36371	121	0.3
T301019	19	47	17	28.5	22.5	5	M6 x 20	14	346	36371	121	0.3
T301020	20	47	17	28.5	22.5	5	M6 x 20	14	364	36371	121	0.3
T301022	22	47	17	28.5	22.5	5	M6 x 20	14	400	36371	121	0.2
T301024	24	50	17	28.5	22.5	6	M6 x 20	14	524	43645	136	0.3
B301025	25	50	17	28.5	22.5	6	M6 x 20	14	546	43645	136	0.3
T301028	28	55	17	28.5	22.5	6	M6 x 20	14	611	43645	124	0.3
B301030	30	55	17	28.5	22.5	6	M6 x 20	14	655	43645	124	0.3
T301032	32	60	17	28.5	22.5	8	M6 x 20	14	931	58193	151	0.4
B301035	35	60	17	28.5	22.5	8	M6 x 20	14	1018	58193	151	0.3
T301038	38	65	17	28.5	22.5	8	M6 x 20	14	1106	58193	140	0.4
B301040	40	65	17	28.5	22.5	8	M6 x 20	14	1164	58193	140	0.4
T301042	42	75	20	34.5	26.5	7	M8 x 25	34	1991	94822	168	0.7
B301045	45	75	20	34.5	26.5	7	M8 x 25	34	2133	94822	168	0.6
B301050	50	80	20	34.5	26.5	7	M8 x 25	34	2371	94822	157	0.7
T301055	55	85	20	34.5	26.5	8	M8 x 25	34	2980	108368	169	0.8
B301060	60	90	20	34.5	26.5	8	M8 x 25	34	3251	108368	160	0.8
T301065	65	95	20	34.5	26.5	9	M8 x 25	34	3962	121914	170	0.9
B301070	70	110	24	40.5	30.5	8	M10 x 30	68	6151	175750	177	1.6
T301075	75	115	24	40.5	30.5	8	M10 x 30	68	6591	175750	169	1.6
T301080	80	120	24	40.5	30.5	8	M10 x 30	68	7030	175750	162	1.7
B301085	85	125	24	40.5	30.5	9	M10 x 30	68	8403	197719	175	1.8
B301090	90	130	24	40.5	30.5	9	M10 x 30	68	8897	197719	168	1.9
T301095	95	135	24	40.5	30.5	10	M10 x 30	68	10435	219688	180	2
B301100	100	145	26	45	33	8	M12 x 35	122	13478	269557	190	3
T301110	110	155	26	45	33	8	M12 x 35	122	14826	269557	177	3
B301120	120	165	26	45	33	9	M12 x 35	122	18195	303251	188	3
T301130	130	180	34	55	41	9	M14 x 40	183	25452	391574	170	5
T301140	140	190	34	55	41	9	M14 x 40	183	27410	391574	161	5
T301150	150	200	34	55	41	10	M14 x 40	183	32631	435082	170	5
T301160	160	210	34	55	41	11	M14 x 40	183	38287	478591	178	6
T301170	170	225	44	65	51	12	M14 x 40	183	44378	522099	140	8
T301180	180	235	44	65	51	12	M14 x 40	183	46989	522099	134	8
T301190	190	250	44	65	51	15	M14 x 40	183	61999	652624	157	9
T301200	200	260	44	65	51	15	M14 x 40	183	65262	652624	151	10
T301220	220	285	50	73	57	12	M16 x 45	297	82145	746770	139	13
T301240	240	305	50	73	57	15	M16 x 45	297	112016	933463	162	14
T301260	260	325	50	73	57	18	M16 x 45	297	145620	1120155	183	15
T301280	280	355	60	85	67	16	M18 x 50	393	163726	1169473	146	23
T301300	300	375	60	85	67	18	M18 x 50	393	197349	1315657	155	24
T301320	320	405	74	102	82	18	M20 x 50	569	274346	1714665	152	34
T301340	340	425	74	102	82	21	M20 x 50	569	340075	2000443	169	36
T301360	360	455	86	116	94	18	M22 x 60	759	377769	2098718	142	49
T301380	380	475	86	116	94	21	M22 x 60	759	465216	2448505	159	52
T301400	400	495	86	116	94	21	M22 x 60	759	489701	2448505	153	55

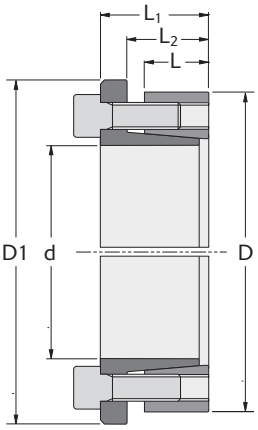
B-LOC®
B106
Inch



Locking screws transfer to integrated push-off holes for disassembly.

Metric socket head locking screws
ISO 4762 grade 12.9
(See M_a for install torque).

Screw head height = screw diameter (mm)



TOLERANCE (T_L)

Bore dia. machined to D -0/+T_L
T_L = .002" for bores up to 4.724"
.003" for bores up to 12.008"
.004" for bores over 12.008"

d = Shaft diameter machined to d +0/-T_L

B106 — Inch

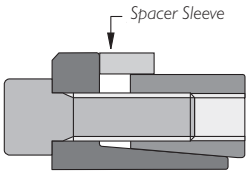
Part Number	d (inch)	D (inch)	D_1 (inch)	L (inch)	L_1 (inch)	L_2 (inch)	Locking Screws Qty	Locking Screws Size	M_a Install Torque (ft lb)	M_t Maximum Transmitted Torque (ft lb)	Th Maximum Transmitted Thrust (lbs)	Ph Hub Pressure (psi)	Shipping Weight (lb)
T602010	5/8	1.260	1.457	0.551	0.846	0.709	4	M4 x 12	3.5	55	2096	8007	0.6
B602012	3/4	1.850	2.047	0.669	1.122	0.886	5	M6 x 20	12	187	5997	12845	0.6
B602014	7/8	1.850	2.047	0.669	1.122	0.886	5	M6 x 20	12	219	5997	12845	0.7
T602015	15/16	1.969	2.224	0.669	1.122	0.886	5	M6 x 20	12	234	5997	12071	0.6
B602100	1	1.969	2.224	0.669	1.122	0.886	6	M6 x 20	12	300	7196	14489	0.7
B602102	1 1/8	2.165	2.421	0.669	1.122	0.886	6	M6 x 20	12	337	7196	13172	0.8
B602103	1 3/16	2.165	2.421	0.669	1.122	0.886	6	M6 x 20	12	356	7196	13172	0.7
B602104	1 1/4	2.362	2.618	0.669	1.122	0.886	8	M6 x 20	12	500	9595	16099	0.9
B602106	1 3/8	2.362	2.618	0.669	1.122	0.886	8	M6 x 20	12	550	9595	16099	0.8
B602107	1 7/16	2.559	2.815	0.669	1.122	0.886	8	M6 x 20	12	575	9595	14860	1.0
B602108	1 1/2	2.559	2.815	0.669	1.122	0.886	8	M6 x 20	12	600	9595	14860	1.0
B602110	1 5/8	2.953	3.287	0.787	1.358	1.043	7	M8 x 25	30	1090	16094	18362	1.7
B602111	1 11/16	2.953	3.287	0.787	1.358	1.043	7	M8 x 25	30	1132	16094	18362	1.6
B602112	1 3/4	2.953	3.287	0.787	1.358	1.043	7	M8 x 25	30	1174	16094	18362	1.6
B602114	1 7/8	3.150	3.484	0.787	1.358	1.043	7	M8 x 25	30	1257	16094	17214	1.8
B602115	1 15/16	3.150	3.484	0.787	1.358	1.043	7	M8 x 25	30	1299	16094	17214	1.7
B602200	2	3.150	3.484	0.787	1.358	1.043	7	M8 x 25	30	1341	16094	17214	1.6
T602202	2 1/8	3.346	3.681	0.787	1.358	1.043	8	M8 x 25	30	1629	18393	18516	1.9
B602203	2 3/16	3.346	3.681	0.787	1.358	1.043	8	M8 x 25	30	1676	18393	18516	1.8
B602204	2 1/4	3.543	3.898	0.787	1.358	1.043	8	M8 x 25	30	1724	18393	17487	2.1
B602206	2 3/8	3.543	3.898	0.787	1.358	1.043	8	M8 x 25	30	1820	18393	17487	1.9
B602207	2 7/16	3.740	4.016	0.787	1.358	1.043	9	M8 x 25	30	2102	20693	18638	2.2
B602208	2 1/2	3.740	4.016	0.787	1.358	1.043	9	M8 x 25	30	2155	20693	18638	2.2
T602209	2 9/16	3.740	4.016	0.787	1.358	1.043	9	M8 x 25	30	2209	20693	18638	2.1
T602211	2 11/16	4.331	4.685	0.945	1.594	1.201	8	M10 x 30	60	3340	29831	19337	3.8
B602212	2 3/4	4.331	4.685	0.945	1.594	1.201	8	M10 x 30	60	3418	29831	19337	3.7
B602214	2 7/8	4.528	4.882	0.945	1.594	1.201	8	M10 x 30	60	3573	29831	18496	4.0
B602215	2 15/16	4.528	4.882	0.945	1.594	1.201	8	M10 x 30	60	3651	29831	18496	3.9
B602300	3	4.724	5.079	0.945	1.594	1.201	8	M10 x 30	60	3729	29831	17726	4.4
B602304	3 1/4	4.921	5.276	0.945	1.594	1.201	9	M10 x 30	60	4545	33559	19144	4.5
T602306	3 3/8	4.921	5.276	0.945	1.594	1.201	9	M10 x 30	60	4719	33559	19144	4.3
B602307	3 7/16	5.118	5.472	0.945	1.594	1.201	9	M10 x 30	60	4807	33559	18408	4.8
B602308	3 1/2	5.118	5.472	0.945	1.594	1.201	9	M10 x 30	60	4894	33559	18408	4.6
T602312	3 3/4	5.315	5.669	0.945	1.594	1.201	10	M10 x 30	60	5826	37288	19695	4.7
T602315	3 15/16	5.709	6.063	1.024	1.772	1.299	8	M12 x 35	105	7322	44627	20258	6
B602400	4	5.709	6.063	1.024	1.772	1.299	8	M12 x 35	105	7438	44627	20258	6
B602407	4 7/16	6.102	6.457	1.024	1.772	1.299	8	M12 x 35	105	8251	44627	18951	6
T602412	4 3/4	6.496	6.850	1.024	1.772	1.299	9	M12 x 35	105	9936	50205	20028	7
B602415	4 15/16	7.087	7.441	1.339	2.165	1.614	9	M14 x 40	166	14057	68327	19106	11
T602500	5	7.087	7.441	1.339	2.165	1.614	9	M14 x 40	166	14235	68327	19106	11
B602507	5 7/16	7.480	7.835	1.339	2.165	1.614	9	M14 x 40	166	15480	68327	18101	12
B602515	5 15/16	7.874	8.228	1.339	2.165	1.614	10	M14 x 40	166	18782	75918	19106	12
B602607	6 7/16	8.858	9.213	1.732	2.559	2.008	12	M14 x 40	166	24436	91102	15748	20
T602615	6 15/16	9.252	9.606	1.732	2.559	2.008	12	M14 x 40	166	26334	91102	15078	20
B602700	7	9.252	9.606	1.732	2.559	2.008	12	M14 x 40	166	26571	91102	15078	20
B602707	7 7/16	9.843	10.197	1.732	2.559	2.008	15	M14 x 40	166	35290	113878	17717	22
T602715	7 15/16	10.236	10.591	1.732	2.559	2.008	15	M14 x 40	166	37663	113878	17035	23
T602800	8	10.236	10.591	1.732	2.559	2.008	15	M14 x 40	166	37959	113878	17035	21

B-LOC® B106 Metric

TOLERANCE (T_L)

Bore diameter machined to D -0/+T_L
T_L = .05mm for bores up to 120mm
.08mm for bores up to 305mm
.10mm for bores over 305mm

d = Shaft diameter machined to d +0/-T_L



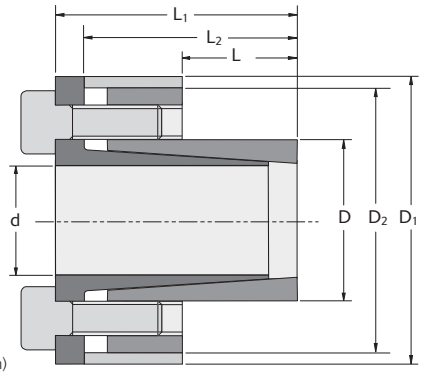
Note: Series B106 also available with optional integrated spacer sleeve (ideal for very narrow drive elements). Spacers are 0.275" wide for B106 sizes with D=2.559" (65mm) and smaller, and 0.315" wide for all others.

B106 — Metric

Part Number	d (mm)	D (mm)	D_1 (mm)	L (mm)	L_1 (mm)	L_2 (mm)	Locking Screws		M_a	M_t	Th	Ph	Shipping Weight (kg)
									Install Torque (Nm)	Maximum Transmitted		Hub Pressure (N/mm^2)	
							Qty	Size		Torque (Nm)	Thrust (N)		
T601014	14	28	32	14	20.5	17	4	M4 x 12	5	68	9713	66	0.1
T601015	15	28	32	14	20.5	17	4	M4 x 12	5	73	9713	66	0.1
T601018	18	47	52	17	28.5	22.5	5	M6 x 20	16	236	26234	87	0.3
T601019	19	47	52	17	28.5	22.5	5	M6 x 20	16	249	26234	87	0.3
T601020	20	47	52	17	28.5	22.5	5	M6 x 20	16	262	26234	87	0.3
B601022	22	47	52	17	28.5	22.5	5	M6 x 20	16	289	26234	87	0.3
T601024	24	50	56.5	17	28.5	22.5	6	M6 x 20	16	378	31481	98	0.3
B601025	25	50	56.5	17	28.5	22.5	6	M6 x 20	16	394	31481	98	0.3
B601028	28	55	61.5	17	28.5	22.5	6	M6 x 20	16	441	31481	89	0.4
B601030	30	55	61.5	17	28.5	22.5	6	M6 x 20	16	472	31481	89	0.3
T601032	32	60	66.5	17	28.5	22.5	8	M6 x 20	16	672	41975	109	0.4
B601035	35	60	66.5	17	28.5	22.5	8	M6 x 20	16	735	41975	109	0.4
T601038	38	65	71.5	17	28.5	22.5	8	M6 x 20	16	798	41975	101	0.5
B601040	40	65	71.5	17	28.5	22.5	8	M6 x 20	16	839	41975	101	0.5
T601042	42	75	83.5	20	34.5	26.5	7	M8 x 25	41	1515	72167	128	0.8
B601045	45	75	83.5	20	34.5	26.5	7	M8 x 25	41	1624	72167	128	0.7
T601048	48	80	88.5	20	34.5	26.5	7	M8 x 25	41	1732	72167	120	0.8
B601050	50	80	88.5	20	34.5	26.5	7	M8 x 25	41	1804	72167	120	0.8
B601055	55	85	93.5	20	34.5	26.5	8	M8 x 25	41	2268	82476	129	0.8
B601060	60	90	98	20	34.5	26.5	8	M8 x 25	41	2474	82476	122	0.9
T601063	63	95	102	20	34.5	26.5	9	M8 x 25	41	2923	92786	130	0.9
T601065	65	95	102	20	34.5	26.5	9	M8 x 25	41	3016	92786	130	0.9
T601070	70	110	119	24	40.5	30.5	8	M10 x 30	81	4624	132127	133	1.7
B601075	75	115	124	24	40.5	30.5	8	M10 x 30	81	4955	132127	127	1.8
B601080	80	120	129	24	40.5	30.5	8	M10 x 30	81	5285	132127	122	1.9
T601085	85	125	134	24	40.5	30.5	9	M10 x 30	81	6317	148643	131	2
B601090	90	130	139	24	40.5	30.5	9	M10 x 30	81	6689	148643	126	2
T601095	95	135	144	24	40.5	30.5	10	M10 x 30	81	7845	165159	135	2
B601100	100	145	154	26	45	33	8	M12 x 35	142	9901	198016	139	3
B601110	110	155	164	26	45	33	8	M12 x 35	142	10891	198016	130	3
B601120	120	165	174	26	45	33	9	M12 x 35	142	13366	222768	138	3
T601130	130	180	189	34	55	41	9	M14 x 40	225	19751	303855	132	5
B601140	140	190	199	34	55	41	9	M14 x 40	225	21270	303855	125	5
T601150	150	200	209	34	55	41	10	M14 x 40	225	25321	337617	132	6
B601160	160	210	219	34	55	41	11	M14 x 40	225	29710	371379	138	6
B601170	170	225	234	44	65	51	12	M14 x 40	225	34437	405140	109	8
B601180	180	235	244	44	65	51	12	M14 x 40	225	36463	405140	104	9
T601190	190	250	259	44	65	51	15	M14 x 40	225	48110	506425	122	10
B601200	200	260	269	44	65	51	15	M14 x 40	225	50643	506425	117	10
T601220	220	285	294	50	73	57	12	M16 x 45	348	60747	552244	103	14
T601240	240	305	314	50	73	57	15	M16 x 45	348	82837	690305	120	15
T601260	260	325	334	50	73	57	18	M16 x 45	348	107688	828366	135	16
T601280	280	355	364	60	85	67	16	M18 x 50	475	124894	892098	111	23
T601300	300	375	384	60	85	67	18	M18 x 50	475	150542	1003610	118	25
T601320	320	405	414	74	102	82	18	M20 x 50	678	206318	1289490	114	35
T601340	340	425	434	74	102	82	21	M20 x 50	678	255749	1504405	127	37
T601360	360	455	464	86	116	94	18	M22 x 60	915	287427	1596815	108	51
T601380	380	475	484	86	116	94	21	M22 x 60	915	353961	1862951	121	53
T601400	400	495	504	86	116	94	21	M22 x 60	915	372590	1862951	116	57

B-LOC® B800 Inch





TOLERANCE (T_L)

Bore diameter machined to D -0/+T_L
T_L = .002" for bores up to 2.559"
.003" for bores over 2.559"

d = Shaft diameter machined to d +0/-T_L.

B800 — Inch

Part Number	d (inch)	D (inch)	D_1 (inch)	D_2 (inch)	L (inch)	L_1 (inch)	L_2 (inch)	Locking Screws Qty	Locking Screws Size	M_a Install Torque (ft lb)	M_t Maximum Transmitted Torque (ft lb)	Th Maximum Transmitted Thrust (lbs)	P_h Hub Pressure (psi)	Shipping Weight (lb)
B802004	1/4	0.551	0.984	0.906	0.394	0.866	0.748	3	M4 x 10	3.5	16	1572	19217	0.2
B802005	5/16	0.591	1.063	0.945	0.472	0.984	0.866	3	M4 x 10	3.5	20	1572	14947	0.3
B802006	3/8	0.630	1.142	1.024	0.551	1.063	0.945	4	M4 x 10	3.5	33	2096	16014	0.4
T82007	7/16	0.709	1.260	1.102	0.551	1.083	0.945	4	M4 x 10	3.5	38	2096	14235	0.5
B802008	1/2	0.906	1.496	1.299	0.551	1.083	0.945	4	M4 x 10	3.5	44	2096	11140	0.5
B802010	5/8	0.945	1.732	1.575	0.630	1.437	1.161	3	M6 x 16	12	94	3598	16036	0.6
B802012	3/4	1.063	1.929	1.693	0.709	1.555	1.280	4	M6 x 16	12	150	4798	16893	0.7
T82014	7/8	1.260	2.126	1.890	0.984	1.850	1.575	4	M6 x 16	12	175	4798	10263	0.8
B802015	15/16	1.339	2.205	1.969	0.984	1.850	1.575	6	M6 x 16	12	281	7196	14489	0.9
B802100	1	1.339	2.205	1.969	0.984	1.850	1.575	6	M6 x 16	12	300	7196	14489	0.9
B802102	1 1/8	1.535	2.402	2.165	0.984	1.850	1.575	6	M6 x 16	12	337	7196	12631	1.0
T82103	1 3/16	1.614	2.441	2.244	0.984	1.850	1.575	6	M6 x 16	12	356	7196	12015	1.1
B802104	1 1/4	1.693	2.559	2.323	0.984	1.850	1.575	8	M6 x 16	12	500	9595	15275	1.2
T82106	1 3/8	1.850	2.677	2.441	1.260	2.126	1.850	8	M6 x 18	12	550	9595	10918	1.4
B802107	1 7/16	1.969	2.835	2.598	1.260	2.126	1.850	8	M6 x 18	12	575	9595	10263	1.5
B802108	1 1/2	1.969	2.835	2.598	1.260	2.126	1.850	8	M6 x 18	12	600	9595	10263	1.5
B802110	1 5/8	2.165	3.071	2.795	1.260	2.126	1.850	8	M6 x 18	12	650	9595	9330	1.7
T82111	1 11/16	2.323	3.386	3.150	1.772	2.756	2.441	8	M8 x 22	30	1293	18393	11856	2.7
T82112	1 3/4	2.323	3.386	3.150	1.772	2.756	2.441	8	M8 x 22	30	1341	18393	11856	2.7
T82114	1 7/8	2.441	3.425	3.189	1.772	2.756	2.441	8	M8 x 22	30	1437	18393	11282	2.7
T82115	1 15/16	2.559	3.622	3.386	1.772	2.756	2.441	8	M8 x 22	30	1485	18393	10762	3.1
B802200	2	2.795	3.858	3.622	2.165	3.189	2.874	9	M8 x 22	30	1724	20693	9068	3.8
T82202	2 1/8	2.795	3.858	3.622	2.165	3.189	2.874	9	M8 x 22	30	1832	20693	9068	3.8
T82203	2 3/16	3.031	4.094	3.858	2.165	3.189	2.874	9	M8 x 22	30	1886	20693	8362	4.2
T82206	2 3/8	3.031	4.094	3.858	2.165	3.189	2.874	9	M8 x 22	30	2048	20693	8362	4.2
B802207	2 7/16	3.307	4.370	4.134	2.165	3.189	2.874	9	M8 x 22	30	2102	20693	7665	4.9
B802208	2 1/2	3.307	4.370	4.134	2.165	3.189	2.874	9	M8 x 22	30	2155	20693	7665	4.9
T82210	2 5/8	3.543	4.685	4.449	2.559	3.780	3.386	9	M10 x 25	60	3671	33559	9817	7
T82212	2 3/4	3.543	4.685	4.449	2.559	3.780	3.386	9	M10 x 25	60	3845	33559	9817	7
T82214	2 7/8	3.740	4.961	4.685	2.559	3.780	3.386	9	M10 x 25	60	4020	33559	9301	7
T82215	2 15/16	3.740	4.961	4.685	2.559	3.780	3.386	9	M10 x 25	60	4108	33559	9301	7
B802300	3	3.740	4.961	4.685	2.559	3.780	3.386	9	M10 x 25	60	4195	33559	9301	7
T82302	3 1/8	3.937	5.157	4.921	2.559	3.780	3.386	12	M10 x 25	60	5826	44746	11781	8
T82304	3 1/4	4.173	5.394	5.157	2.559	3.780	3.386	12	M10 x 25	60	6059	44746	11114	8
T82306	3 3/8	4.173	5.394	5.157	2.559	3.780	3.386	12	M10 x 25	60	6292	44746	11114	8
T82307	3 7/16	4.409	5.669	5.394	2.559	3.780	3.386	12	M10 x 25	60	6409	44746	10519	9
T82308	3 1/2	4.409	5.669	5.394	2.559	3.780	3.386	12	M10 x 25	60	6525	44746	10519	9
T82310	3 5/8	4.409	5.669	5.394	2.559	3.780	3.386	12	M10 x 25	60	6758	44746	10519	9
T82312	3 3/4	4.724	5.866	5.591	2.559	3.780	3.386	14	M10 x 25	60	8157	52204	11454	10
T82314	3 7/8	4.921	6.299	6.024	2.756	4.213	3.701	12	M12 x 30	105	10808	66940	13092	12
B802315	3 15/16	4.921	6.299	6.024	2.756	4.213	3.701	12	M12 x 30	105	10982	66940	13092	12
B802400	4	4.921	6.299	6.024	2.756	4.213	3.701	12	M12 x 30	105	11157	66940	13092	12
T82404	4 1/4	5.512	6.850	6.614	2.756	4.213	3.701	12	M12 x 30	105	11854	66940	11690	15
T82406	4 3/8	5.512	6.850	6.614	2.756	4.213	3.701	12	M12 x 30	105	12203	66940	11690	15
T82407	4 7/16	6.102	7.795	7.362	3.543	5.039	4.528	16	M12 x 30	105	16503	89254	10949	21
T82408	4 1/2	6.102	7.795	7.362	3.543	5.039	4.528	16	M12 x 30	105	16735	89254	10949	21
T82412	4 3/4	6.102	7.795	7.362	3.543	5.039	4.528	16	M12 x 30	105	17665	89254	10949	21
T82415	4 15/16	6.496	8.189	7.756	3.543	5.039	4.528	16	M12 x 30	105	18362	89254	10286	23

B-LOC® B800 Metric

TOLERANCE (T_L)

Bore diameter machined to D -0/+T_L
T_L = .05mm for bores up to 65mm
.08mm for bores over 65mm

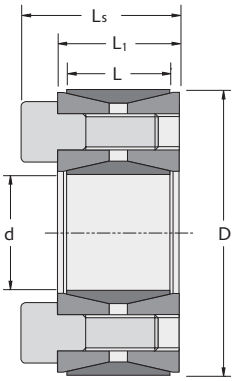
d = Shaft diameter machined to d +0/-T_L.

B800 — Metric

Part Number	d (mm)	D (mm)	D_1 (mm)	D_2 (mm)	L (mm)	L_1 (mm)	L_2 (mm)	Locking Screws		M_a	M_t	Th	P_h	Shipping Weight (kg)
										Install Torque (Nm)	Maximum Transmitted		Hub Pressure (N/mm^2)	
								Qty	Size		Torque (Nm)	Thrust (N)		
T8006	6	14	25	23	10	22	19	3	M4 x 10	5	22	7285	138	0.1
T8007	7	15	27	24	12	25	22	3	M4 x 10	5	25	7285	107	0.1
T8008	8	15	27	24	12	25	22	3	M4 x 10	5	29	7285	107	0.1
T8009	9	16	29	26	14	27	24	4	M4 x 10	5	44	9713	115	0.1
B801010	10	16	29	26	14	27	24	4	M4 x 10	5	49	9713	115	0.1
T8011	11	18	32	28	14	28	24	4	M4 x 10	5	53	9713	102	0.1
T8012	12	18	32	28	14	28	24	4	M4 x 10	5	58	9713	102	0.1
B801014	14	23	38	33	14	28	24	4	M4 x 10	5	68	9713	80	0.1
T8015	15	24	44	40	16	37	30	3	M6 x 16	16	118	15740	109	0.2
B801016	16	24	44	40	16	37	30	3	M6 x 16	16	126	15740	109	0.2
B801018	18	26	47	42	18	40	33	4	M6 x 16	16	189	20987	119	0.3
B801019	19	27	49	43	18	40	33	4	M6 x 16	16	199	20987	115	0.3
B801020	20	28	50	44	18	40	33	4	M6 x 16	16	210	20987	110	0.3
B801022	22	32	54	48	25	47	40	4	M6 x 16	16	231	20987	70	0.4
B801024	24	34	56	50	25	47	40	6	M6 x 16	16	378	31481	98	0.4
B801025	25	34	56	50	25	47	40	6	M6 x 16	16	394	31481	98	0.4
T8028	28	39	61	55	25	47	40	6	M6 x 16	16	441	31481	86	0.4
B801030	30	41	62	57	25	47	40	6	M6 x 16	16	472	31481	81	0.4
B801032	32	43	65	59	25	47	40	8	M6 x 16	16	672	41975	104	0.5
T8035	35	47	68	62	32	54	47	8	M6 x 18	16	735	41975	74	0.5
B801038	38	50	72	66	32	54	47	8	M6 x 18	16	798	41975	70	0.6
B801040	40	53	75	69	32	54	47	8	M6 x 18	16	839	41975	66	0.7
T8042	42	55	78	71	32	54	47	8	M6 x 18	16	881	41975	63	0.7
T8045	45	59	86	80	45	70	62	8	M8 x 22	41	1856	82476	82	1.1
T8048	48	62	87	81	45	70	62	8	M8 x 22	41	1979	82476	78	1.1
T8050	50	65	92	86	45	70	62	8	M8 x 22	41	2062	82476	75	1.3
T8055	55	71	98	92	55	81	73	9	M8 x 22	41	2552	92786	63	1.6
T8060	60	77	104	98	55	81	73	9	M8 x 22	41	2783	92786	58	1.8
T8065	65	84	111	105	55	81	73	9	M8 x 22	41	3015	92786	53	2
T8070	70	90	119	113	65	96	86	9	M10 x 25	81	5203	148643	67	3
T8075	75	95	126	119	65	96	86	9	M10 x 25	81	5575	148643	64	3
T8080	80	100	131	125	65	96	86	12	M10 x 25	81	7928	198191	81	3
T8085	85	106	137	131	65	96	86	12	M10 x 25	81	8423	198191	76	4
B801090	90	112	144	137	65	96	86	12	M10 x 25	81	8919	198191	72	4
T8095	95	120	149	142	65	96	86	14	M10 x 25	81	10983	231223	79	4
T8100	100	125	160	153	70	107	94	12	M12 x 30	142	14851	297024	90	6
T8110	110	140	174	168	70	107	94	12	M12 x 30	142	16336	297024	80	7
T8120	120	155	198	187	90	128	115	16	M12 x 30	142	23762	396032	75	10
T8130	130	165	208	197	90	128	115	16	M12 x 30	142	25742	396032	71	11

B-LOC® B400 Inch





TOLERANCE (T_L)

Bore diameter machined to D -0/+T_L

T_L = .002" for bores up to 1.969"
.003" for bores up to 4.724"
.004" for bores up to 9.252"
.005" for bores up to 14.764"
.006" for bores over 14.764"

d = Shaft diameter machined to d +0/-T_L

Screw head height = screw diameter (mm)

