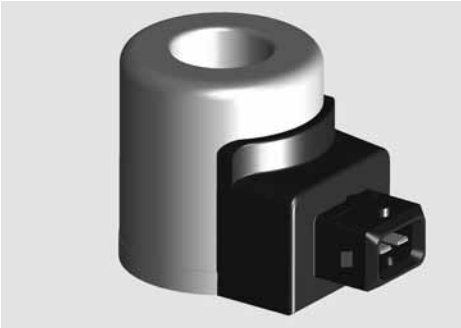
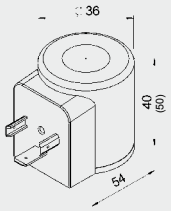
Solenoid Coils for Directional Valves (Solenoid Operated)



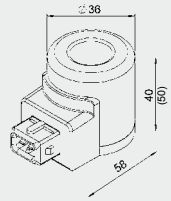
Types

For the following valves:

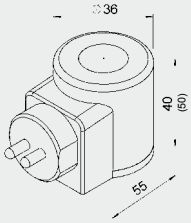
40-1836	50-1836
WSM06020 Y, YR, Z, ZR, V, W …	WS10 W …
WSM10120 Y, YR, Z, ZR, W …	WSM08130 C, D …
WSM12120 Y, YR, Z, ZR, V, W …	WS08 C, D …
WS08 C, Y, YR, Z, ZR, V, W …	WK10 A, C, D, K, L, N, P …
WS10 Y, YR, Z, ZR, W …	WK10 R, V, W, X, Y, Z …
WS12 Y, YR, Z, ZR …	
WS16 Y, YR, Z, ZR …	
WKM08140 X, EB, Y …	
WK08 (07) (081) A, C, D, K, L, P, R, V, W, X, Z …	
WK10 E, F, G, H, J, S, (2x) …	
WSM20121 W …	



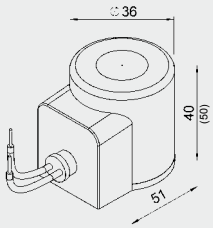
Connector type G
DIN connector to EN175-301-803



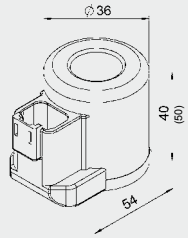
Connector type T
AMP Junior Timer, 2-pole



Connector type K
Kostal connector, 2-pole



Connector type L
Lead-wires, 457 mm



Connector type N
Deutsch connector, 2-pole

FEATURES

- **Maximum power for minimum space requirement**
  Coil is layer-wound which ensures maximum copper fill for minimum space requirement. This prevents damage to the wire insulation.
  (Prevents failure due to short circuit)
- **Fully encapsulated coil**
  Internal coil seal prevents moisture from penetrating and therefore prevents short circuits in the winding
- **Designed for 100% duty cycle**
  At I_{max} and ambient temperatures of -20° to +60°C
- **Low energy consumption**
  Optimum power/energy ratio
- **High mechanical resistance**
  Zinc-plated steel casing
- **High thermal load capacity**
  Insulation material class H (180°C, VDE 0580)
- **5 different types of electrical connection as standard, with protection classes IP65, IP67 and IP6K9K**
  DIN/EN connector (G) IP65, Junior Timer (T) IP65/IP67
  Kostal connector (K) IP67, Lead-wires (L) IP65/IP67,
  Deutsch connector (N) IP65/IP67/IP6K9K and others on request
- **Mounting direction optional**
  Symmetrical coil construction
- **Coil dimensions = type code**
  Type 40-1836 = 40 mm high (18 mm internal Ø, 36 mm external Ø)
  Type 50-1836 = 50 mm high (18 mm internal Ø, 36 mm external Ø)

SPECIFICATIONS

Coil duty rating:		Continuous up to max. 115% of the nominal voltage at max. 60 °C ambient temperature
Max. permitted coil temperature:		180 °C
Power consumption:	40 type coil	18 - 20 Watt at nominal voltage and 20 °C coil temperature
	50 type coil	25 - 27.2 Watt at nominal voltage and 20 °C coil temperature
Coil wire:		Insulation material class H
Coil casing:		Steel, zinc-plated
Connector socket:		Polyamide, black
(all specifications relate to coil when fitted on a valve)		

DESCRIPTION

The solenoid coil is manufactured as a DC coil as standard.

On request, solenoid coils can be fitted with an integrated reverse polarity protected diode for reducing the switch-off induction voltage, to protect against voltage surges. Solenoid coils for connection to alternating current have an integrated bridge rectifier.

For coils with a DIN connector to EN 175301-803 a corresponding connecting socket (Part No. 394287) can be supplied separately.

As a general rule, special coils can be manufactured to customer specification. Please consult your sales partner.

For the various connector electronics for coils, please see the relevant valve brochure.

MODEL CODE

Coil 12 DG01 - 40-1836

Basic model

Coil voltage
12 V DC
24 V DC
115 V AC (AG termination only)
230 V AC (AG termination only)
Other voltages on request

Type of voltage
D = DC, control valve
A = AC, control valve

Type of connector
G = Connector to EN 175301-803, protection class IP65
T = Junior Timer 2-pole, radial, protection class IP65/IP67
K = Kostal threaded connection, M 27x1, 2-pole, protection class IP65/IP67
L = 2 lead-wires, 0.75mm², 457 mm (18") long, protection class IP65/IP67
N = Deutsch connector 2-pole, protection class IP65/IP67/IP6K9K
Other connectors on request

Version (depending on connector)
No details = standard
01, 02... = e.g. protection diodes, different cable lengths...

Type code
40-1836 = principal dimensions (height, internal diameter, external diameter)

The model code is for information only. For the types available, see table below:

BASIC MODEL AND RELEVANT PART NUMBERS

Nominal voltage	Coil length	Coil power	Nominal resistance	Nom. current	Part numbers for type of connector				
					DIN	Junior Timer	Kostal	Lead-wires	Deutsch
[Volt]	[mm]	[Watt]	[Ohm]	[Amp.]	(G)	(T)	(K)	(L)	(N)
12 V DC	40	18.00	8.00	1.50	3000489	3008275	3003133	3002244	3012600
					12DG-40-1836	12DT-40-1836	12DK-40-1836	12DL-40-1836	12-DN-40-1836
	50	26.70	5.40	2.20	915151	3001033	3091679	3091633	3091665
					12DG-50-1836	12DT-50-1836	12DK-50-1836	12DL-50-1836	12-DN-50-1836
24 V DC	40	19.00	30.00	0.80	3000249	3008279	3003138	3003119	3012599
					24DG-40-1836	24DT-40-1836	24DK-40-1836	24DL-40-1836	24DN-40-1836
	50	26.70	21.20	1.10	915142	3001503	3091681	3112951	3091667
					24DG-50-1836	24DT-50-1836	24DK-50-1836	24DL-50-1836	24DN-50-1836
115 V AC	40	20.00	500.00	0.20	3003156	–	–	–	–
					115AG-40-1836				
110 V AC	50	25.00	383.00	0.26	3019735	–	–	–	–
					110AG-50-1836				
230 V AC	40	20.00	2137.00	0.10	3002594	–	–	–	–
					230AG-40-1836				
	50	25.00	1680.00	0.12	3019736	–	–	–	–
					230AG-50-1836				

NOTE
The information in this brochure relates to the operating conditions and applications described. For applications or operating conditions not described, please contact the relevant technical department.
Subject to technical modifications.

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