

REULAND®

DIRECT ACTING MAGNETIC DISC BRAKE



"ONLY ONE MOVING PART"

SIMPLE / DIRECT ACTING / TROUBLE FREE OPERATION

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THE WORLD'S SECOND SIMPLEST BRAKE DESIGN

Concept / Design / Reality

SEVEN MAJOR PARTS,
ONLY ONE OF THEM MOVES.



— CONCEPT —

Create a Simple, Trouble Free, Low Maintenance, Electro-Magnetic Brake without Linkages and Levers

— DESIGN —

BRAKE ON: The instant current is shut off the spring pressure on the armature forces the brake disc against the housing, leaving an air gap between the Magnet and Armature.

BRAKE OFF: The instant that current is applied the Magnet Attracts the Armature automatically releasing the brake disc leaving an air gap between lining and housing.

HEAVY DUTY BRAKE LINING:

- Tough durable asbestos free
- Spring automatically compensates for lining wear
- Safety stops automatically prevent the armature from pressing the disc beyond its maximum wear point

SPLINE TYPE HUB:

- Reduces disc stress by distributing over a maximum hub-lining contact area
- Eliminates lining fractures
- Prevents the loosening or “working free” between disc and hub

STANDARD FEATURES

- Operation: spring-set
- Magnetically released
- Torque Ratings: 1.5 Ft.-Lbs. to 500 Ft.Lbs.
- Standard AC & DC voltages
- Insulation: Class B
- Lead Wire Class H
- Enclosure: IP2 rated
- Duty Rating: Continuous
- Mounting: NEMA C-Face (56C thru 440TC)
- Housing: Cast Iron

OPTIONAL FEATURES

- Space Heater
- Enclosures: IP54, Marine Duty IEEE-45
- Moisture protection
- Insulation: Class F or H
- Motor thru shaft for extension beyond brake cover
- Special Brake Hubs: SAE (Inch) and IEC (Metric)
- Double NEMA C-Face: For mounting between motor and reducer

— REALITY —

- Reliable, heavy duty, trouble-free operation
- Low maintenance
- No linkages and levers
- Second simplest brake design

