

POTENCIAS EN HP MAXIMOS ADMISIBLES A 1800 RPM DE ENTRADA Y FACTOR DE SERVICIO K=1, DOBLE REDUCCION

RED TOT	121	143	165	195	231	273	319	377	473	559	649	731	841	1003	1247	1479	1849	2065	2537	3045
RED X RED	11x11	13x11	15x11	15x13	21x11	21x13	29x11	29x13	43x11	43x13	59x11	43x17	29x29	59x17	43x29	87x17	43x43	59x35	59x43	87x35
610/09	0.51	0.46	0.46	0.39	0.34	0.28	0.24	0.20	0.16	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
611/09	1.14	1.03	0.91	0.76	0.64	0.55														
613/09	1.64	1.58	1.37	1.17	0.98	0.83	0.71	0.60												
614/09		1.63	1.62	1.38	1.30	1.10	0.95	0.80	0.64	0.54			0.36							
614/10	2.33	2.09	1.84	1.56	1.31	1.11														
616/09					1.78	1.68	1.66	1.42	1.14	0.96	0.83	0.74	0.64	0.54	0.54	0.54	0.54	0.27	0.27	0.27
616/10	4.13	3.70	3.24	2.76	2.32	1.97	1.69	1.42												
616/11	4.42	3.74																		
617/09									1.60	1.42	1.21	1.11	0.92	0.82	0.66	0.55	0.54	0.54	0.54	0.27
617/10			4.10	3.61	3.54	3.00	2.48	2.17	1.72	1.46	1.25		0.97							
617/11	6.22	5.67	4.69	4.17	3.54		2.56													
618/10					3.75	3.58	3.53	3.15	2.55	2.16	1.85	1.65	1.43	1.21	1.00	1.00	1.00	1.00	0.54	0.54
618/13	8.19	8.23	7.31	6.20	5.23	4.42	3.78	3.20			1.86									
619/11				7.55	6.69	5.82	4.99		3.86	3.14	2.76	2.53	2.53	1.92	1.72	1.45	1.17	1.05	1.00	1.00
619/13	12.9	11.7	10.2	9.21	9.10	7.88	6.49	5.70	4.55	3.85	3.31	2.94	2.55	2.14		1.45				
620/11															1.90		2.01	2.01	1.00	
620/13	13.2		11.9	10.5	9.31		6.70		5.30	4.42	3.81	3.38		2.95	2.95		2.01	2.01	1.00	
621/13	13.2		13.3	12.7	12.3	10.4	8.90	7.59	7.03	5.95	5.14	4.55	3.35	3.34	2.95	2.01	2.01	2.01	2.01	2.01
621/16	17.3		15.2	12.8	12.3		8.90		7.09											
622/13				13.1	13.3	12.6	11.4	10.0	8.89	7.54	6.49	5.79	4.71	4.22	3.39	2.55	2.29	2.05	2.01	2.01
622/17	22.1		19.6	16.9	16.0	13.7	11.4	9.76												
623/16	24.5		24.3	21.3	19.3	17.0	13.9	12.2	10.9	9.62	8.11	7.32	5.69	5.34	4.29	3.22	2.95	2.95	2.95	2.95
623/18	27.0		24.3	21.2																
624/16			24.4	23.3	24.4	21.7	17.6	15.6	14.3	12.5	10.4	9.53	7.35	6.89	5.55	4.08	3.74	3.35	2.95	2.95
624/18	34.3		32.3	27.3	25.5	22.0	18.2	15.6	14.5		10.5									
625/17	33.7		36.6	35.4	33.8	22.0	24.4	20.6	19.0	16.0	13.8	12.3	9.41	8.96	7.20	5.47	4.96	4.96	4.96	4.96
625/19	44.2		42.9		33.8															
626/19	57.5		52.3	46.5	42.1	37.4	30.8	27.3	24.9	21.6	18.1	16.5	12.6	12.0	9.68	7.38	7.38	7.38	7.38	7.38

