

ESLF Series



Features

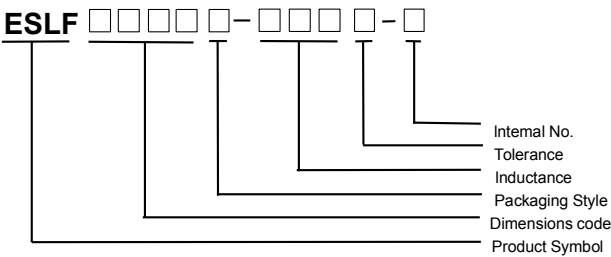
- Ro HS compliant
- Low resistance and high rated currents

ESLF series is designed for low profile type with low Rdc and large current. Its magnetic shielded type is suitable for high-density mounting and flat bottom surface allows for reliable mounting onto the board. Soldering conditions can be easily confirmed when mounting on to the board. This series also provides customers with embossed carrier type packaging for automatic mounting machine.

Applications

- Portable telephones, computers, hard disk drives and other electronic equipment.

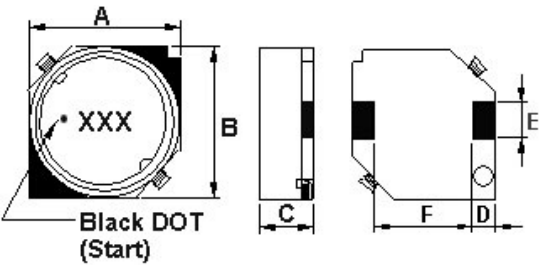
Products Identification



- Packaging: T : Tape and Reel

Shapes and Dimensions

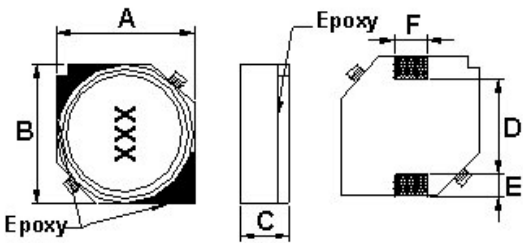
ESLF 0628



Dimension in mm

TYPE	A	B	C	D	E	F
ESLF 0628	6 ± 0.2	6 ± 0.2	2.8 ± 0.2	1.5 TYP	2 ± 0.1	3.0 TYP

ESLF0728/ 0732/ 0745/ 0730

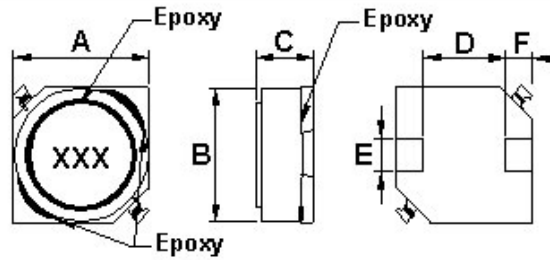


Dimension in mm

TYPE	A	B	C	D	E	F
ESLF 0728	7 ± 0.2	7 ± 0.2	2.8 ± 0.2	4.9 TYP	0.9TYP	2.0 TYP
ESLF 0730	7 ± 0.2	7 ± 0.2	3.0 ± 0.2	4.9 TYP	0.9TYP	2.0 TYP
ESLF 0732	7 ± 0.2	7 ± 0.2	3.2 ± 0.2	4.9 TYP	0.9TYP	2.0 TYP
ESLF 0745	7 ± 0.2	7 ± 0.2	4.5 ± 0.3	4.9 TYP	0.9TYP	2.0 TYP

SMD Shielded Power Inductors - ESLF Series

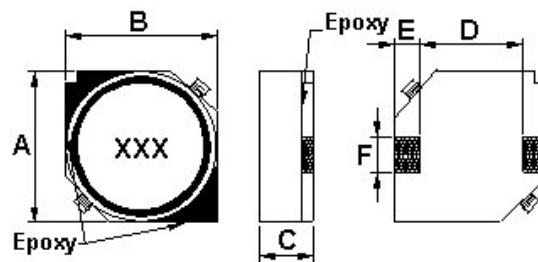
ESLF 1045/ 1055



Dimension in mm

TYPE	A	B	C	D	E	F
ESLF 1045	10.1 ± 0.3	10.1 ± 0.3	4.5 ± 0.3	6.0 TYP	3.0 TYP	2 TYP
ESLF 1055	10.1 ± 0.3	10.1 ± 0.3	5.5 ± 0.3	6.0 TYP	3.0 TYP	2 TYP

