



**Face Contact Brake (FCB)**



**Poly Cam Brake (PCB)**

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Many casters on equipment made outside USA have ISO top plates which are included this section. Please request information on any caster from our application department. Kingpinless casters can be made with any size top plate, OAH, swivel lead and with any diameter wheel.

Acorn™ can supply any size and type caster rig with any type wheel with proper size precision ball bearings. Call, fax or e-mail for application assistance, or visit our website to view or print our complete catalog.

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**Wheel Cam Brake (WCB)**  
Designed for use with Roller, Delrin and Oilex bearing wheel casters.



**Single Side Brake (SSB)**  
Right hand installation standard, left hand option available.



**Double Side Brake (DSB)**  
Pedal on both sides for easy access.



**Total Lock Brake (TLB)**  
Corrosion resistant brake features rugged thermoplastic construction. Locks both wheel and swivel.



**Grip Lock Brake (GLB)**  
Corrosion resistant brake features rugged thermoplastic construction. (Does not work with swivel lock.)



**Face Brake (FBA)**  
Step down to engage and release.



**Face Brake (FBB)**  
Step down to engage and release.



**Face Brake (FBC)**  
Step down to engage and release.



**Face Brake (FBD)**  
Step down to engage and release. Stainless steel.



**Poly Cam Brake (PCB)**  
Positive locking action wheel tread.



**Wrap Around Brake (WAB)**  
Foot operated on both sides. Use with straight roller bearing. Overall height must be greater than 5-1/4".



**Face Contact Brake (FCB)**  
Turn lever to apply shoe against wheel tread for positive locking action. (Recommended for Pneumatic casters.)



**Cam Brake (CB)**  
Step down to engage  
and release.



**Face Contact Brake (FCB)**  
Step down to engage  
and release.



**Face Contact Brake (FCB)**  
Step down to engage  
and release.



**P2 Total Lock Brake (P2/TLB)**  
Locks wheel and swivel with  
simple press of toe lever.



**Total Lock Brake (TLB)**  
Locks wheel and swivel with  
simple press of toe lever.



**Grip Lock Brake (GLB)**  
Corrosion resistant brake features  
rugged thermoplastic construction.



**PC Total Lock (PC/TL)**  
Locks wheel and swivel with  
simple press of toe lever.



### Swivel Lock (Bolt-On)

Spring activated plunger can be disengaged for continuous swiveling or engaged for straight line travel. Available on all models. To order with caster, specify "L". For field installation, see "Options" section on individual pages to determine correct part number. (Notched yoke base option is required for Shockmaster casters, see right.)

### Notched Yoke Base Option

Notches in 90° intervals are required for swivel locks. The notch allows the spring activated plunger to lock the swivel. See "Options" section on individual pages to determine correct part number (Standard on all Contender models.)



Close up view of lock in locked position

**A field installable swivel lock is available**

**SL12000 = Swivel Lock**

**Note: Caster rig must have pre-notched yoke for field installable swivel lock.**



Swivel Caster with Toe Guard  
(TO)



Rigid Caster with Toe Guard  
(TO)

Series	PREFERRED BRAKE STYLE	PREFERRED WHEEL BEARINGS	OTHER OPTIONAL BRAKE STYLE
01	Cam Brake (CB) 3		
02	Self Lock (GL)	Straight Roller (01), Ball (01), Plain Bore (01), Delta (01, 02), O-Ring (03)	Face Contact (F)
04	Face Contact (F)	Delta (01)	Self Lock (GL)
05	Cam Brake (CB)	Straight Roller (01), Plain Bore (01), O-Ring (03)	Single Side (SSB)
16	Self Lock (GL)	Straight Roller (01), O-Ring (03)	Cam (CB), Single Side (SSB)
Cardless 210	Face Contact (F)	Straight Roller (01)	
40	Single Side (SSB)	Straight Roller (01)	
42	Single Side (SSB)	Straight Roller (01)	
44	Single Side (SSB)	Straight Roller (01)	
62	Cam (CB)	Straight Roller (01), O-Ring (03)	Single Side (SSB), Wrap-around (WB)
63	Single Side (SSB)	Straight Roller (01)	Wrap-around (WB)
Cardless 263	Face Contact (F)	Straight Roller (01)	
71	Cam (CB)	Straight Roller (01), O-Ring (03)	Single Side (SSB), Wrap-around (WB)
72	Cam (CB)	Straight Roller (01), O-Ring (03)	Single Side (SSB), Wrap-around (WB)
272	Poly Cam (P)	Straight Roller (01), Tapered Roller (09)	Face Contact (F)
76	Single Side (SSB)	Straight Roller (01), Straight Roller (07)	Single Side (SSB), Wrap-around (WB), Poly Cam (P)
81	Poly Cam (P), Face Contact (F)	Straight Roller (01), Tapered Roller (09)	Wrap-around (WB)
281	Poly Cam (P), Face Contact (F)	Straight Roller (01), Tapered Roller (09)	
Cardless 281	Face Contact (F)	Straight Roller (01)	
64	Single Side (SSB)	Straight Roller (01)	Wrap-around (WB), Poly Cam (P), Face Contact (F)
80	Single Side (SSB)	Straight Roller (01)	Wrap-around (WB), Poly Cam (P), Face Contact (F)
290	Poly Cam (P), Face Contact (F)	Straight Roller (01), Tapered Roller (09)	
Cardless 290	Face Contact (F)	Straight Roller (01)	

specifications continued from preceding column

Series	PREFERRED BRAKE STYLE	PREFERRED WHEEL BEARINGS	OTHER OPTIONAL BRAKE STYLE
92	Wrap-around (W)	Straight Roller (01)	Single Side (SSB), Poly Cam (P)
100	Poly Cam (P), Face Contact (F)	Straight Roller (01), Tapered Roller (09)	
83	Poly Cam (P), Face Contact (F)	Straight Roller (01)	
293	Poly Cam (P), Face Contact (F)	Straight Roller (01), Tapered Roller (09)	
94SSL	Poly Cam (P)	Straight Roller (01), Tapered Roller (09)	Single Side (SSB), Wrap-around (WB)
94TRL	Poly Cam (P)	Straight Roller (01), Tapered Roller (09)	Single Side (SSB), Wrap-around (WB)
85RL	Poly Cam (P)	Straight Roller (01), Tapered Roller (09)	Single Side (SSB), Wrap-around (WB)
215BRL	Poly Cam (P), Face Contact (F)	Straight Roller (01), Tapered Roller (09)	
Cardless 265	Face Contact (F)	Straight Roller (01)	
96	Special		
209	Face Contact (F)	Delta (03)	
100	Cam (CB)	Straight Roller (01), O-Ring (03)	Single Side (SSB), Wrap-around (WB)
110	Cam (CB)	Straight Roller (01), O-Ring (03)	Single Side (SSB), Wrap-around (WB)
300	Face Contact (F)	Straight Roller (01), Tapered Roller (09)	Poly Cam (P)
310	Face Contact (F)	Straight Roller (01), Tapered Roller (09)	Poly Cam (P)
400	Face Contact (F)	Straight Roller (01), Tapered Roller (09)	Poly Cam (P)
410	Face Contact (F)	Straight Roller (01), Tapered Roller (09)	Poly Cam (P)
600	Face Contact (F)	Straight Roller (01), Tapered Roller (09)	
700	Face Contact (F)	Straight Roller (01), Tapered Roller (09)	
850	Face Contact (F)	Straight Roller (01), Tapered Roller (09)	
SN	Face Contact (F)	Ball Bearing (02)	
SF	Face Contact (F)	Straight Roller (01), Tapered Roller (09)	
V-Drive	Face Contact (F), Poly Cam (P)		



We regularly carry top plates with other than standard bolt hole centers: As shown in the chart, these will interchange with standard top plates. There are other optional top plates and/or bolt hole centers available.