CARGAS RADIALES MAXIMAS ADMISIBLES EN LIBRAS EN LA FLECHA DE SALIDA

RPM	>3	4	5	6	8	10	15	20	25	30	35	40	50	60	80	100	125	150	200	250	300
607	242	242	242	242	242	242	242	242	242	242	242	242	242	242	242	242	231	209	187		
608	396	396	396	396	396	396	396	396	396	396	396	396	396	396	396	396	385	363	330	308	286
609	748	748	748	748	748	748	748	748	748	748	748	748	748	748	748	748	726	704	620	576	546
610	1210	1210	1210	1210	1210	1210	1210	1210	1210	1210	1210	1210	1210	1210	1210	1210	1144	1078	975	913	858
611	1963	1963	1936	1936	1936	1936	1936	1936	1936	1936	1936	1936	1936	1837	1665	1551	1439	1353	1225	1135	1071
612	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2101	1956	1837	1672	1551	1441	1353	1232	1142	1071
613	3003	3003	3003	3003	3003	3003	3003	2992	2849	2684	2530	2442	2266	2123	1936	1800	1668	1573	1423	1322	1250
614	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300	3213	3091	2893	2732	2510	2332	2189	2068	1896	1782	1683
615	3520	3520	3520	3520	3520	3520	3520	3520	3520	3520	3520	3520	3370	3197	2926	2730	2556	2420	2222	2068	1958
616	4510	4510	4510	4510	4510	4510	4400	4400	4367	4136	3971	3696	3476	3150	2933	2706	2563	2310	2145	2024	
617	6380	6380	6380	6380	6380	6380	6380	5896	5478	5148	4884	4664	4334	4081	3707	3443	3190	3003	2732	2534	2378
618	8800	8800	8800	8800	8800	8580	8360	7898	7326	6908	6567	6259	5808	5478	4950	4620	4279	4026	3663		
619	11880	11880	11880	11880	11880	11660	11660	11044	10252	9680	9130	8778	8129	7678	6952	6468	5984	5643	5137		
620	17600	17600	17600	17600	17600	15510	14630	13420	12540	11902	11332	10901	10186	9662	8866	8283	7722	7326	6820		
621	19360	19360	19360	19360	19360	19360	18634	17094	15983	15158	14443	13970	12980	12320	11308	10560	9878	9039	8569		
622	31460	29040	27060	25784	23650	22880	19600	17930	16808	15950	15200	14585	13650	12960	11880	11110	10384	9823	9130		
623	39600	35860	33880	31900	29260	27500	24530	22550	20944	19910	19140	18172	17028	16126	14784	13816	12892				
624	42900	40700	37400	35860	33000	31020	27390	24860	23540	22110	21054	20240	18920	17996	16500	15389	14388				
625	52800	48400	46200	43890	40480	37620	33220	30800	28710	27060	25740	24970	23760	21923	20119	18920	17710				
626	61160	60060	56540	53570	49170	45870	40590	37180	34980	33110	31460	30250	28380	26840	24750	23100	21483				
627	44000	44000	4000	44000	44000	44000	44000	44000	44000	44000	44000	44000									

CALCULO DE DIAMETROS MINIMOS DE CATARINAS CALCULADO POR CARGAS RADIALES MAXIMAS

Cuando en la flecha de salida del reductor la transmision del par se hace mediante catarina, engrane o patea, se debe considerar el cálculo que indica el mínimo diámetro permisible

$$T = \frac{HP \times 63250}{RPM}$$

$$CRC = \frac{2T}{D} \leq \frac{CRP}{C_f \times F_s}$$

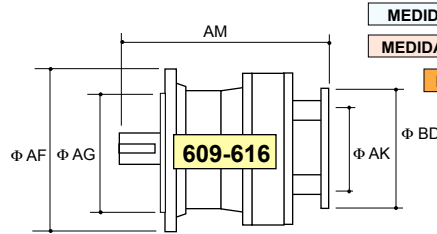
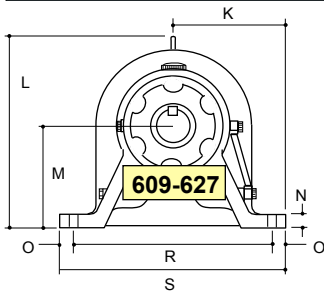
Factor de acoplamiento C _f	
1	CATARINA Y CADENA
1.2	ENGRANES
1.5	BANDAS V
2.5	BANDA PLANA

