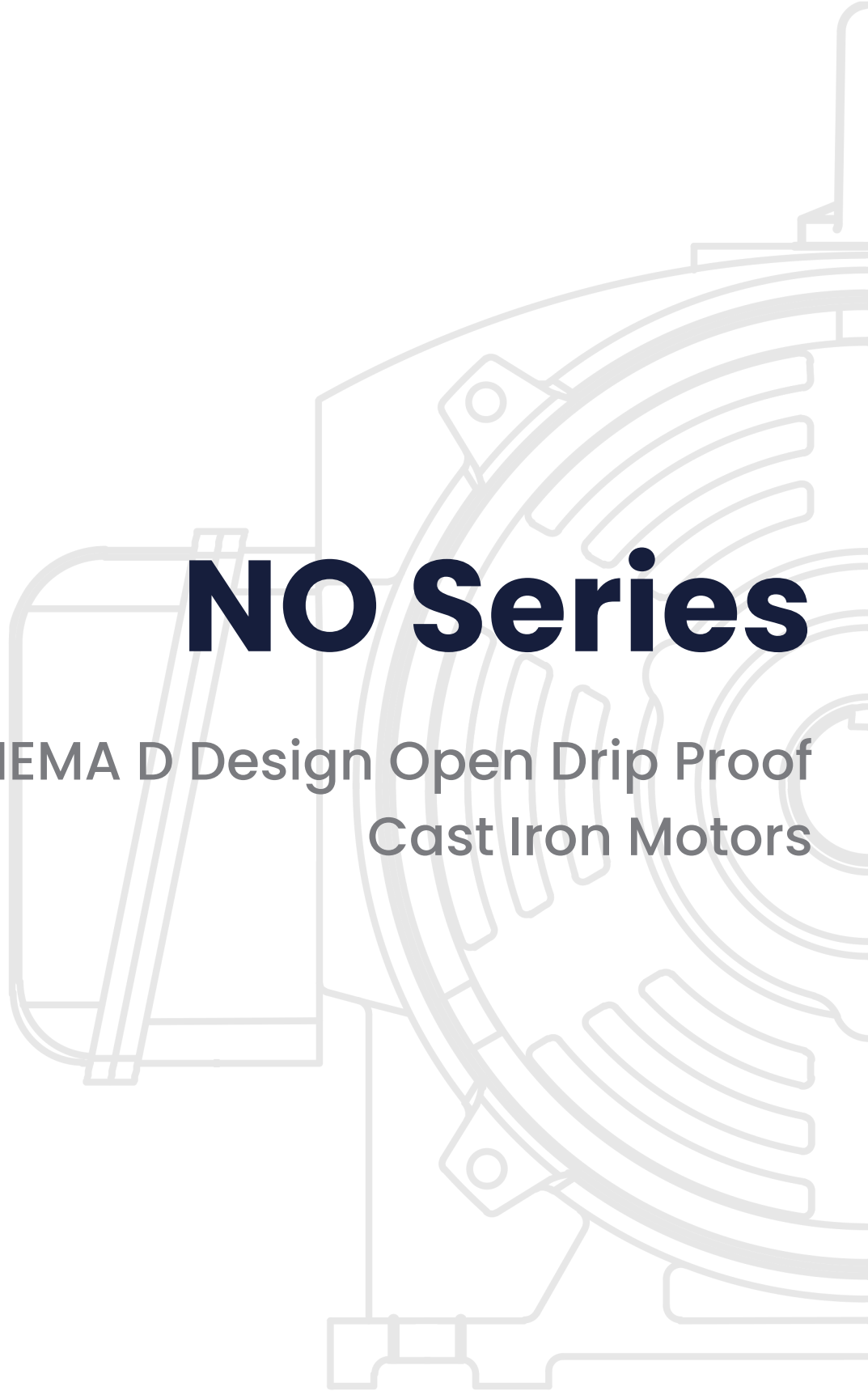


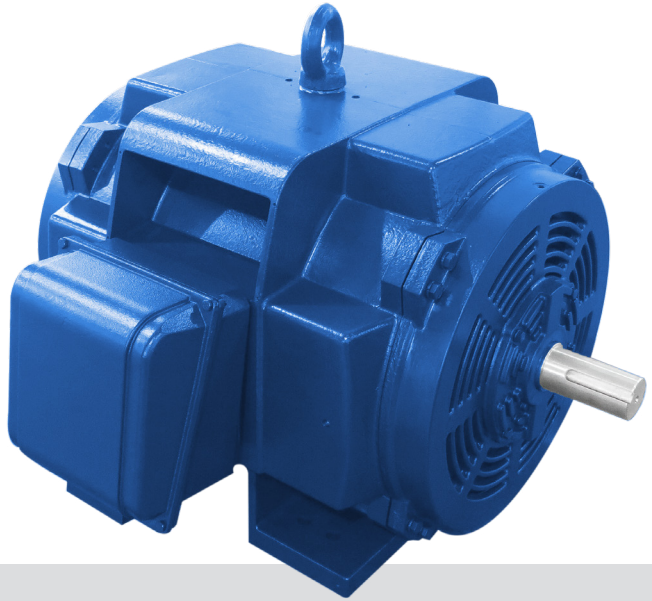
# NO Series

NEMA D Design Open Drip Proof  
Cast Iron Motors



# NO Series

## NEMA D Design Open Drip Proof Cast Iron Motors



NO Series (Inverter Duty) NEMA D Design Open Drip Proof motors comply with NEMA MG-1 standard. NO Series are UL and CSA certificated.

With the vents on the chamber, air is allowed to flow directly through the winding, which keeps a relatively low temperature of winding and offers higher efficiency.

Wonder NO Series are suitable for places free from inflammable, explosive, corrosive gasses and relatively clean. Wonder ODP motors are used to drive a variety of equipment without special performance requirements, such as compressors, machine tools, water pumps, ventilators, blenders, etc.

