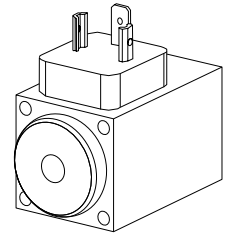


**Solenoid SIN35V  
 to VDE 0580  
 Plug plate to ISO 4400 / DIN 43650  
 Protection class IP65**

**DESCRIPTION**

The SIN35V is a switching solenoid. Its design corresponds to VDE standard 0580. The steel housing is zinc coated as a standard. Static pressure tightness is 160 bars. All o-rings are Viton. The solenoids are fixed to the valve with four screws. Depending on the intended use, the solenoid can be supplied with a plug screw, or with integrated manual override. The connector plate corresponds to ISO 4400 and DIN 43650.

**FUNCTION**

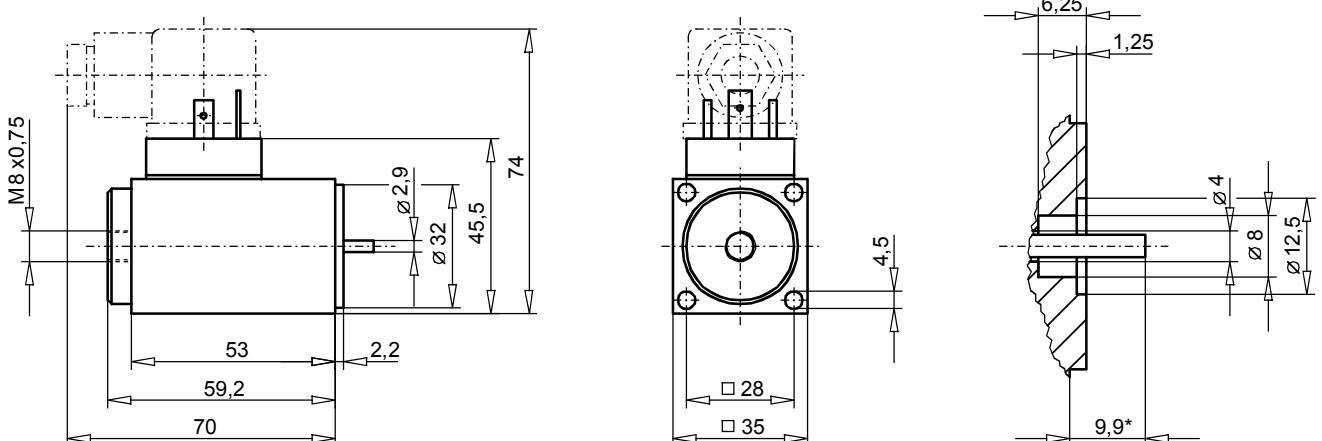
When the solenoid is energised with the specified nominal voltage, the armature moves from the starting position of its stroke ( $s=3,2$  mm) to the end position ( $s=0$  mm). The switching time is essentially dependent on the application. The power stroke characteristics are designed to suit the requirements of hydraulic valves. AC versions include an electronic rectifier integrated into the connector plate. In this way maximum performance is assured.

**APPLICATION**

Essential for hydraulic directional and poppet valves. Because of the risk of overheating, the solenoid must never be used separately. The length of the fixing screws depends on the base material of the body. An o-ring is used for the valve seal. Information on screws and o-rings will be found in the data sheets relating to the valves concerned. Before changing the plug screw or the screw with integrated manual override, care must be taken to ensure that the solenoid is not under pressure. Risk of injury! The maximum operating pressure is determined by the valve actually used.

**TYPE CODE**

		SI N 35 V -	<input type="checkbox"/>	-	<input type="checkbox"/>	#	<input type="checkbox"/>
Solenoid							
Industrial execution							
Normal							
Square 35 mm housing							
Solenoid completely potted							
Nominal voltage $U_N$	12 VDC	<input type="checkbox"/>	G12				
	24 VDC	<input type="checkbox"/>	G24				
	115 VAC	<input type="checkbox"/>	R115	*			
	230 VAC	<input type="checkbox"/>	R230	*			
AC= 50 to 60 Hz							
* Rectifier integrated in the plug plate							
Other nominal voltages and nominal power on request							
with mounted screw plug (data sheet 1.1-300)							<input type="checkbox"/> HB0
with mounted manual override (data sheet 1.1-300)							<input type="checkbox"/> HB4,5
with mounted special manual override (data sheet 1.1-310)							<input type="checkbox"/> H...
Design-Index (Subject to change)							

**DIMENSIONS**


\* Solenoid energised ( $s=0$  mm)

**CHARACTERISTICS**

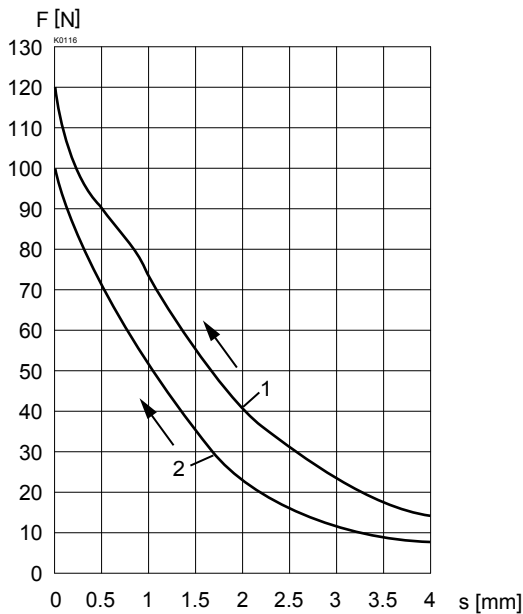
Static pressure tightness	160 bar (seal diameter of valve max. 27 mm) With seal diameter of valve = 32mm Static pressure tightness = 120 bar
Coil winding insulation class	H
Connection/Power supply	Over device plug connection to ISO 4400/DIN 43650, (2P+E), other connections on request
Protection class EN 60529	IP65
Relative duty factor	100 %
Reference temperature	50 °C
Seal	Viton, other on request
Fluid	Mineral oil, other fluid on request
Switching cycles	15 000/h
Mounting screws	4 x M4 (Quality 8.8)
Housing	Zinc coated steel housing, other surface treatments on request

		<b>DC</b>	<b>AC</b>
Totale stroke	(mm)	4	4
Working stroke	(mm)	1,7	1,7
Nominal power	(W)	22	
	(VA)		25
Armature weight	(kg)	0,038	0,038
Solenoid weight	(kg)	0,45	0,45
Voltage range	(VDC)	10-250	
	(VAC)		24-250

	<b>12VDC</b>	<b>24VDC</b>	<b>115VAC</b>	<b>230VAC</b>
Nominal resistance (Ω)	7,2	25	420	1'500
Number of windings (-)	800	1'550	5'930	11'400
Inductivity (mH)	6	22	-	-

**PERFORMANCE**

F = f (s) Force-stroke characteristics



- 1:  $U = 100\% U_N$  Reference temperature = 20 °C (20W)  
 2:  $U = 90\% U_N$  Reference temperature = 50 °C  
 Solenoid in operating temperature (12W)

The values refer to  $U_N = 24$  VDC.

With other nominal voltages deviations can occur.

For curve 2 the solenoid has been mounted on a body  $\square 38 \times 54$ .

**ACCESSOIRES**

Plug HB0	* Article No. 239.2033
Plug with integrated manual override HB4,5	* Article No. 253.8000
	* acc. data sheet 1.1-300
Special manual override	see data sheet 1.1-310
Plug grey	Article No. 219.2001
Plug black	Article No. 219.2002

Technical explanation see data sheet 1.1-400