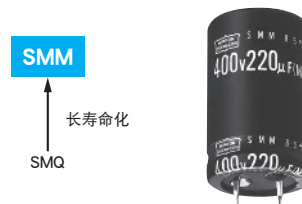


SMM 系列



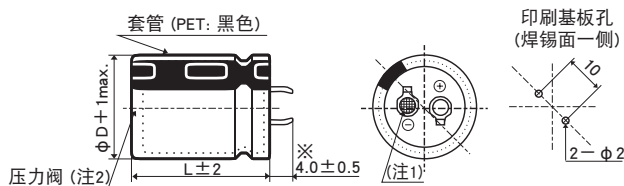
- SMQ系列的长寿命品。
- 保证85°C 3,000小时(叠加纹波电流)。
- 请注意不属于基板清洗类型。

规格表

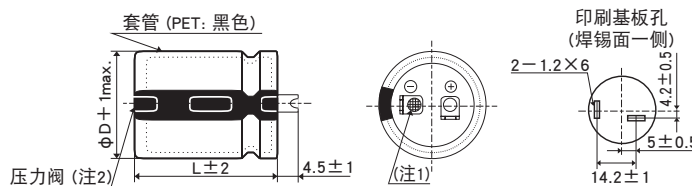
项 目	性 能		
工作温度范围	-25~+85°C		
额定电压范围	160~450V _{dc}		
静电容量容许差	±20% (M) (20°C、120Hz)		
漏电流	I ≤ 3√CV I: 漏电流 (μA)、C: 静电容量 (μF)、V: 额定电压 (V _{dc}) (20°C、5分值)		
损失角正切值 (tan δ)	额定电压 (V _{dc})	160~400V	420、450V
	tan δ (Max.)	0.15	0.20
温度特性 (阻抗比 Max右表值)	额定电压 (V _{dc})	160~400V	420、450V
	Z (-25°C) / Z (+20°C)	4	8
耐久性	在85°C环境中, 不超过额定电压的范围内叠加额定纹波电流, 连续加载额定电压3,000小时后, 待温度恢复到20°C进行测量时, 应满足以下要求。		
	静电容量变化率	≤初始值的±20%	
	损失角正切值	≤初始规格值的200%	
	漏电流	≤初始规格值	
高温无负荷特性	在85°C环境中, 无负荷放置1,000小时后待温度恢复到20°C, 进行试验前处理 (JIS C 5101-4 4.1项) 后进行测量时, 应满足以下要求。		
	静电容量变化率	≤初始值的±15%	
	损失角正切值	≤初始规格值的150%	
	漏电流	≤初始规格值	

尺寸图 (CE692形) [mm]

●端子代码: VS (φ22~φ35): 标准品



●端子代码: LI (φ35)

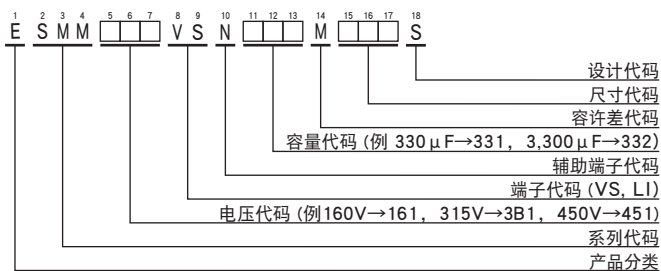


※φ35品为3.5±0.5。

(注1) 阴极端子的铆钉部网眼刻印。

(注2) 标准规格为「无树脂板」。

产品型号体系



产品型号代码的详细介绍请参考「产品型号表示方法(基板自立型)」。

额定纹波电流频率修正系数

纹波频率与标准品一览表的规定值相异时, 请使用小于乘以下表系数所得之值的值。

●频率修正系数

频率 (Hz)	50	120	300	1k	10k	50k
160~250V _{dc}	0.81	1.00	1.17	1.32	1.45	1.50
315~450V _{dc}	0.77	1.00	1.16	1.30	1.41	1.43

