

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 an ISO 9001:2015 and ISO 14001:2015 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 _{dc} Amps	L (µH) Typ. @ Rated Current	L _o (µH) ±15% No Load	DCR mOhms Typical	Energy Storage (µJ) ¹	Schemati ² 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

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Electrical Specifications @25°C

Part Number	I _{DC} Amps	L (μH) Typ. @ Rated Current	L _O (μH) ±15% No Load	DCR mOhms Typical	Energy Storage (μJ) ¹	Schematic ² 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

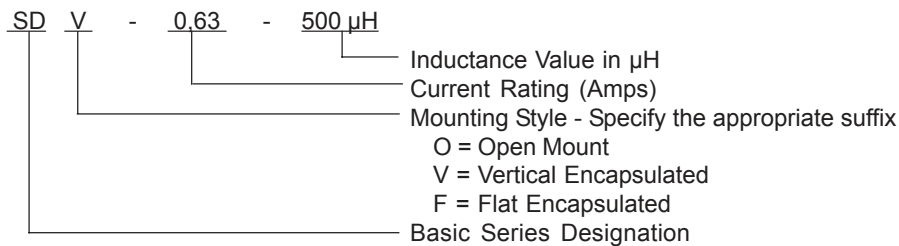
2P = two windings, Parallel Connection

2R = two windings, Series Connection.

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

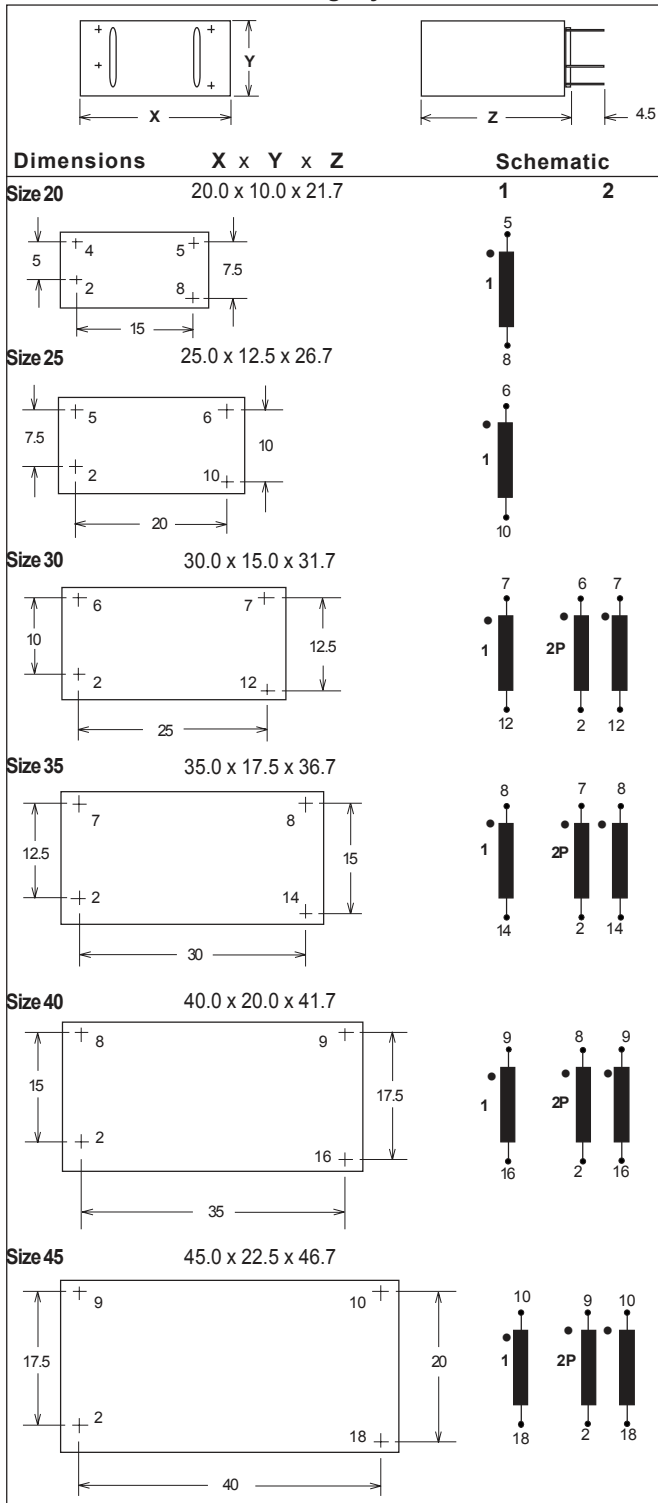
4) On larger units and units wound with fine wire, additional mechanical mounting is recommended. See next page for Mounting Styles.

