

Coils for Solenoid Valves

Series D45/192...



- Facilitates compact assemblies
- Nominal power up 30 W
- With optional protection diode
- Protection class IP 65 / IP 67 / IP 69K
- For core tube \varnothing 19 mm

1 Description

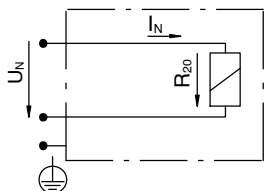
The slip-on coils can be replaced without opening the hydraulic envelope and can be positioned at any angle through 360°. When combined with the appropriate core tube, the coils produce an on/off solenoid function or a proportional solenoid function. Thanks to the wide variety of connector types and voltages, these coils are suitable for

widespread use in mobile and industrial applications. These coils are very adaptable in use, a benefit that is enhanced by various power ratings and an optional protection diode. The coil encapsulation and the plug base are glass-fibre reinforced thermoplastic.

2 Symbol

Connector type to DIN EN

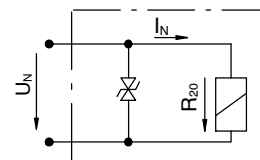
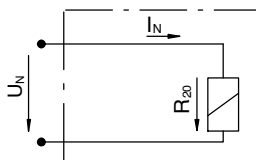
Direct current DC



All connector types except DIN EN (DC)

Without protection diode

With bipolar protection diode



3 Technical data

General characteristics		Description, value, unit
Designation		Coil, D45/192
Design		slip-on, rotatable 360°
Mounting method		core tube, knurled nut
Ambient temperature range	30 W	-30 °C ... +50 °C
	28 W	-30 °C ... +55 °C
	22 W	-30 °C ... +70 °C
Coil weight		350 ... 390 g (dependent on type of connection)

Electrical characteristics		Description, value, unit
Electrical connection:	Standard on request on request on request	- DIN EN 175301-803, 3-pole 2 P+E - Deutsch plug connection DT04-2P - Junior Timer radial plug connection, 2-pole - Cannon CA02COM-E10SL-4P-B
Insulation class to VDE 0580		H (180 °C)

Electrical characteristics	Description, value, unit
Protection class to ISO 20 653 / EN 60 529	IP 65 / IP 67 / IP 69K, see "Ordering code" (with appropriate mating connector and proper fitting and sealing)
Relative duty cycle	100 %
Supply voltage tolerance	± 10 %
Standard - supply voltages / power ratings: 12 V DC 24 V DC	Nominal power consumption: 28 W 22 / 30 W
more - supply voltages / power ratings:	see Coil resistance R

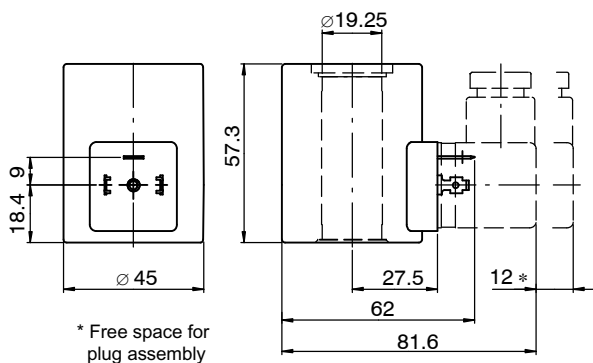
Coil resistance R:	Description, value, unit		
supply voltages / power ratings:	Cold value at + 20 °C	Cold value at - 30 °C	max. Warm value
8 V DC / 28 W	2.29 Ω	1.84 Ω	3.59 Ω
12 V DC / 28 W	5.1 Ω	4.1 Ω	8.0 Ω
24 V DC / 22 W	26.0 Ω	20.9 Ω	40.8 Ω
24 V DC / 30 W	19.2 Ω	15.4 Ω	30.1 Ω

Inductance / protection diode	Description, value, unit		
supply voltages / power ratings:	Inductance Measured at the core tube, non-operated, at 0.1 mA (rms) / 1 kHz	Inductance Measured at the core tube, non-operated, at 0.5 mA (rms) / 120 Hz	Breakdown voltage for protection diode
8 V DC / 28 W	9.2 mH	142 mH	–
12 V DC / 28 W	23 mH	103 mH	–
24 V DC / 22 W	116 mH	284 mH	56 V
24 V DC / 30 W	84 mH	210 mH	56 V

4 Dimensions

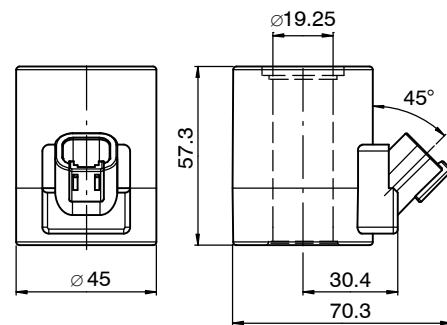
Coil with DIN EN plug connection

- Standard-Type (see Ordering code)



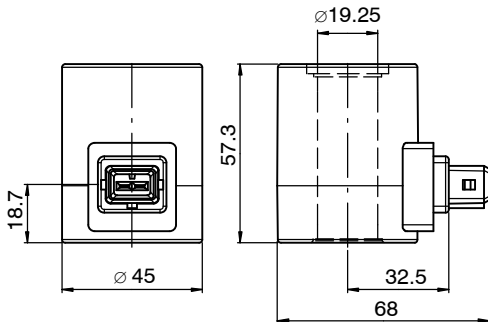
Coil with Deutsch DT04-2P plug connection

- Type DT with quenching diode (see Ordering code)



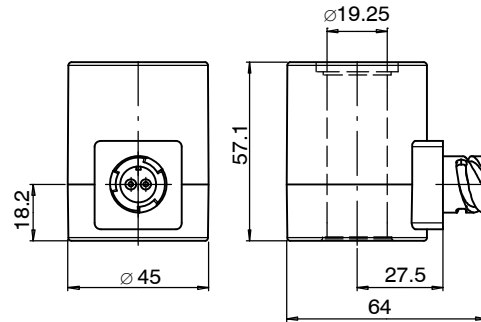
Coil with Junior Timer radial plug connection

- Type JT with quenching diode (see ordering code)



Coil with Cannon CA02COM-E10SL-4P-B

- Type W (see ordering code)



5 Installation information



Attention.

Because of the danger of overheating, the coil must only be operated when it is properly fitted on a valve. To prevent the ingress of water, both ends of the coil on the core tube must be properly sealed with O-rings.



Attention.

Delivery is done without mating connector.

6 Ordering code

Ex. MAG-SP D45/192 24 D _ 30W

MAG-SP = coil

D45/192= \varnothing 45 mm (outside \varnothing) / \varnothing 19.25 mm (inside \varnothing)

... = voltage e.g. 24 (24 V),
see "Electrical characteristics" - supply voltage

D = current DC

A = current AC

(blank) = standard plug connection to DIN EN (3-pole, 2 P+E) (IP 65)
for the following plug-variants, please consult Bucher:

DT = Deutsch plug connection DT04-2P (with quenching diode, IP 67/69K)

J = Junior Timer radial plug connection (IP 65)

JT = Junior Timer radial plug connection (with quenching diode, IP 65)

W = Cannon CA02COM-E10SL-4P-B (IP 65)

... = Nominal power consumption, see "Electrical characteristics"

mating plug not supplied

mating plug not supplied

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Classification: 430.395...