※铝电解电容器由于在纹波电流叠加时自我发热、温度上升而老化, 每升温5°C寿命减少一半。
要想保持长寿命请在使用过程中降低纹波电流。

SMM 系列

◆标准品一览表

WV (Vdc)	Cap (μF)	尺寸 φD×L(mm)	tan δ	额定纹波电流 (Arms/85℃, 120Hz)	产品型号	WV (Vdc)	Cap (μF)	尺寸 φD×L(mm)	tan δ	额定纹波电流 (Arms/85℃, 120Hz)	产品型号
160	270	22×20	0.15	1.30	ESMM161VSN271MP20S	200	390	22×30	0.15	1.73	ESMM201VSN391MP30S
	390	22×25	0.15	1.63	ESMM161VSN391MP25S		390	25.4×25	0.15	1.71	ESMM201VSN391MQ25S
	390	25.4×20	0.15	1.62	ESMM161VSN391MQ20S		390	30×20	0.15	1.71	ESMM201VSN391MR20S
	470	22×30	0.15	1.86	ESMM161VSN471MP30S		470	22×30	0.15	1.97	ESMM201VSN471MP30S
	470	25.4×25	0.15	1.86	ESMM161VSN471MQ25S		470	25.4×25	0.15	1.95	ESMM201VSN471MQ25S
	560	22×30	0.15	2.15	ESMM161VSN561MP30S		470	30×20	0.15	1.88	ESMM201VSN471MR20S
	560	25.4×25	0.15	2.15	ESMM161VSN561MQ25S		560	22×35	0.15	2.18	ESMM201VSN561MP35S
	560	30×20	0.15	2.05	ESMM161VSN561MR20S		560	25.4×30	0.15	2.15	ESMM201VSN561MQ30S
	680	22×35	0.15	2.35	ESMM161VSN681MP35S		560	30×25	0.15	2.15	ESMM201VSN561MR25S
	680	25.4×30	0.15	2.33	ESMM161VSN681MQ30S		560	35×20	0.15	2.05	ESMM201VSN561MA20S
	680	30×25	0.15	2.33	ESMM161VSN681MR25S		680	22×40	0.15	2.48	ESMM201VSN681MP40S
	680	35×20	0.15	2.26	ESMM161VSN681MA20S		680	25.4×30	0.15	2.48	ESMM201VSN681MQ30S
	820	22×40	0.15	2.68	ESMM161VSN821MP40S		680	30×25	0.15	2.48	ESMM201VSN681MR25S
	820	25.4×30	0.15	2.65	ESMM161VSN821MQ30S		680	35×20	0.15	2.36	ESMM201VSN681MA20S
	820	30×25	0.15	2.64	ESMM161VSN821MR25S		820	22×45	0.15	2.81	ESMM201VSN821MP45S
	820	35×20	0.15	2.49	ESMM161VSN821MA20S		820	25.4×35	0.15	2.79	ESMM201VSN821MQ35S
	1,000	22×45	0.15	3.02	ESMM161VSN102MP45S		820	30×30	0.15	2.80	ESMM201VSN821MR30S
	1,000	25.4×35	0.15	3.00	ESMM161VSN102MQ35S		820	35×25	0.15	2.83	ESMM201VSN821MA25S
	1,000	30×30	0.15	2.96	ESMM161VSN102MR30S		1,000	22×50	0.15	3.28	ESMM201VSN102MP50S
	1,000	35×25	0.15	3.13	ESMM161VSN102MA25S		1,000	25.4×40	0.15	3.28	ESMM201VSN102MQ40S
1,200	22×50	0.15	3.47	ESMM161VSN122MP50S	1,000	30×35	0.15	3.15	ESMM201VSN102MR35S		