In dry and clean indoor environment, it is appropriate to choose IP23 electric motors which can offer same output power with smaller volume, reducing the occupation of the device.

These design D torques motors has the characteristics of high slip and high torque, low starting current and full load speed, high efficiency with long lasting performance. Well suited for equipment with very high inertia starts.

### Main Tech Specifications:

- Frame Size: 215T - 444T
- Rated Power: 5-100HP
- Voltage: 230/460V, 460V, or 575 V
- Speed: 1200r/m
- Poles: 6
- Protection Class: IP22, IP23
- Insulation Class: Class F or above
- Continuous Duty: S1
- Ambient Temperature: 104 °F (40°C )
- Altitude: 3300 ft (1000m)

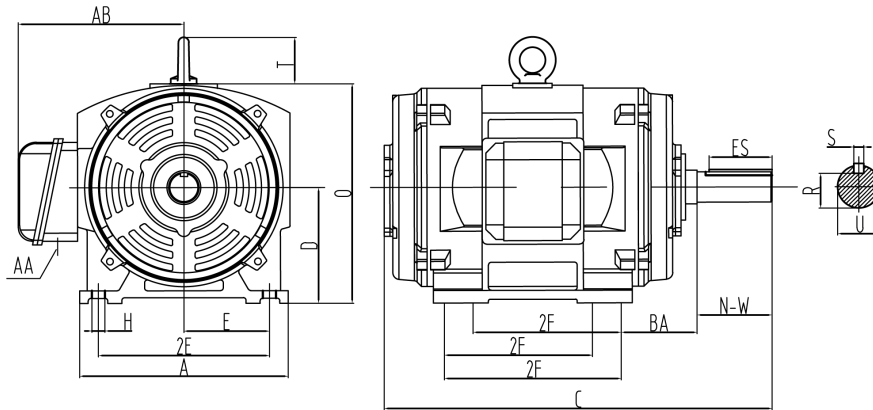
## Technical Specifications (Design D)

