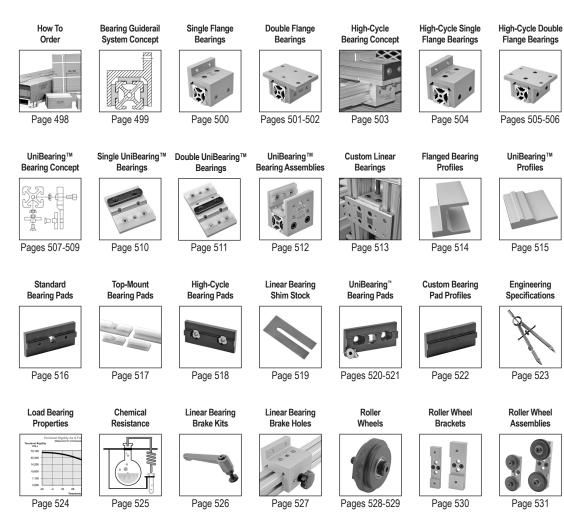
Fractional

Section #9 Pictorial Table Of Contents



Legend for Icons



This part is 10 Series compatible



Design files for this part can be found on the 80/20[®] DVD (Design Software)



This part can use double economy T-nuts (see bolt kit table P on page 268)

This part can use triple economy T-nuts (see bolt kit table Q on page 268)

Phone: 260-248-8030 •

Fax: 260-248-8029

www.8020.net



Linear Motion

w the three types ofThe drawb list all brake holeto mountc from the bearingprofile. The drawcon such as overallIt is importantconal machining.linear motocon bearing.be used to

- Cost-effective alternative to traditional bearings.
- Designed to mate and glide on our family of T-slotted aluminum profiles.
- Great for unique applications such as: drawer glides, door guides, table saw fences, digital length measuring systems, optical sensing mounts, drum set cymbal mounts, work station height adjustments, etc.

80/20[®] Linear Motion Advantages

- Cost-effective alternative to traditional bearings
- Designed to mate and glide on our family of T-slotted aluminum profiles
- Great for unique applications such as drawer glides, door guides, table saw fences, digital length measuring systems, optical sensing mounts, drum set cymbal mounts, workstation height adjustments, etc.

When ordering linear motion components from 80/20, it is important to review the three types of bearings available and make the best choice for your application. Be sure to list all brake hole locations and machining part numbers. If you need a custom bearing, select from the bearing housing profiles listed on page 514. Provide a sketch with specific information such as overall length and mounting hole diameter and location, along with any other additional machining. Select from the bearing pad profiles listed on page 522 to complete your custom bearing.

Shipping N	/lethod:		Ship To:		
Orde	red By:		Customer:		
	, <u> </u>		Address:		
			City / State:		
	e Address &				
F	Required N	O P.O. Bo	X Tag:		
Part Numbe	er Quantity	Length	Description / Machining	Price/ UOM	Ext. Pr
1010	2	18.50"	7042 in A both ends	\$.23	\$8
1515-Lite-14	· · · · · · · · · · · · · · · · · · ·	145.00"	Full length profile	\$65.25	\$326
3060	4	40.00"	7029 one end	\$2.95	\$472
3030	4	36.00"	7050 style G in W, X both ends	\$1.50	\$216
CM01-05100	6 2		Custom bracket per drawing #1	\$23.00	\$46
2611	1	5.25 sf.	1/4" bronze polycarb 1 @ 18" x 40" w/ 7311 per drawing	\$10.40	\$54
7150	1		Cut plastic panels all sides < -48"	\$10.50	\$10
7042	4		10 Series anchor fastener counterbore	\$2.25	\$9
7005	2		Cut-to-length for 1010	\$1.95	\$3
7023	4		Cut-to-length for 3060	\$2.90	\$11
7030	4		Cut-to-length for 3030	\$2.60	\$10
7050	64		15 Series drill access hole	\$1.95	\$124
7029 7311	<u>4</u> 2		5/16-18 tap service for 3060 Anchor fastener notch for 10 Series	\$15.20 \$0.53	\$60 \$1
3380	32		15 Series 5/16-18 black zinc end fastener w/ screw	\$1.60	\$51
2114	<u></u>		Gray T-Slot covers for 10 Series	\$3.45	\$55
2050	8		End caps for 3030	\$1.85	\$14
3395	4		10 Series anchor fasteners	\$2.90	\$11
3279	5	-	15 Series 5/16-18 black zinc double economy T-nut	\$0.79	\$3
4132	12	-	2 hole inside corner gusset bracket	\$3.95	\$47
3393	24		10 Series 1/4-20 BHSCS & economy T-nut	\$0.40	\$9
			10 Series 1/4-20 BHSCS & economy T-nut TOTAL NOTE: Pr		

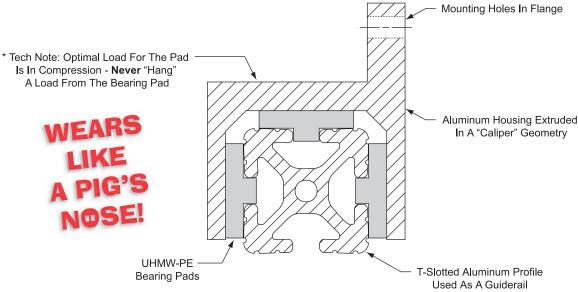
1 - Profiles = Pages 147-202
2 - Custom Parts = Pages 203-220
3 - Panels = Pages 349-432
4 - Machining Services = Pages 559-608
5 - Accessories & Tools = Pages 433-456 & 549-558

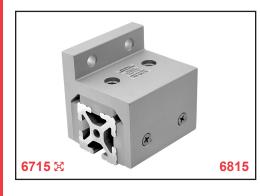
AST same day shipments!

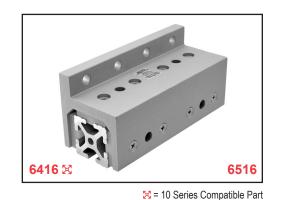
The drawing below shows the general concept for 80/20[®]'s linear bearing design. The bearing profile is used to mount UHMW-PE bearing pads; the pads are then inserted into the T-slot of an 80/20[®] aluminum T-slotted profile. The bearing uses the profile as a "guiderail", sliding along the profile's T-slots.

It is important to note that the UHMW-PE bearing pads are self lubricating, which makes this method of linear motion clean and smooth. All bearings are designed for compression loads only, and should **NEVER** be used to support hanging loads.

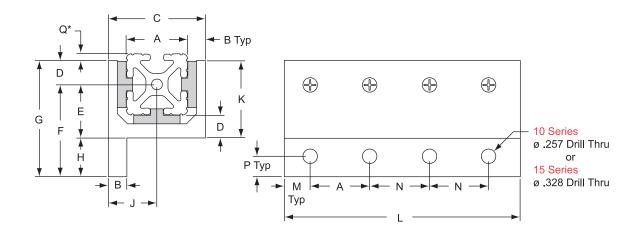
* UHMW-PE is an abbreviation for Ultra High Molecular Weight Polyethylene. UHMW-PE is an easily machined, selflubricating plastic with a low coefficient of friction. For more information on UHMW-PE, refer to pages 421-423.







