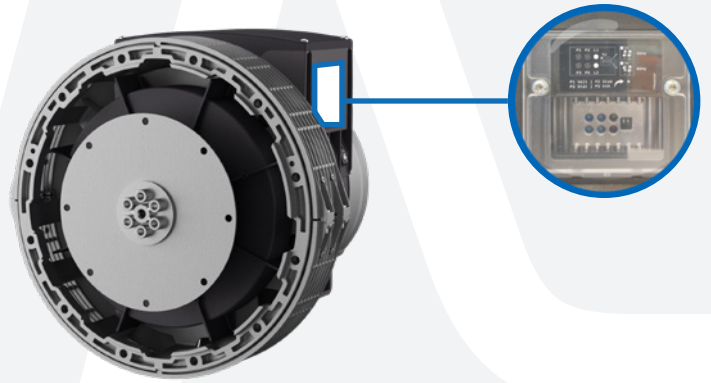


THREE-PHASE ALTERNATORS - 4 Poles

ZR132 / ZR180 Brush with AVR-d



Possibility of adjusting the trimmers in absolute safety when the machine is running; operating status LEDs of the alternator are visible from the outside.

Technical characteristics		ZR132	ZR180
		Three-phase	
Number of poles		4	
Rated power factor		0,8	
Voltage accuracy		± 1%	
T.H.D.		< 4% phase to phase	
Rated temperature		-15°C ÷ 40°C (+60°C with derating)	
Excitation system		Self-excited	
Execution		Brush	
AVR model		AVR 1060D - Digital with 3 phase sensing Right side (coupling side view) as standard; left on request	
Overload		110% of rated power for 1 hour in a 6-hour cycle	
Short circuit current		> 300% I _n	
Insulation class		H	
Temperature rise class		H	

		ZR132	ZR180
		Three-phase	
Protection degree		IP21 (IP23 on request)	
Rated speed		1500 rpm at 50Hz - 1800 rpm at 60Hz	
Overspeed		2250 rpm	
Rotation direction		CW - CCW	
Air flow requirement		5,4 m ³ /min at 1500rpm 6,5 m ³ /min at 1800rpm	7,8 m ³ /min at 1500rpm 9,4 m ³ /min at 1800rpm
NDE bearing type		6207 2RSC3	6305 2RSC3
Stator windings		Single layer with auxiliary windings	
Rotor		With damping cage	
Number of leads		6	
Standards		IEC 34-1; EN60034-1; EN6034-22; ISO 8528-3	
Electromagnetic compatibility		EN61000-6-2; EN61000-6-4	
Union Harmonization		2014/35/EU (Low Voltage); 2014/30/EU (EMC)	