Motor Type	Rated Power	Current	Rated Speed	Power Factor			Efficiency			Locked Current	Rated Torque	Locked Torque/ Rated Torque	Maximum Torque/ Rated Torque	Sound LP	Weight
	HP	A (460V)	r/m	cosφ			η%			A	N.m	T <sub>L</sub> /T <sub>N</sub>	T <sub>b</sub> /T <sub>N</sub>	dB(A)	kg
	1200min <sup>-1</sup> (6 Pole)														
215	5	7.5	1130	0.484	0.615	0.701	88.4	89.9	89.5	39.4	22.9	2.36	3.34	58	221
254	7.5	10.5	1120	0.704	0.808	0.856	86.0	85.5	83.7	46.8	35.6	2.61	2.92	60	315
256	10	13.5	1120	0.542	0.677	0.759	84.9	85.8	85.2	85.8	46.4	3.78	4.10	60	331
284	15	20.0	1110	0.578	0.710	0.785	84.5	84.8	83.6	110.9	70.3	3.09	3.31	63	456
286	20	26.0	1105	0.626	0.750	0.816	85.7	85.6	84.2	142.9	94.1	3.02	3.28	63	490
324	25	32.0	1140	0.631	0.750	0.811	86.0	87.0	86.5	181.4	114.6	2.72	3.12	64	662
326	30	39.0	1040	0.655	0.768	0.824	86.7	87.3	86.6	209.6	137.8	2.63	3.02	64	677
364	40	53.0	1130	0.668	0.778	0.833	88.0	88.7	88.3	295.3	183.1	2.81	3.29	66	886
365	50	64.0	1135	0.688	0.793	0.843	88.4	89.1	88.6	359.9	229	2.77	3.23	66	904
404	60	75.5	1140	0.701	0.802	0.848	88.5	89.1	88.6	409.1	275.5	2.63	3.07	68	1206
405	75	91.0	1140	0.699	0.801	0.849	88.8	89.5	89.0	534.8	343.8	2.80	3.25	68	1281
444	100	113.3	1140	0.703	0.804	0.851	88.7	89.3	89.5	724	468	2.60	3.25	68	1676

## Bearings

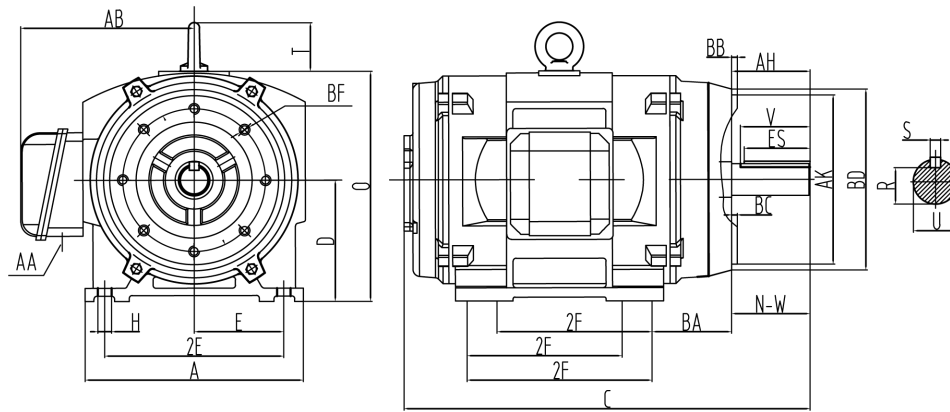
Frame	Driving End	Non-driving End	Pole
140T	6205 2Z/C3	6205 2Z/C3	2-6P
180T	6306 2Z/C3	6306 2Z/C3	2-6P
210T	6308 2Z/C3	6308 2Z/C3	2-6P
250T	6309/C3	6309/C3	2-6P
280T	6310/C3	6310/C3	2-6P
320T	6312/C3	6312/C3	2-6P
360T	6314/C3	6314/C3	2-6P
400T	6314/C3	6314/C3	2P
400T	6316/C3	6316/C3	4-6P
444/5T	6314/C3	6314/C3	2P
444/5T	NU318/C3	6318/C3	4-6P
447/9T	6314/C3	6314/C3	2P
447/9T	NU319/C3	6319/C3	4P
447/9T	NU322/C3	6319/C3	6P

