

Heiko Meier

Double up in the Twin Pack

Two Connectors in One: Han-Modular® Twin

Compact, space-saving dimensions, as well as quick and easy to use – the Han-Modular Twin impresses with its convenience and performance. The new product combines two connectors in one new hood and housing, thereby providing users with easy and quick handling.

Combined or modular connector systems have already been around for many years. To date however, it has been necessary to mount two connectors directly next to each other if for example users needed two connection lines. In the case of many servomotors, this method was opted for in connecting a shielded power supply and an additional shielded signal line. The M23 circular connector system has become established as the “quasi-standard” in this area – space problems notwithstanding. These problems arise when two circular connectors are mounted directly next to each other in a small area, making mating difficult and time-consuming.

The HARTING Technology Group has developed the Han-Modular Twin connector for requirements such as these. Thanks to the Twin, it is possible to replace a defective drive or motor very quickly, thereby reducing down time in production facilities by a considerable measure.

THE TWIN'S EQUIPMENT

At 39 x 44 mm, the Han-Modular Twin looks like a miniature IP65 industrial connector. It is produced from a robust aluminum die-cast alloy and also features the panel mounting housing with the proven Han-Easy Lock locking lever. The Twin has a two-piece hood, consisting of an upper part with the cable entry and, below this, the respective carrier housing. Thanks to this design it is easy to mount the inserts into the hood on the one hand, while the cable-side connection is also quick and reliable. Even cable-to-cable connections can be implemented easily, without additional coupling housings or other special parts.

The power and signal areas are housed in two distinct, metallically separated chambers. The cable screen can be clamped to a metallic separating plate in the hood. This ensures seamless ground connections to achieve the required EMC protection.



Fig. 1: Han-Modular Twin connector



Fig. 2: Top view



Fig. 3: Exploded view with screen connection



Fig. 4: Design study of an overmolded Han-Modular Twin hood and angle adapter for connection to motors



Fig. 5: Modules for Han-Modular Twin

VERSATILE PLACEMENTS AND MOUNTINGS

The various single modules from the Han-Modular range can be used as the contact inserts, which makes the system very flexible, as optimally coordinated modules are already available for the widest range of requirements. Various power modules up to 50 A and 830 V, signal modules with up to 25 contacts and special data modules are available.

A further advantage is the use of the familiar, tried and trusted Han contacts, which have become established as the standard in the industrial connector area. The crimp contacts are well-known and accepted by assemblers and users. In most cases, users already have access to the appropriate crimp tools.

MAKING ONE OUT OF TWO

The system integrates proven technologies in a new connector concept, which is both open as well as flexible for further additions. An overmolded model allows production of completely tested system cables. An angled adapter for direct connection to motors is easy to implement. The result is a completely new connector technology for servomotors that combines two circular connectors into one rectangular one – the Han-Modular Twin connector.



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