B400 — Inch

Part Number	d (inch)	D (inch)	L (inch)	L_1 (inch)	L_S (inch)	Locking Screws Qty	Locking Screws Size	M_a Install Torque (ft lb)	d_B	M_t Maximum Transmitted Torque (ft lb)	Th Maximum Transmitted Thrust (lbs)	P_h Hub Pressure (psi)	Shipping Weight (lb)
B402012	3/4	1.850	0.669	0.787	1.024	8	M6 x 18	11	M8	234	7501	16067	0.5
B402014	7/8	1.850	0.669	0.787	1.024	8	M6 x 18	11	M8	273	7501	16067	0.5
B402100	1	1.969	0.669	0.787	1.024	9	M6 x 18	11	M8	352	8439	16991	0.5
B402102	1 1/8	2.165	0.669	0.787	1.024	10	M6 x 18	11	M8	440	9377	17162	0.6
T402103	1 3/16	2.159	0.669	0.787	1.024	10	M6 x 18	11	M8	464	9377	17212	0.6
B402104	1 1/4	2.362	0.669	0.787	1.024	12	M6 x 18	11	M8	586	11252	18880	0.7
T402106	1 3/8	2.365	0.669	0.787	1.024	12	M6 x 18	11	M8	645	11252	18856	0.6
B402107	1 7/16	2.559	0.669	0.787	1.024	14	M6 x 18	11	M8	786	13127	20331	0.8
B402108	1 1/2	2.559	0.669	0.787	1.024	14	M6 x 18	11	M8	820	13127	20331	0.7
B402110	1 5/8	2.953	0.787	0.945	1.260	12	M8 x 22	26	M10	1381	20393	23267	1.3
B402111	1 11/16	2.953	0.787	0.945	1.260	12	M8 x 22	26	M10	1434	20393	23267	1.2
B402112	1 3/4	2.953	0.787	0.945	1.260	12	M8 x 22	26	M10	1487	20393	23267	1.2
B402114	1 7/8	3.150	0.787	0.945	1.260	12	M8 x 22	26	M10	1593	20393	21812	1.3
B402115	1 15/16	3.150	0.787	0.945	1.260	12	M8 x 22	26	M10	1646	20393	21812	1.3
B402200	2	3.346	0.787	0.945	1.260	14	M8 x 22	26	M10	1983	23792	23951	1.5
B402202	2 1/8	3.346	0.787	0.945	1.260	14	M8 x 22	26	M10	2107	23792	23951	1.4
B402203	2 3/16	3.543	0.787	0.945	1.260	14	M8 x 22	26	M10	2169	23792	22622	1.6
B402204	2 1/4	3.543	0.787	0.945	1.260	14	M8 x 22	26	M10	2231	23792	22620	1.5
T402206	2 3/8	3.531	0.787	0.945	1.260	14	M8 x 22	26	M10	2354	23792	22699	1.4
B402207	2 7/16	3.740	0.787	0.945	1.260	16	M8 x 22	26	M10	2762	27191	24491	1.6
B402208	2 1/2	3.740	0.787	0.945	1.260	16	M8 x 22	26	M10	2832	27191	24491	1.6
T402209	2 9/16	3.737	0.787	0.945	1.260	16	M8 x 22	26	M10	2903	27191	24512	1.5
B402210	2 5/8	4.331	0.945	1.102	1.496	14	M10 x 25	51	M12	4139	37844	24532	2.8
B402211	2 11/16	4.331	0.945	1.102	1.496	14	M10 x 25	51	M12	4238	37844	24532	2.8
T402212	2 3/4	4.337	0.945	1.102	1.496	14	M10 x 25	51	M12	4336	37844	24496	2.7
T402214	2 7/8	4.528	0.945	1.102	1.496	14	M10 x 25	51	M12	4533	37844	23465	2.9
B402215	2 15/16	4.528	0.945	1.102	1.496	14	M10 x 25	51	M12	4632	37844	23465	2.8
B402300	3	4.724	0.945	1.102	1.496	14	M10 x 25	51	M12	4730	37844	22487	3.2
B402302	3 1/8	4.724	0.945	1.102	1.496	14	M10 x 25	51	M12	4928	37844	22487	3.0
T402304	3 1/4	4.921	0.945	1.102	1.496	16	M10 x 25	51	M12	5857	43250	24672	3.3
B402306	3 3/8	4.921	0.945	1.102	1.496	16	M10 x 25	51	M12	6082	43250	24672	3.1
B402307	3 7/16	5.118	0.945	1.102	1.496	16	M10 x 25	51	M12	6195	43250	23723	3.4
B402308	3 1/2	5.118	0.945	1.102	1.496	16	M10 x 25	51	M12	6307	43250	23723	3.4
T402312	3 3/4	5.305	0.945	1.102	1.496	18	M10 x 25	51	M12	7603	48656	25748	3.5
T402314	3 7/8	5.709	1.024	1.299	1.772	14	M12 x 30	91	M14	9320	57726	26204	4.8
T402315	3 15/16	5.709	1.024	1.299	1.772	14	M12 x 30	91	M14	9471	57726	26204	4.7
B402400	4	5.843	1.024	1.299	1.772	14	M12 x 30	91	M14	9621	57726	25602	5
T402403	4 3/16	6.102	1.024	1.299	1.772	14	M12 x 30	91	M14	10072	57726	24513	6
B402407	4 7/16	6.496	1.024	1.299	1.772	16	M12 x 30	91	M14	12198	65972	26317	6
B402408	4 1/2	6.496	1.024	1.299	1.772	16	M12 x 30	91	M14	12370	65972	26317	6
B402415	4 15/16	7.087	1.339	1.496	1.969	20	M12 x 35	91	M14	16966	82466	23060	8
T402500	5	7.087	1.339	1.496	1.969	20	M12 x 35	91	M14	17180	82466	23060	8
B402507	5 7/16	7.480	1.339	1.496	1.969	22	M12 x 35	91	M14	20552	90712	24031	9
T402508	5 1/2	7.492	1.339	1.496	1.969	22	M12 x 35	91	M14	20788	90712	23993	8
B402600	6	8.268	1.339	1.496	1.969	26	M12 x 35	91	M14	26801	107205	25695	10
T402607	6 7/16	8.858	1.496	1.732	2.283	22	M14 x 40	138	M16	31764	118419	23702	14
B402608	6 1/2	8.858	1.496	1.732	2.283	22	M14 x 40	138	M16	32072	118419	23702	13
B402615	6 15/16	9.252	1.496	1.732	2.283	24	M14 x 40	138	M16	37343	129185	24757	14
B402700	7	9.252	1.496	1.732	2.283	24	M14 x 40	138	M16	37679	129185	24757	14
T402708	7 1/2	9.823	1.811	2.047	2.598	28	M14 x 45	138	M16	47099	150716	22473	18
T402714	7 7/8	10.236	1.811	2.047	2.598	30	M14 x 45	138	M16	52986	161481	23106	19
T402715	7 15/16	10.504	1.811	2.047	2.598	30	M14 x 45	138	M16	53407	161481	22517	19
T402800	8	10.504	1.811	2.047	2.598	30	M14 x 45	138	M16	53827	161481	22517	19

B-LOC® B400 Metric

TOLERANCE (T_L)

Bore diameter machined to D -0/+T_L
T_L = .05mm for bores up to 50mm
.08mm for bores up to 120mm
.10mm for bores up to 235mm
.13mm for bores up to 375mm
.15mm for bores over 375mm

d = Shaft diameter machined to d +0/-T_L

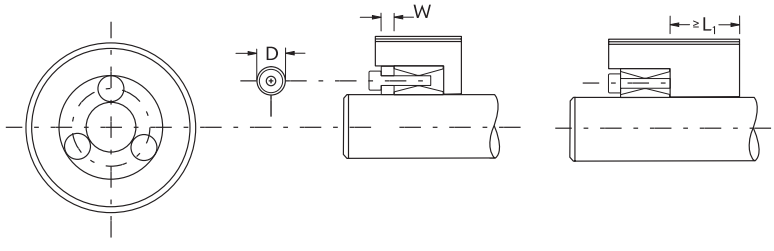
B400 — Metric

Part Number	d (mm)	D (mm)	L (mm)	L_1 (mm)	L_S (mm)	Locking Screws Qty	Locking Screws Size	M_a Install Torque (Nm)	d_B	M_t Maximum Transmitted Torque (Nm)	Th Maximum Transmitted Thrust (N)	P_h Hub Pressure (N/mm²)	Shipping Weight (kg)
T401018	18	47	17	20	26	8	M6 x 18	15	M8	302	33561	111	0.2
T401019	19	47	17	20	26	8	M6 x 18	15	M8	319	33561	111	0.2
B401020	20	47	17	20	26	8	M6 x 18	15	M8	335	33561	111	0.2
T401022	22	47	17	20	26	8	M6 x 18	15	M8	369	33561	111	0.2
B401024	24	50	17	20	26	9	M6 x 18	15	M8	453	37756	118	0.2
B401025	25	50	17	20	26	9	M6 x 18	15	M8	472	37756	118	0.2
B401028	28	55	17	20	26	10	M6 x 18	15	M8	587	41952	119	0.3
B401030	30	55	17	20	26	10	M6 x 18	15	M8	629	41952	119	0.3
B401032	32	60	17	20	26	12	M6 x 18	15	M8	806	50342	131	0.3
B401035	35	60	17	20	26	12	M6 x 18	15	M8	881	50342	131	0.3
B401038	38	65	17	20	26	14	M6 x 18	15	M8	1116	58732	141	0.3
B401040	40	65	17	20	26	14	M6 x 18	15	M8	1175	58732	141	0.3
B401042	42	75	20	24	32	12	M8 x 22	35	M10	1892	90071	159	0.6
B401045	45	75	20	24	32	12	M8 x 22	35	M10	2027	90071	159	0.5
T401048	48	80	20	24	32	12	M8 x 22	35	M10	2162	90071	149	0.6
B401050	50	80	20	24	32	12	M8 x 22	35	M10	2252	90071	149	0.6
B401055	55	85	20	24	32	14	M8 x 22	35	M10	2889	105083	164	0.6
B401060	60	90	20	24	32	14	M8 x 22	35	M10	3152	105083	155	0.7
B401065	65	95	20	24	32	16	M8 x 22	35	M10	3903	120095	168	0.7
B401070	70	110	24	28	38	14	M10 x 25	69	M12	5880	167988	169	1.2
B401075	75	115	24	28	38	14	M10 x 25	69	M12	6300	167988	161	1.3
B401080	80	120	24	28	38	14	M10 x 25	69	M12	6720	167988	155	1.4
T401085	85	125	24	28	38	16	M10 x 25	69	M12	8158	191986	170	1.4
B401090	90	130	24	28	38	16	M10 x 25	69	M12	8639	191986	163	1.5
B401095	95	135	24	28	38	18	M10 x 25	69	M12	10259	215984	177	1.6
B401100	100	145	26	33	45	14	M12 x 30	123	M14	12800	255998	180	2
B401110	110	155	26	33	45	14	M12 x 30	123	M14	14081	255998	169	2
B401120	120	165	26	33	45	16	M12 x 30	123	M14	17553	292569	181	3
B401130	130	180	34	38	50	20	M12 x 35	123	M14	23771	365712	159	4
B401140	140	190	34	38	50	22	M12 x 35	123	M14	28161	402283	165	4
T401150	150	200	34	38	50	24	M12 x 35	123	M14	32917	438854	171	4
B401160	160	210	34	38	50	26	M12 x 35	123	M14	38033	475425	177	4
B401170	170	225	38	44	58	22	M14 x 40	187	M16	44752	526487	163	6
B401180	180	235	38	44	58	24	M14 x 40	187	M16	51694	574350	171	6
B401190	190	250	46	52	66	28	M14 x 45	187	M16	63654	670075	155	8
B401200	200	260	46	52	66	30	M14 x 45	187	M16	71794	717937	159	9
B401220	220	285	50	56	72	26	M16 x 50	290	M20	93540	850401	158	11
B401240	240	305	50	56	72	30	M16 x 50	290	M20	117750	981232	171	12
B401260	260	325	50	56	72	34	M16 x 50	290	M20	144565	1112063	182	13
T401280	280	355	60	66	84	32	M18 x 60	397	M22	178059	1271808	158	19
T401300	300	375	60	66	84	36	M18 x 60	397	M22	214617	1430784	169	21
T401320	320	405	72	78	98	36	M20 x 70	569	M24	295337	1845919	168	29
T401340	340	425	72	78	98	36	M20 x 70	569	M24	313810	1845919	160	31
T401360	360	455	84	90	112	36	M22 x 80	766	M27	410431	2280208	158	43
T401380	380	475	84	90	112	36	M22 x 80	766	M27	433250	2280208	152	45
T401400	400	495	84	90	112	36	M22 x 80	766	M27	456041	2280208	145	47
T401420	420	515	84	90	112	40	M22 x 80	766	M27	532035	2533564	155	49
T401440	440	545	96	102	126	40	M24 x 90	983	M30	651795	2962675	150	65
T401460	460	565	96	102	126	40	M24 x 90	983	M30	681406	2962675	145	67
T401480	480	585	96	102	126	42	M24 x 90	983	M30	746608	3110809	147	71
T401500	500	605	96	102	126	44	M24 x 90	983	M30	814734	3258942	149	72

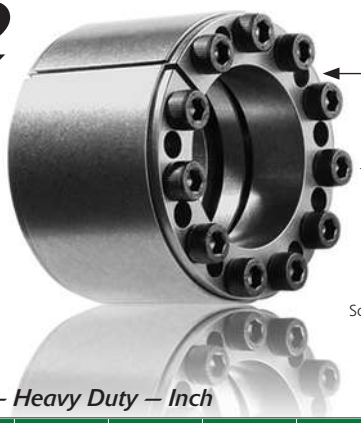
B400 — Pilot Bushings

B-LOC pilot bushings: for series B400 Keyless Bushings to provide pre-centering in applications with either straight through hub bores or narrow hubs. Pilot bushings are supplied in sets consisting of three (3) bushings and three (3) longer screws (replacing plated locking screws). For more information refer to www.fennerdrives.com or contact Applications Engineering at AE@fennerdrives.com.

Recommended pre-centering length in installations without pilot bushings. Provide a minimum .001" clearance (hub concentricity depends on fit clearance).



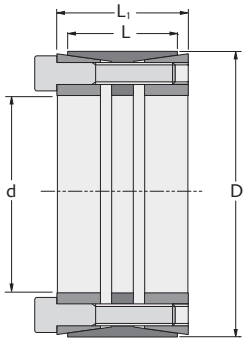
B-LOC®
B112
Inch



Locking screws transfer to integrated push-off holes for disassembly.

Metric socket head locking screws ISO 4762 grade 12.9 (See M_a for install torque).

Screw head height = screw diameter (mm)



TOLERANCE (T_L)

Bore diameter machined to D -0/+T_L

T_L = .002" for bores up to 4.724"
.003" for bores up to 12.008"
.004" for bores up to 25.000"
.005" for bores over 25.000"

d = shaft diameter machined to d +0/-T_L.

B112 — Heavy Duty — Inch

Part Number	d (inch)	D (inch)	L (inch)	L_1 (inch)	Locking Screws Qty	Locking Screws Size	M_a Install Torque (ft lb)	M_t Maximum Transmitted Torque (ft lb)	Th Maximum Transmitted Thrust (lbs)	Ph Hub Pressure (psi)	Shipping Weight (lb)
B122100	1	2.165	1.260	1.575	6	M6 x 35	12	600	14390	18656	1.0
T122102	1 1/8	2.165	1.260	1.575	6	M6 x 35	12	675	14390	18656	1.0
B122103	1 3/16	2.165	1.260	1.575	6	M6 x 35	12	712	14390	18656	0.9
B122104	1 1/4	2.362	1.732	2.126	7	M6 x 45	12	874	16788	14083	1.5
B122106	1 3/8	2.362	1.732	2.126	7	M6 x 45	12	962	16788	14083	1.4
B122107	1 7/16	2.362	1.732	2.126	7	M6 x 45	12	1006	16788	14083	1.3
B122108	1 1/2	2.953	1.732	2.126	7	M8 x 50	30	2011	32182	21598	2.4
B122110	1 5/8	2.953	1.732	2.126	7	M8 x 50	30	2179	32182	21598	2.3
T122111	1 11/16	2.953	1.732	2.126	7	M8 x 50	30	2263	32182	21598	2.3
B122112	1 3/4	2.953	1.732	2.126	7	M8 x 50	30	2347	32182	21598	2.1
B122114	1 7/8	3.150	2.205	2.598	8	M8 x 55	30	2873	36779	17881	2.9
B122115	1 15/16	3.150	2.205	2.598	8	M8 x 55	30	2969	36779	17881	2.8
B122200	2	3.150	2.205	2.598	8	M8 x 55	30	3065	36779	17881	2.6
B122202	2 1/8	3.346	2.205	2.598	9	M8 x 55	30	3664	41377	18933	2.9
B122203	2 3/16	3.346	2.205	2.598	9	M8 x 55	30	3771	41377	18933	2.8
B122204	2 1/4	3.543	2.205	2.598	10	M8 x 55	30	4310	45974	19868	3.3
B122206	2 3/8	3.543	2.205	2.598	10	M8 x 55	30	4550	45974	19868	3.1
B122207	2 7/16	3.740	2.205	2.598	10	M8 x 55	30	4669	45974	18822	3.6
B122208	2 1/2	3.740	2.205	2.598	10	M8 x 55	30	4789	45974	18822	3.4
B122209	2 9/16	3.740	2.205	2.598	10	M8 x 55	30	4909	45974	18822	3.3
B122210	2 5/8	4.331	2.756	3.150	10	M10 x 60	60	8155	74561	20714	7
T122211	2 11/16	4.331	2.756	3.150	10	M10 x 60	60	8349	74561	20714	7
B122212	2 3/4	4.331	2.756	3.150	10	M10 x 60	60	8543	74561	20714	6
B122214	2 7/8	4.331	2.756	3.150	10	M10 x 60	60	8932	74561	20714	6
B122215	2 15/16	4.724	2.756	3.150	11	M10 x 60	60	10039	82017	20887	8
B122300	3	4.724	2.756	3.150	11	M10 x 60	60	10252	82017	20887	7
T122302	3 1/8	4.724	2.756	3.150	11	M10 x 60	60	10679	82017	20887	7
B122304	3 1/4	4.724	2.756	3.150	11	M10 x 60	60	11107	82017	20887	7
B122306	3 3/8	5.118	2.756	3.150	12	M10 x 60	60	12582	89474	21033	8
B122307	3 7/16	5.118	2.756	3.150	12	M10 x 60	60	12815	89474	21033	8
B122308	3 1/2	5.118	2.756	3.150	12	M10 x 60	60	13048	89474	21033	8
T122310	3 5/8	5.118	2.756	3.150	12	M10 x 60	60	13514	89474	21033	7
B122312	3 3/4	5.709	3.543	4.016	11	M12 x 80	105	19172	122699	20688	13
B122314	3 7/8	5.709	3.543	4.016	11	M12 x 80	105	19811	122699	20688	12
T122315	3 15/16	5.709	3.543	4.016	11	M12 x 80	105	20130	122699	20688	13
B122400	4	5.709	3.543	4.016	11	M12 x 80	105	20450	122699	20688	12
T122404	4 1/4	6.102	3.543	4.016	12	M12 x 80	105	23703	133853	21112	14
T122406	4 3/8	6.102	3.543	4.016	12	M12 x 80	105	24400	133853	21112	13
B122407	4 7/16	6.496	3.543	4.016	14	M12 x 80	105	28874	156162	23138	16
B122408	4 1/2	6.496	3.543	4.016	14	M12 x 80	105	29280	156162	23138	16
T122412	4 3/4	6.496	3.543	4.016	14	M12 x 80	105	30907	156162	23138	14
B122415	4 15/16	7.087	4.094	4.567	12	M14 x 90	166	37477	182167	20618	21
B122500	5	7.087	4.094	4.567	12	M14 x 90	166	37952	182167	20618	21
B122504	5 1/4	7.480	4.094	4.567	14	M14 x 90	166	46491	212528	22789	24
B122507	5 7/16	7.480	4.094	4.567	14	M14 x 90	166	48151	212528	22789	22
T122508	5 1/2	7.480	4.094	4.567	14	M14 x 90	166	48704	212528	22789	21
T122512	5 3/4	7.874	4.094	4.567	15	M14 x 90	166	54555	227709	23196	24
B122515	5 15/16	7.874	4.094	4.567	15	M14 x 90	166	56334	227709	23196	22
B122600	6	8.268	4.094	4.567	16	M14 x 90	166	60722	242890	23564	26
T122607	6 7/16	8.858	5.276	5.866	14	M16 x 110	257	77782	289982	20051	40
T122608	6 1/2	8.858	5.276	5.866	14	M16 x 110	257	78537	289982	20051	39
B122615	6 15/16	9.252	5.276	5.866	15	M16 x 110	257	89810	310695	20569	40
B122700	7	9.252	5.276	5.866	15	M16 x 110	257	90619	310695	20569	38
T122704	7 1/4	9.843	5.276	5.866	16	M16 x 110	257	100113	331408	20624	47
T122707	7 7/16	9.843	5.276	5.866	16	M16 x 110	257	102702	331408	20624	44
T122708	7 1/2	9.843	5.276	5.866	16	M16 x 110	257	103565	331408	20624	43
T122712	7 3/4	10.236	5.276	5.866	16	M16 x 110	257	107017	331408	19830	48
T122715	7 15/16	10.236	5.276	5.866	16	M16 x 110	257	109606	331408	19830	45
T122800	8	10.236	5.276	5.866	16	M16 x 110	257	110469	331408	19830	44

B-LOC® B112 Metric

TOLERANCE (T_L)

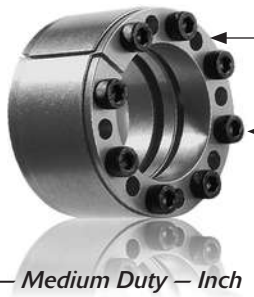
Bore diameter machined to D -0/+T_L
T_L = .05mm for bores up to 120mm
.08mm for bores up to 305mm
.10mm for bores up to 635mm
.13mm for bores over 635mm

d = shaft diameter machined to d +0/-T_L.

B112 — Heavy Duty — Metric

Part Number	d (mm)	D (mm)	L (mm)	L_1 (mm)	Locking Screws		M_a	M_t	Th	Ph	Shipping Weight (kg)
							Install Torque (Nm)	Maximum Transmitted		Hub Pressure (N/mm^2)	
					Qty	Size		Torque (Nm)	Thrust (N)		
T121024	24	55	32	40	6	M6 x 35	16	755	62949	126	0.4
B121025	25	55	32	40	6	M6 x 35	16	787	62949	126	0.4
T121028	28	55	32	40	6	M6 x 35	16	881	62949	126	0.4
B121030	30	55	32	40	6	M6 x 35	16	944	62949	126	0.4
T121032	32	60	44	54	7	M6 x 45	16	1175	73440	95	0.6
B121035	35	60	44	54	7	M6 x 45	16	1285	73440	95	0.6
T121038	38	75	44	54	7	M8 x 50	41	2742	144304	150	1.0
B121040	40	75	44	54	7	M8 x 50	41	2886	144304	150	1.0
T121042	42	75	44	54	7	M8 x 50	41	3030	144304	150	1.0
B121045	45	75	44	54	7	M8 x 50	41	3247	144304	150	0.9
T121048	48	80	56	66	8	M8 x 55	41	3958	164918	124	1.3
B121050	50	80	56	66	8	M8 x 55	41	4123	164918	124	1.2
B121055	55	85	56	66	9	M8 x 55	41	5102	185533	132	1.3
B121060	60	90	56	66	10	M8 x 55	41	6184	206148	138	1.4
B121065	65	95	56	66	10	M8 x 55	41	6700	206148	131	1.5
B121070	70	110	70	80	10	M10 x 60	81	11559	330251	142	3
T121075	75	115	70	80	10	M10 x 60	81	12384	330251	136	3
B121080	80	120	70	80	11	M10 x 60	81	14531	363276	143	3
T121085	85	125	70	80	11	M10 x 60	81	15439	363276	138	3
B121090	90	130	70	80	12	M10 x 60	81	17834	396302	144	4
T121095	95	135	70	80	12	M10 x 60	81	18824	396302	139	4
B121100	100	145	90	102	11	M12 x 80	142	27222	544433	142	6
B121110	110	155	90	102	12	M12 x 80	142	32666	593927	145	6
B121120	120	165	90	102	14	M12 x 80	142	41575	692914	159	7
B121130	130	180	104	116	12	M14 x 90	225	52658	810116	142	9
B121140	140	190	104	116	14	M14 x 90	225	66159	945135	157	10
B121150	150	200	104	116	15	M14 x 90	225	75948	1012645	160	10
B121160	160	210	104	116	16	M14 x 90	225	86412	1080154	162	11
T121170	170	225	134	149	14	M16 x 110	348	109506	1288307	138	16
T121180	180	235	134	149	15	M16 x 110	348	124230	1380329	142	17
T121190	190	250	134	149	16	M16 x 110	348	139873	1472351	142	20
B121200	200	260	134	149	16	M16 x 110	348	147235	1472351	137	21
B121220	220	285	134	150	18	M16 x 110	348	182203	1656395	140	25
B121240	240	305	134	150	20	M16 x 110	348	220853	1840439	146	27
T121260	260	325	134	150	21	M16 x 110	348	251220	1932460	143	29
T121280	280	355	165	177	18	M20 x 130	678	360984	2578456	146	43
T121300	300	375	165	177	20	M20 x 130	678	429743	2864951	154	47
T121320	320	405	165	177	21	M20 x 130	678	481312	3008198	149	56
T121340	340	425	165	177	22	M20 x 130	678	535746	3151446	149	60
T121360	360	455	190	203	21	M22 x 150	915	670526	3725144	143	80
T121380	380	475	190	203	22	M22 x 150	915	741481	3902532	143	85
T121400	400	495	190	203	24	M22 x 150	915	851462	4257308	150	88
T121420	420	515	190	203	24	M22 x 150	915	894035	4257308	144	92
T121440	440	535	190	203	24	M22 x 150	915	936608	4257308	139	96
T121460	460	555	190	203	24	M22 x 150	915	979181	4257308	134	101
T121480	480	575	190	203	28	M22 x 150	915	1192046	4966859	151	103
T121500	500	595	190	203	28	M22 x 150	915	1241715	4966859	146	108
T121520	520	615	190	203	30	M22 x 150	915	1383625	5321634	151	111
T121540	540	635	190	203	30	M22 x 150	915	1436841	5321634	146	114
T121560	560	655	190	203	32	M22 x 150	915	1589395	5676410	151	119
T121580	580	675	190	203	32	M22 x 150	915	1646159	5676410	147	123
T121600	600	695	190	203	33	M22 x 150	915	1756139	5853798	147	128

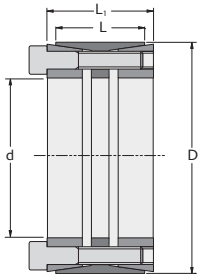
B-LOC® B115 Inch Metric



Locking screws transfer to integrated push-off holes for disassembly.

Metric socket head locking screws ISO 4762 grade 12.9 (See M_a for install torque).

Screw head height = screw diameter (mm)



TOLERANCE (T_L)

Bore diameter machined to D -0/+T_L

T_L = .002" for bores up to 4.724"
.003" for bores up to 12.008"
.004" for bores up to 25.000"
.005" for bores over 25.000"

T_L = .05mm for bores up to 120mm
.08mm for bores up to 305mm
.10mm for bores up to 635mm
.13mm for bores over 635mm

d = shaft diameter machined to d +0/-T_L

B115 — Medium Duty — Inch

Part Number	d (inch)	D (inch)	L (inch)	L_1 (inch)	Locking Screws Qty	Locking Screws Size	M_a Install Torque (ft lb)	M_t Maximum Transmitted Torque (ft lb)	Th Maximum Transmitted Thrust (lbs)	Ph Hub Pressure (psi)	Shipping Weight (lb)
B152212	2 3/4	4.331	1.969	2.441	8	M10 x 50	60	5261	45913	17858	5
B152215	2 15/16	4.528	1.969	2.441	8	M10 x 50	60	5620	45913	17079	5
T152307	3 7/16	5.118	1.969	2.441	11	M10 x 50	60	9042	63131	20777	7
B152308	3 1/2	5.118	1.969	2.441	11	M10 x 50	60	9207	63131	20777	6
B152315	3 15/16	5.709	2.362	2.835	10	M12 x 60	105	14086	85858	21111	9
B152407	4 7/16	6.496	2.362	2.835	11	M12 x 60	105	17462	94444	20408	12
T152408	4 1/2	6.496	2.362	2.835	11	M12 x 60	105	17708	94444	20408	11
T152415	4 15/16	7.087	2.559	3.189	14	M12 x 70	105	24729	120202	21162	15
T152500	5	7.087	2.559	3.189	14	M12 x 70	105	25042	120202	21162	15
B152507	5 7/16	7.480	2.559	3.228	15	M12 x 70	105	29178	128787	21482	15
B152515	5 15/16	7.874	2.559	3.228	15	M12 x 70	105	31861	128787	20407	16
T152600	6	8.268	2.559	3.228	16	M12 x 70	105	34343	137373	20731	19
T152607	6 7/16	8.858	3.071	3.661	15	M14 x 80	166	47013	175273	20830	25
B152615	6 15/16	9.252	3.071	3.661	15	M14 x 80	166	50665	175273	19944	25
B152715	7 15/16	10.236	3.465	4.134	18	M14 x 80	166	69561	210328	18216	31
T152800	8	10.236	3.465	4.134	18	M14 x 80	166	70109	210328	18216	32

B115 — Medium Duty — Metric

Part Number	d (mm)	D (mm)	L (mm)	L_1 (mm)	Locking Screws Qty	Locking Screws Size	M_a Install Torque (Nm)	M_t Maximum Transmitted Torque (Nm)	Th Maximum Transmitted Thrust (N)	Ph Hub Pressure (N/mm^2)	Shipping Weight (kg)
B151070	70	110	50	62	8	M10 x 50	81	7118	203362	123	2
T151075	75	115	50	62	8	M10 x 50	81	7626	203362	117	2
T151080	80	120	50	62	10	M10 x 50	81	10168	254202	140	3
T151090	90	130	50	62	11	M10 x 50	81	12583	279622	143	3
T151095	95	135	50	62	11	M10 x 50	81	13282	279622	137	4
B151100	100	145	60	72	10	M12 x 60	142	19048	380966	145	4
T151110	110	155	60	72	10	M12 x 60	142	20953	380966	136	4
B151120	120	165	60	72	11	M12 x 60	142	25144	419063	140	5
T151130	130	180	65	81	14	M12 x 70	142	34668	533353	146	6
B151140	140	190	65	82	15	M12 x 70	142	40001	571449	148	7
B151150	150	200	65	82	15	M12 x 70	142	42859	571449	140	7
B151160	160	210	65	82	16	M12 x 70	142	48764	609546	143	8
B151170	170	225	78	93	15	M14 x 80	225	66254	779456	144	11
B151180	180	235	78	93	15	M14 x 80	225	70151	779456	137	11
B151190	190	250	88	105	16	M14 x 80	225	78985	831420	116	14
B151200	200	260	88	105	18	M14 x 80	225	93535	935348	126	15
B151220	220	285	96	111	15	M16 x 90	348	116872	1062472	121	19
B151240	240	305	96	111	20	M16 x 90	348	169995	1416629	150	20
T151260	260	325	96	111	21	M16 x 90	348	193370	1487460	148	22
T151280	280	355	96	111	15	M20 x 90	678	231548	1653915	163	27
T151300	300	375	96	111	15	M20 x 90	678	248087	1653915	154	30
T151320	320	405	124	136	20	M20 x 110	678	352835	2205220	150	44
T151340	340	425	124	136	20	M20 x 110	678	374887	2205220	143	47
T151360	360	455	140	160	20	M22 x 130	915	491542	2730791	133	66
T151380	380	475	140	160	20	M22 x 130	915	518850	2730791	127	69
T151400	400	495	140	160	22	M22 x 130	915	600774	3003871	134	72
T151420	420	515	140	160	24	M22 x 130	915	688159	3276950	141	75
T151440	440	535	140	160	24	M22 x 130	915	720929	3276950	135	78
T151460	460	555	140	160	24	M22 x 130	915	753698	3276950	131	82
T151480	480	575	140	160	25	M22 x 130	915	819237	3413489	131	84
T151500	500	595	140	160	25	M22 x 130	915	853372	3413489	127	88
T151520	520	615	140	160	28	M22 x 130	915	994008	3823108	137	91
T151540	540	635	140	160	28	M22 x 130	915	1032239	3823108	133	94
T151560	560	655	140	160	30	M22 x 130	915	1146932	4096187	138	97
T151580	580	675	140	160	30	M22 x 130	915	1187894	4096187	134	100
T151600	600	695	140	160	30	M22 x 130	915	1228856	4096187	130	103

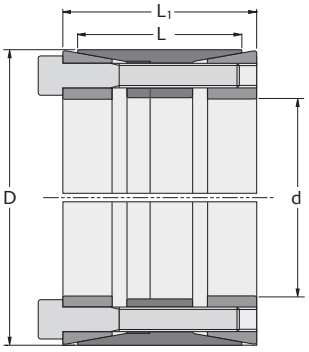
B-LOC®
B113
Metric



Locking screws transfer to integrated push-off holes for disassembly.