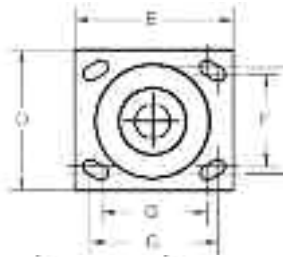
To order: Use standard caster number with option number of "ST-series#" for swivel or "RT-series#" for rigid followed by the alpha bolt hole center designation.

Example: 16TM06201S ST16J

(swivel top, 16 series, bolt hole center "A")

272PD06201R RT272D

(Rigid top, dual wheel 72 series, bolt hole center "F")



**Top Plate & Bolt Hole Centers Chart**

F & G Bolt Hole Centers (inches)	D & E Top Plate Size (inches)	Attaching Bolt Size (inches)	Special Bolt Hole Template Design										
			12, 16, 33	71, 55	72, 54	81	90	94	95	106	400		
Slotted for 3 x 4 or 2-5/8 x 3-5/8	4 x 5	3/8	J	J									
Slotted for 3-3/8 x 5-1/4 or 2-7/16 x 4-15/16	6-1/2 x 6-1/4	1/2	K								K		
Not slotted 2-1/8 x 4	4 x 5	3/8		G									
3 x 3	4 x 4	3/8		H									
3-1/4 x 6	4-1/2 x 7-1/4	1/2			W	W							
3-1/4 x 6	5-1/2 x 7-1/4	1/2					W						
4-1/8 x 4-1/2	5 x 5-1/2	3/8	D		D	D							
4-7/8 x 6-3/4	Swivel 5-1/2 x 8 Rigid 6 x 8	5/8							C				
7 x 9-3/4	Swivel 9-1/2 x 11 Rigid 9 x 11	5/8								T			
Slotted for 4-5/8 x 9-1/2 or 4-3/8 x 5-5/8	8 x 7	1/2											N

**Overall Heights Chart**

The table below shows variations in overall height special overall heights can be obtained y using smaller diameter wheels in larger rigs. For example, by using 6" wheels in 8" rigs, the height is 1/2" the difference in wheel diameter, or 1" lower than the regular height with an 8" wheel.

Series	Wheel Diameter (inches)	Optional Height (inches)	Swivel Lead (inches)	Option Number
12, 16, 33	3-1/4	5-1/4	1-11/16	HS-42
12, 16, 33	4	5-1/4	1-11/16	HS-86
12, 16, 33	5	6-1/8	1-11/16	HS-50
12, 16, 33	5	6-3/4	1-3/4	HS-54
12, 16, 33	6	6-7/8	2-1/4	HS-56
12	6	7-1/4	1-3/4	HS-82
16	6	7-3/8	1-3/4	HS-59
16	6	7-1/2	1-3/4	HS-60
2	6	7-3/4	1-3/4	HS-85
12, 16	6	10	1-3/4	HS-81
34, 62	8	9-1/2	2-1/4	HS-78
34, 62	8	9-3/4	1-3/4	HS-83
63	8	9-1/2	2-1/4	HS-84
100	8	9-1/2	2-1/2	HS-89

## Replacement Part Chart

The table immediately below gives part numbers of caster axles, spanner bushings, straight roller bearings and washers for most standard casters listed in this catalog. Please consult Acorn for tapered roller bearing wheels or casters not listed.

Caster Series Number & Description	Replacement Part Numbers							
	Wheel Hub Length (inches)	Axle and Nut	Spanner Bushing	Thrust Washer	Roller Bearing	Plain Retaining Washer	Sealed Retaining Washer	Ball Bearing
02 - Roller Bearing	1-3/8	ZJ063508	ZF080824	WA082400	ZB081718	WA081700	WA081700	
02 - Chisel & Plain Bearing	1-3/8	ZJ063508	ZF080824	WA082400				
02 - Ball Bearing	1-5/8	ZJ063509					WA121905	
08, 12, 15	1-5/8	ZJ085408	ZF081239	WA121905	ZB121920	WA121905	WA121905	ZAC81900
	2-3/16	ZJ085408	ZF081239	WA121905	ZB121930	WA121905	WA121905	ZAO81902
31, 33	1-5/8	ZJ085408	ZF081239	WA121905	ZB121920	WA121905	WA121905	
34	2-3/16	ZJ086408	ZF081239	WA121905	ZB121930	WA121905	WA121905	
50	1-5/8	ZJ086408	ZF081239	WA122600	ZB121920		WA121900	
51, 53, 54	2-3/16	ZJ086408	ZF081239	WA122600	ZB121930		WA121900	
61, 62, 71, 72	1-7/32	ZJ085408	ZF081239	WA121905	ZB121930	WA121905	WA121905	ZAO81902
61, 62, 72		ZJ086408	ZF081240	WA122600	ZB121940	WA121900	WA121900	
63	2-13/32	ZJ126608	ZF121640	WA163900	ZB163140	WA163100	WA163100	
70	2-3/16	ZJ085808	ZF081239	WA121905	ZB121930	WA121905	WA121905	
	2-5/4	ZJ086809	ZF081248	WA122600	ZB121940	WA121900	WA121900	
81, 84	2-3/4	ZJ127608	ZF121657	WA163900	ZB163140	WA163100	WA163100	
90, 92	3-1/4	ZJ127608	ZF121657	WA163900	ZB163140	WA163100	WA163100	
	4-1/4	ZJ129609	ZF162073	WA201800	ZB203890	WA203900	WA203900	
100	2-3/16	ZJ085408	ZF081239	WA121905	ZX121930	WA121905	WA121905	ZAO81902

## Spanner Bushings & Thrust Washers

All spanner bushings are hardened to form precision inner race for roller bearings. Except as noted below by the asterisk (\*), all spanner bushings are cross drilled for lubrication through hollow axle. Thrust washers are hardened. They are not part of the spanner bushing assembly and must be ordered separately.

