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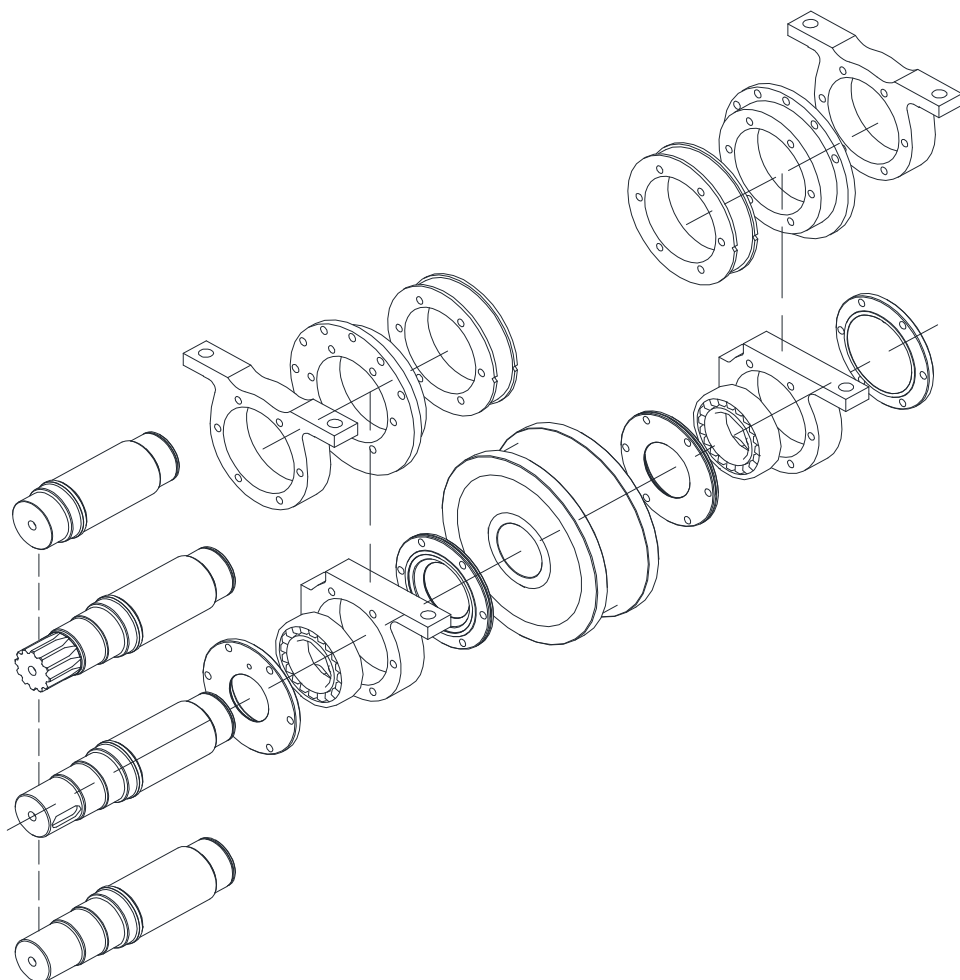
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RUOTE E GRUPPI RUOTA

WHEELS AND WHEEL ASSEMBLIES





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GRUPPI RUOTA WHEEL ASSEMBLIES

Pag. **R 1**

Ed. 04.18

Gruppi ruota completamente montati, pronti per la posa in opera

Ciascun gruppo ruota sarà così costituito:

– corpo ruota in acciaio fucinato, 42CrMo4 UNI EN 10083/1 temprato secondo cicli esclusivi SIMA, durezza HB 450÷500, profondità 13-16 mm;

– albero motore e albero folle in acciaio 36NiCrMo4 UNI EN 10083/1; in caso di necessità la sporgenza d'albero potrà essere modificata in funzione delle esigenze del cliente.

– supporti e coperchietti in acciaio S355/275JR UNI EN 10025;

– cuscinetti a sfera o rulli oscillanti, serie europea;

– minuteria e quanto occorrente per un normale montaggio.

Ciascun gruppo ruota dovrà intendersi completo e pronto per il montaggio, compresi i lubrificanti di primo riempimento.

Certificazioni e collaudi

I prodotti SIMA sono controllati da personale interno. Le ruote saranno così certificate:

- certificato AC / CM di origine;
- controllo e prove di durezza sulla fascia di rotolamento;
- controllo LP sulla fascia di rotolamento;
- controllo dimensionale
- certificato di conformità all'ordine

Su richiesta potranno essere eseguiti eventuali altri controlli.

Verniciatura

Il ciclo standard prevede un'accurata spazzolatura meccanica seguita da 2 mani di vernice protettiva a smalto blu RAL 5010, spessore totale 60÷70 micron.

Cicli e/o colori differenti disponibili su richiesta.

Garanzia

I prodotti SIMA sono coperti da una garanzia totale contro difetti nei materiali e nella lavorazione per un periodo di 12 mesi dalla consegna. Durante questo periodo, ripareremo e / o sostituiremo, franco fabbrica, quelle parti che mostrano difetti nei materiali o nella lavorazione, soggetti ad un corretto allineamento delle condizioni contrattuali.

Wheel assemblies completely assembled, ready to be installed on machines

Each wheel assembly will be composed as follows:

– wheel body in forged steel, 42CrMo4 UNI EN 10083/1 hardened according to SIMA exclusive cycle, hardness HB 450÷500, depth 13-16 mm;

– drive and idle shaft in steel 36NiCrMo4 UNI EN 10083/1; the extension of the driven shaft can be modified according to the customer's necessities.

– pillow blocks and covers in steel S355/275JR UNI EN 10025;

– european series spherical or roller bearings

– ancillary and everything necessary for a normal assembly.

Each wheel assembly will be complete and ready to be installed. The first filling of lubricants is included.

Quality control program

SIMA wheels will be checked by our internal staff.

Wheels will be certified as follows:

- certificate of material origin;
- hardness check on the rolling surface;
- dye penetrants check and certificate on the tread surface;
- dimensional check;
- certificate of conformity to the order

Upon request we can carry out any other test according to the customer's necessities.

Painting

The standard cycle foresees careful mechanical brushing and washing by diluent for mechanical parts, followed by 2 coats in blue paint RAL 5010, total thickness 60÷70 micron.

Different cycles and/or colours available upon request.

Guarantee

SIMA products are covered by full guarantee against defects in materials and workmanship for a period of 12 months from delivery. During this period, we will repair and / or replace, ex works, those parts that show defects in materials or workmanship, subject to a correct alignment of the contractual conditions.



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CORPI RUOTA

WHEELS BODY

Pag. **R 2**

Ed. 04.18

CORPI RUOTA

La SIMA produce CORPI RUOTA in esecuzione FUCINATA utilizzando materiali secondo normativa EN 10083 in acciaio da bonifica quali:

- C45
- 42CrMo4
- 36NiCrMo4
- AISI 316L (amagnetico)

con forma costruttiva diversa secondo disegno del cliente.

In caso di ruote (per ricambio) in esecuzione fusa, siamo in grado di fornirle in esecuzione fucinata, sottoponendole alla supervisione del cliente. Abbiamo operato con diversi costruttori di carriponte e gru portuali, pertanto, siamo in grado di fornire i ricambi di corpi ruota con vari profili, da quello ferroviario alle sagome più usate quali:

WHEELS BODY

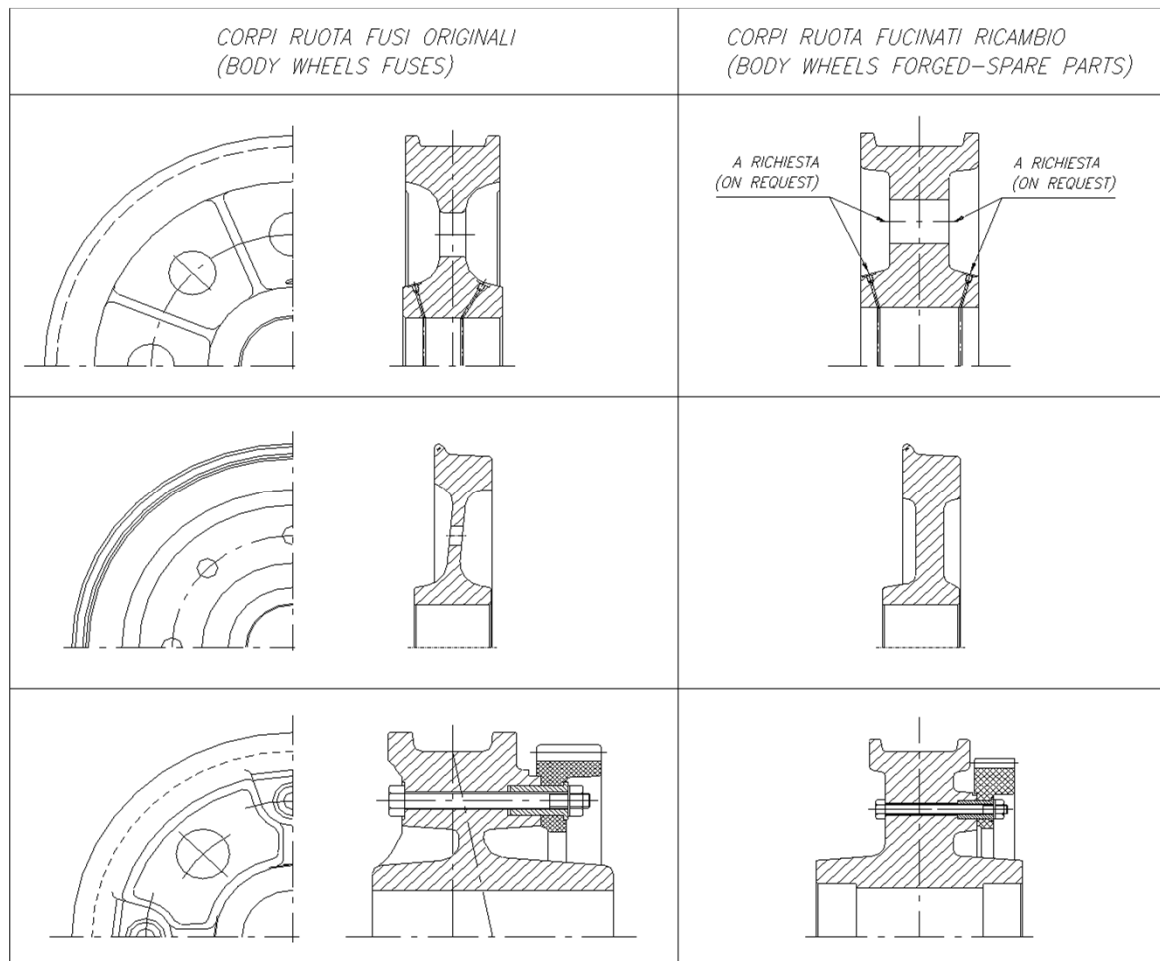
SIMA produces WHEELS BODY in FORGED execution using materials according to standards EN-10083 in quenched and tempered steel such as:

- C45
- 42CrMo4
- 36NiCrMo4
- AISI 316L (nonmagnetic)

with different construction shape according to customer's drawing.

In case the wheels (for spare parts) in fused execution, we can supply them in forged execution, submitting them to the supervision of the customer.

We have operated with different, builders of bridge cranes and harbour cranes, therefore, we can supply spare parts for wheel bodies with various profiles, from railway one to the more different shapes use them as:





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CORPI RUOTA

WHEEL BODY

Pag. **R 3**

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La presente tabella è stata compilata secondo le indicazioni della FEM 1001 3^aed. del 1998 sez.4, riguardante la «Portata media del corpo ruota», mediante la seguente formula:

$$C_m = \frac{2P_{\max} + P_{\min}}{3} \leq b \times D \times p \times C_1 \times C_2$$

dove:

b = larghezza utile della rotaia;
 D = diametro di contatto della ruota;
 C_1 = coefficiente di velocità;
 C_2 = coefficiente di classe del meccanismo (in ore di funzionamento);
 p = pressione ammissibile secondo il tipo di materiale.