• Bearings include bearing pads, screws and shims

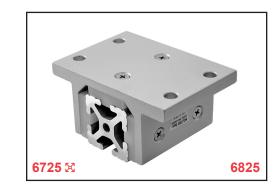


Part No.	A	B	C	D	E	F	G	H	J	K	L	М	N	P	Q*	Lbs.
6715 🔀	1.000	.312	1.625	.406	.903	1.562	1.968	.656	.813	1.312	1.875	.438	—	.343	.094	.205
6415** 🔀	1.000	.312	1.625	.406	.903	1.562	1.968	.656	.813	1.312	1.875	.438	_	.343	.094	.205
6716 🔀	1.000	.312	1.625	.406	.903	1.562	1.968	.656	.813	1.312	4.000	.500	1.000	.343	.094	.435
6416** 🔀	1.000	.312	1.625	.406	.903	1.562	1.968	.656	.813	1.312	4.000	.500	1.000	.343	.094	.435
6815	1.500	.500	2.500	.625	1.375	2.125	2.750	.750	1.250	2.000	2.812	.656	—	.375	.125	.700
6515**	1.500	.500	2.500	.625	1.375	2.125	2.750	.750	1.250	2.000	2.812	.656	—	.375	.125	.700
6816	1.500	.500	2.500	.625	1.375	2.125	2.750	.750	1.250	2.000	6.000	.750	1.500	.375	.125	1.495
6516**	1.500	.500	2.500	.625	1.375	2.125	2.750	.750	1.250	2.000	6.000	.750	1.500	.375	.125	1.495

*10 Series: Add 1.00" when using 1020 profile or 2.00" when using 1030 profile. *15 Series: Add 1.50" when using 1530 / 1530-Lite profile or 3.00" when using 1545 profile.

** Brake Kit Ready Bearings are pre-drilled with brake holes, refer to page 527 for additional information.

Double Flange Linear Bearings

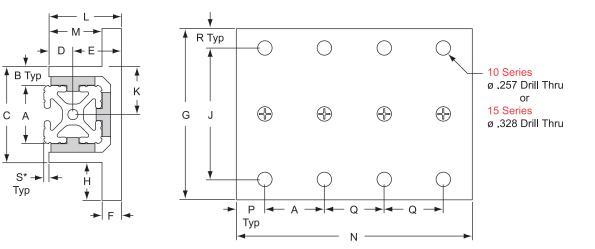




🔀 = 10 Series Compatible Part

Fractional

• Bearings include bearing pads, screws and shims



Part No.	Α	В	C	D	E	F	G	Н	J	K	L	M	N	Р	Q	R	S*	Lbs.
6725 🔀	1.000	.312	1.625	.406	.812	.312	2.937	.656	2.250	.812	1.218	.906	1.875	.438	—	.343	.094	.215
6425** 🔀	1.000	.312	1.625	.406	.812	.312	2.937	.656	2.250	.812	1.218	.906	1.875	.438	-	.343	.094	.215
6726 🔀	1.000	.312	1.625	.406	.812	.312	2.937	.656	2.250	.812	1.218	.906	4.000	.500	1.000	.343	.094	.450
6426** 🔀	1.000	.312	1.625	.406	.812	.312	2.937	.656	2.250	.812	1.218	.906	4.000	.500	1.000	.343	.094	.450
6825	1.500	.500	2.500	.640	1.235	.375	4.000	.750	3.250	1.250	1.875	1.500	2.812	.656		.375	.125	.665
6525**	1.500	.500	2.500	.640	1.235	.375	4.000	.750	3.250	1.250	1.875	1.500	2.812	.656		.375	.125	.665
6826	1.500	.500	2.500	.640	1.235	.375	4.000	.750	3.250	1.250	1.875	1.500	6.000	.750	1.500	.375	.125	1.415
6526**	1.500	.500	2.500	.640	1.235	.375	4.000	.750	3.250	1.250	1.875	1.500	6.000	.750	1.500	.375	.125	1.415

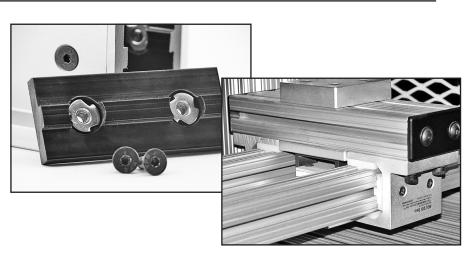
*10 Series: Add 1.00" when using 1020 profile or 2.00" when using 1030 profile. *15 Series: Add 1.50" when using 1530 / 1530-Lite profile or 3.00" when using 1545 profile.

** Brake Kit Ready Bearings are pre-drilled with brake holes, refer to page 527 for additional information.



Fractional

High-Cycle Linear Bearings Introduction



15 Series High-Cycle Linear Bearings contain special threaded inserts in the bearing pads. These inserts allow for a more heavy-duty bearing, capable of withstanding high-cycles with sudden accelerations and decelerations. 80/20[®]'s standard bearings work well in almost all applications. However, if you have a rapid acceleration / deceleration, high-cycle application in mind, then 80/20's high-cycle bearings were made especially for you!

Use high-cycle bearings in applications such as actuators, parts transfers or pick-and-place operations. The high-cycle bearing is just another fine feature offered by 80/20 to add more versatility to your application.

High-Cycle Bearing Advantages

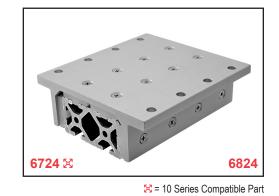
- Special threaded inserts specifically designed for sudden accelerations/decelerations
- Can be shimmed for a precise fit, like all 80/20 linear bearings
- You can design your own custom high-cycle bearing

Double Flange Linear Bearings contiuned

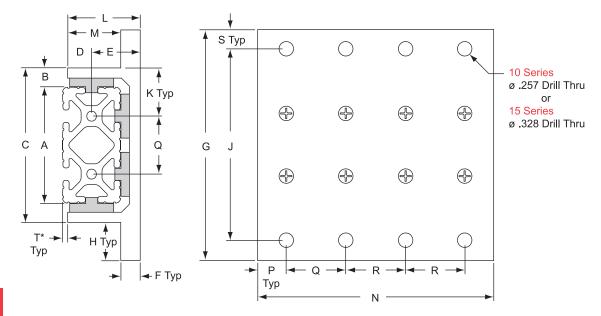


80/20[°] Inc.

The Industrial Erector Set®



Bearings include bearing pads, screws and shims



Part No.	A	В	C	D	E	F	G	H	J	K	L	М	N	P	Q	R	S	T*	Lbs.
6723 🔀	2.000	.312	2.630	.406	.812	.312	3.937	.656	3.250	.812	1.218	.906	1.875	.437	1.000	—	.343	.094	.250
6423** 🔀	2.000	.312	2.630	.406	.812	.312	3.937	.656	3.250	.812	1.218	.906	1.875	.437	1.000	—	.343	.094	.250
6724 🔀	2.000	.312	2.630	.406	.812	.312	3.937	.656	3.250	.812	1.218	.906	4.000	.500	1.000	1.000	.343	.094	.525
6424** 🔀	2.000	.312	2.630	.406	.812	.312	3.937	.656	3.250	.812	1.218	.906	4.000	.500	1.000	1.000	.343	.094	.525
6823	3.000	.500	4.000	.640	1.235	.375	5.500	.750	4.750	1.250	1.875	1.500	2.812	.656	1.500	—	.375	.125	.810
6523**	3.000	.500	4.000	.640	1.235	.375	5.500	.750	4.750	1.250	1.875	1.500	2.812	.656	1.500	—	.375	.125	.810
6824	3.000	.500	4.000	.640	1.235	.375	5.500	.750	4.750	1.250	1.875	1.500	6.000	.750	1.500	1.500	.375	.125	1.705
6524**	3.000	.500	4.000	.640	1.235	.375	5.500	.750	4.750	1.250	1.875	1.500	6.000	.750	1.500	1.500	.375	.125	1.705

*10 Series: Add 1.00" when using 2020 profile or 3.00" when using 2040 profile. *15 Series: Add 1.50" when using 3030 profile or 4.50" when using 3060 profile.