1,200	25.4×40	0.15	3.43	ESMM161VSN122MQ40S	1,000	35×30	0.15	3.26	ESMM201VSN102MA30S		
1,200	30×30	0.15	3.41	ESMM161VSN122MR30S	1,200	25.4×45	0.15	3.61	ESMM201VSN122MQ45S		
1,200	35×25	0.15	3.40	ESMM161VSN122MA25S	1,200	30×35	0.15	3.61	ESMM201VSN122MR35S		
1,500	25.4×50	0.15	3.96	ESMM161VSN152MQ50S	1,200	35×30	0.15	3.57	ESMM201VSN122MA30S		
1,500	30×35	0.15	3.96	ESMM161VSN152MR35S	1,500	30×45	0.15	4.13	ESMM201VSN152MR45S		
1,500	35×30	0.15	3.94	ESMM161VSN152MA30S	1,500	35×35	0.15	4.06	ESMM201VSN152MA35S		
1,800	30×40	0.15	4.31	ESMM161VSN182MR40S	1,800	30×50	0.15	4.60	ESMM201VSN182MR50S		
1,800	35×35	0.15	4.28	ESMM161VSN182MA35S	1,800	35×40	0.15	4.59	ESMM201VSN182MA40S		
2,200	30×50	0.15	4.96	ESMM161VSN222MR50S	2,200	35×45	0.15	5.25	ESMM201VSN222MA45S		
2,200	35×40	0.15	4.96	ESMM161VSN222MA40S	180	22×20	0.15	1.06	ESMM221VSN181MP20S		
2,700	35×45	0.15	5.57	ESMM161VSN272MA45S	270	22×25	0.15	1.47	ESMM221VSN271MP25S		
3,300	35×50	0.15	6.21	ESMM161VSN332MA50S	270	25.4×20	0.15	1.35	ESMM221VSN271MQ20S		
180	220	22×20	0.15	1.18	ESMM181VSN221MP20S	330	22×30	0.15	1.70	ESMM221VSN331MP30S	
	330	22×25	0.15	1.77	ESMM181VSN331MP25S	330	25.4×25	0.15	1.69	ESMM221VSN331MQ25S	
	330	25.4×20	0.15	1.49	ESMM181VSN331MQ20S	330	30×20	0.15	1.58	ESMM221VSN331MR20S	
	390	22×25	0.15	1.84	ESMM181VSN391MP25S	390	22×30	0.15	1.89	ESMM221VSN391MP30S	
	470	22×30	0.15	1.91	ESMM181VSN471MP30S	390	25.4×25	0.15	1.84	ESMM221VSN391MQ25S	
	470	25.4×25	0.15	2.08	ESMM181VSN471MQ25S	390	30×20	0.15	1.71	ESMM221VSN391MR20S	
	470	30×20	0.15	1.88	ESMM181VSN471MR20S	470	22×35	0.15	2.08	ESMM221VSN471MP35S	
	560	22×35	0.15	2.25	ESMM181VSN561MP35S	470	25.4×30	0.15	2.08	ESMM221VSN471MQ30S	
	560	25.4×25	0.15	2.25	ESMM181VSN561MQ25S	470	30×25	0.15	2.12	ESMM221VSN471MR25S	
	680	22×35	0.15	2.48	ESMM181VSN681MP35S	470	35×20	0.15	1.88	ESMM221VSN471MA20S	
	680	25.4×30	0.15	2.50	ESMM181VSN681MQ30S	560	22×40	0.15	2.33	ESMM221VSN561MP40S	