## Mounting and Overall Dimensions for Foot-mounted Motors with Single Straight-shaft Extension



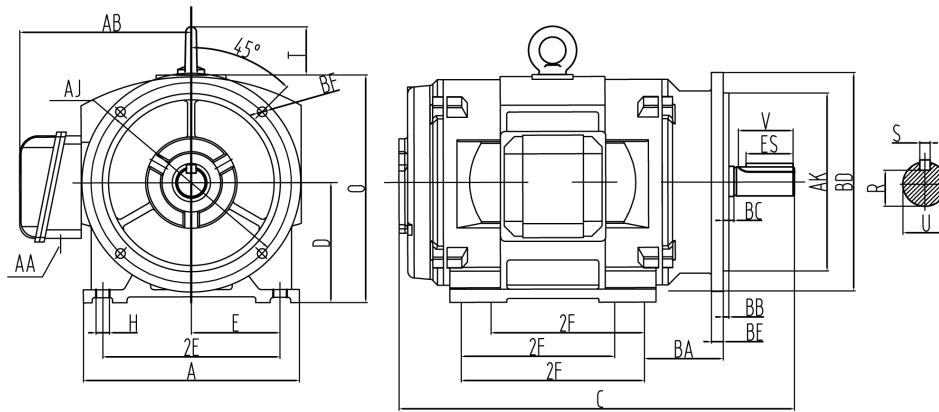
Frame Size	A Max	C	D	2E	2F	BA	H	N-W	O	R	S	T	U	ES Min	AA NPT	AB		
143T	7.00	12.99	3.5	5.5	4.00	2.25	0.34	2.25	6.89	0.771	0.188	1.421	0.875	1.41	0.75	6.10		
145T					5.00													
182T	7.48	15.15	4.5	7.5	4.50	2.75	0.41	2.75	9.17	0.986	0.250	1.700	1.125	1.78	0.75	7.87		
184T					5.50													
213T	10.24	20.47	5.3	8.5	5.50	3.50	0.41	3.38	10.74	1.201	0.312	1.700	1.375	2.41	1.00	8.66		
215T					7.00													
254T	12.20	24.90	6.3	10.0	8.25	4.25	0.53	4.00	12.90	1.416	0.375	2.047	1.625	2.91	1.25	10.24		
256T					10.00													
284T	13.74	28.51	7.0	11.0	9.50	4.75	0.53	4.62	14.33	1.591	0.500	2.047	1.875	3.28	1.50	12.20		
284TS		28.51								3.25	0.375		1.625	1.91				
286T		29.88			4.62	0.500		1.875		3.28								
286TS		29.88			3.25	0.375		1.625		1.91								
324T	15.28	26.60	8.0	12.5	10.50	5.25	0.66	5.25	16.82	1.845	0.500	2.400	2.125	3.91	2.00	13.39		
324TS		26.60			3.75			1.591		1.875			2.03					
326T		28.10			5.25	1.845		2.125		3.91								
326TS		28.10			3.75	1.591		1.875		2.03								
364T	17.13	37.27	9.0	14.0	11.25	5.88	0.66	5.88	17.46	2.021	0.625	2.835	2.375	4.28	3.00	17.32		
364TS		35.14			3.75			1.591		0.500	1.875		2.03					
365T		37.27			5.88	2.021		0.625		2.375	4.28							
365TS		35.14			3.75	1.591		0.500		1.875	2.03							
404T	19.06	38.27	10.0	16.0	12.25	6.63	0.81	7.25	21.08	2.450	0.750	2.835	2.875	5.65	3.00	18.70		