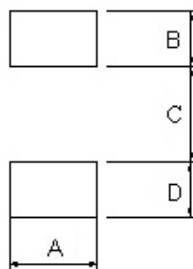
ESLF 0755/ 1255/ 1265/ 1275



Dimension in mm

TYPE	A	B	C	D	E	F
ESLF 0755	7.0 ± 0.2	7.0 ± 0.2	5.5 ± 0.3	4.9 TYP	0.9 TYP	2.0 TYP
ESLF 1255	12.5 ± 0.3	12.5 ± 0.3	5.5 ± 0.3	8.6 TYP	2.0 TYP	3.0 TYP
ESLF 1265	12.5 ± 0.3	12.5 ± 0.3	6.5 ± 0.35	8.6 TYP	2.0 TYP	3.0 TYP
ESLF 1275	12.5 ± 0.3	12.5 ± 0.3	7.5 ± 0.35	8.6 TYP	2.0 TYP	3.0 TYP

Recommended Pattern



Dimension in mm

TYPE	A	B	C	D
ESLF 0628	2.2	1.5	4	1.5
ESLF 0728	2.2	1.5	4.9	1.5
ESLF 0730	2.2	1.5	4.9	1.5
ESLF 0732	2.2	1.5	4.9	1.5
ESLF 0745	2.2	1.5	4.9	1.5
ESLF 0755	2.2	1.5	4.9	1.5
ESLF 1045	3.2	2.5	5.6	2.5
ESLF 1045	3.2	2.5	5.6	2.5
ESLF 1105	3.2	2.5	5.6	2.5
ESLF 1255	3.2	2.5	8.6	2.5
ESLF 1265	3.2	2.5	8.6	2.5
ESLF 1275	3.2	2.5	8.6	2.5

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance ($\pm$ %)	Test Frequency (KHz)	DC Resistance ($\Omega \pm 20\%$)	Isat (A)	Itemp (A) Max
ESLF0628T-4R7M-N	4.7	20	1	0.0284	1.6	2.5
ESLF0628T-6R8M-N	6.8	20	1	0.0354	1.5	2.2
ESLF0628T-100M-N	10	20	1	0.0532	1.3	1.8
ESLF0628T-150M-N	15	20	1	0.0745	1.0	1.4
ESLF0628T-220M-N	22	20	1	0.104	0.77	1.3
ESLF0628T-330M-N	33	20	1	0.148	0.69	1.1
ESLF0628T-470M-N	47	20	1	0.21	0.59	0.92
ESLF0628T-680M-N	68	20	1	0.29	0.50	0.78
ESLF0628T-101M-N	100	20	1	0.43	0.42	0.64

- Tolerance: M = $\pm 20\%$
- Isat: Value obtained when DC current flows and the initial value of inductance has fallen by 30%
- Itemp current: Value obtained when current flows and the temperature has risen to 25°C
- Test equipment Inductance: HP4284A LF impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)
- RDC: CH502BC

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance ($\pm$ %)	Test Frequency (KHz)	DC Resistance ($\Omega \pm 20\%$)	Isat (A)
ESLF0728T-3R3M-N	3.3	20	1	0.037	1.6
ESLF0728T-4R7M-N	4.7	20	1	0.045	1.5
ESLF0728T-6R8M-N	6.8	20	1	0.059	1.3
ESLF0728T-100M-N	10	20	1	0.083	1.1
ESLF0728T-150M-N	15	20	1	0.13	0.88
ESLF0728T-220M-N	22	20	1	0.18	0.75
ESLF0728T-330M-N	33	20	1	0.24	0.65
ESLF0728T-470M-N	47	20	1	0.34	0.54