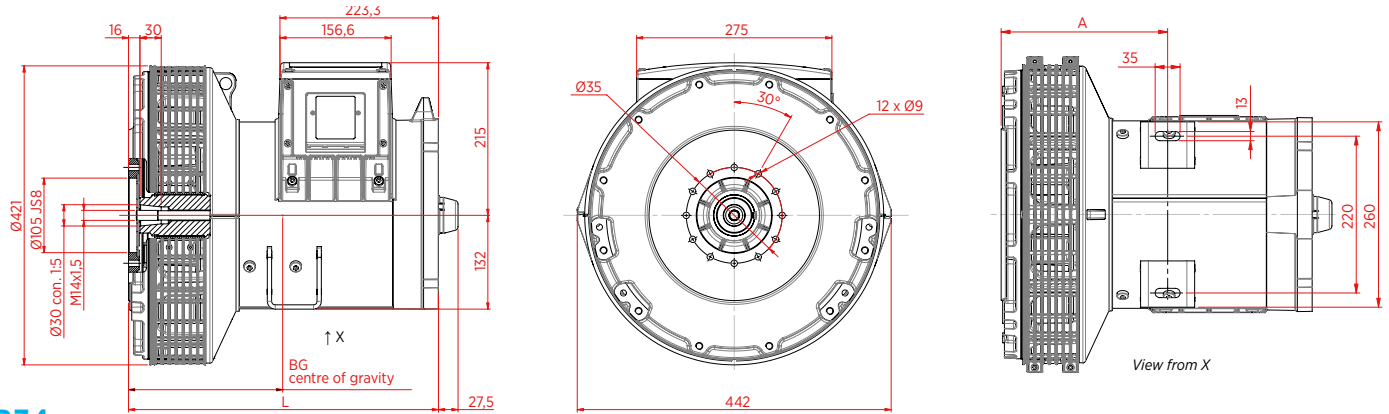
		50Hz - 1500rpm								60Hz - 1800rpm																			
		S1 continuous 40/125°C cl. H				Stand-by 27/163°C				S1 continuous 40/125°C cl. H				Stand-by 27/163°C															
		3ph - 0,8 p.f.				1ph - 1 p.f.	3ph - 0,8 p.f.	1ph - 1 p.f.	3ph - 0,8 p.f.				1ph - 1 p.f.	3ph - 0,8 p.f.	1ph - 1 p.f.														
Voltage (V)	Series-Star Y (*)	380	400	415	Eff. 4/4 load 400V 25°	230 (L-N)	400	230	380	416	440	480 (**)	Eff. 4/4 load 480V 25°	240 (L-N)	480 (**)	240													
	Model (***)	kVA				%	kVA			kVA				%	kVA														
Power		SAE5	SAE3-4	SAE5	SAE3-4	SAE5	SAE3-4	SAE5	SAE3-4	SAE5	SAE3-4	SAE5	SAE3-4	SAE5	SAE3-4	SAE5	SAE3-4												
	ZR132 XSB	10	11	10	11	10	11	81,7	3,5	4,4	11	12,1	3,9	4,8	11	12	11,5	12,5	12	13	13	14	82	5,2	5,6	14,3	15,4	5,7	6,2
	ZR132 SB	15	16	15	16	15	16	85	5,5	6,4	16,5	17,6	6,1	7	16	17,5	17	18,5	18	19,5	19	21	85,8	7,6	8,4	20,9	23,1	8,4	9,2
	ZR132 MA	18	20	18	20	18	20	85,8	7,2	8	19,8	22	7,9	8,8	20	22	21	23,5	22	24,5	23,5	26	86,4	9,4	10,4	25,9	28,6	10,3	11,4
	ZR132 LA	22,5	26	23	27	23	27	87	9,2	10,8	25,3	29,7	10,1	11,9	25	29	26,5	31	27	32	28,5	33	87,4	11,4	13,2	31,4	36,3	12,5	14,5
ZR180 SD	---	30	---	30	---	30	86,4	---	12	---	33	---	13,2	---	35	---	38	---	40	---	42	86,7	---	16,8	---	46,2	---	18,5	

(*) Other type of connections are not permitted (ie Delta Δ)
 (**) For voltages ≥ 460V a special winding is required.
 (***) Sizes 8kVA (ZR132 XSA) and 13kVA (ZR132SA) available on request.

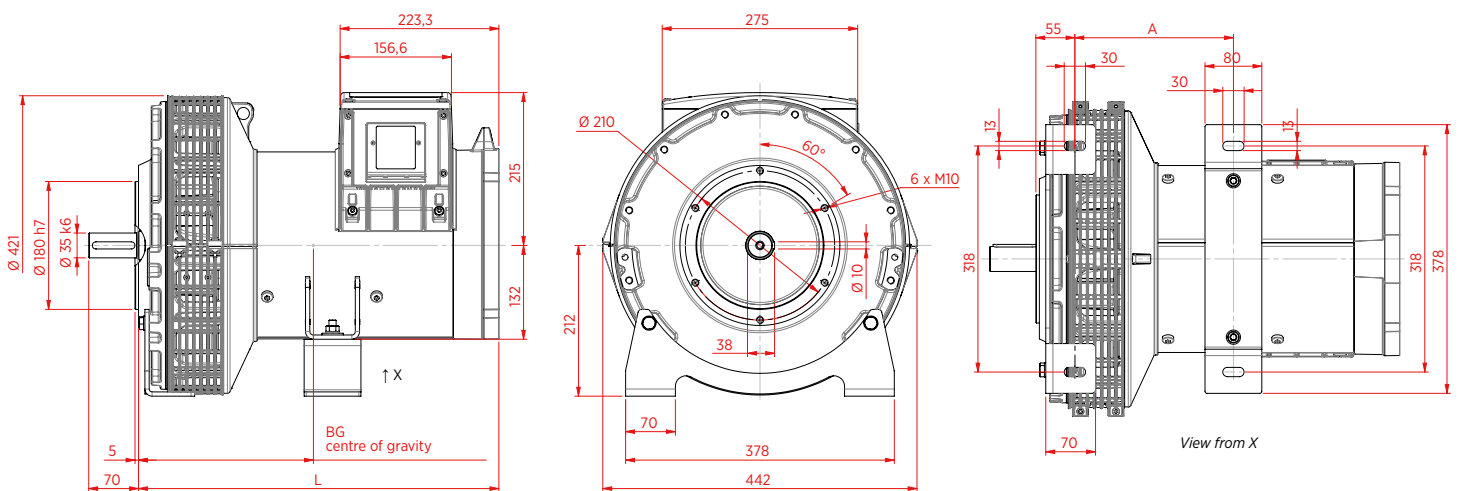
ZR180 SD is not available with SAE5 coupling.
 The powers in SAE3-4 also apply to C30 and B34.
 Power S1 cl.H (ΔT=125°C) - below 1000m AMSL - A.T. < 40°C

