

Spring-Loaded Casters (U.S. Patent 6,357,077)



#S-SPCH-10DT-2
Swivel showing
Duralast® wheel

Hamilton's shock absorbing casters are built on the proven and reliable *Champion, Workhorse and Heavy Service* swivel caster platforms. This means you have lots of flexibility if you need to match an existing bolt hole pattern or a specific capacity range. The unique and simple design enables Hamilton to offer these at extremely competitive prices.

Spring loaded casters offer many benefits. These include protecting delicate cargo from shock and vibration, reducing noise levels, reducing wear on floors and extending caster, wheel and bearing life.

The legs are slotted such that the axle "floats" up and down as the wheel encounters obstacles. Since the spring is pre-loaded, the minimum capacity is required to cause the spring to yield. (A load under the minimum capacity may not result in any absorption of shock.)

At the maximum capacity, the spring will have compressed approximately one-half of its length. Overloading a shock-absorbing caster will cause the axle to reach its travel limit, resulting in no shock absorbing benefit.

These casters can be easily modified to accommodate many custom specification requirements. Our engineering department will assist you if you have special application issues.

NEVER DISASSEMBLE A SPRING-LOADED CASTER OR REMOVE THE WHEEL FROM THE CASTER.

The springs contain a tremendous amount of stored energy and serious injury could occur. This should only be done by trained factory personnel.

WHEEL CHOICES for more help, see pages 14 & 15



Duralast®:
95A poly on iron – our standard urethane



Plastex:
phenolic, low cost, high capacity



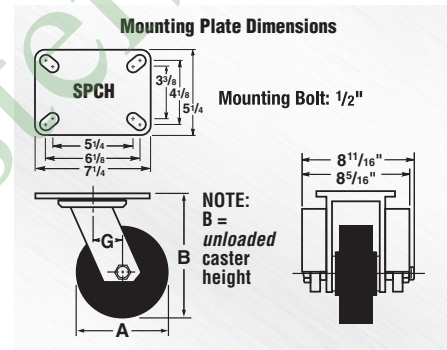
Poly-Soft®:
85A softer poly on iron – quieter, easy rolling, debris resistant urethane



Ultrast™:
95A - the ultimate premium urethane, outperforms all other urethanes



Unilast®:
95A solid poly – institutional use

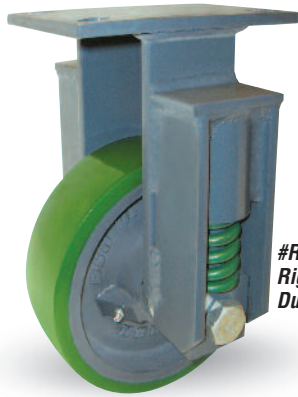


When ordering, specify Spring 1 or Spring 2 as a suffix to the Catalog Number: e.g. S-SPCH-83DB-2