- Tolerance: M = $\pm 20\%$
- Isat: Value obtained when DC current flows and the initial value of inductance has fallen by 10%
- Test equipment Inductance: HP4284A LF impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)
- RDC: CH502BC

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance ($\pm$ %)	Test Frequency (KHz)	DC Resistance ($\Omega \pm 20\%$)	Isat (A)
ESLF0730T-3R3M-N	3.3	20	1	0.023	1.8
ESLF0730T-4R7M-N	4.7	20	1	0.036	1.6
ESLF0730T-6R8M-N	6.8	20	1	0.041	1.5
ESLF0730T-100M-N	10	20	1	0.060	1.3
ESLF0730T-150M-N	15	20	1	0.084	1
ESLF0730T-220M-N	22	20	1	0.15	0.86
ESLF0730T-330M-N	33	20	1	0.16	0.65
ESLF0730T-470M-N	47	20	1	0.24	0.57
ESLF0730T-680M-N	68	20	1	0.31	0.49
ESLF0730T-101M-N	100	20	1	0.45	0.35

- Tolerance: M = $\pm 20\%$
- Isat: Value obtained when DC current flows and the initial value of inductance has fallen by 10%
- Test equipment Inductance: HP4284A LF impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)
- RDC: CH502BC

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance ($\pm$ %)	Test Frequency (KHz)	DC Resistance ($\Omega \pm 20\%$)	Isat (A)
ESLF0732T-2R2M-N	2.2	20	1	0.018	2.1
ESLF0732T-3R3M-N	3.3	20	1	0.023	1.9
ESLF0732T-4R7M-N	4.7	20	1	0.036	1.7
ESLF0732T-6R8M-N	6.8	20	1	0.041	1.6
ESLF0732T-100M-N	10	20	1	0.053	1.4
ESLF0732T-150M-N	15	20	1	0.075	1.1
ESLF0732T-220M-N	22	20	1	0.11	0.96
ESLF0732T-330M-N	33	20	1	0.16	0.75
ESLF0732T-470M-N	47	20	1	0.24	0.67
ESLF0732T-680M-N	68	20	1	0.31	0.59
ESLF0732T-101M-N	100	20	1	0.45	0.45
ESLF0732T-151M-N	150	20	1	0.65	0.37
ESLF0732T-221M-N	220	20	1	1.05	0.29
ESLF0732T-331M-N	330	20	1	1.67	0.22
ESLF0732T-471M-N	470	20	1	2.05	0.2
ESLF0732T-681M-N	680	20	1	3.15	0.16
ESLF0732T-102M-N	1000	20	1	4.78	0.13

- Tolerance: M = $\pm 20\%$
- Isat: Value obtained when DC current flows and the initial value of inductance has fallen by 10%
- Test equipment Inductance: HP4284A LF impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)
- RDC: CH 502BC

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance ($\pm$ %)	Test Frequency (KHz)	DC Resistance ($\Omega \pm 20\%$)	Isat (A)	Itemp (A) Max
ESLF0745T-3R3M-N	3.3	20	1	0.02	2.5	2.3
ESLF0745T-4R7M-N	4.7	20	1	0.03	2	2.1
ESLF0745T-6R8M-N	6.8	20	1	0.039	1.7	1.74
ESLF0745T-100M-N	10	20	1	0.036	1.3	1.78
ESLF0745T-150M-N	15	20	1	0.052	1.1	1.53
ESLF0745T-220M-N	22	20	1	0.061	0.9	1.34
ESLF0745T-330M-N	33	20	1	0.096	0.82	1.09
ESLF0745T-470M-N	47	20	1	0.125	0.75	0.92
ESLF0745T-680M-N	68	20	1	0.175	0.6	0.77
ESLF0745T-101M-N	100	20	1	0.25	0.5	0.65
ESLF0745T-151M-N	150	20	1	0.34	0.4	0.55
ESLF0745T-221M-N	220	20	1	0.52	0.33	0.45
ESLF0745T-331M-N	330	20	1	0.74	0.25	0.37
ESLF0745T-471M-N	470	20	1	1.05	0.22	0.31
ESLF0745T-681M-N	680	20	1	1.48	0.2	0.27
ESLF0745T-102M-N	1000	20	1	2.28	0.14	0.25