** Brake Kit Ready Bearings are pre-drilled with brake holes, refer to page 527 for additional information.

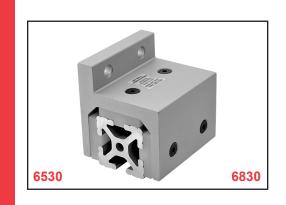


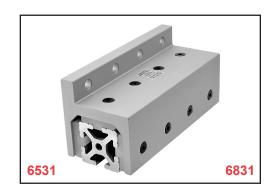
www.8020.net

80/20° Inc. The Industrial Erector Set° THE STANDARD High-Cycle Single Flange Linear Bearings

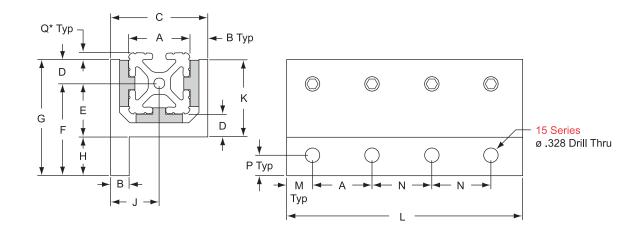
Fractional

High-Cycle Double Flange Linear Bearings





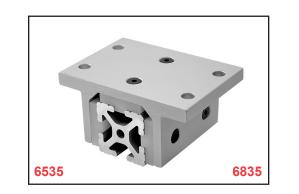
• Bearings include bearing pads, screws and shims



Part No.	Α	В	C	D	E	F	G	H	J	K	L	М	N	Р	Q*	Lbs.
6830	1.500	.500	2.500	.625	1.375	2.125	2.750	.750	1.250	2.000	2.812	.656	—	.375	.125	.700
6530**	1.500	.500	2.500	.625	1.375	2.125	2.750	.750	1.250	2.000	2.812	.656	—	.375	.125	.700
6831	1.500	.500	2.500	.625	1.375	2.125	2.750	.750	1.250	2.000	6.000	.750	1.500	.375	.125	1.495
6531**	1.500	.500	2.500	.625	1.375	2.125	2.750	.750	1.250	2.000	6.000	.750	1.500	.375	.125	1.495

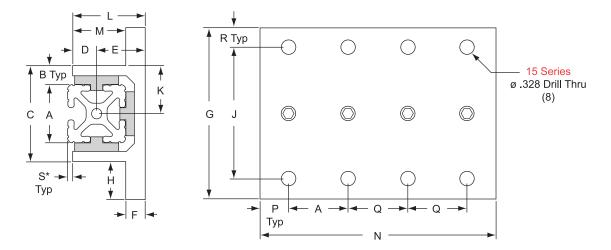
*15 Series: Add 1.50" when using 1530 / 1530-Lite profile or 3.00" when using 1545 profile.

** Brake Kit Ready Bearings are pre-drilled with brake holes, refer to page 527 for additional information.





• Bearings include bearing pads, screws and shims



Part No.	A	В	C	D	E	F	G	Н	J	K	L	М	N	Р	Q	R	S*	Lbs.
6835	1.500	.500	2.500	.640	1.235	.375	4.000	.750	3.250	1.250	1.875	1.500	2.812	.656	—	.375	.125	.665
6535**	1.500	.500	2.500	.640	1.235	.375	4.000	.750	3.250	1.250	1.875	1.500	2.812	.656	—	.375	.125	.665
6836	1.500	.500	2.500	.640	1.235	.375	4.000	.750	3.250	1.250	1.875	1.500	6.000	.750	1.500	.375	.125	1.415
6536**	1.500	.500	2.500	.640	1.235	.375	4.000	.750	3.250	1.250	1.875	1.500	6.000	.750	1.500	.375	.125	1.415

*15 Series: Add 1.50" when using 1530 / 1530-Lite profile or 3.00" when using 1545 profile.

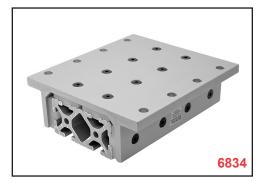
** Brake Kit Ready Bearings are pre-drilled with brake holes, refer to page 527 for additional information.

Linear Motion

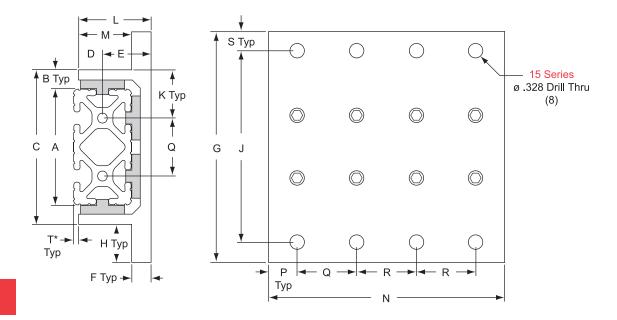
9







• Bearings include bearing pads, screws and shims



506

Part No.	A	В	C	D	E	F	G	Н	J	K	L	М	N	Р	Q	R	S	T*	Lbs.
6833	3.000	.500	4.000	.640	1.235	.375	5.500	.750	4.750	1.250	1.875	1.500	2.812	.656	1.500	—	.375	.125	.810
6533**	3.000	.500	4.000	.640	1.235	.375	5.500	.750	4.750	1.250	1.875	1.500	2.812	.656	1.500	—	.375	.125	.810
6834	3.000	.500	4.000	.640	1.235	.375	5.500	.750	4.750	1.250	1.875	1.500	6.000	.750	1.500	1.500	.375	.125	1.705
6534**	3.000	.500	4.000	.640	1.235	.375	5.500	.750	4.750	1.250	1.875	1.500	6.000	.750	1.500	1.500	.375	.125	1.705

*15 Series: Add 1.50" when using 3030 profile or 4.50" when using 3060 profile.

** Brake Kit Ready Bearings are pre-drilled with brake holes, refer to page 527 for additional information.

80/20[®] UniBearing[™] Bearings



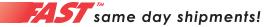
80/20 proudly includes the Unibearing[™] family in its linear motion line. Unibearing[™] bearings are universal, quickly setting all 80/20 profiles in motion. This concept answers a need to remove or install bearings quickly on a T-slotted structure without taking it apart. Unibearing[™] bearings reduce downtime and retooling, increasing productivity, creativity and flexibility.

Unibearing[™] bearings are unique because the pads are mounted using stainless steel flat-head socket cap screws. The screws secure the pad to the housing. This eliminates a need for high-cycle pads in the Unibearing[™] family.

Most pads in the Unibearing[™] family require the "double-keyed" pad, located on pages 520-521. Apply these versatile pads to many applications outside the Unibearing[™] family, too.

UniBearing[™] Bearing Advantages

- 9
- The actual bearing itself can move, or the bearing can be fixed, allowing the guiderail (T-slotted profile) and any associated assembly to move
- All UniBearing bearings come with pre-drilled brake holes to accept our brake kits, page 526
- A set of tapped mounting holes are provided for mounting accessories to a flat surface

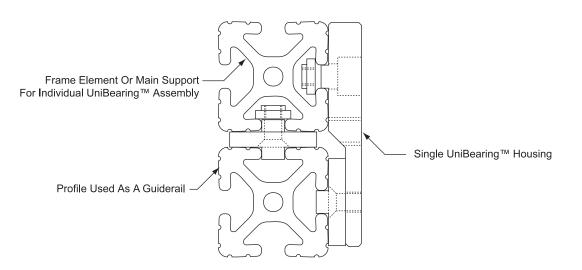


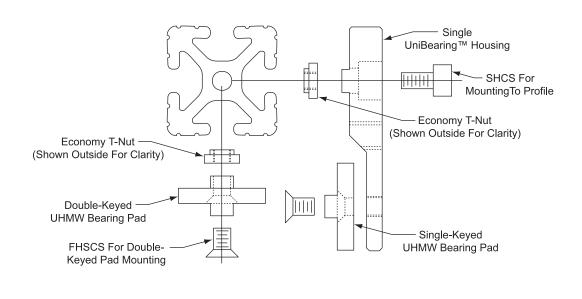
9

Single UniBearing[™] Bearing Concept & Construction

Unibearings[™] are available in both 10 and 15 Series, as sub-assemblies or complete, assembled units. All housings are extruded 6105-T5 aluminum with a clear anodize finish. All sub-assemblies include UHMW-PE pads secured with stainless steel FHSCS and mounting hardware (SHCS with economy T-nut), along with shim kits (see pages 516 and 519). Consult page 513 for custom applications.