Factor de servicio F _s	
1	LIGERO SIN SOBRECARGAS
1-1.2	SOBRECARGAS LEVES
1.4-1.6	SOBRECARGAS SEVERAS



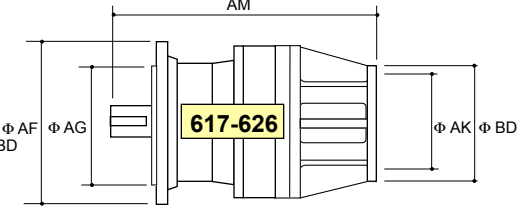
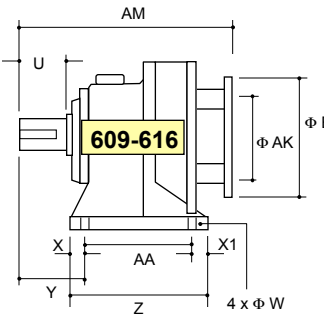
- CRC:** Carga Radial Calculada (Libras, ver fórmula)
- CRP:** Carga Radial Permissible (Libras, ver tabla)
- T:** Torque calculado (Libras-Pulgada)
- HP:** Potencia en HP del motor acoplado
- C_f:** Factor de acoplamiento (ver tabla)
- F_s:** Factor de servicio (ver tabla)
- D:** Diámetro de la catarina, engrane o patea (pulg)

DIMENSIONES GENERALES DE REDUCTORES TRANSCYKO

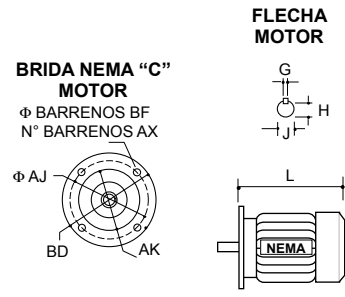
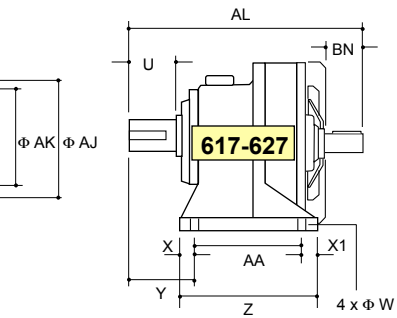
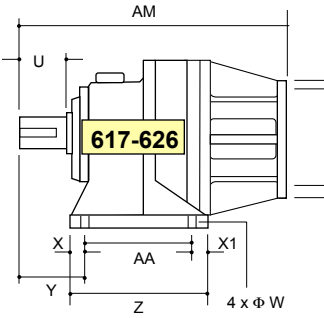
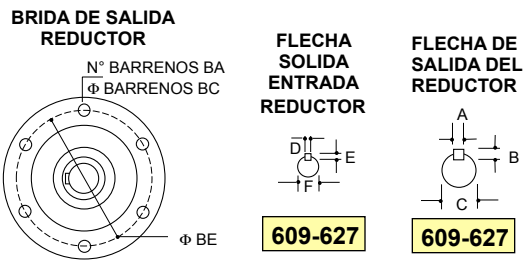


MEDIDAS EN PULGADAS
MEDIDAS EN MILIMETROS
DIMENSION APROX

NEMA	56	140	180	210	250	280	320	360
G	0.188	0.188	0.25	0.31	0.375	0.50	0.50	0.62
H	0.517	0.78	1.0	1.218	1.437	1.625	1.875	2.062
J	0.625	0.875	1.125	1.375	1.625	1.875	2.125	2.375
AK	4.5	4.5	8.5	8.5	8.5	10.5	12.5	12.5
BD	6.5	6.5	9	9	10	10.75	12.75	12.75
AX	4	4	4	4	4	4	4	8
BF	0.375	0.375	0.50	0.50	0.50	0.50	0.625	0.625
AJ	5.875	5.875	7.25	7.25	7.25	9	11	11