Per semplificare possiamo dichiarare:

- $600 < R_m \leq 700$ N/mm², 2C45 bonificato: moltiplicare i valori per 0,9;
- $700 < R_m \leq 800$ N/mm², 42CrMo4: moltiplicare i valori per 1.
- $R_m \leq 1000$ N/mm², 42CrMo4 temprato HB450 (rotaia $R > 700$ N/mm²) moltiplicare i valori x 1,18

This chart has been filled in compliance with norm FEM 1001 3^aed. 1998 chapter 4, regarding the «Average capacity of wheel bodies», according to the formula given below:

where:

b = useful rail width;
 D = sliding contact diameter;
 C_1 = speed coefficient;
 C_2 = coefficient depending on mechanism classification (work hours);
 p = allowable pressure depending on material characteristics.

In order to simplify:

- $600 < R_m \leq 700$ N/mm², 2C45 QT: multiply figures by 0.9;
- $700 < R_m \leq 800$ N/mm², 42CrMo4: multiply figures by 1.
- $R_m \leq 1000$ N/mm², 42CrMo4 hardened HB450 (rail $R > 700$ N/mm²) multiply figures by x 1,18

La tempra non incrementa la pressione, bensì agisce sulla durata della ruota.

Hardening does not increase specific pressure, rather it positively affects wheel duration.

Portata media della ruota [kN] Average wheel capacity [kN]	RUOTA / ROTAIA WHEEL / RAIL	CLASSE UNI-ISO UNI-ISO CLASS	VELOCITÀ [m/min] SPEED [m/min]												
			10	16	20	25	31,5	40	50	63	80	100	125	160	200
Ø200×90 A45 – b=37 [mm]	M2	M3	65,04	61,46	59,67	57,88	56,09	54,30	51,92	48,93	45,95	42,96	39,38	–	–
	M4	M5	58,08	54,88	53,28	51,68	50,08	48,48	46,35	43,69	41,03	38,36	35,16	–	–
	M6		53,27	49,39	47,95	46,51	45,07	43,64	41,72	39,32	36,92	34,53	31,65	–	–
	M7	M8	46,46	43,90	42,62	41,35	40,07	38,79	37,08	34,95	32,82	30,69	28,13	–	–
Ø250×90 A45 – b=37 [mm]	M2	M3	82,80	79,07	76,83	74,59	72,35	70,12	67,88	64,90	61,17	57,44	53,71	49,23	–
	M4	M5	73,93	70,60	68,60	66,60	64,60	62,60	60,61	57,94	54,61	51,28	47,95	43,96	–
	M6		66,53	63,54	61,74	59,94	58,14	56,34	54,55	52,15	49,15	46,15	43,16	39,56	–
	M7	M8	59,14	56,48	54,88	53,28	51,68	50,08	48,48	46,35	43,69	41,03	38,36	35,16	–
Ø315×120 A55 – b=37 [mm]	M2	M3	129,17	124,59	121,17	117,74	114,31	110,88	107,45	104,02	99,45	93,73	88,02	82,30	75,44
	M4	M5	115,33	111,25	108,18	105,12	102,06	99,00	95,94	92,87	88,79	83,69	78,59	73,48	67,36
	M6		103,80	100,12	97,37	94,61	91,85	89,10	86,34	83,59	79,91	75,32	70,73	66,13	60,62
	M7	M8	92,26	89,00	86,55	84,10	81,65	79,20	76,75	71,03	66,95	62,87	58,79	58,79	53,89
Ø315×140 A75 – b=59 [mm]	M2	M3	169,35	163,36	158,86	154,37	149,87	145,37	140,88	136,39	130,39	122,89	115,40	107,91	98,91
	M4	M5	151,21	145,86	141,84	137,83	133,81	129,80	125,78	121,77	116,42	109,73	103,04	96,34	88,32
	M6		136,09	131,27	127,66	124,04	120,43	116,82	113,20	109,59	104,77	98,75	92,73	86,71	79,48
	M7	M8	121,00	116,70	113,50	110,30	107,00	103,80	100,60	97,42	93,13	87,78	82,43	77,08	70,65
Ø400×140 A75 – b=59 [mm]	M2	M3	216,95	211,24	207,44	201,73	196,02	190,31	184,60	178,89	173,18	165,57	156,05	146,54	137,02
	M4	M5	193,71	188,61	185,21	180,12	175,02	169,92	164,82	159,72	154,63	147,83	139,33	130,84	122,34
	M6		174,34	169,75	166,69	162,10	157,52	152,93	148,34	143,75	139,16	133,05	125,40	117,75	110,11
	M7	M8	155,00	150,90	148,20	144,10	140,00	135,90	131,90	127,80	123,70	118,30	111,50	104,70	97,87



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CORPI RUOTA WHEEL BODY

Pag. **R 4**

Ed. 04.18

RUOTA / ROTAIA WHEEL / RAIL	CLASSE UNI-ISO UNI-ISO CLASS	VELOCITA' [m/min] SPEED [m/min]														
		10	16	20	25	31,5	40	50	63	80	100	125	160	200	250	
Ø500×140 A75 - b=59 [mm]	M2 M3	273,57	268,81	264,06	259,3	252,16	245,02	237,89	230,75	223,61	216,48	206,96	195,07	183,17	171,28	
	M4 M5	244,26	240,01	235,77	231,52	225,14	218,77	212,40	206,03	199,65	193,29	184,79	174,17	163,54	152,93	
	M6	219,83	216,01	212,19	208,37	202,63	196,89	191,16	185,42	179,69	173,96	166,31	156,75	147,19	137,64	
	M7 M8	195,41	192,01	188,61	185,21	180,11	175,01	169,92	164,82	159,72	154,63	147,83	139,34	130,84	122,34	
Ø500×190 A100 - b=80 [mm]	M2 M3	370,94	364,49	358,04	351,59	341,91	332,24	322,56	312,88	303,21	293,53	280,63	264,5	248,37	232,24	
	M4 M5	331,20	325,44	319,68	313,92	305,28	296,64	288,00	279,36	270,72	262,08	250,56	236,16	221,76	207,36	
	M6	298,08	292,89	287,71	282,53	274,75	266,98	259,20	251,42	243,65	235,87	225,51	212,54	199,58	186,62	
	M7 M8	264,96	260,35	255,74	251,14	244,22	237,31	230,40	223,49	216,58	209,66	200,45	188,93	177,41	165,89	
Ø630×140 A75 - b=59 [mm]	M2 M3	350,69	341,7	338,7	332,71	326,72	317,72	308,73	299,74	290,75	281,75	272,76	260,77	245,79	230,8	
	M4 M5	313,12	305,09	302,41	297,06	291,71	283,68	275,65	267,63	259,60	251,56	243,54	232,83	219,46	206,07	
	M6	281,80	274,58	272,17	267,36	262,54	255,31	248,09	240,86	233,64	226,41	219,18	209,55	197,51	185,46	
	M7 M8	250,49	244,07	241,93	237,65	233,37	226,94	220,52	214,10	207,68	201,25	194,83	186,26	175,56	164,86	
Ø630×190 A100 - b=80 (A120) [mm]	M2 M3	475,52	463,33	459,26	451,13	443	430,81	418,62	406,43	394,23	382,04	369,85	353,59	333,27	312,95	
	M4 M5	424,57	413,69	410,05	402,79	395,54	384,65	373,77	362,88	351,99	341,11	330,22	315,71	297,56	279,42	
	M6	382,11	372,32	369,05	362,52	355,98	346,19	336,39	326,60	316,79	307,00	297,20	284,13	267,81	251,48	
	M7 M8	339,66	330,95	328,04	322,24	316,43	307,72	299,01	290,31	281,59	272,89	264,18	252,56	238,05	223,54	
Ø630×210 A120 - b=100 [mm]	M2 M3	594,4	579,16	574,08	563,92	553,75	538,51	523,51	508,03	492,79	477,55	462,31	441,99	416,59	391,18	
	M4 M5	530,71	517,11	512,57	503,50	494,42	480,81	467,42	453,60	439,99	426,38	412,78	394,63	371,96	349,27	
	M6	477,64	465,40	461,31	453,15	444,98	432,73	420,68	408,24	395,99	383,75	371,50	355,17	334,76	314,34	
	M7 M8	424,57	413,69	410,06	402,80	395,54	384,65	373,94	362,88	351,99	341,11	330,22	315,71	297,56	279,41	
Ø710×140 A75 - b=59 [mm]	M2 M3	—	385,09	381,72	378,34	371,58	361,45	351,31	344,56	334,42	324,29	310,78	300,64	283,75	266,86	
	M4 M5	—	343,83	340,82	337,80	331,77	322,72	313,67	307,64	298,59	289,54	277,48	268,43	253,35	238,27	
	M6	—	309,45	306,74	304,02	298,59	290,45	282,30	276,88	268,73	260,59	249,73	241,59	228,01	214,44	
	M7 M8	—	275,06	272,66	270,24	265,41	258,18	250,94	246,11	238,87	231,64	221,99	214,74	202,68	190,61	
Ø710×190 A100 - b=80 (A120) [mm]	M2 M3	—	522,16	517,58	513	503,84	490,1	476,36	467,2	453,45	439,71	421,39	407,65	384,75	361,85	
	M4 M5	—	466,21	462,13	458,04	449,86	437,59	425,32	417,14	404,87	392,60	376,24	363,97	343,53	323,08	
	M6	—	419,59	415,91	412,23	404,87	393,83	382,79	375,43	364,38	353,34	338,62	327,58	309,17	290,77	
	M7 M8	—	372,97	369,70	366,43	359,89	350,07	340,26	333,71	323,89	314,08	300,99	291,18	274,82	258,46	
Ø710×210 A120 - b=100 [mm]	M2 M3	—	652,7	646,97	641,25	629,8	612,62	595,45	583,99	566,82	549,64	526,74	509,56	480,94	452,31	
	M4 M5	—	582,77	577,65	572,54	562,32	546,98	531,65	521,42	506,09	490,75	470,30	454,96	429,41	403,85	
	M6	—	524,49	519,89	515,29	506,09	492,28	478,49	469,28	455,48	441,68	423,27	409,47	386,47	363,46	
	M7 M8	—	466,21	462,12	458,04	449,86	437,59	425,32	417,14	404,87	392,60	376,24	363,97	343,53	323,08	
Ø800×140 A75 - b=59 [mm]	M2 M3	—	437,71	433,91	430,1	422,49	414,88	403,46	392,04	380,62	369,2	357,78	346,36	331,14	312,11	
	M4 M5	—	390,81	387,42	384,02	377,22	370,43	360,23	350,04	339,84	329,64	319,45	309,25	295,66	278,67	
	M6	—	351,73	348,68	345,62	339,50	333,39	324,21	315,03	305,86	296,68	287,50	278,33	266,09	250,80	
	M7 M8	—	312,65	309,94	307,21	301,78	296,34	288,19	280,03	271,87	263,71	255,56	247,40	236,53	222,94	
Ø800×190 A100 - b=80 (A120) [mm]	M2 M3	—	593,51	588,35	583,19	572,87	562,54	547,06	531,58	516	500,61	485,13	469,65	449	423,2	
	M4 M5	—	529,92	525,31	520,71	511,49	502,27	488,45	474,63	460,71	446,97	433,15	419,33	400,89	377,86	
	M6	—	476,93	472,78	468,63	460,34	452,04	439,60	427,16	414,64	402,28	389,84	377,40	360,80	340,07	
	M7 M8	—	423,94	420,25	416,56	409,19	401,81	390,76	379,70	368,57	357,58	346,52	335,46	320,71	302,29	
Ø800×210 A120 - b=100 [mm]	M2 M3	—	741,89	735,44	728,99	716,08	703,18	683,83	664,47	645,12	625,77	606,41	587,06	561,24	529	
	M4 M5	—	662,40	656,64	650,88	639,36	627,84	610,56	593,28	576,00	558,72	541,44	524,16	501,11	472,32	
	M6	—	596,16	590,98	585,80	575,42	565,06	549,51	533,95	518,40	502,85	487,29	471,74	451,00	425,09	
	M7 M8	—	529,92	525,31	520,71	511,49	502,27	488,45	474,62	460,80	446,98	433,15	419,33	400,89	377,86	
Ø1000×190 A100 - b=80 (A120) [mm]	M2 M3	—	754,79	741,89	735,44	728,99	716,08	703,18	683,83	664,47	645,12	625,77	606,41	587,06	561,25	
	M4 M5	—	673,92	662,40	656,64	650,88	639,36	627,84	610,56	593,28	576,00	558,72	541,44	524,16	501,12	
	M6	—	606,53	596,16	590,98	585,80	575,42	565,06	549,51	533,95	518,40	502,85	487,29	471,74	451,00	
	M7 M8	—	539,14	529,92	525,31	520,71	511,49	502,27	488,45	474,62	460,80	446,98	433,15	419,33	400,89	
Ø1000×210 A120 - b=100 [mm]	M2 M3	—	943,49	927,36	919,3	911,23	895,1	878,98	854,78	830,59	806,4	782,21	758,02	733,82	701,57	
	M4 M5	—	842,40	828,00	820,80	813,60	799,20	784,80	763,20	741,60	720,00	698,40	676,80	655,20	626,40	
	M6	—	758,16	745,20	738,72	732,24	719,28	706,32	686,88	667,44	648,00	628,56	609,12	589,68	563,76	
	M7 M8	—	673,92	662,40	656,64	650,88	639,36	627,84	610,56	593,28	576,00	558,72	541,44	524,16	501,12	