ORDERING NOTE: T-slotted profiles must be ordered separately when ordering UniBearing sub-assemblies (pages 510-511), but are included with UniBearing assemblies (page 512).

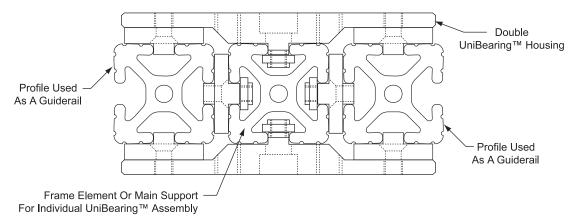


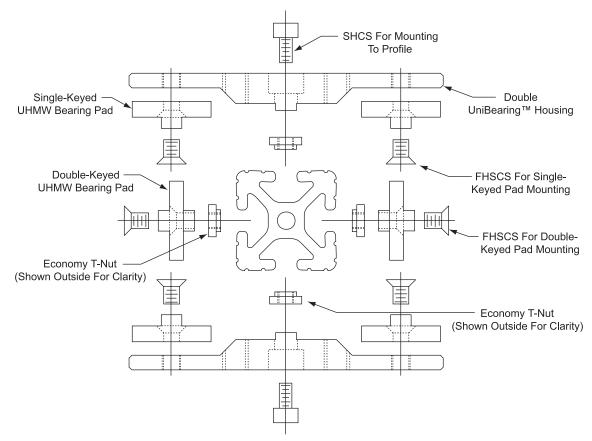


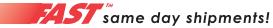
Double UniBearing[™] Bearing Concept & Construction

US Patent No. 5,429,438

The diagrams below illustrate how Double UniBearings are designed and assembled. These bearings are available in 10 and 15 Series, as sub-assemblies or complete, assembled units. All housings are extruded 6105-T5 aluminum with a clear anodize finish. All assembly and ordering tips are standard between single and double UniBearings.



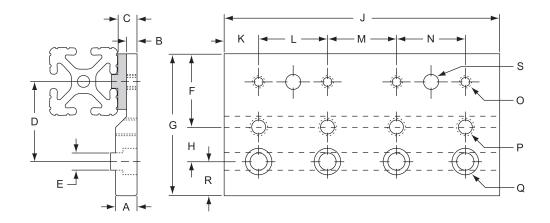




Linear Motion

Single UniBearing[™] Bearing





DVO

6860

Part No.	A	В	C	D	E	F	G	H	J	K	L	M	N	R	Lbs.
6760 🔀	.312	.152	.302	1.165	.250	1.062	2.062	.500	1.875	.437	1.000	—	—	.500	.130
6762 🔀	.312	.152	.302	1.165	.250	1.062	2.062	.500	4.000	.500	1.000	1.000	1.000	.500	.270
6860	.500	.240	.480	1.760	.310	1.625	3.125	.750	2.812	.656	1.500	—	—	.750	.445
6862	.500	.240	.480	1.760	.310	1.625	3.125	.750	6.000	.750	1.500	1.500	1.500	.750	.930

Typical Machining:

9

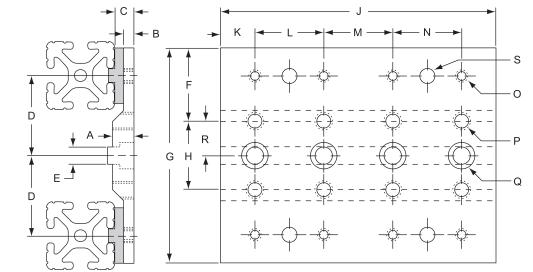
- **O** = 10 Series Drill & Tap for #8-32 15 Series Drill & Tap for #10-24
- P = 10 Series Drill & Tap Thru 1/4-20 (Accessory Mount) 15 Series Drill & Tap Thru 5/16-18 (Accessory Mount)
- **Q** = 10 Series Drill & Counterbore for Included Hardware (PN: 3058 - 1/4-20 x .375" SHCS and PN: 3280 - 1/4-20 Double Economy T-Nut) 15 Series Drill & Counterbore for Included Hardware (PN: 3110 - 5/16-18 x .625" SHCS and PN: 3279 - 5/16-18 Double Economy T-Nut)
- S = 10 Series .265 Brake Hole Typ. (Refer to Page 526 for Brakes) 15 Series .328 Brake Hole Typ. (Refer to Page 526 for Brakes)



🔀 = 10 Series Compatible Part







Part No.	A	В	C	D	E	F	G	Н	J	K	L	M	N	R	Lbs.
6764 🔀	.312	.152	.302	1.165	.250	1.062	3.125	.500	1.875	.437	1.000	-	—	1.000	.165
6766 🔀	.312	.152	.302	1.165	.250	1.062	3.125	.500	4.000	.500	1.000	1.000	1.000	1.000	.350
6864	.500	.240	.480	1.760	.310	1.625	4.750	.750	2.812	.656	1.500	—	—	1.500	.580
6866	.500	.240	.480	1.760	.310	1.625	4.750	.750	6.000	.750	1.500	1.500	1.500	1.500	1.225

Typical Machining:

- **O** = 10 Series Drill & Tap for #8-32 15 Series Drill & Tap for #10-24
- P = 10 Series Drill & Tap Thru 1/4-20 (Accessory Mount) 15 Series Drill & Tap Thru 5/16-18 (Accessory Mount)
- **Q** = 10 Series Drill & Counterbore for Included Hardware (PN: 3058 - 1/4-20 x .375" SHCS and PN: 3280 - 1/4-20 Double Economy T-Nut) 15 Series Drill & Counterbore for Included Hardware (PN: 3110 - 5/16-18 x .625" SHCS and PN: 3279 - 5/16-18 Double Economy T-Nut)
- S = 10 Series .265 Brake Hole Typ. (Refer to Page 526 for Brakes) 15 Series .328 Brake Hole Typ. (Refer to Page 526 for Brakes)

🔀 = 10 Series Compatible Part

Linear Motion

9

80/20[°] Inc. The Industrial Erector Set® **THE STANDARD**

- UniBearing[™] subassemblies are pre-mounted onto a T-slotted aluminum profile
- Pre-tapped holes included in the profile ends as well as in housing for accessory mounting
- Shim kits are included; refer to pages 510-511 for individual components







Ö



Long Double Assembly

Short Single Assembly

Short Double Assembly

Long Single Assembly

Part No.	Туре	Mounted Profile	Profile Length	Lbs.
6730 🔀	Single	1010	Short 1.870"	.415
6731 🔀	Single	1020	Short 1.870"	.680
6732 🔀	Single	1010	Long 4.000"	.770
6733 🔀	Single	1020	Long 4.000"	.780
6734 🔀	Double	1010	Short 1.870"	.470
6735 🔀	Double	1020	Short 1.870"	.550
6736 🔀	Double	1010	Long 4.000"	1.085
6737 🔀	Double	1020	Long 4.000"	1.110
6870	Single	1515	Short 2.820"	.780
6871	Single	1530	Short 2.820"	1.595
6872	Single	1545	Short 2.820"	1.900
6873	Single	1515	Long 6.000"	2.595
6874	Single	1530	Long 6.000"	3.205
6875	Single	1545	Long 6.000"	4.245
6876	Double	1515	Short 2.820"	1.575
6877	Double	1530	Short 2.820"	1.895
6878	Double	1545	Short 2.820"	2.200
6879	Double	1515	Long 6.000"	3.225
6883	Double	1530	Long 6.000"	3.835
6884	Double	1545	Long 6.000"	4.405