Champion Caster- SPCH

Dia. A	Face	Wheel			Swivel Caster			Rigid Caster			Spring 1 Cap. Lbs.		Spring 2 Cap. Lbs.		Overall Height B	Swivel Offset G
		Type	Replacement Number		Hamilton No. Roller/Prec. BB	Hamilton No. Tapered Brgs.	Wt. Lbs.	Hamilton No. Roller/Prec. BB	Hamilton No. Tapered Brgs.	Wt. Lbs.	Min.	Max.	Min.	Max.		
6	2 1/2	Duralast®	W-625-DB-3/4		S-SPCH-6DB	S-SPCH-6DT	33	R-SPCH-6DB	R-SPCH-6DT	29	140	850	270	1600	11 1/4	2 1/2
		Plastex	W-625-P-1		S-SPCH-6PH	S-SPCH-6PT	27	R-SPCH-6PH	R-SPCH-6PT	23	140	850	270	1630		
	3	Duralast®	W-630-DB-3/4		S-SPCH-63DB	S-SPCH-63DT	34	R-SPCH-63DB	R-SPCH-63DT	30	140	850	270	1630		
		Plastex	W-630-P-1		S-SPCH-63PH	S-SPCH-63PT	28	R-SPCH-63PH	R-SPCH-63PT	24	140	850	270	1630		
		Poly-Soft®	W-630-SPB-3/4		S-SPCH-63SPB	S-SPCH-63SPT	34	R-SPCH-63SPB	R-SPCH-63SPT	30	140	850	270	1630		
		Ultrast™	W-630-TRB-3/4		S-SPCH-63TRB	S-SPCH-63TRT	34	R-SPCH-63TRB	R-SPCH-63TRT	30	140	850	270	1630		
8	2 1/2	Duralast®	W-825-DB-3/4		S-SPCH-8DB	S-SPCH-8DT	39	R-SPCH-8DB	R-SPCH-8DT	37	140	850	270	1630	12 1/4	2 1/2
		Plastex	W-825-P-1		S-SPCH-8PH	S-SPCH-8PT	30	R-SPCH-8PH	R-SPCH-8PT	28	140	850	270	1630		
	3	Duralast®	W-830-DB-3/4		S-SPCH-83DB	S-SPCH-83DT	40	R-SPCH-83DB	R-SPCH-83DT	38	140	850	270	1630		
		Plastex	W-830-P-1		S-SPCH-83PH	S-SPCH-83PT	32	R-SPCH-83PH	R-SPCH-83PT	30	140	850	270	1630		
		Poly-Soft®	W-830-SPB-3/4		S-SPCH-83SPB	S-SPCH-83SPT	40	R-SPCH-83SPB	R-SPCH-83SPT	38	140	850	270	1630		
		Ultrast™	W-830-TRB-3/4		S-SPCH-83TRB	S-SPCH-83TRT	40	R-SPCH-83TRB	R-SPCH-83TRT	38	140	850	270	1630		
10	2 1/2	Duralast®	W-1025-DB-3/4		S-SPCH-10DB	S-SPCH-10DT	38	R-SPCH-10DB	R-SPCH-10DT	36	140	850	270	1630	14 1/4	2 5/8
		Plastex	W-1025-P-1		S-SPCH-10PH	S-SPCH-10PT	34	R-SPCH-10PH	R-SPCH-10PT	32	140	850	270	1630		
	3	Duralast®	W-1030-DB-3/4		S-SPCH-13DB	S-SPCH-13DT	44	R-SPCH-13DB	R-SPCH-13DT	42	140	850	270	1630		
		Plastex	W-1030-P-1		S-SPCH-13PH	S-SPCH-13PT	37	R-SPCH-13PH	R-SPCH-13PT	35	140	850	270	1630		
		Poly-Soft®	W-1030-SPB-3/4		S-SPCH-13SPB	S-SPCH-13SPT	44	R-SPCH-13SPB	R-SPCH-13SPT	42	140	850	270	1630		
		Ultrast™	W-1030-TRB-3/4		S-SPCH-13TRB	S-SPCH-13TRT	44	R-SPCH-13TRB	R-SPCH-13TRT	42	140	850	270	1630		
12	3	Duralast®	W-1230-DB-3/4		S-SPCH-12DB	S-SPCH-12DT	63	R-SPCH-12DB	R-SPCH-12DT	61	140	850	270	1630	16 1/4	2 1/2
		Plastex	W-1230-P-1		S-SPCH-12PH	S-SPCH-12PT	38	R-SPCH-12PH	R-SPCH-12PT	36	140	850	270	1630		
		Poly-Soft®	W-1230-SPB-3/4		S-SPCH-12SPB	S-SPCH-12SPT	63	R-SPCH-12SPB	R-SPCH-12SPT	61	140	850	270	1630		
		Ultrast™	W-1230-TRB-3/4		S-SPCH-12TRB	S-SPCH-12TRT	63	R-SPCH-12TRB	R-SPCH-12TRT	61	140	850	270	1630		

⌘ With straight roller or precision ball bearings. For catalog number of corresponding tapered bearing wheels, consult factory.

HAMILTON®**Spring Loaded Casters**

#R-SPCH-83DT-2
Rigid showing
Duralast® wheel

FEATURED WHEEL BEARINGS

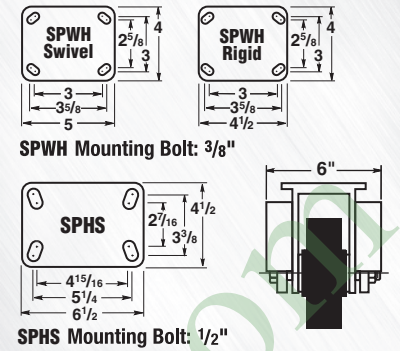
Precision Ball Bearings (B): double sealed, maintenance free, superior rollability aids manual applications, not recommended if shock loading is prevalent.