LOS REDUCTORES TRANSCYKO USAN MOTORES ESTANDAR CON BRIDA NEMA "C" PARA HACER MAS SIMPLE EL MANTENIMIENTO SIN NECESIDAD DEL USO DE MOTORES ESPECIALES



HP	NEMA	L Aprox.
0.25-0.5	C 48	186
0.75-2	C140	282
3-5	C180	336
7.5-10	C 210	416
15-20	C 250	538
25-30	C 280	598
40-50	C 320	663
60-75	C 360	713
100	C 405	789

	609	610	611	613	614	616	617	618	619	620	621	622	623	624	625	626	627
A	1/4"	1/4"	3/8"	1/2"	1/2"	1/2"	5/8"	3/4"	7/8"	1"	1"	1 1/4"	1 1/4"	1 1/4"	1 1/2"	1 3/4"	1 3/4"
B	1/4"	1/4"	3/8"	1/2"	1/2"	1/2"	5/8"	3/4"	7/8"	1"	1"	7/8"	1/8"	7/8"	1"	1 1/4"	1 1/4"
C	1 1/8"	1 1/8"	1 1/2"	1 7/8"	1 7/8"	2 1/4"	2 3/4"	3 1/8"	3 5/8"	3 7/8"	4 1/4"	4 5/8"	5"	5 1/2"	6 1/4"	6 5/8"	7"
D	3/16"	3/16"	3/16"	3/16"	3/16"	1/4"	5/16"	3/8"	3/8"	3/8"	1/2"	1/2"	1/2"	5/8"	3/4"	3/4"	7/8"
E	3/16"	3/16"	3/16"	3/16"	3/16"	1/4"	5/16"	3/8"	3/8"	3/8"	1/2"	1/2"	1/2"	5/8"	3/4"	3/4"	7/8"
F	5/8"	5/8"	3/4"	7/8"	7/8"	1 1/8"	1 3/8"	1 1/2"	1 3/4"	1 3/4"	1 7/8"	2 1/8"	2 1/4"	2 1/2"	3 1/8"	3 1/8"	3 1/2"
K	92	92	117	167	167	207	217	237	267	267	292	312	337	362	392	442	582
L	175	175	222	265	265	310	370	405	465	530	575	610	667	729	815	874	1161
M	100	100	120	150	150	160	200	220	250	250	265	280	300	335	375	400	540
N	12	12	15	22	22	25	30	30	35	35	40	40	45	45	50	55	60
O	17	17	22	22	22	22	27	27	27	47	52	42	47	47	57	57	57
R	150	150	190	290	290	370	380	420	480	440	480	540	580	630	670	770	1050
S	184	184	234	334	334	414	434	474	534	534	584	624	674	724	784	884	1164
U	35	35	55	70	90	90	90	110	135	165	165	165	200	200	240	300	330
W	11	11	14	18	18	18	22	22	26	26	26	33	33	39	39	45	45
X	17	17	22	27	27	46	32	32	32	42	42	52	52	52	57	57	102
X1	32	32	22	27	27	46	32	32	32	42	42	52	52	52	57	57	102
Y	60	60	82	100	120	139	125	145	170	215	210	230	260	263	320	390	485
Z	134	139	159	199	199	242	339	384	444	444	479	524	564	584	634	704	1044
AA	90	90	115	145	145	150	275	320	380	360	395	420	460	480	520	590	C/F
AB	48	48	69	76	96	89	94	110	145	204	203	210	250	250	295	360	355
AL	202	208	259	321	341	413	477	527	620	678	708	752	839	877	1040	1150	1462
AM	233	250	284	350	400	458	612	649	757	862	892	971	1058	1097	1225	1370	
AF	160	160	210	260	260	340	400	430	490	455	490	535	570	635	685	750	1160
AG	110	110	140	200	200	270	316	345	400	355	390	415	450	485	535	570	900
BN	25	25	35	40	40	45	55	65	70	82	82	82	105	105	130	130	150
BA	4	4	6	6	6	6	8	8	12	8	8	8	8	8	8	8	8
BC	11	11	11	11	11	11	14	18	18	22	24	27	27	33	33	39	39
BE	134	134	180	230	230	310	360	390	450	405	440	475	510	560	610	660	1020