Swivel & Rigid



www.ColsonCaster.com Consult factory for RoHS and NSF requirements on a part specific basis







- Food grade -40°F to 600°F performance grease (FDA approved)
- ½" diameter 304 stainless steel zerk axle standard; solid axle available by special order
- NSF listed

The D4 Defender Series is the ideal 2" wide caster solution for customers requiring lasting performance and corrosion resistance. Manufactured from Type 304 stainless steel, this series provides critical defense to applications exposed to washdowns, cleaning agents, steam, caustic solutions, and other environmental conditions that eventually cause oxidation and failure in standard casters.



Brake Selection

 Legs precision welded to yoke for strength Double stainless steel ball

bearing raceways (with zerk) formed smooth for

ease of swiveling



Top Lock

Applies positive engagement to tread surface of wheel when activated for a secure lock; available on swivel models only (Specify BRK7; Example: D4.06109.839 EN BRK7 SS WB29).



Total Lock

Locks wheel and swivel simultaneously. Total Lock rig rated to 300°F continuous (Specify BRK4; Example: D4.06109.459 BRK4 SS WB29).



Side Lock

Large brake pedal places positive locking force against wheel hub when activated; available on all swivel and rigid casters with roller bearings (Specify BRK3; Example: D4.06109.929 BRK3 SS WB29).

Brake Swivel Radius

DIA.	BRK4	BRK7	BRK3
4"	5 ¹⁵ /16"	4 ¹⁵ /16"	4 ¹⁵ /16"
5"	63/8"	51/8"	51/8"
6"	63/4"	53/8"	53/8"
8"	6 ¹⁵ /16"	61/2"	61/2"

Standard Dimensions -35/g"-3"25/8 3" 25/8 41/2"-Wheel Fork Leg Spacing 21/2" Swivel Cross Section Mounting Bolt 3/8"

Fork / Wheel Options

To order caster forks only use 1st 7 digits of model numbers and add SS (Example: D4.04109 SS).



Hand Operated Bolt-on Swivel Lock

Available for all swivel models (field installable); order part SWVLOCKX2SS separately. For welded version, please consult factory.



Foot Activated Swivel Lock Available for all swivel models (field installable); order part **05213.67** separately.



DirtBan Swivel Seals (Upper and Lower Raceways) Not compatible with Total

Lock brake and swivel locks. Temperature rating: 140°F (Specify SEAL; Example: D4.06109.929 SS SEAL).

Fork Temperature Range

Standard swivel rigs rated up to 600°F; see specified wheel and bearing ratings to determine maximum caster temperature rating.

Wheel Selection

Nylon Models: Temperature/moisture versatility, strong, floor protective

Nylon	Maxim Nylon	Nylon Glass	Co
White	Glass Filled	Filled	
()	6	(6)	

Polyurethane Models: Versatile & floor protective, softer than nylon/metal for quieter ride Polyurethane



Rubber Models: Floor protective, shock absorbing, quiet, debris rejecting Performa







Endura Solid

Performa Conductive

K Solid

Elastomer Polyurethane



Thermo Hi-Temp

Phenolic Models:

Economical & strong, not recommended for moisture

Hi-Temp

Nylon Glass Filled

Phenolic Phenolic Hi-Temp



Polyolefin Models: Most Economical, light weight, and water resistant Polyolefin





Thicker 3/4" kingpin lasts up to 2x longer!



Defender 3/4" kingpin rigs last up to 2x longer in internal durability testing compared to standard 5/8" kingpin constructions

HIGH HEAT WHEEL	*CONTINUOUS Temperature range		
Thermo Hi-Temp	up to +480°F		
Hi-Temp Nylon Glass Filled	up to +480°F		
Phenolic Hi-Temp	up to +475°F		
Retort Hi-Temp	up to +290°F		

*Temperature range dependent on bearing choice, see next page for bearing temperature specifications.