Part Number	Spanner Bushing			Thrust Washers		Part Number	Spanner Bushing			Thrust Washers	
	ID (Inches)	OD (Inches)	Length (Inches)	Number	Size (Inches)		ID (Inches)	OD (Inches)	Length (Inches)	Number	Size (Inches)
ZF080824	5/8	1/2	1-5/8	WA082400	1/2 x 1-1/2	ZF081294*	1/2	3/4	4	WA122600	3/4 x 1-5/8
ZF081030	1/2	5/8	1-1/8	WA103400	5/8 x 1-5/8	ZF121239	5/8	3/4	3-7/16	WA122600	3/4 x 1-5/8
ZF081039	1/2	5/8	2-5/8	WA103400	5/8 x 1-5/8	ZF121648	3/4	1	3	WA163900	1 x 2-7/16
ZF081038	1/2	5/8	2-1/8	WA103400	5/8 x 1-5/8	ZF121657	3/4	1	3-1/2	WA163900	1 x 2-7/16
ZF081038	1/2	5/8	2-3/8	WA103400	5/8 x 1-5/8	ZF121664*	3/4	1	4	WA163900	1 x 2-7/16
ZF081039	1/2	5/8	2-7/16	WA103400	5/8 x 1-5/8	ZF121667*	3/4	1	4-1/16	WA163900	1 x 2-7/16
ZF081040	1/2	5/8	2-7/8	WA103400	5/8 x 1-5/8	ZF163083*	1	1-1/4	3-5/16	WA203900	1-1/4 x 2-7/16
ZF081230	1/2	3/4	1-7/8	WA122600	3/4 x 1-5/8	ZF162073*	1	1-1/4	4-5/16	WA204900	1-1/4 x 3
ZF081236	1/2	3/4	2-1/4	WA122600	3/4 x 1-5/8	ZF162081*	1	1-1/4	5-5/16	WA204900	1-1/4 x 3
ZF081239	1/2	3/4	2-3/8	WA122600	3/4 x 1-5/8	ZF202450*	1-1/4	1-1/2	3-5/16	WA245000	1-1/2 x 3-1/2
ZF081239	1/2	3/4	2-7/8	WA122600	3/4 x 1-5/8	ZF202473*	1-1/4	1-1/2	4-5/16	WA245600	1-1/2 x 3-1/2
ZF081248	1/2	3/4	3	WA122600	3/4 x 1-5/8	ZF202480*	1-1/4	1-1/2	5-5/16	WA245800	1-1/2 x 3-1/2



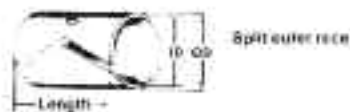
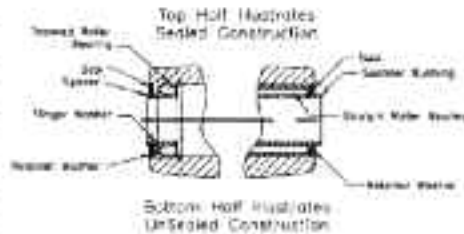
## Straight roller Bearing & Retaining Washers

Straight roller bearings include roller assembly with split outer race but does not include the retaining washers. Retaining washers are ordered separately in quantities of 2 per wheel.

Part Number	Roller Bearing Size			Retaining Washer Numbers		Size (inches)
	ID (inches)	OD (inches)	Length (inches)	Plain	Sealed	
ZB061716	1/2	1-1/16	1-1/8	WA061703	WA061790	1/2 x 1-1/16
ZB163140	1	1-15/16	2-1/2	WA163103	WA163190	1 x 1-15/16
ZB163148	1	1-15/16	3	WA163103	WA163190	1 x 1-15/16
ZB163184	1	1-15/16	4	WA163103	WA163190	1 x 1-15/16
ZB163140	1	1-15/16	3	WA203103		1-1/4 x 1-15/16
ZB203140	1-1/8	1-15/16	2-1/2	WA203103	WA203190	1-1/4 x 1-15/16
ZB203148	1-1/8	1-15/16	3	WA203103	WA203190	1-1/4 x 1-15/16
ZB081922	1/2	1-3/16	1-3/8	WA121900		3/4 x 1-3/16
ZB081932	1/2	1-3/16	2	WA121900		3/4 x 1-3/16
ZB101922	5/8	1-3/16	1-3/8	WA121900	WA101960	3/4 x 1-3/16
ZB101932	5/8	1-3/16	2	WA121900	WA101960	3/4 x 1-3/16
ZB101940	5/8	1-3/16	2-1/2	WA121900	WA101960	3/4 x 1-3/16
ZB121920	3/4	1-3/16	1-1/4	WA121900	WA121900	3/4 x 1-3/16
ZB121930	3/4	1-3/16	1-7/8	WA121900	WA121900	3/4 x 1-3/16
ZB121940	3/4	1-3/16	2-1/2	WA121900	WA121900	3/4 x 1-3/16
ZB142332	7/8	1-7/16	2	WA162303	WA142360	7/8 x 1-7/16
ZB162328	7/8	1-7/16	1-3/4	WA162303	WA162360	1 x 1-7/16
ZB244560	1-1/2	2-13/16	5	WA244503		1-1/2 x 2-13/16
ZB203948	1-1/4	2-7/16	3	WA203903	WA203960	1-1/4 x 2-7/16
ZB203964	1-1/4	2-7/16	4	WA203903	WA203960	1-1/4 x 2-7/16
ZB203960	1-1/4	2-7/16	5	WA203903	WA203960	1-1/4 x 2-7/16
ZB243948	1-1/4	2-7/16	3	WA243903	WA243960	1-1/2 x 2-7/16
ZB243964	1-1/2	2-7/16	4	WA243903	WA243960	1-1/2 x 2-7/16
ZB243960	1-1/2	2-7/16	5	WA243903	WA243960	1-1/2 x 2-7/16
ZB284948	1-3/4	3-1/8	3	WA284903		1-3/4 x 3-1/8
ZB284964	1-3/4	3-1/8	4	WA284903		1-3/4 x 3-1/8
ZB284960	1-3/4	3-1/8	5	WA284903		1-3/4 x 3-1/8
ZB325248	2	3-1/4	3	WA325203		2 x 3-1/4
ZB325264	2	3-1/4	4	WA325203		2 x 3-1/4
ZB325260	2	3-1/4	5	WA325203		2 x 3-1/4
ZB325296	2	3-1/4	6	WA325203		2 x 3-1/4

\*Washer is made of Nylon

Line drawing (right) section view shows typical wheel hub construction with sealed straight and tapered roller bearings. Note spacer tubes are used with tapered roller bearings which increases hub length 1/4" and facilitates proper loading of cup to cone. For non-sealed construction, seal is replaced with retainer and finger washers.