Metric socket head locking screws ISO 4762 grade 12.9 (See M_a for install torque).

Screw head height = screw diameter (mm)



TOLERANCE (T_L)

Bore diameter machined to D -0/+T_L

T_L = .064mm for bores up to 285mm
.08mm for bores up to 355mm
.09mm for bores up to 615mm
.10mm for bores up to 675mm
.13mm for bores over 675mm

d = shaft diameter machined to d +0/-T_L

B113 — Extra Heavy Duty — Metric

Part Number	d (mm)	D (mm)	L (mm)	L_1 (mm)	Locking Screws		M_a	Mt	Th	Ph	Shipping Weight (kg)
							Install Torque (Nm)	Maximum Transmitted		Hub Pressure (N/mm^2)	
					Qty	Size		Torque (Nm)	Thrust (N)		
T131180	180	285	205	229	14	M22 x 180	915	223566	2483935	139	62
T131200	200	305	205	229	16	M22 x 180	915	283878	2838783	149	67
T131220	220	325	205	229	16	M22 x 180	915	312251	2838783	141	73
T131240	240	355	208	238	16	M24 x 180	1180	400322	3335957	147	88
T131260	260	375	208	238	18	M24 x 180	1180	487873	3752951	156	93
T131280	280	405	208	238	20	M24 x 180	1180	583812	4169946	163	110
T131300	300	425	208	238	20	M24 x 180	1180	625491	4169946	153	117
T131320	320	455	250	280	18	M27 x 220	1763	803261	5020549	149	161
T131340	340	475	250	280	20	M27 x 220	1763	948338	5578387	156	170
T131360	360	495	250	280	22	M27 x 220	1763	1104503	6136226	164	177
T131380	380	515	250	280	22	M27 x 220	1763	1165912	6136226	160	186
T131400	400	535	250	280	22	M27 x 220	1763	1227243	6136226	152	192
T131420	420	555	250	280	24	M27 x 220	1763	1405717	6694065	160	202
T131440	440	575	250	280	24	M27 x 220	1763	1472708	6694065	154	210
T131460	460	595	250	280	24	M27 x 220	1763	1539615	6694065	149	220
T131480	480	615	250	280	28	M27 x 220	1763	1874374	7809742	168	227
T131500	500	635	250	280	28	M27 x 220	1763	1952432	7809742	163	233
T131520	520	655	250	280	28	M27 x 220	1763	2030489	7809742	158	244
T131540	540	675	250	280	30	M27 x 220	1763	2259264	8367581	164	251
T131560	560	695	250	280	30	M27 x 220	1763	2342897	8367581	160	260

B-LOC®
B117
Metric



Metric socket head locking screws
ISO 4762 grade 12.9
(See M_a for install torque).

Screw head height = screw diameter (mm)

TOLERANCE (T_L)

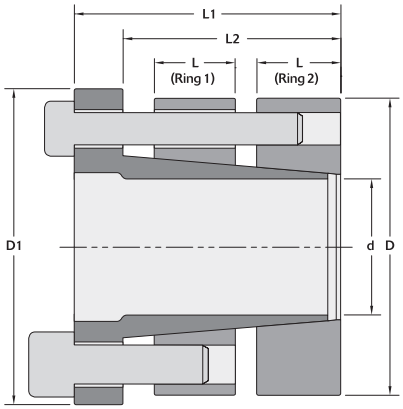
Bore diameter machined to D -0/+T_L
T_L = .05mm for bores up to 120mm
.08mm for bores up to 305mm
.10mm for bores over 305mm

d = Shaft diameter machined to d +0/-T_L

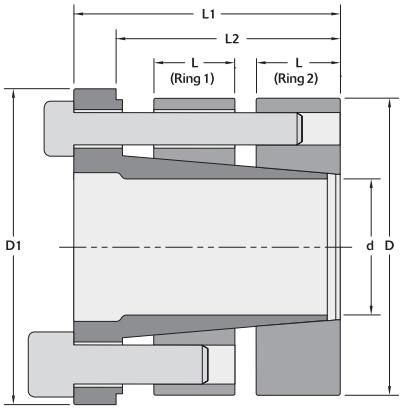
B117 — High-Bending — Metric

Part Number	d (mm)	D (mm)	D_1 (mm)	L (mm)	L_1 (mm)	L_2 (mm)	Locking Screws						M_{t1}	M_{t2}	M_{ttot}	Th_1	Th_2	Th_{tot}	P_{h1}	P_{h2}	Shipping Weight (kg)
							SIZE 1			SIZE 2			Maximum Transmitted			Maximum Transmitted			Hub Pressure (N/mm^2)	Hub Pressure (N/mm^2)	
							Qty.	Size	M_a Install Torque (Nm)	Qty.	Size	M_a Install Torque (Nm)	Torque (Nm)	Torque (Nm)	Torque (Nm)	Thrust (N)	Thrust (N)	Thrust (N)			
B171180	180	250	256	40	122	92	8	M20 x 70	678	8	M16 x 110	348	51569	33128	84697	572990	368088	941078	152	98	21
B171190	190	260	266	40	122	92	10	M20 x 70	678	10	M16 x 110	348	68043	43710	111753	716238	460110	1176347	176	113	22
B171200	200	270	276	40	122	92	10	M20 x 70	678	10	M16 x 110	348	71624	46011	117635	716238	460110	1176347	176	113	23
B171220	220	290	296	40	122	92	10	M20 x 70	678	10	M16 x 110	348	78786	50612	129398	716238	460110	1176347	164	105	25
B171240	240	310	316	40	122	92	12	M20 x 70	678	12	M16 x 110	348	103138	66256	169394	859485	552132	1411617	184	118	28
B171260	260	330	336	40	122	92	12	M20 x 70	678	12	M16 x 110	348	111733	71777	183510	859485	552132	1411617	173	111	29
B171280	280	365	371	45	144	108	10	M24 x 80	1180	10	M20 x 130	678	145918	100273	246192	1042274	716238	1758512	168	116	45
B171300	300	385	391	45	144	108	10	M24 x 80	1180	10	M20 x 130	678	156341	107436	263777	1042274	716238	1758512	160	110	48
B171340	340	425	431	45	144	108	14	M24 x 80	1180	14	M20 x 130	678	248061	170465	418526	1459184	1002733	2461917	202	139	54
B171380	380	465	471	45	144	108	16	M24 x 80	1180	16	M20 x 130	678	316851	217736	534588	1667639	1145980	2813619	211	145	58
B171400	400	485	491	45	144	108	16	M24 x 80	1180	16	M20 x 130	678	333528	229196	562724	1667639	1145980	2813619	203	139	62
B171420	420	505	511	45	144	108	16	M24 x 80	1180	16	M20 x 130	678	350204	240656	590860	1667639	1145980	2813619	195	134	65
B171440	440	525	531	59	178	147	16	M24 x 100	1180	16	M20 x 150	678	366881	252116	618996	1667639	1145980	2813619	143	98	82
B171460	460	545	551	59	178	147	16	M24 x 100	1180	16	M20 x 150	678	383557	263575	647132	1667639	1145980	2813619	138	95	85
B171480	480	565	571	59	178	147	16	M24 x 100	1180	16	M20 x 150	678	400233	275035	675269	1667639	1145980	2813619	133	91	90
B171500	500	585	591	59	178	147	18	M24 x 100	1180	18	M20 x 150	678	469023	322307	791330	1876094	1289228	3165322	144	99	93
B171520	520	605	611	59	178	147	18	M24 x 100	1180	18	M20 x 150	678	487784	335199	822984	1876094	1289228	3165322	139	96	97
B171540	540	625	631	59	178	147	18	M24 x 100	1180	18	M20 x 150	678	506545	348092	854637	1876094	1289228	3165322	135	93	100
B171560	560	645	651	59	178	147	18	M24 x 100	1180	18	M20 x 150	678	525306	360984	886290	1876094	1289228	3165322	131	90	103
B171580	580	665	671	59	178	147	20	M24 x 100	1180	20	M20 x 150	678	604519	415418	1019937	2084549	1432475	3517024	141	97	107
B171600	600	685	691	59	178	147	20	M24 x 100	1180	20	M20 x 150	678	625365	429743	1055107	2084549	1432475	3517024	137	94	110

Additional sizes available upon request.



B117 Units, d ≤ 420mm



B117 Units, d ≥ 440mm

B-LOC SPEED



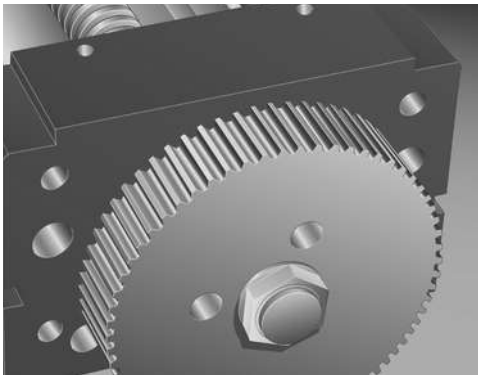
B-LOC Speed is a new series of keyless locking devices engineered to reduce installation time while maintaining performance.

- Reduce installation time by up to 60%
- Same physical performance as a standard keyless locking device
- Available in three series: S106, S112, S115
- Shaft sizes 4 15/16" – 8", 130mm – 300mm
- Contact Fenner Drives for part numbers and technical information.

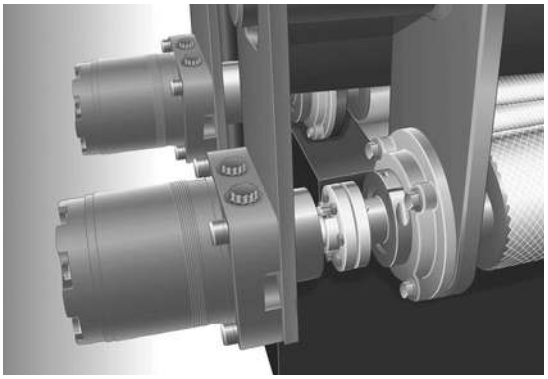
Trantorque® B-LOC®

Fenner Drives Keyless Locking Devices

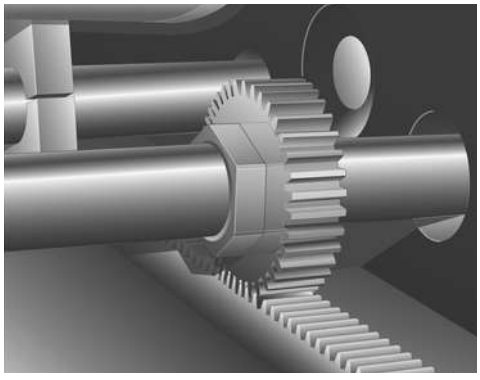
From precision medical devices to powerful turbines, Fenner Drives Keyless Locking Devices are perfectly suited for use in any industry where there is a need to mount a component to a shaft. Every day, our customers find unique uses for the engineering elegance of our keyless locking devices. The application examples shown are just a small sampling of the many thousands of possible applications for Fenner Drives Keyless Locking Devices. So ask yourself, "What do I need to mount today?"



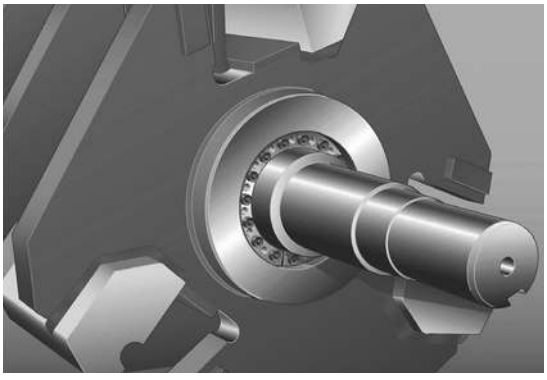
Trantorque Mini provides a solution for mounting components in tight spaces on very small shafts, such as for this timing pulley on a linear slide.



B-LOC Shrink Discs and WK Series Rigid Couplings facilitate torque-arm mounting of hydraulic drives directly onto the driven shaft, eliminating more expensive and less reliable flexible coupling arrangements.



Trantorque OE ensures zero backlash on a rack and pinion drive.



Heavy Duty B112 mounts rotor on an aggregate impact crusher.

SURFACE FINISH

Recommended surface finish for shafts and hub bores to be used with Fenner Drives Keyless Bushings is between 32 and 125 micro-inch (0.8 and 3.2 micro-meter) RMS. A smoother finish — such as that found on components supplied TG&P (turned, ground and polished) — is NOT recommended and can result in a failure of the connection. Note that surface finishes below 32 micro-inch (0.8 micro-meter) RMS can be roughened using longitudinal abrasion with a bastard file, emery paper or similar to achieve a surface finish within the recommended range.

CONCENTRICITY

Fenner Drives Keyless Bushings are precision machined to maximize concentricity and minimize runout. The final installed concentricity of mounted components depends on several variables, including the components themselves and the installation technique employed. Special attention to proper installation will be required for B-LOC® B400 series units. Overall, however, concentricity is typically excellent for the majority of Fenner Drives Keyless Bushings.

POLYMERIC DRIVE COMPONENTS

Fenner Drives Keyless Locking Devices are only recommended for use with drive components constructed of polymers if a metal sleeve of sufficient size and strength is incorporated into the bore of the mounted component. For design and manufacturing support of a suitable sleeve consult with a Fenner Drives Applications Engineer.

TEMPERATURE INFLUENCE

Similar to conventional shrink or press fits, connections using Fenner Drives Keyless Bushings are generally not affected by temperature changes as long as the shaft, hub and bushing are made of the same material and temperatures are applied uniformly to each. For situations where one or more of the components are made of a material with a different coefficient of thermal expansion or where thermal gradients/cycles are present, fit pressures can be impacted. Please consult a Fenner Drives Applications Engineer.

MOUNTING BEARINGS WITH FENNER DRIVES KEYLESS BUSHINGS

Mounting bearings with a Fenner Drives Keyless Bushing is not recommended. The expansion forces generated will distort the bearing's inner race, causing premature failure.

INSTALLING MULTIPLE FENNER DRIVES KEYLESS BUSHINGS IN SERIES

Additional torque capacity can be achieved by arranging two or more B-LOC Keyless Bushings in series. In these situations, where access to locking screws is available from one side only, the total torque capacity of the connection is not a linear function of the number of units applied. For applications involving B-LOC Keyless Bushings in series, please consult with a Fenner Drives Applications Engineer.

ANAEROBIC ADHESIVES (THREADLOCKER)

Do not use anaerobic adhesives such as Loctite®, Permatex® or similar compounds with Fenner Drives Keyless Bushings. Doing so results in unknown contact pressures and capacities. Further, disassembly may be compromised when such compounds are applied to the keyless bushing, the shaft and/or the hub bore. Proper installation assures sufficient pre-load so that threads are self-locking, even in cases where the keyless bushing is subjected to extreme vibratory conditions.

HOLLOW SHAFTS

Hollow shafts with bores exceeding 35% of outside diameter usually require a reduction of contact pressures in order to avoid permanent shaft deformation. Special considerations arise when installing Fenner Drives Keyless Bushings onto hollow shafts. Please consult with a Fenner Drives Applications Engineer for a trouble free hollow shaft connection.

LUBRICANTS

Trantorque® and B-LOC Keyless Locking Devices are supplied with an oil specific to the product line. The listed performance data requires the use of these lubricants to provide the necessary coefficient of friction to the sliding surfaces. Some products have strategically applied grease or oil (in some cases food grade) to achieve performance.

MATERIALS

Trantorque and B-LOC Keyless Locking Devices are made from carbon and heat treated alloy steels. B-LOC Keyless Bushings are manufactured from heat treated carbon and alloy steels. For applications in corrosive environments, corrosion resistance can be improved through sealing with grease or silicone, the use of protective cover plates, application of industry standard plating materials (e.g., nickel, thin dense chrome, etc.) or by specifying the product in stainless steel or other corrosion resistant materials. Please consult with a Fenner Drives Applications Engineer for more details.

TORQUE

T = peak drive torque = nominal torque multiplied by a variable safety factor to account for stall or start-up conditions, mass accelerations, impact loads, etc. Nominal drive torque can be calculated as follows:

$$M_{t_{nom}}\ (\text{ft lb}) = \frac{5252 \times HP}{rpm}$$

$$M_{t_{nom}}\ (\text{Nm}) = \frac{9550 \times kW}{rpm}$$

Consult with a Fenner Drives Applications Engineer in cases where "T" is uncertain.

M_t = The rated torque capacity of one Fenner Drives Keyless Bushing installed according to our instructions. Published torque capacities are calculated without using a safety factor and should be considered as the point where a connection could slip if a higher torque is applied. Therefore, always select a unit where $M_t \geq T$.

MODIFIED INSTALLATION TORQUE

The installation torque shown in the data tables is the maximum installation torque recommended for the product. Torque capacity and contact pressures are a linear function of installation torque (M_a) and can be adjusted if necessary by changing M_a within the following limits:

Series	M_a
Trantorque	up to 50% lower
B-LOC B103/B106/B109	up to 20% lower
B-LOC B400	up to 20% higher or up to 20% lower
B-LOC B800	up to 20% lower
B-LOC B112/B113	up to 40% lower
B-LOC B115	up to 30% lower
B-LOC B117	up to 20% lower

THRUST

T_h = transmissible thrust, determined by using the following equation:

$$T_h = \frac{2 \times M_t}{d}$$

where: d = shaft diameter
M_t = rated torque capacity

TORQUE AND THRUST COMBINED

Simultaneous transmission of torque and thrust requires calculating a resultant torque:

$$M_{t_{res}} = \sqrt{T^2 + \left(\frac{F \times d}{2}\right)^2}$$

where: T = peak drive torque
F = peak thrust load
d = shaft diameter

Select a unit where $M_t \geq M_{t_{res}}$

BENDING MOMENTS

Bending moments are a crucial sizing factor in applications where a radial load from chain pull, the weight of components, etc. acts significantly outside the keyless bushing centerline. Typical applications include rolls or conveyor pulleys where shaft deflection due to radial loads results in a bending moment between shaft and end disc. Generally, bending moments change from a positive to a negative value during each rotation and are designated as rotating or reversing bending moments.

Fenner Drives Keyless Bushings are well suited to transmit rotating/reversing bending moments. Compiled using relevant data gleaned from numerous successful heavy-duty applications in conveyor pulleys as well as pertinent investigations by independent institutions, the following bending moment capacities apply:

Series	Bending Moment Capacity (M_b)
Trantorque	0.28 × M_t
B-LOC B103/B106/B109	0.28 × M_t
B-LOC B400	0.22 × M_t
B-LOC B800	0.28 × M_t
B-LOC B115	0.32 × M_t
B-LOC B112/B113	0.35 × M_t
B-LOC B117	0.65 × M_t

where: M_t = rated torque capacity (from specification tables)

Consult with a Fenner Drives Applications Engineer on applications where the actual bending moment exceeds these recommended limits.

TORQUE AND BENDING COMBINED

Simultaneous transmission of torque and bending requires calculating a resultant torque:

$$M_{t_b} = \sqrt{T^2 + (2 \times M_b)^2}$$

where: T = peak drive torque
M_b = bending moment

Always select a unit where $M_t \geq M_{t_b}$ and M_b is within the limits appearing under **Bending Moment Capacity** above.

FENNER DRIVES KEYLESS BUSHINGS WITH SHAFT ADAPTOR SLEEVES

When an existing shaft diameter does not fit the bore of a standard Fenner Drives Keyless Bushing, we recommend using an adapter sleeve that can be sized to allow for the use of a standard unit and the existing shaft. The maximum wall thickness of the adapter sleeve should be approximately 10% of the existing shaft diameter.



Note that in order to maximize the torque capacity of a sleeved keyless bushing connection, the shaft/sleeve bore interface must be free of any lubricant. This makes the sleeve outside diameter/keyless bushing bore the point of lowest torque capacity (provided the sleeve outside diameter is less than 1.25 times the shaft diameter) and allows for full use of the larger keyless bushing's higher torque capacity.

Notes:
1. Sleeve ID = d_s -0/+.001" (.025mm) where d_s = shaft diameter
2. Sleeve OD = d +0/-T_L for keyless bushing to be used
3. Install dry (cleaned with non-petroleum-based solvent) at shaft/sleeve bore interface for coefficient of friction $\mu = 0.15$
4. Torque capacity at sleeve OD = M_t for keyless bushing to be used
5. Torque capacity on shaft = $M_t \times \frac{d_s}{d} \times 1.25$
6. Sleeve to be manufactured with one lengthwise slit (after machining) and from material equal to or better than shaft material
7. Sleeve can be installed over existing keyway; position slit approximately opposite keyway

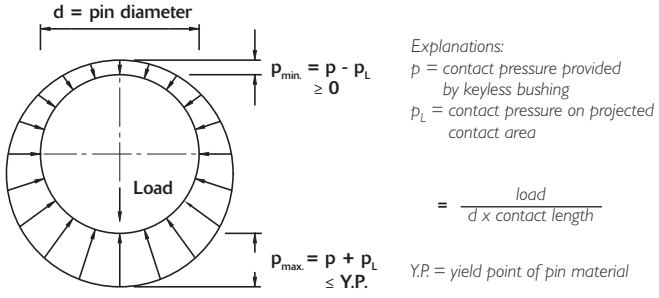
RADIAL LOADS

Radial loads are generated when force is applied perpendicular to the centerline of the shaft and are frequently associated with pin or axle connections (see illustration below). Fenner Drives Keyless Bushings are well suited to provide tight, backlash-free connections for this type of application, as explained below.

F_{rad} = radial load capacity = d × L × P_s

where: d = shaft diameter
D = hub bore
L = contact length
P_h = hub pressure
P_s = shaft contact pressure = $P_h \times \frac{D}{d}$

Typical pressure distribution in backlash-free pin connections



Explanations:
p = contact pressure provided by keyless bushing
p_L = contact pressure on projected contact area

$$= \frac{load}{d \times contact\ length}$$

Y.P. = yield point of pin material

HUB SIZING

Fenner Drives Keyless Bushings transmit torque and other loads by means of mechanical interference generated by pressure exerted on both the shaft and mounted component hub. Therefore, consideration must be given to the amount of hub material (wall thickness) required to prevent permanent expansion (i.e., yielding). The following information is provided to assist you in determining the required hub diameter D_N for any keyless bushing application.

Following standard industry practice, the criterion $\sigma_{ti} < S_y$ is used to determine D_N as follows:

$$D_N = D \sqrt{\frac{S_y + (P_h \times C)}{S_y - (P_h \times C)}}$$

where: D = hub bore diameter (from product specifications)

P_h = contact pressure applied to hub bore (from product specifications)

S_y = yield strength of hub material and

C = Stress Reduction Factor which assumes the value of 1.0, 0.8 or 0.6 depending upon the relationship of your actual hub width H_w to the contact length L of the keyless bushing selected. Use the illustrations on the right to determine C for your application.

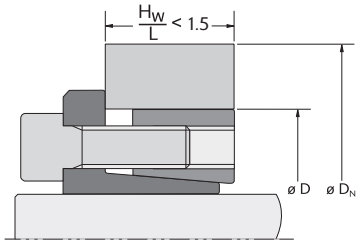
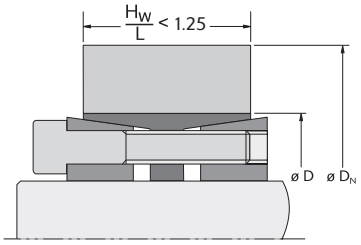
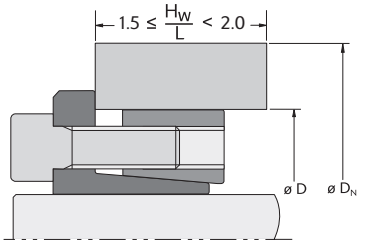
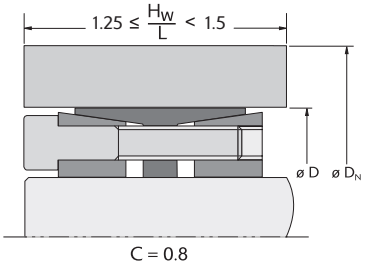
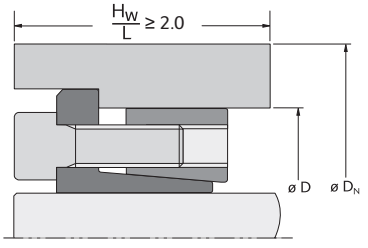
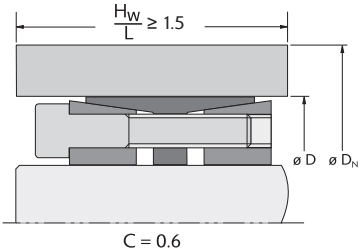
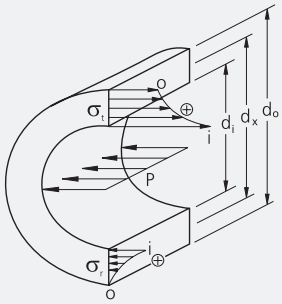
Trantorque®, B-LOC® B109, B103, B106, B117, B400 & B800	*B-LOC® B112, B113, & B115*
 C = 1.0	 C = 1.0
 C = 0.8	 C = 0.8
 C = 0.6	 C = 0.6

Table 1
Note: Keyless Locking Device outer ring axial position must be roughly centered in the hub.

THICK WALLED CYLINDER SUBJECTED TO INTERNAL PRESSURE



TANGENTIAL STRESSES "S_t"

$$\sigma_{tx} = P\frac{Q}{1-Q}\left[1+\frac{d_o^2}{d_x^2}\right]$$

$$\sigma_{ti} = P\frac{1+Q}{1-Q}$$

$$\sigma_{to} = 2P\frac{Q}{1-Q}$$

RADIAL STRESSES "S_r"

$$\sigma_{rx} = P\frac{Q}{1-Q}\left[1-\frac{d_o^2}{d_x^2}\right]$$

$$\sigma_{ri} = -P$$

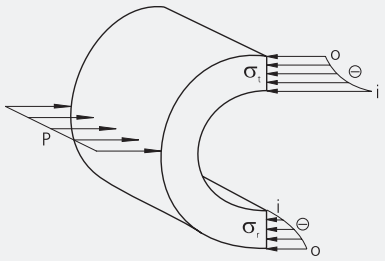
$$\sigma_{ro} = 0$$

EXPANSION/ CONTRACTION

$$\Delta d_i = \frac{P d_i}{E}\left[\frac{(1+Q)}{(1-Q)} + \nu\right]$$

$$\Delta d_o = 2P\frac{d_o Q}{E(1-Q)}$$

THICK WALLED CYLINDER SUBJECTED TO EXTERNAL PRESSURE



TANGENTIAL STRESSES "S_t"

$$\sigma_{tx} = -\frac{P}{1-Q}\left[1+\frac{d_i^2}{d_x^2}\right]$$

$$\sigma_{ti} = -\frac{2P}{1-Q}$$

$$\sigma_{to} = -P\frac{1+Q}{1-Q}$$

RADIAL STRESSES "S_r"

$$\sigma_{rx} = -\frac{P}{1-Q}\left[1-\frac{d_i^2}{d_x^2}\right]$$

$$\sigma_{ri} = 0$$

$$\sigma_{ro} = -P$$

EXPANSION/ CONTRACTION

$$\Delta d_i = 2P\frac{d_i}{E(1-Q)}$$

$$\Delta d_o = \frac{P d_o}{E}\left[\frac{(1+Q)}{(1-Q)} - \nu\right]$$

COMBINED HUB STRESSES $\sigma_v = \sqrt{\sigma_t^2 + \sigma_r^2 - (\sigma_t \sigma_r) + 3\tau^2}$

KEY

i = inside of cylinder
o = outside of cylinder
ν = Poisson's ratio for steel: 0.29
E = modulus of elasticity for steel: 3.0×10^7 psi (2.07×10^5 N/mm²)
P = pressure
τ = torsional hub stress

$$Q = \left(\frac{d_i}{d_o}\right)^2$$

Example for calculating minimum hub diameter:

Trantorque OE 1", assuming a 2" wide hub made of 55,000 psi yield strength material.

