

## SD Series • High Efficiency Storage Chokes

**SD Series** storage chokes provide excellent efficiency and field modulation when used as loading coils for interim energy storage with switch mode power supplies. The use of MPP cores allows compact size, a highly stable inductance over a wide bias current range and high "Q" with operating frequencies upto 200KHz

### Features

- Operating frequency upto 200KHz
- Small size and high "Q"
- Highly stable inductance with changing bias current
- Fully encapsulated styles available meeting class GFK (-40°C to +125°C, humidity class F) per DIN 40040.
- Manufactured in ISO 9001:2008, ISO/TS 16949:2009 and ISO 14001:2004 certified Talema facility
- Fully RoHS & REACH Compliant



### Electrical Specifications @25°C

Test frequency: Inductance measured @10KHz / 100mV  
 Test voltage between windings: 500Vrms  
 Operating temperature: -40°C to +125°C  
 Climatic category: IEC68-1 40/125/56

Part Number	I <sub>dc</sub> Amps	L (μH) Typ. @ Rated Current	L <sub>o</sub> (μH) ±15% No Load	DCR mOhms Typical	Energy Storage (μJ) <sup>1</sup>	Schemati <sup>2</sup> Mounting Style			Coil Size O.D. x Ht. (a x b)	Housing Size Code		Mounting Style Terminals Ød		
						O	F	V		F	V	O	F	V
SD__-0.63-400	0.63	400	474	537	79	1	1	1	15 x 7	17	20	0.250	0.600	0.800
SD__-0.63-500		500	620	670	99	1	1	1	15 x 7	17	20	0.250	0.600	0.800
SD__-0.63-630		630	820	563	12	1	1	1	15 x 7	17	20	0.280	0.600	0.800
SD__-0.63-1000		1000	1157	650	198	1	1	1	19 x 9	22	25	0.300	0.600	0.800
SD__-0.63-2000		2000	2695	992	397	1	1	1	20 x 9	22	25	0.300	0.600	0.800
SD__-0.63-2500		2500	3080	730	496	1	1	1	26 x 12	29	30	0.400	0.600	0.800
SD__-0.63-4000		4000	5625	1000	794	1	1	1	26 x 12	29	30	0.400	0.600	0.800
SD__-0.63-6000		6000	7600	1150	1191	1	1	1	30 x 15	32	35	0.40	0.600	0.800
SD__-1.0-250	1.0	250	323	354	125	1	1	1	15 x 7	17	20	0.355	0.600	0.800
SD__-1.0-500		500	580	210	250	1	1	1	19 x 9	22	25	0.450	0.600	0.800
SD__-1.0-1000		1000	1250	290	500	1	1	1	26 x 12	29	30	0.500	0.600	0.800
SD__-1.0-2500		2500	4160	550	1250	1	1	1	26 x 12	29	30	0.500	0.600	0.800
SD__-1.0-4000		4000	5970	820	2000	1	1	1	30 x 15	32	35	0.450	0.600	0.800
SD__-1.0-6000		6000	9260	970	3000	1	2R	1	37 x 15	42	40	0.500	0.500	0.800
SD__-1.6-160	1.6	160	251	127	205	1	1	1	15 x 7	17	20	0.500	0.800	0.800
SD__-1.6-315		315	443	289	408	1	1	1	19 x 8	22	25	0.355	0.800	0.800
SD__-1.6-400		400	613	266	502	1	1	1	19 x 9	22	25	0.400	0.800	0.800
SD__-1.6-500		500	695	115	640	1	1	1	26 x 12	29	30	0.710	0.800	0.800
SD__-1.6-1000		1000	1290	195	1280	1	2R	1	30 x 15	32	35	0.630	0.630	0.800
SD__-1.6-2500		2500	3670	380	3200	1	1	1	37 x 15	42	40	0.630	0.800	0.800
SD__-1.6-4000		4000	5440	450	5140	1	1	--	44 x 18	49	--	0.630	0.800	--
SD__-2.0-63		2.0	63	81	87	126	1	1	1	14 x 6	17	20	0.400	0.800
SD__-2.0-100	100		115	161	200	1	1	1	19 x 8	22	25	0.355	0.800	0.800
SD__-2.0-315	315		422	168	650	1	1	1	25 x 9	29	30	0.800	0.800	0.800
SD__-2.0-630	630		885	120	1260	1	1	1	26 x 12	29	30	0.750	0.800	0.800
SD__-2.0-1000	1000		1387	145	2000	1	1	1	30 x 15	42	35	0.750	0.800	0.800
SD__-2.0-1600	1600		2420	200	3200	1	1	1	37 x 15	42	40	0.800	0.800	0.800
SD__-2.0-2500	2500		3240	313	5000	1	1	--	46 x 20	49	--	0.850	0.850	--
SD__-2.5-63	2.5	63	99	62	197	1	1	1	14 x 6	17	20	0.500	0.800	0.800
SD__-2.5-100		100	129	122	312	1	1	1	19 x 8	22	25	0.400	0.800	0.800
SD__-2.5-160		160	241	132	489	1	1	1	19 x 8	22	25	0.450	0.800	0.800
SD__-2.5-200		200	275	70	630	1	2R	1	26 x 12	29	30	0.750	0.750	0.800
SD__-2.5-400		400	790	120	1250	1	2R	1	26 x 12	29	30	0.710	0.710	0.800
SD__-2.5-1000		1000	1521	125	3125	1	2R	1	39 x 16	42	45	0.950	0.950	1.000
SD__-3.15-63	3.15	63	80	62	312	1	1	1	19 x 8	22	25	0.500	0.800	0.800
SD__-3.15-100		100	157	60	498	1	1	1	19 x 8	22	25	0.600	0.800	0.800
SD__-3.15-160		160	234	86	794	1	1	1	25 x 10	29	30	0.600	0.800	0.800
SD__-3.15-250		250	570	85	1240	1	2P	1	26 x 12	29	30	0.560	0.560	0.800
SD__-3.15-630		630	1122	110	3125	1	2R	1	37 x 15	42	40	0.900	0.900	0.900