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CORPI RUOTA WHEEL BODY

Pag. **R 5**

Ed. 04.18

Portata media della ruota [kN] Average wheel capacity [kN]	RUOTA / ROTAIA WHEEL / RAIL	CLASSE UNI-ISO UNI-ISO CLASS	VELOCITÀ [m/min] SPEED [m/min]													
			10	16	20	25	31,5	40	50	63	80	100	125	160	200	250
	Ø1120×190 A100 - b=80 (A120) [mm]	M2 M3	—	—	838,1	823,7	816,5	809,2	794,8	773,1	751,5	737,0	715,3	693,6	664,7	643,1
		M4 M5	—	—	748,3	735,4	729,0	722,5	709,6	690,3	670,9	658,0	638,7	619,3	593,5	574,2
		M6	—	—	673,5	661,9	656,1	650,3	638,7	621,3	603,8	592,2	574,8	557,4	534,2	516,7
		M7 M8	—	—	598,7	588,3	583,2	578,0	567,7	552,2	536,7	526,4	510,9	495,5	474,8	459,3
	Ø1120×210 A120 - b=100 [mm]	M2 M3	—	—	1047,7	1029,6	1020,6	1011,5	993,5	966,4	939,3	921,2	894,1	867,0	830,9	803,8
		M4 M5	—	—	935,4	919,3	911,2	903,2	887,0	862,9	838,7	822,5	798,3	774,1	741,9	717,7
		M6	—	—	841,9	827,4	820,1	812,9	798,3	776,6	754,8	740,3	718,5	696,7	667,7	645,9
		M7 M8	—	—	748,3	735,4	729,0	722,5	709,6	690,3	670,9	658,0	638,7	619,3	593,5	574,2
	Ø1250×190 A100 - b=80 (A120) [mm]	M2 M3	—	—	943,5	927,4	919,3	911,2	895,1	879,0	854,8	830,6	806,4	782,2	758,0	733,8
		M4 M5	—	—	842,4	828,0	820,8	813,6	799,2	784,8	763,2	741,6	720,0	698,4	676,8	655,2
		M6	—	—	758,2	745,2	738,7	732,2	719,3	706,3	686,9	667,4	648,0	628,6	609,1	589,7
		M7 M8	—	—	673,9	662,4	656,6	650,9	639,4	627,8	610,6	593,3	576,0	558,7	541,4	524,2
	Ø1250×210 A120 - b=100 [mm]	M2 M3	—	—	1179,4	1159,2	1149,1	1139,0	1118,9	1098,7	1068,5	1038,2	1008,0	977,8	947,5	917,3
		M4 M5	—	—	1053,0	1035,0	1026,0	1017,0	999,0	981,0	954,0	927,0	900,0	873,0	846,0	819,0
		M6	—	—	947,7	931,5	923,4	915,3	899,1	882,9	858,6	834,3	810,0	785,7	761,4	737,1
		M7 M8	—	—	842,4	828,0	820,8	813,6	799,2	784,8	763,2	741,6	720,0	698,4	676,8	655,2

Ciclo delle lavorazioni meccaniche e trattamenti termici

- Normalizzazione del fucinato grezzo.
- Cilindratura del fucinato.
- Controllo US (se richiesto).
- Sgrossatura della ruota con circa 4 mm di sovrametallo sulle dimensioni nominali.
- Bonifica della ruota (se necessario).
- Tornitura di prefinitura (escluso foro).
- Preriscaldamento lento sino al raggiungimento della temperatura richiesta.
- Flammatura della superficie di rotolamento e dei bordini con metodologia esclusiva SIMA.
- Raffreddamento in vasca *aquaquench* turbolenta (HB 450÷500, profondità 13-16 mm).
- Rinvenimento lento in forno elettrico computerizzato, onde raggiungere il grado di durezza richiesto.
- Controlli non distruttivi: durezza, liquidi penetranti.
- Tornitura di finitura, curando particolarmente la concentricità e l'ortogonalità fra il foro, un fianco della ruota e la fascia di rotolamento.

Cycle of mechanical processing and heat treatment

- Normalizing of the row forged steel.
- Rolling of the forged steel by turning.
- Ultrasonic (US) inspection (upon request).
- Roughing-out of the wheel with about 4 mm over nominal dimensions.
- Hardening and tempering of the wheel (if necessary).
- Pre-finishing by turning (excluding hole).
- Slow preheating of the wheel up to the required temperature.
- Flame hardening of the rolling surface and flanges with SIMA exclusive method.
- Quenching in controlled *aquaquench* water tank (HB 450÷500, depth 13-16 mm).
- Slow tempering in electrical computerised furnace, in order to achieve the hardness required on the rolling surface.
- Non-destructive tests: hardness check, dye penetrant inspection.
- Finishing by turning, with particular care on the concentricity and squareness among the hole, a side of the wheel and the rolling surface.

SERIE SERIES	CORPO RUOTA WHEEL BODY	BONIFICA HARDENING AND TEMPERING	TEMPRA HARDENING	ASSE SHAFT	SUPPORTI SUPPORTS	COPERCHI E DISTANZIALI COVERS AND SPACERS
RSP	42CrMo4	HB 300±20	HB 450÷500 13-16 mm	36NiCrMo4	S355JR	S275JR
RSR						
RSF						
RSC						
RDU	2C45	HB 260 ~	HB 450÷500 13-16 mm	2C45	—	
RC	2C45 - 42CrMo4					
RCE	2C45					
RS	2C45 - 42CrMo4					



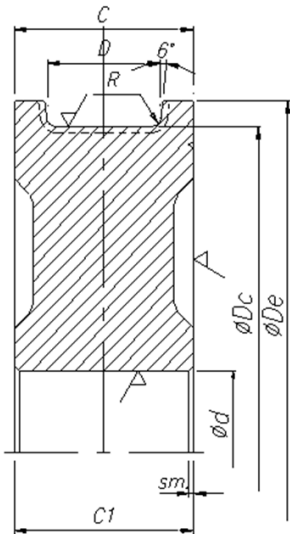
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CORPI RUOTA (FEM - AISE)

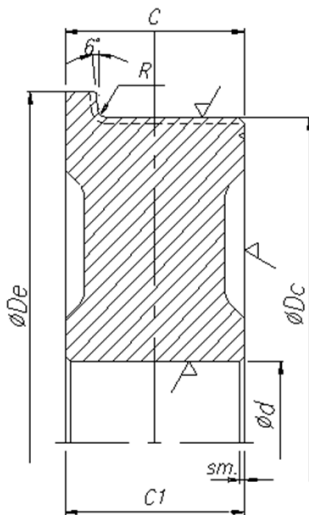
WHEELS BODY (FEM - AISE)

Pag. **R 6**

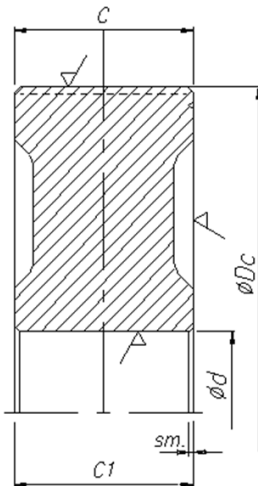
Ed. 04.18



RUOTA A DOPPIO BORDINO
(WHEEL WITH DOUBLE EDGE)



RUOTA A SINGOLO BORDINO
(WHEEL WITH SINGLE EDGE)



RUOTA PIANA
(FLAT WHEEL)

secondo normativa FEM - (FEM norms)

Dc h9	De	ROTAIA RAIL			C	D	d N7	R	sm	PESO WEIGHT kg.
		BURBACK	VIGNOLE	SPECIAL						
200	230	A45	21	S 20	90	55	58	4	1,5	21
250	280		27	S 20			75			32
315	350	A55	30	S 30	120	68	95	4	1,5	65
		A75	60	MRS 67	140	88	100			76
400	440	A75	60	MRS 67	140	88	115	6	1,5	126
500	540	A75	60	MRS 67	140	88	125	6	1,5	193
		A100		MRS 85	190	126-140	125			265
630	680	A75	60	MRS 67	140	88	145	6	2	296
		A100		MRS 85	190	126-140	160		3	406
		A120		MRS125	210	150	160		3	455
710	760	A75	60		140	88	160	6	3	370
		A100		MRS 87	190	126-140	165			520
		A120		MRS125	210	150	165			580
800	850	A75			140	88	165	6	3	466
		A100		MRS 87	190	126-140	175			631
		A120		MRS125	210	150	175			711
		A150			250	170	175			862
900	950	A100		MRS 87	190	126-140	175	6	3	570
		A120		MRS125	210	150	190			785
		A150			250	170	190			850
1000	1050	A75			140	88	190	6	3	707
		A100		MRS 87	190	126-140	200			973
		A 120		MRS125	210	150	200			1050
		A150			250	170	200			1300
1120	1170	A100		MRS 87	190	126-140	200	6	3	1220
		A 120		MRS125	210	150	210			1320
		A150			250	170	210			1630
1250	1300	A100			190	126-140	210	6	3	1520
		A 120		MRS125	210	150	230			1650
		A150			250	170	230			2040
1500	1610	120		MRS125	210	150	250	6	3	2400
		A150			250	170	250			2980

secondo normativa AISE - americana (AISE U.S.A. norms)

secondo normativa AISE - americana (AISE U.S.A. norms)										
Dc h9	De	ROTAIA RAIL	d MOZZO HUB	d N7	C	D	C1 MOZZO HUB	r	sm.	PESO WEIGHT
		SPECIAL								kg.
383	432	60	192	110	114	73	120	10	2	
457	508	175	280	100	159	110	155	10	2	
610	660	175	305	145	178	127	170	10	2	
686	737	179	330	145	178	127	185	10	2	
762	826	175	350	195	178	127	195	10	2	

✓ = finitura da unico piazzamento
(finishing with some clamping)



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GRUPPI RUOTA WHEEL ASSEMBLIES