- Tolerance: M = $\pm 20\%$
- Isat: Value obtained when DC current flows and the initial value of inductance has fallen by 10%
- Itemp current: Value obtained when current flows and the temperature has risen to 20°C
- Test equipment Inductance: HP4284A LF impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)
- RDC: CH502BC

SMD Shielded Power Inductors – ESLF Series

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance ($\pm$ %)	Test Frequency (KHz)	DC Resistance (Ω)	Isat (A)	Itemp (A) Max
ESLF0755T-1R5T-N	1.5	30	100	0.0174 $\pm$ 30%	6.2	4.0
ESLF0755T-2R2T-N	2.2	30	100	0.0217 $\pm$ 30%	5.3	3.5
ESLF0755T-3R3T-N	3.3	30	100	0.0240 $\pm$ 30%	4.3	3.3
ESLF0755T-4R7T-N	4.7	30	100	0.0280 $\pm$ 30%	3.6	3.1
ESLF0755T-6R8T-N	6.8	30	100	0.0340 $\pm$ 30%	3.0	2.8
ESLF0755T-100M-N	10	20	100	0.0391 $\pm$ 20%	2.6	2.5
ESLF0755T-150M-N	15	20	100	0.0508 $\pm$ 20%	2.1	2.2
ESLF0755T-220M-N	22	20	100	0.0643 $\pm$ 20%	1.7	2.0
ESLF0755T-470M-N	47	20	100	0.1550 $\pm$ 20%	0.8	1.0

- Tolerance: T = $\pm$ 30% , M = $\pm$ 20% ,
- Isat: Value obtained when DC current flows and the initial value of inductance has fallen by 10%
- Itemp current : Value obtained when current flows and the temperature has risen to 30℃
- Test equipment Inductance: HP4284A LF impedance analyzer or equivalent (Test frequency: 100KHz/1V)
- RDC: CH502BC

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance ($\pm$ %)	Test Frequency (KHz)	DC Resistance ($\Omega \pm 20\%$)	Isat (A)	Itemp (A) Max
ESLF1045T-100M-N	10	20	1	0.0364	3	2.5
ESLF1045T-150M-N	15	20	1	0.0472	2.4	2.2
ESLF1045T-220M-N	22	20	1	0.0591	2.1	1.9
ESLF1045T-330M-N	33	20	1	0.0815	1.6	1.7
ESLF1045T-470M-N	47	20	1	0.1	1.4	1.5
ESLF1045T-680M-N	68	20	1	0.14	1.2	1.3
ESLF1045T-101M-N	100	20	1	0.2	1	1.1
ESLF1045T-151M-N	150	20	1	0.35	0.79	0.81
ESLF1045T-221M-N	220	20	1	0.47	0.65	0.7
ESLF1045T-331M-N	330	20	1	0.68	0.54	0.58
ESLF1045T-471M-N	470	20	1	1.03	0.47	0.47
ESLF1045T-681M-N	680	20	1	1.6	0.38	0.38
ESLF1045T-102M-N	1000	20	1	2.8	0.32	0.29
ESLF1045T-152M-N	1500	20	1	3.4	0.22	0.26

- Tolerance: M = $\pm$ 20%
- Isat: Value obtained when DC current flows and the initial value of inductance has fallen by 10%
- Itemp current: Value obtained when current flows and the temperature has risen to 30℃
- Test equipment Inductance: HP4284A LF impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)
- RDC: CH502BC

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance ($\pm$ %)	Test Frequency (KHz)	DC Resistance (m Ω) Max	Isat (A)
ESLF1055T-100M-N	10	20	1	40	3.5
ESLF1055T-330M-N	33	20	1	85	2.1

- Tolerance: M = $\pm$ 20%
- Isat: Value obtained when DC current flows and the initial value of inductance has fallen by 15%
- Test equipment Inductance: HP4284A LF impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)
- RDC: CH 502BC digital