	680	30×25	0.15	2.46	ESMM181VSN681MR25S	560	25.4×35	0.15	2.38	ESMM221VSN561MQ35S	
	680	35×20	0.15	2.26	ESMM181VSN681MA20S	560	30×25	0.15	2.31	ESMM221VSN561MR25S	
	820	22×40	0.15	2.86	ESMM181VSN821MP40S	560	35×20	0.15	2.14	ESMM221VSN561MA20S	
	820	25.4×35	0.15	2.75	ESMM181VSN821MQ35S	680	22×45	0.15	2.63	ESMM221VSN681MP45S	
	820	30×25	0.15	2.69	ESMM181VSN821MR25S	680	25.4×35	0.15	2.68	ESMM221VSN681MQ35S	
	1,000	22×50	0.15	3.10	ESMM181VSN102MP50S	680	30×30	0.15	2.62	ESMM221VSN681MR30S	
	1,000	25.4×40	0.15	3.06	ESMM181VSN102MQ40S	680	35×25	0.15	2.58	ESMM221VSN681MA25S	
	1,000	30×30	0.15	3.10	ESMM181VSN102MR30S	820	25.4×45	0.15	3.01	ESMM221VSN821MQ45S	
	1,000	35×25	0.15	2.98	ESMM181VSN102MA25S	820	30×35	0.15	2.99	ESMM221VSN821MR35S	
1,200	25.4×45	0.15	3.63	ESMM181VSN122MQ45S	820	35×30	0.15	2.79	ESMM221VSN821MA30S		
1,200	30×35	0.15	3.55	ESMM181VSN122MR35S	1,000	25.4×50	0.15	3.40	ESMM221VSN102MQ50S		
1,200	35×30	0.15	3.49	ESMM181VSN122MA30S	1,000	30×35	0.15	3.42	ESMM221VSN102MR35S		
1,500	30×40	0.15	4.10	ESMM181VSN152MR40S	1,000	35×30	0.15	3.29	ESMM221VSN102MA30S		
1,500	35×35	0.15	4.02	ESMM181VSN152MA35S	1,200	30×40	0.15	3.88	ESMM221VSN122MR40S		
1,800	30×45	0.15	4.55	ESMM181VSN182MR45S	1,200	35×35	0.15	3.68	ESMM221VSN122MA35S		
1,800	35×35	0.15	4.54	ESMM181VSN182MA35S	1,500	30×50	0.15	4.44	ESMM221VSN152MR50S		
2,200	35×40	0.15	4.83	ESMM181VSN222MA40S	1,500	35×40	0.15	4.10	ESMM221VSN152MA40S		
2,700	35×50	0.15	5.30	ESMM181VSN272MA50S	1,800	35×45	0.15	4.52	ESMM221VSN182MA45S		
200	220	22×20	0.15	1.18	ESMM201VSN221MP20S	250	150	22×20	0.15	0.97	ESMM251VSN151MP20S
	270	22×25	0.15	1.37	ESMM201VSN271MP25S		180	22×20	0.15	1.06	ESMM251VSN181MP20S
	270	25.4×20	0.15	1.35	ESMM201VSN271MQ20S		220	22×25	0.15	1.24	ESMM251VSN221MP25S
	330	22×25	0.15	1.51	ESMM201VSN331MP25S		220	25.4×20	0.15	1.22	ESMM251VSN221MQ20S
	330	25.4×20	0.15	1.49	ESMM201VSN331MQ20S		270	22×25	0.15	1.50	ESMM251VSN271MP25S

