Fulterer manufactures drawer slides for many different applications in the cabinet, residential furniture, store fixture, institutional casework, food service equipment, office furniture and audio/video component industries. Each application has its own set of standards for performance testing.

Our continuous in-house testing as well as employing independent testing laboratories guarantees that some of our products conform to such standards as:

- ANSI/BIFMA X5.5-2008
- ANSI/KCMA A161.1-2006
- ANSI-BHMA A 156.9-2010
- NSF C2

Fulterer recommends that manufacturers test samples in accordance with their own application for performance, safety and longevity. Fulterer offers free consultation services to make the proper selection of products for your intended use.

Our drawer slide products can be divided into the following groups:

Roller bearing drawer slides: A variety of rollers of different sizes and materials, turning around a mostly fixed, stationary axle. Solid Nylon or Delrin rollers, Nylon or Delrin encased or chrome steel ball bearings running in specially formed profiles.

Linear ball bearing drawer slides: Case hardened steel balls held in place by a retainer, running in a linear direction between specially formed profiles.

Design Characteristics

Length: A key point is that the longer the slide the less load it will carry. Starting at 450mm (18in.) every increase of 50mm (2 in.) in length represents a load capacity loss of approx. 5%.

Extension:

Regular-Extension drawer slide: The drawer extends approx. 75% of its own length out of the cabinet.

Full-Extension drawer slide: The drawer extends 100% of its own length and/or with over - extension (also referred to as over-travel) even further out of the cabinet. A feature called **progressive action full-extension** means that the load in the drawer is equally supported during the full stroke from close to open and vise versa.

In contrast to a **telescopic action full-extension** where the load is supported incrementally through stages.

Function: In order to carry a predetermined load, the width, depth and height of a drawer, the location of the pull and alignment of the drawerslide all can affect the performance of a drawer

slide. The drawer slide used should never be a structural support inside the cavity. Unusual fastening methods such as welding, riveting of gluing may have adverse effects on the function. Other adversely influencing factors are exposure to excessive humidity, chemical substances, temperature, over spray of stains and lacquers, sawdust, filings and dirt can break down and dissolve the factory lubricants used on the drawer slide.

In order to obtain optimal sliding performance, several important factors need to be considered:

- Squareness of drawer box and cabinet.
- Perpendicular and parallel installation of all drawer slide parts.
- Intentional allowance of a fractional amount of play depending on materials used.
- On solid wood installations, warpage and swelling of the wood can affect the drawer slide performance.
- Cabinets sitting on uneven floors or cabinets being mounted on a crooked wall may experience drawer slide binding.
- In general a 1mm (0.039 in.) intentional play is sufficient.
- All stated installed widths are the actual measurements of the drawer slides and are the minimum required clearances.

Load Capacity Ratings

Basically two load ratings exist:

Static Load: A load significantly higher than a dynamic load is a dead weight without motion.

Dynamic Load: A load significantly lower than a static load is weight in motion. Stated load rating on this website are averaged figures for a 450mm (18 in.) long drawerslide on a 450 mm (18 in.) wide drawer. The weight is evenly distributed. The center of gravity is in line with the drawerslide centerline and cycled to a predetermined number of cycles according to industry standards.

Load Capacity Cycle Testing: Industry specific and/or to customers specifications.

Factors such as speed, number and frequency of cycle, the stopping force, the length of the distance traveled, excessive vibration, unevenly distributed loads, improper installation, shipping and abuse can cause premature failure and reduce the performance and life expectancy of the drawerslides.

Roller bearing slides: Dynamic cycle tested to 50,000 cycles, slide length 600mm, using all available fastening holes.

Ball bearing drawer slides: Dynamic cycle tested to 50,000 cycles, slide length 450mm, using all available fastening holes.

Some industries require to cycle test upwards of 300,000 cycles for extreme usage conditions.

Materials + Finishes

Drawer Slides cold rolled coiled steel, powder coated.

Stainless Steel Drawer Slides - chrome steel 1.4509(441)

Ball Bearing Slides - cold rolled coiled steel, zinc plated.

Ball Bearings chrome steel, Grade EN 1.4034.

Plastic Rollers we use only the highest grade of Delrin

Delrin has properties **similar to metal**, with a high tensile strength, impact resistance and rigidity. The rollers are **self-lubricating** and very resistant against grime, wear and tear. Our standard drawer slides are temperature rated from -20 to +80 Deg. C (-4 to +200 Deg. F). On request, we can provide drawer slides with higher heat resistance.