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance ($\pm$ %)	Test Frequency (KHz)	DC Resistance ($\Omega \pm 20\%$)	Isat (A)	Itemp (A) Max
ESLF1255T-6R0M-N	6	20	1	0.0164	3.6	4.9
ESLF1255T-100M-N	10	20	1	0.0215	3.4	4.3
ESLF1255T-150M-N	15	20	1	0.0259	2.8	3.9
ESLF1255T-220M-N	22	20	1	0.0338	2.3	3.4
ESLF1255T-330M-N	33	20	1	0.0415	1.9	3.1
ESLF1255T-470M-N	47	20	1	0.0618	1.6	2.5
ESLF1255T-680M-N	68	20	1	0.0832	1.3	2.2
ESLF1255T-101M-N	100	20	1	0.117	1.1	1.8
ESLF1255T-151M-N	150	20	1	0.19	0.88	1.4
ESLF1255T-221M-N	220	20	1	0.27	0.72	1.2
ESLF1255T-331M-N	330	20	1	0.41	0.59	1
ESLF1255T-471M-N	470	20	1	0.52	0.49	0.88
ESLF1255T-681M-N	680	20	1	0.76	0.43	0.73
ESLF1255T-102M-N	1000	20	1	1.12	0.34	0.6
ESLF1255T-152M-N	1500	20	1	1.73	0.29	0.48

- Tolerance: M = $\pm 20\%$
- Isat: Value obtained when DC current flows and the initial value of inductance has fallen by 10%
- Itemp current: Value obtained when current flows and the temperature has risen to 30°C
- Test equipment Inductance: HP4284A LF impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)
- RDC:CH 502BC

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance ($\pm$ %)	Test Frequency (KHz)	DC Resistance ($\Omega \pm 20\%$)	Isat (A)	Itemp (A) Max
ESLF1265T-2R0T-N	2	30	1	0.0117	10	6.2
ESLF1265T-4R2T-N	4.2	30	1	0.015	7.3	5.5
ESLF1265T-7R0T-N	7	30	1	0.0177	5.7	5
ESLF1265T-100M-N	10	20	1	0.0202	5	4.8
ESLF1265T-150M-N	15	20	1	0.0237	4.2	4.4
ESLF1265T-220M-N	22	20	1	0.0316	3.5	3.8
ESLF1265T-330M-N	33	20	1	0.0406	2.8	3.4
ESLF1265T-470M-N	47	20	1	0.0578	2.4	2.8
ESLF1265T-680M-N	68	20	1	0.0787	2	2.4
ESLF1265T-101M-N	100	20	1	0.123	1.6	1.9
ESLF1265T-221M-N	220	20	1	0.273	1	1.2

- Tolerance: M = $\pm 20\%$
- Isat: Value obtained when DC current flows and the initial value of inductance has fallen by 10%
- Itemp current: Value obtained when current flows and the temperature has risen to 40°C
- Test equipment Inductance: HP4284A LF impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)
- RDC:CH 502BC

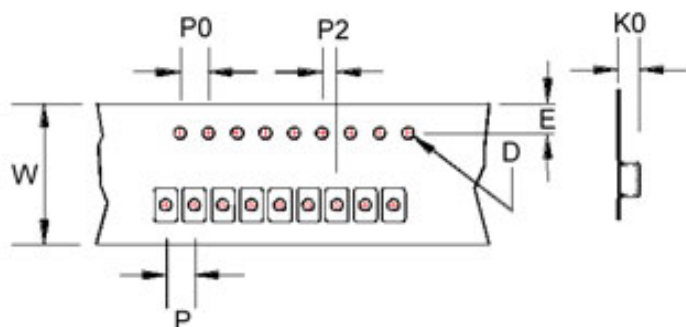
Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance ($\pm$ %)	Test Frequency (KHz)	DC Resistance ($\Omega \pm 20\%$)	Isat (A)	Itemp (A) Max
ESLF1275T-1R2T-N	1.2	30	1	0.0069	13	8.2
ESLF1275T-2R7T-N	2.7	30	1	0.0094	10	7
ESLF1275T-3R9T-N	3.9	30	1	0.0104	9	6.7
ESLF1275T-5R6T-N	5.6	30	1	0.0116	7.8	6.3
ESLF1275T-6R8T-N	6.8	30	1	0.0131	7.2	5.9
ESLF1275T-100M-N	10	20	1	0.0156	5.5	5.4
ESLF1275T-150M-N	15	20	1	0.0184	4.7	5
ESLF1275T-220M-N	22	20	1	0.0263	4	4
ESLF1275T-330M-N	33	20	1	0.0395	3.2	3.4
ESLF1275T-470M-N	47	20	1	0.0528	2.7	3
ESLF1275T-680M-N	68	20	1	0.0778	2	2.4
ESLF1275T-101M-N	100	20	1	0.1250	1.9	1.9
ESLF1275T-151M-N	150	20	1	0.1750	1.5	1.6
ESLF1275T-221M-N	220	20	1	0.2580	1.3	1.3