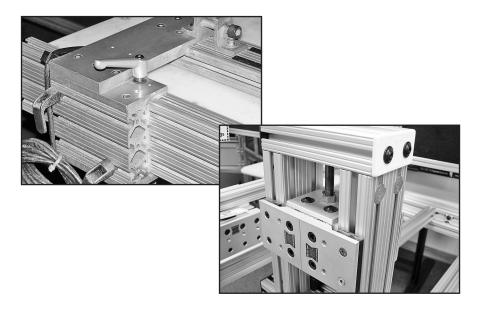
🔀 = 10 Series Compatible Part

Custom Linear Bearings

• Reference information for standard and custom bearing pads on pages 516-522

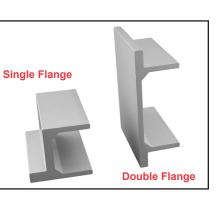
How to Specify

- 1. Select a bearing housing.
- 2. Produce a sketch or drawing showing overall length, mounting hole diameter and location, and any additional machining desired.
- 3. Note how many bearing pads and the location for each.
- 4. We will provide you with a prompt quotation and delivery in 24-72 hours.
- See pages 563 for cut-to-length machining, and pages 526-527 for brake kit services
- See pages 514-515 for bearing profile dimensions

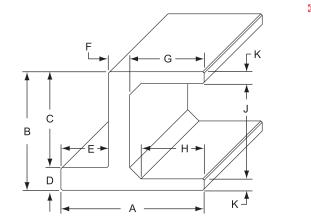


Single & Double Flange Bearing Profiles

- Stock length: 145" mill-finish (unanodized) material unless noted
- Maximum length for anodizing material is 120"

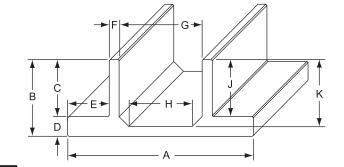


🔀 = 10 Series Compatible Part



Single Flange	e Part No.											Cut-to-Length	
Clear Anodized	Mill-Finish	Α	В	С	D	E	F	G	H	J	K	Part No.	Lbs. / Ft.
8520 🔀	8521 🔀	1.968	1.625	1.313	.312	.656	.250	1.062	.906	1.312	.156	7212	1.158
8530	8531	2.750	2.500	2.000	.500	.750	.375	1.625	1.312	2.000	.250	7212	2.664

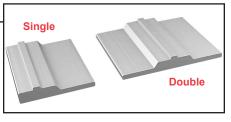




Double Flange	e Part No.											Cut-to-Length	
Clear Anodized	Mill-Finish	Α	В	C	D	E	F	G	Н	J	K	Part No.	Lbs. / Ft.
8525 🔀	8526 🔀	2.936	1.218	.906	.312	.656	.156	1.312	1.000	.906	1.062	7212	1.218
8527 🔀	8528 🔀	3.936	1.218	.906	.312	.656	.156	2.320	2.008	.906	1.062	7224	1.406
8535	8536	4.000	1.875	1.500	.375	.750	.250	2.000	1.375	1.313	1.625	7224	2.518
8540	8541	5.500	1.875	1.500	.375	.750	.250	3.500	2.876	1.313	1.625	7224	2.966

Single & Double UniBearing[™] Bearing Profiles

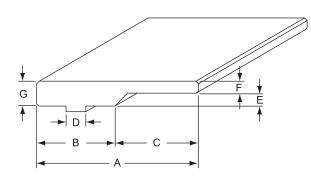
- Stock length: 145" mill-finish (unanodized) material unless noted
- Maximum length for anodizing material is 120"



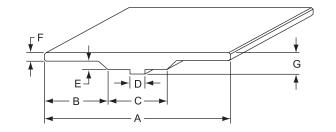
🔀 = 10 Series Compatible Part

Fractional





Single Par	t No.								Cut-to-Length	[
Clear Anodized	Mill-Finish	Α	В	C	D	E	F	G	Part No.	Lbs. / Ft.
8580 🔀	8581 🔀	2.063	1.000	1.063	.250	.156	.156	.375	7212	.586
8582	8583	3.125	1.500	1.625	.312	.260	.245	.625	7212	.971



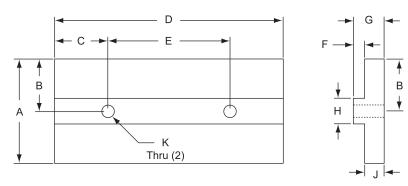
Double Pa	rt No.								Cut-to-Length	[
Clear Anodized	Mill-Finish	Α	В	C	D	E	F	G	Part No.	Lbs. / Ft.
8584 🔀	8585 🔀	3.125	1.063	1.000	.250	.156	.156	.375	7212	.776
8586	8587	4.750	1.625	1.500	.312	.260	.245	.625	7224	1.888



- High strength pads offer a low coefficient of friction
- These UHMW-PE bearing pads are simple to install and replace
- Available in custom lengths up to 145" refer to page 522 for more information

ov*o*





Recommended N	lounting Hardwa	re (Mount to Bearing Profile)
Part No.	Qty	Description
3625 🔀	2	#8 x 3/8 Pad Screw
3628	2	#10 x 5/8 Pad Screw

AST same day shipments!

Part No.	Brake Ready	Pad Color	Α	В	C	D	E	F	G	Н	J	K	Lbs.
6790 🔀	No	White	.812	.406	.432	1.865	1.000	.103	.250	.243 ± .003	.147 ± .003	.109	.010
6791 🔀	No	Black	.812	.406	.432	1.865	1.000	.103	.250	.243 ± .003	.147 ± .003	.109	.010
6490 🔀	Yes	White	.812	.406	.432	1.865	1.000	.103	.250	.243 ± .003	.147 ± .003	.109	.010
6491 🔀	Yes	Black	.812	.406	.432	1.865	1.000	.103	.250	.243 ± .003	.147 ± .003	.109	.010
6890	No	White	1.250	.625	.650	2.800	1.500	.135	.375	.309 ± .003	.240 ± .003	.125	.030
6891	No	Black	1.250	.625	.650	2.800	1.500	.135	.375	.309 ± .003	.240 ± .003	.125	.030
6590	Yes	White	1.250	.625	.650	2.800	1.500	.135	.375	.309 ± .003	.240 ± .003	.125	.030
6591	Yes	Black	1.250	.625	.650	2.800	1.500	.135	.375	.309 ± .003	.240 ± .003	.125	.030

🔀 = 10 Series Compatible Part

We specialize in

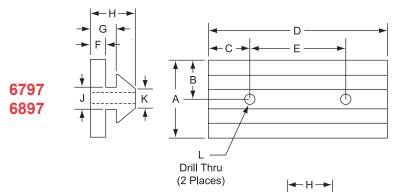
9

516

US Patent No. 5,429,438

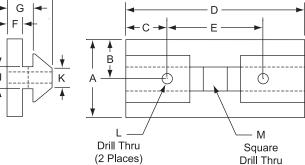
- An alternative to the standard bearing pad
- Pad rides captive inside the T-slot
- 10 and 15 Series compatible
- Available with or without brake hole
- Made from UHMW-PE, white only





6798

6898



N→

Dout Ma	04.	Description
Recommended N	Nounting Hardwar	e (Mount to Bearing Profile)