Locate part number 6410100 on page 50.
Record the values for outside diameter D, contact length L, and hub pressure P_h and return to this page.

D = 1½"
L = 1"
P_h = 18,746 psi

Determine the Stress Reduction Factor C, by first calculating the ratio of hub width to contact length (H_w/L). Next, locate the appropriate product line in Table 1 on previous page to determine C.

NOTE: Contact Fenner Drives Applications Engineering if $\frac{H_w}{L} < 1$

$\frac{H_w}{L} = 2 \longrightarrow C = 0.6$

The last item required is the yield strength of your mounted component, S_y. This value should be obtainable from the manufacturer of the mounted component or raw material supplier. For this example, the yield strength is 55,000 psi.

Substitute the values obtained above into the minimum hub diameter equation, D_N to obtain your result.

$$D_N = 1.5 \sqrt{\frac{55{,}000 + (18{,}746 \times 0.6)}{55{,}000 - (18{,}746 \times 0.6)}} = 1.846"$$

Worksheet for calculating minimum hub diameter:

	Above Example	*Your Example*
Series	Trantorque OE	
Part Number	6410400	
Size	1"	
Outside diameter, D	1.5	
Contact Length, L	1	
Hub Pressure, P_h	18,746	
Hub Size, H_w	2"	
Yield Strength, S_y	55,000 psi	

$\frac{H_w}{L} = \frac{2}{1} = 2 \longrightarrow C = 0.6$

C is obtained from Table 1 on previous page for Trantorque where $\frac{H_w}{L} \geq 2$

$\frac{H_w}{L} = \frac{\quad}{\quad} = \quad \longrightarrow C = \quad$

$$D_N = D \sqrt{\frac{S_y + (P_h \times C)}{S_y - (P_h \times C)}}$$

$$= 1.5 \sqrt{\frac{55{,}000 + (18{,}746 \times 0.6)}{55{,}000 - (18{,}746 \times 0.6)}} = 1.846"$$

$$D_N = D \sqrt{\frac{S_y + (P_h \times C)}{S_y - (P_h \times C)}}$$

$$= \quad \sqrt{\frac{\quad + (\quad \times \quad)}{\quad - (\quad \times \quad)}} = \quad$$

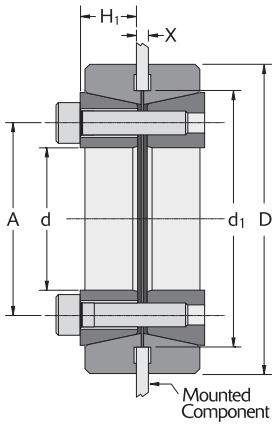
B-LOC® BCH 20 Inch



Metric socket head locking screws ISO 4762 grade 12.9 (See M_a for install torque).

Locking screws transfer to integrated push-off holes for disassembly.

Screw head height = screw diameter (mm)



TOLERANCE (T_L)

Recommended bore diameter d_1 +.001" / +.003"

T_L = .002" for shafts up to 3"

Shaft diameter machined to d +0/-T_L

Parallelism machined to X +/- .005"

BCH20 – Light Duty – Inch

Base Part Number	d (inch)	D (inch)	H_1 (inch)	A (inch)	d_1 (inch)	Locking Screws Qty	Locking Screws Size	Mounted Component Thickness (X) Range 1 X (inch)	Range 1 Screw Length 1 (mm)	Range 2 X (inch)	Range 2 Screw Length 2 (mm)	M_a Install Torque (ft lb)	M_t Maximum Transmitted Torque (ft lb)	Th Maximum Transmitted Thrust (lbs)	P_s Shaft Pressure (ksi)	Ship Weight (lb)
BCH202008	1/2	1.496	0.305	0.925	1.280	4	M4	0.098 – 0.161	16	0.161 – 0.319	20	3.5	48	2320	24.7	0.2
BCH202010	5/8	1.496	0.305	0.925	1.280	4	M4	0.098 – 0.161	16	0.161 – 0.319	20	3.5	60	2320	19.7	0.2
BCH202012	3/4	1.732	0.305	1.122	1.535	4	M4	0.098 – 0.161	16	0.161 – 0.319	20	3.5	72	2320	16.5	0.4
BCH202014	7/8	1.969	0.384	1.339	1.732	4	M4	0.098 – 0.240	20	0.240 – 0.437	25	3.5	84	2320	11.3	0.4
BCH202015	15/16	1.969	0.384	1.339	1.732	4	M4	0.098 – 0.240	20	0.240 – 0.437	25	3.5	90	2320	10.6	0.4
BCH202100	1	1.969	0.384	1.339	1.732	4	M4	0.098 – 0.240	20	0.240 – 0.437	25	3.5	97	2320	9.9	0.4
BCH202102	1 1/8	2.165	0.384	1.535	1.969	5	M4	0.098 – 0.240	20	0.240 – 0.437	25	3.5	136	2990	11.3	0.7
BCH202103	1 3/16	2.165	0.384	1.535	1.969	5	M4	0.098 – 0.240	20	0.240 – 0.437	25	3.5	136	2990	10.7	0.7
BCH202104	1 1/4	2.362	0.384	1.732	2.126	6	M4	0.098 – 0.240	20	0.240 – 0.437	25	3.5	180	3570	12.2	0.7
BCH202106	1 3/8	2.362	0.384	1.732	2.126	6	M4	0.098 – 0.240	20	0.240 – 0.437	25	3.5	180	3570	11.2	0.7
BCH202107	1 7/16	2.756	0.482	2.008	2.520	4	M5	0.098 – 0.276	25	0.276 – 0.472	30	7	237	4020	10.0	1.1
BCH202108	1 1/2	2.756	0.482	2.008	2.520	4	M5	0.098 – 0.276	25	0.276 – 0.472	30	7	237	4020	9.6	1.1
BCH202110	1 5/8	2.992	0.482	2.205	2.677	6	M5	0.098 – 0.276	25	0.276 – 0.472	30	7	385	6050	13.2	1.3
BCH202111	1 11/16	2.992	0.482	2.205	2.677	6	M5	0.098 – 0.276	25	0.276 – 0.472	30	7	385	6050	12.8	1.3
BCH202112	1 3/4	2.992	0.482	2.205	2.677	6	M5	0.098 – 0.276	25	0.276 – 0.472	30	7	385	6050	12.3	1.3
BCH202114	1 7/8	3.543	0.561	2.598	3.071	9	M5	0.098 – 0.394	30	0.394 – 0.512	40	7	683	9060	14.8	2.2
BCH202115	1 15/16	3.543	0.561	2.598	3.071	9	M5	0.098 – 0.394	30	0.394 – 0.512	40	7	683	9060	14.4	2.2
BCH202200	2	3.543	0.561	2.598	3.071	9	M5	0.098 – 0.394	30	0.394 – 0.512	40	7	683	9060	13.8	2.2
BCH202202	2 1/8	3.543	0.561	2.598	3.071	9	M5	0.098 – 0.394	30	0.394 – 0.512	40	7	683	9060	13.1	2
BCH202203	2 3/16	3.543	0.561	2.598	3.071	9	M5	0.098 – 0.394	30	0.394 – 0.512	40	7	683	9060	12.6	2
BCH202204	2 1/4	4.134	0.679	3.031	3.622	9	M6	0.098 - 0.429	35	0.429 - 0.591	45	12	1066	12190	13.6	3.5
BCH202206	2 3/8	4.134	0.679	3.031	3.622	9	M6	0.098 - 0.429	35	0.429 - 0.591	45	12	1066	12190	12.9	3.3
BCH202207	2 7/16	4.134	0.679	3.031	3.622	9	M6	0.098 - 0.429	35	0.429 - 0.591	45	12	1066	12190	12.6	3.3
BCH202208	2 1/2	4.134	0.679	3.031	3.622	9	M6	0.098 - 0.429	35	0.429 - 0.591	45	12	1066	12190	12.3	3.3
BCH202209	2 9/16	4.134	0.679	3.031	3.622	9	M6	0.098 - 0.429	35	0.429 - 0.591	45	12	1066	12190	12.0	3.1
BCH202210	2 5/8	4.724	0.679	3.465	4.016	12	M6	0.098 - 0.429	35	0.429 - 0.591	45	12	1617	16250	15.5	4.6
BCH202212	2 3/4	4.724	0.679	3.465	4.016	12	M6	0.098 - 0.429	35	0.429 - 0.591	45	12	1617	16250	14.9	4.4
BCH202214	2 7/8	4.724	0.679	3.465	4.016	12	M6	0.098 - 0.429	35	0.429 - 0.591	45	12	1617	16250	14.2	4.2
BCH202215	2 15/16	4.724	0.679	3.465	4.016	12	M6	0.098 - 0.429	35	0.429 - 0.591	45	12	1617	16250	13.9	4.2
BCH202300	3	4.724	0.679	3.465	4.016	12	M6	0.098 - 0.429	35	0.429 - 0.591	45	12	1617	16250	13.6	4

Part Number Ordering Guide

Base Part Number	+	Screw Length (based on X)	=	Complete Part Number
BCH202110		025		BCH202110-025
		3 digit whole number Always in mm 25 = 025		

NOTES

1. *B-LOC Compression Hubs exert a maximum pressure on the face of the mounted component of 250 N/mm² (36 ksi).*
2. *B-LOC pilot diameter d_1 machined to ISO tolerance h8.*

B-LOC® BCH 20 Metric

TOLERANCE (T_L)

Recommended bore diameter d_1 +.03mm / +.08mm

T_L = .05mm for shafts up to 75mm

Shaft diameter machined to d +0/-T_L

Parallelism machined to X +/- 0.13mm

BCH20 – Light Duty – Metric

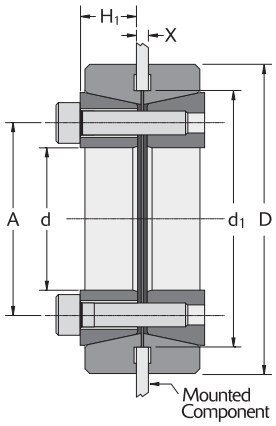
Base Part Number	d (mm)	D (mm)	H_1 (mm)	A (mm)	d_1 (mm)	Locking Screws		Mounted Component Thickness (X)				M_a	M_t	Th	P_s	Ship Weight (kg)
								Range 1		Range 2		Install Torque (Nm)	Maximum Transmitted			
						Qty	Size	X (mm)	Screw Length 1 (mm)	X (mm)	Screw Length 2 (mm)		Torque (Nm)	Thrust (kN)	Shaft Pressure (N/mm^2)	
BCH201012	12	38	7.8	23.5	32.5	4	M4	2.5 – 4.1	16	4.1 – 8.1	20	5	65	10.8	189	0.1
BCH201014	14	38	7.8	23.5	32.5	4	M4	2.5 – 4.1	16	4.1 – 8.1	20	5	76	10.8	136	0.1
BCH201015	15	38	7.8	23.5	32.5	4	M4	2.5 – 4.1	16	4.1 – 8.1	20	5	81	10.8	114	0.2
BCH201018	18	44	7.8	28.5	39	4	M4	2.5 – 4.1	16	4.1 – 8.1	20	5	97	10.8	78	0.2
BCH201019	19	44	7.8	28.5	39	4	M4	2.5 – 4.1	16	4.1 – 8.1	20	5	103	10.8	73	0.2
BCH201020	20	44	7.8	28.5	39	4	M4	2.5 – 4.1	16	4.1 – 8.1	20	5	108	10.8	68	0.2
BCH201022	22	50	9.8	34	44	4	M4	2.5 – 6.1	20	6.1 – 11.1	25	5	122	11.2	78	0.3
BCH201024	24	50	9.8	34	44	4	M4	2.5 – 6.1	20	6.1 – 11.1	25	5	134	11.2	74	0.3
BCH201025	25	50	9.8	34	44	4	M4	2.5 – 6.1	20	6.1 – 11.1	25	5	140	11.2	84	0.3
BCH201028	28	55	9.8	39	50	5	M4	2.5 – 6.1	20	6.1 – 11.1	25	5	195	13.9	77	0.3
BCH201030	30	55	9.8	39	50	5	M4	2.5 – 6.1	20	6.1 – 11.1	25	5	195	13.9	69	0.5
BCH201032	32	60	9.8	44	54	6	M4	2.5 – 6.1	20	6.1 – 11.1	25	5	257	16.7	66	0.5
BCH201035	35	60	9.8	44	54	6	M4	2.5 – 6.1	20	6.1 – 11.1	25	5	257	16.7	91	0.6
BCH201038	38	70	12.3	51	64	4	M5	2.5 – 7	25	7 – 12	30	10	321	17.9	88	0.6
BCH201040	40	70	12.3	51	64	4	M5	2.5 – 7	25	7 – 12	30	10	321	17.9	85	0.6
BCH201042	42	76	12.3	56	68	6	M5	2.5 – 7	25	7 – 12	30	10	522	26.9	102	1
BCH201045	45	76	12.3	56	68	6	M5	2.5 – 7	25	7 – 12	30	10	522	26.9	99	1
BCH201048	48	90	14.3	66	78	9	M5	2.5 – 10	30	10 – 13	40	10	926	40.3	95	1
BCH201050	50	90	14.3	66	78	9	M5	2.5 – 10	30	10 – 13	40	10	926	40.3	90	0.9
BCH201055	55	90	14.3	66	78	9	M5	2.5 – 10	30	10 – 13	40	10	926	40.3	87	0.9
BCH201060	60	105	17.3	77	92	9	M6	2.5 – 10.9	35	10.9 – 15	45	16	1445	54.2	94	1.6
BCH201065	65	105	17.3	77	92	9	M6	2.5 – 10.9	35	10.9 – 15	45	16	1445	54.2	89	1.5
BCH201070	70	120	17.3	88	102	12	M6	2.5 – 10.9	35	10.9 – 15	45	16	2192	72.3	87	1.5
BCH201075	75	120	17.3	88	102	12	M6	2.5 – 10.9	35	10.9 – 15	45	16	2192	72.3	85	1.5

Contact our Application Engineers:

- *Larger and smaller bore sizes available upon request*
- *Larger mounted component thickness (outside of X Ranges 1 and 2) can be easily accommodated. Fully-threaded screws are required for mounted component thicknesses larger than X Range 2.*
- *Fenner Drives can engineer a custom B-LOC Compression Hub to meet your needs.*
- *Email: AE@fennerdrives.com*

B-LOC® BCH 50 Inch





TOLERANCE (T_L)

Recommended bore diameter d_1 +.001" / +.003"

T_L = .002" for shafts up to 3"

Shaft diameter machined to d +0/-T_L

Parallelism machined to X +/- .005"

BCH50 – Heavy Duty – Inch

Base Part Number	d (inch)	D (inch)	H_1 (inch)	A (inch)	d_1 (inch)	Locking Screws Qty	Locking Screws Size	Mounted Component Thickness (X) Range 1 X (inch)	Range 1 Screw Length 1 (mm)	Range 2 X (inch)	Range 2 Screw Length 2 (mm)	M_a Install Torque (ft lb)	M_t Maximum Transmitted Torque (ft lb)	Th Maximum Transmitted Thrust (lbs)	P_s Shaft Pressure (ksi)	Ship Weight (lb)
BCH502008	1/2	1.85	0.384	0.984	1.457	5	M5	0.098 – 0.197	20	0.197 – 0.394	25	7	104	4970	42.5	0.7
BCH502010	5/8	1.85	0.384	0.984	1.457	5	M5	0.098 – 0.197	20	0.197 – 0.394	25	7	129	5510	33.9	0.4
BCH502012	3/4	2.047	0.384	1.181	1.654	6	M5	0.098 – 0.197	20	0.197 – 0.394	25	7	186	6610	33.9	0.7
BCH502014	7/8	2.283	0.463	1.398	1.890	6	M5	0.098 – 0.315	25	0.315 – 0.512	30	7	217	6610	24.2	0.9
BCH502015	15/16	2.283	0.463	1.398	1.890	6	M5	0.098 – 0.315	25	0.315 – 0.512	30	7	233	6610	22.6	0.9
BCH502100	1	2.283	0.463	1.398	1.890	6	M5	0.098 – 0.315	25	0.315 – 0.512	30	7	248	6610	21.2	0.9
BCH502102	1 1/8	2.559	0.463	1.594	2.126	8	M5	0.098 – 0.315	25	0.315 – 0.512	30	7	385	9130	26.0	1.1
BCH502103	1 3/16	2.559	0.463	1.594	2.126	8	M5	0.098 – 0.315	25	0.315 – 0.512	30	7	406	9130	24.7	1.1
BCH502104	1 1/4	2.953	0.561	1.850	2.362	8	M6	0.098 – 0.350	30	0.350 – 0.547	35	12	564	12030	26.5	1.8
BCH502106	1 3/8	2.953	0.561	1.850	2.362	8	M6	0.098 – 0.350	30	0.350 – 0.547	35	12	621	12030	24.1	1.8
BCH502107	1 7/16	3.307	0.561	2.047	2.598	10	M6	0.098 – 0.350	30	0.350 – 0.547	35	12	811	15040	28.7	2.2
BCH502108	1 1/2	3.307	0.561	2.047	2.598	10	M6	0.098 – 0.350	30	0.350 – 0.547	35	12	846	15040	27.6	2.2
BCH502110	1 5/8	3.78	0.699	2.362	2.992	7	M8	0.098 – 0.323	35	0.323 – 0.630	45	30	1261	20710	28.0	3.5
BCH502111	1 11/16	3.78	0.699	2.362	2.992	7	M8	0.098 – 0.323	35	0.323 – 0.630	45	30	1310	20710	27.0	3.5
BCH502112	1 3/4	3.78	0.699	2.362	2.992	7	M8	0.098 – 0.323	35	0.323 – 0.630	45	30	1358	20710	26.0	3.5
BCH502114	1 7/8	4.528	0.699	2.756	3.386	8	M8	0.098 – 0.323	35	0.323 – 0.630	45	30	1663	23650	27.7	5.3
BCH502115	1 15/16	4.528	0.699	2.756	3.386	8	M8	0.098 – 0.323	35	0.323 – 0.630	45	30	1719	23650	26.8	5.1
BCH502200	2	4.528	0.699	2.756	3.386	8	M8	0.098 – 0.323	35	0.323 – 0.630	45	30	1774	23650	26.0	5.1
BCH502202	2 1/8	4.528	0.699	2.756	3.386	8	M8	0.098 – 0.323	35	0.323 – 0.630	45	30	1885	23650	24.5	4.9
BCH502203	2 3/16	4.528	0.699	2.756	3.386	8	M8	0.098 – 0.323	35	0.323 – 0.630	45	30	1940	23650	23.8	4.9
BCH502204	2 1/4	5.433	0.797	3.268	4.016	8	M10	0.098 – 0.335	40	0.335 – 0.630	50	60	3198	37900	32.5	8.6
BCH502206	2 3/8	5.433	0.797	3.268	4.016	8	M10	0.098 – 0.335	40	0.335 – 0.630	50	60	3375	37900	30.7	8.4
BCH502207	2 7/16	5.433	0.797	3.268	4.016	8	M10	0.098 – 0.335	40	0.335 – 0.630	50	60	3464	37900	29.9	8.4
BCH502208	2 1/2	5.433	0.797	3.268	4.016	8	M10	0.098 – 0.335	40	0.335 – 0.630	50	60	3553	37900	29.1	8.2
BCH502209	2 9/16	5.433	0.797	3.268	4.016	8	M10	0.098 – 0.335	40	0.335 – 0.630	50	60	3642	37900	28.4	8.2
BCH502210	2 5/8	6.142	0.797	3.740	4.409	9	M10	0.098 – 0.335	40	0.335 – 0.630	50	60	4197	42630	31.3	10.8
BCH502212	2 3/4	6.142	0.797	3.740	4.409	9	M10	0.098 – 0.335	40	0.335 – 0.630	50	60	4396	42630	29.9	10.6
BCH502214	2 7/8	6.142	0.797	3.740	4.409	9	M10	0.098 – 0.335	40	0.335 – 0.630	50	60	4596	42630	28.6	10.4
BCH502215	2 15/16	6.142	0.797	3.740	4.409	9	M10	0.098 – 0.335	40	0.335 – 0.630	50	60	4696	42630	28.0	10.1
BCH502300	3	6.142	0.797	3.740	4.409	9	M10	0.098 – 0.335	40	0.335 – 0.630	50	60	4796	42630	27.4	10.1

Part Number Ordering Guide

Base Part Number	+	Screw Length (based on X)	=	Complete Part Number
BCH502110		035		BCH502110-035
		3 digit whole number Always in mm 35 = 035		

NOTES

1. *B-LOC Compression Hubs exert a maximum pressure on the face of the mounted component of 250 N/mm² (36 ksi).*
2. *B-LOC pilot diameter d_1 machined to ISO tolerance h8.*

B-LOC® BCH 50 Metric

TOLERANCE (T_L)

Recommended bore diameter d_1 +.03mm / +.08mm

T_L = .05mm for shafts up to 75mm

Shaft diameter machined to d +0/-T_L

Parallelism machined to X +/- 0.13mm

BCH50 – Heavy Duty – Metric

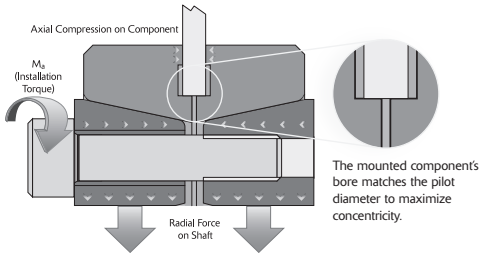
Base Part Number	d (mm)	D (mm)	H_1 (mm)	A (mm)	d_1 (mm)	Locking Screws		Mounted Component Thickness (X)				M_a	M_t	Th	P_s	Ship Weight (kg)
								Range 1		Range 2		Install Torque (Nm)	Maximum Transmitted		Shaft Pressure (N/mm^2)	
						Qty	Size	X (mm)	Screw Length 1 (mm)	X (mm)	Screw Length 2 (mm)		Torque (Nm)	Thrust (kN)		
BCH501012	12	47	9.8	25	37.0	5	M5	2.5 – 5.0	20	5.0 – 10.0	25	10	132	22.1	310	0.3
BCH501014	14	47	9.8	25	37.0	5	M5	2.5 – 5.0	20	5.0 – 10.0	25	10	155	22.1	266	0.2
BCH501015	15	47	9.8	25	37.0	5	M5	2.5 – 5.0	20	5.0 – 10.0	25	10	166	22.1	248	0.2
BCH501018	18	52	9.8	30	42.0	6	M5	2.5 – 5.0	20	5.0 – 10.0	25	10	239	26.5	248	0.3
BCH501019	19	52	9.8	30	42.0	6	M5	2.5 – 5.0	20	5.0 – 10.0	25	10	252	26.5	235	0.3
BCH501020	20	52	9.8	30	42.0	6	M5	2.5 – 5.0	20	5.0 – 10.0	25	10	265	26.5	223	0.3
BCH501022	22	58	11.8	35.5	48.0	6	M5	2.5 – 8.0	25	8.0 – 13.0	30	10	302	27.4	175	0.4
BCH501024	24	58	11.8	35.5	48.0	6	M5	2.5 – 8.0	25	8.0 – 13.0	30	10	329	27.4	160	0.4
BCH501025	25	58	11.8	35.5	48.0	6	M5	2.5 – 8.0	25	8.0 – 13.0	30	10	342	27.4	154	0.4
BCH501028	28	65	11.8	40.5	54.0	8	M5	2.5 – 8.0	25	8.0 – 13.0	30	10	511	36.5	183	0.5
BCH501030	30	65	11.8	40.5	54.0	8	M5	2.5 – 8.0	25	8.0 – 13.0	30	10	548	36.5	171	0.5
BCH501032	32	75	14.3	47	60.0	8	M6	2.5 – 8.9	30	8.9 – 13.9	35	16	771	48.2	181	0.8
BCH501035	35	75	14.3	47	60.0	8	M6	2.5 – 8.9	30	8.9 – 13.9	35	16	843	48.2	166	0.8
BCH501038	38	84	14.3	52	66.0	10	M6	2.5 – 8.9	30	8.9 – 13.9	35	16	1145	60.2	191	1
BCH501040	40	84	14.3	52	66.0	10	M6	2.5 – 8.9	30	8.9 – 13.9	35	16	1205	60.2	181	0.9
BCH501042	42	96	17.8	60	76.0	7	M8	2.5 – 8.2	35	8.2 – 16.0	45	41	1740	82.9	190	1.6
BCH501045	45	96	17.8	60	76.0	7	M8	2.5 – 8.2	35	8.2 – 16.0	45	41	1864	82.9	177	1.6
BCH501048	48	115	17.8	70	86.0	8	M8	2.5 – 8.2	35	8.2 – 16.0	45	41	2273	94.7	190	2.4
BCH501050	50	115	17.8	70	86.0	8	M8	2.5 – 8.2	35	8.2 – 16.0	45	41	2367	94.7	182	2.3
BCH501055	55	115	17.8	70	86.0	8	M8	2.5 – 8.2	35	8.2 – 16.0	45	41	2604	94.7	166	2.2
BCH501060	60	138	20.3	83	102.0	8	M10	2.5 – 8.5	40	8.5 – 16.0	50	81	4551	152	213	3.8
BCH501065	65	138	20.3	83	102.0	8	M10	2.5 – 8.5	40	8.5 – 16.0	50	81	4930	152	197	3.7
BCH501070	70	156	20.3	95	112.0	9	M10	2.5 – 8.5	40	8.5 – 16.0	50	81	5973	171	205	4.8
BCH501075	75	156	20.3	95	112.0	9	M10	2.5 – 8.5	40	8.5 – 16.0	50	81	6400	171	192	4.6

Contact our Application Engineers:

- *Larger and smaller bore sizes available upon request*
- *Larger mounted component thickness (outside of X Ranges 1 and 2) can be easily accommodated. Fully-threaded screws are required for mounted component thicknesses larger than X Range 2.*
- *Fenner Drives can engineer a custom B-LOC Compression Hub to meet your needs.*
- *Email: AE@fennerdrives.com*

Principles of Operation

B-LOC® Compression Hubs differ from other keyless locking devices in how they engage the mounted component. Rather than creating a radial force on the mounted component, the outer tapered rings are drawn together to generate an axial clamping force. In this way, the mounted component is not subjected to tensile (hoop) stresses. This operating principle also allows narrow components to be mounted with excellent runout.



Surface Finish

Recommended surface finish for shafts to be used with B-LOC Compression Hubs is between 32 and 125 microinch (0.8 and 3.2 micrometer) RMS. A smoother finish — such as that found on components supplied TG&P (turned, ground and polished) — is NOT recommended and can result in a failure of the connection. Note that surface finishes below 32 microinch (0.8 micrometer) RMS can be roughened using longitudinal abrasion with a bastard file, emery paper or similar to achieve a surface finish within the recommended range. The recommended surface finish on the contact faces of the mounted component is between 32 and 250 microinch (0.8 – 6.4 micrometer).

Concentricity

Fenner Drives Keyless Locking Devices are precision machined to maximize concentricity and minimize runout. The final installed concentricity of mounted components depends on several variables, including the components themselves and the installation technique employed. In the case of B-LOC Compression Hubs, total runout can be minimized by machining the bore and contacting faces of the mounted component to tight tolerances.

Adhesives & Lubricants

B-LOC Keyless Locking Devices are supplied with an oil specific to the product line. The listed performance data requires the use of these lubricants to provide the necessary coefficient of friction to the sliding surfaces. Likewise, do not use anaerobic adhesives such as Loctite®, Permatex® or similar compounds with Fenner Drives Keyless Locking Devices. Doing so results in unknown contact pressures and capacities. Furthermore, disassembly may be compromised when such compounds are applied to the keyless bushing, the shaft and/or the hub bore. The approved lubricant for use with B-LOC Compression Hubs is CRC3-36.

Materials

B-LOC Keyless Locking Devices are made from carbon steels and heat treated alloy steels. For applications in corrosive environments, corrosion resistance can be improved through sealing with grease or silicone, the use of protective cover plates, application of industry standard plating materials (e.g., nickel, thin dense chrome, etc.) or by specifying the product in stainless steel or other corrosion resistant materials. Please consult with a Fenner Drives Applications Engineer for more details.

Torque

T = peak drive torque = nominal torque multiplied by a safety factor to account for stall or start-up conditions, mass accelerations, impact loads, etc. Nominal drive torque can be calculated as follows:

$$M_{t_{nom}}\ (\text{ft lb}) = \frac{5252 \times HP}{rpm}$$

$$M_{t_{nom}}\ (\text{Nm}) = \frac{9550 \times kW}{rpm}$$

Consult with a Fenner Drives Applications Engineer in cases where "T" is uncertain.

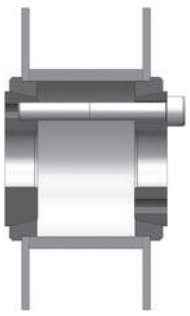
M_t = The rated torque capacity of one Fenner Drives Keyless Locking Device installed according to our instructions. Published torque capacities are calculated without using a safety factor and should be considered as the point where a connection could slip if a higher torque is applied. Therefore, always select a unit where $M_t \geq T$.

Made to Order

B-LOC Compression Hubs offer a unique design that can provide solutions for applications beyond the standard, single chain sprocket application. Because compression hubs function by clamping the mounted components in the axial direction, cost savings can be realized by stacking together lower cost individual components. The compression hub simultaneously clamps the assembly together and attaches the assembly to the shaft.



A double strand chain sprocket can be easily made by adding a spacer between two A-plate sprockets.



Applications that require spacing between thin end discs can be accommodated by extending the pilot surface through the end discs so that it engages a spacer and keeps the entire assembly aligned.

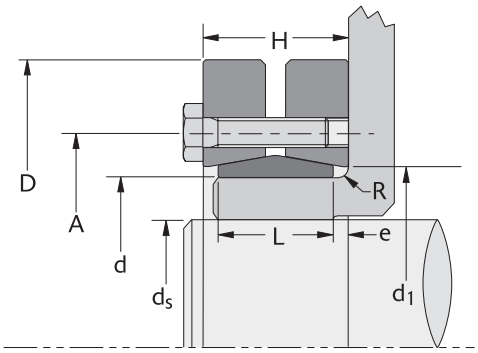


Split sprocket designs are simplified by utilizing an A-plate sprocket which is split in a way that provides positive engagement between the two halves.

B-LOC® Shrink Disc SD10



Metric hex head
locking screws
DIN 931 grade 10.9
(See M_a for install torque).



See Table 1 below for maximum diametrical clearance between shaft and hub bore.