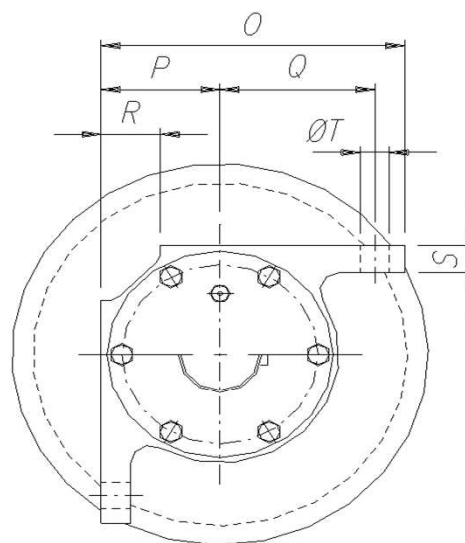
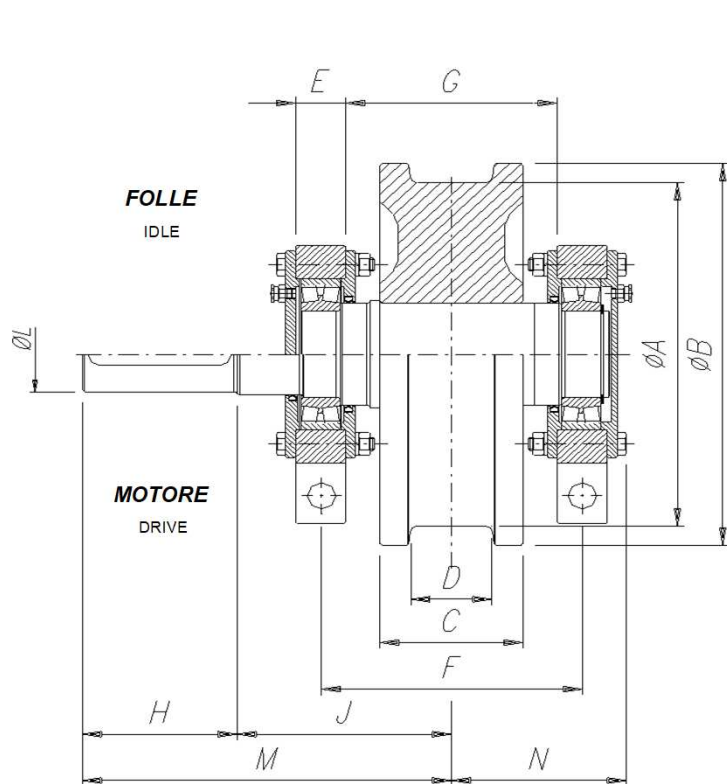
Pag. **R 7**

Ed. 04.18

SERIE
SERIES

RSP

CON SUPPORTI A SQUADRA
WITH SQUARE SUPPORTS



Le quote ØL, H e D sono modificabili a richiesta.
Dimensions ØL, H and D are changeable upon request.

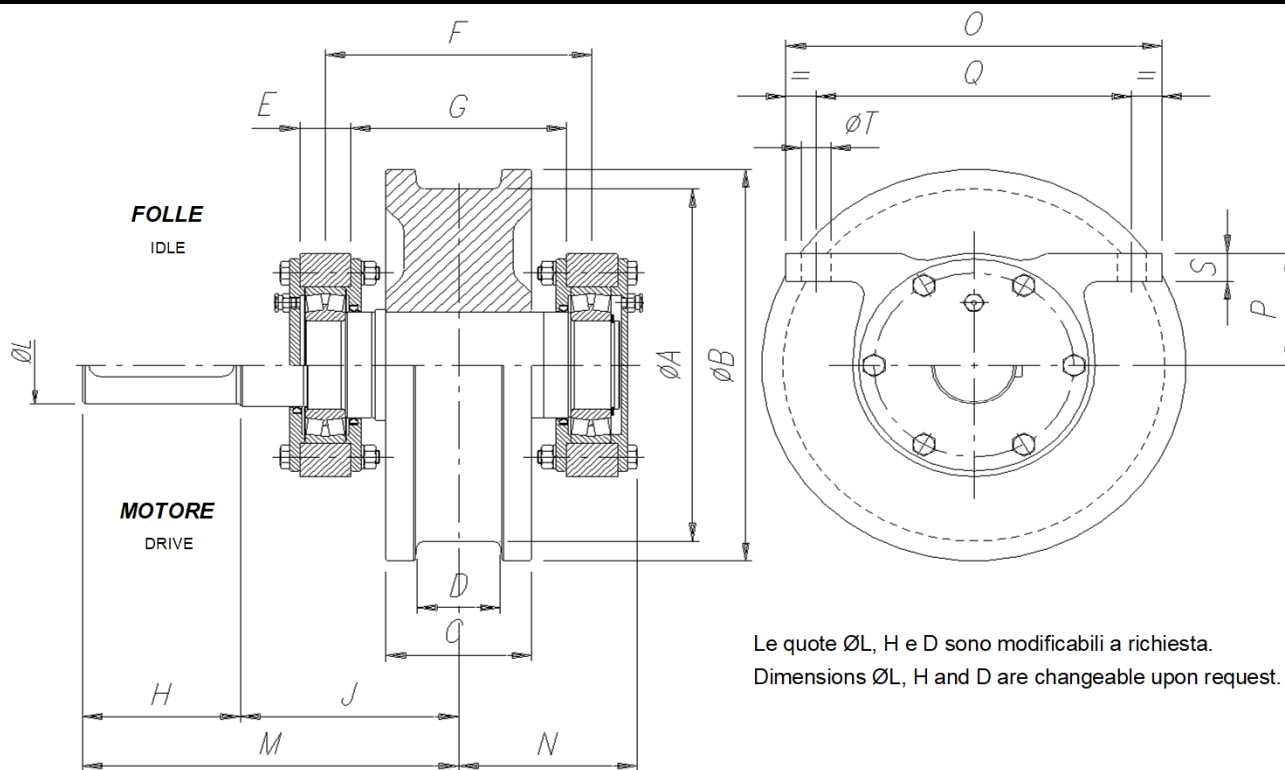
Quote in [mm]
Dimensions [mm]

AxC	ROTAIA RAIL	B	D	E	F	G	H	J	L	M	N	O	P	Q	R	S	T	PESO WEIGHT [kg]	CUSCINETTO BEARING
200x90	A45	230	55	32	190	158	80	150	45	230	130	180	70	90	35	20	18	75	22210
250x90	A45	280	55	42	190	148	130	150	55	280	135	225	90	110	45	25	22	85	22213
315x120	A55	350	68	42	220	178	130	180	70	310	155	255	100	130	50	25	24	150	22216
315x140	A75	350	88	52	240	188	150	190	80	340	170	285	115	145	55	25	24	170	22218
400x140	A75	440	88	52	250	198	180	200	90	380	180	310	125	155	60	30	26	250	22220
500x140	A75	540	88	62	260	198	180	210	100	390	185	340	135	175	65	40	28	300	22222
500x190	A100	540	126-140	82	330	248	180	250	100	430	230	340	135	175	65	40	28	280	23222
630x140	A75	680	88	72	270	198	185	225	120	410	200	375	150	190	70	40	32	580	22226
630x190	A100	680	126-140	82	330	248	230	250	130	480	230	395	160	200	80	40	32	700	22228
630x210	A120	680	150	102	370	268	230	280	130	510	257	395	160	200	80	40	32	750	23228
710x140	A75	760	88	82	290	208	230	230	130	460	208	395	160	200	80	40	32	700	22228
710x190	A100	760	126-140	82	330	248	230	250	130	480	230	420	175	210	85	40	32	800	22230
710x210	A120	760	150	105	380	275	230	285	130	515	270	420	175	210	85	40	32	860	23230
800x140	A75	850	88	82	290	208	230	230	130	460	210	420	175	210	85	40	32	900	22230
800x190	A100	850	126-140	92	340	248	230	260	150	490	245	470	190	240	95	45	38	1000	22232
800x210	A120	850	150	116	380	264	230	290	150	520	273	470	190	240	95	45	38	1050	23232
900x140	A75	950	88	92	320	228	230	250	150	480	235	470	190	240	95	45	38	1000	22232
900x190	A100	950	126-140	102	360	258	230	280	150	510	260	490	200	250	100	45	38	1200	22234
900x210	A120	950	150	120	400	280	230	310	150	540	290	490	200	250	100	45	38	1300	23234
1000x140	A75	1050	88	102	320	218	230	250	150	480	240	490	200	250	100	50	38	1200	22234
1000x190	A100	1050	126-140	102	360	258	230	270	150	500	260	510	210	260	100	50	38	1400	22236
1000x210	A120	1050	150	120	400	280	230	310	150	540	290	510	210	260	100	50	38	1600	23236
1120x190	A100	1170	126-140	102	380	278	260	295	160	555	275	540	225	270	110	50	38	1900	22238
1120x190	A120	1170	150	130	430	300	260	335	160	595	315	540	225	270	110	50	38	2150	23238
1250x190	A100	1300	126-140	110	390	280	260	300	180	560	285	570	240	290	120	50	38	2400	22240
1250x210	A120	1300	150	140	440	300	260	340	180	600	320	570	240	290	120	50	38	2600	23240



Pag.	R 8
Ed.	04.18

CON SUPPORTI RITTI
WITH STRAIGHT SUPPORTS



Le quote ØL, H e D sono modificabili a richiesta.
Dimensions ØL, H and D are changeable upon request.

Quote in [mm] Dimensions [mm]	AxC	ROTAIA RAIL	B	D	E	F	G	H	J	L	M	N	O	P	Q	S	T	PESO WEIGHT [kg]	CUSCINETTO BEARING
	200x90	A45	230	55	32	190	158	80	150	45	230	130	220	70	180	20	18	75	22210
	250x90	A45	280	55	42	190	148	130	150	55	280	135	270	90	220	25	22	85	22213
	315x120	A55	350	68	42	220	178	130	180	70	310	155	310	100	260	25	24	150	22216
	315x140	A75		88	52	240	188	150	190	80	340	170	340	115	290	25	24	170	22218
	400x140	A75	440	88	52	250	198	180	200	90	380	180	370	125	310	30	26	250	22220
	500x140	A75	540	88	62	260	198	180	210	100	390	185	410	135	350	40	28	300	22222
	500x190	A100		126-140	82	330	248	180	250	100	430	230	410	135	350	40	28	280	23222
	630x140	A75	680	88	72	270	198	185	225	120	410	200	450	150	380	40	32	580	22226
	630x190	A100		126-140	82	330	248	230	250	130	480	230	470	160	400	40	32	700	22228
	630x210	A120		150	102	370	268	230	280	130	510	257	470	160	400	40	32	750	23228
	710x140	A75	760	88	82	290	208	230	230	130	460	208	470	160	400	40	32	700	22228
	710x190	A100		126-140			330	248	230	250	130	480	230	490	175	420	40	32	800
	710x210	A120		150	105	380	275	230	285	130	515	270	490	175	420	40	32	860	23230
	800x140	A75	850	88	82	290	208	230	230	130	460	210	490	175	420	40	32	900	22230
	800x190	A100		126-140	92	340	248	230	260	150	490	245	560	190	480	45	38	1000	22232
	800x210	A120		150	114	380	266	230	290	150	520	273	560	190	480	45	38	1050	23232
	900x140	A75	950	88	92	320	228	230	250	150	480	235	560	190	480	45	38	1000	22232
	900x190	A100		126-140	102	360	258	230	280	150	510	260	580	200	500	45	38	1200	22234
900x210	A120	150		120	400	280	230	310	150	540	290	580	200	500	45	38	1300	23234	
1000x140	A75	1050	88	102	320	218	230	250	150	480	240	580	200	500	50	38	1200	22234	
1000x190	A100		126-140			360	258	230	270	150	500	260	600	210	520	50	38	1400	22236
1000x210	A120		150	120	400	280	230	310	150	540	290	600	210	520	50	38	1600	23236	
1120x190	A100	1170	126-140	102	380	278	260	295	160	555	275	630	225	550	50	38	1900	22238	
1120x190	A120		150	130	430	300	260	335	160	595	315	630	225	550	50	38	2150	23238	
1250x190	A100	1300	126-140	110	390	280	260	300	180	560	285	660	240	580	50	38	2400	22240	
1250x210	A120		150	140	440	300	260	340	180	600	320	660	240	580	50	38	2600	23240	



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GRUPPI RUOTA WHEEL ASSEMBLIES