Part No.	Qty	Description
3625 🔀	2	#8 x 3/8 Pad Screw
3628	2	#10 x 5/8 Pad Screw

Part No.	Α	В	С	D	E	F	G	Н	J	K	LØ	M	N	Lbs.
6797 🔀	.812	.406	.432	1.865	1.000	.160	.270	.470	.230	.200	.109	-	-	.012
6798 🔀 *	.812	.406	.432	1.865	1.000	.160	.270	.470	.230	.200	.109	.250	.530	.012
6897	1.250	.625	.656	2.800	1.500	.240	.420	.700	.300	.270	.125	-	-	.035
6898 *	1.250	.625	.656	2.800	1.500	.240	.420	.700	.300	.270	.125	.312	.750	.035

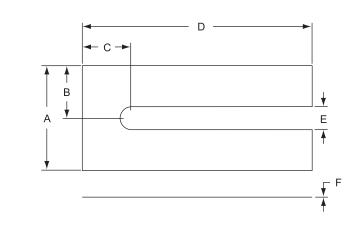
🔀 = 10 Series Compatible Part

* With Brake Hole

80/20[®] Inc. The Industrial Erector Set® THE STANDARD High-Cycle Bearing Pads

Linear Motion

9



Part No.	Α	В	C	D	E	F	Lbs.
6780 🔀	.812	.406	.375	1.875	.175	.005	.002
6881*	1.250	.625	.656	2.812	.250	.005	.005

🔀 = 10 Series Compatible Part

US Patent No. 5,429,438

Shim thickness is .005"

• Sold in packages of 10

Slotted to ease installation

between pad and housing

• Shims work with all 80/20 bearings

Linear Bearing Shim Stock

• Shim bearing pads for a more precise fit

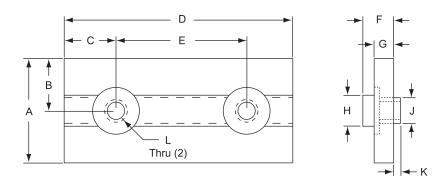
• Simply loosen bearing pad and slide shims

*The 15 series standard shim is also compatible with high-cycle linear bearings and UniBearing™ Bearings.

DV0

- High strength pads are ideal for quick acceleration / deceleration applications
- These UHMW-PE bearing pads are simple to install and replace
- Nutserts included. Part No. 3022 (2) required for attaching to bearing profile

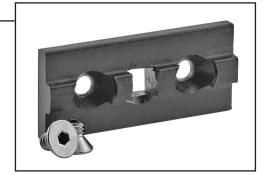


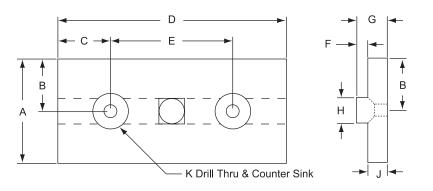


Part No.	Brake Ready	Pad Color	Α	В	С	D	E	F	G	Н	J	K	L	Lbs.
6895	No	White	1.250	.625	.650	2.800	1.500	.375	.240 ± .003	.309 ± .003	.250	.060	10-32	.010
6896	No	Black	1.250	.625	.650	2.800	1.500	.375	.240 ± .003	.309 ± .003	.250	.060	10-32	.010
6595	Yes	White	1.250	.625	.650	2.800	1.500	.375	.240 ± .003	.309 ± .003	.250	.060	10-32	.010
6596	Yes	Black	1.250	.625	.650	2.800	1.500	.375	.240 ± .003	.309 ± .003	.250	.060	10-32	.010



- High-strength pads offer a low coefficient of friction
- These UHMW-PE bearing pads are simple to install and replace
- Available in custom lengths up to 145" refer to page 522 for more information





Part No.	Color	A	В	C	D	E	F	G	Н	J	K	Lbs.
6705 🔀	White	.812	.406	.432	1.865	1.000	.103	.250	.243 ± .003	.147 ± .003	#8-32	.010
6706 🔀	Black	.812	.406	.432	1.865	1.000	.103	.250	.243 ± .003	.147 ± .003	#8-32	.010
6814	White	1.250	.625	.650	2.800	1.500	.135	.375	.309 ± .003	.240 ± .003	#10-24	.030
6817	Black	1 250	625	650	2 800	1 500	135	375	309 ± 003	240 + 003	#10-24	030

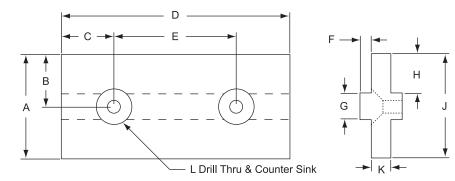
🔀 = 10 Series Compatible Part

9

Double-Keyed UniBearing[™] Bearing Pads

- High-strength pads offer a low coefficient of friction
- These UHMW-PE bearing pads are simple to install and replace
- All mounting hardware included –
- 10 Series (1) 8-32 Double Econ T-Nut (2) 8-32 x 3/8" SS FHSCS 15 Series - (1) 1/4-20 Double Econ T-Nut (2) 1/4-20 x 5/8" SS FHSCS
- Available in custom lengths up to 145" refer to page 522 for more information





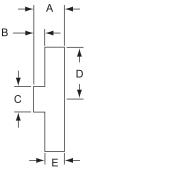
Р	Part No.	Color	A	В	С	D	E	F	G	Н	J	K	L	Lbs.
6	6792 🔀	White	.812	.406	.432	1.865	1.000	.075	.244	.280	.810	.146	#8-32	.010
6	6793 🔀	Black	.812	.406	.432	1.865	1.000	.075	.244	.280	.810	.146	#8-32	.010
6	6892	White	1.250	.625	.650	2.800	1.500	.120	.308	.470	1.250	.238	1/4-20	.030
6	5893	Black	1.250	.625	.650	2.800	1.500	.120	.308	.470	1.250	.238	1/4-20	.030

🔀 = 10 Series Compatible Part

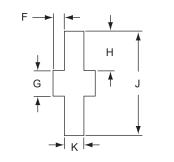


- High-strength pads offer a low coefficient of friction
- These UHMW-PE bearing pads are simple to machine and customize
- Black and white profiles are available in lengths up to 145"
- Refer to page 563 for cut-to-length services





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Single-Keyed

Double-Keyed

Part No.	Туре	Color	Α	В	С	D	E	F	G	Н	J	K	Lbs. / Ft.
6700 🔀	Single-Keyed	White	.250	.103	.243	.406	.147	-	-	-	-	-	.040
6701 🔀	Single-Keyed	Black	.250	.103	.243	.406	.147	-	-	-	-	-	.040
6810	Single-Keyed	White	.375	.135	.309	.625	.240	-	-	-	-	-	.120
6811	Single-Keyed	Black	.375	.135	.309	.625	.240	-	-	-	-	-	.120
6702 🔀	Double-Keyed	White	-	-	-	-	-	.075	.244	.284	.812	.146	.040
6703 🔀	Double-Keyed	Black	-	-	-	-	-	.075	.244	.284	.812	.146	.040
6812	Double-Keyed	White	-	-	-	-	-	.120	.308	.470	1.250	.238	.120
6813	Double-Keyed	Black	-	-	-	-	-	.120	.308	.470	1.250	.238	.120

9

Engineering Specifications on UHMW-PE Bearing Pads

Property	Test Method	Unit	Typical Value
Specific Gravity	ASTM D-792	g/cm3	0.94
Yield Strength @ 73°F	ASTM D-638	p.s.i.	3400
Ultimate Tensile Strength @ 73°F	ASTM D-638	p.s.i.	6800
Break Elongation @ 73°F	ASTM D-638	%	450
Yield Strength @ 250°F	Stress Strain Diagram	p.s.i.	700
Ultimate Tensile Strength @ 250°F	Stress Strain Diagram	p.s.i.	3300
Break Elongation @ 250°F	Stress Strain Diagram	%	900
Hardness - Rockwell "R" Scale	ASTM D-785	-	64
- Shore "D" Scale	ASTM D-2240	-	67
Flexural Modulus of Elasticity	Bend Creep/1 min. value	p.s.i.	110,000
Shear Strength	ASTM D-732	p.s.i.	3500
Izod Impact @ + 23°C	ASTM D-256A	ft-lbs/in. notch	No break
@ - 140° C	ASTM D-256A	ft-lbs/in. notch	No break
Environmental Stress Cracking @ F50	ASTM D-1693 Mod	hrs.	6000
Water Absorption	ASTM D-570	-	NIL

Abrasive Resistance - Sand Slurry Test

- Each material listed below was rotated 24 hours @ 1750 r.p.m.
- Carbon Steel = abrasive rating of 100.
- The weight loss for each material is relative to 100.
- The lower the figure, the better the abrasive resistance.
- 50-50 sand/water slurry.