Nema "C" Face – X Series

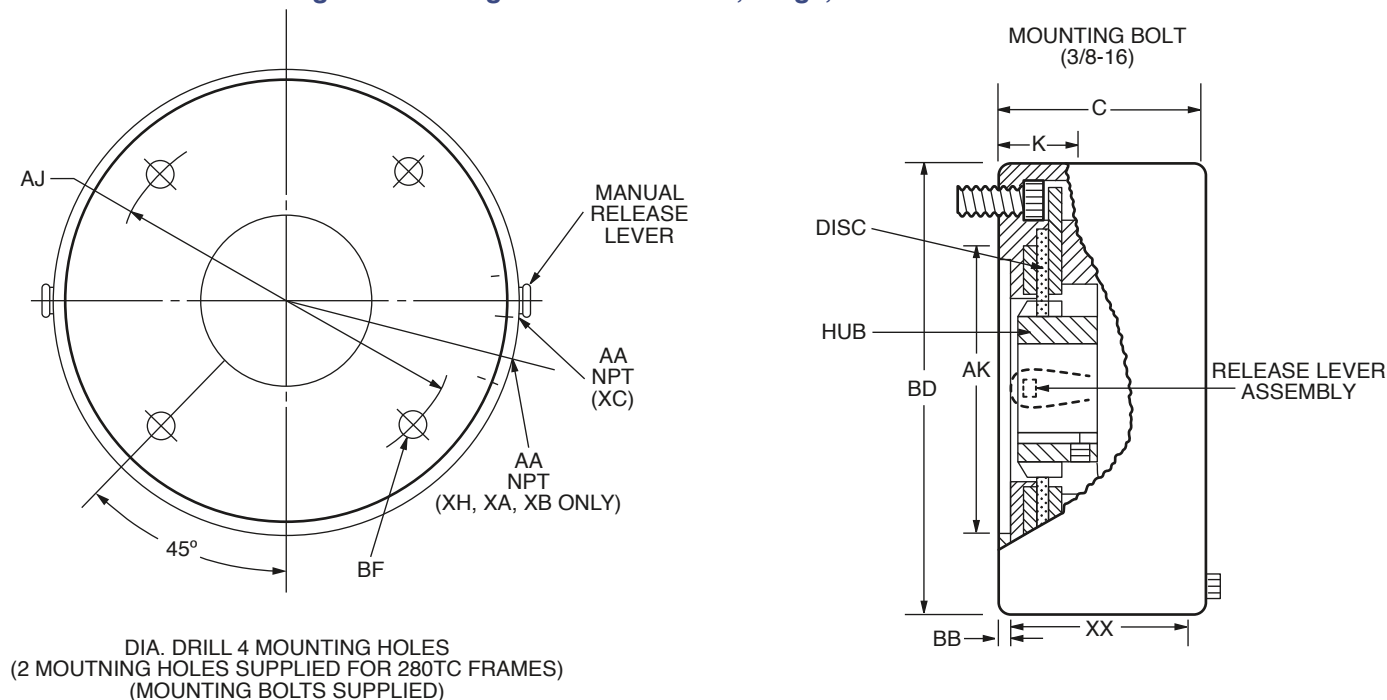
SPECIFICATIONS



MODEL	NOMINAL STATIC TORQUE (FT-LBS)	NEMA MOTOR FRAME	NEMA C-FACE DIRECT MOUNT*	APPROXIMATE SHIPPING WEIGHT
XH	1.5 - 3 - 6 - 10	56C THRU 145TC	YES - ALL	13 LBS.
XA	3 - 6 - 10 - 15	182TC THRU 256TC	YES - ALL	23 LBS.
XB	15 - 25 - 35	182TC THRU 256TC	YES - ALL	26 LBS.
XC	50 - 75	213TC THRU 286TC	284TC / 286TC ONLY	85 LBS.
XN	75 - 90 - 105 - 125 - 150 - 175 - 230	254TC THRU 364TC	284TC / 286TC ONLY	79 LBS.
XP	230 - 330 - 440 - 500	284TC THRU 440TC	324TC THRU 405TC ONLY	149 LBS.

*Motor frame adapter required for other than frame sizes noted.

*X- Series Brake mounting is interchangeable with Stearns, Dings, and other Nema "C" Face mounted brakes.



AVAILABLE STANDARD BORES											
MODEL XH		MODEL XA		MODEL XB		MODEL XC		MODEL XN		MODEL XP	
BORE	KEYWAY	BORE	KEYWAY	BORE	KEYWAY	BORE	KEYWAY	BORE	KEYWAY	BORE	KEYWAY
0.625	3/16	0.625	1/8	0.75	3/16	1.375	5/16	1.500	3/8	1.625	3/8
0.750	3/16	0.75	3/16	0.875	3/16	1.625	3/8	1.625	3/8	1.750	3/8
0.875	3/16	0.875	3/16	1.125	1/4	1.875	1/2	1.750	3/8	1.875	1/2
1.000	1/4	1.125	1/4	1.375	5/16			1.875	1/2		
		1.375	5/16	1.625	3/8						
		1.625	3/8								

MODEL	C	P	AA	AJ	AK	BB	BD	BF	XX	K
XH	.322	7.00	.50	5.88	4.500	.19	6.94	13/22	2.75	1.31
XA	3.69	8.62		7.25	8.500		8.75	17/32	3.06	.44
XB	4.94			9.00	10.500		10.88		4.31	
XC	6.31	11.00		7.25	8.500	.22	10.88		5.62	2.50
XC *										