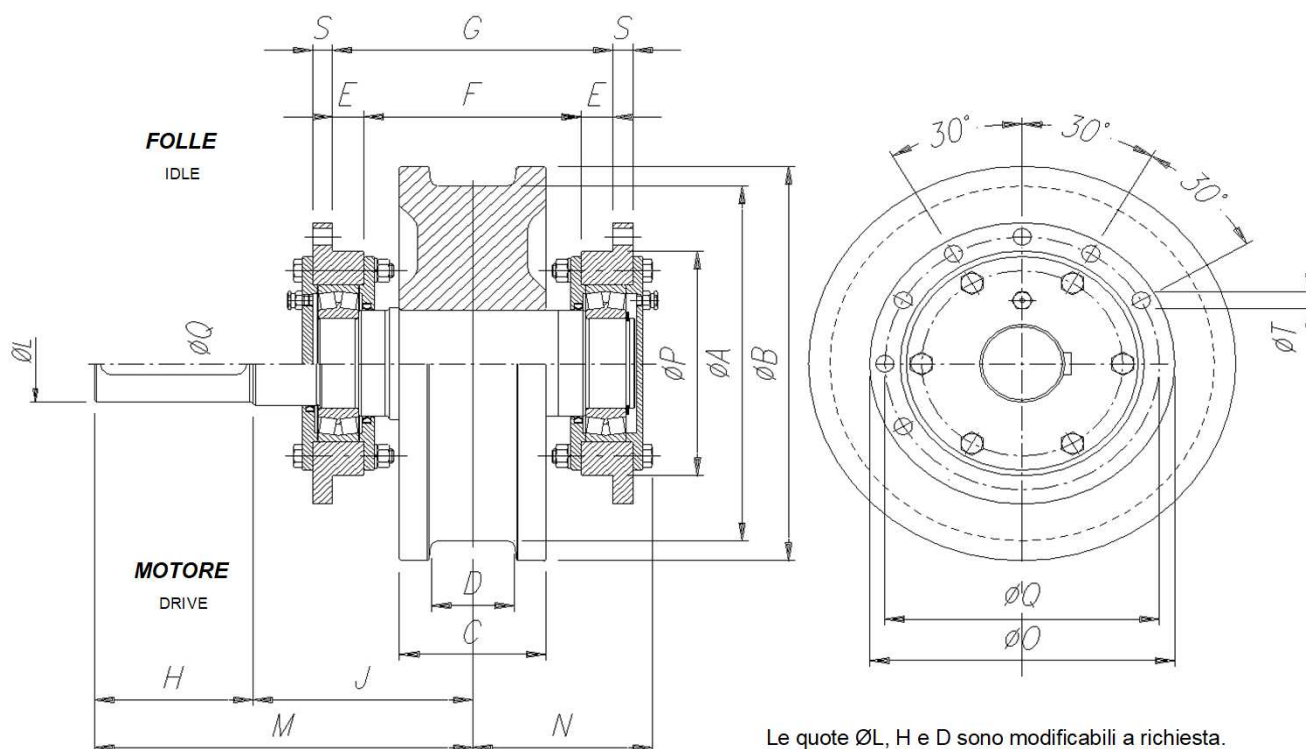
Pag. **R 9**

Ed. 04.18

SERIE
SERIES

RSF

CON SUPPORTI A FLANGIA
WITH FLANGE SUPPORTS



Le quote ØL, H e D sono modificabili a richiesta.
Dimensions ØL, H and D are changeable upon request.

AxC	ROTAIA RAIL	Dimensions [mm]														PESO WEIGHT [kg]	CUSCINETTO BEARING
		B	D	E	F	G	H	J	L	M	N	O	P	S	T		
200x90	A45	230	55	21	158	200	80	150	45	230	135	190	140	11	18	75	22210
250x90	A45	280	55	26	148	200	130	150	55	280	140	230	180	16	26	85	22213
315x120	A55	350	68	26	178	230	130	180	70	310	155	250	200	16	36	150	22216
315x140	A75		88	36	188	260	150	190	80	340	170	280	230	16	36	170	22218
400x140	A75	440	88	36	198	270	180	200	90	380	180	310	250	16	36	250	22220
500x140	A75	540	88	41	198	280	180	210	100	390	190	330	270	21	41	300	22222
500x190	A100		126-140	61	248	370	180	250	100	430	235	330	270	21	61	280	23222
630x140	A75	680	88	46	198	290	185	225	120	410	200	375	300	26	46	580	22226
630x190	A100		126-140	56	248	360	230	250	130	480	235	395	320	26	56	700	22228
630x210	A120		150	70	268	410	230	280	130	510	265	395	320	30	70	750	23228
710x140	A75	760	88	56	208	320	230	230	130	460	215	395	320	26	56	700	22228
710x190	A100		126-140	56	248	360	230	250	130	480	235	425	350	26	56	800	22230
710x210	A120		150	71	272	430	230	285	130	515	275	425	350	30	80	860	23230
800x140	A75	850	88	56	208	320	230	230	130	460	215	425	350	26	56	900	22230
800x190	A100		126-140	61	248	370	230	260	150	490	245	475	380	31	61	1000	22232
800x210	A120		150	82	264	430	230	290	150	520	275	475	380	32	82	1050	23232
900x140	A75	950	88	61	228	350	230	250	150	480	235	475	380	31	61	1000	22232
900x190	A100		126-140	71	262	400	230	280	150	510	260	495	400	31	71	1200	22234
900x210	A120		150	90	278	460	230	310	150	540	290	495	400	30	90	1300	23234
1000x140	A75	1050	88	71	222	350	230	250	150	480	240	495	400	31	71	1200	22234
1000x190	A100		126-140	71	262	400	230	270	150	500	260	525	425	31	71	1400	22236
1000x210	A120		150	90	276	460	230	310	150	540	290	525	425	30	90	1600	23236
1120x190	A100	1170	126-140	71	276	420	260	295	160	555	275	550	450	31	71	1900	22238
1120x190	A120		150	90	298	500	260	335	160	595	315	550	450	40	90	2150	23238
1250x190	A100	1300	126-140	80	280	440	260	300	180	560	285	580	480	30	80	2400	22240
1250x210	A120		150	100	300	500	260	340	180	600	320	580	480	40	100	2600	23240



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GRUPPI RUOTA WHEEL ASSEMBLIES

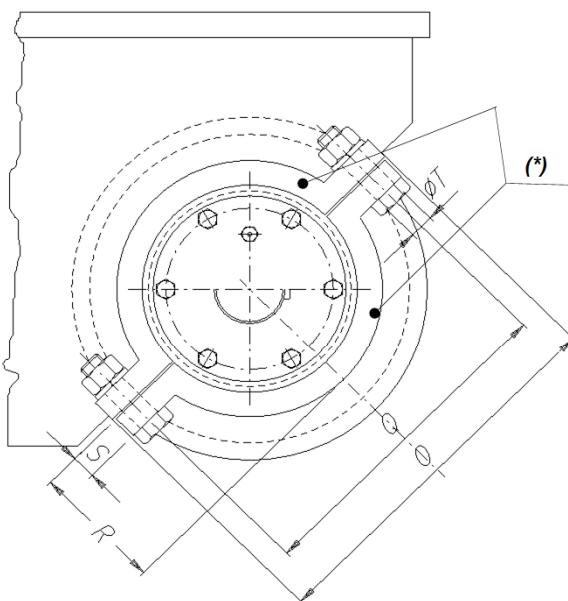
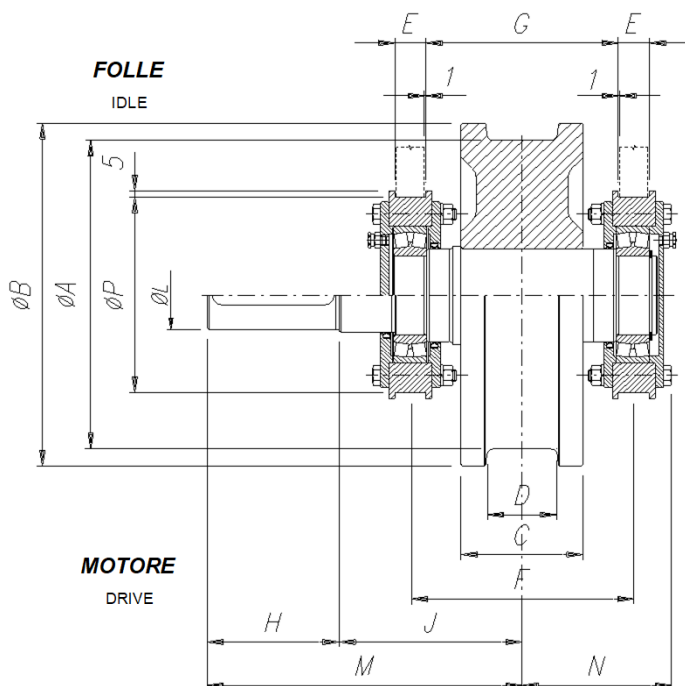
Pag. **R 10**

Ed. 04.18

SERIE
SERIES

RSC

CON SUPPORTI CIRCOLARI
WITH CIRCULAR SUPPORTS



Le quote ØL, H e D sono modificabili a richiesta.
Dimensions ØL, H and D are changeable upon request.

(*) Escluso dalla fornitura - quote indicative.
(*) Excluded from supply - indicative dimensions.

A x C	ROTAIA RAIL	B	D	E	F	G	H	J	L	M	N	O	P	Q	R	S	T	PESO WEIGHT [kg]	CUSCINETTO BEARING
200x90	A45	230	55	25	190	165	80	150	45	230	135	240	140	210	85	15	14	75	22210
250x90	A45	280	55	30	190	160	130	150	55	280	140	295	180	260	110	20	16	85	22213
315x120	A55	350	68	30	220	190	130	180	70	310	155	315	200	280	120	20	16	150	22216
315x140	A75		88	40	240	200	150	190	80	340	170	350	230	315	137	25	18	170	22218
400x140	A75	440	88	40	250	210	180	200	90	380	180	370	250	335	147	25	18	250	22220
500x140	A75	540	88	50	260	210	180	210	100	390	190	410	270	370	157	30	22	300	22222
500x190	A100		126-140	70	330	260	180	250	100	430	235	410	270	370	157	30	22	280	23222
630x140	A75	680	88	60	270	210	185	225	120	410	200	440	300	400	172	30	22	580	22226
630x190	A100		126-140	70	330	260	230	250	130	480	235	460	320	420	182	35	22	700	22228
630x210	A120		150	90	370	280	230	280	130	510	265	460	320	420	182	35	22	750	23228
710x140	A75	760	88	70	290	220	230	230	130	460	215	460	320	420	182	35	22	700	22228
710x190	A100		126-140	70	330	260	230	250	130	480	235	500	350	460	200	35	22	800	22230
710x210	A120		150	90	380	290	230	285	130	515	275	500	350	460	200	35	22	860	23230
800x140	A75	850	88	60	290	230	230	230	130	460	215	500	350	460	215	40	22	900	22230
800x190	A100		126-140	70	340	270	230	260	150	490	245	550	380	500	215	40	26	1000	22232
800x210	A120		150	95	380	285	230	290	150	520	275	550	380	500	215	40	26	1050	23232
900x140	A75	950	88	70	320	250	230	250	150	480	235	550	380	500	225	40	26	1000	22232
900x190	A100		126-140	80	360	280	230	280	150	510	260	570	400	520	225	40	26	1200	22234
900x210	A120		150	100	400	300	230	310	150	540	290	570	400	520	225	40	26	1300	23234
1000x140	A75	1050	88	80	320	240	230	250	150	480	240	570	400	520	245	40	26	1200	22234
1000x190	A100		126-140	80	360	280	230	270	150	500	260	610	430	560	245	40	26	1400	22236
1000x210	A120		150	100	400	300	230	310	150	540	290	610	430	560	245	40	26	1600	23236
1120x190	A100	1170	126-140	80	380	300	260	295	160	555	275	630	450	580	255	40	26	1900	22238
1120x190	A120		150	110	430	320	260	335	160	595	315	630	450	580	255	40	26	2150	23238
1250x190	A100	1300	126-140	90	390	300	260	300	180	560	285	660	480	610	270	40	26	2400	22240
1250x210	A120		150	120	440	320	260	340	180	600	320	660	480	610	270	40	26	2600	23240