Ordering Key

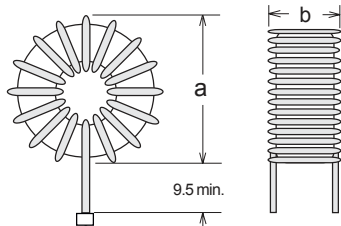


Mounting Styles • SD Series • High Efficiency Storage Chokes

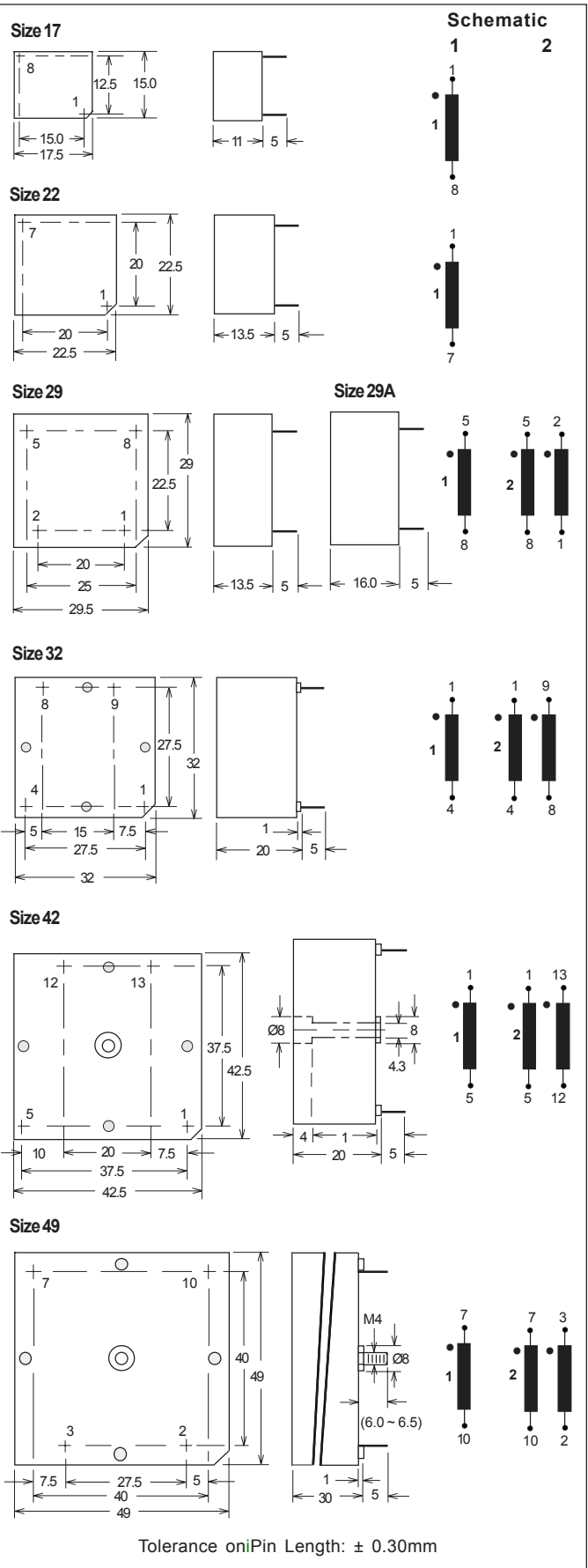
Mounting Style "V"



Mounting Style 'O' = Open Mount



Mounting Style "F"



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