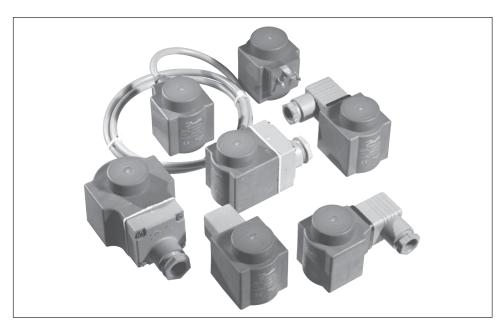


# Coils for VDH and VDHT valves



Introduction

The coils for the Danfoss High-Pressure Pumps valves are high-performance and reliable coils based on more than 50 years manufacturing of solenoid valves.

The coils are designed for the VDH and VDHT High-Pressure solenoid valve program and are available with many different options.

For information about other coil types not listed in this data sheet, please contact the Danfoss High-Pressure Systems sales department.

The Clip-on fastening system ensures a faultless installation. A Danfoss Clip-on coil can be mounted without the use any tools, and it is simple to dismount the coil by means of a screwdriver.



### Coils for VDH and VDHT valves, Type BB

#### **Features**



- 10 W AC
- 18 W DC
- Clip-on version
- Windings of class H insulated wire moulded in the coil body
- Ambient temperature: Up to +80°C
- All usual AC and DC voltages
- IP 00 version with spade connector in accordance with DIN 43650, form A.
- IP 20 version with protective cap
- IP65 version with mounted cable plug
- Standard coils available with 3 core cable, for DIN plugs
- Coils can be fitted without the use of tools
- Coils can only be removed with the use of tools

#### **Technical data**

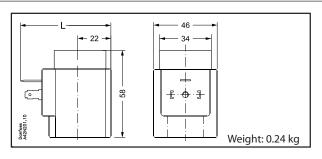
Design	In accordance with VDE 0580
Voltage tolerance	220/380V AC coils: +10%, -15%. 230/400V AC coils: +6%, -10%. Other AC coils with NC valve: +10%, -15% Other AC coils with NO valve and all DC coils: ± 10%
Power consumption, cut-in	AC: 44 VA
Power consumption, holding	AC: 21 VA, 10 W / DC: 18 W
Insulation of coil windings	Class H according to IEC 85
Connection	Spade connector in accordance with DIN 43650 form A
Enclosure, IEC 529	IP00 with spade connec., IP 20 with protective cap, IP 65 with cable plug
Ambient temperature	Max. +50°C /+80°C - see table below for details
Duty rating	Continuous

### **Code numbers**

Power consumption holding	Coil type	Ambient temperature	Supply voltage	Code no.
10.144.4.6	BB024AS	max. +80°C	24 V, 50 Hz	018F7905
10 W AC	BB240AS	max. +80°C	240 V, 50 Hz	018F7906
18 W DC	BB024DS	max. +50°C	24 V	018F7928

Contact Danfoss for delivery of coils for other voltages

Symbol	Description	Enclosure	Code no.
	Cable plug according to DIN 43650-A PG 11	IP65	180Z0183



	L
Without cable plug	62 mm
With protective cap	77 mm
With cable plug	85 mm



## Coils for VDH and VDHT valves, Type UL

### **Features**



- Encapsulated coils with long operation life, even under extreme conditions
- Standard coils for AC
- Standard coils available with DIN spade terminals
- Standard coils from 24 V to 240 V and 50/60 Hz
- Coils can be fitted without the use of tools
- Cable plugs must be ordered separately from the coils

#### **Technical data**

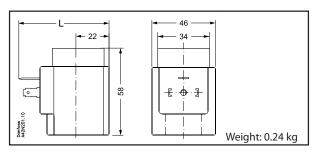
Approvals	<b>F1</b> UL recognized with EVR, EVRA, EVM		
Permissible voltage variation	14 W AC coils: +10/-15%		
Enclosure, IEC 529	IP 65 (≈ NEMA 4X) with DIN socket 180Z0183		
Ambient temperature	14 W AC coil for NC valve: -40> +122°F (-40> +50°C)		

#### **Code numbers**

Power consumption holding	Coil type	Ambient temperature	Supply voltage	Code no.
	BY024CS	max. +122°F	24 V, 50/60 Hz	018F7907
14 W AC	BB110BS	max. +122°F	110 V, 50/60 Hz	018F7909
	BB240CS	max. +122°F	208-240 V, 50/60 Hz	018F7908

Contact Danfoss for delivery of coils for other voltages

Symbol	Description	Enclosure	Code no.
	Cable plug according to DIN 43650-A PG 11	IP65	180Z0183



	L
Without cable plug	62 mm
With protective cap	77 mm
With cable plug	85 mm

## Coils for VDH and VDHT valves, Type BE

### **Features**



- 10 W AC
- 18 W DC
- Clip-on version
- Encapsulated coils with long operation life,
- Ambient temperature: Up to +80°C
  Suitable for moist environments
- All usual AC and DC voltages
- IP 67 version with terminal box
- IP 67 version with 3-core flying lead
- Coils can be fitted without the use of tools
- Coils can only be removed with the use of tools

#### **Technical data**

Design	In accordance with VDE 0580	
Voltage tolerance	220/380V AC coils: +10%, -15%. 230/400V AC coils: +6%, -10%. Other AC coils with NC valve: +10%, -15% Other AC coils with NO valve and all DC coils: ±10%	
Power consumption, cut-in	AC: 44 VA	
Power consumption, holding	AC: 21 VA, 10 W / DC: 18 W	
Insulation of coil windings	Class H according to IEC 85	
Connection	Terminal box; PG 13.5 - on 3-core flying lead	
Enclosure, IEC 529	IP67	
Ambient temperature	Max. +50°C /+80°C - see table below for details	
Duty rating	Continuous	