## SD Series • High Efficiency Storage Chokes

### Electrical Specifications @25°C

Part Number	I <sub>DC</sub> Amps	L (μH) Typ. @ Rated Current	L <sub>O</sub> (μH) ±15% No Load	DCR mOhms Typical	Energy Storage (μJ) <sup>1</sup>	Schematic <sup>2</sup> Mounting Style			Coil Size O.D. x Ht. (a x b)	Housing Size Code		Mounting Style Terminals Ød		
						O	F	V		F	V	O	F	V
SD__4.0-47	4.0	47	65	55	376	1	1	1	20 x 9	22	25	0.500	0.800	0.800
SD__4.0-100		100	144	68	800	1	1	1	25 x 10	29	30	0.600	0.800	0.800
SD__4.0-160		160	240	40	1280	1	1	1	26 x 12	29	30	0.900	1.000	0.900
SD__4.0-250		250	345	50	2000	1	1	1	30 x 15	42	45	0.950	1.000	1.000
SD__5.0-47	5.0	47	60	44	588	1	1	1	25 x 10	29	30	0.600	0.800	0.800
SD__5.0-63		63	91	43	797	1	1	1	25 x 10	29	30	0.670	0.800	0.800
SD__5.0-100		100	165	27	1250	2P	2P	2P	26 x 12	29	30	0.750	0.750	0.750
SD__5.0-250		250	357	40	3125	2R	1	1	39 x 16	42	45	1.180	1.180	1.180
SD__6.3-47	6.3	47	76	44	946	1	1	1	26 x 11	29	30	1.000	1.000	1.000
SD__6.3-63		63	120	17	1250	1	1	1	26 x 12	29A	30	1.180	1.180	1.180
SD__6.3-100		100	160	28	2010	1	1	1	29 x 13	32	35	0.670	0.800	0.800
SD__6.3-200		200	266	44	3969	2P	2P	2P	38 x 17	42	40	0.850	0.850	0.850
SD__8.0-47	8.0	47	63	43	1507	1	1	1	29 x 13	32	35	0.670	0.800	0.800
SD__8.0-63		63	95	12	2016	2P	2P	1	30 x 15	32	35	0.950	0.950	0.950

The Talema engineering staff can assist in the design of other inductance values and sizes including pre-designed cable lug models to 63 Amps.

1) The μJoule rating ( $\frac{1}{2}LI^2$ ) is the ability of the inductor to store energy.

