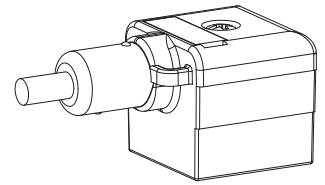


## Power reduction plug P04

- After switching on, current consumption is reduced to 50%
- Direct mounting on the valve
- Protection class 67
- For switching solenoids with DIN plug construction form A ISO 4400

DIN EN 175301-803

ISO 4400



### DESCRIPTION

Power reduction plug for direct mounting on the valve. Contact arrangement in accordance with DIN EN 175301-803, construction form A (ISO 4400) for DC switching solenoids. The protection class of the power reduction plug is IP 67, mounted according to EN 60529. The connection cable is injection moulded onto the plug.

### FUNCTION

After switching on the supply, the maximum current of the solenoid passes for approx. 250 ms, thereafter the current is limited to half by the cycle controlled output stage. Thereby the power consumption of the valve is reduced to below 30 %.

### APPLICATION

By the IP 67 execution and the wide temperature range, the power reduction plug is suitable both for industrial and mobile applications. The plug can be rotated by 180°. It protects continuously energised solenoids (e.g. used as a safety function) from overtemperature and premature ageing. By overenergisation, a valve which is deenergised in normal operation (eventually seized spool), can be switched straight through powerfully.

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### TYPE CODE

Plug	P	04	A	-	1	D2	#	
Designation								
Housing construction form A, contact clearance 18 mm								
1 solenoid execution								
Supply voltage								
24 VDC								
Design-Index (Subject to change)								

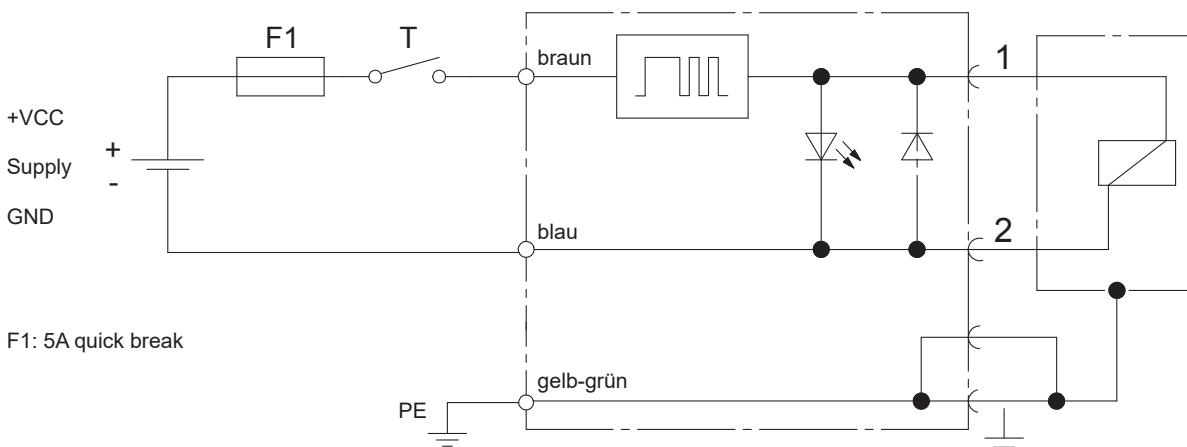
### GENERAL SPECIFICATIONS

Plug housing	TPU transparent
Connection line	PUR black 3 x 0,5 mm <sup>2</sup>
	Length 5 m
Weight	130 g
Ambient temperature	-25...60 °C

### HYDRAULIC SPECIFICATIONS

Supply voltage	24 VDC ± 10 %
Suppressor circuit	Freewheel diode
Status display	LED yellow
Dither	Frequency fix 1,1 kHz
Solenoid current	$I_{Nmax} = 4A$ (max. switching current) $I_{Nmax} = 2A$ (max. holding current)
Switching frequency	max. 2 Hz
EMC	Immunity EN 61000-6-2 Emission EN 61000-4-2

### BLOCK DIAGRAM / CONNECTION



F1: 5A quick break

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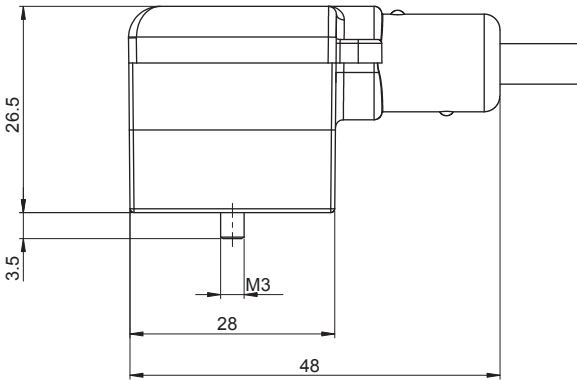
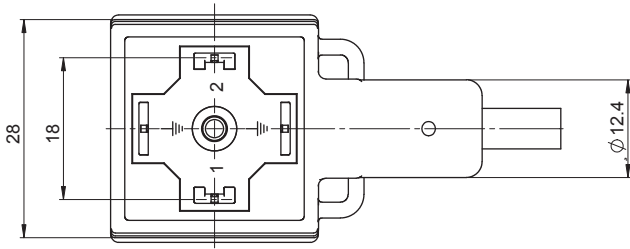
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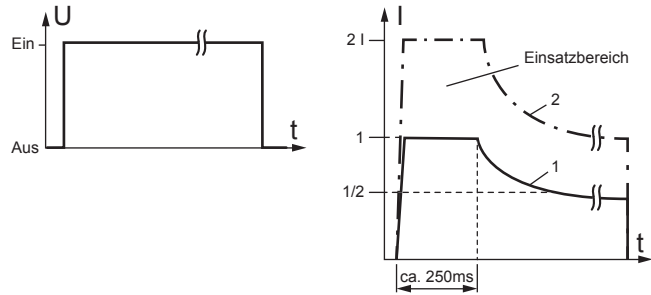
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## DIMENSIONS



## APPLICATION POSSIBILITIES



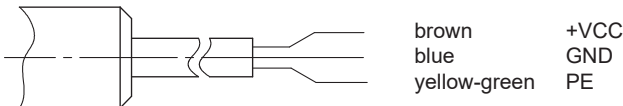
- ① Switching operation at nominal power, with subsequent power reduction.
  - reduced heating of coil
  - extended service life of solenoid
  - shorter disconnection time
- ② Switching at elevated nominal power or overvoltage. For optimum design, please contact us.
  - powerful straight-through switching
  - shorter switching time

U: Supply voltage of the power reduction plug  
 I: Current consumption of the solenoid

## START-UP

(This data sheet is attached to every power reduction plug)  
 A back-up fuse (5A, quick break) is recommended.  
 The yellow LED status display shows that the plug is energised.  
 The plug can also be mounted rotated by 180°.

## CONNECTION ASSIGNMENT



If the valve is operated to its limit values (pressure, flow), it is possible that the holding current of the plug is not sufficient to hold the valve completely open.  
 In this case, power reduction cannot be used.

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