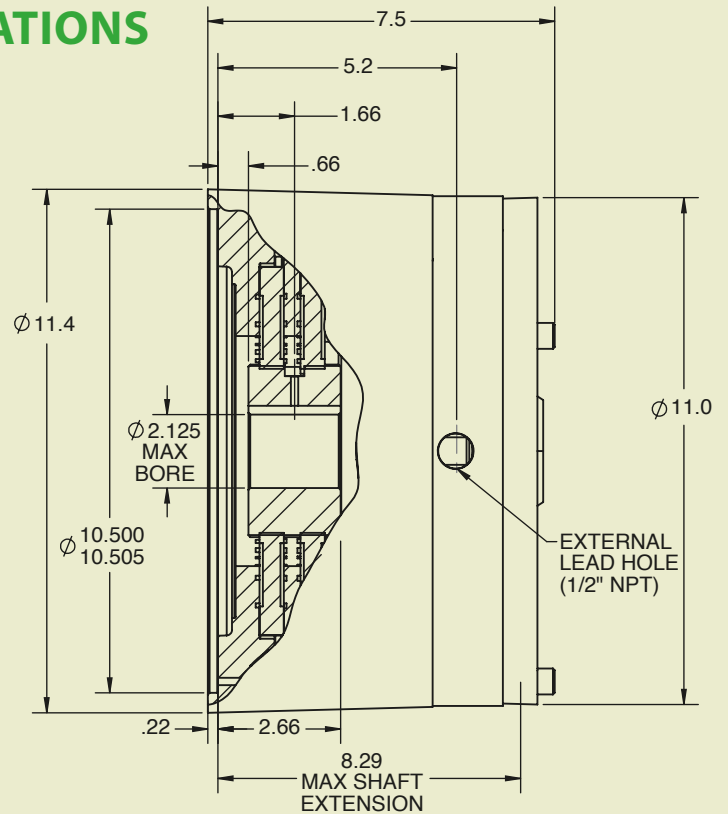
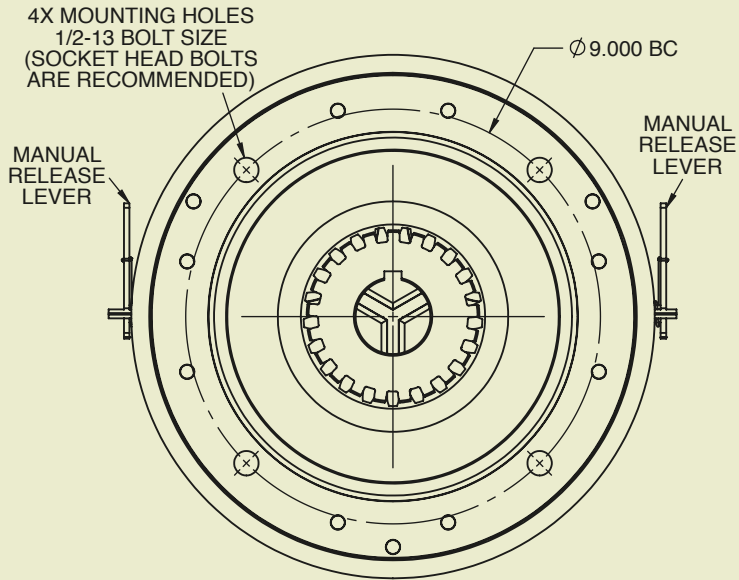
*For motor frames 213TC thru 256TC

Nema "C" Face – XN Series

DC Rectified Voltage

Rectifier Package Supplied with Brake
in Separate Enclosure
Contact Factory for Enclosure
Dimensional Drawing Number: 01451

