

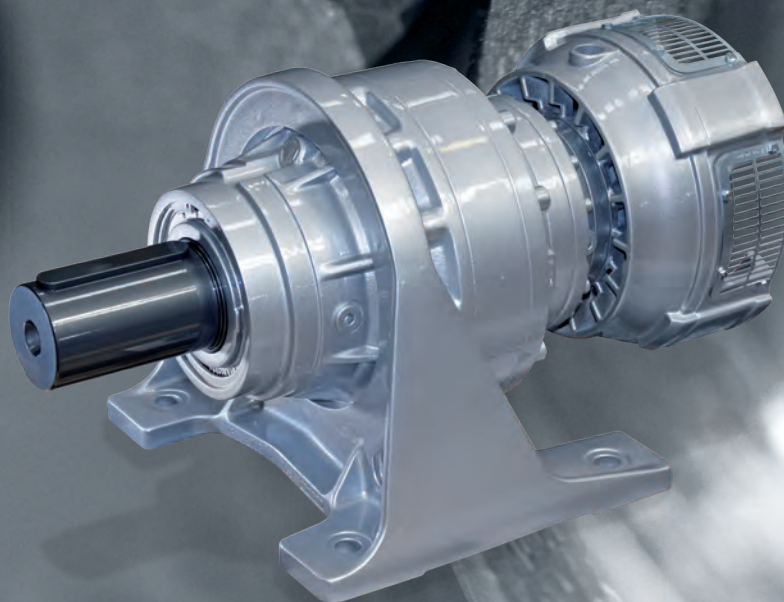


Bonfiglioli

Riduttori

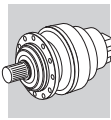
300M series

Modular planetary gearboxes



PRODUCT

IE2-IE3



PLANETARY GEARBOX SERIES 300M ATEX CONFIGURATION

A1 SCOPE OF DOCUMENT

This Technical Bulletin serves as an aid for the selection of 300M series planetary gear units intended for installation in explosion risk areas, classified according to Directive 1999/92/EC.

This Technical Bulletin is an integral part of the 300M series, and subsequent revisions, and has the following scope:

“ describes the **constructional characteristics** of the reducers comply with the directive 2014/34/EU, where these differ from those of standard construction gear units - See section A4.2.

“ specifies the **selection criteria** approved by the manufacturer that said gear units operate keeping the minimum security requirements required by the Directive 2014/34/EU - See section A4.4.

A2 INTRODUCTION TO THE ATEX DIRECTIVES

Under the provisions of Directive 2014/34/EU, an explosive atmosphere is defined as a mixture:

- of **flammable substances**, whether gas, vapour, mist or dust;
- with **air**;
- in certain **atmospheric conditions**;
- in which, following ignition, combustion spreads to the entire unburned mixture (note that in the case of dust, the entire quantity of dust is not always completely burnt after combustion).

An atmosphere which may potentially be transformed into an explosive atmosphere due to operating and/or ambient conditions is defined as a **potentially explosive atmosphere**. The products governed by Directive 2014/34/EU are intended for use only in a potentially explosive atmosphere defined in this way.

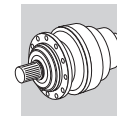
European harmonised ATEX standards

The European Union has issued two harmonisation guidelines in the area of health and safety. Directive 2014/34/EU stipulates the minimum safety requirements for products intended for use in explosion risk areas within the member countries of the European Union. The directive also assigns such equipment to **categories**, which are defined by the directive itself.

Directive 1999/92/EC defines the minimum health and safety requirements for the workplace, for working conditions and for the handling of products and materials in explosion risk areas. The directive also divides the workplace into zones and defines the criteria for the application of product **categories** in said **zones**.

The following table describes the **zones** into which the user of a plant, in which an explosive atmosphere may occur, is required to divide the equipment application areas.

