

## Solenoid Coils for Directional Valves (Solenoid Operated)

### Types

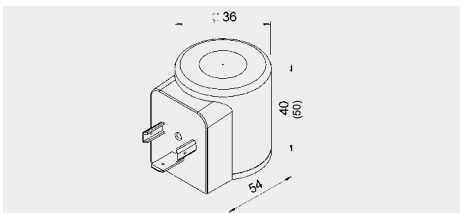
For the following valves:

### 40-1836

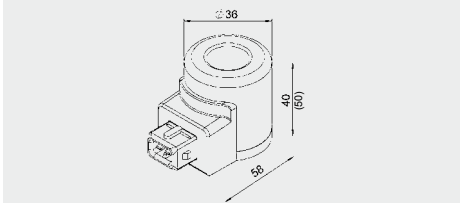
WSM06020 Y, YR, Z, ZR, V, W ...  
 WSM10120 Y, YR, Z, ZR, W ...  
 WSM12120 Y, YR, Z, ZR, V, W ...  
 WS08 C, Y, YR, Z, ZR, V, W ...  
 WS10 Y, YR, Z, ZR, W ...  
 WS12 Y, YR, Z, ZR ...  
 WS16 Y, YR, Z, ZR ...  
 WKM08140 X, EB, Y ...  
 WK08 (07) (081) A, C, D, K, L, P, R, V, W, X, Z ...  
 WK10 E,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

### 50-1836

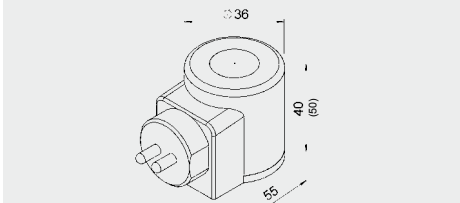
WS10 W ...  
 WSM08130 C, D ...  
 WS08 C, D ...  
 WK10 A, C, D, K, L, N, P ...  
 WK10 R, V, W, X, Y, Z ...



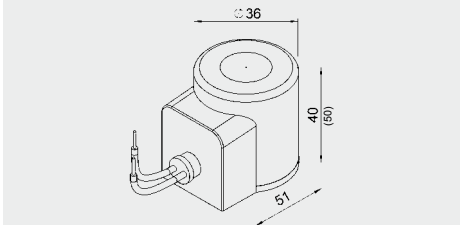
**Connector type G**  
 DIN connector to EN175-301-803



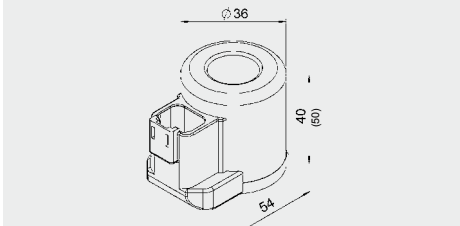
**Connector type T**  
 AMP Junior Timer, 2-pole



**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  $-20^{\circ}$  to  $+60^{\circ}\text{C}$
- **Low energy consumption**  
 Optimum power/energy ratio
- **High mechanical resistance**  
 Zinc-plated steel casing
- **High thermal load capacity**  
 Insulation material class H ( $180^{\circ}\text{C}$ , 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  $\varnothing$ , 36 mm external  $\varnothing$ )  
 Type 50-1836 = 50 mm high (18 mm internal  $\varnothing$ , 36 mm external  $\varnothing$ )

### SPECIFICATIONS

Coil duty rating:	Continuous up to max. 115% of the nominal voltage at max. $60^{\circ}\text{C}$ ambient temperature	
Max. permitted coil temperature:	$180^{\circ}\text{C}$	
Power consumption:	40 type coil	18 - 20 Watt at nominal voltage and $20^{\circ}\text{C}$ coil temperature
	50 type coil	25 - 27.2 Watt at nominal voltage and $20^{\circ}\text{C}$ 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

12DN-40-1836

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, 0.75mm<sup>2</sup>, 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 [Volt]	Coil length [mm]	Coil power [Watt]	Nominal resistance [Ohm]	Nom. current [Amp.]	Part numbers for type of connector				
					DIN (G)	Junior Timer (T)	Kostal (K)	Lead-wires (L)	Deutsch (N)
12 V DC	40	18.00	8.00	1.50	3000489 12DG-40-1836	3008275 12DT-40-1836	3003133 12DK-40-1836	3002244 12DL-40-1836	3012600 12-DN-40-1836
	50	26.70	5.40	2.20	915151 12DG-50-1836	3001033 12DT-50-1836	3091679 12DK-50-1836	3091633 12DL-50-1836	3091665 12-DN-50-1836
24 V DC	40	19.00	30.00	0.80	3000249 24DG-40-1836	3008279 24DT-40-1836	3003138 24DK-40-1836	3003119 24DL-40-1836	3012599 24DN-40-1836
	50	26.70	21.20	1.10	915142 24DG-50-1836	3001503 24DT-50-1836	3091681 24DK-50-1836	3112951 24DL-50-1836	3091667 24DN-50-1836
115 V AC	40	20.00	500.00	0.20	3003156 115AG-40-1836	—	—	—	—
	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.

**HYDAC Fluidtechnik GmbH**  
Justus-von-Liebig-Str.  
D-66280 Sulzbach/Saar  
Tel: 0 68 97 /509-01  
Fax: 0 68 97 /509-598  
E-Mail: flutec@hydac.com