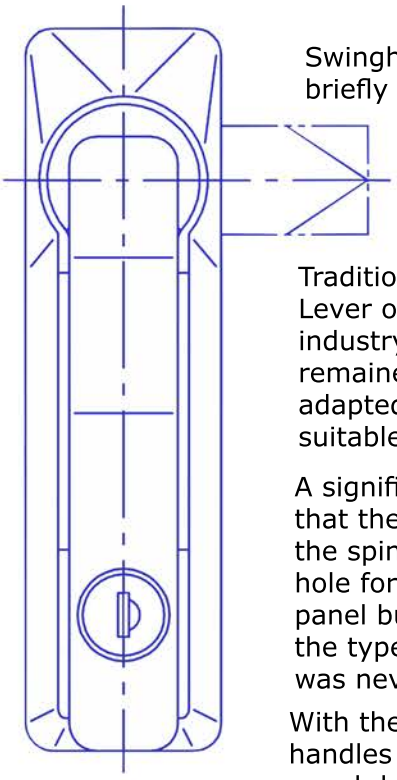
Swinghandles



Swinghandles have become very popular in recent years and it is worth looking briefly at their origin.

Traditionally, enclosure manufacturers had a choice of zinc-diecast Lever or Tee handles. These were originally designed for the motor industry and were used for door and boot locks. The basic style remained unaltered for more than 50 years although they were adapted for use on enclosure doors by fitting a spindle or shaft with a suitable locking cam or rod latch.

A significant disadvantage of the traditional style handles was that they needed at least three holes in the panel door; one for the spindle and two or more for fixing screws. Also the fixing hole format varied between makes and styles, meaning that panel builders had to configure their panel cut-outs according to the type of handle specified. The old adage "holes cost money" was never truer in this respect.

With the boom in the telecoms and computer industry, manufacturers needed handles that were not only functional but relatively low profile when fitted to the panel door. In installations featuring rows of electronics racks or cabinets, it is undesirable to have traditional style projecting handles that could catch on clothing or obstruct the free movement of personnel and equipment in the aisles.

The advent of CNC technology prompted a major change to the way panels and enclosures were produced and enabled manufactures to design and mass-produce cabinets that would accept the new breed of modular, interchangeable access hardware that had recently become available to panel builders. This meant that various quarter turn locks, lever and tee handles could be specified and they would all fit the same, single panel cut-out.

However this did not solve the problem of projecting handles and it was this issue together with the aesthetic requirements of the burgeoning electronics/racking industry that saw the development of the swing handle. In its simplest form the handle is lifted outward when in use and otherwise lies reasonably flat against the door when closed. Standard locking and non-locking versions are readily available.

Starting from this basic concept, there is now a plethora of styles and types and whilst manufacturer's catalogues contain detailed specifications of individual products, it may be helpful to look at some of the many options available.

Standard swinghandle

On the left is a typical swinghandle with fitted lock
Shown on the right are some other variants.

low profile

sliding cover

anti-vandal

snapline

Swinghandles

Selecting a swinghandle

Because of the huge range of swinghandle options now available, it is probable that there exists a solution for virtually any application. Therefore of necessity, this guide can only provide a very brief summary of some of the main points to assist in selection. For details and specifications please consult the appropriate catalogue section. However some basic points to consider are:

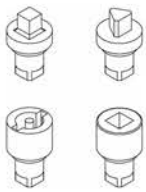
1. Decide on material. This can be:
   - Polyamide (PA); most cost-effective
   - Zinc diecast; more robust than PA
   - Stainless steel; stronger and corrosion resistant

2. For multi-point locking, there is a choice of flat or round rods and swinghandles differ depending on the type of rod chosen. It is important to note that 2/3 point locking cams for swinghandles differ from those for standard quarter turn locks and handles. The 4mm high shoulder enables a straight rod to clear the internal dustcap without bending. (See 2-150).

3. Is IP65 sealing needed? For IP65 applications the lower part of the handle is fixed with a sealed cap. In non IP65 applications, the lower part usually has a fastening hook.

4. Various locking options are available as well as non-locking types. Some typical locking options are shown below:

Profile cylinders- keyed alike or keyed to differ



Standard inserts (tool operated) full range see 2-141.

Padlockable, (padlockable + profile cylinder also available)

Combination lock

Dual profile cylinder- can be opened by either key holder without the other present

Other options

Other versions include: Low profile options, narrow frame width options, snapline - tool-less installation options (see KB07.1 for more information).

2-075SL - Snapline swinghandle

2-070 Low profile swinghandle.

There is a range of rod controls designed for use with swinghandles (2-340) including internal release option (2-400) as well as a closing device for use with emergency exits (2-450).

2-340 bolt type rod latch

Electronic Locking

The Dirak E-Line programme comprises a range of mechatronic locks providing a high level of security for cabinets, racks and enclosures.

Typical applications include Data Centres and cabinets/kiosks in public areas where access may be required by many people at different times.

For further information click here.