Zones		Formation frequency of a potentially explosive atmosphere	Type of danger
Gaseous atmosphere G	Dusty atmosphere D		
0	20	Present continuously or for long periods	Permanent
1	21	Likely to occur in normal operation occasionally	Potential
2	22	Not likely to occur in normal operation but if it does occur will persist for short period only	Minimal



BONFIGLIOLI RIDOTTORI gear units selected in this catalogue are suitable for installation in zones 1, 21, as highlighted in light gray in the above table, 2 and 22 only on request by contacting our Technical Department, highlighted in dark gray in the diagram above.

Starting from July 1, 2003, the Atex Directives apply throughout the European Union, and replace the divergent laws currently in force at national and European level in the field of explosive atmospheres.

The directives apply to mechanical, hydraulic and pneumatic equipment.

Levels of protection for the various categories of equipment

The various categories of equipment must be able to operate in conformity with the Manufacturer's operational specifications, at certain defined levels of protection.

Protection level	Category		Type of protection	Operating conditions
	Group I	Group II		
Very high	M1		Two independent means of protection or safety capable of operating even when two independent faults occur	The equipment remains powered and operational even in the presence of an explosive atmosphere
Very high		1	Two independent means of protection or safety capable of operating even when two independent faults occur	The equipment remains powered and operational in zones 0, 1, 2 (G) and/or zones 20, 21, 22 (D)
High	M2		Protection suitable for normal operation and heavy duty conditions	Power to the equipment is shut off in the presence of a potentially explosive atmosphere
High		2	Protection suitable for normal operation and frequent faults or equipment in which malfunction is normal.	The equipment remains powered and operational in zones 1, 2 (G) and/or zones 21, 22 (D)
Normal		3	Protection suitable for normal operation	The equipment remains powered and operational in zones 2 (G) and/or 22 (D)

 **BONFIGLIOLI TECHNICAL SERVICE**

Definition of groups (EN 1127-1)

Group I Applies to equipment intended for use underground in parts of mines and those parts of surface installations of such mines, liable to be endangered by firedamp and/or combustible dust.

Group II Applies to equipment intended for use in other places liable to be endangered by explosive atmospheres.

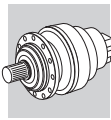
The areas highlighted in grey indicate the only categories in which BONFIGLIOLI RIDOTTORI products may be used. BONFIGLIOLI RIDOTTORI products may not therefore be installed in mines, classified in **Group I**. To summarise, the classification of equipment into groups, categories and zones is illustrated in the table below, where the availability of BONFIGLIOLI RIDOTTORI products is highlighted in grey.

Group	I mines, firedamp		II other potentially explosive areas (gas, dust)					
	M1	M2	1		2		3	
Category								
Atmosphere⁽¹⁾			G	D	G	D	G	D
Zone			0	20	1	21	2	22
Type of protection gear unit⁽²⁾					c, k	c, k	c, k	c, k

 **BONFIGLIOLI TECHNICAL SERVICE**

(1) **G** = gas **D** = DUST

(2) as per EN13463



A3 USE, INSTALLATION AND MAINTENANCE



The instructions for safe storage, handling and use of the product are given in the unit's User, Installation and Service Manual.

This document must be kept in a suitable place, in the vicinity of the installed gear unit, as a reference for all persons authorised to work with or on the product throughout its service life.

The Manufacturer reserves the right to modify, supplement or improve the Manual, in the interests of the User.

A4 PECULIARITIES OF 300M SERIES GEAR UNITS COMPLIANT WITH DIRECTIVE ATEX

A4.1 PRODUCT AVAILABILITY



Frame sizes : 300 to 325.