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GRUPPI RUOTA WHEEL ASSEMBLIES

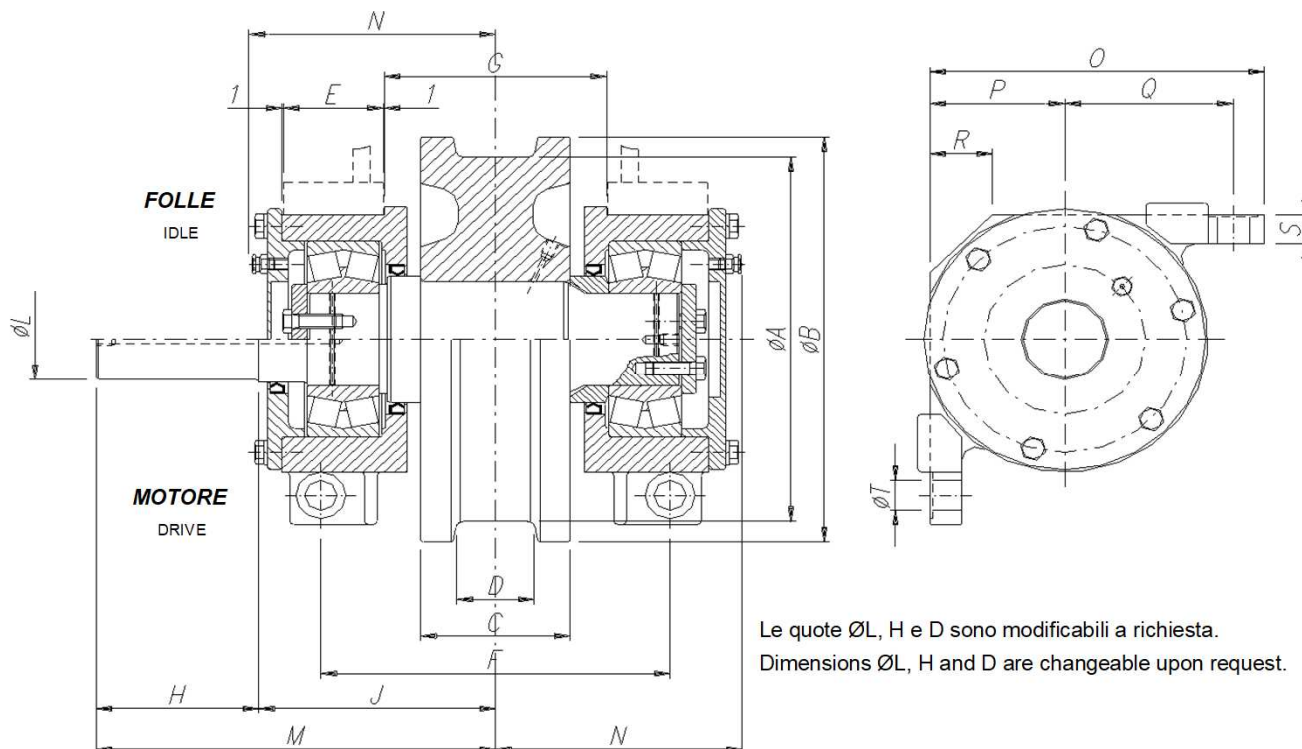
Pag. **R 11**

Ed. 04.18

SERIE SPECIALE
SPECIAL SERIES

RSQ

PER SERVIZIO EXTRA PESANTE PER SIDERURGIA
FOR EXTRA-HEAVY SERVICE



Le quote ØL, H e D sono modificabili a richiesta.
Dimensions ØL, H and D are changeable upon request.

AxC	ROTAIA RAIL	B	D	E	F	G	H	J	L	M	N	O	P	Q	R	S	T	PESO WEIGHT [kg]	CUSCINETTO BEARING
315x120	55	350	68	80	280	180	130	190	70	320	195	268	108	135	55	25	26	125	22316
400x140	(55)	440	88	100	310	200	180	230	90	410	230	330	135	165	55	30	32	235	22320
	65																		
500x140	(65)	550	88	100	310	200	180	230	100	410	240	360	145	185	60	30	32	315	22322
	75																		
630x140	(65)	680	88	100	310	200	185	225	120	410	250	400	165	205	65	30	32	470	22326
	75																		
630x190	100	680	126	140	420	270	230	300	130	530	305	430	180	220				650	22328
710x190	(75)	760	126	140	420	270	230	300	130	530	305	450	190	230	60	30	32	720	22330
	100																		
800x190	100	850	126	140	420	270	230	300	150	530	305	480	200	245	75	35	36	810	22332
	(120)																		
1000x190	100	1050	126	140	420	270	230	300	150	530	305	500	210	255	75	35	36	950	22334
	(120)																		
1120x190	100	1170	126	140	420	270	230	300	150	530	305	500	210	255	75	35	36	1100	22334
	(120)																		
1250x190	100	1300	126	140	420	270	230	300	150	530	305	500	210	255	75	35	36	1250	22334
	(120)																		

Nota: le rotaie indicate fra parentesi () non sono consigliate e sono da specificarsi se richieste.

Note: rails put in brackets () are not suggested and must be specified upon request.



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GRUPPI RUOTA WHEEL ASSEMBLIES

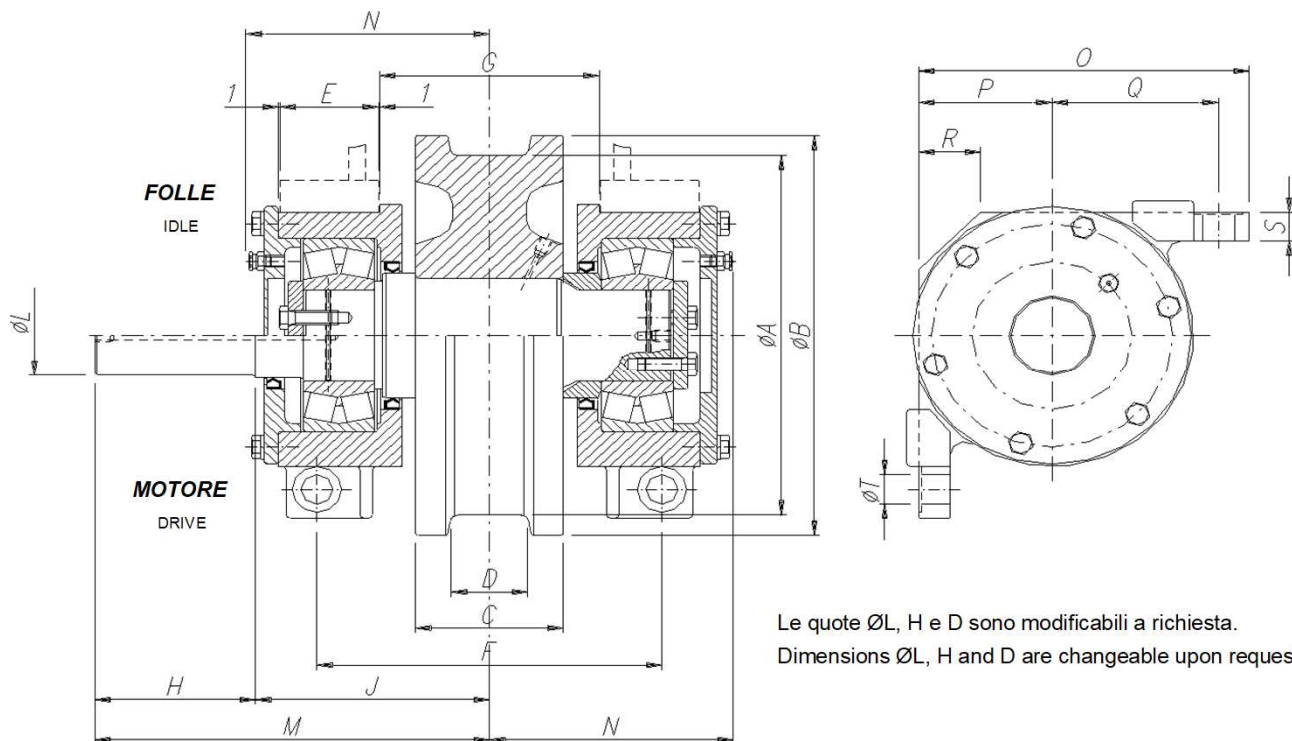
Pag. **R 12**

Ed. 04.18

SERIE SPECIALE
SPECIAL SERIES

RSI

PER SERVIZIO EXTRA PESANTE PER SIDERURGIA
FOR EXTRA-HEAVY SERVICE



Quota in [mm] Dimensions [mm]	AxC	ROTAIA RAIL	B	D	E	F	G	H	J	L	M	N	O	P	Q	R	S	T	PESO WEIGHT [kg]	CUSCINETTO BEARING
	315x120	55	350	66	80	280	180	130	190	70	320	192	268	108	135	55	25	26	145	22219
	400x140	(55)	440	66	100	310	200	180	230	90	410	222	330	135	165	55	30	26	265	22222
		65		90															260	
	500x140	(65)	540	90	100	310	200	180	230	100	410	222	330	135	165	55	30	26	330	22224
		75																		
	630x140	(65)	680	90	100	310	200	185	225	120	410	225	360	145	185	55	30	26	461	22228
		75																		
	630x190	(75)		112		380	270	230	300	130	530	257							622	23228
		100																		
	710x190	(75)	760	112	100	380	270	230	300	130	530	294	400	165	205	65	30	26	740	23230
		100		126																
800x190	100	850	126	140	420	270	230	300	150	530	300	430	180	220	65	30	32	925	23232	
800x210	120		150															992		
1000x190	100	1050	126	140	420	270	230	300	150	530	307	450	190	230	65	30	32	1310	23236	
1000x210	120		150															1417		

Nota: le rotaie indicate fra parentesi () non sono consigliate e sono da specificarsi se richieste.

Note: rails put in brackets () are not suggested and must be specified upon request.



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GRUPPI RUOTA WHEEL ASSEMBLIES

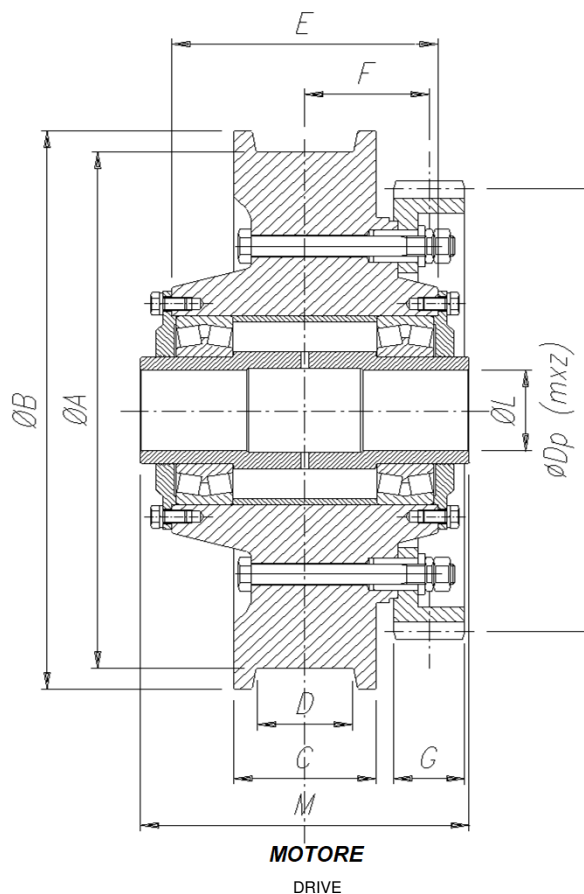
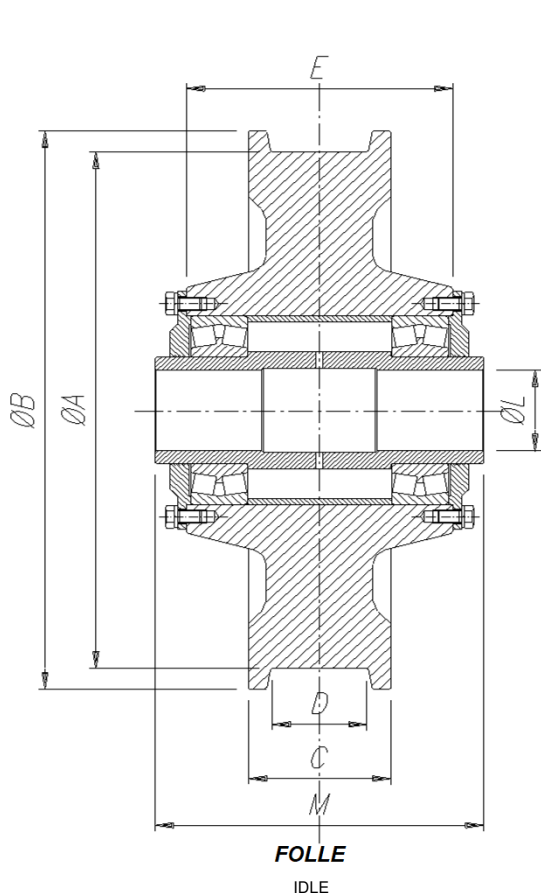
Pag. **R 13**

Ed. 04.18

SERIE
SERIES

RDU

A NORME DIN 15 079 E 15 080 – CUSCINETTI SERIE 22200
ACCORDING TO DIN NORMS 15 079 AND 15080 – BEARINGS SERIES 22200



La quota D è modificabile a richiesta.
Dimension D is changeable upon request.