SD10 — Standard Duty

Part Number	Size	SD bore (Hub OD) d (inch)	Hub OD Tolerance T_Ld (inch)	Shaft Diameter Range ds-MIN (inch)	Shaft Diameter Range ds-MAX (inch)	Locking Screws Qty	Locking Screws Size	M_a Install Torque (ft lb)	M_t Max. Transmitted Torque ds-MIN (ft lb)	M_t Max. Transmitted Torque ds-MAX (ft lb)	A (inch)	D (inch)	L (inch)	H (inch)	e (inch)	d_1 (inch)	R (inch)	Ship wt (lb)
B0241	24-10	0.945	+ 0 / -0.002	5/8	0.774	6	M5 x 16	3.6	138	278	1.417	1.97	0.551	0.71	0.080	1.023	1/16	0.5
B0301	30-10	1.181	+ 0 / -0.002	3/4	0.967	7	M5 x 18	3.6	177	407	1.732	2.36	0.629	0.79	0.081	1.259	1/16	0.7
B0361	36-10	1.417	+ 0 / -0.002	7/8	1.161	5	M6 x 20	8.7	315	666	2.047	2.83	0.700	0.87	0.085	1.496	1/16	0.9
B0441	44-10	1.732	+ 0 / -0.002	1 1/8	1.419	7	M6 x 20	8.7	683	1198	2.402	3.15	0.787	0.94	0.077	1.850	1/16	1.4
B0501	50-10	1.969	+ 0 / -0.002	1 3/8	1.612	8	M6 x 22	8.7	964	1565	2.756	3.54	0.866	1.02	0.077	2.086	1/16	1.8
B0551	55-10	2.165	+ 0 / -0.002	1 1/2	1.773	8	M6 x 25	8.7	1014	1707	2.953	3.94	0.905	1.14	0.118	2.283	3/32	2.4
B0621	62-10	2.441	+ 0 / -0.002	1 3/4	1.999	10	M6 x 25	8.7	1718	2375	3.386	4.33	0.905	1.14	0.118	2.598	3/32	2.9
B0681	68-10	2.677	+ 0 / -0.002	1 7/8	2.193	10	M6 x 25	8.7	1760	2606	3.386	4.53	0.905	1.14	0.118	2.834	3/32	3
B0751	75-10	2.953	+ 0 / -0.002	2 1/8	2.418	7	M8 x 25	22	2792	4057	3.937	5.43	0.984	1.22	0.118	3.110	1/8	3.8
B0801	80-10	3.150	+ 0 / -0.002	2 3/8	2.580	7	M8 x 25	22	3416	4331	3.937	5.71	0.984	1.22	0.118	3.307	1/8	4.2
B0901	90-10	3.543	+ 0 / -0.004	2 1/2	2.902	10	M8 x 30	22	4751	7139	4.488	6.10	1.181	1.49	0.155	3.700	1/8	7
H0951	95-10	3.740	+ 0 / -0.004	2 3/4	3.063	12	M8 x 30	22	6832	9108	4.882	6.69	1.338	1.69	0.176	4.094	1/8	10
B1001	100-10	3.937	+ 0 / -0.004	2 7/8	3.224	12	M8 x 35	22	7059	9586	4.882	6.69	1.338	1.69	0.176	4.094	1/8	10
B1101	110-10	4.331	+ 0 / -0.004	3 1/8	3.547	9	M10 x 40	44	9013	12602	5.354	7.28	1.535	1.93	0.198	4.488	1/8	13
B1251	125-10	4.921	+ 0 / -0.004	3 1/2	4.031	12	M10 x 40	44	13710	19540	6.299	8.46	1.653	2.04	0.194	5.275	1/8	18
B1401	140-10	5.512	+ 0 / -0.004	4	4.514	10	M12 x 45	74	19648	26440	6.890	9.06	1.811	2.28	0.235	5.708	3/16	23
B1551	155-10	6.102	+ 0 / -0.004	4 1/2	4.998	12	M12 x 50	74	27515	34049	7.559	10.36	1.968	2.44	0.236	6.496	3/16	31
H1651	165-10	6.496	+ 0 / -0.004	4 7/8	5.320	8	M16 x 55	185	37737	47135	8.268	11.42	2.204	2.67	0.233	6.889	3/16	49
B1751	175-10	6.890	+ 0 / -0.004	5 1/4	5.643	8	M16 x 55	185	41620	50005	8.661	11.81	2.204	2.67	0.233	7.283	3/16	50
B1851	185-10	7.283	+ 0 / -0.004	5 5/8	5.965	10	M16 x 65	185	56802	65965	9.291	12.99	2.795	3.34	0.273	7.677	3/16	82
H1951	195-10	7.677	+ 0 / -0.004	5 7/8	6.288	12	M16 x 65	185	71908	84926	9.685	13.78	2.795	3.34	0.273	8.110	3/16	91
B2001	200-10	7.874	+ 0 / -0.004	6 1/4	6.449	12	M16 x 65	185	80674	87096	9.685	13.78	2.795	3.34	0.273	8.110	3/16	90
B2201	220-10	8.661	+ 0 / -0.004	6 3/8	7.094	15	M16 x 80	185	92230	116425	10.630	14.57	3.464	4.06	0.298	8.897	1/4	119
B2401	240-10	9.449	+ 0 / -0.004	7	7.739	12	M20 x 80	362	130645	161818	11.614	15.95	3.622	4.22	0.299	9.763	1/4	148
B2601	260-10	10.236	+ 0 / -0.004	7 5/8	8.383	14	M20 x 90	362	162198	205263	12.638	16.93	4.055	4.72	0.318	10.551	1/4	181
H2801	280-10	11.024	+ 0 / -0.005	8 3/8	9.028	16	M20 x 100	362	210581	253378	13.622	18.11	4.488	5.20	0.356	11.338	5/16	225
H3001	300-10	11.811	+ 0 / -0.005	9	9.673	18	M20 x 100	362	257278	306749	14.331	19.10	4.803	5.52	0.359	12.125	5/16	260
H3201	320-10	12.598	+ 0 / -0.005	9 5/8	10.318	20	M20 x 100	362	310492	359728	15.197	20.48	4.803	5.52	0.359	12.913	5/16	288
H3401	340-10	13.386	+ 0 / -0.005	10 1/4	10.963	24	M20 x 110	362	392088	462391	16.063	22.44	5.276	6.14	0.432	13.700	5/16	409
H3501	350-10	13.780	+ 0 / -0.005	10 7/8	11.285	24	M20 x 110	362	432685	474097	17.008	22.84	5.511	6.30	0.395	14.488	5/16	429
H3601	360-10	14.173	+ 0 / -0.005	11 1/4	11.608	24	M20 x 110	362	451405	487702	17.008	23.23	5.511	6.30	0.395	14.488	5/16	449
H3801	380-10	14.961	+ 0 / -0.005	11 1/2	12.253	20	M24 x 120	620	535005	623051	18.031	25.40	5.669	6.46	0.396	15.276	5/16	526
H3901	390-10	15.354	+ 0 / -0.005	12 1/4	12.575	21	M24 x 120	620	633184	673847	18.425	25.99	5.669	6.46	0.396	15.629	3/8	572
H4201	420-10	16.535	+ 0 / -0.006	12 1/2	13.543	24	M24 x 130	620	685493	829666	19.843	27.17	6.456	7.25	0.397	16.929	3/8	630
H4401	440-10	17.323	+ 0 / -0.006	13 1/2	14.187	24	M24 x 130	620	768743	852536	20.748	29.53	6.969	7.95	0.491	17.716	3/8	835
H4601	460-10	18.110	+ 0 / -0.006	14 1/8	14.832	28	M24 x 130	620	934194	1051580	21.535	30.32	6.969	7.95	0.491	18.425	3/8	924
H4801	480-10	18.898	+ 0 / -0.006	14 3/4	15.477	30	M24 x 150	620	1047086	1176357	22.441	31.50	7.401	8.39	0.495	19.291	1/2	1110
H5001	500-10	19.685	+ 0 / -0.006	15 3/8	16.122	24	M27 x 150	922	1169590	1310148	23.228	33.46	7.401	8.39	0.495	19.999	1/2	1265

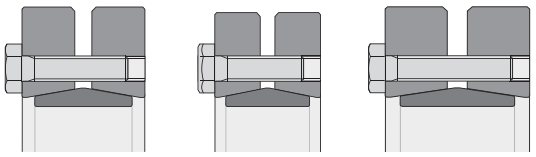
Notes:

- *Inner rings of all shrink discs are supplied with one lengthwise slit.*
- *Shrink discs are available for shafts up to 40" diameter and in a variety of special designs.*
- *Maximum shaft sizes listed for Shrink Disc Series SD10 and SD30 reflect equal section moduli of shaft and hub (maximum shaft diameter = $\frac{d}{1.221}$).*
- *Larger shrink discs for shafts up to 40" diameter are available on request.*

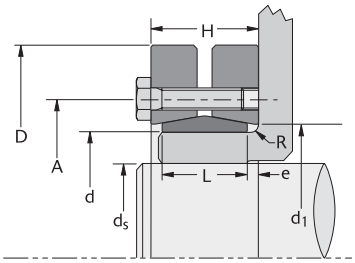
Shaft Sizes (inch) >	Shaft Sizes (inch) ≤	Maximum Diametrical Clearance Between Shaft and Hub Bore
	1 1/8	0.0010
1 1/8	1 15/16	0.0015
1 15/16	4 3/4	0.0020
4 3/4	7	0.0030
7	10	0.0040
10	14	0.0050
14		0.0060

Table 1
For Series SD10, SD20 and SD30

B-LOC® Shrink Disc SD20 SD30



SD10 Standard Duty | SD20 Light Duty | SD30 Heavy Duty



SD20 — Light Duty

Part Number	Size	SD bore (Hub OD) d (inch)	Hub OD Tolerance T_Ld (inch)	Shaft Diameter Range ds-MIN (inch)	Shaft Diameter Range ds-MAX (inch)	Locking Screws Qty	Locking Screws Size	Ma Install Torque (ft lb)	M_t Max. Transmitted Torque ds-MIN (ft lb)	M_t Max. Transmitted Torque ds-MAX (ft lb)	A (inch)	D (inch)	L (inch)	H (inch)	e (inch)	d_1 (inch)	R (inch)	Ship wt (lb)
H1252	125-20	4.921	+ 0 / -0.004	3 5/8	4.125	8	M10 x 40	44	9380	13343	6.220	7.28	1.535	2.01	0.238	5.118	1/8	13
H1402	140-20	5.512	+ 0 / -0.004	4 1/4	5.000	9	M10 x 40	44	13691	20328	6.889	8.67	1.535	2.01	0.238	5.669	1/8	18
H1552	155-20	6.102	+ 0 / -0.004	5	5.500	11	M10 x 40	44	21144	27447	7.559	9.65	1.535	2.01	0.238	6.259	1/8	22
H1652	165-20	6.496	+ 0 / -0.004	5 3/8	5.750	10	M12 x 50	74	30652	36677	8.267	10.24	1.811	2.44	0.315	6.653	3/16	31
H1752	175-20	6.890	+ 0 / -0.004	5 5/8	6.125	11	M12 x 50	74	34940	43588	8.661	10.83	1.811	2.44	0.315	7.047	3/16	35
H1852	185-20	7.283	+ 0 / -0.004	6	6.500	12	M12 x 50	74	41643	51035	8.858	11.62	1.811	2.44	0.315	7.440	3/16	44
H1952	195-20	7.677	+ 0 / -0.004	6 1/2	7.000	15	M12 x 60	74	58979	71073	9.330	12.40	2.204	2.84	0.318	7.834	3/16	60
H2202	220-20	8.661	+ 0 / -0.004	7	7.875	10	M16 x 70	185	76454	100895	10.433	13.59	2.598	3.31	0.356	8.818	3/16	77
H2402	240-20	9.449	+ 0 / -0.004	7 7/8	8.500	12	M16 x 70	185	107011	129864	11.417	14.57	2.598	3.31	0.356	9.606	1/4	97
H2602	260-20	10.236	+ 0 / -0.004	8 5/8	9.250	14	M16 x 70	185	139939	166618	12.204	15.55	2.834	3.63	0.398	10.433	1/4	106
H2802	280-20	11.024	+ 0 / -0.005	9	9.875	16	M16 x 75	185	158724	200396	13.110	16.74	3.307	4.10	0.397	11.220	1/4	132
H3002	300-20	11.811	+ 0 / -0.005	9 7/8	10.625	18	M16 x 75	185	229935	271288	14.094	18.11	3.307	4.10	0.397	12.007	1/4	165
H3202	320-20	12.598	+ 0 / -0.005	10 1/2	11.375	20	M16 x 75	185	238939	292045	14.881	19.49	3.307	4.18	0.437	12.795	1/4	185
H3402	340-20	13.386	+ 0 / -0.005	11 3/8	12.000	21	M16 x 75	185	281000	320857	15.826	21.07	3.307	4.18	0.437	13.582	1/4	220
H3602	360-20	14.173	+ 0 / -0.005	11 7/8	12.625	16	M20 x 90	362	341876	398029	16.653	21.85	3.937	4.81	0.437	14.370	5/16	275
H3802	380-20	14.961	+ 0 / -0.005	12 1/2	13.000	18	M20 x 100	362	403340	444630	17.401	23.03	4.409	5.35	0.471	15.236	5/16	301
H3902	390-20	15.354	+ 0 / -0.005	12 5/8	13.750	20	M20 x 100	362	446171	549086	17.795	23.43	4.409	5.36	0.476	15.629	5/16	344
H4202	420-20	16.535	+ 0 / -0.006	13 3/4	14.625	22	M20 x 100	362	544495	625817	19.094	24.81	4.724	5.67	0.473	16.810	5/16	407
H4602	460-20	18.110	+ 0 / -0.006	14 5/8	16.375	28	M20 x 110	362	704454	927856	20.747	26.97	5.196	6.22	0.512	18.425	3/8	517
H5002	500-20	19.685	+ 0 / -0.006	16 1/4	17.375	30	M20 x 120	362	860127	1014952	22.519	29.53	5.984	7.01	0.513	19.999	3/8	704

SD30 — Heavy Duty

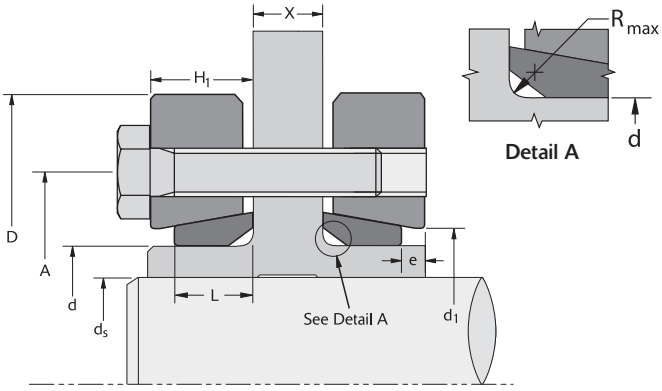
Part Number	Size	SD bore (Hub OD) d (inch)	Hub OD Tolerance T_Ld (inch)	Shaft Diameter Range ds-MIN (inch)	Shaft Diameter Range ds-MAX (inch)	Locking Screws Qty	Locking Screws Size	Ma Install Torque (ft lb)	M_t Max. Transmitted Torque ds-MIN (ft lb)	M_t Max. Transmitted Torque ds-MAX (ft lb)	A (inch)	D (inch)	L (inch)	H (inch)	e (inch)	d_1 (inch)	R (inch)	Ship wt (lb)
H0443	44-30	1.732	+ 0 / -0.002	1 1/8	1.419	5	M8 x 30	22	941	1653	2.598	3.35	1.102	1.34	0.119	1.890	1/16	1.4
H0503	50-30	1.969	+ 0 / -0.002	1 3/8	1.612	7	M8 x 35	22	1761	2749	2.874	3.74	1.181	1.54	0.180	1.984	1/16	1.8
H0553	55-30	2.165	+ 0 / -0.002	1 1/2	1.773	7	M8 x 35	22	1892	3023	3.071	4.13	1.181	1.54	0.180	2.323	3/32	2.4
B0623	62-30	2.441	+ 0 / -0.002	1 3/4	1.999	7	M8 x 35	22	2353	3244	3.346	4.53	1.181	1.54	0.180	2.598	3/32	2.9
B0683	68-30	2.677	+ 0 / -0.002	1 7/8	2.193	8	M8 x 35	22	2861	4173	3.622	4.72	1.181	1.54	0.180	2.835	3/32	3
B0753	75-30	2.953	+ 0 / -0.002	2 1/8	2.418	7	M10 x 40	44	4552	6529	4.134	5.71	1.417	1.81	0.197	3.307	1/8	3.8
B0803	80-30	3.150	+ 0 / -0.002	2 3/8	2.580	7	M10 x 40	44	5541	6971	4.134	5.71	1.417	1.81	0.197	3.307	1/8	4.2
B0903	90-30	3.543	+ 0 / -0.004	2 1/2	2.902	8	M10 x 40	44	5946	8994	4.567	6.30	1.575	1.97	0.198	3.701	1/8	7
B1003	100-30	3.937	+ 0 / -0.004	2 7/8	3.224	10	M10 x 45	44	9370	12700	4.961	6.69	1.732	2.13	0.199	4.094	1/8	10
H1103	110-30	4.331	+ 0 / -0.004	3 1/8	3.547	12	M10 x 45	44	12116	16879	5.354	7.28	1.969	2.36	0.196	4.482	1/8	17
H1253	125-30	4.921	+ 0 / -0.004	3 1/2	4.031	12	M12 x 50	74	20092	28393	6.299	8.47	2.126	2.60	0.237	5.157	3/16	24
B1403	140-30	5.512	+ 0 / -0.004	4	4.514	12	M12 x 60	74	23275	31491	6.889	9.06	2.362	2.92	0.279	5.744	3/16	29
H1553	155-30	6.102	+ 0 / -0.004	4 1/2	4.998	15	M12 x 60	74	34154	42273	7.795	10.36	2.598	3.15	0.276	6.496	3/16	44
H1653	165-30	6.496	+ 0 / -0.004	4 7/8	5.320	10	M16 x 70	185	46957	58743	8.267	11.42	2.834	3.47	0.318	6.940	3/16	57
H1753	175-30	6.890	+ 0 / -0.004	5 1/4	5.643	10	M16 x 70	185	51804	62320	8.661	11.82	2.834	3.47	0.318	7.322	3/16	64
H1853	185-30	7.283	+ 0 / -0.004	5 5/8	5.965	15	M16 x 80	185	86847	100371	9.291	12.99	3.622	4.41	0.394	7.704	3/16	104
H1953	195-30	7.677	+ 0 / -0.004	5 7/8	6.288	15	M16 x 80	185	89488	105820	9.685	13.78	3.622	4.41	0.394	8.102	1/4	110
H2003	200-30	7.874	+ 0 / -0.004	6 1/4	6.449	15	M16 x 80	185	100466	108524	9.685	13.78	3.622	4.41	0.394	8.102	1/4	110
H2203	220-30	8.661	+ 0 / -0.004	6 3/8	7.094	20	M16 x 90	185	123458	155750	10.629	14.57	4.488	5.28	0.396	8.901	1/4	143
B2403	240-30	9.449	+ 0 / -0.004	7	7.739	15	M20 x 100	362	162518	201425	11.614	15.95	4.724	5.67	0.473	9.692	1/4	192
H2603	260-30	10.236	+ 0 / -0.005	7 5/8	8.383	18	M20 x 110	362	207733	263252	12.637	16.93	5.354	6.30	0.473	10.511	1/4	220
H2803	280-30	11.024	+ 0 / -0.005	8 3/8	9.028	21	M20 x 120	362	276822	332933	13.622	18.11	5.826	6.77	0.472	11.370	5/16	291
H3003	300-30	11.811	+ 0 / -0.005	9	9.673	22	M20 x 120	362	313789	374371	14.330	19.10	5.984	6.93	0.473	12.177	5/16	308
H3203	320-30	12.598	+ 0 / -0.005	9 5/8	10.318	24	M20 x 120	362	368957	427823	15.196	20.48	6.299	7.25	0.476	12.964	5/16	363
H3403	340-30	13.386	+ 0 / -0.005	10 1/4	10.963	21	M24 x 130	620	489329	577963	16.535	22.44	6.929	7.88	0.476	13.724	5/16	528
H3603	360-30	14.173	+ 0 / -0.005	11	11.608	22	M24 x 140	620	562859	642534	17.007	23.23	7.086	8.04	0.477	14.515	3/8	550
H3903	390-30	15.354	+ 0 / -0.005	11 5/8	12.575	24	M24 x 140	620	628949	762028	18.425	25.99	7.401	8.35	0.475	15.609	3/8	770
H4203	420-30	16.535	+ 0 / -0.006	12 1/2	13.543	30	M24 x 160	620	852841	1033732	19.842	27.17	8.425	9.37	0.472	16.811	3/8	902
H4603	460-30	18.110	+ 0 / -0.006	13 5/8	14.832	28	M27 x 170	922	1144559	1403894	21.535	30.32	8.818	9.93	0.556	18.503	1/2	1188
H5003	500-30	19.685	+ 0 / -0.006	14 7/8	16.122	32	M27 x 180	922	1443359	1749331	23.622	33.47	9.685	10.79	0.552	19.999	1/2	1650

Notes:
- *Inner rings of all shrink discs are supplied with one lengthwise slit.*
- *Shrink discs are available for shafts up to 40" diameter and in a variety of special designs.*
- *Maximum shaft sizes listed for Shrink Disc Series SD10 and SD30 reflect equal section moduli of shaft and hub (maximum shaft diameter = $\frac{d}{1.221}$).*
- *See Table 1 (bottom of page 77) for maximum diametrical clearance between shaft and hub bore.*

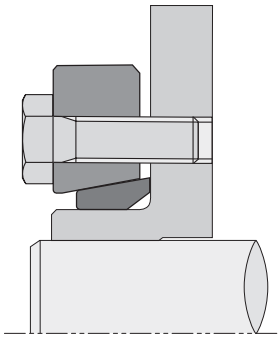
B-LOC® Split and Half Shrink Discs

To complement our standard line of B-LOC Shrink Discs, we also offer Split and Half Shrink Discs. These versions are available in all bore sizes listed for standard Shrink Discs. The Split Shrink Disc design allows greater mounting versatility on symmetrical hubs. For applications with tight space constraints and lower performance requirements, Half Shrink Discs provide several compact mounting options.

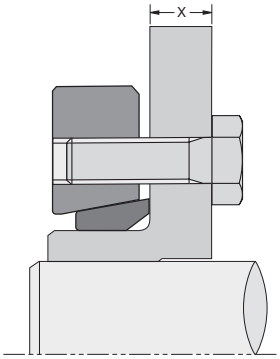
- **Reduced dimensions –** Perfect for applications with restricted space.
- **Easy Installation –** Standard screws mean installation and removal are achieved using standard tools.
- **Infinite Adjustment –** Simplified design allows hubs to be located and locked virtually anywhere on the shaft.
- **Easy Removal –** Units are self-releasing once the locking screws are loosened, making removal a breeze.
- **Reliability you can count on!** B-LOC Shrink Discs can be tightened and released as often as required.



Split Shrink Disc
Type HS



Half Shrink Disc
Type HC
(Tapped holes in hub)



Half Shrink Disc
Type HT
(Clearance holes in hub)

Note: Dimension X is required when ordering Split or Half Shrink Disc Type HT. See Table 1 at bottom left of page 80 for web clearance hole data. Please consult B-LOC Applications Engineering at AE@fennerdrives.com to determine appropriate screw length for your specific application.

Split Shrink Discs

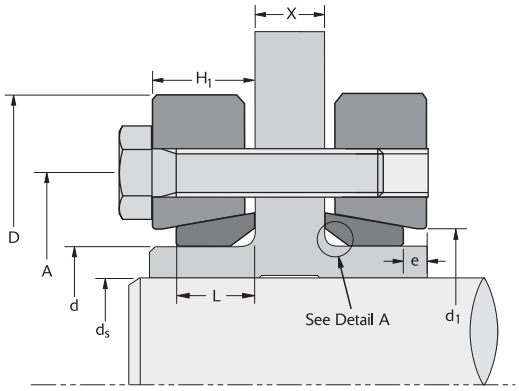
Standard and Light Duty Series: If dimension X > 2 × L then the transmissible torque may be reduced by up to 50%.

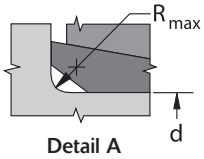
Heavy Duty Series: If dimension X > 1 × L then the transmissible torque may be reduced by up to 50%.

Half Shrink Discs

Half Shrink Discs HC/HT transmit 50% of the M_t of Shrink Discs and Split Shrink Discs.

B-LOC® Shrink Disc Split





Dimension X is required when ordering Split Shrink Discs. See Table 1 at bottom left for web clearance hole data.

Split Shrink Disc – Type HS

SD10 — Split SD — Standard Duty

Part Number	Size	SD bore (Hub OD) d (inch)	Hub OD Tolerance T_1d (inch)	Shaft Diameter Range ds-MIN (inch)	Shaft Diameter Range ds-MAX (inch)	Locking Screws Qty	Locking Screws Size	M_a Install Torque (ft lb)	M_t Max. Transmitted Torque ds-MIN (ft lb)	M_t Max. Transmitted Torque ds-MAX (ft lb)	A (inch)	D (inch)	L (inch)	H_1 (inch)	e (inch)	d_1 (inch)	R (inch)	Ship wt (lb)
HS0241	24-10	0.945	+ 0 / -0.002	5/8	0.774	6	M5	3.6	138	278	1.417	1.97	0.374	0.453	0.080	1.023	1/16	0.5
HS0301	30-10	1.181	+ 0 / -0.002	3/4	0.967	7	M5	3.6	177	407	1.732	2.36	0.413	0.493	0.081	1.259	1/16	0.7
HS0361	36-10	1.417	+ 0 / -0.002	7/8	1.161	5	M6	8.7	315	666	2.047	2.83	0.448	0.533	0.085	1.496	1/16	0.9
HS0441	44-10	1.732	+ 0 / -0.002	1 1/8	1.419	7	M6	8.7	683	1198	2.402	3.15	0.492	0.568	0.077	1.850	1/16	1.4
HS0501	50-10	1.969	+ 0 / -0.002	1 3/8	1.612	8	M6	8.7	964	1565	2.756	3.54	0.531	0.608	0.077	2.086	1/16	1.8
HS0551	55-10	2.165	+ 0 / -0.002	1 1/2	1.773	8	M6	8.7	1014	1707	2.953	3.94	0.551	0.668	0.118	2.283	3/32	2.4
HS0621	62-10	2.441	+ 0 / -0.002	1 3/4	1.999	10	M6	8.7	1718	2375	3.386	4.33	0.551	0.668	0.118	2.598	3/32	2.9
HS0681	68-10	2.677	+ 0 / -0.002	1 7/8	2.193	10	M6	8.7	1760	2606	3.386	4.53	0.551	0.668	0.118	2.834	3/32	3
HS0751	75-10	2.953	+ 0 / -0.002	2 1/8	2.418	7	M8	22	2792	4057	3.937	5.43	0.689	0.807	0.118	3.110	1/8	3.8
HS0801	80-10	3.150	+ 0 / -0.002	2 3/8	2.580	7	M8	22	3416	4331	3.937	5.71	0.689	0.807	0.118	3.307	1/8	4.2
HS0901	90-10	3.543	+ 0 / -0.004	2 1/2	2.902	10	M8	22	4751	7139	4.488	6.10	0.788	0.942	0.155	3.700	1/8	7
HS0951	95-10	3.740	+ 0 / -0.004	2 3/4	3.063	12	M8	22	6832	9108	4.882	6.69	0.866	1.042	0.176	4.094	1/8	10
HS1001	100-10	3.937	+ 0 / -0.004	2 7/8	3.224	12	M8	22	7059	9586	4.882	6.69	0.866	1.042	0.176	4.094	1/8	10
HS1101	110-10	4.331	+ 0 / -0.004	3 1/8	3.547	9	M10	44	9013	12602	5.354	7.28	0.965	1.162	0.198	4.488	1/8	13
HS1251	125-10	4.921	+ 0 / -0.004	3 1/2	4.031	12	M10	44	13710	19540	6.299	8.46	1.024	1.217	0.194	5.275	1/8	18
HS1401	140-10	5.512	+ 0 / -0.004	4	4.514	10	M12	74	19648	26440	6.890	9.06	1.103	1.337	0.235	5.708	3/16	23
HS1551	155-10	6.102	+ 0 / -0.004	4 1/2	4.998	12	M12	74	27515	34049	7.559	10.36	1.181	1.417	0.236	6.496	3/16	31
HS1651	165-10	6.496	+ 0 / -0.004	4 7/8	5.320	8	M16	185	37737	47135	8.268	11.42	1.299	1.532	0.233	6.889	3/16	49
HS1751	175-10	6.890	+ 0 / -0.004	5 1/4	5.643	8	M16	185	41620	50005	8.661	11.81	1.299	1.532	0.233	7.283	3/16	50
HS1851	185-10	7.283	+ 0 / -0.004	5 5/8	5.965	10	M16	185	56802	65965	9.291	12.99	1.595	1.867	0.273	7.677	3/16	82
HS1951	195-10	7.677	+ 0 / -0.004	5 7/8	6.288	12	M16	185	71908	84926	9.685	13.78	1.595	1.867	0.273	8.110	3/16	91
HS2001	200-10	7.874	+ 0 / -0.004	6 1/4	6.449	12	M16	185	80674	87096	9.685	13.78	1.595	1.867	0.273	8.110	3/16	90
HS2201	220-10	8.661	+ 0 / -0.004	6 3/8	7.094	15	M16	185	92230	116425	10.630	14.57	2.027	2.325	0.298	8.897	1/4	119
HS2401	240-10	9.449	+ 0 / -0.004	7	7.739	12	M20	362	130645	161818	11.614	15.95	2.106	2.405	0.299	9.763	1/4	148
HS2601	260-10	10.236	+ 0 / -0.004	7 5/8	8.383	14	M20	362	162198	205263	12.638	16.93	2.323	2.640	0.318	10.551	1/4	181
HS2801	280-10	11.024	+ 0 / -0.005	8 3/8	9.028	16	M20	362	210581	253378	13.622	18.11	2.638	2.994	0.356	11.338	5/16	225
HS3001	300-10	11.811	+ 0 / -0.005	9	9.673	18	M20	362	257278	306749	14.331	19.10	2.796	3.154	0.359	12.125	5/16	260
HS3201	320-10	12.598	+ 0 / -0.005	9 5/8	10.318	20	M20	362	310492	359728	15.197	20.48	2.796	3.154	0.359	12.913	5/16	288
HS3401	340-10	13.386	+ 0 / -0.005	10 1/4	10.963	24	M20	362	392088	462391	16.063	22.44	3.032	3.464	0.432	13.700	5/16	409
HS3501	350-10	13.780	+ 0 / -0.005	10 7/8	11.285	24	M20	362	432685	474097	17.008	22.84	3.150	3.544	0.395	14.488	5/16	429
HS3601	360-10	14.173	+ 0 / -0.005	11 1/4	11.608	24	M20	362	451405	487702	17.008	23.23	3.150	3.544	0.395	14.488	5/16	449
HS3801	380-10	14.961	+ 0 / -0.005	11 1/2	12.253	20	M24	620	535005	623051	18.031	25.40	3.229	3.624	0.396	15.276	5/16	526
HS3901	390-10	15.354	+ 0 / -0.005	12 1/4	12.575	21	M24	620	633184	673847	18.425	25.99	3.327	3.722	0.396	15.629	3/8	572
HS4201	420-10	16.535	+ 0 / -0.006	12 1/2	13.543	24	M24	620	685493	829666	19.843	27.17	3.720	4.117	0.397	16.929	3/8	630
HS4401	440-10	17.323	+ 0 / -0.006	13 1/2	14.187	24	M24	620	768743	852536	20.748	29.53	3.977	4.467	0.491	17.716	3/8	835
HS4601	460-10	18.110	+ 0 / -0.006	14 1/8	14.832	28	M24	620	934194	1051580	21.535	30.32	3.977	4.467	0.491	18.425	3/8	924
HS4801	480-10	18.898	+ 0 / -0.006	14 3/4	15.477	30	M24	620	1047086	1176357	22.441	31.50	4.292	4.786	0.495	19.291	1/2	1110
HS5001	500-10	19.685	+ 0 / -0.006	15 3/8	16.122	24	M27	922	1169590	1310148	23.228	33.46	4.292	4.786	0.495	19.999	1/2	1265

