

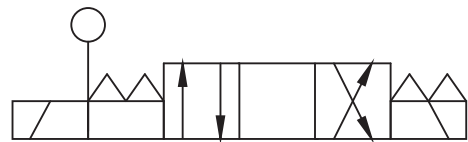


**SOLENOID OPERATED DIRECTIONAL VALVE  
(MANUAL HANDLE FOR SAFETY CONTROL)**

SWHL-G02 SERIES



■ Symbol



■ FEATURES

- Manual handle can be operated in emergency & power shutdown.
- Armature operates in oil system. Impact is cushioned, noise is reduced, solenoid life is increased.
- Wet armature solenoid eliminates push pin seal, therefore no seal wear, drop or leakage for longer valve life.
- Molded coils for maximum insulating properties, which is impervious to moisture and dirt.
- Plug-in solenoid, for ease of maintenance.
- All spools and bodies are interchangeable, simplifying maintenance.
- Indicating signal lights are standard.
- High pressure, high flow rating, provides low pressure drop, with maximum performance.
- Specially designed, balanced spool allows proper shifting force, for maximum reliability and long life.
- Viton seal kits are available for fire-resistance fluids.

■ HOW TO ORDER

SWHL	-G	02	-C2	-D24	-20	-LS	
Series	Mounting Style	Nominal Size	Spool Type	Coil Voltage	Wiring	Design Code	
Solenoid Operated Directional Valves (manual handle for safety control)	Subplate Mounted	6mm	①	②	Hirschmann Type with Indicating Lights	No Code	Standard
						LS	Low surge voltage



①

### List of Spool Configurations

Application	Spool Type	Symbols	Application	Spool Type	Symbols
4-way, 3-position Spring Centered	C2		4-way, 2-position Spring Offset (Solenoid b)	C2B	
	C2M			C3B	
	C22M			C4B	
	C23			C40B	
	C3			C5B	
	C3-I			C6B	
	C3M			C60B	
	C4			C7B	
	C4M			C8B	
	C40			C9B	
	C40M			C5SB	
	C48M			C8SB	
	C5		C9SB		
	C6		4-way, 2-position No Spring, No Detent	N2	
	C6M			N3	
	C60		4-way, 2-position Detent	D2	
	C60M			D3	
	C7		4-way, 2-position Spring Offset (Solenoid b)	B2	
	C8			B20	
	C8M			B21	
	C88M			B3	
	C9			B51	
	C92				



### List of Spool Configurations

Application	Spool Type	Symbols	Application	Spool Type	Symbols
4-way, 2-position Spring Offset (Solenoid a)	B2S		4-way, 2-position Spring Offset (Solenoid a)	C60BS	
	B3S			C7BS	
	B4S			C8BS	
	B20S			C9BS	
	B51S				
	C2BS				
	C3BS				
	C4BS				
	C40BS				
	C5BS				
C6BS					
			4-way, 3-position Spring Centered	C5S	
				C8S	
				C88S	
				C9S	

### ② Coil Voltage

Coil Type	Voltage	Coil Type	Voltage
A240	AC240V,60Hz;AC220V,50Hz	R220	AC220V,60Hz;AC200V,50Hz
A220	AC220V,60Hz;AC200V,50Hz	R110	AC110V,60Hz;AC100V,50Hz
A120	AC120V,60Hz;AC110V,50Hz	D12	DC12V
A110	AC110V,60Hz;AC100V,50Hz	D24	DC24V



## SPECIFICATIONS

Max Operating Pressure (bar)	Max Flow Capacity (L/min)	Max Tank Line Back Pressure (bar)	Max Frequencies Operation (CPM)	Recommended Filtration (µm)	Hydraulic Fluids Temp Range (°C)
315	63	140	300	25	0~55

## SOLENOID RATINGS

Electric Source	Coil Type	Voltage			Current & Power At Rated Voltage		
		Frequency (Hz)	Source Rating	Range (±10%)	In-rush Current (A)	Holding Current (A)	Wattage (W)
AC	A110	50	100	90-110	1.80	0.51	--
		60	100	90-110	1.60	0.38	--
	A120		110	99-121	1.60	0.45	--
		50	110	99-121	1.60	0.58	--
	A220	60	120	108-132	1.60	0.49	--
		50	200	180-220	1.40	0.40	--
	60		200	180-220	1.10	0.30	--
		A240	220	198-242	1.10	0.30	--
50	220		198-242	0.80	0.27	--	
	60	240	216-264	0.81	0.23	--	
RF		R110	50	100	90-110	0.46	0.46
	60		110	99-121	0.33	0.33	--
	R220	50	200	180-220	0.19	0.19	--
		60	220	198-242	0.15	0.15	--
DC	D12	12	10.8-13.2	2.6	2.6	31	
	D24	24	21.6-26.4	1.3	1.3		

## TECHNICAL DATA

- Solenoid can be used within ±10% of the rated voltage of the coil.
- Withstand voltage 1500V/sec.
- Insulation resistance over 100MΩ.
- A momentary signal of approximately 0.1 second is required for shifting action.

