

# **Coils for Solenoid Valves**

Diverse connector types, power ratings and voltages Series D45/22...



- Facilitates compact assemblies
- All common DC voltages
- Nominal power up 22 W
- Diverse connector types
- Protection class IP 65 / IP 67 / IP 69K
- $\bullet$  For core tube  $\varnothing$  22 mm

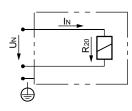
### 1 Description

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. The plug base are plastic. The body is zinc-nickel plated according to DIN 50 979 and is thus suitable for use in the harshest operating environments.

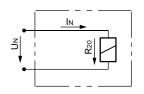
### 2 Symbol

#### Connector type to DIN EN 175301-803

Direct current DC



All connector types except DIN EN 175301-803 (DC) Without protection diode



### 3 Technical data

General characteristics	Description, value, unit
Designation	coil, D45/22
Design	slip-on, rotatable 360°
Mounting method	core tube, knurled nut



#### IMPORTANT!

For solenoid coils with integrated rectifier as well as for solenoid coils without protection diode the two supply connections  $(U_N)$  can be interchanged. The earth connection is marked with ...



# **BUCHER** hydraulics

General characteristics		Description, value, unit
Ambient temperature range	14 W 22 W	-30 °C +65 °C (Prop.) -30 °C +65 °C (ON/OFF)
Coil weight		530 g
Electrical characteristics		Description, value, unit
Electrical connection:	standard on request on request on request	<ul> <li>DIN EN 175301-803, 3-pole 2 P+E</li> <li>Deutsch plug connection DT04-2P</li> <li>Junior Timer radial plug connection, 2-pole</li> <li>AMPSEAL axial plug connection</li> </ul>
Insulation class to VDE 0580		H (180 °C)
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 %
Control current		see valve data sheet (proportional function)
Supply voltage tolerance		± 10 %
Supply voltages / power ratings:	standard standard	12 V DC / 14 W, 22 W 24 V DC / 14 W, 22 W
Others on request		

IMPORTANT!:

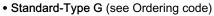
<sup>1)</sup> supply voltages > 75 VDC or 50 VAC only possible with DIN EN 175301-803 connect.

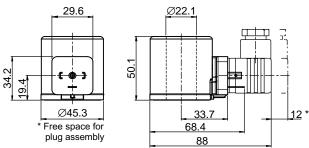
Supply voltage: 12 V DC		14 W	22 W
Coil resistance R - cold value at + 20 °C		2.6 Ω	6.28 Ω
	- cold value at - 30 °C	2.1 Ω	5.1 Ω
	- max. warm value	4.1 Ω	9.8 Ω
Inductance parallel 120 Hz		42 mH	mH
Measured at the core tube, non-operated	serial 1000 Hz	8 mh	mH
		-	-
Supply voltage: 24 V DC		14 W	22 W
Coil resistance R	- cold value at + 20 °C	10.1 Ω	26.4 Ω
	- cold value at - 30 °C	8.1 Ω	21.2 Ω
	- max. warm value	15.8 Ω	41.3 Ω
Inductance	parallel 120 Hz	170 mH	445 mH
Measured at the core tube, non-operated	serial 1000 Hz	33 mH	90 mH



### 4 Dimensions

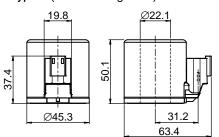
#### Coil with DIN EN plug connection





Coil with Deutsch DT04-2P plug connection

• Type T (see Ordering code)



### 5 Installation information

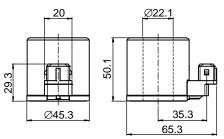


#### Attention.

Because of the danger of overheating, the coil must only be operated when it is properly fitted on a valve.

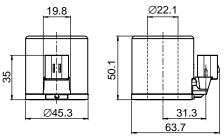
#### Coil with Junior Timer axial plug connection

• Type I (see ordering code)



Coil with AMPSEAL 16 axial plug connection

• Type A (see ordering code)





Attention. Delivery is done without mating connector.

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### 6 Ordering code

		Ex.	COIL	D45/22		24 D _	22W
COIL	= coil						
D45/22	= $\emptyset$ 45 mm (outside $\emptyset$ ) / $\emptyset$ 22 mm (	inside Ø)					
B P	<ul><li>use for a switching valves (22 W)</li><li>use for a prop. valves (14 W)</li></ul>						
	= voltage e.g. 24 (24 V), see "Electrical characteristics" - s	upply voltage					
D	= current DC						
G	<ul> <li>standard plug connection to DIN the following plug-variants on required</li> </ul>		5)	motio			
Т		eutsch nlug connection DT04-2P 2-nole avial (IP 67/69K)					
I	= Junior Timer plug connection 2-pd	ole axial (IP 65)		not supplied			
А	= <u>AMPSEAL plug connection 2-pole</u>	e axial (IP 67/69K)		J			
	= Nominal power consumption, see	"Electrical characteristics	s"				

### 7 Related data sheets

Reference	Description
400-D-9010002	Technical hints and tips – solenoid coils

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Classification: 430.395....