Precision Tapered Roller Bearings (T): best for most severe heavy duty or all power-towed applications.



Straight Roller Bearing (H): traditional anti-friction bearing, best for manual applications where shock loading (but no side thrust) is prevalent.

Mounting Plate Dimensions-SPWH & SPHS**Workhorse Caster- SPWH**

Dia. A	Face	Wheel		Swivel Caster			Rigid Caster			Spring 1		Spring 2		Overall Height B	Swivel Offset G
		Type	Replacement Number	Hamilton No. Roller/Prec.BB	Hamilton No. Tapered Brgs.	Wt. Lbs.	Hamilton No. Roller/Prec.BB	Hamilton No. Tapered Brgs.	Wt. Lbs.	Min.	Max.	Min.	Max.		
4	2	Duralast®	W-420-DB-½	S-SPWH-4DB-	X	13	R-SPWH-4DB-	X	10	125	620	280	750	6 1/16"	2
		Plastex	W-420-P-¾	S-SPWH-4P-	X	10	R-SPWH-4P-	X	8	125	620	280	800		
		Poly-Soft®	W-420-SPB-½	S-SPWH-4SPB-	X	13	R-SPWH-4SPB-	X	10	125	600	280	600		
		Ultralast™	W-420-TRB-½	S-SPWH-4TRB-	X	13	R-SPWH-4TRB-	X	10	125	620	280	900		
		Unilast®	W-420-UYB-½	S-SPWH-4UYB-	X	10	R-SPWH-4UYB-	X	7	125	620	280	750		
5	2	Duralast®	W-520-DB-½	S-SPWH-5DB-	S-SPWH-5DT-	13	R-SPWH-5DB-	R-SPWH-5DT-	11	125	620	280	1050	7 3/16"	2
		Plastex	W-520-P-¾	S-SPWH-5P-	X	11	R-SPWH-5P-	X	8	125	620	280	1000		
		Poly-Soft®	W-520-SPB-½	S-SPWH-5SPB-	S-SPWH-5SPT-	13	R-SPWH-5SPB-	R-SPWH-5SPT-	10	125	620	280	840		
		Ultralast™	W-520-TRB-½	S-SPWH-5TRB-	S-SPWH-5TRT-	13	R-SPWH-5TRB-	R-SPWH-5TRT-	11	125	620	280	1200		
		Unilast®	W-520-UYB-½	S-SPWH-5UYB-	X	10	R-SPWH-5UYB-	X	7	125	620	280	900		
6	2	Duralast®	W-620-DB-½	S-SPWH-6DB-	S-SPWH-6DT-	15	R-SPWH-6DB-	R-SPWH-6DT-	12	125	620	280	1200	8 3/16"	2 1/4"
		Plastex	W-620-P-¾	S-SPWH-6P-	X	12	R-SPWH-6P-	X	9	125	620	280	1200		
		Poly-Soft®	W-620-SPB-½	S-SPWH-6SPB-	S-SPWH-6SPT-	13	R-SPWH-6SPB-	R-SPWH-6SPT-	12	125	620	280	960		
		Ultralast™	W-620-TRB-½	S-SPWH-6TRB-	S-SPWH-6TRT-	15	R-SPWH-6TRB-	R-SPWH-6TRT-	12	125	620	280	1200		
		Unilast®	W-620-UYB-½	S-SPWH-6UYB-	X	11	R-SPWH-6UYB-	X	8	125	620	280	1100		
8	2	Duralast®	W-820-DB-½	S-SPWH-8DB-	S-SPWH-8DT-	18	R-SPWH-8DB-	R-SPWH-8DT-	15	125	620	280	1220	10 3/16"	2 5/16"
		Plastex	W-820-P-¾	S-SPWH-8P-	X	14	R-SPWH-8P-	X	11	125	620	280	1220		
		Poly-Soft®	W-820-SPB-½	S-SPWH-8SPB-	S-SPWH-8SPT-	18	R-SPWH-8SPB-	R-SPWH-8SPT-	12	125	620	280	1200		
		Ultralast™	W-820-TRB-½	S-SPWH-8TRB-	S-SPWH-8TRT-	18	R-SPWH-8TRB-	R-SPWH-8TRT-	15	125	620	280	1220		
		Unilast®	W-820-UYB-½	S-SPWH-8UYB-	X	12	R-SPWH-8UYB-	X	9	125	620	280	1200		

When ordering, specify Spring 1 or Spring 2 as a suffix to the Catalog Number: e.g. S-SPWH-6DB-2