SMM 系列

◆标准品一览表

WV (Vdc)	Cap (μF)	尺寸 φD×L(mm)	tan δ	额定纹波电流 (Arms/85℃, 120Hz)	产品型号	WV (Vdc)	Cap (μF)	尺寸 φD×L(mm)	tan δ	额定纹波电流 (Arms/85℃, 120Hz)	产品型号
250	330	22×30	0.15	1.66	ESMM251VSN331MP30S	350	180	30×20	0.15	1.16	ESMM351VSN181MR20S
	330	25.4×25	0.15	1.61	ESMM251VSN331MQ25S		220	22×35	0.15	1.47	ESMM351VSN221MP35S
	330	30×20	0.15	1.58	ESMM251VSN331MR20S		220	25.4×30	0.15	1.53	ESMM351VSN221MQ30S
	390	22×35	0.15	1.88	ESMM251VSN391MP35S		220	30×25	0.15	1.54	ESMM351VSN221MR25S
	390	25.4×30	0.15	1.88	ESMM251VSN391MQ30S		220	35×20	0.15	1.29	ESMM351VSN221MA20S
	390	30×25	0.15	1.86	ESMM251VSN391MR25S		270	22×40	0.15	1.70	ESMM351VSN271MR40S
	390	35×20	0.15	1.71	ESMM251VSN391MA20S		270	25.4×35	0.15	1.73	ESMM351VSN271MQ35S
	470	22×35	0.15	2.15	ESMM251VSN471MP35S		270	30×25	0.15	1.80	ESMM351VSN271MR25S
	470	25.4×35	0.15	2.15	ESMM251VSN471MQ35S		270	35×20	0.15	1.49	ESMM351VSN271MA20S
	470	30×25	0.15	2.05	ESMM251VSN471MR25S		330	22×45	0.15	1.87	ESMM351VSN331MP45S
	470	35×20	0.15	1.88	ESMM251VSN471MA20S		330	25.4×35	0.15	1.97	ESMM351VSN331MQ35S
	560	22×40	0.15	2.48	ESMM251VSN561MP40S		330	30×30	0.15	2.03	ESMM351VSN331MR30S
	560	25.4×35	0.15	2.35	ESMM251VSN561MQ35S		330	35×25	0.15	1.80	ESMM351VSN331MA25S
	560	30×25	0.15	2.35	ESMM251VSN561MR25S		390	25.4×40	0.15	2.14	ESMM351VSN391MR40S
	680	22×50	0.15	2.61	ESMM251VSN681MP50S		390	30×35	0.15	2.23	ESMM351VSN391MR35S
	680	25.4×40	0.15	2.67	ESMM251VSN681MQ40S		390	35×30	0.15	2.30	ESMM351VSN391MA30S
	680	30×30	0.15	2.71	ESMM251VSN681MR30S		470	25.4×50	0.15	2.55	ESMM351VSN471MQ50S
	680	35×25	0.15	2.58	ESMM251VSN681MA25S		470	30×35	0.15	2.53	ESMM351VSN471MR35S
	820	25.4×45	0.15	3.01	ESMM251VSN821MQ45S		470	35×30	0.15	2.55	ESMM351VSN471MA30S
	820	30×35	0.15	2.98	ESMM251VSN821MR35S		560	30×40	0.15	2.73	ESMM351VSN561MR40S
820	35×30	0.15	2.96	ESMM251VSN821MA30S	560	35×35	0.15	2.75	ESMM351VSN561MA35S		
1,000	30×40	0.15	3.56	ESMM251VSN102MR40S	680	30×50	0.15	3.15	ESMM351VSN681MR50S		
1,000	35×35	0.15	3.48	ESMM251VSN102MA35S	680	35×40	0.15	3.15	ESMM351VSN681MA40S		
1,200	30×45	0.15	3.99	ESMM251VSN122MR45S	820	35×45	0.15	3.47	ESMM351VSN821MA45S		
1,200	35×35	0.15	3.84	ESMM251VSN122MA35S	1,000	35×50	0.15	3.60	ESMM351VSN102MA50S		
1,500	35×40	0.15	4.33	ESMM251VSN152MA40S	68	22×20	0.15	0.65	ESMM401VSN680MP20S		
1,800	35×50	0.15	4.54	ESMM251VSN182MA50S	82	22×25	0.15	0.84	ESMM401VSN820MP25S		
315	100	22×20	0.15	0.79	ESMM3B1VSN101MP20S	82	25.4×20	0.15	0.74	ESMM401VSN820MQ20S	
	120	25.4×20	0.15	0.90	ESMM3B1VSN121MQ20S	100	22×25	0.15	0.99	ESMM401VSN101MP25S	
	150	22×25	0.15	1.06	ESMM3B1VSN151MP25S	100	25.4×20	0.15	0.82	ESMM401VSN101MQ20S	
	150	25.4×20	0.15	1.00	ESMM3B1VSN151MQ20S	120	22×30	0.15	1.09	ESMM401VSN121MP30S	
	180	22×30	0.15	1.29	ESMM3B1VSN181MP30S	120	25.4×25	0.15	1.13	ESMM401VSN121MQ25S	