US Patent No. 5,429,438

UHMW-PE 15	Nylon31	
TFE72	Stainless steel84	
Polycarbonate96	Polyacetal 110	
Normal MW polyethylene 125	Phosphor bronze	
Phenolic laminate	Hickory wood	

Coefficient Of Friction

UHMW-PE polymer has a lower coefficient of friction than glass. Its self-lubricating characteristics make it an ideal material for bearings, bushings, valves, wear strips, or any application where sliding contact is encountered.

Materials	Static	Kinetic	Test Method
Aluminum* vs. UHMW-PE	0.12	0.016	
Mild Steel vs. Mild Steel	0.30 - 0.40	0.25 - 0.35	ASTM D-1894
Mild Steel vs. UHMW-PE	0.15 - 0.20	0.12 - 0.20	ASTIM D-1094
UHMW-PE vs. UHMW-PE	0.20 - 0.30	0.20 - 0.30	

*Anodized 204 R1 Spec on extruded aluminum

Comparison of Dynamic Coefficient of Friction on Polished Steel

Property	UHMW-PE	
Dry	0.10 - 0.22	
Water	0.05 - 0.10	
Oil	0.05 - 0.08	

FDA and USDA Approved

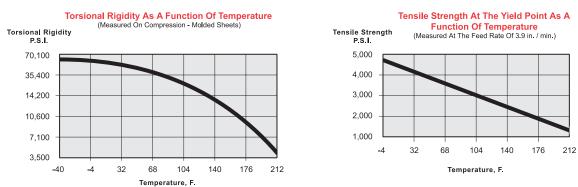
Fractional

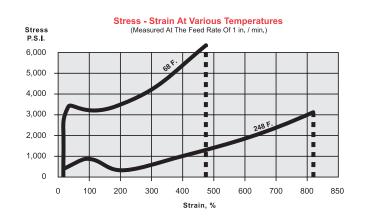
High MW polyethylene	44
Polypropylene	87
TFE/glass fiber	.113
Yellow brass	409
Hi carbon steel	100

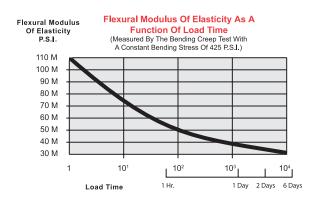


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Load Bearing Properties of UHMW-PE







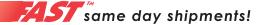
Chemical Resistance of UHMW-PE

TEST SPECIMENS	Dumb-bell type
DURATION OF TEST	30 Days
+ = RESISTANT	Mechanical properties not appreciably affected
/ = LIMITED RESISTANT	Decreases in yield stress and ultimate tensile strength less than 20%
- = NOT RESISTANT	Decreases in yield stress and ultimate tensile strength greater than 20%

Reagent		Temperatur	
Keagent	20°C	50°C	80°C
I. Inorganic acids			
Chromic acid (80%)	+	+	/
Hydrychloric acid (conc.)	+	+	+
Hydrocyanic acid	+	+	
Hydrofluoric acid	-	-	-
Nitric acid (conc.)	/	-	
Nitric acid (50%)	+	+	/
Nitric acid (20%)	+	+	+
Phosphoric acid (85%)	+	-	-
Sulphuric acid (conc.)	+	-	-
Sulphuric acid (50%)	+	+	+
II. Alkalis	_		
Aqueous ammonia	+	+	
Potassium hydroxide solution	+	+	+
Sodium hydroxide solution	+	+	+
South hydroxide solution		- T	Ŧ
III. Aqueous solutions of inorganic salts			
Aluminum chloride	+	+	+
Ammonium nitrate	+	+	+
Bleaching powder	+	+	+
Calcium chloride	+	+	+
Sodium carbonate	+	+	+
Sodium chloride	+	+	+
Sodium hypochlorite	+	+	+
Zinc chloride	+	+	+
N/ Overania asida	_		
IV. Organic acids Acetic acid (99%)	+	+	1
Acetic acid (99%) Acetic acid (10%)	+	+ +	+
()	+	+ +	+
Butyric acid		+ +	+
	+		+
Formic acid	+	+	
Oleic acid	+	+	/

Deswort	Te	mperatur	es
Reagent	20°C	50°C	80°C
V. Hydrocarbons and halogenated hydrocarbons			
Benzene	1	/	
Carbon tetrachloride	1		
Cyclohexane	+	+	
Dichloroethylene	-	-	
Diesel oil	+	+	/
n-Heptane	+	+	
Petroleum ether	+		
Trichloroethylene	1	-	
Toluene	1	-	
White spirit	+	/	
Xylene	1	/	-
VI. Alcohols, Ketones, Ester, and Amines			
Acetone	+	+	
Aniline	+	+	/
Benzyl alcohol	+	+	+
Butyl alcohol	+	+	+
Cyclohexanol	+	+	+
Ethanol	+	+	
Ethyl acetate	+	+	
Ethylene glycol	+	+	+
Glycerine	+	+	+
Lauryl alcohol	+	+	+
Propyl alcohol	+	+	+
VII. Miscellaneous			
Beer	+	+	+
Detergents in aqueous solution	+	+	+
Distilled water	+	+	+
Hydrogen peroxide 30% (perhydrol)	+	+	
Linseed oil	+	+	+
Milk	+	+	+
Olive oil	+	+	+
Sea water	+	+	+
Wine	+	+	+

Because we cannot anticipate or control the many different conditions under which our products may be used, the product information contained in this catalog should be viewed as general guidelines only and not as a recommendation to use our products in any particular situation. Although we believe that all information contained herein is reliable, certain information in this catalog may have been obtained from test results published by other parties, and consequently, we cannot guarantee the accuracy of all information contained in this catalog. In addition, particular conditions of use and reasonable lot-to-lot variations can affect performance. Users of our products should perform their own tests to determine the suitability of any product for their particular purposes.



- Adds an adjustable stop to any bearing
- Secures gliding profiles into semi-permanent positions
- Secure lockdown capability for safety
- Refer to page 527 for required machining



Part No.	Туре	Color	Lbs.
6850 🔀	L - Handle	Black	.054
6851 🔀	Hex Nut	Black	.065
6852 🔀	Wing Nut	Bright	.075
6800	L - Handle	Gray	.337
6805	L - Handle	Blue	.337
6806	L - Handle	Red	.337
6807	L - Handle	Yellow	.337
6801	T - Handle	Black	.100
6802	Star Handle	Black	.111
6803	Hex Nut	Black	.075
6804	Wing Nut	Bright	.085

🔀 = 10 Series Compatible Part









9

526



We specialize in





Family \$

Linear Bearing Brake Holes

US Patent No. 5,429,438

Famil

Familv

- Enables you to add a stop-and-lock linear brake onto your application
- Refer to page 526 for all available brake kits