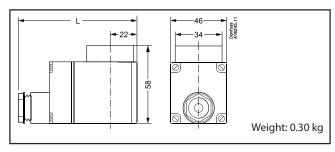
### **Code numbers**

Power consumption holding	Coil type	Ambient temperature	Supply voltage	Code no.  With terminal box	Code no. With cable	Code no.  Without terminal box
	BE024AS	max. +80°C	24 V, 50 Hz	018F7920		
	BE042AS	max. +80°C	42 V, 50 Hz	018F7927		
	BE048AS	max. +80°C	48 V, 50 Hz		018F7915 (4 m)	
	BE230AS	max. +80°C	220-230 V, 50 Hz	018F7921		
	BE240AS	max. +80°C	240 V, 50 Hz	018F7924	018F8205 (3 m)	018F7917
10 W AC	BE380AS	max. +80°C	380-400 V, 50 Hz			
10 W AC	BE024BS	max. +80°C	24 V, 60 Hz	018F7922		
	BE220BS	max. +80°C	220 V, 60 Hz	018F7925		
	BE240BS	max. +80°C	240 V, 60 Hz	018F7926		
	BE110CS	max. +50°C	110 V, 50/60 Hz	018F7923		
	BE200CS	max. +50°C	200 V, 50/60 Hz	018F7929		018F7918
	BE230CS	max. +50°C	220-230 V, 50/60 Hz	018F7919		
18 W DC	BE012DS	max. +50°C	12 V	018F7913		
10 W DC	BE024DS	max. +50°C	24 V	018F7914		018F7912

Contact Danfoss for delivery of coils for other voltages

	Description	Code no.
Terminal box with LED indication	48-220 V DC 24-250 V AC, 50/60 Hz	018Z0089
Terminal box	100 pcs package	018Z0279

## Coils for VDH and VDHT valves, Type BE



	L
With terminal box	94 mm
With 1 m cable	65 mm

## Coils for VDH and VDHT valves, Type BO; Eex m II T4

#### **Features**



- 10 W AC
- 10 W DC
- For explosion-risk environments, such as where flammable liquids and gases are produced, transported or tapped
- Approvals for use in Zone 1 according to Directive 94/9/EC (ATEX 100A) EN50014 and EN50028
- Medium temperature: Up to +90°C
- Ambient temperature: Up to +40°C
  IP 67 version with 5 m 3-core flying lead
- Seal kit as accessory for extremely wet and aggressive environments (please contact Danfoss)

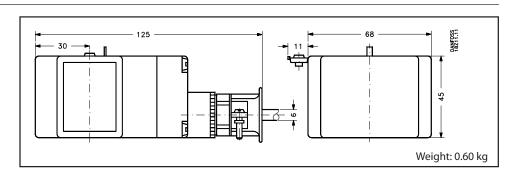
#### **Technical data**

Voltage tolerance	±10%
Power consumption, holding	AC: 10 W / DC: 10 W
Insulation of coil windings	Class H according to IEC 85
Connection	5 m 3-core flying lead
Enclosure, IEC 529	IP67
Media temperature	Max. +90°C
Ambient temperature	Max. +40°C
Duty rating	Continuous

### **Code numbers**

	Coil type	Supply voltage	Code no.
10 W AC	BO230C	230 V, 50/60 Hz	018Z7992
10 W DC	BO24D	24 V	018Z7993

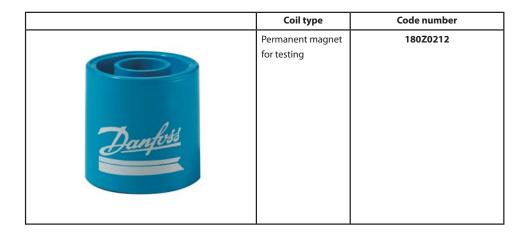
NC/NO seal kit included





## Coils for VDH and VDHT valves

## Permanent magnet



## **Cross list**

Coil code number	Coil type	Nessie code number	Comment
		018Z0279	Terminal box incl screws and seal
	Spare parts	018Z0093	Seal kit NC
	BE230CS	018F7919	
018F6015	BE024BS	018F7922	
018F6081	BE200CS	018F7929	
018F6081	BE200CS	018F7918	Excl. terminal box
018F6163	BE042AS	018F7927	
018F6176	BE230AS	018F7921	
018F6177	BE240AS	018F7924	
018F6177	BE240AS	018F7917	Excl. terminal box
018F6182	BE024AS	018F7920	
018F6184	BE048AS	018F7915	With 4 m cable
018F6188	BE200AS	018F7926	Same as BE240BS
018F6188	BE240BS	018F7926	
018F6189	BE220BS	018F7925	
018F6192	BE110CS	018F7923	
018F6756	BE012DS	018F7913	
018F6757	BE024DS	018F7914	
018F7352	BB240AS	018F7906	For DIN plug (excl. plug) hirshman
018F7358	BB024AS	018F7905	For DIN plug (excl. plug) hirshman
018F7397	BB024DS	018F7928	For DIN plug (excl. plug) hirshman
018F7655	BY024CS	018F7907	UL recognized
018F7658	BY240CS	018F7908	UL recognized
018F7663	BY	018F7909	UL recognized
018Z6592	Z6592	018Z7992	Eex mll T4 T, 40°C
018Z6596	Z6509	018Z7993	Eex mll T4 T, 40°C
042N0156	Cable plug	180Z0183	DIN plug for BY and BB (hirshman)



Data sheet	Coils for VDH and VDHT valves
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