AxC	ROTAIA RAIL	B	D	E	F	G	L	M	m	z	Dp	PESO WEIGHT [kg]		CUSCINETTO BEARING
												MOTRICE DRIVE	FOLLE IDLE	
315x90	45	350	55	190	90	60	60	250	6	52	312	95	75	22218
315x110	55		65	210				270				125	105	
400x110	55	440	65	220	102,5	65	80	280	8	40	320	153	130	22220
400x140	75		90	250	117,5			310		50	400	180	160	
500x110	55	540	65	230	105	70	90	290	10	42	420	233	190	22224
500x140	75		90	260	120			320		49	490	263	225	
630x120	65	680	75	260	120	80	100	330	10	54	540	345	270	22226
630x160	100		110	300	140			370		62	620	400	320	
710x140	75	760	90	300	135	90	110		12	50	600	485	390	22230
710x210	120		160	370	170			440		58	696	590	485	
800x140	75	850	90	320	140	100	125	390	12	58	696	585	465	22232
800x210	120		160	390	175			460		66	792	710	585	
900x140	75	950	90	340	145	110	140	410	14	56	784	720	570	22236
900x210	120		160	410	180			480		63	882	890	730	
1000x140	75	1050	90	330	145	110	160	410	14	64	896	940	750	22240
1000x210	120		160	400	180			480		70	980	1130	925	
1120x220	120	1180	160	440	192,5	125	180	520	16	68	1088	1480	1190	22244
1250x220	120	1310	160	440	192,5	125	200	520	16	76	1216	1730	1400	22248



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GRUPPI RUOTA WHEEL ASSEMBLIES

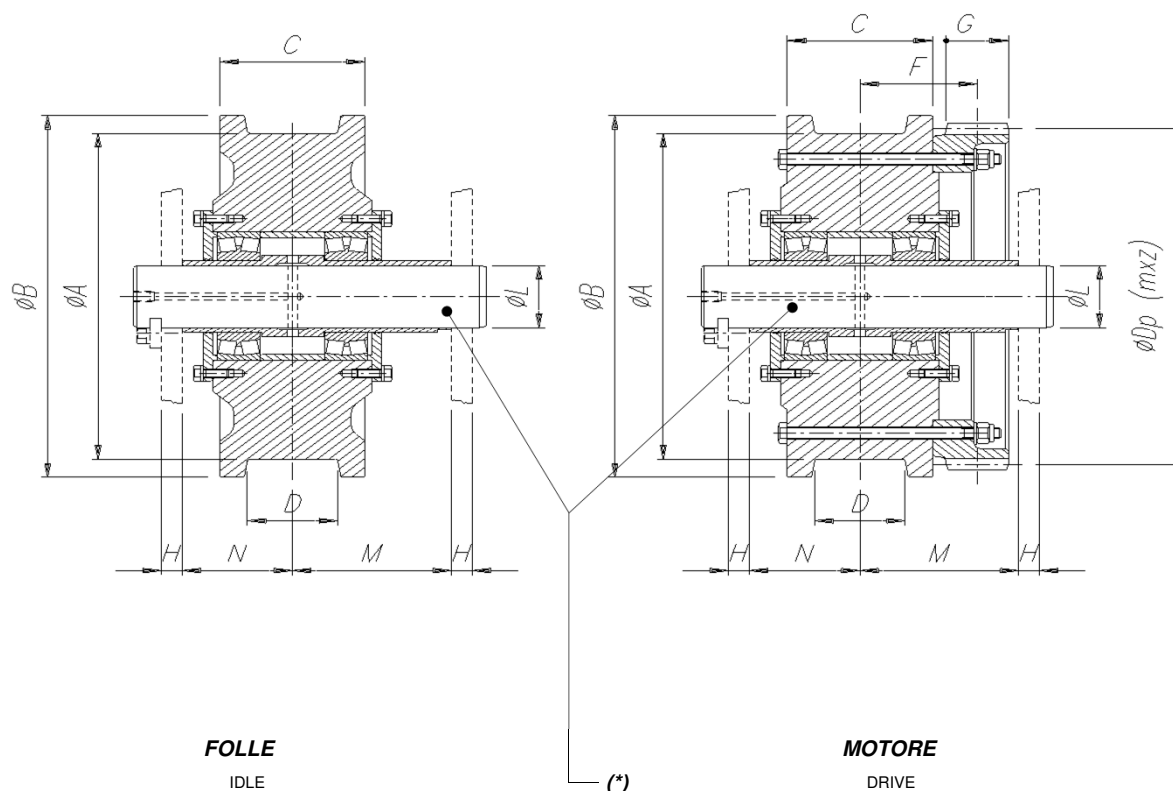
Pag. **R 14**

Ed. 04.18

SERIE
SERIES

RC

CON CORONA ED ASSE FISSO
WITH CROWN AND FIXED SHAFT



(*) Escluso dalla fornitura.

(*) Excluded from supply.

La quota D è modificabile a richiesta.

Dimension D is changeable upon request.

Quote in [mm]
Dimensions [mm]

AxC	ROTAIA RAIL	B	D	F	G	H	L	M	N	m	z	Dp	PESO WEIGHT [kg]		CUSCINETTO BEARING
													MOTRICE DRIVE	FOLLE IDLE	
160x80	45	190	50	60	25	12	45	80	65	4	46	184	22	19	22211
200x100	55	230	65	75	35	12	50	100	75	4	55	220	38	32	22212
250x100	55	280	65	80	40	12	55	105	75	4	66	264	56	48	22213
315x105	55	350	65	85	45	15	60	115	80	5	65	325	93	80	22214
400x125	65	440	80	100	55	15	75	145	95	6	70	420	178	155	22218
500x130	65	540	80	105	60	20	85	150	100	7	74	518	275	235	22220
630x140	75	680	90	125	70	20	100	170	110	8	78	624	450	400	22224
630x180	100		130	145	80	25	110	200	140	10	63	630	620	540	22226
710x190	120	760	140	165	100	25	130	225	140	12	59	708	820	680	22230
800x190	120	850	140	165	100	25	140	225	145	14	57	798	1050	850	22232
1000x190	120	1050	140	170	110	25	150	235	145	16	62	992	1300	1100	22234



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GRUPPI RUOTA WHEEL ASSEMBLIES

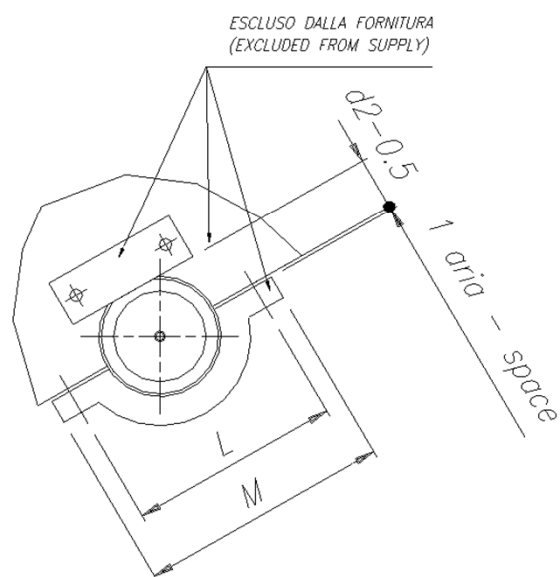
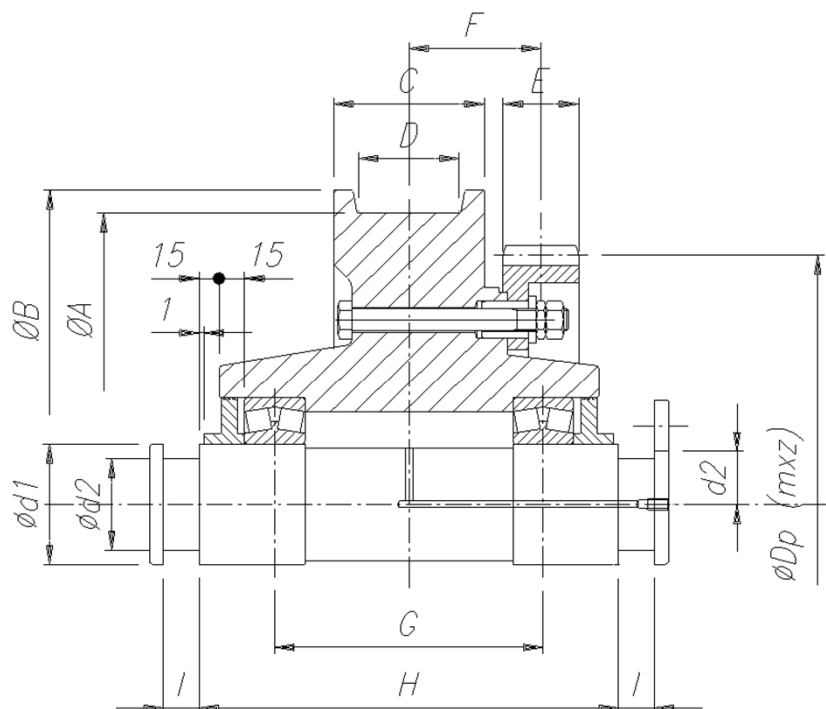
Pag. **R 15**

Ed. 04.18

SERIE
SERIES

RANS

UNIFICAZIONE RUOTE PER CARRELLIERE PORTUALI
STANDARDIZATION WHEEL ASSEMBLIES FOR BOGIES



A	ROTAIA RAIL	B	C	D	E	F	d1	d2	G	H	I	L	M	Dp	z	m	Viti	CUSCINETTO BEARING
500	A 75 A 100	540	140 190	90 130	70	125 140	90	80	270	370	40	210	270	420	42	10	M24 x 600	22218
630	A 75 A 100	680	140 190	90 130	80	135 150	100	90	324	400	45	210	270	540	54	10	M24 x 80	22220
710	A 75 A 100	760	140 190	90 130	90	140 155	110	95	337	420	45	230	290	600	50	12	M24 x 80	22222
800	A 75 A 100	850	140 190	90 130	100	145 160	130	115	346	440	50	260	330	696	58	12	M27 x 90	22226
900	A 75 A 100	950	140 190	90 130	110	150 165	140	120	362	460	50	290	360	784	56	14	M30 x 100	22228
1000	A 75 A 100	1050	140 190	90 130	110	150 165	150	130	357	460	50	320	400	896	64	14	M30 x 100	22230
1250	A 75 A 100	1300	140 190	90 130	120	155 170	180	160	384	500	60	400	490	1120	70	16	M30 x 100	22236