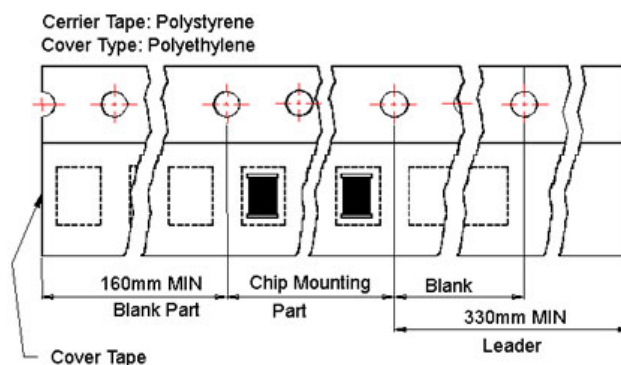
- Tolerance: M = $\pm 20\%$
- Isat: Value obtained when DC current flows and the initial value of inductance has fallen by 10%
- Itemp current: Value obtained when current flows and the temperature has risen to 40°C
- Test equipment Inductance: HP4284A LF impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)
- RDC: CH 502BC

Packaging Specifications

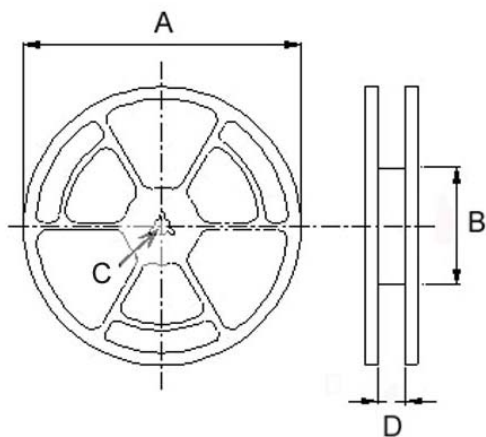
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity PCS / REEL
	K0	D	E	W	P	P0	P2	A	B	C	D	
ESLF 0628	3.4	1.55	1.75	16	12	4	2	330	100	13	17.4	1000
ESLF 0728	3.2	1.55	1.75	16	12	4	2	330	100	13	17.4	1000
ESLF 0730	3.5	1.55	1.75	16	12	4	2	330	100	13	17.4	1000
ESLF 0732	3.5	1.55	1.75	16	12	4	2	330	100	13	17.4	1000
ESLF 0745	4.8	1.55	1.75	16	12	4	2	330	100	13	17.4	1000
ESLF 0755	5.7	1.55	1.75	16	12	4	2	330	100	13	17.4	900
ESLF 1045	5.0	1.55	1.75	24	16	4	2	330	100	13	24.4	500
ESLF 1055	5.0	1.55	1.75	24	16	4	2	330	100	13	24.4	500
ESLF 1255	6.0	1.55	1.75	24	16	4	2	330	100	13	24.4	500
ESLF 1265	7.0	1.55	1.75	24	16	4	2	330	100	13	24.4	500
ESLF 1275	8.2	1.55	1.75	24	16	4	2	330	100	13	24.4	500