Overall Dimensions ZR132

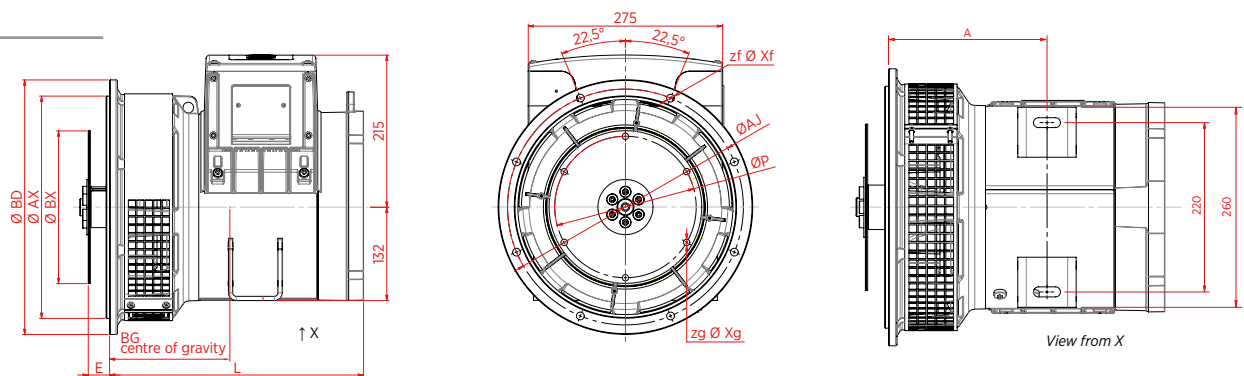
C30



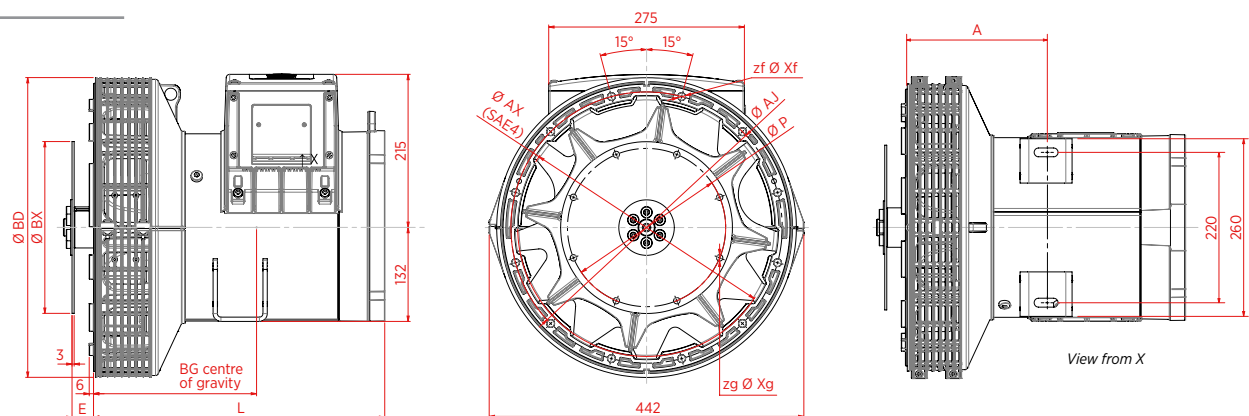
B34



SAE 5

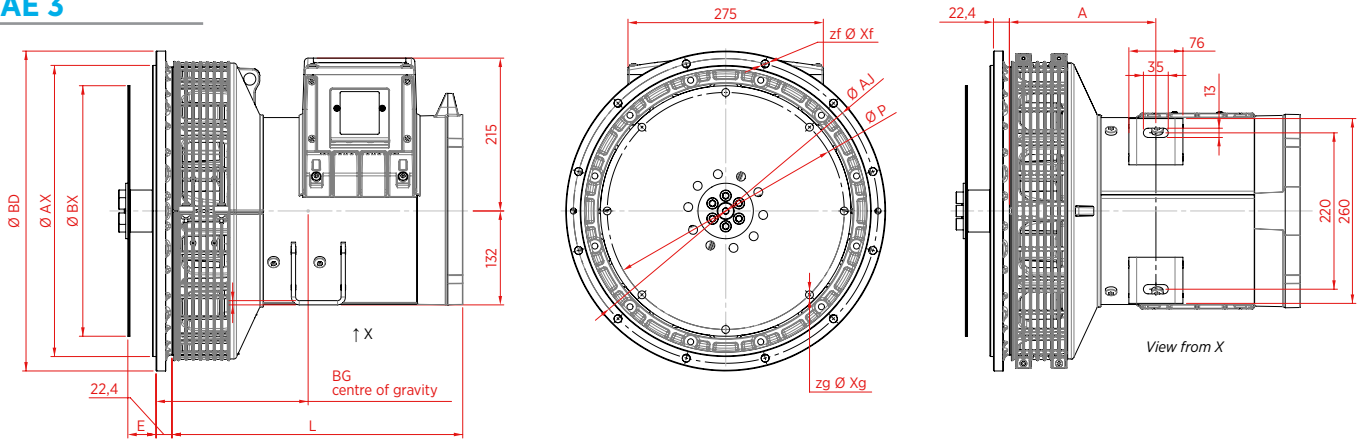


SAE 4



Overall Dimensions ZR132

SAE 3



Model	L			A			BG				
	C30	B34	SAE	C30	B34	SAE	C30	B34	SAE5	SAE4	SAE3
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
ZR132 XSB	386,5	397	359	233,5	194	206	183	185	163	161	169