Heavy Service Caster- SPHS

Dia. A	Face	Wheel		Swivel Caster			Rigid Caster			Spring 1		Spring 2		Overall Height B	Swivel Offset G
		Type	Replacement Number	Hamilton No. Roller/Prec.BB	Hamilton No. Tapered Brgs.	Wt. Lbs.	Hamilton No. Roller/Prec.BB	Hamilton No. Tapered Brgs.	Wt. Lbs.	Min.	Max.	Min.	Max.		
4	2	Duralast®	W-420-DB-½	S-SPHS-4DB-	X	14	R-SPHS-4DB-	X	11	125	620	280	750	6 1/16"	2
		Plastex	W-420-P-¾	S-SPHS-4P-	X	12	R-SPHS-4P-	X	13	125	620	280	800		
		Poly-Soft®	W-420-SPB-½	S-SPHS-4SPB-	X	14	R-SPHS-4SPB-	X	11	125	600	280	600		
		Ultralast™	W-420-TRB-½	S-SPHS-4TRB-	X	14	R-SPHS-4TRB-	X	11	125	620	280	900		
		Unilast®	W-420-UYB-½	S-SPHS-4UYB-	X	11	R-SPHS-4UYB-	X	8	125	620	280	750		
5	2	Duralast®	W-520-DB-½	S-SPHS-5DB-	S-SPHS-5DT-	15	R-SPHS-5DB-	R-SPHS-5DT-	11	125	620	280	1050	7 3/16"	2
		Plastex	W-520-P-¾	S-SPHS-5P-	X	12	R-SPHS-5P-	X	9	125	620	280	1000		
		Poly-Soft®	W-520-SPB-½	S-SPHS-5SPB-	S-SPHS-5SPT-	15	R-SPHS-5SPB-	R-SPHS-5SPT-	11	125	620	280	840		
		Ultralast™	W-520-TRB-½	S-SPHS-5TRB-	S-SPHS-5TRT-	15	R-SPHS-5TRB-	R-SPHS-5TRT-	11	125	620	280	1200		
		Unilast®	W-520-UYB-½	S-SPHS-5UYB-	X	12	R-SPHS-5UYB-	X	8	125	620	280	900		
6	2	Duralast®	W-620-DB-½	S-SPHS-6DB-	S-SPHS-6DT-	16	R-SPHS-6DB-	R-SPHS-6DT-	13	125	620	280	1200	8 3/16"	2 1/4"
		Plastex	W-620-P-¾	S-SPHS-6P-	X	13	R-SPHS-6P-	X	10	125	620	280	1200		
		Poly-Soft®	W-620-SPB-½	S-SPHS-6SPB-	S-SPHS-6SPT-	16	R-SPHS-6SPB-	R-SPHS-6SPT-	12	125	620	280	960		
		Ultralast™	W-620-TRB-½	S-SPHS-6TRB-	S-SPHS-6TRT-	16	R-SPHS-6TRB-	R-SPHS-6TRT-	13	125	620	280	1200		
		Unilast®	W-620-UYB-½	S-SPHS-6UYB-	X	12	R-SPHS-6UYB-	X	9	125	620	280	1100		
8	2	Duralast®	W-820-DB-½	S-SPHS-8DB-	S-SPHS-8DT-	20	R-SPHS-8DB-	R-SPHS-8DT-	16	125	620	280	1220	10 3/16"	2 5/16"
		Plastex	W-820-P-¾	S-SPHS-8P-	X	15	R-SPHS-8P-	X	11	125	620	280	1220		
		Poly-Soft®	W-820-SPB-½	S-SPWH-8SPB-	S-SPWH-8SPT-	20	R-SPHS-8SPB-	R-SPHS-8SPT-	16	125	620	280	1200		
		Ultralast™	W-820-TRB-½	S-SPHS-8TRB-	S-SPHS-8TRT-	20	R-SPHS-8TRB-	R-SPHS-8TRT-	16	125	620	280	1220		
		Unilast®	W-820-UYB-½	S-SPHS-8UYB-	X	14	R-SPHS-8UYB-	X	10	125	620	280	1200		

When ordering, specify Spring 1 or Spring 2 as a suffix to the Catalog Number: e.g. S-SPHS-6DB-1

✕ With straight roller or precision ball bearings. For catalog number of corresponding tapered bearing wheels, consult factory.