



UKŁADY HYDRAULICZNE



ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

7 - ELECTRICAL FEATURES

7.1 Solenoids

These are essentially made up of two parts: tube and coil. The tube is threaded into the valve body and includes the armature that moves immersed in oil, without wear. The inner part, in contact with the oil in the return line, ensures heat dissipation.

The coil is fastened to the tube by a threaded ring, and can be rotated 360°, to suit the available space.

NOTE 1: In order to further reduce the emissions, use of type H connectors is recommended. These prevent voltage peaks on opening of the coil supply electrical circuit (see cat. 49 000).

Protection from atmospheric agents CEI EN 60529

Plug-in type	IP 65		NOTE: The protection		
K1 DIN 43650	х		degree is guaranteed only with the con-		
K7 DEUTSCH DT04 male	x	10	nector correctly con-		

SUPPLY VOLTAGE FLUCTUATION	± 10% Vnom		
MAX SWITCH ON FREQUENCY	18.000 ins/hr		
DUTY CYCLE	100%		
ELECTROMAGNETIC COMPATIBILITY (EMC) emissions (NOTE 1) EN 50081-1 immunity EN 50082-2	In compliance with 89/336 CEE		
LOW VOLTAGE	In compliance with 73/23/CEE 96/68/CEE		
CLASS OF PROTECTION : Coil insulation (VDE 0580) Impregnation: CC valve CA valve	class H class F class H		

7.2 Current and absorbed power for DC solenoid valve

The table shows current and power consumption values relevant to the different coil types for DC.

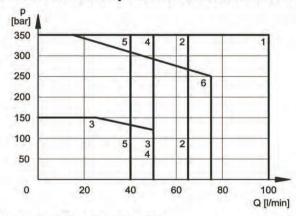
The rectified current supply takes place by fitting the valve (with the exception of D12 coil) with an alternating current source (50 or 60 Hz), rectified by means of a bridge built-in to the "D" type connectors (see cat. 49 000), by considering a reduction of the operating limits (see diagram below).

Coils for direct current (values ±5%)

	Nominal voltage	Resistance at 20°C	Current consumpt.	Power consumpt	Coil	code	
	[V]	V] [Ω]		. [W]	K1	K7	
D12	12	4,4	2,72	32,6	1902860	1902940	
D24	24	18,6	1,29	31	1902861	1902941	
D48	48	78,6	0,61	29,3	1902863		
D110	110	423	0,26	28,6	1902864		
D220	220	1692	0,13	28,6	1902865		

Operating limits for DC solenoid valves fed with AC by means of connectors with built-in rectifier bridge.

SPOOL TYPE	CURVE		
	P-A	P-B	
S1. SA1. SB1	1	1	
S2. SA2. SB2	2	2	
S3. SA3. SB3	3	3	
S4. SA4. SB4	4	4	
S9	6	6	
TA. TB	5	5	
RK	1	1	



7.3 Current and absorbed power for AC solenoid valve

The table shows current and power consumption values at inrush and at holding, relevant to the different coil types for AC current.

Coils for alternating current (values ± 5%)

Suffix	Nominal voltage [V]	Frequency [Hz]	Resistance at 20°C	Current consumption at inrush [A]	Current consumption at holding [A]	Power consumption at inrush [VA]	Power consumption at holding [VA]	Coil code
A24	24	50	1,46	8	2	192	48	1902830
A48	48	50	5,84	4,4	1,1	204	51	1902831
A110	110V-50Hz	50/60		1,84	0,46	192	48	
	120V-60Hz		32	1,56	0,39	188	47	1902832
A230	230V-50Hz			0,76	0,19	176	44	
	240V-60Hz		140	0,6	0,15	144	36	1902833
F110	110	60	26	1,6	0,4	176	44	1902834
F220	220	60	106	0,8	0,2	180	45	1902835