ZR132 SB	436,5	447	409	233,5	194	206	209	211	188	186	196
ZR132 MA	496,5	507	469	262,5	223	235	237	239	215	213	224
ZR132 LA	526,5	537	499	277,5	238	250	253	254	230	228	240

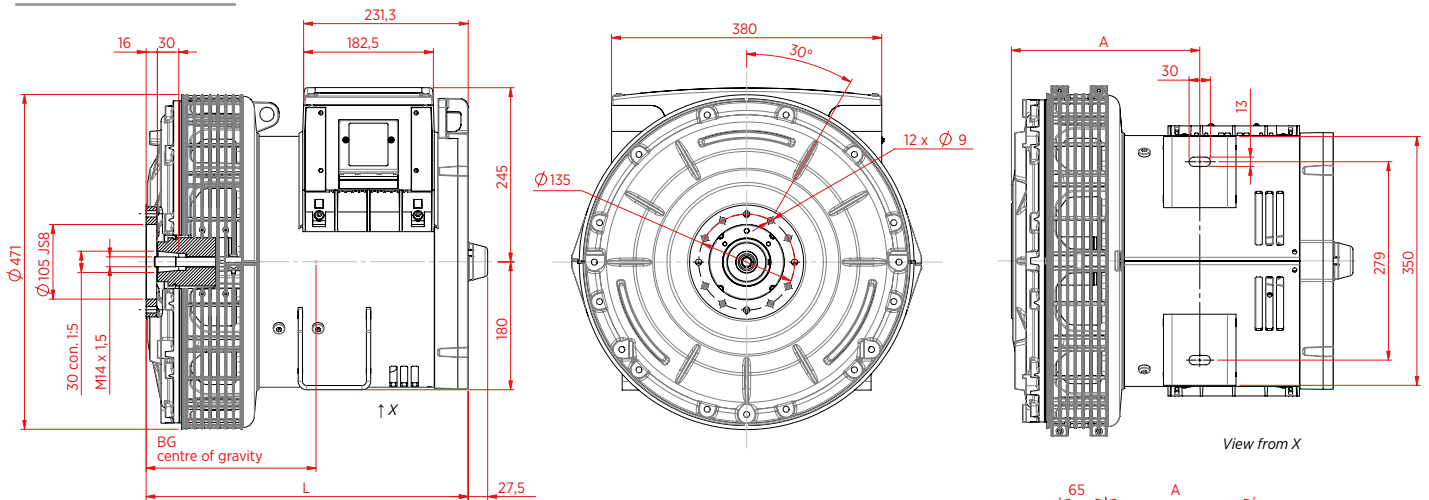
Flange	AX	BD	AJ	Xf	zf
	(mm)	(mm)	(mm)	(mm)	(nr)
SAE 5	314,325	355	333,37	11	8
SAE 4	361,95	421	381	11	12
SAE 3	409,575	450	428,625	11	12