	180	25.4×25	0.15	1.38	ESMM3B1VSN181MQ25S	120	30×20	0.15	0.95	ESMM401VSN121MR20S	
	180	30×20	0.15	1.16	ESMM3B1VSN181MR20S	150	22×35	0.15	1.24	ESMM401VSN151MP35S	
	220	22×30	0.15	1.41	ESMM3B1VSN221MP30S	150	25.4×30	0.15	1.27	ESMM401VSN151MQ30S	
	220	25.4×25	0.15	1.47	ESMM3B1VSN221MQ25S	150	30×25	0.15	1.20	ESMM401VSN151MR25S	
	220	30×20	0.15	1.28	ESMM3B1VSN221MR20S	180	22×40	0.15	1.41	ESMM401VSN181MP40S	
	270	22×35	0.15	1.68	ESMM3B1VSN271MP35S	180	25.4×30	0.15	1.44	ESMM401VSN181MQ30S	
	270	25.4×30	0.15	1.70	ESMM3B1VSN271MQ30S	180	30×25	0.15	1.52	ESMM401VSN181MR25S	
	270	30×25	0.15	1.55	ESMM3B1VSN271MR25S	180	35×20	0.15	1.16	ESMM401VSN181MA20S	
	270	35×20	0.15	1.43	ESMM3B1VSN271MA20S	220	22×45	0.15	1.58	ESMM401VSN221MP45S	
	330	22×40	0.15	1.91	ESMM3B1VSN331MP40S	220	25.4×35	0.15	1.64	ESMM401VSN221MQ35S	
	330	25.4×35	0.15	1.94	ESMM3B1VSN331MQ35S	220	30×30	0.15	1.66	ESMM401VSN221MR30S	
	330	30×25	0.15	1.98	ESMM3B1VSN331MR25S	220	35×25	0.15	1.47	ESMM401VSN221MA25S	
	390	22×45	0.15	2.07	ESMM3B1VSN391MP45S	270	22×50	0.15	1.65	ESMM401VSN271MP50S	
	390	25.4×40	0.15	2.11	ESMM3B1VSN391MQ40S	270	25.4×40	0.15	1.79	ESMM401VSN271MQ40S	
	390	30×30	0.15	2.15	ESMM3B1VSN391MR30S	270	30×30	0.15	1.82	ESMM401VSN271MR30S	
	390	35×25	0.15	1.95	ESMM3B1VSN391MA25S	270	35×25	0.15	1.63	ESMM401VSN271MA25S	
	470	25.4×45	0.15	2.31	ESMM3B1VSN471MQ45S	330	25.4×45	0.15	2.00	ESMM401VSN331MQ45S	
	470	30×35	0.15	2.38	ESMM3B1VSN471MR35S	330	30×35	0.15	2.05	ESMM401VSN331MR35S	
	470	35×30	0.15	2.46	ESMM3B1VSN471MA30S	330	35×30	0.15	2.05	ESMM401VSN331MA30S	
	560	25.4×50	0.15	2.46	ESMM3B1VSN561MQ50S	390	25.4×50	0.15	2.12	ESMM401VSN391MQ50S	
	560	30×35	0.15	2.63	ESMM3B1VSN561MR35S	390	30×40	0.15	2.26	ESMM401VSN391MR40S	
	560	35×30	0.15	2.69	ESMM3B1VSN561MA30S	390	35×35	0.15	2.28	ESMM401VSN391MA35S	
	680	30×45	0.15	2.82	ESMM3B1VSN681MR45S	470	30×45	0.15	2.51	ESMM401VSN471MR45S	
680	35×35	0.15	3.05	ESMM3B1VSN681MA35S	470	35×35	0.15	2.54	ESMM401VSN471MA35S		
820	30×50	0.15	3.28	ESMM3B1VSN821MR50S	560	30×50	0.15	2.85	ESMM401VSN561MR50S		
820	35×40	0.15	3.45	ESMM3B1VSN821MA40S	560	35×40	0.15	2.85	ESMM401VSN561MA40S		
1,000	35×45	0.15	3.59	ESMM3B1VSN102MA45S	680	35×50	0.15	3.10	ESMM401VSN681MA50S		
350	82	22×20	0.15	0.72	ESMM351VSN820MP20S	47	22×20	0.20	0.54	ESMM421VSN470MP20S	
	120	22×25	0.15	1.04	ESMM351VSN121MP25S	56	22×20	0.20	0.59	ESMM421VSN560MP20S	
	120	25.4×20	0.15	0.90	ESMM351VSN121MQ20S	68	25.4×20	0.20	0.68	ESMM421VSN680MQ20S	
	150	22×30	0.15	1.20	ESMM351VSN151MP30S	82	22×25	0.20	0.85	ESMM421VSN820MP25S	
	150	25.4×25	0.15	1.22	ESMM351VSN151MQ25S	82	25.4×20	0.20	0.74	ESMM421VSN820MQ20S	
	150	30×20	0.15	1.06	ESMM351VSN151MR20S	100	22×30	0.20	0.97	ESMM421VSN101MP30S	
	180	22×30	0.15	1.34	ESMM351VSN181MP30S	100	25.4×25	0.20	0.98	ESMM421VSN101MQ25S	
180	25.4×25	0.15	1.37	ESMM351VSN181MQ25S	100	30×20	0.20	0.87	ESMM421VSN101MR20S		