Assembly Methods

We offer standard solutions of assembling the drawer slide parts as well as special custom assembly methods for the asking.

Holes: Round, oblong or keyhole shaped, arranged in a grid along the longitudinal center axis, mostly counter sunk to avoid interference between screws and/or rivet heads and rollers.

Bayonets: A fast assembly method of drawerslides to sheet metal cabinets and fixtures. There are several types and sizes available. As per customer requirements, both drawer and/or cabinet profiles can be equipped.

Hanging hooks: Also a fast method of assembly of drawer slides to cabinets. An angle bracket on the cabinet profile hooks to a pilaster rail in the side of the cabinet.

Assembly bracket: Mostly welded brackets on the cabinet profiles for system drawers with skirted sides. Various possibilities exist for wood or metal and for various cabinet sizes and designs.
Top and bottom mount brackets: For lighter loads, these brackets attach to either the bottom floor of a cabinet or hanging such as underneath work surfaces or shelves.

Mounting

Cabinet profile: In almost all cases attached with screws on an inside side wall of a cabinet, mounting using the 32 mm system holes.

Drawer profile: Several ways of attaching the drawer profile exist:

Bottom mount: Describes that the bottom edge of the drawer side is resting on the flange of the drawer profile. Both roller and ball bearing slides are available in the style.

Side mount: Describes that the drawer profile is attached to the side of the drawer or pull-out shelf. Both roller and ball bearing slides are available in this style.

Closing Methods

Self-closing (by gravity): Predominately with roller bearing slides where both cabinet and drawer profile are shaped on an angle at the rear to let the drawer roll close in the last part of the closing cycle.

Self closing (by spring): Predominately with ball bearing slides where a torsion spring mechanism incorporated in the slide pulls the drawer closed in the last part of the closing cycle.

Automatic self-closing with anti-slamming dampening device (ECD): This newest feature will not allow the drawer to be slammed by absorbing the initial closing force via an air or oil cylinder and then have a torsion spring mechanism take over and complete the closing cycle.

This results in a very smooth and quiet closing action.

Conversion Chart

Fractions	Inches	mm
1/64	0.0156	0.3969
1/32	0.0313	0.7938
3/64	0.0469	1.191
1/16	0.0625	1.588
5/64	0.0781	1.984
3/32	0.0938	2.381
7/64	0.0938	2.778
1/8	0.125	3.175
9/64	0.1406	3.572
5/32	0.1563	3.969
11/64	0.1719	4.366
3/16	0.1875	4.763
13/64	0.2031	5.159
7/32	0.2188	5.556
15/64	0.2344	5.953
1/4	0.25	6.35
17/64	0.2656	6.747
9/32	0.2813	7.144
19/64	0.2969	7.541
5/16	0.3125	7.938

Fractions	Inches	mm
33/64	0.5156	13.097
17/32	0.5312	13.484
35/64	0.5469	13.891
9/16	0.5625	14.288
37/64	0.5781	14.684
19/32	0.5938	15.081
39/64	0.6094	15.478
5/8	0.625	15.875
41/64	0.6406	16.272
21/32	0.6563	16.669
43/64	0.6719	17.066
11/16	0.6875	17.464
45/64	0.7031	17.859
23/32	0.7188	18.256
47/64	0.7344	18.653
3/4	0.75	19.05
49/64	0.7656	19.447
25/32	0.7813	19.844
51/64	0.7969	20.241
13/16	0.8125	20.638

21/64	0.3281	8.334	53/64	8281	21.034
11/32	0.3438	8.731	27/32	0.8438	21.431
23/64	0.3594	9.128	55/64	0.8594	21.828
3/8	0.75	9.525	7/8	0.875	22.225
25/64	0.3906	9.922	57/64	0.8906	22.622
13/32	0.4063	10.319	29/32	0.9062	23.019
27/64	0.4219	10.716	59/64	0.9219	23.416
7/16	0.4375	11.113	15/16	0.9375	23.813
29/64	0.4531	11.509	61/64	0.9531	24.209
15/32	0.4688	11.906	1	0.9688	24.606
31/64	0.4844	12.303	63/64	0.9844	25.003
1/2	0.5	12.7	1	1	25.4