	3...L	3...R	3/V		
Configurations 	300...309, 310M...318M, 319	-	-		
	L 1	-	-		
	300...309, 310M...318M, 319...321	300...306	R 2	-	
	L 2	-	-		
	300...309, 310M...318M, 319...321	300...309, 310M...317M	R 3	300...306	L 3
	300...309, 310M...318M, 319...325	300...309, 310M...318M, 319...321	R 4	-	-
	L 4	-	-		

Versions 	Foot mount	Flange mount	Shaft mount	Agitator (vertical)
	PC PZ	MC/HC MZ/HZ FZ	FP FDK FZP	VK

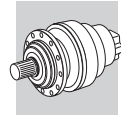
Inputs 			Hydraulic motor connecting
	P(IEC)	V_	Standard negative multidisc brake 6 = Type: 4, 5, 6 A = Braking torque: A, B, C, ...

NOTE:

- With the negative multi disc brake, you must always ensure a minimum pressure for opening the discs. This must be 20% higher than that of the table of the brakes.

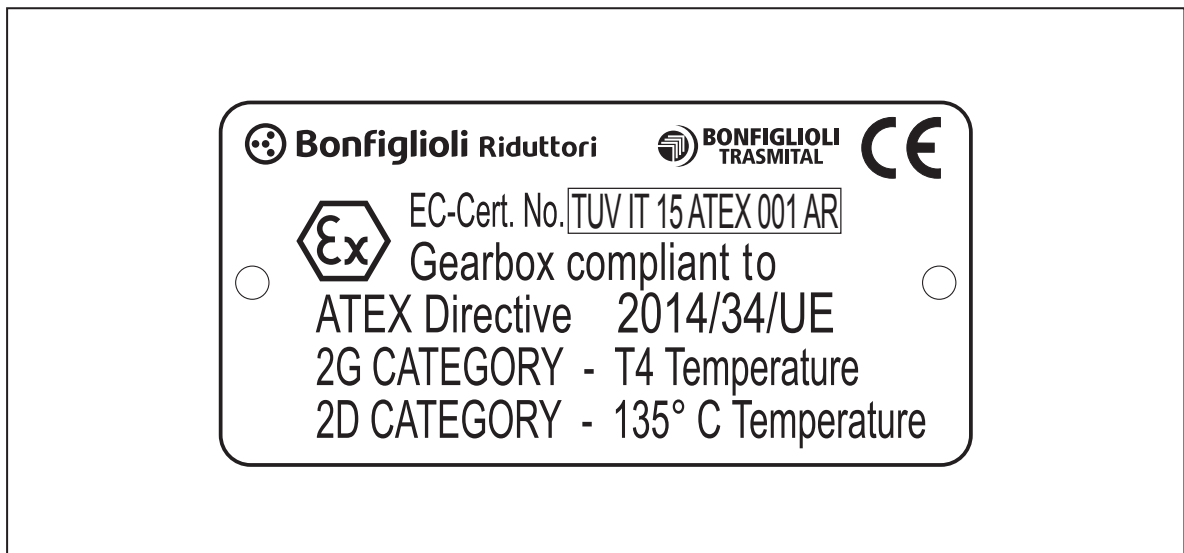
- The pressure max. of brake control must not exceed 50 bar.

Accessories 					
	P ...	B0A	M0A	G0A	W0A



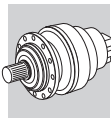
A4.2 CONSTRUCTIONAL CHARACTERISTICS

- Only synthetic lubricants are used.
- Only VITON® gaskets are used.
- Oil seals are equipped with dust lips.
- Vent plugs are equipped with valves with anti-intrusion springs, to prevent contamination of the lubricant by solid particles.
- Oil filler, drain and level plugs are made from steel and equipped with aluminium lock washers.
- No external metal moving parts in contact with other parts.
- No plastic parts prone to accumulating static charges; if present, such parts are shielded.
- Each gear unit is supplied with an installation drawing indicating the following information:
 - main technical characteristics
 - installation specifications
 - location of oil plugs for the specified mounting position
 - lubrication instructions
- The units are fitted with an additional nameplate specifying the product category. For example:



A4.3 OPERATIONAL CHARACTERISTICS

For installation in zones 21 and 22, the Customer must set out and implement a specific cleaning schedule for the unit's surfaces and recesses to prevent build ups of dust exceeding 5 mm in depth.