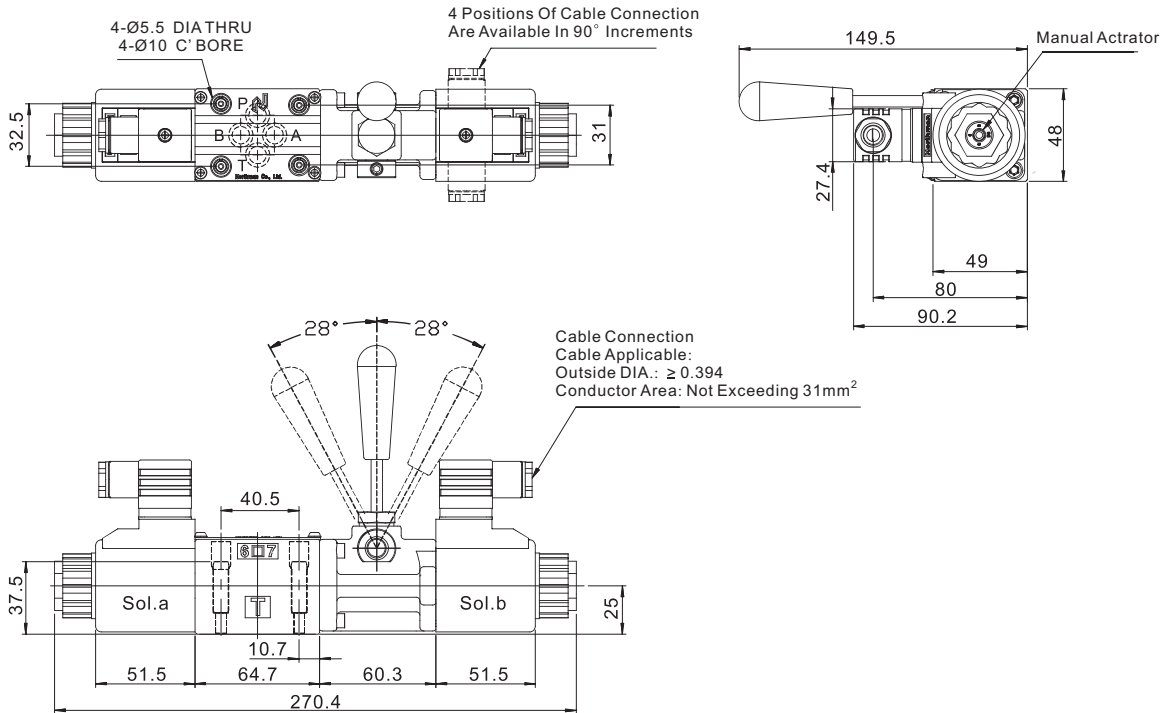
## ACCESSORIES

Type	Pieces	Japan Standard "JIS" European Standard	US Standard
Mounting Bolt Kits (suppeied with valve socket head cap screws)	4	M5X45L	#10-24UNCX1-3/4"L
O-Rings	4	AS568-012	-----

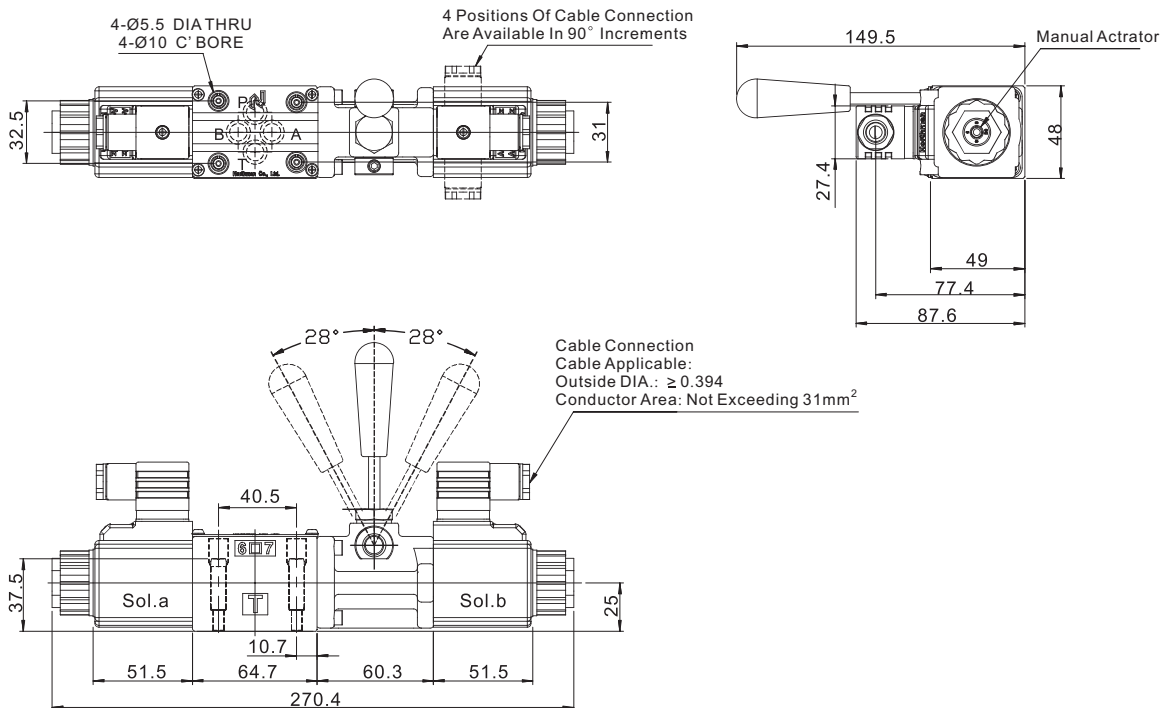


## ■ INSTALLATION DIMENSIONS

### SWHL-G02-C※-D/R※-20-※



### SWHL-G02-C※-A※-20-※





SECTION PLAN VIEWS