404TS		35.27			4.25			1.845		0.500	2.125		2.78					
405T		39.77			7.25	2.450		0.750		2.875	5.65							
405TS		36.77			4.25	1.845		0.500		2.125	2.78							
444T	22.52	81.14	11.0	18.0	14.50	7.50	0.81	8.50	23.4	2.880	0.875	2.835	3.375	6.91	3.00	19.68		
444TS-2		39.89			4.75			2.021		0.625	2.375		3.03					
445T		81.14			8.50	2.880		0.875		3.375	6.91							
445TS-2		39.89			4.75	2.021		0.625		2.375	3.03							
447T		83.14	20.00	8.50	23.4	7.50		0.81	8.50	23.4	2.880		0.875	2.835	3.375	6.91	3.00	22.80
447TS-2		41.89							4.75		2.021		0.625		2.375	3.03		
449T		83.14							8.50		2.880		0.875		3.375	6.91		
449TS-2		41.89							4.75		2.021		0.625		2.375	3.03		
505US	24.72	46.09	12.5	20	18	8.5	0.94		4.75	27.00	2.450	0.750	2.835		2.875	3.00	4.00	24.30
505UZ	24.72	52.96	12.5	20	18	8.5	0.94		11.62	27.00	3.309	1.000	2.835		3.875	10.00	4.00	24.30
5010USS	24.72	50.42	12.5	20	32	8.5	0.94		4.75	27.00	2.021	0.625	2.835		2.375	2.375	4.00	24.30
5010US	24.72	50.42	12.5	20	32	8.5	0.94		6.25	27.00	3.134	0.875	2.835		3.625	5.00	4.00	24.30
5010UZ	24.72	57.29	12.5	20	32	8.5	0.94	11.62	27.00	3.817	1.000	2.835	4.375	10.00	4.00	24.30		
586T	24.72	66.34	12.5	23	25	10	1.18	6.25	34.17	3.817	1.000	2.835	4.375	8.661	2-NPT3	22.22		
587T	24.72	78.15	12.5	23	25	10	1.18	11.62	34.17	3.817	1.000	2.835	4.375	8.661	2-NPT3	22.22		
5810U2	29.92	71.68	14.5	23	36/32	10	1.20	6.25	30.76	3.134	0.875	2.835	3.625	5.00	4-NPT2	31.10		
5810U2	29.92	76.60	14.5	23	36/32	10	1.20	11.62	30.76	4.550	1.250	2.835	5.250	10.00	4-NPT2	31.10		