A4.4 SELECTING THE PRODUCT

The gear unit and gearmotor selection procedure is identical to that given in the 300M Series, and any future revisions thereof.

The following chapters contain variations to the procedure given in the catalogue, and subsequent revisions thereof as regards the selection of products compliant with 2014/34/EU, which supersede the procedure specified in the catalogue for units intended for installation in areas without risk of explosion.

These variations primarily affect the following:

- Application of an adjusting factor to the thermal capacity.
- Application of a service factor « f_s » with a greater safety margin.

- Thermal capacity « P_t » [kW]

This parameter is linked to the gearbox thermal limit. Values for the thermal capacity are listed within the rating charts of gearboxes and gearmotors and represent the mechanical power that can be transmitted continuously at an input speed n_1 and at an ambient temperature of 20°C, without the temperatures t_o and t_s exceeding the values indicated in the chapter “Allowed temperature limits”.

When the duty cycle is formed by short operating periods and rest time is long enough for the unit to cool down, the thermal capacity is hardly significant and it may be omitted from calculation.

For ambient temperatures other than 20°C, intermittent duty and drive speed n_1 other than the reference speed listed in the rating charts, P_t is to be adjusted through thermal factor f_t and/or speed factor f_v as listed in the following tables. Finally, make sure that the following condition is always satisfied:

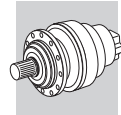
$$P_{r1} \leq P_t \times f_t \times f_v \times f_{EX}$$

		f_t			
t_a (°C)	Continuous duty	Intermittent duty			
		Intermittence ratio « I »			
		80%	60%	40%	20%
10	1.2	1.3	1.6	1.8	2.0
20	1.0	1.1	1.3	1.5	1.7
30	0.9	1.0	1.2	1.3	1.5
40	0.7	0.8	0.9	1.0	1.2
50	0.5	0.6	0.7	0.8	0.9

n_1 (min ⁻¹)	f_v
500	1.35
900	1.2
1500	1.0
1800	0.85

$$I = \frac{t_f}{t_f + t_r} \times 100 \quad \begin{array}{l} t_f = \text{operating time under load;} \\ t_r = \text{rest time.} \end{array}$$

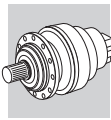
Frame size	Configuration			f_{EX}
	in line	right angle	reductions	
300...309, 310M...318M, 319...321	L	-	1	0.8
300...309, 310M...318M, 319...321	L	-	2	0.9
300...309, 310M...318M, 319...321	L	-	3 - 4	1.0
300...306	-	R	2	0.8
300...309, 310M...318M, 319...321	-	R	3 - 4	0.9



- Service factor in ATEX gearboxes with Negative multidisc brake

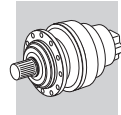
		POS A, E, F, G Input speed [rpm]																	
		100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800
300	L1	Unusable speed																	
	L2	85%																	
	L3	85%																	
	L4	85%																	
301	L1	Unusable speed																	
	L2	85%																	
	L3	85%																	
	L4	85%																	
303	L1	85%						Unusable speed											
	L2	85%																	
	L3	85%																	
	L4	85%																	
305	L1	85%						Unusable speed											
	L2	85%																	
	L3	85%																	
	L4	85%																	
306	L1	85%						Unusable speed											
	L2	85%												75%					
	L3	85%																	
	L4	85%																	
307	L1	85%						Unusable speed											
	L2	85%												75%					
	L3	85%																	
	L4	85%																	
309	L1	85%						Unusable speed											
	L2	85%												75%					
	L3	85%																	
	L4	85%																	
310M	L1	no brake																	
	L2	85%												75%					
	L3	85%																	
	L4	85%																	
311M	L1	no brake																	
	L2	85%												75%					
	L3	85%																	
	L4	85%																	
313M	L1	no brake																	
	L2	85%												75%					
	L3	85%																	
	L4	85%																	
315M	L1	no brake																	
	L2	Unusable speed																	
	L3	85%												80%					
	L4	85%												75%					
316M	L1	no brake																	
	L2	no brake																	
	L3	85%												80%					
	L4	85%												75%					
317M	L1	no brake																	
	L2	no brake																	
	L3	85%												75%					
	L4	85%												75%					
318M	L1	no brake																	
	L2	no brake																	
	L3	85%												80%					
	L4	85%												75%					
319	L1	no brake																	
	L2	no brake																	
	L3	85%												80%					
	L4	85%												80%					
321	L1	no brake																	
	L2	no brake																	
	L3	no brake																	
	L4	85%												80%					