## Oillex

Part Number	ID (inches)	OD (inches)	Length (inches)
ZO081722	1/2	1-1/16	1-3/8
ZO081926	1/2	1-3/16	1-5/8
ZO081935	1/2	1-3/16	2-3/16
ZO101926	5/8	1-3/16	1-5/8
ZO101935	5/8	1-3/16	2-3/16
ZO121926	3/4	1-3/16	1-5/8
ZO121935	3/4	1-3/16	2-3/16

## Ball Bearings

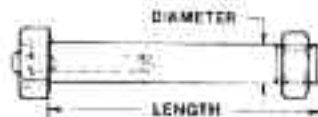
Part Number	ID (inches)	OD (inches)
ZA01900	1/2	1-3/16
ZA081902	1/2	1-3/16

## Axles

Hollow axles have zinc fitting for lubrication and solid axles are without lubrication fitting. All axles come complete with lock nut.

Axle Number	Type	Diameter & Length (inches)
ZJ063508	Hollow	3/8 x 2-3/16
ZJ063509	Solid	3/8 x 2-3/16
ZJ084508	Hollow	1/2 x 2-13/16
ZJ084509	Solid	1/2 x 2-13/16
ZJ085408	Hollow	1/2 x 3-3/8
ZJ065409	Solid	1/2 x 3-3/8
ZJ085808	Hollow	1/2 x 3-3/8
ZJ085408	Hollow	1/2 x 4
ZJ067209	Solid	1/2 x 4-1/2
ZJ105608	Hollow	5/8 x 3-1/2
ZJ126808	Hollow	3/4 x 4-1/4
ZJ127608	Hollow	3/4 x 4-3/4
ZJ127808	Solid	3/4 x 4-3/4
ZJ168009	Solid	1 x 5
ZJ168609	Solid	1 x 6
ZJ169608	Hollow	1 x 6
ZJ063810	Solid Stainless	3/8 x 2-3/16
ZJ085608	Hollow Stainless	1/2 x 3-1/2
ZJ085609	Solid Stainless	1/2 x 3-1/2

Consult Acorn for optional slotted nuts and lock pins.







Roller bearings offer the best compromise between capacity, rollability and value in a bearing. Constructed with a series of hardened steel rollers encased in a split metal sleeve cover. Our standard bearing type. Made in North America.



Model Number	ID	OD	Length	Retainer Washers			Thrust Washer
				Steel	Nylon	Double Nylon	
RB-12125	1/2"	1-1/16"	1-1/8"	RW-12116	NW-12116		TW-12
RB-58150	5/8"	1-3/16"	1-3/8"	RW-34136	NW-34136	DW-34136	TW-58
RB-34150	3/4"	1-3/16"	1-3/8"	RW-34136	NW-34136	DW-34136	TW-34
RB-34178	3/4"	1-3/16"	1-7/8"	RW-34136	NW-34136	DW-34136	TW-34
RB-58200	5/8"	1-3/16"	2"	RW-34136	NW-34136	DW-34136	TW-58
RB-34200	3/4"	1-3/16"	2"	RW-34136	NW-34136	DW-34136	TW-34
RB-10200	1"	1-7/16"	2"	RW-10176			TW-10
RB-10250	1"	1-15/16"	2-1/2"	RW-10115			TW-10
RB-14250	1-1/4"	1-15/16"	2-1/2"	RW-14115			TW-14
RB-10300	1"	1-15/16"	3"	RW-10115			TW-10
RB-14300	1-1/4"	1-15/16"	3"	RW-14115			TW-14
RB-14400	1-1/4"	2-7/16"	4"	RW-14276			TW-14
RB-15400	1-1/2"	2-7/16"	4"	RW-15276			TW-15
RB-14500	1-1/4"	2-7/16"	5"	RW-14276			TW-14
RB-15500	1-1/2"	2-7/16"	5"	RW-15276			TW-15



An improved version of our standard roller bearing featuring a solid outer sleeve for simplified installation and improved grease retention. Made in North America.

Model Number	ID	OD	Length
HRB-58150	5/8"	1-3/16"	1-3/8"
HRB-34150	3/4"	1-3/16"	1-3/8"
HRB-34178	3/4"	1-3/16"	1-7/8"



A fully stainless steel version of our standard roller bearing. Provides higher capacity and improved rollability over Delrin Bearings.

Model Number	ID	OD	Length
SSRB-34150	3/4"	1-3/16"	1-3/8"
SSRB-34200	3/4"	1-3/16"	2"
SSRB-10300	1"	1-15/16"	3"



A one-piece insert bearing constructed from Delrin material. Our standard bearing for use with stainless steel casters where a cam style brake is used.

Model Number	ID	OD	Length
DB-12150	1/2"	1-3/16"	1-5/8"
DB-58150	5/8"	1-3/16"	1-5/8"
DB-34150	3/4"	1-3/16"	1-5/8"
DB-12200	1/2"	1-3/16"	2-1/8"
DB-58200	5/8"	1-3/16"	2-1/8"
DB-34200	3/4"	1-3/16"	2-1/8"
DB-10200	1"	1-7/16"	2"
DB-10250	1"	1-15/16"	2 @ 1-1/4"
DB-14250	1-1/4"	1-15/16"	2 @ 1-1/4"
DB-10300	1"	1-15/16"	2 @ 1-1/2"
DB-14300	1-1/4"	1-15/16"	2 @ 1-1/2"

### SELECTING THE RIGHT BEARING

Finding the right caster for your application involves more than just picking the fork and wheel types. The bearing you select for your wheel has a great impact on the overall performance of your caster.

- For improved rollability select Flanged Ball Bearings, Precision Ball Bearings, or Tapered Roller Bearings.
- For increased capacity select Tapered Roller Bearings or Precision Ball Bearings.
- Wet conditions call for Delrin Bearings, Stainless Roller Bearings or Stainless Precision Ball Bearings.
- High Heat applications require either Flanged Brass Bearings or Hi-Lex Spinner Bushings.
- Precision Ball Bearings or Tapered Roller Bearings are required for Towline applications.

Remember, whatever bearing you choose, proper regular maintenance is required to keep it working!



Flanged roller bearings are a higher capacity alternative to flanged ball bearings such as those found on our pneumatic and semi-pneumatic wheels. Made in North America.

### FLANGED ROLLER BEARINGS

Model Number	ID	OD	Length
RF-58138	5/8"	1-3/8"	1"
RF-34138	3/4"	1-3/8"	1"



Flanged brass bearings are ideal for high-heat or corrosive environments or for wet applications where Delrin bearings are inappropriate. Made in North America.

### FLANGED BRASS BEARINGS

Model Number	ID	OD	Length
BF-34138	3/4"	1-3/16"	5/8"
BF-10115	1"	1-15/16"	1-3/8"



Delrin is a high-strength, wear resistant material with a low coefficient of friction. This combined with good chemical resistance and low moisture absorption make it ideal for use as a wheel bearing. This is our standard stainless bearing. One-piece Delrin bearings are required when a cam-style brake (BF) is used.