## Mounting and Overall Dimensions for C Face-mounted or Footless Motors



Frame Size	A Max	C	D	2E	2F	BA	H	N-W	O	R	S	T	U	ES Min	AA NPT	AB	AJ	AK	BB	BC	BD	No.	BF											
143T		12.99	3.50	5.5	4.00	2.75	0.34	2.25	6.89	0.771	0.188	1.421	0.875	1.41	0.75	6.10	5.875	5.875	0.16	+0.12	6.5	4	3/8-16											
145T	5.00																																	
182T		15.15	4.50	7.5	4.50	3.50	0.41	2.75	9.17	0.986	0.250	1.700	1.125	1.78	0.75	7.87	7.25	7.25	0.25	+0.12	9	4	1/2-13											
184T	5.50																																	
213T		20.47	5.25	8.5	5.50	4.25	3.38	10.74	1.201	0.312	1.700	1.375	2.41	1.00	8.66	7.25	7.25	0.25	+0.25	9	4	1/2-13												
215T	7.00																																	
254T		12.2	24.90	6.25	8.25	4.75	4.00	12.9	1.416	0.375	1.700	1.625	2.91	1.25	10.24	7.25	7.25	0.25	+0.25	10	4	1/2-13												
256T	10.00																																	
284T		13.74	7.00	11.0	9.50	4.75	0.53	4.62	14.33	1.591	0.500	2.047	1.875	3.28	1.5	12.20	9	9	0.25	+0.25	11.25	4	1/2-13											
284TS	28.51				3.25																			1.416	0.375	1.625	1.91	9	9	0.25	+0.25	11.25	4	1/2-13
286T	29.88				4.62																			1.591	0.500	1.875	3.28	9	9	0.25	+0.25	11.25	4	1/2-13
286TS	29.88				3.25																			1.416	0.375	1.625	1.91	9	9	0.25	+0.25	11.25	4	1/2-13
324T		15.28	8.00	12.5	10.50	5.25	0.66	5.25	16.82	1.845	0.500	2.400	2.125	3.91	2.00	13.39	11	11	0.25	+0.25	14	4	5/8-11											
324TS	26.60				3.75																			1.591	2.03	1.875	2.03	11	11	0.25	+0.25	14	4	5/8-11
326T	28.10				5.25																			1.845	0.500	2.125	3.91	11	11	0.25	+0.25	14	4	5/8-11
326TS	28.10				3.75																			1.591	2.03	1.875	2.03	11	11	0.25	+0.25	14	4	5/8-11
364T		17.13	9.00	14.0	11.25	5.88	0.66	5.88	17.46	2.021	0.625	2.835	2.375	4.28	3.00	17.32	11	11	0.25	+0.25	14	8	5/8-11											
364TS	35.14				3.75																			1.591	0.500	1.875	2.03	11	11	0.25	+0.25	14	8	5/8-11
365T	37.27				5.88																			2.021	0.625	2.375	4.28	11	11	0.25	+0.25	14	8	5/8-11
365TS	35.14				3.75																			1.591	0.500	1.875	2.03	11	11	0.25	+0.25	14	8	5/8-11
404T		19.06	10.00	16.0	12.25	6.63	0.66	7.25	21.08	2.450	0.750	2.835	2.875	5.65	3.00	18.70	11	11	0.25	+0.25	15.5	8	5/8-11											
404TS	35.27				4.25																			1.845	0.500	2.125	2.78	11	11	0.25	+0.25	15.5	8	5/8-11
405T	39.77				7.25																			2.450	0.750	2.875	5.65	11	11	0.25	+0.25	15.5	8	5/8-11
405TS	36.77				4.25																			1.845	0.500	2.125	2.78	11	11	0.25	+0.25	15.5	8	5/8-11
444T		22.52	11.00	18.0	14.50	7.50	0.81	8.50	23.4	2.880	0.875	2.835	3.375	6.91	3.00	19.68	14	14	0.25	+0.25	18	8	5/8-11											
444TS-2	39.89				4.75																			2.021	0.625	2.375	3.03	14	14	0.25	+0.25	18	8	5/8-11
445T					8.50																			2.880	0.875	3.375	6.91	14	14	0.25	+0.25	18	8	5/8-11
445TS-2	81.14				4.75																			2.021	0.625	2.375	3.03	14	14	0.25	+0.25	18	8	5/8-11
447T		22.52	11.00	18.0	20.00	7.50	0.81	8.50	23.4	2.880	0.875	2.835	3.375	6.91	3.00	22.80	14	14	0.25	+0.25	18	8	5/8-11											
447TS-2	39.89				4.75																			2.021	0.625	2.375	3.03	14	14	0.25	+0.25	18	8	5/8-11
449T	41.89				8.50																			2.880	0.875	3.375	6.91	14	14	0.25	+0.25	18	8	5/8-11
449TS-2	83.14				4.75																			2.021	0.625	2.375	3.03	14	14	0.25	+0.25	18	8	5/8-11