SPECIFICATIONS

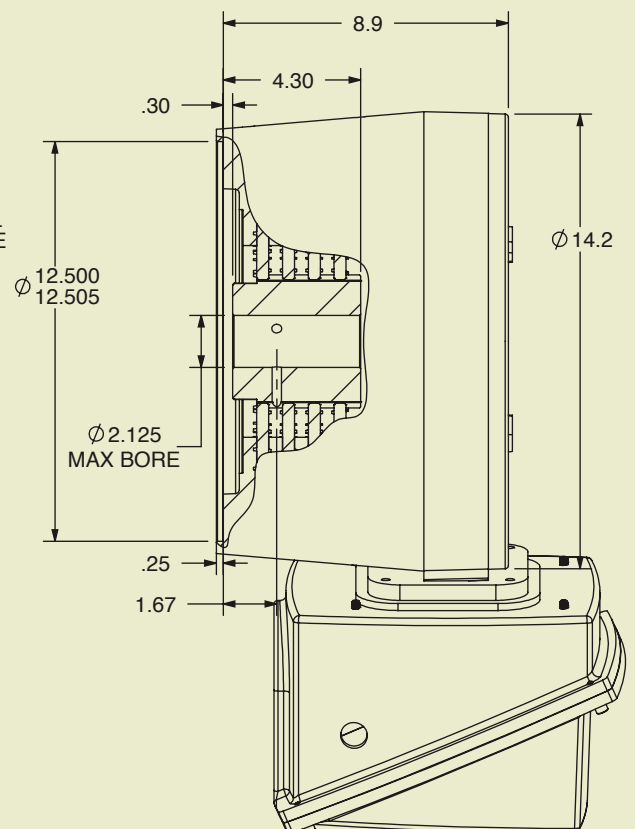
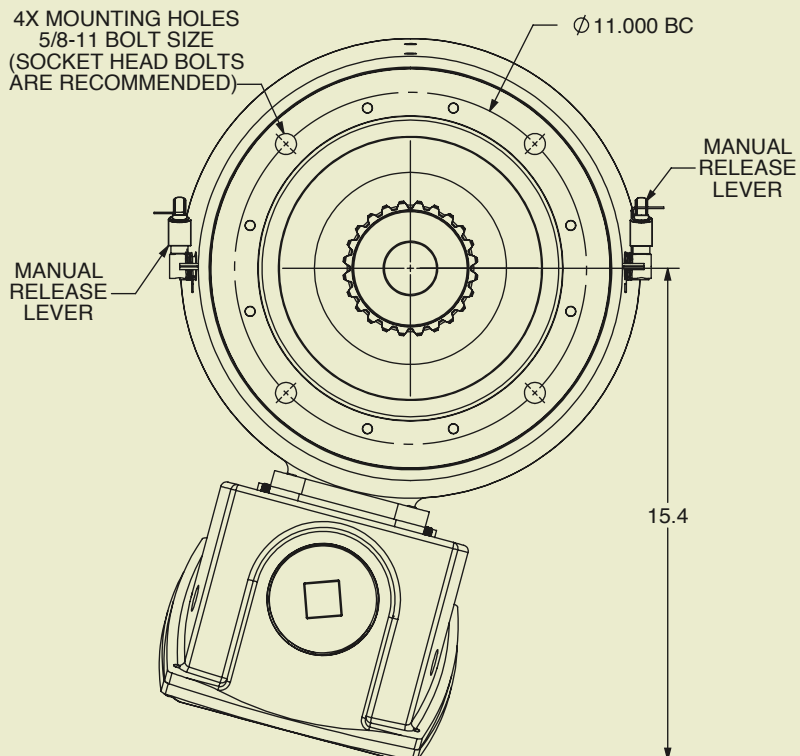