### FLANGED DELRIN BEARINGS

Model Number	ID	OD	Length
DF-12118	1/2"	1-1/8"	1/2"
DF-12138	1/2"	1-3/16"	11/16"
DF-58138	5/8"	1-3/16"	11/16"
DF-34138	3/4"	1-3/16"	11/16"
DF-12138	1/2"	1-3/8"	5/8"
DF-58138	5/8"	1-3/8"	5/8"
DF-34138	3/4"	1-3/8"	5/8"



Flanged ball bearings provide improved rollability over standard roller bearings however load capacity is reduced.

### FLANGED BALL BEARINGS

Model Number	ID	OD	Length
BB-58118	3/8"	1-1/8"	13/16"
BB-12138	1/2"	1-3/16"	7/16"
BB-12138	1/2"	1-3/8"	1/2"
BB-58138	5/8"	1-3/8"	1/2"
BB-34138	3/4"	1-3/8"	1/2"



Our fully sealed precision ball bearings (available in both steel and stainless steel) provide both greatly increased rollability and higher capacity over roller bearings. PBB's are ideal for towline applications.

### PRECISION BALL BEARINGS

Model Number	ID	OD	Seal Type
PBB-6203-2RS	17mm	40mm	Rubber
PBB-6204-2RS	20mm	47mm	Rubber
PBB-6205-2RS	25mm	52mm	Rubber

### STAINLESS PRECISION BALL BEARINGS

Model Number	ID	OD	Seal Type
SSPBB-6203-2RS	17mm	40mm	Rubber
SSPBB-6205-2RS	25mm	52mm	Rubber



Our precision machined Top Hat spacers are designed for use with precision ball bearings.

### TOP HATS (SPACERS FOR PRECISION BALL BEARINGS)

Model Number	ID	Typical Wheel Hub Length
TH-58	5/16"	1-5/8" (1-11/16" Leg Spacing)
TH-38	3/8"	1-5/8" (1-7/8" Leg Spacing)
TH-12	1/2"	2-3/16" (2-7/16" Leg Spacing)
TH-34S	3/4"	2-3/4" (3" Leg Spacing)
TH-34L	3/4"	3-1/4" (3-1/2" Leg Spacing)
TH-34XL	3/4"	2-3/4" (3-1/2" Leg Spacing)

### TOP HATS (SPACERS FOR PRECISION BALL BEARINGS)

Model Number	ID	Typical Wheel Hub Length
SSTH-38	3/8"	1-5/8" (1-7/8" Leg Spacing)
SSTH-12	1/2"	2-3/16" (2-7/16" Leg Spacing)
SSTH-34S	3/4"	2-3/4" (3" Leg Spacing)
SSTH-34L	3/4"	3-1/4" (3-1/2" Leg Spacing)
SSTH-34XL	3/4"	2-3/4" (3-1/2" Leg Spacing)



Tapered roller bearings offer both much higher load bearing capacity and improved rollability over standard roller bearings. They are suitable for lowfric applications.

### TAPERED ROLLER BEARINGS

Model Number	ID	Typical Installation
TB-12	1/2"	Most 1-3/16" Bore Wheels
TB-34	3/4"	Most 1-15/16" Bore Wheels
TB-10	1"	Most 1-15/16" Bore Wheels
TB-14	1-1/4"	Most 2-7/16" Bore Wheels
TB(HD)-14	1-1/4"	Most 2-7/16" Bore Wheels
TB-15	1-1/2"	Most 2-7/16" Bore Wheels
TB-20	2"	Most 2-7/16" Bore Wheels



Retainer washers are used to firmly hold roller bearings in place in the wheel. They are available in steel, nylon or stainless steel.

### STEEL RETAINER WASHERS

Model Number	ID	OD
RW-12116	1/2"	1-1/16"
RW-34136	3/4"	1-3/16"
RW-10176	1"	1-7/16"
RW-10115	1"	1-15/16"
RW-14115	1-1/4"	1-15/16"
RW-14276	1-1/4"	2-7/16"
RW-15276	1-1/2"	2-7/16"

### STAINLESS STEEL RETAINER WASHERS

Model Number	ID	OD
SSRW-34136	3/4"	1-3/16"
SSRW-10115	1"	1-15/16"

### STEEL THRUST WASHERS

Model Number	ID
TW-12	1/2"
TW-58	5/8"
TW-34	3/4"
TW-10	1"
TW-14	1-1/4"
TW-15	1-1/2"

### STAINLESS STEEL THRUST WASHERS

Model Number	ID
SSTW-12	1/2"
SSTW-34	3/4"
SSTW-10	1"



Vulca seals are a rubberised version of our standard steel retainer washers and are used to provide a seal for our standard roller bearings.

### VULCA SEALS

Model Number	ID	OD	Thickness
VS-34136	3/4"	1-3/16"	3/32"
VS-58136	5/8"	1-3/16"	3/32"
VS-10115	1"	1-15/16"	1/8"
VS-14115	1-1/4"	1-15/16"	1/8"
VS-14276	1-1/4"	2-7/16"	1/8"
VS-15276	1-1/2"	2-7/16"	1/8"



Head seals are soft gaskets used to seal the raceways on a caster to prevent infiltration of debris.

### HEAD SEALS

Model Number	Series Used With
HS-BW	BW, FT, SSBW and SSR1 Series
HS-HD	HD, LH, SSHD and SSLH Series
HS-LD	LD and SSD Series
HS-LS	LE, LS, SSLE and SSSL Series

### NYLON RETAINER WASHERS

Model Number	ID	OD
NW-12116	1/2"	1-1/16"
NW-34136	3/4"	1-3/16"

### DOUBLE NYLON RETAINER WASHERS

Model Number	ID	OD
DW-34136	3/4"	1-3/16"

### WASHERS AND TOP HATS - SELECTION AND INSTALLATION GUIDE

Different bearing types require different combinations of washers to ensure proper operation of the wheel. Here is a brief guide:

- Retainer Washers are used to "retain" or hold in place Roller Bearings (standard, 1-piece and stainless steel).
- Thrust Washers are used in conjunction with Retainer Washers to keep the Caster fork legs from compressing against the side of the wheel.
- Double Nylon Washers are a combination Retainer Washer and Thrust Washer together in one piece.
- Flanged bearings (Delrin, Flanged Brass, Flanged Roller and Flanged Ball) and Tapered Roller Bearings do not require washers to be installed.
- Casters using Cam Style Pedal Brakes (BR) must use separate Retainer and Thrust Washers (rather than Double Nylon Washers) to operate.
- Precision Ball Bearings require the use of Top Hat Spacers.

Spanner bushings are used to "span" the distance between the legs of the fork. The Spanner is locked in place allowing the bearing to turn freely. Precision machined and cross-drilled to allow for lubrication of the wheel bearing.