## Mounting and Overall Dimensions for D Face-mounted or Footless Motors



Frame Size	A Max	C	D	2E	2F	BA	H	N-W	O	R	S	T	U	ES Min	AA NPT	AB	AJ	AK	BB	BC	BD	No.	BF			
143T		12.99	3.50	5.5	4.00	2.75	0.34	2.25	6.89	0.771	0.188	1.421	0.875	1.41	0.75	6.10	5.875	5.875	0.16	+0.12	6.5	4	3/8-16			
145T					5.00																					
182T		15.15	4.50	7.5	4.50	3.50	0.41	2.75	9.17	0.986	0.250	1.700	1.125	1.78	0.75	7.87	7.25	7.25	0.25	+0.12	9	4	1/2-13			
184T					5.50																					
213T		20.47	5.25	8.5	5.50	4.25	3.38	10.74	1.201	0.312	1.700	1.375	2.41	1.00	8.66	7.25	7.25	0.25	+0.25	9	4	1/2-13				
215T					7.00																					
254T	12.2	24.90	6.25	10.0	8.25	4.75	4.00	12.9	1.416	0.375	1.700	1.625	2.91	1.25	10.24	7.25	7.25	0.25	+0.25	10	4	1/2-13				
256T					10.00																					
284T	13.74	28.51	7.00	11.0	9.50	4.75	0.53	4.62	14.33	1.591	0.500	2.047	1.875	3.28	1.5	12.20	9	9	0.25	+0.25	11.25	4	1/2-13			
284TS																								3.25	1.416	0.375
286T					29.88			11.00		3.25	1.591		0.500	1.875			3.28	1.625	1.91	9	9	0.25	+0.25	11.25	4	1/2-13
286TS					29.88																					
324T	15.28	26.60	8.00	12.5	10.50	5.25	0.66	5.25	16.82	1.845	0.500	2.400	2.125	3.91	2.00	13.39	11	11	0.25	+0.25	14	4	5/8-11			
324TS																								3.75	1.591	0.500
326T					28.10			12.00		5.25	1.845		0.500	2.125			3.91	1.875	2.03	11	11	0.25	+0.25	14	4	5/8-11
326TS					28.10																					
364T	17.13	37.27	9.00	14.0	11.25	5.88	0.66	5.88	17.46	2.021	0.625	2.835	2.375	4.28	3.00	17.32	11	11	0.25	+0.25	14	8	5/8-11			
364TS																								3.75	1.591	0.500
365T					37.27			12.25		5.88	2.021		0.625	2.375			4.28	1.875	2.03	11	11	0.25	+0.25	14	8	5/8-11
365TS					35.14																					
404T	19.06	38.27	10.00	16.0	12.25	6.63	0.66	7.25	21.08	2.450	0.750	2.835	2.875	5.65	3.00	18.70	11	11	0.25	+0.25	15.5	8	5/8-11			
404TS																								4.25	1.845	0.500
405T					39.77			13.75		7.25	2.450		0.750	2.875			5.65	2.125	2.78	11	11	0.25	+0.25	15.5	8	5/8-11
405TS					36.77																					
444T	22.52	81.14	11.00	18.0	14.50	7.50	0.81	8.50	23.4	2.880	0.875	2.835	3.375	6.91	3.00	19.68	14	14	0.25	+0.25	18	8	5/8-11			
444TS-2																								4.75	2.021	0.625
445T					8.50			2.880		0.875	3.375		6.91	14			14	0.25	+0.25	18	8	5/8-11				
445TS																							4.75	2.021	0.625	2.375
447T		83.14	11.00	18.0	20.00	7.50	0.81	0.81	8.50	23.4	2.880	0.875	2.835	3.375	6.91	3.00	22.80	14	14	0.25	+0.25	18	8	5/8-11		
447TS-2																									4.75	2.021
449T					41.89				8.50		2.880	0.875		3.375	6.91			14	14	0.25	+0.25	18	8	5/8-11		
449TS-2																									4.75	2.021



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