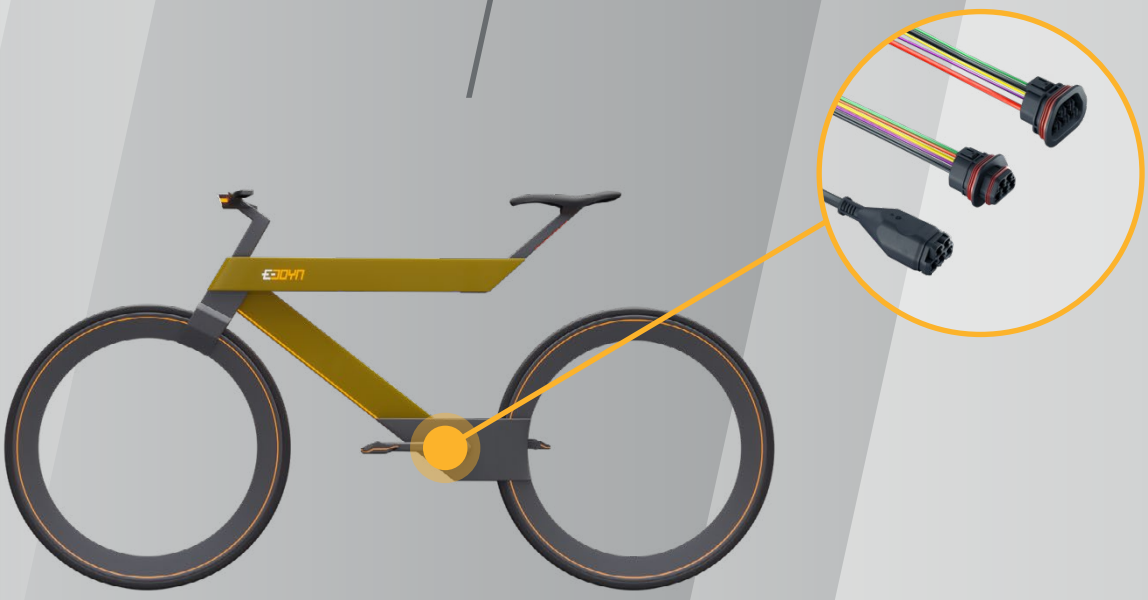
2+3 WAY POWER-DATA BATTERY INTERFACES

WITH TOUCH PROTECTION



BY HIRSCHMANN AUTOMOTIVE

CONNECTION BETWEEN BATTERY, MOTOR, AND CHARGER

For data communication and power transmission between the battery, motor, and charger, we developed our Power-Data Battery Interface Family for voltages up to 60 V DC and current loads up to 22 A.

With this application, you have the advantage that the power supply between the battery and the motor, as well as the connection to the charger, is established with only one interface.

When the battery is inserted, the interface connects the battery to the motor. In this state, the battery can be charged directly through the built-in interface in the frame. When the battery is removed, the built-in socket in the battery can be connected to the charging cable, allowing the battery to be charged in any location the rider desires.

The interfaces are suitable for various versions of swing-in in-tube batteries and non-swing-in frame batteries. Our patented, sophisticated connecting system convinces through an extremely compact design and a large number of mating cycles. Reliable data and power transmission even under extreme conditions such as wetness, vibrations, or shocks is a matter of course. For variants above 42 V, we offer touch protection.

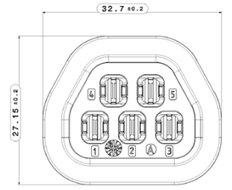
Various pole numbers are possible, as well as harnesses that can be individualized and adapted to the customer´s needs.

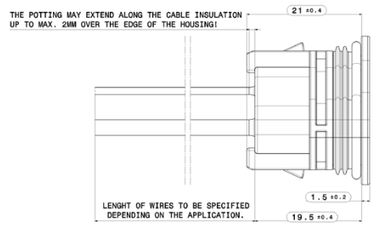
In close cooperation with our customers, we realize product requirements for optimal system integration.

KEY FEATURES

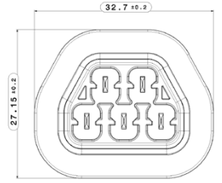
CONTACT SYSTEM POWER PINS	2 x contact 2.8 x 0.8 mm (pre-mating)
CONTACT SYSTEM SIGNAL PINS	3 x contact 2.8 x 0.8 mm
RATED VOLTAGE POWER PINS	0 to 59 V DC
RATED VOLTAGE SIGNAL PINS	0 to 59 V DC
MAXIMUM CURRENT LOAD POWER PINS	22 A, 28 A peak
MAXIMUM CURRENT LOAD SIGNAL PINS	3 A
PROTECTION CLASS NOT MATED	IP67
PROTECTION CLASS MATED	IP54
MINIMUM OPERATING TEMPERATURE	-20° C
MAXIMUM OPERATING TEMPERATURE	+100° C
MATING CYCLE FREQUENCY	≥ 1000
MATING FORCE	ca. 22 N
CONNECTOR LOCKING	by force, no mechanical locking
CODINGS	only polarisation
TWIST PROTECTION	yes
POWER PIN WIRE CROSS SECTION	2.5 mm^2
SIGNAL PIN WIRE CROSS SECTION	0.35 mm^2
OVERVOLTAGE CATEGORY	DIN EN 60664-1/II
POLLUTION DEGREE	DIN EN 60664-1/3
IP-DEGREE OF PROTECTION	IPXXB, for variants > 42 V
MATERIAL CONTACT CARRIERS	PA66+PA6 GF25
MATERIAL POTTING	PU
MATERIAL OVERMOULDING	TPU Shore A85
PULL RELIEF	yes, overmolding or potting
MINIMUM STORAGE TEMPERATURE	-20° C
MAXIMUM STORAGE TEMPERATURE	+60° C
STANDARDS	DIN EN 61984 DIN EN 50604-1 IEC 62133 partly UN 38.8 DIN EN 60335-1 DIN EN 60335-29 DIN SPEC 79009 cULus (upon request)

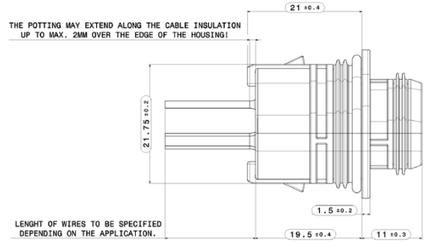
BUILT-IN CONNECTOR



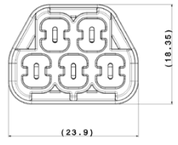


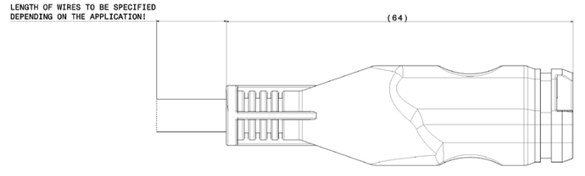
MOTOR HARNESS

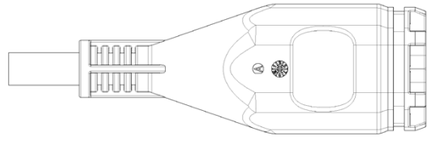




CHARGING HARNESS







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SCAN ME AND VISIT OUR WEBSITE.

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