A fully stainless steel version of our standard steel spanner bushing.

### STEEL SPANNER BUSHINGS

Model Number	ID	OD	Length
SB-5638112	5/16"	3/8"	1-1/2"
SB-5638196	5/16"	3/8"	1-9/16"
SB-5612196	5/16"	1/2"	1-9/16"
SB-5658111	5/16"	5/8"	1-11/16"
SB-56RM178	5/16"	12mm	1-7/8"
SB-3812196	3/8"	1/2"	1-9/16"
SB-3812178	3/8"	1/2"	1-7/8"
SB-3858111	3/8"	5/8"	1-11/16"
SB-3858178	3/8"	5/8"	1-7/8"
SB-1258178	1/2"	5/8"	1-7/8"
SB-1258276	1/2"	5/8"	2-7/16"
SB-1234178	1/2"	3/4"	1-7/8"
SB-1234276	1/2"	3/4"	2-7/16"
SB-1210300	1/2"	1"	3"
SB-1210312	1/2"	1"	3-1/2"
SB-5834178	5/8"	3/4"	1-7/8"
SB-5834276	5/8"	3/4"	2-7/16"
SB-5810300	5/8"	1"	3"
SB-5810312	5/8"	1"	3-1/2"
SB-3410300	3/4"	1"	3"
SB-3410312	3/4"	1"	3-1/2"
SB-1014312	1"	1-1/4"	3-1/2"
SB-1014412	1"	1-1/4"	4-1/2"
SB-1415312	1-1/4"	1-1/2"	3-1/2"
SB-1415412	1-1/4"	1-1/2"	4-1/2"

### STAINLESS STEEL SPANNER BUSHINGS

Model Number	ID	OD	Length
SSB-5612M111	5/16"	12mm	1-11/16"
SSB-5612196	5/16"	1/2"	1-9/16"
SSB-5658111	5/16"	5/8"	1-11/16"
SSB-5634111	5/16"	3/4"	1-11/16"
SSB-5612M178	5/16"	12mm	1-7/8"
SSB-3812196	3/8"	1/2"	1-9/16"
SSB-3815M178	3/8"	15mm	1-7/8"
SSB-3858111	3/8"	5/8"	1-11/16"
SSB-3858178	3/8"	5/8"	1-7/8"
SSB-3834111	3/8"	3/4"	1-11/16"
SSB-3834178	3/8"	3/4"	1-7/8"
SSB-1234178	1/2"	3/4"	1-7/8"
SSB-1234278	1/2"	3/4"	2-7/16"
SSB-3410300	3/4"	1"	3"
SSB-3410312	3/4"	1"	3-1/2"

These spanners are made from high-strength Delrin material and are a lower cost alternative to stainless steel spanner bushings.

### DELRIN SPANNER BUSHINGS

Model Number	ID	OD	Length
DSB-5612196	5/16"	1/2"	1-9/16"
DSB-3812158	3/8"	1/2"	1-5/8"
DSB-1234178	1/2"	3/4"	1-7/8"
DSB-1234278	1/2"	3/4"	2-7/16"

These special spanner bushings are designed to allow wheels to turn through the expansion and contraction often experienced in high-heat applications that cause other bearings to squeak and bind. They are intended for use with our special High-Temp Monolithic Wheels (HTM Series).

### HI-LEX SPANNER BUSHINGS

Model Number	ID	OD	Length
HL-56	5/16"	12mm	1-5/8"
HL-38	3/8"	15mm	1-7/8"

### CUSTOM COMPONENTS

Bestway has it's own in-house machine shop where we can quickly manufacture any custom replacement part or component you may require.

If you require a component that is not listed on these pages, give us the specifications and we can make it for you. As with all of our custom specials, we offer speedy delivery and unbeatable pricing. There is no minimum order quantity required.

Here's just a sample of the custom products we can produce for you:

- Axle Kits (Plain and Grease)
- Spanner Bushings
- Top Hat Spacers for PBB's
- Flanged Metal Bearings

We can machine your product in the material of your choice (Steel, Stainless Steel, Brass, Bronze, Delrin).

We can also source non-standard bearing types and sizes to suit your specific application needs.





Grease axles are hollow axles that are fitted with a grease nipple to allow periodic lubrication of the wheel bearing.

GREASE AXLE KITS		
Model Number	Diam.	Length
GAK-56214	5/16"	2-1/4"
GAK-56212	5/16"	2-1/2"
GAK-38214	3/8"	2-1/4"
GAK-38212	3/8"	2-1/2"
GAK-38300	3/8"	3"
GAK-12300	1/2"	3"
GAK-12312	1/2"	3-1/2"
GAK-12400	1/2"	4"
GAK-12412	1/2"	4-1/2"
GAK-12500	1/2"	5"
GAK-12512	1/2"	5-1/2"
GAK-12612	1/2"	6-1/2"
GAK-34412	3/4"	4-1/2"
GAK-34500	3/4"	5"
GAK-34512	3/4"	5-1/2"
GAK-34900	3/4"	9"
GAK-10512	1"	5-1/2"
GAK-14612	1-1/4"	6-1/2"
GAK-14700	1-1/4"	7"
GAK-14130	1-1/4"	13"

A fully stainless steel version of our standard plain axles.

STAINLESS STEEL PLAIN AXLE		
Model Number	Diam.	Length
SSAK-56214	5/16"	2-1/4"
SSAK-38212	3/8"	2-1/2"
SSAK-12300	1/2"	3"
SSAK-12312	1/2"	3-1/2"
SSAK-34412	3/4"	4-1/2"
SSAK-34500	3/4"	5"



A fully stainless steel version of our standard grease axles.

STAINLESS STEEL GREASE AXLE		
Model Number	Diam.	Length
SSGAK-56214	5/16"	2-1/4"
SSGAK-38212	3/8"	2-1/2"
SSGAK-12300	1/2"	3"
SSGAK-12312	1/2"	3-1/2"
SSGAK-34412	3/4"	4-1/2"
SSGAK-34500	3/4"	5"



Plain axles (without grease fittings) are used with spacers and bearings that do not require lubrication.

PLAIN AXLE KITS		
Model Number	Diam.	Length
AK-25112	1/4"	1-1/2"
AK-25134	1/4"	1-3/4"
AK-25200	1/4"	2"
AK-56200	5/16"	2"
AK-56214	5/16"	2-1/4"
AK-56212	5/16"	2-1/2"
AK-38214	3/8"	2-1/4"
AK-38212	3/8"	2-1/2"
AK-38300	3/8"	3"
AK-12300	1/2"	3"
AK-12312	1/2"	3-1/2"
AK-12400	1/2"	4"
AK-12412	1/2"	4-1/2"
AK-12500	1/2"	5"
AK-12512	1/2"	5-1/2"
AK-12612	1/2"	6-1/2"
AK-34412	3/4"	4-1/2"
AK-34500	3/4"	5"
AK-34512	3/4"	5-1/2"
AK-34900	3/4"	9"
AK-10512	1"	5-1/2"
AK-14612	1-1/4"	6-1/2"
AK-14700	1-1/4"	7"
AK-14912	1-1/4"	9-1/2"
AK-14130	1-1/4"	13"

### CHOOSING THE RIGHT AXLE KIT

There are several things to consider when selecting an Axle kit.