Nema "C" Face – XP Series

DC Rectified Voltage

Rectifier Package Supplied with Brake
and Mounted Inside Brake Terminal Box

SPECIFICATIONS

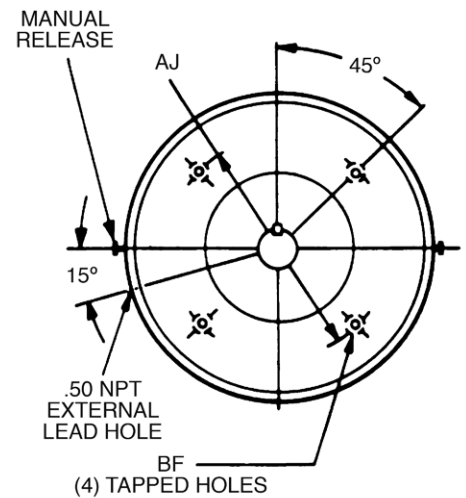
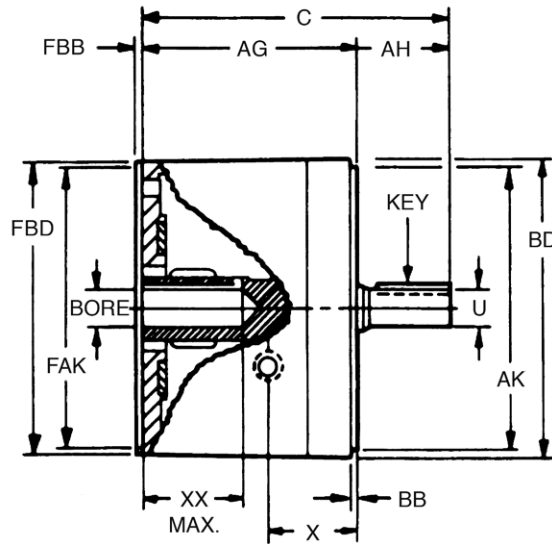
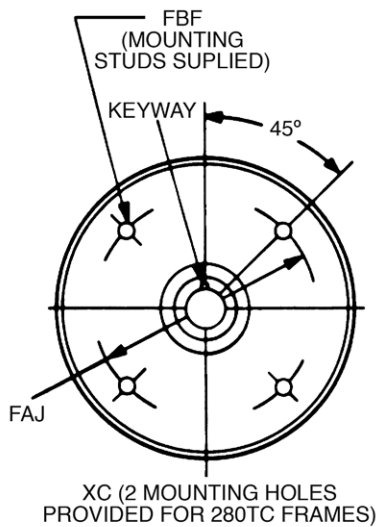


Nema Double "C" Face – X Series

SPECIFICATIONS



MODEL	NOMINAL STATIC TORQUE (LBS./FEET)	NEMA MOTOR FRAME	APPROXIMATE SHIPPING WEIGHT
XH	1.5 - 3 - 6 - 10	56C thru 145TC	22 lbs.
XA	3 - 6 - 10 - 15	180TC thru 210TC	27 lbs.
XB	15 - 25 - 35		29 lbs.
XC	50 - 75	213TC thru 286TC	80 lbs.



AVAILABLE STANDARD BORES					
MODEL XH - XA		MODEL XA - XB		MODEL XC	
BORE	KEYWAY	BORE	KEYWAY	BORE	KEYWAY
.625	3/16	1.125	1/4	1.375	5/16
.750		1.375	5/16	1.625	3/8
.875		—	—	1.875	1/2
1.000	1/4	—	—	—	—

MODEL	FRAME	C	U	BB	KEY	AG	AH	AK	BF	BD	FBD	FAK	FBF	XX	FBB	X	FAJ	AJ	
XH	56C	6.31	.6250	.12	.19	4.25	2.06	4.500	3/8-16	7.00	6.94	4.50	13/32	2.25		1.88	5.88	5.88	
	140TC	6.38	.8750				2.12												
XA	180TC	7.62	1.1250	.25	.25	5.00	2.62	4.500 or 8.500	1/2-13	9.00	8.81	4.500 or 8.500	17/32	3.19	.19	2.75	7.25	7.25	
	210TC	8.12	1.3750		.31		3.12												
XB	180TC	8.88	1.1250		.25	6.25	2.62												3.12
	210TC	9.38	1.3750		.31														
XC	210TC	10.25	1.3750		.31	7.12	3.12	8.500		11.12	10.88	8.500							
	250TC	10.88	1.6250		.38		3.75							10.500					
	280TC	11.50	1.8750		.50		4.38												

About REULAND®

REULAND® traces its history back to the 1930's when Frank Reuland, still in high school, rebuilt and repaired motors in his garage in Alhambra, California. The quality of his work attracted business to the extent that within four years, REULAND® was the largest repair shop in the area, employing ten electric motor repair journeymen. As the business grew, Frank enlisted the help of his brother, Howard, whose talent in management complemented Frank's mechanical aptitude.

Today, REULAND® looks forward to continued growth through the manufacture of quality products and development of new technologies to meet the ongoing needs of its customers in an expanding market.



Original plant in Alhambra, CA (1930)



Alhambra, CA (1945)



Howell, MI (Current Facility)



City of Industry, CA (Current Facility)

REULAND®

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