

Part number:

**HYDROMA**

HYDRAULICKÉ SYSTÉMY

**HIDROMA**  
SISTEMS

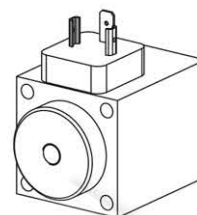
UKŁADY HYDRAULICZNE

**HYDROMA**

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

## Solenoids

### Solenoid SIS45V to VDE 0580 Plug plate to ISO 4400/DIN 43650 Protection class IP65



#### DESCRIPTION

The SIS45V is a switching solenoid. Its design corresponds to VDE standard 0580. The steel housing has a zinc coated finish as standard. Static pressure-tightness is 350 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 ( $s=5,5$  mm) to the end position ( $s=0$  mm). The switching time is essentially dependent on the application. The power-stroke characteristics are de-signed 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.

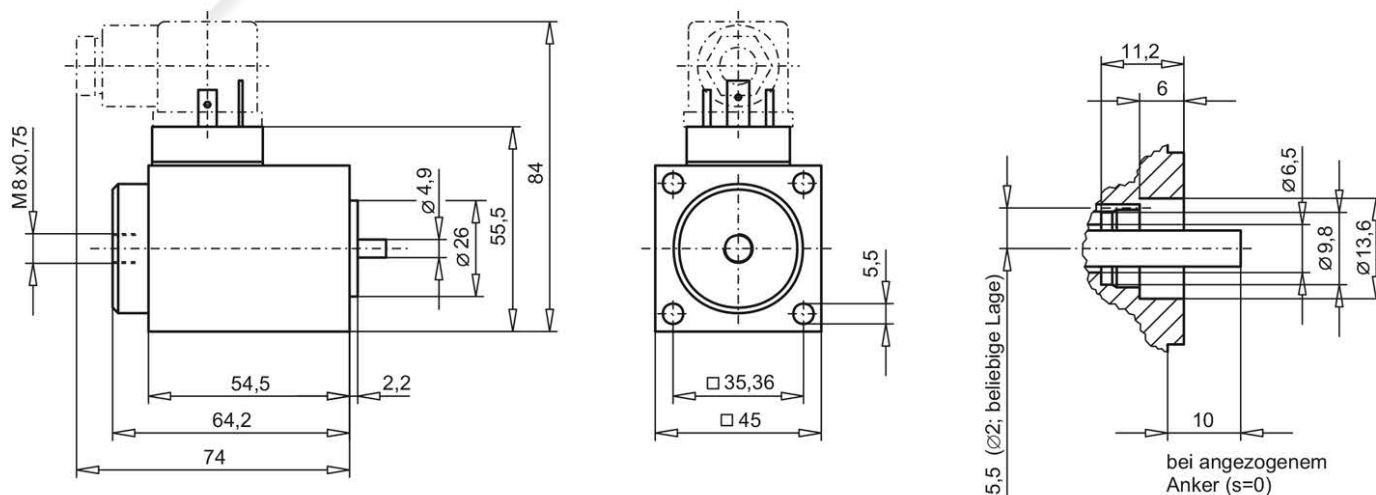
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#### TYPE CODE

Solenoid	SI	S	45	V	-		-		#	
Industry version										
Super										
Square 45 mm housing										
Solenoid completely potted										
Standard-Nominal voltage $U_N$										
12 VDC						G12				
24 VDC						G24				
110 VAC						R110	*			
115 VAC						R115	*			
230 VAC						R230	*			
AC= 50 to 60 Hz										
* Rectifier integrated in the plug plate										
Other nominal voltages and nominal power on request										
with mounted plug (data sheet 1.1-300)								HB0		
with mounted manual override (data sheet 1.1-300)								HB6		
with mounted special manual override (data sheet 1.1-310)								H...		
Design-Index (Subject to change)										

#### DIMENSIONS



### CHARACTERISTICS

Static pressure tightness	350 bar (seal diameter of valve max. 25 mm) With seal diameter of valve = 26 mm: Static pressure tightness = 315 bar
Coil winding insulation class	F
Connection/Power supply	Over device plug connection to ISO 4400/DIN 43650, (2P+E), other connections on request
Protection class to 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	4xM5 (Quality 8.8)
Housing	Zinc coated steel housing, other surface treatments on request.

		DC	AC
Totale stroke	(mm)	5,5	5,5
Working stroke	(mm)	2,5	2,5
Nominal power	(W)	30	
	(VA)		35
Armature weight	(kg)	0,044	0,044
Solenoid weight	(kg)	0,76	0,76
Voltage range	(VDC)	10-250	
	(VAC)		40-250*

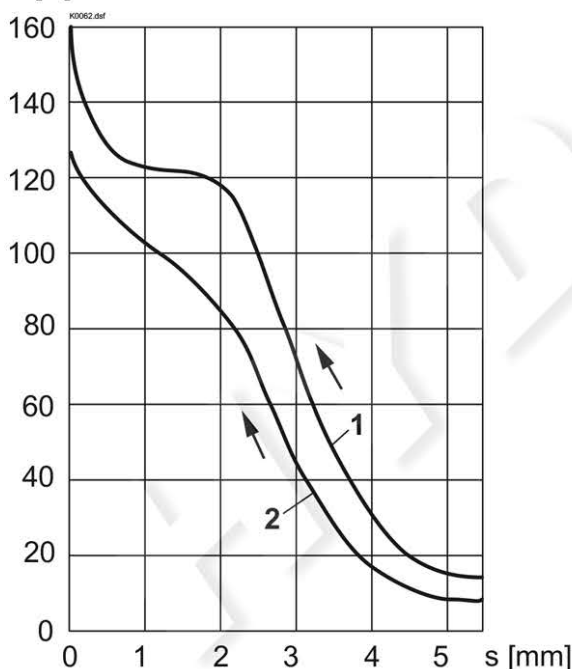
\* For AC voltages below 40 VAC DC solenoids plus rectifier plugs are available.  
21 VDC to 24 VAC  
32 VDC to 36 VAC

	12VDC	24VDC	115VAC	230VAC
Nominal resistance ( $\Omega$ )	5	21,8	445	1'400
Number of windings (-)	770	1'560	7'000	13'000
Inductivity (mH)	19	82		

### PERFORMANCE

$F = f(s)$  Force-stroke characteristics

$F$  [N]



1:  $U = 100\% U_N$       Reference temperature = 20°C (30W)  
2:  $U = 90\% U_N$       Reference temperature = 50°C  
Solenoid in operating temperature (19W)

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  $\square 46 \times 64$ .

### ACCESSOIRES

Plug HB0	* Article No. 239.2033
Plug with integrated manual override HB6	* Article No. 253.8001
	* 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
Rectifier plug grey	Article No. 219.2105
Rectifier plug black	Article No. 219.2106

Technical explanation see data sheet 1.1-400E