

Technical Note

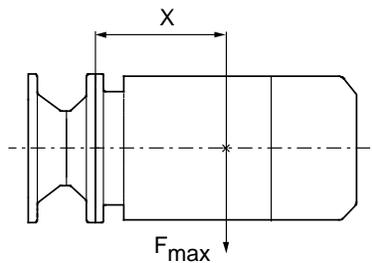
Mounting NEMA C-Face Motors to AM Adapters

Mounting a NEMA C-Face motor to an AM adapter requires the following steps:

- Checking the permissible loads due to the motor mass
- Mounting the coupling to the motor shaft
- Mounting the motor to the AM adapter

Permissible loads due to motor mass

High loads may occur on the AM adapter from supporting the motor. Knowing the motor's center of mass, check the tables below to confirm the loading of the adapter is not excessive.



Gear unit series R..7, F..7, K..7, K..9 and S..7:

AM Adapter Size (NEMA)	X ¹⁾ (mm)	F _{max} ¹⁾ (lb)
56	77	92
143/145	113	85
182/184	144	396
2/13/215 ²⁾	186	280
213/215		830
254 - 286	251	975
324 - 365	297	1180

Gear unit series SPIROPLAN® W37-47:

AM Adapter Size (NEMA)	X ¹⁾ (mm)	F _{max} ¹⁾ (lb)
56	115	27
143/145	151	57

1) The maximum permissible weight of the attached motor, F_{max}, must be reduced linearly as the center of the gravity distance, x, increases. If this distance is reduced, the maximum permissible weight F_{max} cannot be increased.

2) Diameter of the AM adapter output flange = 160mm.

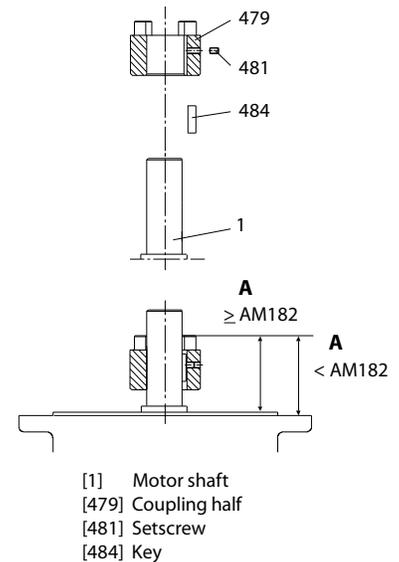
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Mounting the coupling to the motor shaft

1. Clean the motor shaft and flange surfaces of the motor and the adapter.

Note: To avoid contact corrosion, we recommend applying corrosion-inhibiting paste to the motor shaft before mounting the coupling half.

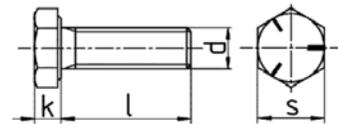
2. Remove the key from the motor shaft and replace it with the supplied key [484].
3. Heat the coupling half [479] to approximately 175-210°F (80-100°C) and push the coupling half onto the motor shaft per the dimension A in the table below.
4. Secure the key and coupling half using the setscrew [481] and tightening torque, T_A , according to the table below.
5. Re-check the dimension A.



NEMA Size	56	143/145	182/184	213/215	254/256	284/286	324/326	364/365
A (mm)	46	43	55	63.5	78.5	85.5	107	107
T_A (lb _r -ft)	1.1	1.1	3.5	3.5	7.4	12.5	12.5	12.5
Thread #481	M4	M4	M6	M6	M8	M10	M10	M10

Mounting the motor to the AM adapter

1. To prevent ingress of contaminants to the AM adapter housing, apply a suitable sealant to the contact surfaces between the adapter and motor.
2. Mount the motor on the adapter. Ensure that the jaws of the motor coupling engage the rubber spider in the jaws of the adapter coupling.
3. Fasten the motor to the adapter using the ASME B18.2.1 screws listed below.



NEMA Size	SEW p/n	d [in]	l [in]	k [in]	s [in]	Material	SAE strength class	Surface Protection	Torque	
									Nm	lb _r -ft
56	08069905	3/8-16	1	1/4	9/16	Steel	Grade 5	Galvanized 5 μm min	38	28
143/145									92	68
182/184									92	68
213/215	08069913	1/2-13	1-1/4	11/32	3/4	Steel	Grade 5	Galvanized 5 μm min	92	68
254/256									92	68
284/286	08069573	5/8-11	1-3/4	27/64	15/16	Steel	Grade 5	Galvanized 5 μm min	183	135
324/326									183	135
364/365									183	135