- The Diameter of the Axle is determined by the Axle hole size of the caster being used.
- The Length of the Axle is determined by the fork leg spacing of the caster used. On some light duty casters a slightly longer axle may be required if a Side Pedal Brake is installed.
- Stainless Steel material should be used with all Stainless Steel casters regardless of bearing type or material.
- Plain Axles should be used where there is no requirement to lubricate the wheel bearing (i.e. Plain Bore, Flanged Ball Bearings, Flanged Roller Bearings and Precision Ball Bearings).
- Grease Axles are used where periodic lubrication of the wheel bearing is required (i.e. Roller Bearings, Delrin Bearings, 1-Piece Heavy Duty Roller Bearings, Stainless Steel Roller Bearings and Tapered Roller Bearings).

## BEARINGS / SPARE PARTS

- **Split Race Roller Bearing:** Most popular for industrial wheel use. Great general duty bearing with high capacity.
- **Caged Roller Bearing:** Hardened rollers are retained in a hardened casing. A superior version of the split race roller bearing.
- **Spanners:** Non-rotating steel sleeve that fits over the axle. Provides hardened surface for bearing rollers; caster legs are locked against it.

### Roller Bearings



I.D. (in.)	O.D. (in.)	Length (in.)	Part Number
3/4	1-3/16	1-3/8	RB121922
3/4	1-3/16	1-7/8	RB121930
3/4	1-3/16	2	RB121932
3/4	1-3/16	2-1/2	RB121940
1	1-7/16	2	RB162332
1	1-15/16	2-1/2	RB163140
1	1-15/16	3	RB163148
1	1-15/16	4	RB163164
1-1/4	1-15/16	2	RB203132
1-1/4	1-15/16	2-1/2	RB203140
1-1/4	1-15/16	3	RB203148
1-1/4	1-15/16	4	RB203164
1-1/4	2-7/16	3	RB203948
1-1/4	2-7/16	4	RB203964
1-1/4	2-7/16	5	RB203980
1-1/2	2-7/16	3	RB243948
1-1/2	2-7/16	4	RB243964
1-1/2	2-7/16	5	RB243980
1-3/4	3-1/16	5	RB284980
2	3-1/4	5	RB325280

### Spanner Bushings



I.D. (in.)	O.D. (in.)	Length (in.)	Part Number
1-2	3/4	1-5/8	SP081226
1-2	3/4	1-7/8	SP081230
1-2	3/4	2-7/16	SP081239
1-2	3/4	3	SP081248
3/4	1	3	SP121648
3/4	1	3-9/16	SP121657
3/4	1	4-9/16	SP121673
1	1-1/4	3	SP162048
1	1-1/4	3-9/16	SP162057
1	1-1/4	4-9/16	SP162073
1	1-1/4	5-9/16	SP162089
1-1/4	1-1/2	3-9/16	SP202457
1-1/4	1-1/2	4-9/16	SP202473
1-1/4	1-1/2	5-9/16	SP202489

### Caged Roller Bearings



I.D. (in.)	O.D. (in.)	Length (in.)	Part Number
3/4	1-3/16	1-3/8	RBC121922
3/4	1-3/16	1-7/8	RBC121930

### Tapered Roller Bearings



I.D. (in.)	O.D. (in.)	Part Number
1/2	1.375	4050 Cone
1/2	1.375	4138 Cup
3/4	1.780	LM11949 Cone
3/4	1.780	LM11910 Cup
3/4	1.9375	09067 Cone
3/4	1.9375	09195 Cup
1	1.980	L44643 Cone
1	1.980	L44610 Cup
1	2.437	15101 Cone
1	2.437	15245 Cup
1-1/4	2.327	LM67048 Cone
1-1/4	2.327	LM 67010 Cup
1-1/4	2.437	15125 Cone
1-1/4	2.437	15245 Cup
1-1/2	2.717	13685 Cone
1-1/2	2.717	13621 Cup
2	3.187	L305649 Cone
2	3.187	L305610 Cup

## BEARINGS / SPARE PARTS

- **Seals:** Retain lubrication and prevent dirt and debris entry. Standard on all tapered roller bearings. Also available in flat washer type for roller bearings.
- **Snap Rings:** Internally expanding metal rings that lock into bore grooves to provide backing for ball or tapered roller bearings.
- **Ball Bearings:** Easiest rolling bearing. Generally maintenance free. T-bushing available for most sizes.
- **T-Bushings:** Metal T-shaped bushings used in ball bearing setups.; allow axle to be tightened on caster legs without applying force to inner race of bearing.
- **Spacers:** Used in tapered roller bearing setup; allow caster leg to apply required preload to tapered bearing cone.

### Metric Precision Ball Bearings



I.D. (in./mm.)	O.D. (in./mm.)	Width (in./mm.)	Part Number
.6693 / 17mm	1.378 / 35mm	.3937 / 10mm	<b>6003</b>
.6693 / 17mm	1.575 / 40mm	.4724 / 12mm	<b>6203</b>
.7874 / 20mm	1.850 / 47mm	.5512 / 14mm	<b>6204</b>
.9843 / 25mm	2.047 / 52mm	.5902 / 15mm	<b>6205</b>
1.181 / 30mm	2.441 / 62mm	.6299 / 16mm	<b>6206</b>

### Standard Precision Ball Bearings



I.D. (in.)	O.D. (in.)	Width (in.)	Part Number
1/2	1.125	.2500	<b>R8</b>
5/8	1.375	.2812	<b>R10</b>
3/4	1.625	.3125	<b>R12</b>
1	2.000	.3750	<b>R16</b>
1-1/4	2.250	.3750	<b>R20</b>

### Seals for Tapered Roller Bearings



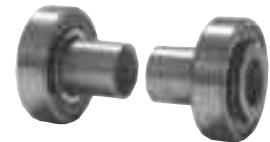
I.D. (in.)	O.D. (in.)	Part Number
3/4	1.780	<b>CR12178</b>
3/4	1.937	<b>CR12193</b>
1	1.980	<b>CR16198</b>
1	2.437	<b>CR16244</b>
1-1/4	2.326	<b>CR20233</b>
1-1/4	2.437	<b>CR20244</b>
1-1/2	2.717	<b>CR24272</b>
2	3.187	<b>CR32319</b>