Specifications for Web Clearance Holes (diameter in inches)									
Screw Size	**M5**	M6	M8	M10	M12	M16	M20	M24	M27
Split Shrink Disc	**0.281**	0.328	0.406	0.500	0.594	0.750	0.906	1.063	1.188
Half Shrink Disc HT	**0.219**	0.266	0.359	0.438	0.531	0.719	0.875	1.031	1.156

Table 1

Notes:

- *Screw length must be determined based on your X dimension. Please consult Applications Engineering.*
- *Inner rings of all shrink discs are supplied with one lengthwise slit.*
- *Shrink discs are available for shafts up to 40" diameter and in a variety of special designs.*
- *Maximum shaft sizes listed for Shrink Disc Series SD10 and SD30 reflect equal section moduli of shaft and hub (maximum shaft diameter = $\frac{d}{1.221}$).*
- *Larger shrink discs for shafts up to 40" diameter are available on request.*

Shaft Sizes (inch) >	Shaft Sizes (inch) ≤	Maximum Diametrical Clearance Between Shaft and Hub Bore
	1 1/8	0.0010
1 1/8	**1 15/16**	0.0015
1 15/16	**4 3/4**	0.0020
4 3/4	**7**	0.0030
7	**10**	0.0040
10	**14**	0.0050
14		0.0060

Table 2
For Series SD10, SD20 and SD30

B-LOC®
Shrink Disc
Split

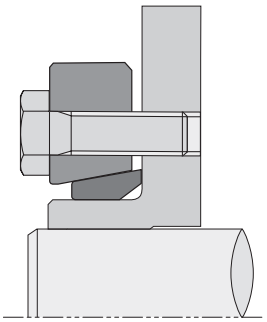
SD20 — Split SD — Light Duty

Part Number	Size	SD bore (Hub OD) d (inch)	Hub OD Tolerance T_Ld (inch)	Shaft Diameter Range ds-MIN (inch)	Shaft Diameter Range ds-MAX (inch)	Locking Screws Qty	Locking Screws Size	M_a Install Torque (ft lb)	M_t Max. Transmitted Torque ds-MIN (ft lb)	M_t Max. Transmitted Torque ds-MAX (ft lb)	A (inch)	D (inch)	L (inch)	H_1 (inch)	e (inch)	d_1 (inch)	R (inch)	Ship wt (lb)
HS1252	125-20	4.921	+ 0 / -0.004	3 5/8	4.125	8	M10	44	9380	13343	6.220	7.28	0.965	1.202	0.238	5.118	1/8	13
HS1402	140-20	5.512	+ 0 / -0.004	4 1/4	5.000	9	M10	44	13691	20328	6.889	8.67	0.965	1.202	0.238	5.669	1/8	18
HS1552	155-20	6.102	+ 0 / -0.004	5	5.500	11	M10	44	21144	27447	7.559	9.65	0.965	1.202	0.238	6.259	1/8	22
HS1652	165-20	6.496	+ 0 / -0.004	5 3/8	5.750	10	M12	74	30652	36677	8.267	10.24	1.103	1.417	0.315	6.653	3/16	31
HS1752	175-20	6.890	+ 0 / -0.004	5 5/8	6.125	11	M12	74	34940	43588	8.661	10.83	1.103	1.417	0.315	7.047	3/16	35
HS1852	185-20	7.283	+ 0 / -0.004	6	6.500	12	M12	74	41643	51035	8.858	11.62	1.103	1.417	0.315	7.440	3/16	44
HS1952	195-20	7.677	+ 0 / -0.004	6 1/2	7.000	15	M12	74	58979	71073	9.330	12.40	1.299	1.617	0.318	7.834	3/16	60
HS2202	220-20	8.661	+ 0 / -0.004	7	7.875	10	M16	185	76454	100895	10.433	13.59	1.496	1.852	0.356	8.818	3/16	77
HS2402	240-20	9.449	+ 0 / -0.004	7 7/8	8.500	12	M16	185	107011	129864	11.417	14.57	1.594	1.950	0.356	9.606	1/4	97
HS2602	260-20	10.236	+ 0 / -0.004	8 5/8	9.250	14	M16	185	139939	166618	12.204	15.55	1.712	2.110	0.398	10.433	1/4	106
HS2802	280-20	11.024	+ 0 / -0.005	9	9.875	16	M16	185	158724	200396	13.110	16.74	1.949	2.345	0.397	11.220	1/4	132
HS3002	300-20	11.811	+ 0 / -0.005	9 7/8	10.625	18	M16	185	229935	271288	14.094	18.11	1.949	2.345	0.397	12.007	1/4	165
HS3202	320-20	12.598	+ 0 / -0.005	10 1/2	11.375	20	M16	185	238939	292045	14.881	19.49	1.949	2.385	0.437	12.795	1/4	185
HS3402	340-20	13.386	+ 0 / -0.005	11 3/8	12.000	21	M16	185	281000	320857	15.826	21.07	1.949	2.385	0.437	13.582	1/4	220
HS3602	360-20	14.173	+ 0 / -0.005	11 7/8	12.625	16	M20	362	341876	398029	16.653	21.85	2.363	2.799	0.437	14.370	5/16	275
HS3802	380-20	14.961	+ 0 / -0.005	12 1/2	13.000	18	M20	362	403340	444630	17.401	23.03	2.599	3.069	0.471	15.236	5/16	301
HS3902	390-20	15.354	+ 0 / -0.005	12 5/8	13.750	20	M20	362	446171	549086	17.795	23.43	2.599	3.074	0.476	15.629	5/16	344
HS4202	420-20	16.535	+ 0 / -0.006	13 3/4	14.625	22	M20	362	544495	625817	19.094	24.81	2.756	3.229	0.473	16.810	5/16	407
HS4602	460-20	18.110	+ 0 / -0.006	14 5/8	16.375	28	M20	362	704454	927856	20.747	26.97	3.090	3.602	0.512	18.425	3/8	517
HS5002	500-20	19.685	+ 0 / -0.006	16 1/4	17.375	30	M20	362	860127	1014952	22.519	29.53	3.484	3.997	0.513	19.999	3/8	704

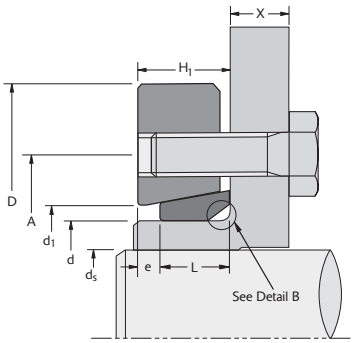
SD30 — Split SD — Heavy Duty

Part Number	Size	SD bore (Hub OD) d (inch)	Hub OD Tolerance T_Ld (inch)	Shaft Diameter Range ds-MIN (inch)	Shaft Diameter Range ds-MAX (inch)	Locking Screws Qty	Locking Screws Size	M_a Install Torque (ft lb)	M_t Max. Transmitted Torque ds-MIN (ft lb)	M_t Max. Transmitted Torque ds-MAX (ft lb)	A (inch)	D (inch)	L (inch)	H_1 (inch)	e (inch)	d_1 (inch)	R (inch)	Ship wt (lb)
HS0443	44-30	1.732	+ 0 / -0.002	1 1/8	1.419	5	M8	22	941	1653	2.598	3.35	0.649	0.768	0.119	1.890	1/16	1.4
HS0503	50-30	1.969	+ 0 / -0.002	1 3/8	1.612	7	M8	22	1761	2749	2.874	3.74	0.689	0.868	0.180	1.984	1/16	1.8
HS0553	55-30	2.165	+ 0 / -0.002	1 1/2	1.773	7	M8	22	1892	3023	3.071	4.13	0.689	0.868	0.180	2.323	3/32	2.4
HS0623	62-30	2.441	+ 0 / -0.002	1 3/4	1.999	7	M8	22	2353	3244	3.346	4.53	0.689	0.868	0.180	2.598	3/32	2.9
HS0683	68-30	2.677	+ 0 / -0.002	1 7/8	2.193	8	M8	22	2861	4173	3.622	4.72	0.689	0.868	0.180	2.835	3/32	3
HS0753	75-30	2.953	+ 0 / -0.002	2 1/8	2.418	7	M10	44	4552	6529	4.134	5.71	0.906	1.102	0.197	3.307	1/8	3.8
HS0803	80-30	3.150	+ 0 / -0.002	2 3/8	2.580	7	M10	44	5541	6971	4.134	5.71	0.906	1.102	0.197	3.307	1/8	4.2
HS0903	90-30	3.543	+ 0 / -0.004	2 1/2	2.902	8	M10	44	5946	8994	4.567	6.30	0.985	1.182	0.198	3.701	1/8	7
HS1003	100-30	3.937	+ 0 / -0.004	2 7/8	3.224	10	M10	44	9370	12700	4.961	6.69	1.063	1.262	0.199	4.094	1/8	10
HS1103	110-30	4.331	+ 0 / -0.004	3 1/8	3.547	12	M10	44	12116	16879	5.354	7.28	1.182	1.377	0.196	4.482	1/8	17
HS1253	125-30	4.921	+ 0 / -0.004	3 1/2	4.031	12	M12	74	20092	28393	6.299	8.47	1.260	1.497	0.237	5.157	3/16	24
HS1403	140-30	5.512	+ 0 / -0.004	4	4.514	12	M12	74	23275	31491	6.889	9.06	1.378	1.657	0.279	5.744	3/16	29
HS1553	155-30	6.102	+ 0 / -0.004	4 1/2	4.998	15	M12	74	34154	42273	7.795	10.36	1.496	1.772	0.276	6.496	3/16	44
HS1653	165-30	6.496	+ 0 / -0.004	4 7/8	5.320	10	M16	185	46957	58743	8.267	11.42	1.614	1.932	0.318	6.940	3/16	57
HS1753	175-30	6.890	+ 0 / -0.004	5 1/4	5.643	10	M16	185	51804	62320	8.661	11.82	1.614	1.932	0.318	7.322	3/16	64
HS1853	185-30	7.283	+ 0 / -0.004	5 5/8	5.965	15	M16	185	86847	100371	9.291	12.99	2.008	2.402	0.394	7.704	3/16	104
HS1953	195-30	7.677	+ 0 / -0.004	5 7/8	6.288	15	M16	185	89488	105820	9.685	13.78	2.106	2.500	0.394	8.102	1/4	110
HS2003	200-30	7.874	+ 0 / -0.004	6 1/4	6.449	15	M16	185	100466	108524	9.685	13.78	2.106	2.500	0.394	8.102	1/4	110
HS2203	220-30	8.661	+ 0 / -0.004	6 3/8	7.094	20	M16	185	123458	155750	10.629	14.57	2.539	2.935	0.396	8.901	1/4	143
HS2403	240-30	9.449	+ 0 / -0.004	7	7.739	15	M20	362	162518	201425	11.614	15.95	2.657	3.130	0.473	9.692	1/4	192
HS2603	260-30	10.236	+ 0 / -0.005	7 5/8	8.383	18	M20	362	207733	263252	12.637	16.93	2.972	3.445	0.473	10.511	1/4	220
HS2803	280-30	11.024	+ 0 / -0.005	8 3/8	9.028	21	M20	362	276822	332933	13.622	18.11	3.307	3.779	0.472	11.370	5/16	291
HS3003	300-30	11.811	+ 0 / -0.005	9	9.673	22	M20	362	313789	374371	14.330	19.10	3.386	3.859	0.473	12.177	5/16	308
HS3203	320-30	12.598	+ 0 / -0.005	9 5/8	10.318	24	M20	362	368957	427823	15.196	20.48	3.544	4.019	0.476	12.964	5/16	363
HS3403	340-30	13.386	+ 0 / -0.005	10 1/4	10.963	21	M24	620	489329	577963	16.535	22.44	3.859	4.334	0.476	13.724	5/16	528
HS3603	360-30	14.173	+ 0 / -0.005	11	11.608	22	M24	620	562859	642534	17.007	23.23	4.035	4.512	0.477	14.515	3/8	550
HS3903	390-30	15.354	+ 0 / -0.005	11 5/8	12.575	24	M24	620	628949	762028	18.425	25.99	4.193	4.667	0.475	15.609	3/8	770
HS4203	420-30	16.535	+ 0 / -0.006	12 1/2	13.543	30	M24	620	852841	1033732	19.842	27.17	4.705	5.177	0.472	16.811	3/8	902
HS4603	460-30	18.110	+ 0 / -0.006	13 5/8	14.832	28	M27	922	1144559	1403894	21.535	30.32	5.000	5.556	0.556	18.503	1/2	1188
HS5003	500-30	19.685	+ 0 / -0.006	14 7/8	16.122	32	M27	922	1443359	1749331	23.622	33.47	5.434	5.986	0.552	19.999	1/2	1650

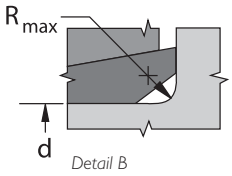
B-LOC® Shrink Disc Half



Half Shrink Disc Type HC



Half Shrink Disc Type HT



Detail B

Dimension X is required when ordering Half Shrink Disc Type HT. See Table 1 at bottom left for web clearance hole data.

SD10 — Half SD — Standard Duty

Type HC Part Number	Type HT Part Number	Size	SD bore (Hub OD)	Hub OD Tolerance	Shaft Diameter Range		Locking Screws			M_a	M_t		A	D	L	H_1	e	d_1	R	Ship wt
										Install Torque	Max. Transmitted Torque									
			d	T_1d	ds-MIN	ds-MAX	Qty	HC Size	HT Size	(ft lb)	ds-MIN (ft lb)	ds-MAX (ft lb)	(inch)	(inch)	(inch)	(inch)	(inch)	(inch)	(inch)	(lb)
HHC0241	HHT0241	24-10	0.945	+ 0 / -0.002	5/8	0.774	6	M5 x 16	M5	3.6	69	139	1.417	1.97	0.374	0.453	0.080	1.023	1/16	0.3
HHC0301	HHT0301	30-10	1.181	+ 0 / -0.002	3/4	0.967	7	M5 x 18	M5	3.6	89	204	1.732	2.36	0.413	0.493	0.081	1.259	1/16	0.4
HHC0361	HHT0361	36-10	1.417	+ 0 / -0.002	7/8	1.161	5	M6 x 20	M6	8.7	158	333	2.047	2.83	0.448	0.533	0.085	1.496	1/16	0.6
HHC0441	HHT0441	44-10	1.732	+ 0 / -0.002	1 1/8	1.419	7	M6 x 20	M6	8.7	342	599	2.402	3.15	0.492	0.568	0.077	1.850	1/16	0.8
HHC0501	HHT0501	50-10	1.969	+ 0 / -0.002	1 3/8	1.612	8	M6 x 22	M6	8.7	482	783	2.756	3.54	0.531	0.608	0.077	2.086	1/16	1
HHC0551	HHT0551	55-10	2.165	+ 0 / -0.002	1 1/2	1.773	8	M6 x 25	M6	8.7	507	854	2.953	3.94	0.551	0.668	0.118	2.283	3/32	1.4
HHC0621	HHT0621	62-10	2.441	+ 0 / -0.002	1 3/4	1.999	10	M6 x 25	M6	8.7	859	1188	3.386	4.33	0.551	0.668	0.118	2.598	3/32	1.6
HHC0681	HHT0681	68-10	2.677	+ 0 / -0.002	1 7/8	2.193	10	M6 x 25	M6	8.7	880	1303	3.386	4.53	0.551	0.668	0.118	2.834	3/32	1.6
HHC0751	HHT0751	75-10	2.953	+ 0 / -0.002	2 1/8	2.418	7	M8 x 25	M8	22	1396	2029	3.937	5.43	0.689	0.807	0.118	3.110	1/8	2.6
HHC0801	HHT0801	80-10	3.150	+ 0 / -0.002	2 3/8	2.580	7	M8 x 25	M8	22	1708	2166	3.937	5.71	0.689	0.807	0.118	3.307	1/8	2.8
HHC0901	HHT0901	90-10	3.543	+ 0 / -0.004	2 1/2	2.902	10	M8 x 30	M8	22	2376	3570	4.488	6.10	0.788	0.942	0.155	3.700	1/8	4
HHC0951	HHT0951	95-10	3.740	+ 0 / -0.004	2 3/4	3.063	12	M8 x 30	M8	22	3416	4554	4.882	6.69	0.866	1.042	0.176	4.094	1/8	6
HHC1001	HHT1001	100-10	3.937	+ 0 / -0.004	2 7/8	3.224	12	M8 x 35	M8	22	3530	4793	4.882	6.69	0.866	1.042	0.176	4.094	1/8	6
HHC1101	HHT1101	110-10	4.331	+ 0 / -0.004	3 1/8	3.547	9	M10 x 40	M10	44	4507	6301	5.354	7.28	0.965	1.162	0.198	4.488	1/8	7
HHC1251	HHT1251	125-10	4.921	+ 0 / -0.004	3 1/2	4.031	12	M10 x 40	M10	44	6855	9770	6.299	8.46	1.024	1.217	0.194	5.275	1/8	11
HHC1401	HHT1401	140-10	5.512	+ 0 / -0.004	4	4.514	10	M12 x 45	M12	74	9824	13220	6.890	9.06	1.103	1.337	0.235	5.708	3/16	13
HHC1551	HHT1551	155-10	6.102	+ 0 / -0.004	4 1/2	4.998	12	M12 x 50	M12	74	13758	17025	7.559	10.36	1.181	1.417	0.236	6.496	3/16	17
HHC1651	HHT1651	165-10	6.496	+ 0 / -0.004	4 7/8	5.320	8	M16 x 55	M16	185	18869	23568	8.268	11.42	1.299	1.532	0.233	6.889	3/16	24
HHC1751	HHT1751	175-10	6.890	+ 0 / -0.004	5 1/4	5.643	8	M16 x 55	M16	185	20810	25003	8.661	11.81	1.299	1.532	0.233	7.283	3/16	25
HHC1851	HHT1851	185-10	7.283	+ 0 / -0.004	5 5/8	5.965	10	M16 x 65	M16	185	28401	32983	9.291	12.99	1.595	1.867	0.273	7.677	3/16	39
HHC1951	HHT1951	195-10	7.677	+ 0 / -0.004	5 7/8	6.288	12	M16 x 65	M16	185	35954	42463	9.685	13.78	1.595	1.867	0.273	8.110	3/16	44
HHC2001	HHT2001	200-10	7.874	+ 0 / -0.004	6 1/4	6.449	12	M16 x 65	M16	185	40337	43548	9.685	13.78	1.595	1.867	0.273	8.110	3/16	43
HHC2201	HHT2201	220-10	8.661	+ 0 / -0.004	6 3/8	7.094	15	M16 x 80	M16	185	46115	58213	10.630	14.57	2.027	2.325	0.298	8.897	1/4	57
HHC2401	HHT2401	240-10	9.449	+ 0 / -0.004	7	7.739	12	M20 x 80	M20	362	65323	80909	11.614	15.95	2.106	2.405	0.299	9.763	1/4	72
HHC2601	HHT2601	260-10	10.236	+ 0 / -0.004	7 5/8	8.383	14	M20 x 90	M20	362	81099	102632	12.638	16.93	2.323	2.640	0.318	10.551	1/4	89
HHC2801	HHT2801	280-10	11.024	+ 0 / -0.005	8 3/8	9.028	16	M20 x 100	M20	362	105291	126689	13.622	18.11	2.638	2.994	0.356	11.338	5/16	115
HHC3001	HHT3001	300-10	11.811	+ 0 / -0.005	9	9.673	18	M20 x 100	M20	362	128639	153375	14.331	19.10	2.796	3.154	0.359	12.125	5/16	133
HHC3201	HHT3201	320-10	12.598	+ 0 / -0.005	9 5/8	10.318	20	M20 x 100	M20	362	155246	179864	15.197	20.48	2.796	3.154	0.359	12.913	5/16	153
HHC3401	HHT3401	340-10	13.386	+ 0 / -0.005	10 1/4	10.963	24	M20 x 110	M20	362	196044	231196	16.063	22.44	3.032	3.464	0.432	13.700	5/16	209
HHC3501	HHT3501	350-10	13.780	+ 0 / -0.005	10 7/8	11.285	24	M20 x 110	M20	362	216343	237049	17.008	22.84	3.150	3.544	0.395	14.488	5/16	220
HHC3601	HHT3601	360-10	14.173	+ 0 / -0.005	11 1/4	11.608	24	M20 x 110	M20	362	225703	243851	17.008	23.23	3.150	3.544	0.395	14.488	5/16	225
HHC3801	HHT3801	380-10	14.961	+ 0 / -0.005	11 1/2	12.253	20	M24 x 120	M24	620	267503	311526	18.031	25.40	3.229	3.624	0.396	15.276	5/16	292
HHC3901	HHT3901	390-10	15.354	+ 0 / -0.005	12 1/4	12.575	21	M24 x 120	M24	620	316592	336924	18.425	25.99	3.327	3.722	0.396	15.629	3/8	305
HHC4201	HHT4201	420-10	16.535	+ 0 / -0.006	12 1/2	13.543	24	M24 x 130	M24	620	342747	414833	19.843	27.17	3.720	4.117	0.397	16.929	3/8	364
HHC4401	HHT4401	440-10	17.323	+ 0 / -0.006	13 1/2	14.187	24	M24 x 130	M24	620	384372	426268	20.748	29.53	3.977	4.467	0.491	17.716	3/8	467
HHC4601	HHT4601	460-10	18.110	+ 0 / -0.006	14 1/8	14.832	28	M24 x 130	M24	620	467097	525790	21.535	30.32	3.977	4.467	0.491	18.425	3/8	483
HHC4801	HHT4801	480-10	18.898	+ 0 / -0.006	14 3/4	15.477	30	M24 x 150	M24	620	523543	588179	22.441	31.50	4.292	4.786	0.495	19.291	1/2	555
HHC5001	HHT5001	500-10	19.685	+ 0 / -0.006	15 3/8	16.122	24	M27 x 150	M27	922	584795	655074	23.228	33.46	4.292	4.786	0.495	19.999	1/2	626

Specifications for Web Clearance Holes (diameter in inches)									
Screw Size	M5	M6	M8	M10	M12	M16	M20	M24	M27
Split Shrink Disc	0.281	0.328	0.406	0.500	0.594	0.750	0.906	1.063	1.188
Half Shrink Disc HT	0.219	0.266	0.359	0.438	0.531	0.719	0.875	1.031	1.156

Table 1

Notes:

- *Type HT: Screw length must be determined based on your X dimension. Please consult Applications Engineering.*
- *Inner rings of all shrink discs are supplied with one lengthwise slit.*
- *Shrink discs are available for shafts up to 40" diameter and in a variety of special designs.*
- *Maximum shaft sizes listed for Shrink Disc Series SD10 and SD30 reflect equal section moduli of shaft and hub (maximum shaft diameter = $\frac{d}{1.221}$).*
- *Larger shrink discs for shafts up to 40" diameter are available on request.*

Shaft Sizes (inch)		Maximum Diametrical Clearance Between Shaft and Hub Bore
>	≤	
	1 1/8	0.0010
1 1/8	1 15/16	0.0015
1 15/16	4 3/4	0.0020
4 3/4	7	0.0030
7	10	0.0040
10	14	0.0050
14		0.0060

Table 2
For Series SD10, SD20 and SD30

B-LOC®
Shrink Disc
Half

SD20 — Half SD — Light Duty

Type HC Part Number	Type HT Part Number	Size	SD bore (Hub OD)	Hub OD Tolerance	Shaft Diameter Range		Locking Screws			M_a	M_t		A	D	L	H_1	e	d_1	R	Ship wt
										Install Torque	Max. Transmitted Torque									
			d (inch)	T_Ld (inch)	ds-MIN (inch)	ds-MAX (inch)	Qty	HC Size	HT Size	(ft lb)	ds-MIN (ft lb)	ds-MAX (ft lb)	(inch)	(inch)	(inch)	(inch)	(inch)	(inch)	(inch)	(lb)
HHC1252	HHT1252	125-20	4.921	+ 0 / -0.004	3 5/8	4.125	8	M10 x 40	M10	44	4690	6672	6.220	7.28	0.965	1.202	0.238	5.118	1/8	7
HHC1402	HHT1402	140-20	5.512	+ 0 / -0.004	4 1/4	5.00	9	M10 x 40	M10	44	6846	10164	6.889	8.67	0.965	1.202	0.238	5.669	1/8	10
HHC1552	HHT1552	155-20	6.102	+ 0 / -0.004	5	5.500	11	M10 x 40	M10	44	10572	13724	7.559	9.65	0.965	1.202	0.238	6.259	1/8	12
HHC1652	HHT1652	165-20	6.496	+ 0 / -0.004	5 3/8	5.750	10	M12 x 50	M12	74	15326	18339	8.267	10.24	1.103	1.417	0.315	6.653	3/16	16
HHC1752	HHT1752	175-20	6.890	+ 0 / -0.004	5 5/8	6.125	11	M12 x 50	M12	74	17470	21794	8.661	10.83	1.103	1.417	0.315	7.047	3/16	17
HHC1852	HHT1852	185-20	7.283	+ 0 / -0.004	6	6.500	12	M12 x 50	M12	74	20822	25518	8.858	11.62	1.103	1.417	0.315	7.440	3/16	20
HHC1952	HHT1952	195-20	7.677	+ 0 / -0.004	6 1/2	7.000	15	M12 x 60	M12	74	29490	35537	9.330	12.40	1.299	1.617	0.318	7.834	3/16	27
HHC2202	HHT2202	220-20	8.661	+ 0 / -0.004	7	7.875	10	M16 x 70	M16	185	38227	50448	10.433	13.59	1.496	1.852	0.356	8.818	3/16	37
HHC2402	HHT2402	240-20	9.449	+ 0 / -0.004	7 7/8	8.500	12	M16 x 70	M16	185	53506	64932	11.417	14.57	1.594	1.950	0.356	9.606	1/4	42
HHC2602	HHT2602	260-20	10.236	+ 0 / -0.004	8 5/8	9.250	14	M16 x 70	M16	185	69970	83309	12.204	15.55	1.712	2.110	0.398	10.433	1/4	51
HHC2802	HHT2802	280-20	11.024	+ 0 / -0.005	9	9.875	16	M16 x 75	M16	185	79362	100198	13.110	16.74	1.949	2.345	0.397	11.220	1/4	67
HHC3002	HHT3002	300-20	11.811	+ 0 / -0.005	9 7/8	10.625	18	M16 x 75	M16	185	114968	135644	14.094	18.11	1.949	2.345	0.397	12.007	1/4	79
HHC3202	HHT3202	320-20	12.598	+ 0 / -0.005	10 1/2	11.375	20	M16 x 75	M16	185	119470	146023	14.881	19.49	1.949	2.385	0.437	12.795	1/4	96
HHC3402	HHT3402	340-20	13.386	+ 0 / -0.005	11 3/8	12.000	21	M16 x 75	M16	185	140500	160429	15.826	21.07	1.949	2.385	0.437	13.582	1/4	114
HHC3602	HHT3602	360-20	14.173	+ 0 / -0.005	11 7/8	12.625	16	M20 x 90	M20	362	170938	199015	16.653	21.85	2.363	2.799	0.437	14.370	5/16	137
HHC3802	HHT3802	380-20	14.961	+ 0 / -0.005	12 1/2	13.000	18	M20 x 100	M20	362	201670	222315	17.401	23.03	2.599	3.069	0.471	15.236	5/16	168
HHC3902	HHT3902	390-20	15.354	+ 0 / -0.005	12 5/8	13.75	20	M20 x 100	M20	362	223086	274543	17.795	23.43	2.599	3.074	0.476	15.629	5/16	172
HHC4202	HHT4202	420-20	16.535	+ 0 / -0.006	13 3/4	14.625	22	M20 x 100	M20	362	272248	312909	19.094	24.81	2.756	3.229	0.473	16.810	5/16	199
HHC4602	HHT4602	460-20	18.110	+ 0 / -0.006	14 5/8	16.375	28	M20 x 110	M20	362	352227	463928	20.747	26.97	3.090	3.602	0.512	18.425	3/8	257
HHC5002	HHT5002	500-20	19.685	+ 0 / -0.006	16 1/4	17.375	30	M20 x 120	M20	362	430064	507476	22.519	29.53	3.484	3.997	0.513	19.999	3/8	350