Unusable speed



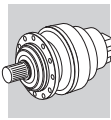
		POS O, Q, T, V Input speed [rpm]																							
		100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800						
300	L1	85%																							
	L2	85%									70%														
	L3	85%									70%														
	L4	85%									70%														
301	L1	85%																							
	L2	85%									70%														
	L3	85%									70%														
	L4	85%									70%														
303	L1	60%						Unusable speed																	
	L2	85%									70%														
	L3	85%									70%														
	L4	85%									70%														
305	L1	60%						Unusable speed																	
	L2	85%									70%														
	L3	85%									70%														
	L4	85%									70%														
306	L1	50%				Unusable speed																			
	L2	60%												40%											
	L3	85%									70%														
	L4	85%									70%														
307	L1	50%				Unusable speed																			
	L2	60%												40%											
	L3	85%									70%														
	L4	85%									70%														
309	L1	50%				Unusable speed																			
	L2	60%												40%											
	L3	85%									70%														
	L4	85%									70%														
310M	L1	no brake																							
	L2	50%						15%						10%						Unusable speed					
	L3	60%												40%											
	L4	85%									70%														
311M	L1	no brake																							
	L2	50%						15%						10%						Unusable speed					
	L3	60%												40%											
	L4	85%									70%														
313M	L1	no brake																							
	L2	50%						15%						10%						Unusable speed					
	L3	60%												40%											
	L4	85%									70%														
315M	L1	no brake																							
	L2	Unusable speed																							
	L3	50%						15%						10%						Unusable speed					
	L4	60%												40%											
316M	L1	no brake																							
	L2	Unusable speed																							
	L3	50%						15%						10%						Unusable speed					
	L4	60%												40%											
317M	L1	no brake																							
	L2	Unusable speed																							
	L3	50%						15%						10%						Unusable speed					
	L4	60%												40%											
318M	L1	no brake																							
	L2	Unusable speed																							
	L3	50%						15%						10%						Unusable speed					
	L4	60%												40%											
319	L1	no brake																							
	L2	no brake																							
	L3	50%						Unusable speed																	
	L4	50%						15%						10%											
321	L1	no brake																							
	L2	no brake																							
	L3	no brake																							
	L4	50%						15%						10%											