Joint	E	BX	P	Xg	zg
	(mm)	(mm)	(mm)	(mm)	(nr)
6,5	30,2	215,9	200,02	9	6
7,5	30,2	241,3	222,25	9	8
8	62	263,5	244,47	11	6
10	53,8	314,3	295,27	11	8
11,5	39,6	352,4	333,37	11	8

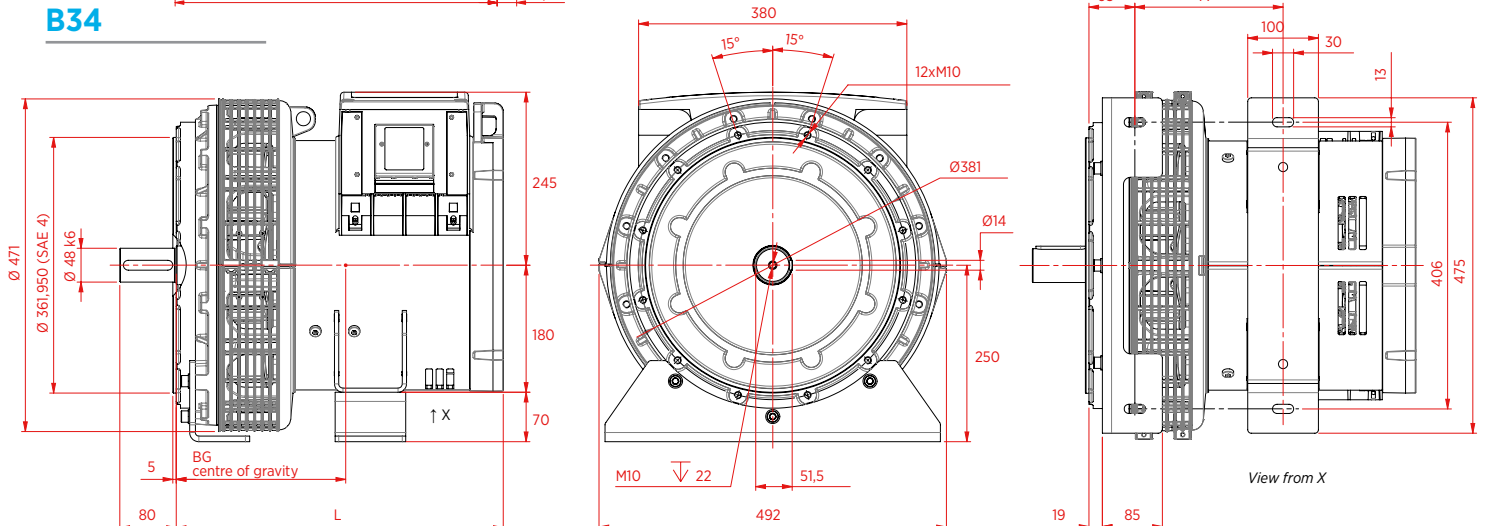
Model	Weight				
	C30	B34	SAE5	SAE4	SAE3
	(Kg)	(Kg)	(Kg)	(Kg)	(Kg)
ZR132 XSB	58	65	55	56	61
ZR132 SB	76	82	73	74	78
ZR132 MA	94	100	91	92	96
ZR132 LA	105	111	101	103	107