Quote in [mm] Dimensions are in [mm]



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GRUPPI RUOTA WHEEL ASSEMBLIES

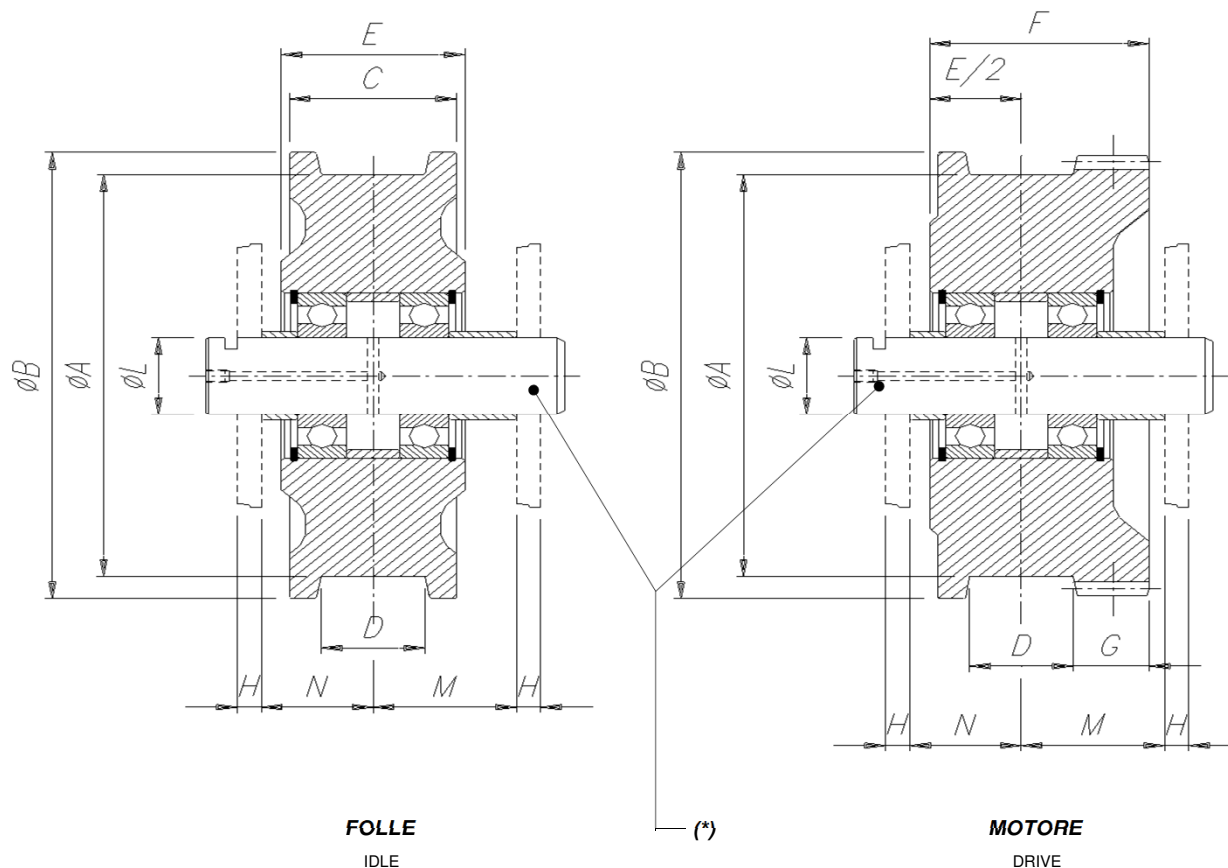
Pag. **R 16**

Ed. 04.18

SERIE
SERIES

RCE

CON CORONA ED ASSE FISSO
WITH CROWN AND FIXED SHAFT



(*) Escluso dalla fornitura.

(*) Excluded from supply.

La quota D è modificabile a richiesta.

Dimension D is changeable upon request.

Dimensions [mm] Quote in [mm]	A×C	ROTAIA RAIL	B	D	E	F	G	H	L	M	N	m	z	Dp	PESO WEIGHT [kg]		CUSCINETTO BEARING
															MOTRICE DRIVE	FOLLE IDLE	
	160×80	45	190	50	90	97,5	27,5	12	45	60	55	4	45	180	18	15	6309-2RS1
	200×100	55	230	65	110	125	37,5	12	50	75	65	4	55	220	35	30	6310-2RS1
	250×100	55	280	65	110	130	42,5	12	55	80	65	4	67	268	50	45	6311-2RS1
	315×105	55	350	65	115	137,5	47,5	15	60	90	70	5	67	335	85	75	6312-2RS1
	400×125	65	440	80	135	165	57,5	15	75	110	80	6	71	426	165	155	6315-2RS1
	500×130	65	540	80	140	172,5	62,5	20	85	115	85	7	75	525	250	230	6317-2RS1



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CORPI RUOTA WHEEL BODY

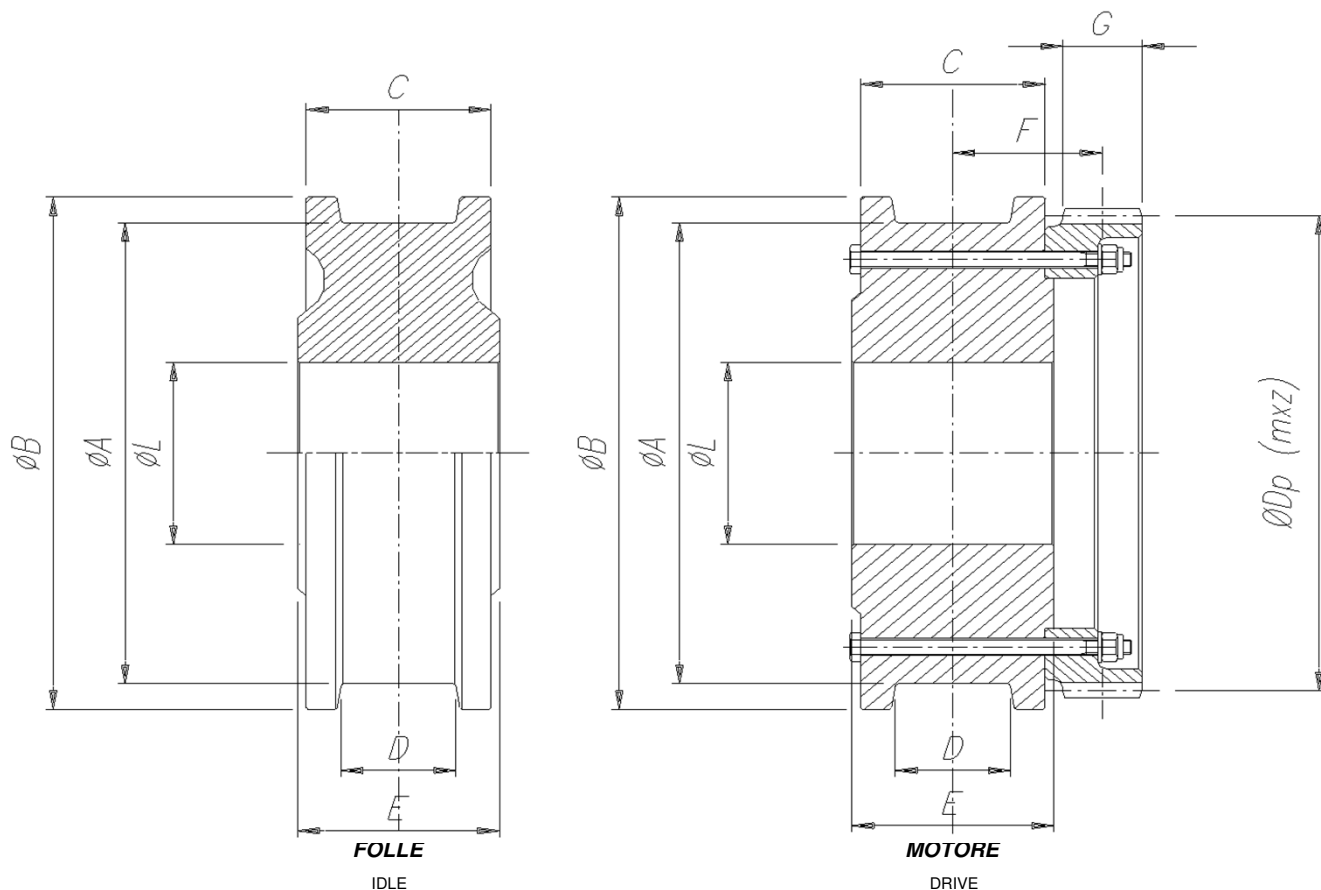
Pag. **R 17**

Ed. 04.18

SERIE
SERIES

RS

CON CORONA
WITH CROWN



Le quote ϕL e D sono modificabili a richiesta.
Dimensions ϕL and D are changeable upon request.

AxC	ROTAIA RAIL	B	D	E	F	G	L	m	z	Dp	PESO WEIGHT [kg]	
											MOTRICE DRIVE	FOLLE IDLE
160x80	45	190	50	90	60	25	45	4	46	184	16	13
200x100	55	230	65	110	75	35	50	4	55	220	31	25
250x100	55	280	65	110	80	40	55	4	66	264	47	39
315x105	55	350	65	115	85	45	60	5	65	325	79	66
400x125	65	440	80	135	100	55	75	6	70	420	148	125
500x130	65	540	80	140	105	60	85	7	74	518	260	220



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CERCHIONI PER RUOTE RIMS FOR WHEELS

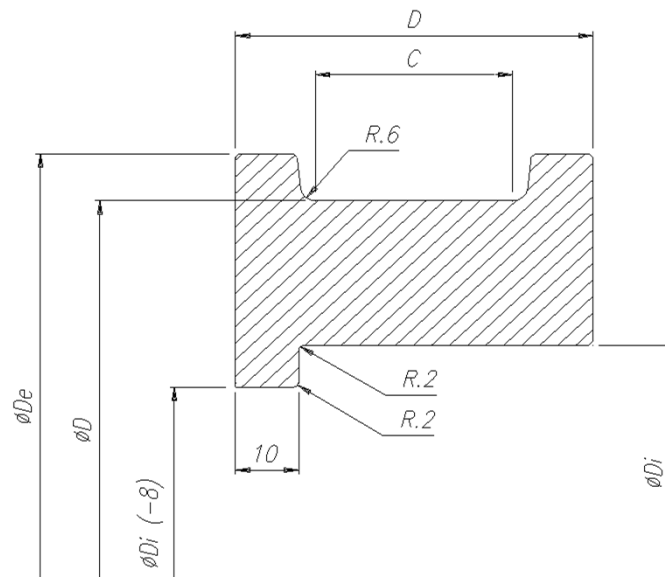
Pag. **R 18**

Ed. 04.18

SERIE
SERIES

RS

CERCHIONI PER RUOTE
RIMS FOR WHEELS



Quote in [mm] Dimensions [mm]

D	ROTAIA RAIL	De	Di	C	D	Di min.	PESO weight (kg.)
630	A75	680	520	88	140	540	186
	A100			126	190	530	250
	A120			150	210		272
710	A75	760	590	88	140	610	221
	A100			126	190	600	297
	A120			150	210		323
800	A75	850	670	88	140	700	262
	A100			126	190	680	352
	A120			150	210		384
	A 150		650	180	240	670	474
	MRS 221			250	320		625
900	A75	950	760	88	140	800	310
	A100			126	190	770	416
	A120			150	210		454
1000	A75	1050	850	88	140	880	360
	A100			126	190	870	485
	A120			150	210		529
	A 150		830	180	240	850	650
	MRS 221			250	320		858
1120	A75	1180	960	88	140	1000	450
	A100			126	190	990	605
	A120			150	210		659
	A 150		930	180	240	960	830
	MRS 221			250	320		1095
1250	A75	1310	1090	88	140	1120	504
	A100			126	190	1100	677
	A120			150	210		739
	A 150		1060	180	240	1090	930
	MRS 221			250	320		1230

Di min. = valido per cerchioni bomificati non temprati

Di min. = only for rims quench & tempered (not hardened)