Family 2

Family 4

Family 6

• Refer to page 578-579 for specifying brake hole machining services

DVO



Linear Motion

Standard Bearing Part No.	Brake Ready Bearing Part No.	Bearing Size	Pre-Drilled or Specified Brake Hole Locations
6725 🔀	-	Family 1	
6825	-	Family 1	Specify*
6835	-	Family 1	
-	6425 🔀	Family 1	LG / LH / LI
-	6525	Family 1	LG / LH / LI
-	6535	Family 1	LG / LH / LI
6726 🔀	-	Family 2	
6826	-	Family 2	Specify*
6836	-	Family 2	
-	6426 🔀	Family 2	LG/LH/LI/LJ/LK/LM
-	6526	Family 2	LG/LH/LI/LJ/LK/LM
-	6536	Family 2	LG/LH/LI/LJ/LK/LM
6723 🔀	-	Family 3	
6823	-	Family 3	Specify*
6833	-	Family 3	
-	6423 🔀	Family 3	LN / LO / LP / LQ
-	6523	Family 3	LN / LO / LP / LQ
-	6533	Family 3	LN / LO / LP / LQ
6724 🔀	-	Family 4	
6824	-	Family 4	Specify*
6834	-	Family 4	
-	6424 🔀	Family 4	LN/LO/LP/LQ/LR/LS/LT/LU
-	6524	Family 4	LN/LO/LP/LQ/LR/LS/LT/LU
-	6534	Family 4	LN/LO/LP/LQ/LR/LS/LT/LU
6715 🔀	-	Family 5	
6815	-	Family 5	Specify*
6830	-	Family 5	
-	6415 🔀	Family 5	LA/LB/LC
-	6515	Family 5	LA/LB/LC
-	6530	Family 5	LA/LB/LC
6716 🔀	-	Family 6	
6816	-	Family 6	Specify*
6831	-	Family 6	
-	6416 🔀	Family 6	LA/LB/LC/LD/LE/LF
-	6516	Family 6	LA/LB/LC/LD/LE/LF
_	6531	Family 6	LA/LB/LC/LD/LE/LF

* Refer to pages 483-484 for machining services

Brake Kit Mounting Hole Machining Services

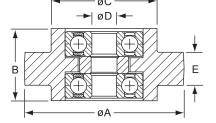
Part No.	Series	Description
7401 🔀	10	.265 diameter drill thru one wall
7400	15	.328 diameter drill thru one wall

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80/20[®] Inc. The Industrial Erector Set[®] **THE STANDARD**

Move frames, panels and other components by rolling in the profile T-slot



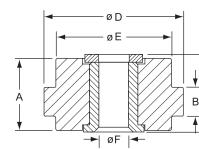


Part No.	A	В	С	D	E (Slot Tab)	Lbs.	Compatibility Code*
12017	1.535	.693	1.016	.236	.315	.07	
12018	1.555	.095	1.010	.230	.394	.07	8-15
12020	1.850	.772	1.323	.315	.315	.11	GI-0
12021	1.000	.112	1.323	.315	.394	.11	

Roller Wheel with Steel Hub

Fiberglass-Reinforced Nylon, Black

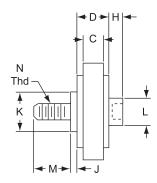
• Move frames, panels and other components by rolling in the profile T-slot



Part No.	Α	B (Slot Tab)	C	D	E	F	Lbs.	Compatibility Code*
12024	.590	.236	.634	1.142	.945	.244	.02	6-10

* See Compatibility Code information on page 152.





guided linear motion

US Patent No. 5,429,438

• 10 and 15 Series compatible

• All mounting hardware included

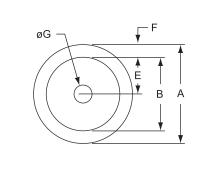
Made of self-lubricating black nylon

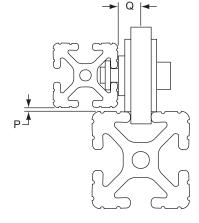
• Mounts to profile end or T-slot – ideal for

• Part No. 2290 has permanently lubricated bronze bushing, Part No. 2280 has ball bearing hub

Roller Wheels

NV*O*





Part No.	Α	В	С	D	E	F	G	Н	J	K	L	Μ	N	Р	Q	Lbs.
2281 🔀	1.500	1.125	.240	.480	.563	.188	.314	.219	.125	.625	.435	.310	1/4-20	.060	.370	.070
2282 🔀	1.500	1.125	.310	.480	.563	.188	.314	.219	.125	.625	.435	.310	1/4-20	.060	.370	.075
2280	2.000	1.625	.310	.720	.812	.188	.375	.250	.125	.750	.562	.375	5/16-18	.060	.485	.185
2290	2.000	1.625	.310	.720	.812	.188	.375	.250	.125	.750	.562	.375	5/16-18	.060	.485	.165

Part No.	Bearing Type	Mounts To	Rolls In
2281 🔀	Permanent Lubricated Bronze Bushing	10 Series	10 Series
2282 🔀	Permanent Lubricated Bronze Bushing	10 Series	15 Series
2280	Dual Roller Bearing	15 Series	15 Series
2290	Permanent Lubricated Bronze Bushing	15 Series	15 Series









🔀 = 10 Series Compatible Part

Linear Motion Fractional

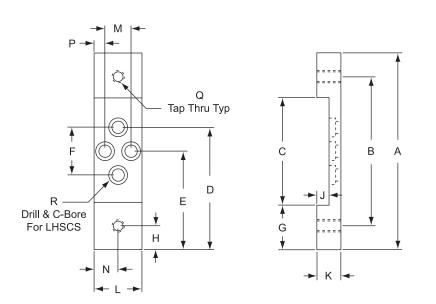
529

Roller Wheel Brackets

- 10 and 15 Series compatible
- Hardware for mounting bracket to T-slot included

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- Made of clear anodized aluminum
- Mounts to T-slot profile, ideal for moving framed doors and other components
- See pages 528-529 for roller wheels
- See page 531 for roller wheel bracket assemblies



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Part No.	A	B	С	D	E	F	G	н	J	K	L	М	N	P	Q	R	Lbs.
2750 🔀	3.125	2.125	1.250	1.897	1.563	.669	.938	.500	.255	.500	1.000	.544	.500	.228	1/4-20	1/4-20	.120
2752 🔀	4.125	3.125	2.250	2.562	2.063	1.000	.938	.500	.255	.500	1.000	.544	.500	.228	1/4-20	1/4-20	.140
2754	4.625	3.125	1.750	2.743	2.313	.860	1.438	.750	.390	.750	1.500	.735	.750	.383	5/16-18	5/16-18	.420
2757	6.125	4.625	3.250	3.813	3.063	1.500	1.438	.750	.390	.750	1.500	.735	.750	.383	5/16-18	5/16-18	.500

Note: Be sure to use the included washer with the roller wheels for proper spacing.

🔀 = 10 Series Compatible Part

Roller Wheel & Bracket Assemblies

- 10 and 15 Series compatible
- All mounting hardware included for both roller wheel and mounting bracket -
- 10 Series (2) 1/4-20 x 3/8" LHSCS (2) P/N 3204, 1/4-20 Standard T-nut 15 Series - (2) 5/16-18 x 5/8" LHSCS
 - (2) P/N 3203, 5/16-18 Standard T-nut
- Mounts to T-slot profile ideal for moving



framed doors and other components												
		l			l	ndividua	l Part No					
			2750 🔀	2752 🔀	2754	2757	2281 🔀	2282 🔀	2280	2290		
	2751 🔀 .260 Lbs.		1				2					
	2753 🔀 .280 Lbs.			1			2					
Assembly Part No.	2755 .790 Lbs.				1				2			
Assembly	2758 .870 Lbs.					1			2			
	2756 .740 Lbs.				1					2		
	2759 .820 Lbs.					1				2		

🔀 = 10 Series Compatible Part

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Linear Motion

Customized Workstation Carts by 80/20®

- Lots and lots of storage!
- Mobile it's a complete portable workshop!
- Modular add onto it to fit any application requirement.

- Lots of work surface!
- Hard mount for drill press / chamfer, custom machined from 80/20's own structural shapes!