3D CAD Models & Data Sheets www.colsoncaster.com/D4

Colson D4 Series Casters • Defender Stainless Steel Top Plate Swivel & Rigid • Capacity to 1250 lbs

Wheel Dia.	Tread Width	Capacity Each (Pounds)	Wheel Descriptions	Swivel Top Plate SS Roller Bearing Models	Rigid Top Plate SS Roller Bearing Models	Optional Bearings (order information in below chart)	Load Height	Swivel Radius	Weight (Pounds) Rigid Deduct 1.5 lbs)				
		300		D4.04109.459 COND SS WB29	D4.04108.459 COND SS WB29	PPBB Delvin Branco DDDD	5-5/8"	3-3/8"	5-1/4				
		400	Performa (Flat) Performa (Round)	D4.04109.459 SS WB29 D4.04109.559 SS WB29	D4.04108.459 SS WB29 D4.04108.559 SS WB29	Delrin, Bronze, PPBB Delrin, Bronze, PPBB	5-5/8" 5-5/8"	3-3/8"	5-1/4 5-1/4				
		500	Retort Hi-Temp	D4.04109.839 RW SS WB29	D4.04108.839 RW SS WB29	Delrin, Bronze, PPBB	5-5/8"	3-3/8"	5				
				D4.04109.839 SS WB29	D4.04108.839 SS WB29	Delrin, Bronze, PPBB	5-5/8"	3-3/8"	3-3/4 4-3/4				
		600 700	HydroTech K Solid Polyurethane*	D4.04109.929 HF SS WB29 D4.04109.935 KW SS	D4.04108.929 HF SS WB29 D4.04108.935 KW SS	Delrin, Bronze, PPBB Delrin, Bronze	5-5/8" 5-5/8"	3-3/8"	4-3/4				
		720	Polyurethane Hi-TECH	D4.04109.929 SS WB29	D4.04108.929 SS WB29	Delrin, Bronze, PPBB	5-5/8"	3-3/8"	5				
4"	2"	720	Antimicrobial Hi-TECH Phenolic - High Temp	D4.04109.929G SS WB29	D4.04108.929G SS WB29	Delrin, Bronze, PPBB Delrin, Bronze, PPBB	5-5/8" 5-5/8"	3-3/8"	<u>5</u> 5				
			Phenolic - night temp	D4.04109.339 HT SS WB29 D4.04109.339 SS WB29	D4.04108.339 HT SS WB29 D4.04108.339 SS WB29	Delrin, Bronze, PPBB	5-5/8"	3-3/8"	5				
		800	Maxim Nylon Glass Filled	D4.04109.539 SS WB29	D4.04108.539 SS WB29	Delrin, Bronze, PPBB	5-5/8"	3-3/8"	5				
				D4.04109.839 HTBLK SS WB29 D4.04109.839 HT SS WB29	D4.04108.839 HTBLK SS WB29 D4.04108.839 HT SS WB29	Delrin, Bronze, PPBB Delrin, Bronze, PPBB	5-5/8" 5-5/8"	3-3/8"	<u>5</u> 5				
		900	White Nylon	D4.04109.539 WN SS WB29	D4.04108.539 WN SS WB29	Delrin, Bronze, PPBB	5-5/8"	3-3/8"	5				
		1000	HD Nylon Glass Filled	D4.04109.839 DT SS WB29	D4.04108.839 DT SS WB29	Delrin, Bronze, PPBB	5-5/8"	3-3/8"	5				
		1250	Endura Solid Elastomer Commander HD*	D4.04109.839 EN SS WB29 D4.04109.5PN SS	D4.04108.839 EN SS WB29 D4.04108.5PN SS	Delrin, Bronze, PPBB SS Prec. Ball Standard	5-5/8" 5-5/8"	3-3/8" 3-3/8"	5-3/4				
		325		D4.05109.459 COND SS WB29	D4.05108.459 COND SS WB29	PPBB	6-1/2"	4-1/8"	5-1/2				
		425	Performa (Round)	D4.05109.559 SS WB29	D4.05108.559 SS WB29	Delrin, Bronze, PPBB	6-1/2"	4-1/8"	5-1/2				
