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

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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GENERAL SPECIFICATIONS
Plug housing TPU transparent
Connection line PUR black 3 x 0,5 mm²
Length 5 m
Weight 130 g
Ambient temperature -25…80 °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_{max} = 4A (max. switching current)
I_{max} = 2A (max. holding current)
Switching frequency max. 2 Hz
EMC Immunity EN 61000-6-2
Emission EN 61000-4-2

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

BLOCK DIAGRAM / CONNECTION

[Diagram of the block diagram]
**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**

- brown +VCC
- blue GND
- yellow-green PE

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.

© Switching operation at nominal
power, with subsequent power reduction.
- reduced heating of coil
- extended service life of solenoid
- shorter disconnection time

® 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