2) Schematic:

1 = one winding

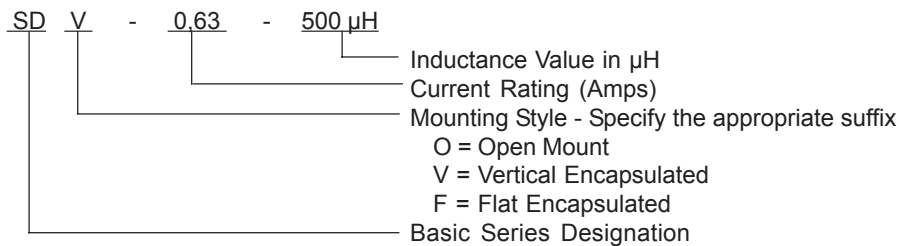
2P = two windings, Parallel Connection

2R = two windings, Series Connection.

3) Inductance measured @10KHz / 0.10Vrms without DC Current, @10KHz / 0.25Vrms with DC Current.

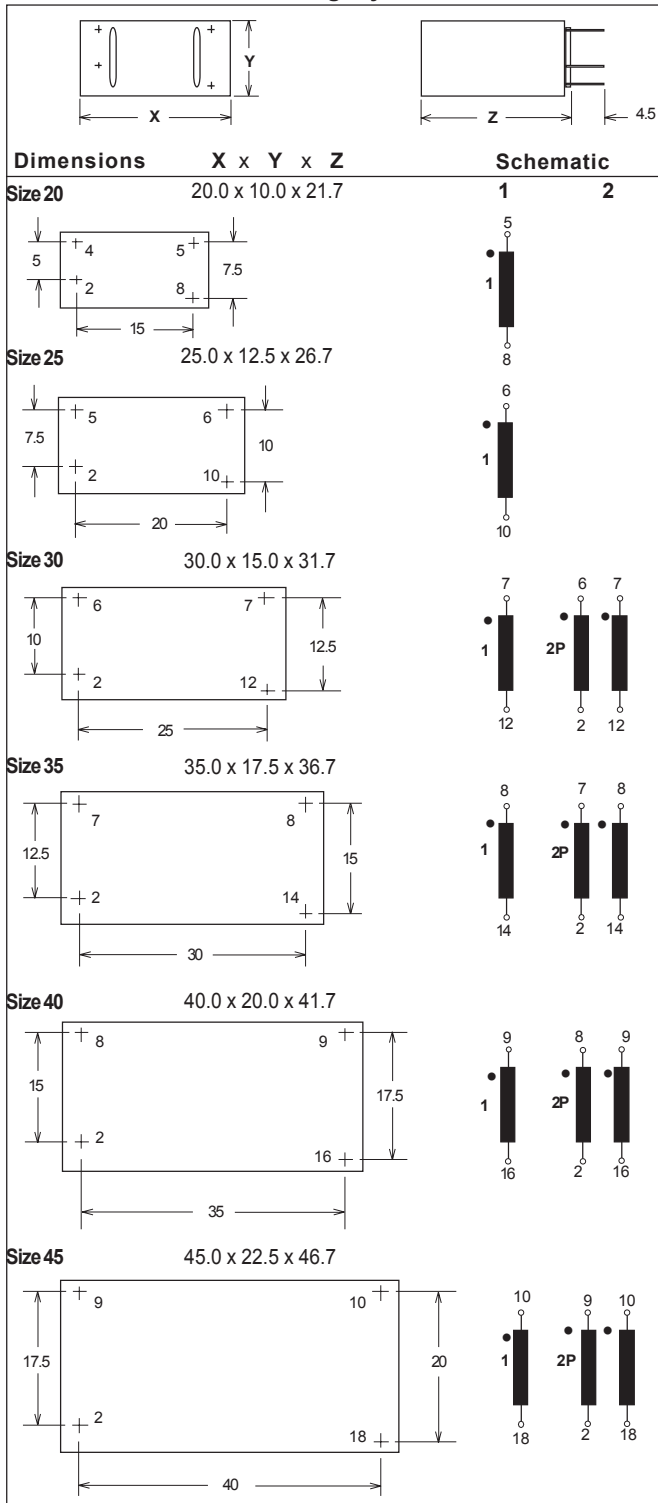
4) On larger units and units wound with fine wire, additional mechanical mounting is recommended. See next page for Mounting Styles.

### Ordering Key

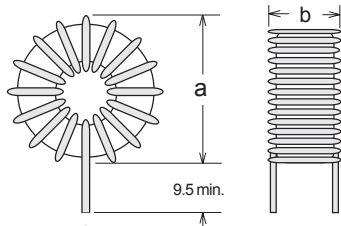


**Mounting Styles • SD Series • High Efficiency Storage Chokes**

**Mounting Style "V"**



**Mounting Style 'O' = Open Mount**



**Mounting Style "F"**