		500		D4.05109.459 SS WB29 D4.05109.839 RW SS WB29	D4.05108.459 SS WB29 D4.05108.839 RW SS WB29	Delrin, Bronze, PPBB Delrin, Bronze, PPBB	6-1/2" 6-1/2"	4-1/8" 4-1/8"	5-1/2 5-1/4				
		650		D4.05109.839 SS WB29	D4.05108.839 SS WB29	Delrin, Bronze, PPBB	6-1/2"	4-1/8"	4-1/2				
		750	HydroTech	D4.05109.929 HF SS WB29	D4.05108.929 HF SS WB29	Delrin, Bronze, PPBB	6-1/2"	4-1/8"	4-3/4				
		900		D4.05109.929 SS WB29 D4.05109.929G SS WB29	D4.05108.929 SS WB29 D4.05108.929G SS WB29	Delrin, Bronze, PPBB	6-1/2" 6-1/2"	4-1/8" 4-1/8"	5-1/4 5-1/4				
	011		Antimicrobial Hi-TECH Phenolic - High Temp	D4.05109.339 HT SS WB29	D4.05108.339 HT SS WB29	Delrin, Bronze, PPBB Delrin, Bronze, PPBB	6-1/2"	4-1/8"	5-1/4				
5"	2"		Phenolic	D4.05109.339 SS WB29	D4.05108.339 SS WB29	Delrin, Bronze, PPBB	6-1/2"	4-1/8"	5-1/4				
			Maxim Nylon Glass Filled White Nylon	D4.05109.539 SS WB29 D4.05109.539 WN SS WB29	D4.05108.539 SS WB29 D4.05108.539 WN SS WB29	Delrin, Bronze, PPBB Delrin, Bronze, PPBB	6-1/2" 6-1/2"	4-1/8" 4-1/8"	5-1/4 5-1/4				
		1000	Endura Solid Elastomer	D4.05109.839 EN SS WB29	D4.05108.839 EN SS WB29	Delrin, Bronze, PPBB	6-1/2"	4-1/8"	5-7/8				
			Hi-Temp Nylon Glass Filled	D4.05109.839 HTBLK SS WB29	D4.05108.839 HTBLK SS WB29	Delrin, Bronze, PPBB	6-1/2"	4-1/8"	5-1/4				
				D4.05109.935 KW SS D4.05109.839 HT SS WB29	D4.05108.935 KW SS D4.05108.839 HT SS WB29	Delrin, Bronze	6-1/2" 6-1/2"	4-1/8" 4-1/8"	<u>5</u> 5-1/4				
		1200		D4.05109.839 DT SS WB29	D4.05108.839 DT SS WB29	Delrin, Bronze, PPBB Delrin, Bronze, PPBB	6-1/2"	4-1/8"	5-1/4				
		1250	Commander HD*	D4.05109.5PN SS	D4.05108.5PN SS	SS Prec. Ball Standard	6-1/2"	4-1/8"	8				
		410	Performa Conductive (Flat)	D4.06109.459 COND SS WB29 D4.06109.559 COND SS WB29	D4.06108.459 COND SS WB29 D4.06108.559 COND SS WB29	PPBB PPBB	7-1/2" 7-1/2"	4-7/8" 4-7/8"	5-3/4 5-3/4				
		450	Performa (Round)	D4.06109.559 SS WB29	D4.06108.559 SS WB29	Delrin, Bronze, PPBB	7-1/2"	4-7/8"	5-3/4				
		600	Performa (Flat)	D4.06109.459 SS WB29	D4.06108.459 SS WB29	Delrin, Bronze, PPBB	7-1/2"	4-7/8"	5-3/4				
		700	Retort Hi-Temp Polyolefin	D4.06109.839 RW SS WB29 D4.06109.839 SS WB29	D4.06108.839 RW SS WB29 D4.06108.839 SS WB29	Delrin, Bronze, PPBB Delrin, Bronze, PPBB	7-1/2" 7-1/2"	4-7/8" 4-7/8"	5-1/2 4-3/4				
		900		D4.06109.929 HF SS WB29	D4.06108.929 HF SS WB29	Delrin, Bronze, PPBB	7-1/2"	4-7/8"	5				
			Polyurethane Hi-TECH	D4.06109.929 SS WB29	D4.06108.929 SS WB29	Delrin, Bronze, PPBB	7-1/2"	4-7/8"	5-3/4				
6"	2"	2" 1100		D4.06109.929G SS WB29 D4.06109.839 EN SS WB29	D4.06108.929G SS WB29 D4.06108.839 EN SS WB29	Delrin, Bronze, PPBB Delrin, Bronze, PPBB	7-1/2" 7-1/2"	4-7/8" 4-7/8"	5-3/4 6				