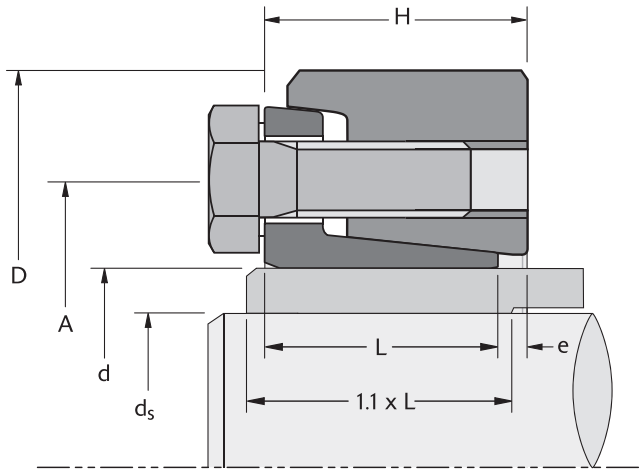
SD30 — Half SD — Heavy Duty

Type HC Part Number	Type HT Part Number	Size	SD bore (Hub OD)	Hub OD Tolerance	Shaft Diameter Range		Locking Screws			M_a	M_t		A	D	L	H_1	e	d_1	R	Ship wt
										Install Torque	Max. Transmitted Torque									
			d (inch)	T_Ld (inch)	ds-MIN (inch)	ds-MAX (inch)	Qty	HC Size	HT Size	(ft lb)	ds-MIN (ft lb)	ds-MAX (ft lb)	(inch)	(inch)	(inch)	(inch)	(inch)	(inch)	(inch)	(lb)
HHC0443	HHT0443	44-30	1.732	+ 0 / -0.002	1 1/8	1.419	5	M8 x 30	M8	22	471	827	2.598	3.35	0.649	0.768	0.119	1.890	1/16	1.2
HHC0503	HHT0503	50-30	1.969	+ 0 / -0.002	1 3/8	1.612	7	M8 x 35	M8	22	881	1375	2.874	3.74	0.689	0.868	0.180	1.984	1/16	1.8
HHC0553	HHT0553	55-30	2.165	+ 0 / -0.002	1 1/2	1.773	7	M8 x 35	M8	22	946	1512	3.071	4.13	0.689	0.868	0.180	2.323	3/32	2.1
HHC0623	HHT0623	62-30	2.441	+ 0 / -0.002	1 3/4	1.999	7	M8 x 35	M8	22	1177	1622	3.346	4.53	0.689	0.868	0.180	2.598	3/32	2.3
HHC0683	HHT0683	68-30	2.677	+ 0 / -0.002	1 7/8	2.193	8	M8 x 35	M8	22	1431	2087	3.622	4.72	0.689	0.868	0.180	2.835	3/32	2.5
HHC0753	HHT0753	75-30	2.953	+ 0 / -0.002	2 1/8	2.418	7	M10 x 40	M10	44	2276	3265	4.134	5.71	0.906	1.102	0.197	3.307	1/8	4.6
HHC0803	HHT0803	80-30	3.150	+ 0 / -0.002	2 3/8	2.580	7	M10 x 40	M10	44	2771	3486	4.134	5.71	0.906	1.102	0.197	3.307	1/8	4.4
HHC0903	HHT0903	90-30	3.543	+ 0 / -0.004	2 1/2	2.902	8	M10 x 40	M10	44	2973	4497	4.567	6.30	0.985	1.182	0.198	3.701	1/8	6
HHC1003	HHT1003	100-30	3.937	+ 0 / -0.004	2 7/8	3.224	10	M10 x 45	M10	44	4685	6350	4.961	6.69	1.063	1.262	0.199	4.094	1/8	7
HHC1103	HHT1103	110-30	4.331	+ 0 / -0.004	3 1/8	3.547	12	M10 x 45	M10	44	6058	8440	5.354	7.28	1.182	1.377	0.196	4.482	1/8	9
HHC1253	HHT1253	125-30	4.921	+ 0 / -0.004	3 1/2	4.031	12	M12 x 50	M12	74	10046	14197	6.299	8.47	1.260	1.497	0.237	5.157	3/16	13
HHC1403	HHT1403	140-30	5.512	+ 0 / -0.004	4	4.514	12	M12 x 60	M12	74	11638	15746	6.889	9.06	1.378	1.657	0.279	5.744	3/16	16
HHC1553	HHT1553	155-30	6.102	+ 0 / -0.004	4 1/2	4.998	15	M12 x 60	M12	74	17077	21137	7.795	10.36	1.496	1.772	0.276	6.496	3/16	23
HHC1653	HHT1653	165-30	6.496	+ 0 / -0.004	4 7/8	5.320	10	M16 x 70	M16	185	23479	29372	8.267	11.42	1.614	1.932	0.318	6.940	3/16	32
HHC1753	HHT1753	175-30	6.890	+ 0 / -0.004	5 1/4	5.643	10	M16 x 70	M16	185	25902	31160	8.661	11.82	1.614	1.932	0.318	7.322	3/16	33
HHC1853	HHT1853	185-30	7.283	+ 0 / -0.004	5 5/8	5.965	15	M16 x 80	M16	185	43424	50186	9.291	12.99	2.008	2.402	0.394	7.704	3/16	53
HHC1953	HHT1953	195-30	7.677	+ 0 / -0.004	5 7/8	6.288	15	M16 x 80	M16	185	44744	52910	9.685	13.78	2.106	2.500	0.394	8.102	1/4	60
HHC2003	HHT2003	200-30	7.874	+ 0 / -0.004	6 1/4	6.449	15	M16 x 80	M16	185	50233	54262	9.685	13.78	2.106	2.500	0.394	8.102	1/4	59
HHC2203	HHT2203	220-30	8.661	+ 0 / -0.004	6 3/8	7.094	20	M16 x 90	M16	185	61729	77875	10.629	14.57	2.539	2.935	0.396	8.901	1/4	76
HHC2403	HHT2403	240-30	9.449	+ 0 / -0.004	7	7.739	15	M20 x 100	M20	362	81259	100713	11.614	15.95	2.657	3.130	0.473	9.692	1/4	99
HHC2603	HHT2603	260-30	10.236	+ 0 / -0.005	7 5/8	8.383	18	M20 x 110	M20	362	103867	131626	12.637	16.93	2.972	3.445	0.473	10.511	1/4	121
HHC2803	HHT2803	280-30	11.024	+ 0 / -0.005	8 3/8	9.028	21	M20 x 120	M20	362	138411	166467	13.622	18.11	3.307	3.779	0.472	11.370	5/16	149
HHC3003	HHT3003	300-30	11.811	+ 0 / -0.005	9	9.673	22	M20 x 120	M20	362	156895	187186	14.330	19.10	3.386	3.859	0.473	12.177	5/16	165
HHC3203	HHT3203	320-30	12.598	+ 0 / -0.005	9 5/8	10.318	24	M20 x 120	M20	362	184479	213912	15.196	20.48	3.544	4.019	0.476	12.964	5/16	200
HHC3403	HHT3403	340-30	13.386	+ 0 / -0.005	10 1/4	10.963	21	M24 x 130	M24	620	244665	288982	16.535	22.44	3.859	4.334	0.476	13.724	5/16	272
HHC3603	HHT3603	360-30	14.173	+ 0 / -0.005	11	11.608	22	M24 x 140	M24	620	281430	321267	17.007	23.23	4.035	4.512	0.477	14.515	3/8	286
HHC3903	HHT3903	390-30	15.354	+ 0 / -0.005	11 5/8	12.575	24	M24 x 140	M24	620	314475	381014	18.425	25.99	4.193	4.667	0.475	15.609	3/8	384
HHC4203	HHT4203	420-30	16.535	+ 0 / -0.006	12 1/2	13.543	30	M24 x 160	M24	620	426421	516866	19.842	27.17	4.705	5.177	0.472	16.811	3/8	462
HHC4603	HHT4603	460-30	18.110	+ 0 / -0.006	13 5/8	14.832	28	M27 x 170	M27	922	572280	701947	21.535	30.32	5.000	5.556	0.556	18.503	1/2	624
HHC5003	HHT5003	500-30	19.685	+ 0 / -0.006	14 7/8	16.122	32	M27 x 180	M27	922	721680	874666	23.622	33.47	5.434	5.986	0.552	19.999	1/2	838

B-LOC® Single Taper Shrink Discs (SD40)

We also offer SD40 Single Taper Shrink Discs as an alternative to SD10, SD20 & SD30 Double Taper Shrink Discs. The SD40 units have the following attributes:

- **External locking device**
- **Simpler two piece design**
- **Integrated removal holes**
- **Provides extremely concentric and well-balanced mechanical interference fit**



The advantages of the SD40 over the SD10, SD20 and SD30 include:

- No torque wrench needed.* Simply tighten the screws in clockwise sequence, using several passes, until the front faces of the flange and of the outer ring are aligned
- Save up to 80% of mounting time if using a powered tool
- High transmissible torque
- Aligning the two flanges (flush mounted) ensures concentricity, reducing the need for dynamic balancing

Note: Dynamic fit pressures vary between Single Taper and Double Taper shrink discs, as this is based on effective contact length. This should be taken into consideration.

* A torque wrench is recommended for best performance.

For assistance or more information on B-LOC Single Taper Shrink Discs, contact Fenner Drives Applications Engineering group at AE@fennerdrives.com.

B-LOC® Shrink Disc SD40



Shaft Sizes (inch)		Maximum Diametrical Clearance Between Shaft and Hub Bore
>	≤	
1.18	1.97	0.0016
1.97	3.15	0.0019
3.15	4.72	0.0022
4.72	6.30	0.0026
6.30	7.09	0.0031
7.09	9.84	0.0035
9.84	12.40	0.0040
12.40	15.75	0.0044
15.75	19.69	0.0048
19.69	22.05	0.0054

SD40 — Single Taper

Part Number	Size	SD bore (Hub OD)	Hub OD Tolerance	Shaft Diameter Range		Locking Screws		M_a	M_t		A	D	L	H	e	R	Ship wt
								Install Torque	Max. Transmitted Torque								
		d	T_Ld	ds-MIN	ds-MAX	Qty	Size	(ft lb)	ds-MIN (ft lb)	ds-MAX (ft lb)	(inch)	(inch)	(inch)	(inch)	(inch)	(inch)	(lb)
H0504	50-40	1.969	+0.0010/-0.0020	1.496	1.654	8	M8 x 20	25	1180	1475	2.677	3.543	0.925	1.028	0.103	0.086	1.8
H0554	55-40	2.165	+0.0012/-0.0024	1.654	1.890	8	M8 x 20	25	1254	1844	2.835	3.937	1.024	1.142	0.118	0.090	2.4
H0604	60-40	2.362	+0.0012/-0.0024	1.890	2.047	9	M8 x 20	25	1696	2139	3.150	4.331	1.024	1.152	0.128	0.094	2.9
H0624	62-40	2.441	+0.0012/-0.0024	1.890	2.047	9	M8 x 20	25	1696	2139	3.150	4.331	1.024	1.152	0.128	0.096	2.9
H0684	68-40	2.677	+0.0012/-0.0024	1.969	2.362	9	M8 x 20	25	1770	2950	3.386	4.528	1.024	1.157	0.133	0.101	2.9
H0754	75-40	2.953	+0.0012/-0.0024	2.165	2.559	10	M10 x 25	52	2803	4426	3.937	5.433	1.063	1.209	0.146	0.106	5.1
H0804	80-40	3.150	+0.0012/-0.0024	2.362	2.756	10	M10 x 25	52	3172	4794	4.094	5.551	1.063	1.224	0.161	0.110	5.1
H0854	85-40	3.346	+0.0014/-0.0028	2.559	2.953	11	M10 x 25	52	4426	6343	4.488	6.102	1.339	1.504	0.165	0.114	7.1
H0904	90-40	3.543	+0.0014/-0.0028	2.559	2.953	11	M10 x 25	52	4426	6343	4.488	6.102	1.339	1.504	0.165	0.119	7.1
H0954	95-40	3.740	+0.0014/-0.0028	2.756	3.150	14	M10 x 25	52	5532	7819	4.882	6.693	1.535	1.711	0.176	0.123	9.5
H1004	100-40	3.937	+0.0014/-0.0028	2.756	3.150	14	M10 x 25	52	5532	7819	4.882	6.693	1.535	1.711	0.176	0.127	9.5
H1054	105-40	4.134	+0.0014/-0.0028	3.150	3.543	12	M12 x 35	89	9441	12539	5.354	7.283	1.713	1.933	0.220	0.131	13
H1104	110-40	4.331	+0.0014/-0.0028	3.150	3.543	12	M12 x 35	89	9441	12539	5.354	7.283	1.713	1.933	0.220	0.135	13
H1154	115-40	4.528	+0.0014/-0.0028	3.346	3.740	14	M12 x 35	89	10105	13424	5.787	7.756	1.890	2.087	0.197	0.139	16
H1204	120-40	4.724	+0.0014/-0.0028	3.346	3.740	14	M12 x 35	89	10105	13424	5.787	7.756	1.890	2.087	0.197	0.143	15
H1254	125-40	4.921	+0.0017/-0.0033	3.543	3.937	14	M12 x 35	89	12244	15858	6.220	8.465	1.890	2.102	0.212	0.147	19
H1304	130-40	5.118	+0.0017/-0.0033	3.740	4.331	12	M14 x 40	140	15121	21759	6.496	9.055	2.008	2.264	0.256	0.151	24
H1354	135-40	5.315	+0.0017/-0.0033	3.740	4.331	12	M14 x 40	140	15121	21759	6.496	9.055	2.008	2.264	0.256	0.155	24
H1404	140-40	5.512	+0.0017/-0.0033	3.937	4.528	12	M14 x 40	140	17334	23972	6.772	9.055	2.008	2.276	0.268	0.159	23
H1504	150-40	5.906	+0.0017/-0.0033	4.331	4.921	14	M14 x 40	140	23234	31717	7.323	10.354	2.165	2.449	0.284	0.167	34
H1554	155-40	6.102	+0.0017/-0.0033	4.331	4.921	14	M14 x 40	140	23234	31717	7.323	10.354	2.165	2.449	0.284	0.171	34
H1604	160-40	6.299	+0.0017/-0.0033	4.724	5.315	12	M16 x 45	214	33192	43518	7.795	11.417	2.402	2.693	0.291	0.176	49
H1654	165-40	6.496	+0.0017/-0.0033	4.724	5.315	12	M16 x 50	214	33192	43518	7.795	11.417	2.402	2.693	0.291	0.180	47
H1704	170-40	6.693	+0.0017/-0.0033	5.118	5.709	14	M16 x 50	214	40568	52370	8.189	11.811	2.402	2.713	0.311	0.184	51
H1754	175-40	6.890	+0.0017/-0.0033	5.118	5.709	14	M16 x 50	214	40568	52370	8.189	11.811	2.402	2.713	0.311	0.188	50
H1804	180-40	7.087	+0.0017/-0.0033	5.512	6.102	16	M16 x 50	214	59746	74498	8.740	12.598	3.051	3.346	0.295	0.192	74
H1854	185-40	7.283	+0.0020/-0.0038	5.512	6.102	16	M16 x 50	214	59746	74498	8.740	12.598	3.051	3.346	0.295	0.196	72
H1904	190-40	7.480	+0.0020/-0.0038	5.906	6.496	16	M16 x 50	214	71547	88512	9.370	13.386	3.051	3.453	0.402	0.200	84
H1954	195-40	7.677	+0.0020/-0.0038	5.906	6.496	16	M16 x 50	214	71547	88512	9.370	13.386	3.051	3.453	0.402	0.204	82
H2004	200-40	7.874	+0.0020/-0.0038	5.906	6.496	16	M16 x 50	214	71547	88512	9.370	13.386	3.051	3.453	0.402	0.208	80
H2204	220-40	8.661	+0.0020/-0.0038	6.299	7.087	15	M20 x 60	420	95888	125392	10.551	14.567	3.799	4.234	0.435	0.224	117
H2404	240-40	9.449	+0.0020/-0.0038	6.693	7.874	16	M20 x 60	420	112115	161534	11.339	15.945	3.858	4.374	0.516	0.241	146
H2604	260-40	10.236	+0.0022/-0.0043	7.480	8.661	16	M20 x 60	420	158584	221280	12.283	16.929	4.350	4.933	0.583	0.257	181
H2804	280-40	11.024	+0.0022/-0.0043	8.268	9.449	18	M20 x 60	420	208003	280288	13.150	18.110	4.764	5.512	0.748	0.273	227
H3004	300-40	11.811	+0.0022/-0.0043	8.661	9.843	16	M24 x 70	730	269224	359211	14.173	19.094	4.882	5.504	0.622	0.290	265
H3204	320-40	12.598	+0.0024/-0.0047	9.449	10.630	18	M24 x 70	730	327494	427808	14.961	20.472	4.882	5.575	0.693	0.306	304
H3404	340-40	13.386	+0.0024/-0.0047	9.843	11.024	18	M24 x 70	730	395354	511157	15.827	22.441	5.472	6.236	0.764	0.322	417
H3604	360-40	14.173	+0.0024/-0.0047	10.630	11.417	20	M24 x 70	730	506731	612208	16.693	23.228	5.630	6.417	0.787	0.339	456
H3904	390-40	15.354	+0.0024/-0.0047	11.417	12.598	18	M27 x 70	1092	633598	787757	17.874	25.591	5.827	6.661	0.834	0.363	549
H4204	420-40	16.535	+0.0027/-0.0052	12.598	13.780	20	M27 x 70	1092	785544	959618	19.134	26.378	6.535	7.323	0.788	0.387	628
H4404	440-40	17.323	+0.0027/-0.0052	13.386	14.567	21	M27 x 70	1092	983221	1184586	19.921	29.134	6.772	7.634	0.862	0.404	866
H4604	460-40	18.110	+0.0027/-0.0052	14.173	15.354	21	M27 x 70	1092	1130003	1346858	21.024	30.315	7.008	7.992	0.984	0.420	924
H4704	470-40	18.504	+0.0027/-0.0052	14.567	15.748	21	M27 x 70	1092	811360	1032640	21.181	27.756	7.874	8.646	0.772	0.428	750
H4804	480-40	18.898	+0.0027/-0.0052	14.961	16.142	21	M30 x 100	1460	1343907	1586578	21.732	31.496	8.228	9.161	0.933	0.436	1085
H5004	500-40	19.685	+0.0027/-0.0052	15.748	16.929	24	M30 x 100	1460	1530520	1793843	23.937	33.465	7.795	8.685	0.890	0.453	1250
H5304	530-40	20.866	+0.0030/-0.0057	16.929	18.110	24	M30 x 100	1460	1548960	1792368	23.937	33.465	8.504	9.539	1.035	0.477	1162
H5604	560-40	22.047	+0.0030/-0.0057	17.717	18.898	24	M30 x 100	1460	2064542	2377285	24.882	37.008	8.661	9.630	0.969	0.502	1711
H5904	590-40	23.228	+0.0030/-0.0057	18.504	19.685	28	M30 x 100	1460	2408264	2755674	26.142	37.795	9.291	10.260	0.969	0.526	1841
H6204	620-40	24.409	+0.0030/-0.0057	19.685	21.260	28	M30 x 100	1460	2760099	3267568	27.795	38.189	10.197	11.378	1.181	0.550	2346

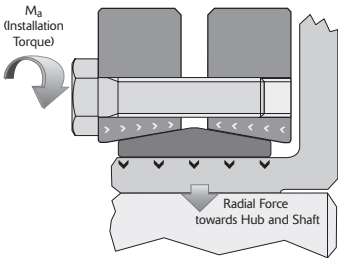
DESIGN FEATURES

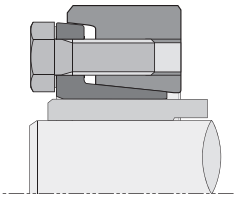
External locking devices for keyless frictional shaft/hub connections on shafts from 5/8" to 40" diameter, B-LOC® Shrink Discs…

- Provide a high capacity interference fit with all the positive features of conventional interference fits, but without their assembly and disassembly problems.
- Offer extremely concentric and well-balanced connections, ideal for high-speed applications.
- Permit simple axial positioning and angular timing.
- Are available in standard, light, and heavy-duty series to suit any application.

WORKING PRINCIPLE

B-LOC Shrink Discs provide a high-ratio conversion of screw clamp loads into radial contact pressures when the tapered collars are pulled together by tightening of the integrated high-strength locking screws. These radial contact pressures in turn accomplish the following:





1. Contract the inner ring and hub to close the clearance between shaft and hub bore.

2. Generate a defined shaft/hub contact pressure for a high capacity mechanical interference fit.

This frictional bond transmits torque, bending and/or thrust loads directly from the hub to the shaft; the shrink disc itself does not carry any torque or thrust load.

TORQUE

M_t = rated torque capacity of one B-LOC Shrink Disc with all screws tightened to specified torque M_a as listed in specifications, based on a coefficient of friction $\mu = 0.15$ and specified tolerances and clearances. Torque capacities for Half Shrink Discs = $\frac{M_t}{2}$

- Torque capacities for connections using shaft diameters between the minimum and maximum sizes listed can be approximated through interpolation.
- Transmissible torque decreases if tolerances and/or clearances are larger than specified; or if hollow shafts with bores exceeding approximately 35% of shaft diameter are used.

THRUST

T_h = transmissible thrust, determined by using the following equation:

$$T_h = \frac{2 \times M_t}{d}$$

where: d = shaft diameter
M_t = rated torque capacity

TORQUE AND THRUST COMBINED

Simultaneous transmission of torque and thrust requires calculating a resultant torque:

$$M_{tres} = \sqrt{T^2 + \left(\frac{F \times d}{2}\right)^2}$$

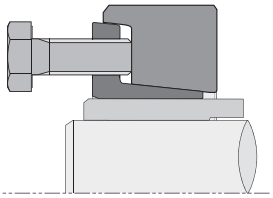
where: T = peak drive torque
F = peak thrust load
d = shaft diameter

Select a unit where $M_t \geq M_{tres}$

BENDING MOMENTS

Shrink discs will generally transmit a continuous bending moment equal to 25% of rated torque capacity M_t.

RELEASABILITY



Since the tapers of a B-LOC Shrink Disc are self-releasing and stresses from radial contractions of the hub are well within elastic limits, loosening the locking screws results in hub expansion back to its original dimensions, thereby restoring fit clearance for simple disassembly. The SD40 is manufactured with self-releasing tapers, however, it is possible the outer ring may need disengaging from the inner ring. This can be easily done by loosening the bolts in sequence, transferring the appropriate number of bolts over to the threaded back-off holes in the face of the shrink disc and progressively tightening these bolts until the shrink disc becomes loose. The hub and shaft will return to their original fit clearances.

MATERIAL

Shrink disc inner rings are manufactured from high-carbon steel. Outer rings are made from forged and heat treated alloy steel.

LUBRICANTS

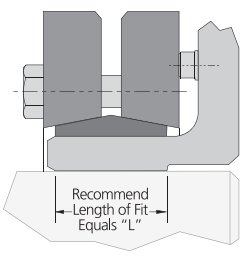
Shrink discs are supplied with Molybdenum Disulphide based lubricant applied to the tapers and to the locking screw threads and head contact areas.

SHAFT AND HUB MATERIAL

Listed specifications assume shaft and hub material with a yield point of at least 45 ksi (310 N/mm^2). Cast iron hubs are well suited for compressive stresses exerted by B-LOC Shrink Discs. However, a lower torsional hub strength generally requires the selection of a shrink disc at least one size larger than listed if full torque (i.e., that applicable to a steel hub) is to be transmitted.

LENGTH OF FIT

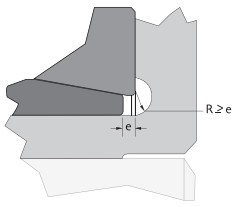
The most recent research on length of fit for a shrink disc connection* indicates that the hub bore-to-shaft interface should be relieved using a non-toleranced clearance except for that portion directly under the shrink disc inner ring, for a fit length equal to "L" for a standard shrink disc (see illustration at right). This approach eliminates fretting corrosion between shaft and hub which can make the separation of components difficult.



*(see Casper, Thomas: Reibkorrosionsverhalten von Spanelementverbindungen - Aachen: Mainz, 1999)

LOCATING AGAINST HUB FACE

In applications subjected to reversing bending moments, we recommend the configuration at right which requires a hub undercut where R ≥ e for smooth transition.



B-LOC® WK SERIES

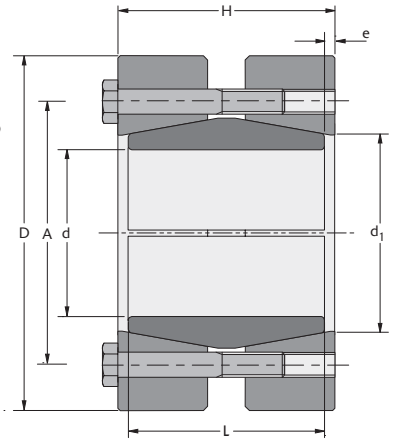


Metric hex head locking screws grade 10.9. (See M_a for install torque.)

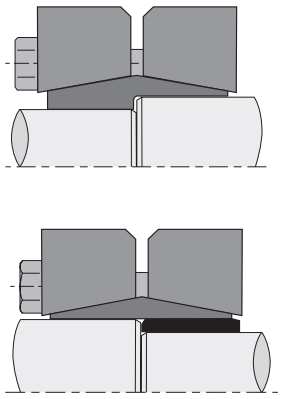
TOLERANCE (T_L)

T_L = .003" for shafts up to 1"
.006" for shafts over 1"

d = Shaft diameter machined to d+0/-T_L



Shaft engagement equal for both ends with gap not exceeding 5% of shaft diameter.



WK Couplings can be manufactured to accommodate different shaft diameters; this can also be accomplished using an adaptor sleeve.

WK Series

Part Number	Type	d (in)	D (in)	H (in)	L (in)	e (in)	d_1 (in)	A (in)	Locking Screws Qty	Locking Screws Size	M_a Install Torque (ft lb)	M_t Maximum Transmissible Torque (ft lb)	Ship wt (lb)
HWK0152010	WK 15	5/8	2.047	1.339	1.181	0.079	0.827	1.378	3	M6 x 30	8.7	132	0.9
HWK0152011		11/16										145	0.9
HWK0152012		3/4										158	0.9
HWK0202013	WK 20	13/16	2.362	1.575	1.339	0.118	1.024	1.614	5	M6 x 35	8.7	286	1.4
HWK0202014		7/8										308	1.3
HWK0202015		15/16										330	1.3
HWK0252100	WK 25	1	2.598	1.732	1.496	0.118	1.260	1.890	7	M6 x 35	8.7	492	1.8
HWK0252101		1 1/16										523	1.8
HWK0252102		1 1/8										554	1.7
HWK0302103	WK 30	1 3/16	2.992	1.890	1.654	0.118	1.496	2.126	8	M6 x 40	8.7	668	2.7
HWK0302104		1 1/4										703	2.7
HWK0302106		1 3/8										774	2.6
HWK0402107	WK 40	1 7/16	3.780	2.205	1.969	0.118	1.850	2.638	7	M8 x 45	22	1371	5
HWK0402108		1 1/2										1430	5
HWK0402110		1 5/8										1550	5
HWK0402111		1 11/16										1609	5
HWK0402112		1 3/4										1669	5
HWK0502114	WK 50	1 7/8	4.409	2.676	2.362	0.157	2.283	3.150	10	M8 x 50	22	2554	8
HWK0502115		1 15/16										2639	8
HWK0502200		2										2724	8
HWK0502202		2 1/8										2895	8
HWK0602203	WK 60	2 3/16	4.724	3.071	2.756	0.157	2.598	3.504	12	M8 x 55	22	3576	10
HWK0602204		2 1/4										3678	10
HWK0602206		2 3/8										3882	10
HWK0602207		2 7/16										3984	10
HWK0602208		2 1/2										4087	9
HWK0702209	WK 70	2 9/16	5.826	3.464	3.150	0.157	3.110	4.173	12	M10 x 65	44	6642	19
HWK0702210		2 5/8										6804	19
HWK0702211		2 11/16										6966	18
HWK0702212		2 3/4										7128	18
HWK0702214		2 7/8										7452	17
HWK0802215	WK 80	2 15/16	6.693	4.095	3.701	0.197	3.701	4.961	10	M12 x 80	74	9128	28
HWK0802300		3										9323	28
HWK0802302		3 1/8										9711	27
HWK0802304		3 1/4										10099	26
HWK0802306		3 3/8										10488	26
HWK0902307	WK 90	3 7/16	7.283	4.567	4.173	0.197	4.094	5.433	12	M12 x 80	74	12819	36
HWK0902308		3 1/2										13052	36
HWK0902310		3 5/8										13518	35
HWK0902312		3 3/4										13984	34
HWK0902314		3 7/8										14450	34
HWK1002315	WK 100	3 15/16	7.756	4.960	4.488	0.236	4.488	5.866	15	M12 x 90	74	18354	43
HWK1002400		4										18645	43
HWK1002404		4 1/4										19810	42

If your application requires increased torque transmission and/or thrust, solvent clean the interface between the bore of the WK unit and the shaft to produce an oil free connection. This in turn will result in up to a 20% increase in M_t and T_h performance values. Contact Fenner Drives Applications Engineering for additional details at AE@fennerdrives.com.

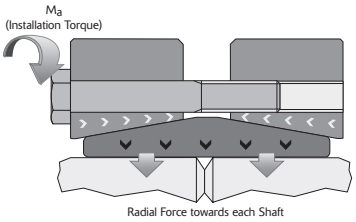
DESIGN FEATURES

External keyless locking devices that simultaneously transmit high torques and bending moments that allow your drive to be overhung shaft mounted.

- Keyless, rigid, zero backlash coupling.
- Transmits high torque and bending moments.
- Eliminates the need for costly mounting brackets and structural support.
- Compact, double taper design with self-releasing tapers for easy removal.
- Exceptional concentricity.
- Installs right over existing keyways and splines.
- Not affected by shock or reversing loads.

WORKING PRINCIPLE

Drawing the two tapered collars together with the integrated tightening screws, generates radial forces that squeeze the inner ring tightly to the two shafts. The inner ring acts as a press fit sleeve, transmitting torque, thrust, and even bending loads from one shaft to the other.



TORQUE

M_t = rated torque capacity of one B-LOC® WK Coupling with all screws tightened to specified torque M_a as listed in specifications.

THRUST

T_h = transmissible thrust, determined by using the following equation:

$$T_h = \frac{2 \times M_t}{d}$$

where: d = shaft diameter
M_t = rated torque capacity

TORQUE AND THRUST COMBINED

Simultaneous transmission of torque and thrust requires calculating a resultant torque:

$$M_{tres} = \sqrt{T^2 + \left(\frac{F \times d}{2}\right)^2}$$

where: T = peak drive torque
F = peak thrust load
d = shaft diameter

Select a unit where $M_t \geq M_{tres}$

BENDING MOMENTS

WK Couplings will generally transmit a continuous bending moment equal to 25% of rated torque capacity M_t.