SMM系列

◆标准品一览表

WV (Vdc)	Cap (μF)	尺寸 φD×L(mm)	tan δ	额定纹波电流 (Arms/85°C, 120Hz)	产品型号	WV (Vdc)	Cap (μF)	尺寸 φD×L(mm)	tan δ	额定纹波电流 (Arms/85°C, 120Hz)	产品型号
420	120	22×30	0.20	1.07	ESMM421VSN121MP30S	450	82	25.4×20	0.20	0.74	ESMM451VSN820MQ20S
	120	25.4×25	0.20	1.08	ESMM421VSN121MQ25S		82	30×20	0.20	0.79	ESMM451VSN820MR20S
	120	30×20	0.20	0.95	ESMM421VSN121MR20S		100	22×30	0.20	0.95	ESMM451VSN101MP30S
	150	22×35	0.20	1.21	ESMM421VSN151MP35S		100	25.4×25	0.20	0.97	ESMM451VSN101MQ25S
	150	25.4×30	0.20	1.26	ESMM421VSN151MQ30S		100	30×20	0.20	0.87	ESMM451VSN101MR20S
	150	30×25	0.20	1.30	ESMM421VSN151MR25S		120	22×35	0.20	1.07	ESMM451VSN121MP35S
	150	35×20	0.20	1.11	ESMM421VSN151MA20S		120	25.4×30	0.20	1.09	ESMM451VSN121MQ30S
	180	22×40	0.20	1.33	ESMM421VSN181MP40S		120	30×25	0.20	1.12	ESMM451VSN121MR25S
	180	25.4×35	0.20	1.42	ESMM421VSN181MQ35S		120	35×20	0.20	0.99	ESMM451VSN121MA20S
	180	30×25	0.20	1.48	ESMM421VSN181MR25S		150	22×40	0.20	1.18	ESMM451VSN151MP40S
	180	35×20	0.20	1.16	ESMM421VSN181MA20S		150	25.4×30	0.20	1.25	ESMM451VSN151MQ30S
	220	22×45	0.20	1.55	ESMM421VSN221MP45S		150	30×25	0.20	1.29	ESMM451VSN151MR25S
	220	25.4×35	0.20	1.58	ESMM421VSN221MQ35S		150	35×20	0.20	1.06	ESMM451VSN151MA20S
	220	30×30	0.20	1.65	ESMM421VSN221MR30S		180	22×45	0.20	1.32	ESMM451VSN181MP45S
	220	35×25	0.20	1.47	ESMM421VSN221MA25S		180	25.4×35	0.20	1.40	ESMM451VSN181MQ35S
	270	25.4×40	0.20	1.74	ESMM421VSN271MQ40S		180	30×30	0.20	1.45	ESMM451VSN181MR30S
	270	30×35	0.20	1.90	ESMM421VSN271MR35S		180	35×25	0.20	1.33	ESMM451VSN181MA25S
	270	35×30	0.20	1.94	ESMM421VSN271MA30S		220	22×50	0.20	1.48	ESMM451VSN221MP50S
	330	25.4×50	0.20	2.20	ESMM421VSN331MQ50S		220	25.4×40	0.20	1.59	ESMM451VSN221MQ40S
	330	30×35	0.20	1.98	ESMM421VSN331MR35S		220	30×30	0.20	1.64	ESMM451VSN221MR30S
	330	35×35	0.20	2.17	ESMM421VSN331MA35S		220	35×25	0.20	1.66	ESMM451VSN221MA25S
	390	30×40	0.20	2.22	ESMM421VSN391MR40S		270	25.4×45	0.20	1.73	ESMM451VSN271MQ45S
	390	35×35	0.20	2.27	ESMM421VSN391MA35S		270	30×35	0.20	1.89	ESMM451VSN271MR35S
	470	30×45	0.20	2.50	ESMM421VSN471MR45S		270	35×30	0.20	1.90	ESMM451VSN271MA30S
	470	35×40	0.20	2.61	ESMM421VSN471MA40S		330	25.4×50	0.20	2.12	ESMM451VSN331MQ50S
	560	35×45	0.20	2.95	ESMM421VSN561MA45S		330	30×40	0.20	2.12	ESMM451VSN331MR40S
680	35×50	0.20	3.15	ESMM421VSN681MA50S	330	35×35	0.20	2.15	ESMM451VSN331MA35S		
450	47	22×20	0.20	0.54	ESMM451VSN470MP20S	390	30×45	0.20	2.35	ESMM451VSN391MR45S	
	56	22×20	0.20	0.59	ESMM451VSN560MP20S	390	35×40	0.20	2.38	ESMM451VSN391MA40S	
	68	22×25	0.20	0.71	ESMM451VSN680MP25S	470	30×50	0.20	2.65	ESMM451VSN471MR50S	
	68	25.4×20	0.20	0.68	ESMM451VSN680MQ20S	470	35×45	0.20	2.68	ESMM451VSN471MA45S	
	82	22×25	0.20	0.86	ESMM451VSN820MP25S	560	35×50	0.20	2.88	ESMM451VSN561MA50S	