### Washer Seals



I.D. (in.)	O.D. (in.)	Part Number
3/4	1-3/16	<b>WS1219</b>
3/4	1-3/8	<b>WS1222</b>
1	1-7/16	<b>WS1623</b>
1	1-9/16	<b>WS1625</b>
1	1-15/16	<b>WS1631</b>
1-1/4	1-15/16	<b>WS2031</b>
1-1/4	2-7/16	<b>WS2039</b>
1-1/2	2-7/16	<b>WS2439</b>

### Top Hats / T-Bushings



I.D. (in.)	O.D. (in.)	Length* (in.)	Part Number
1/2	.667	15/16	<b>TH081715</b>
1/2	.667	1-7/32	<b>TH081719</b>
3/4	.982	1-1/2	<b>TH122524</b>
3/4	.982	1-3/4	<b>TH122528</b>

\*Two T-bushings required per wheel length x 2 = overall

### Snap Rings

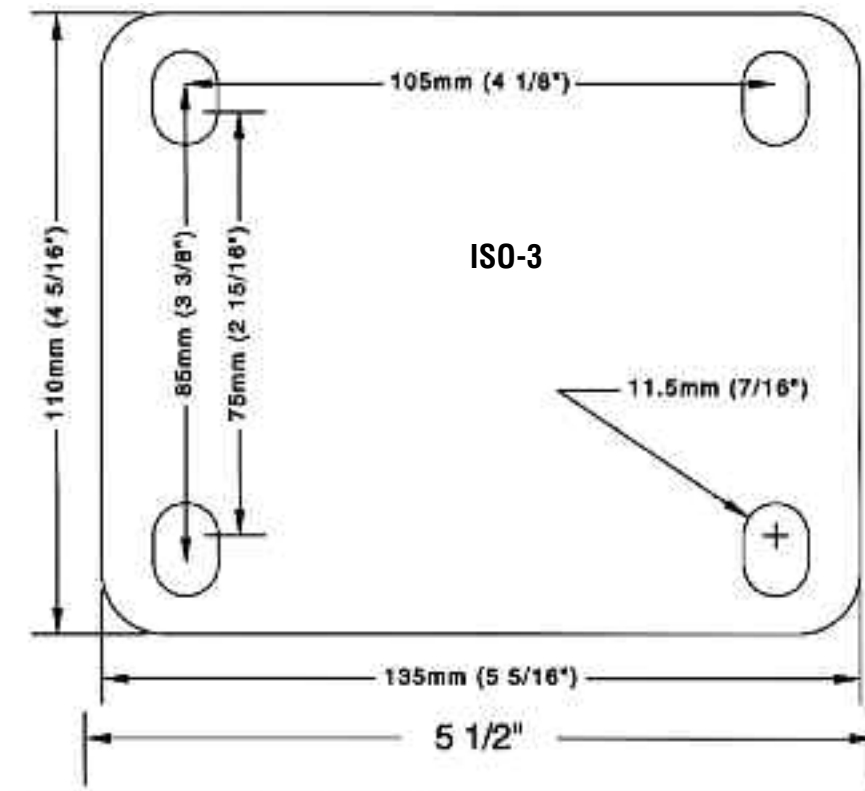
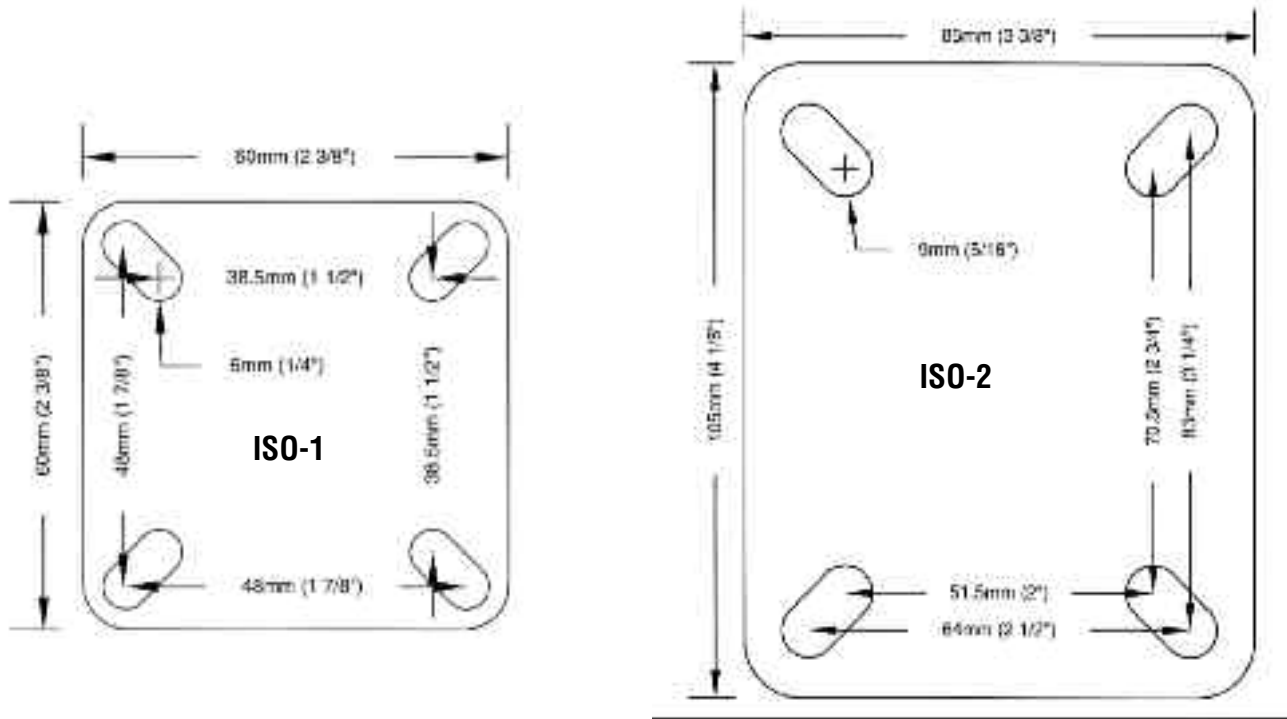


For Bore Size	Part Number
1.780	<b>SR12</b>
1.980	<b>SR16</b>
2.437	<b>SR16-1</b>
2.326	<b>SR20</b>
2.717	<b>SR20-1</b>
3.187	<b>SR32</b>

### Spacer Washers



I.D. (in.)	O.D. (in.)	Width (in.)	Part Number
1/2	3/4	1-4	<b>SW081204</b>
3/4	1	3/8	<b>SW121606</b>
1	1-1/4	3/8	<b>SW162006</b>
1	1-1/4	1/2	<b>SW162008</b>
1-1/4	1-1/2	1/2	<b>SW202408</b>
1-1/2	1-3/4	1/2	<b>SW242808</b>
2	2-1/4	1/2	<b>SW323608</b>



**OTHER ISO TOP PLATE SIZES OR BOLT HOLE CENTERS ARE AVAILABLE WITH KINGPINLESS STYLE CASTERS**