RELEASABILITY

Since the tapers of a B-LOC WK Coupling are self-releasing, loosening the locking screws results in releasing the shafts from the coupling. Care needs to be used by loosening each screw gradually such that the screw tension remains relatively equal on all screws.

MATERIAL

WK Coupling inner rings are manufactured from high-carbon steel. Outer rings are made from forged and heat treated alloy steel.

LUBRICANTS

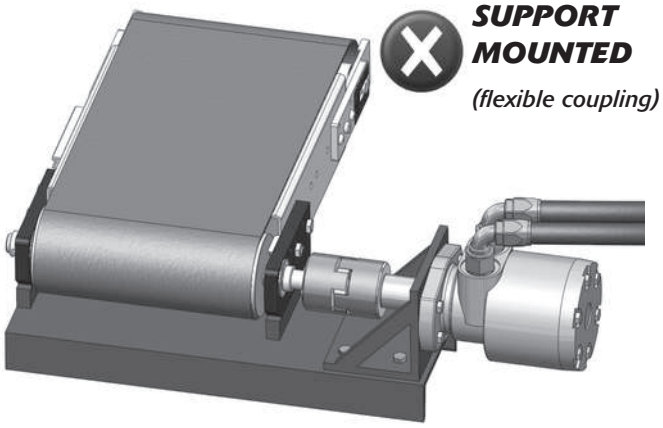
WK Couplings are supplied with molybdenum disulphide based lubricant applied to the tapers and to the locking screw threads and head contact areas. The bore of WK Couplings are supplied lightly oiled and should only be used with oil supplied on the unit.

SHAFT AND HUB MATERIAL

Listed specifications assume shaft material with a yield point of at least 45 ksi (310 N/mm²).

LENGTH OF FIT

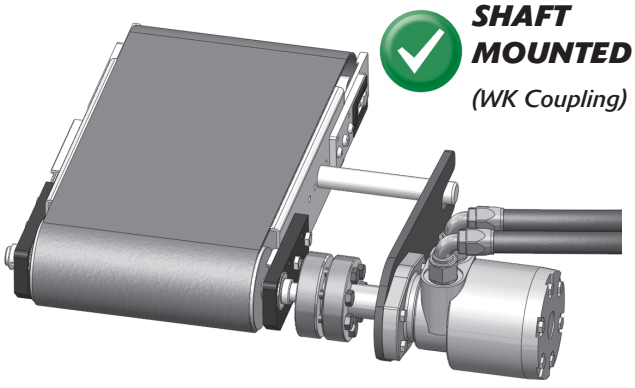
Shaft engagement inside the WK Coupling must be equal for both shafts and the gap between the shafts should not exceed 5% of the shaft diameter.



SUPPORT MOUNTED

(flexible coupling)

- Requires bulky frame work and supports
- Shaft misalignment issues necessitate the use of flexible couplings
- Fretted and corroded flexible couplings complicate disassembly
- Higher total cost

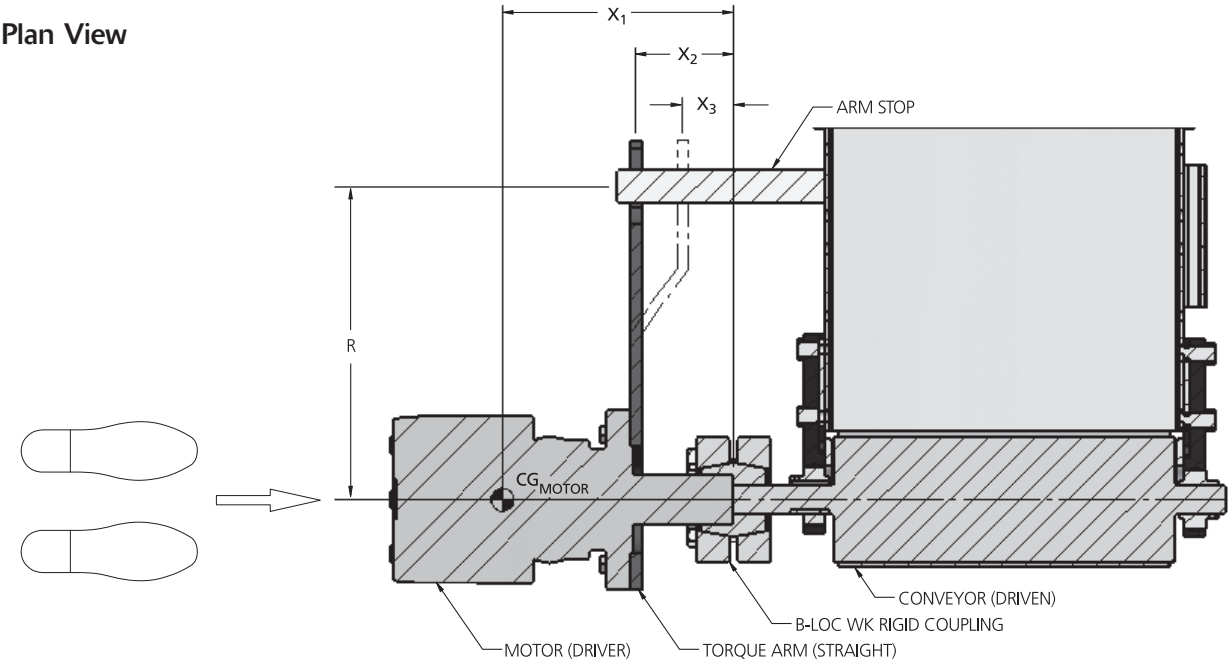


SHAFT MOUNTED

(WK Coupling)

- Shaft mount completely eliminates shaft misalignment and frame work
- Simple torque arm prevents motor rotation
- Keyless mechanical shrink fit never corrodes to the shaft and disassembles easily
- Compact design allows for smaller drive footprint
- Lower overall cost

Plan View



CALCULATIONS

Once you have selected your WK Rigid Coupling, apply the following calculations to verify that it is suitable for your application. Please reference Plan View above.

1. M_t = published max rated torque capacity of B-LOC® WK Rigid Coupling = _____ ft-lb

2. M_{DMAX} = maximum drive torque (stall torque where applicable) = _____ ft-lb

3. W = weight of the overhung shaft mounted drive = _____ lb

4. R = length of the torque arm = _____ ft

5. F_{TA} = torque arm reaction force = $M_{DMAX} \div R$ = _____ lb

6. M_B = bending moment at the coupling
   NOTE: M_B must be $< 0.25 \times M_t$

   TORQUE ARM OPTIONS

   Straight Torque Arm

   $M_B = (W \times X_1) + (F_{TA} \times X_2)$ = _____ ft-lb

   Bent Torque Arm

   $M_B = (W \times X_1) + (F_{TA} \times X_3)$ = _____ ft-lb

   Double Torque Arm

   $M_B = (W \times X_1)$ = _____ ft-lb

7. M_{tB} = resultant (torque & bending) = $\sqrt{(M_{DMAX})^2 + (2 \times M_B)^2}$ = _____ ft-lb
   NOTE: M_{tB} must be $< M_t$

8. If the NOTES in steps 6 and 7 are <u>both</u> satisfied, the B-LOC WK Rigid Coupling is recommended for your application.

The calculations on this page assume worst case placement of torque arm.
To optimize design contact a Fenner Drives Applications Engineer at AE@fennerdrives.com.

DESIGN TIPS

- For any WK Coupling design or engineering questions, contact a Fenner Drives Applications Engineer at AE@fennerdrives.com.
- Shaft mounting creates bending moments in the system; coupling, shafts, bearings etc., must be designed to handle these bending moments.
- Torque arm design and placement can be used to counteract or minimize bending moments in the system.
- Torque arm and arm stop(s) must be adequately designed to handle the forces generated by the motor.
- To achieve up to a 20% increase in coupling load capacity, using a non-petroleum based solvent, clean the shafts and coupling bore to produce a completely lubricant free interface.
- WK Couplings can typically join shafts of different sizes up to a ratio of 2:1. For shaft ratios greater than this, please contact a Fenner Drives Applications Engineer.
- WK Couplings are not recommended for applications in which motor and driven component are rigidly mounted.

POWERMAX COMPOSITE SOLUTIONS



PowerMax™

The PowerMax Advantage

Fenner Drives is the industry leader in molded composite solutions for industrial power transmission and material handling applications. PowerMax composite products are used where dependability counts most.

- High-strength glass reinforced composite idlers and pulleys are available in a wide range of sizes for flat, round and V-belts.
- Our composite products are a lightweight, corrosion resistant alternative to steel, aluminum and cast iron.



PowerMax V-Belt Iders used with POWERTWISt Roller Drive on a Live Roller Conveyor.



Wood panel conveyor using PowerMax Round Idlers and Eagle Red 90 belting.



PowerMax DriveN Pulley on a Centrifugal Fan.



Need a custom solution?

With industry leading engineering, Fenner Drives will design the best product for your application.

- Engineered composite material allows for design flexibility by consolidating multiple pieces into one unit.
- We offer a range of engineered composite material to best fit your application requirements.



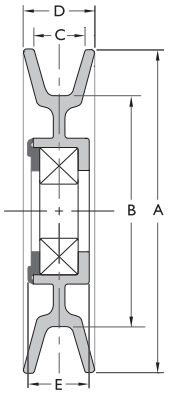
Timing pulley with overmolded shaft for fitness equipment



Custom molded composite assembly for a bowling ball return wheel



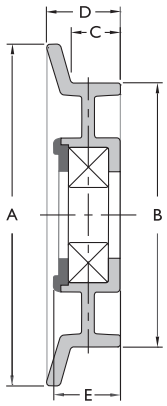
Custom flanged bearing spindle assembly for a floor polisher



V Belt Idler

PowerMax™ V Belt Idlers

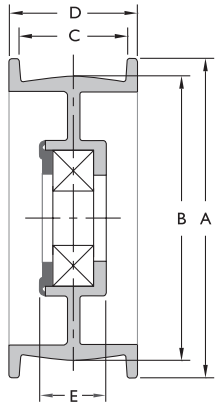
Part Number	Type	Grooves	Dimensions (inches)					Belt Size	Bearing Type	Bore Sizes
			A	B	C	D	E			
VA3001†	1	1	3	2	0.5	0.7	0.81	A	6203-2RS	17mm
VA3002	1	1	3.1	1.84	0.63	0.78	0.81	B	6203-2RS	17mm
VA4001	1	1	3.98	2.99	0.5	0.7	0.81	A	6203-2RS	17mm
VA4002	1	1	4	2.84	0.64	0.86	0.81	B	6203-2RS	17mm
VA5001	1	1	5.04	3.84	0.65	0.8	0.82	B	6203-2RS	17mm
VA6001	1	1	6.03	5.12	0.5	0.72	0.81	A	6203-2RS	17mm
VA6250†	1	1	6.25	5	0.61	0.95	0.72	A/B	6203-2RS	17mm
VA7501	1	1	7.5	6.6	0.54	0.72	0.75	A	6203-2RS	17mm
V2B6280	2	2	6.28	5.18	0.64	1.72	1.85	B/5V	6203-2RS	.510/.520
V3B6280	2	3	6.28	5.18	0.64	2.44	2.58	B/5V	6203-2RS	.510/.520
V4B6280	2	4	6.28	5.18	0.64	3.16	3.33	B/5V	6203-2RS	.510/.520



Single Flange Idler

PowerMax Single Flange Belt Idlers

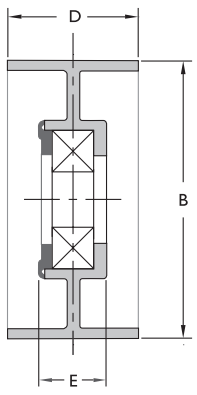
Part Number	Dimensions (inches)					Belt Size	Bearing Type	Bore Sizes
	A	B	C	D	E			
VA3600	3.6	2.84	0.59	0.84	0.8	B	6203-2RS	17mm
VA4130*	4.13	3.23	0.58	0.86	0.81	B	6203-2RS	17mm



Flat Belt Idler

PowerMax Flat Belt Idlers

Part Number	Type	Crown	Dimensions (inches)					Belt Size	Bearing Type	Bore Size
			A	B	C	D	E			
FA2001†	1	Yes	2.07	1.88	1.37	1.54	0.47	1 1/8"	6203-2RS	17mm
FA2002†	1	Yes	2.35	1.99	0.98	1.15	0.47	7/8"	6203-2RS	17mm
FA2003	1	No	2.76	1.94	0.82	1.15	0.75	5/8"	6203-2RS	17mm
FA2501†	1	No	2.48	1.97	1.55	1.85	0.72	11/4"	6203-2RS	17mm
FA2750†	1	Yes	2.75	1.97	1.09	1.4	0.67	29/32"	6203-2RS	17mm
FA2751	1	Yes	2.75	2.52	1	1.22	0.8	13/16"	6203-2RS	17mm
FA3002	1	Yes	3	2.5	1.02	1.31	0.76	7/8"	6203-2RS	17mm
FA3251†	1	Yes	3.24	2.97	1.04	1.2	0.67	7/8"	6203-2DD	17mm
FA3301†	1	Yes	3.38	2.97	1.38	1.67	0.78	11/8"	6203-2RS	17mm
FA3501	1	Yes	3.5	3	0.77	1.09	0.76	5/8"	6203-2RS	17mm
FA3502	1	Yes	3.5	3	1	1.22	0.76	13/16"	6203-2RS	17mm
FA3504	1	Yes	3.48	2.98	0.69	0.9	0.76	1/2"	6203-2RS	17mm
FA3750†	1	Yes	3.75	2.96	1.09	1.38	0.67	29/32"	6203-2RS	17mm
FA3751†	1	Yes	3.8	3.25	1.03	1.24	0.67	7/8"	6203-2RS	17mm
FA4501	1	Yes	4.5	4	1.09	1.39	0.76	29/32"	6203-2RS	17mm
FA4750†	1	Yes	4.75	3.96	1.09	1.38	0.67	29/32"	6203-2RS	17mm
FA5501†	1	Yes	5.56	5.03	1.02	1.29	0.72	7/8"	6203-2RS	17mm
FX0001‡	1	Yes	2.75	2.37	1.07	1.39	–	29/32"	6205-2RS	1"
F1B6280	2	No	6.28	6	1.22	1.63	1.63	1"	6203-2RS	.510/.520
F2B6280	2	No	6.28	6	2.1	2.5	2.5	2"	6203-2RS	.510/.520
F3B6280	2	No	6.28	6	2.91	3.31	3.31	2 3/4"	6203-2RS	.510/.520
F4B6280	2	No	6.28	6	3.85	4.25	4.25	3 3/4"	6203-2RS	.510/.520



Flat Belt Idler – Flangeless

PowerMax Flat Belt Idlers (Flangeless)

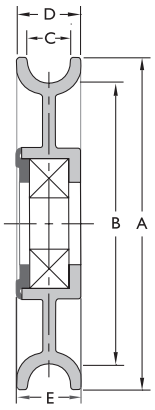
Part Number	Type	Crown	Dimensions (inches)					Belt Size	Bearing Type	Bore Size
			A	B	C	D	E			
FA2009†	1	No	–	2	–	1	0.47	13/16"	6203-2RS	17mm
FA2010†	1	No	–	1.98	–	0.75	0.47	5/8"	6203-2DD	17mm
FA2700†	1	No	–	2.71	–	1.05	0.67	7/8"	6203-2RS	17mm
FA2900*	1	Yes	–	2.91	–	1.22	0.76	1"	6203-2RS	17mm
FA3003*	1	No	–	2.96	–	1.09	0.76	29/32"	6203-2RS	17mm
FA3250†	1	No	–	3.2	–	1.01	0.67	13/16"	6203-2DD	17mm
FA4502	1	No	–	4.5	–	1.21	0.82	1"	6203-2RS	17mm
FX0002*‡	1	Yes	–	2.33	–	1.39	–	11/8"	6205-2RS	1"

** Minimums may apply.*
† Insertion molded bearing.
‡ Special 1" bore bearing with extended inner-race.



Many idlers are, or can be, made into a driven pulley with a 5/8" or 3/4" bore.
Please contact Fenner Drives for minimum order quantities, pricing, and availability.
T-Max Belt & Chain Tensioners can be found on pages 39-40.

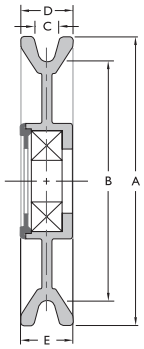
PowerMax™ Round Belt Idlers



Round Belt Idler

Part Number	Dimensions (inches)					Radius	Maximum Belt Size	Bearing Type	Bore Sizes
	A	B	C	D	E				
RA3001	3.05	2.45	0.4	0.61	0.81	0.19	3/8"	6203-2RS	17mm
RA3002	3.05	2.45	0.42	0.61	0.63	0.21	13/32"	6203-2RS	17mm
RA3501	3.5	2.75	0.53	0.76	0.76	0.26	1/2"	6203-2RS	17mm
RA3502	3.5	2.75	0.44	0.76	0.76	0.19	3/8"	6203-2RS	17mm
RA4101	4.12	3.5	0.53	0.68	0.72	0.26	1/2"	6203-2RS	17mm
RA4801	4.8	4	0.53	1	0.77	0.28	1/2"	6203-2RS	17mm
RA4802	4.82	4	0.73	1.06	0.77	0.36	11/16"	6203-2RS	17mm
RA5502†	5.38	4.62	0.38	0.56	0.7	0.19	3/8"	6203-2RS	17mm
SMALL SERIES									
RA1850†	1.84	1.39	0.4	0.63	0.63	0.16	5/16"	6902-2RS	15mm
RA2540	2.54	1.9	0.44	0.63	0.63	0.16	5/16"	6902-2RS	15mm

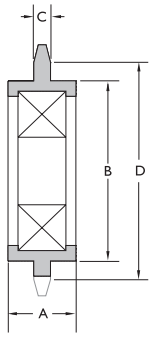
PowerMax Cable Pulleys



Cable Pulley

Part Number	Dimensions (inches)					Maximum Cable Size	Bore Size
	A	B	C	D	E		
RA2701	2.75	2.43	0.23	0.54	0.82	5/32"	17mm
RA3503†	3.55	2.73	0.39	0.8	0.77	1/4"	17mm
RA3504	3.5	2.81	0.31	0.65	0.77	7/32"	17mm
RA4501†	4.46	3.74	0.38	0.86	0.77	1/4"	17mm
RA4502†	4.46	3.74	0.38	0.86	0.77	3/16"	17mm
RA5001	5	4.31	0.31	0.65	0.73	3/16"	17mm
RA5501†	5.5	4.86	0.22	0.53	0.6	5/32"	17mm
RA6001	6	5.2	0.4	0.8	0.8	1/4"	17mm

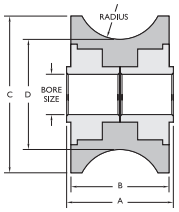
PowerMax Sprockets



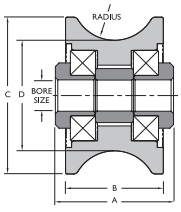
Sprocket

Part Number	Chain #	# Teeth	Nominal O.D. (in)	Pitch Diameter (in)	Dimensions (inches)			Bearing Type	Bore Size
					A	B	C		
CS3502†	35	19	2.48	2.28	0.67	1.78	0.164	6203-2RS	17mm
CS4002†	40	17	2.98	2.72	0.67	1.78	0.279	6203-2RS	17mm
CS4003†	40	17	2.98	2.72	0.67	1.78	0.279	6203-2RS-10	5/8"
CS4006*†	40	17	2.98	2.72	0.67	1.78	0.279	6203-2RS-12	3/4"
CS5002†	50	15	3.34	3.01	0.67	1.78	0.343	6203-2RS	17mm
CS5004†	50	15	3.34	3.01	0.67	1.78	0.343	6203-2RS-10	5/8"
CS5005*†	50	15	3.34	3.01	0.67	1.78	0.343	6203-2RS-12	3/4"
CS6002†	60	13	3.52	3.14	0.67	1.78	0.449	6203-2RS	17mm
CS6003†	60	13	3.52	3.14	0.67	1.78	0.449	6203-2RS-10	5/8"
CS6004†	60	13	3.52	3.14	0.67	1.78	0.449	6203-2RS-12	3/4"
CS8002†	80	12	4.39	3.86	0.67	1.78	0.58	6203-2RS	17mm
CS8003†	80	12	4.39	3.86	0.67	1.78	0.58	6203-2RS-10	5/8"
CS8004†	80	12	4.39	3.86	0.67	1.78	0.58	6203-2RS-12	3/4"

PowerMax™ Carriage Rollers



Type 1



Type 2

Part Number	Type	Dimensions (inches)				Radius	Bore Sizes
		A	B	C	D		
RA2002	1	1.36	1.2	1.95	1.37	0.53"	1/2"
RA2004	1	1.48	1.2	1.95	1.37	0.53"	1/2"
RX0219	2	1.48	1.2	1.95	1.38	0.53"	3/8"

** Minimums may apply.*

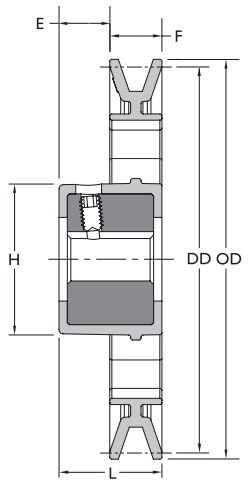
† Insertion molded bearing.



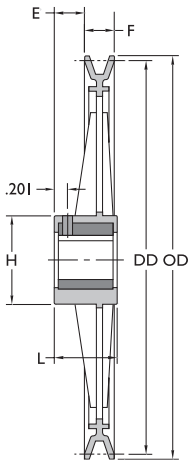
Many idlers are, or can be, made into a driven pulley with a 5/8" or 3/4" bore. Please contact Fenner Drives for minimum order quantities, pricing, and availability.

T-Max Belt & Chain Tensioners can be found on pages 39-40.

PowerMax DriveN Pulleys



Type 1



Type 2

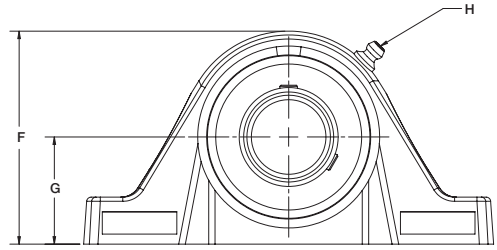
Base Part Number	Dimensions (inches)					Belt Size	Diameter (inches)		Number Spokes	Spoke Style
	Type	E	F	H	L		Outside	Datum		
AFD44*	1	0.79	0.74	2.17	1.53	A/4L	4.25	4	–	–
AFD49	1	0.79	0.74	2.17	1.53	A/4L	4.75	4.5	4	I-Beam
AFD59	1	0.79	0.74	2.17	1.53	A/4L	5.75	5.5	4	I-Beam
AFD74	1	0.79	0.74	2.17	1.53	A/4L	7.25	7	4	I-Beam
AFD84	2	0.76	0.75	2.22	1.6	A/4L	8.25	8	6	Cross
AFD94	2	0.76	0.75	2.22	1.6	A/4L	9.25	9	6	Cross
AFD104	2	0.76	0.75	2.22	1.6	A/4L	10.25	10	6	Cross
AFD112	2	0.76	0.75	2.22	1.6	A/4L	10.98	10.73	6	Cross
AFD124	2	0.76	0.75	2.22	1.6	A/4L	12.25	12	6	I-Beam

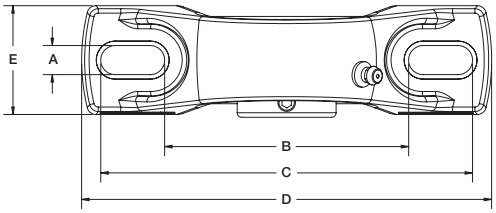
Shaft Size	Keyseat
5/8", 3/4"	3/16" x 3/32"
1"	1/4" x 1/8"

Part Number Ordering Guide

Base Part Number	+	Shaft Size	=	Complete Part Number
AFD44		5/8"		AFD4458
AFD94		1"		AFD94100

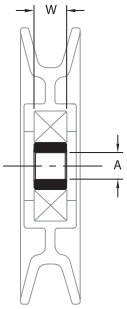
PowerMax Pillow Blocks





Part Number	Dimensions (inches)							Zerk	Bearing Type	Bore Size
	A	B	C	D	E	F	G	H		
PB1000	0.39	3.3	4.9	5.7	1.6	2.8	1.45	No	SB205-16	1"
PB1036	0.51	3.3	4.9	5.7	1.6	2.8	1.45	No	SB205-16	1"
PB2050	0.39	3.3	4.9	5.5	1.5	2.9	1.44	Yes	SB205-16	1"

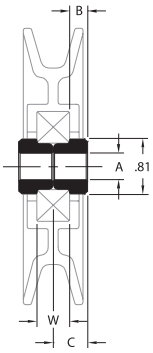
PowerMax Mounting Adapters



Bore Reducing Adapters

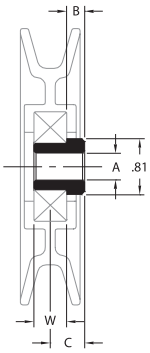
Part Number	Dimensions (inches)	
	A	W
RB0001	.385 / .395	0.472
RB0002	.510 / .520	0.472
RB0071	.474 / .486	0.472

Clevis Adapters



Part Number	Dimensions (inches)			
	A	B	W	C
CB0001	.385 / .395	0.26	0.472	0.5
CB0002	.385 / .395	0.51	0.472	0.75
CB0003	.385 / .395	0.76	0.472	1
CB0004	.510 / .520	0.26	0.472	0.5
CB0005	.510 / .520	0.51	0.472	0.75
CB0006	.510 / .520	0.76	0.472	1
CB0015	.314 / .324	0.08	0.472	0.32
CB0016	.385 / .395	0.17	0.472	0.41
CB0020*	.314 / .324	0.1	0.472	0.34
CB0023	.394 / .399	0.64	0.472	0.87
CB0036	.385 / .395	0.7	0.472	0.94
CB0058	.385 / .395	0.33	0.472	0.57
CB0100	.397 / .407	0.26	0.472	0.5

Shoulder Adapters



Part Number	Dimensions (inches)			
	A	B	W	C
SB0001	.385 / .395	0.26	0.472	0.5
SB0002	.385 / .395	0.51	0.472	0.75
SB0003	.385 / .395	0.76	0.472	1
SB0004	.510 / .520	0.26	0.472	0.5
SB0005	.510 / .520	0.51	0.472	0.75
SB0006	.510 / .520	0.76	0.472	1
SB0013	.385 / .395	0.15	0.472	0.38
SB0018	.385 / .395	0.4	0.472	0.64
SB0020	.385 / .395	0.59	0.472	0.83
SB0032	.385 / .395	0.56	0.472	0.8
SB0033	.385 / .395	0.95	0.472	1.19
SB0052	.385 / .395	0.71	0.472	0.95
SB0090	.255 / .265	0.31	0.472	0.55

* *Minimums may apply.*

PowerMax™ PULLEYS & IDLERS

Engineering Data

Almost all PowerMax Pulleys use precision 6203-2RS chrome-alloy steel radial ball bearings (exceptions are noted). These bearings meet all ABEC-1 standards. Our bearings utilize two rubber wiping seals to keep the grease in and contaminants out. See chart for standard load ratings.

Bearing Properties	
Type	6203-2RS
Seals	Rubber Wiping
Fit	ABEC–1 "C4" Internal Clearance
Lubrication	Mobil Polyrex EM or equivalent NLGI No. 2 (30% +/- 5% Fill)
Service Temperature	-20° – 350°F (-30° – 180°C)
Basic Dynamic Load	2150 lbs. (9563N)

Bearings are also available in stainless steel, with trash seals and shields.

6203 Radial Load Ratings											
Speed (RPM)	33	100	200	300	500	1000	1500	1800	2500	3600	5000
Load (lbs)	2141	1480	1175	1026	866	687	601	565	507	449	402
Load (N)	9523	6583	5226	4566	3852	3058	2672	2514	2254	1996	1789

Load Ratings based on 500 HR minimum L_{10} life.

Bearing Life

How long a bearing will last in an application depends on two variables: first, the bearing's physical properties (material, design, method of manufacture); and second, the conditions of operation (load, speed, temperature, lubrication). Although it is not possible to predict the exact life of a bearing, the designer can calculate the "L_{10} Life" of a bearing. L_{10} is the life, in hours or revolutions, that 90% of a group of bearings will complete or exceed. The equations for calculating L_{10} life are:

- Revolutions: $L_{10} = \left(\frac{C}{P}\right)^3 \times 10^6$
- Hours: $L_{10} = \left(\frac{C}{P}\right)^3 \times \frac{16667}{N}$
- Where:
  L_{10} = Rating Life
  C = Basic Dynamic Capacity
  P = Radial Load in lbs.
  N = Speed in RPM

Material Properties

Fenner Drives uses engineering composites, which ensure the highest level of performance and consistent strength. Our standard material is 33% glass reinforced nylon 6/6. The combination of high strength, temperature resistance and abrasion resistance makes nylon a versatile engineering thermoplastic.

33% GLASS-REINFORCED NYLON 6/6, dry as molded		
PROPERTY	ASTM CODE	VALUE
Tensile Strength at Break	D638	20,000 psi
Flexural Modulus	D790	1,300,000 psi
Heat Deflection Temp @ 264 psi	D648	480°F (249°C)
Continuous Service Temp. (Min. – Max.)	N/A	32° to 225°F (0° to 107°C)
Izod Impact Strength (notched 1/8")	D256	1.3 to 1.8 ft.-lb/in. of notch

Data listed was generated using molded specimens tested under standard conditions. Many of the mechanical properties can be influenced by processing conditions, environmental factors and the application of stress. Therefore, this data characterizes typical production material, and should not be used either to establish specification limits or alone as the basis for engineering design.

POWERTWIST DRIVE

SUPER T LINK

NU T LINK

POWERTWIST MOVE

EAGLE

T-Max

Trantorque

B-LOC

RotoShield

PowerMax

Trackstar

Count on Fenner Drives. We've got the right product for your application.

With over 100 years of manufacturing, technical and commercial expertise, Fenner Drives is a global leader in value-adding, problem-solving products for conveying and power transmission applications. Recognized widely for our expertise and innovation, we blend reliability, quality and value in our products while providing unsurpassed technical support and service.

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