Overall Dimensions ZR180

C30

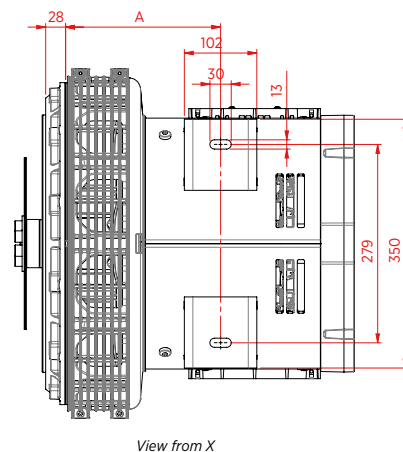
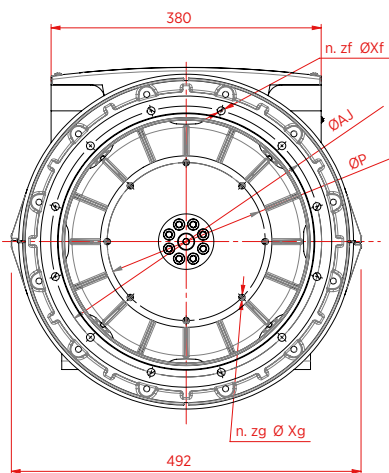
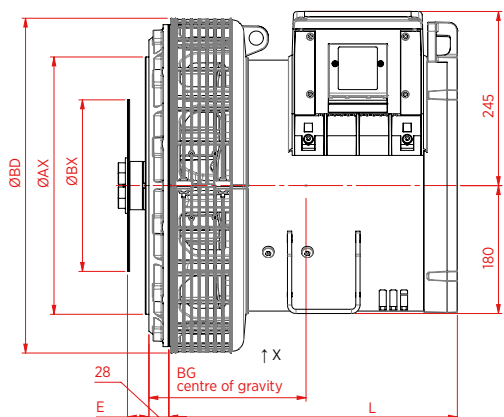


B34

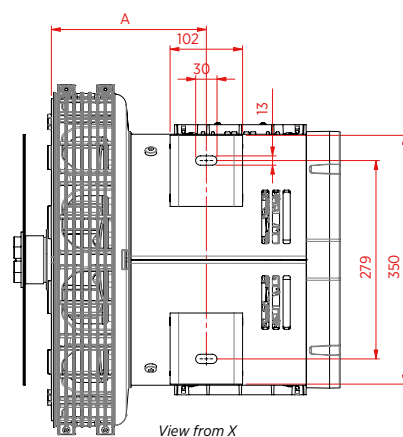
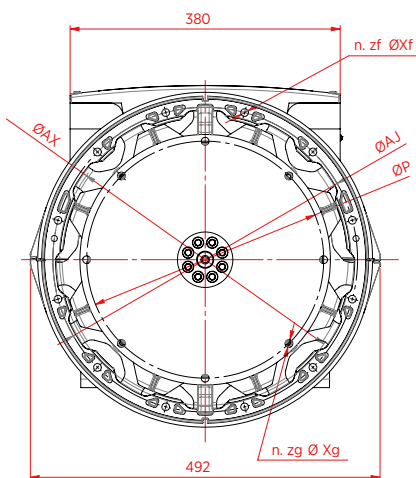
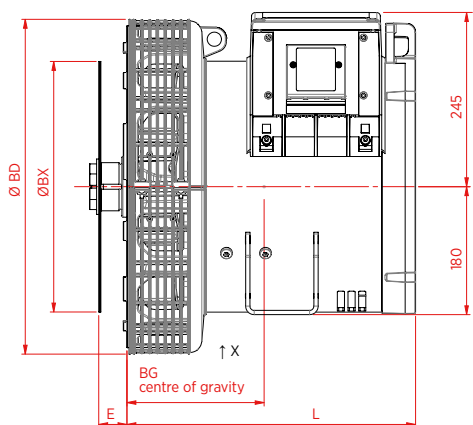


Overall Dimensions ZR180

SAE 4



SAE 3



Model	L			A			BG			
	C30	B34	SAE	C30	B34	SAE	C30	B34	SAE4	SAE3
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
ZR180 SD	453	463	406	265	210	218	235	240	226	201

Model	Weight			
	C30	B34	SAE4	SAE3
	(Kg)	(Kg)	(Kg)	(Kg)
ZR180 SD	120	142	129	127

Flange	AX	BD	AJ	Xf	zf
	(mm)	(mm)	(mm)	(mm)	(nr)
SAE 4	361,95	471	381	11	12
SAE 3	409,575	471	428,625	11	12

Joint	E	BX	P	Xg	zg
	(mm)	(mm)	(mm)	(mm)	(nr)
7,5	30,2	241,3	222,25	9	8
11,5	39,6	352,4	333,37	11	8