U	_				D4.06108.839 HT SS WB29	Delrin, Bronze, PPBB	7-1/2"	4-7/8"	5-3/4				
			Phenolic - High Temp	D4.06109.339 HT SS WB29	D4.06108.339 HT SS WB29	Delrin, Bronze, PPBB	7-1/2"	4-7/8"	6-1/4				
						1200		D4.06109.339 SS WB29 D4.06109.539 SS WB29	D4.06108.339 SS WB29 D4.06108.539 SS WB29	Delrin, Bronze, PPBB Delrin, Bronze, PPBB	7-1/2" 7-1/2"	4-7/8" 4-7/8"	6-1/4 5-3/4
							1200	White Nylon	D4.06109.539 WN SS WB29	D4.06108.539 WN SS WB29	Delrin, Bronze, PPBB	7-1/2"	4-7/8"
				D4.06109.839 HTBLK SS WB29 D4.06109.839 DT SS WB29	D4.06108.839 HTBLK SS WB29	Delrin, Bronze, PPBB	7-1/2" 7-1/2"	4-7/8"	5-3/4				
		1250	HD Nylon Glass Filled K Solid Polyurethane*	D4.06109.935 KW SS	D4.06108.839 DT SS WB29 D4.06108.935 KW SS	Delrin, Bronze, PPBB Delrin, Bronze	7-1/2"	4-7/8" 4-7/8"	6-1/4 5-1/2				
			Commander HD*	D4.06109.5PN SS	D4.06108.5PN SS	SS Prec. Ball Standard	7-1/2"	4-7/8"	9-3/4				
		500			D4.08108.459 COND SS WB29 D4.08108.559 COND SS WB29	PPBB PPBB	9-1/2" 9-1/2"	6-3/8" 6-3/8"	6				
		600			D4.08108.559 SS WB29	Delrin, Bronze, PPBB		6-3/8"	6				
		675	Performa (Flat)	D4.08109.459 SS WB29	D4.08108.459 SS WB29	Delrin, Bronze, PPBB	9-1/2"	6-3/8"	6				
		900	Retort Hi-Temp Polyolefin	D4.08109.839 RW SS WB29 D4.08109.839 SS WB29	D4.08108.839 RW SS WB29 D4.08108.839 SS WB29	Delrin, Bronze, PPBB Delrin, Bronze, PPBB		6-3/8" 6-3/8"	6-1/4 6-1/4				
		1000	HydroTech	D4.08109.929 HF SS WB29	D4.08108.929 HF SS WB29	Delrin, Bronze, PPBB	9-1/2"	6-3/8"	5-3/4				
			Polyurethane Hi-TECH	D4.08109.929 SS WB29	D4.08108.929 SS WB29	Delrin, Bronze, PPBB	9-1/2"	6-3/8"	7				
8"	2"	1200	Antimicrobial Hi-TECH White Nylon	D4.08109.929G SS WB29 D4.08109.539 WN SS WB29	D4.08108.929G SS WB29 D4.08108.539 WN SS WB29	Delrin, Bronze, PPBB Delrin, Bronze, PPBB		6-3/8" 6-3/8"	<u>7</u> 8				
J	_	1200	Endura Solid Elastomer	D4.08109.839 EN SS WB29	D4.08108.839 EN SS WB29	Delrin, Bronze, PPBB	9-1/2"	6-3/8"	6-3/4				
			Thermo Hi-Temp	D4.08109.839 HT SS WB29	D4.08108.839 HT SS WB29	Delrin, Bronze, PPBB	9-1/2"	6-3/8"	7				
				D4.08109.339 HT SS WB29 D4.08109.339 SS WB29	D4.08108.339 HT SS WB29 D4.08108.339 SS WB29	Delrin, Bronze, PPBB Delrin, Bronze, PPBB	9-1/2" 9-1/2"	6-3/8" 6-3/8"	8 8				
			Maxim Nylon Glass Filled	D4.08109.539 SS WB29	D4.08108.539 SS WB29	Delrin, Bronze, PPBB	9-1/2"	6-3/8"	7				
		1250	HD Nylon Glass Filled	D4.08109.839 DT SS WB29	D4.08108.839 DT SS WB29	Delrin, Bronze, PPBB	9-1/2"	6-3/8"	8				
						D4.08108.839 HTBLK SS WB29 D4.08108.935 KW SS	Delrin, Bronze, PPBB Delrin, Bronze	9-1/2" 9-1/2"	6-3/8" 6-3/8"	7 6-1/2			
				D4.08109.5PN SS		SS Prec. Ball Standard			10				

*K Solid Polyurethane wheels standard with Pedestal Precision Ball Bearing (PPBB); Commander HD wheels standard with large Precision Ball Bearings.

Bearing Options

Wheels feature stainless steel roller bearings in above chart, unless otherwise noted. To order optional bearings, see information to right.



Stainless Steel Roller Bearing

Temperature Rating: 350°F
The standard bearing option in all above models with **WB29** specification.

High Temp wheel selections are automatically upgraded to stainless steel thrust and retaining washers.



Delrin® Bearing

Temperature Rating: 160°F (increases to 350°F continuous for high-temp wheel selections) To order, change 10th digit to "1" and remove WB29 from model number. (Example: D4.06109.921 SS)



Bronze Bearing

Temperature Rating: 525°F To order, change the 10th digit in model number to "4" and remove WB29 from model number. (Example: D4.06109.534 SS).



Stainless Steel Pedestal Precision Ball Bearing (PPBB)

Temperature Rating: 250°F (increases to 480°F continuous for high-temp wheel selections)
To order change 10th digit to "**5**" and remove WB29 from model number.

(Example: D4.06109.925 SS).

Sealed Precision Ball Bearing: Specify "P5". Minimum order quantities apply.

Defender D4 Stainless Steel Series Components

Swivel and Rigid Rigs





	Tread Width	*Load Capacity (lbs)		Swivel Caster Part #	Rigid Caster Part #
4"	2"	1250	5-5/8"	D4.04109SS	D4.04108SS
5"	2"	1250	6-1/2"	D4.05109SS	D4.05108SS
6"	2"	1250	7-1/2"	D4.06109SS	D4.06108SS
8"	2"	1250	9-1/2"	D4.08199SS	D4.08198SS

Total Lock Rigs



Wheel Dia.		*Load Capacity (lbs)	Mount Height	Part #
4"	2"	1250	5-5/8"	D4.04149SS BRK4
5"	2"	1250	6-1/2"	D4.05149SS BRK4
6"	2"	1250	7-1/2"	D4.06149SS BRK4
8"	2"	1250	9-1/2"	D4.08149SS BRK4

Brake Kits

All brake kits include axle, nut and necessary hardware to install on casters.

Top Lock (BRK7)

Only works with swivel casters.



Model #	Description
DEFTBK4X2SS	4" models
DEFTBK5X2SS	5" models
DEFTBK6X2SS	6" models
DEFTBK8X2SS	8" models

Side Lock (BRK3)

Only works with swivel and rigid roller bearing models. Fits all caster sizes.



Model #	Description	
	Comes with custom	
	spanner bushing (roller	
	bearing required)	

Swivel Locks

Choice of hand operated or foot operated swivel locks.

Hand Operated Swivel Locks





Foot Operated Swivel Locks



05213.67

Hardware (All hardware parts sold per piece, not sets) Axles, nuts and bushings



Stainless Steel Axle (Zerk) 1/2-13x3.75

AXLEZRKEX2SS



Stainless Steel Solid Axle 1/2-13x3.75 **AXLESLDEX2SS**



Stainless Steel Nut 1/2-13



Stainless Steel Spanner Bushing 1/2 X 3/4 X 2-7/16

AXLENUTEX2SS

SPANNEREX2SS

Washers







RETAINEREX2SS

THRUSTEX2SS

Bearings



Stainless Steel Roller Bearing Temperature Rating: 350°F

34 I.D. (Use With Bushing For 1/2 I.D.)

BRGCROLLEX2SS



Bronze Bearing Temperature Rating: 525°F **BRGBRZEX2**



Stainless Steel **Pedestal Precision Ball Bearing**

Temperature Rating: 250°F

BRGPBALLEX2SS



High Temperature Stainless Steel **Pedestal Precision Ball Bearing**

Temperature Rating: 480°F continuous **BRGPBALLEX2SSHT**



Flanged Delrin® **B**earing Temperature Rating: 160°F

34 I.D. (Use With Spanner For ½ I.D.)

BRGDELRNEX2



Flanged High Temperature Nylon Bearing

Temperature Rating: 350°F

34 I.D. (Use With Spanner For ½ I.D.)

BRGNYLONEX2HT

Raceway Seals



Upper and lower seals available on swivel and total lock caster models with exception of swivel locks.





Fork Type	Temperture Rating	Upper Part #	Lower Part #
Swivel	+140°F	51000.77	51001.76
Swivei	+450°F	51000.77HT	51001.76HT
Total Lock	+140°F	618836	618837