Unusable speed



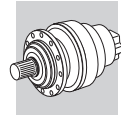
		POS B0, B2, I0, I2, J0, J2, M1, M3, P, R, U, W Input speed [rpm]																								
		100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800							
300	R2						85%										70%									
	R3						85%										70%									
	R4						85%										70%									
301	R2						85%										70%									
	R3						85%										70%									
	R4						85%										70%									
303	R2						85%										70%									
	R3						85%										70%									
	R4						85%										70%									
305	R2						85%										70%									
	R3						85%										70%									
	R4						85%										70%									
306	R2						85%										70%									
	R3						85%										70%									
	R4						85%										70%									
307	R2						60%										40%									
	R3						85%										70%									
	R4						85%										70%									
309	R2						60%										40%									
	R3						85%										70%									
	R4						85%										70%									
310M	R2 (A)						60%										40%									
	R2 (B)	50%										15%					10%									
	R3						85%										70%									
	R4						85%										70%									
R2 (A)						60%										40%										
311M	R2 (B)	50%										15%					10%									
	R2 (C)	50%										15%					10%									
	R3						60%										40%									
	R4						85%										70%									
	R2 (A)						60%										40%									
313M	R2 (B)	50%										15%					10%									
	R2 (C)	50%										15%					10%									
	R3						60%										40%									
	R4						85%										70%									
	R3 (A)						60%										40%									
315M	R3 (B)	50%										15%					10%									
	R3 (C)	50%										15%					10%									
	R4						60%										40%									
	R3 (B)	50%										15%					10%									
316M	R3 (C)	50%										15%					10%									
	R4						60%										40%									
	R3 (A)						60%										40%									
317M	R3 (B)	50%										15%					10%									
	R3 (C)	50%										15%					10%									
	R4						60%										40%									
	R4 (B)	50%										15%					10%									
318M	R4 (C)	50%										15%					10%									
	R4 (B)						60%										40%									
	R4 (C)	50%										15%					10%									
319	R4 (C)	50%										15%					10%									
	R4 (B)						60%										40%									
	R4 (C)	50%										15%					10%									
321	R4 (B)						60%										40%									
	R4 (C)	50%										15%					10%									
	R4 (C)	50%										15%					10%									

Unusable speed



		POS B1, B3, I1, I3, J1, J3, M0, M2 Input speed [rpm]																			
		100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800		
300	R2																	85%			
	R3																	85%			
	R4																	85%			
301	R2																	85%			
	R3																	85%			
	R4																	85%			
303	R2																	85%			
	R3																	85%			
	R4																	85%			
305	R2																	85%			
	R3																	85%			
	R4																	85%			
306	R2																	85%			
	R3																	85%			
	R4																	85%			
307	R2																	85%		75%	
	R3																	85%			
	R4																	85%			
309	R2																	85%		75%	
	R3																	85%			
	R4																	85%			
310M	R2 (A)																	85%		75%	
	R2 (B)																	85%		Unusable speed	
	R3																	85%			
	R4																	85%			
311M	R2 (A)																	85%		75%	
	R2 (B)																	85%		Unusable speed	
	R2 (C)																	85%		Unusable speed	
	R3																	85%		75%	
	R4																	85%			
313M	R2 (A)																	60%		Unusable speed	
	R2 (B)																	85%		Unusable speed	
	R2 (C)																	85%		Unusable speed	
	R3																	85%		75%	
	R4																	85%			
315M	R3 (A)																	60%		Unusable speed	
	R3 (B)																	85%		Unusable speed	
	R3 (C)																	85%		Unusable speed	
	R4																	85%		75%	
316M	R3 (B)																	85%		Unusable speed	
	R3 (C)																	85%		Unusable speed	
	R4																	85%		75%	
317M	R3 (A)																	85%		Unusable speed	
	R3 (B)																	85%		Unusable speed	
	R3 (C)																	85%		Unusable speed	
	R4																	85%		75%	
318M	R4 (B)																	85%		Unusable speed	
	R4 (C)																	85%		Unusable speed	
319	R4 (B)																	60%		Unusable speed	
	R4 (C)																	85%		Unusable speed	
	R4 (C)																	85%		Unusable speed	
321	R4 (B)																	85%		Unusable speed	
	R4 (C)																	85%		Unusable speed	
	R4 (C)																	85%		Unusable speed	

Unusable speed

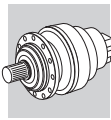


- Service factor « f_s »

Service factor « f_s »						
Duty	Starts / hour	Accumulated operating hours (h)				
		≤ 5000	10000	15000	25000	50000
	z	Daily operating hours (h)				
h < 4		4 < h < 8	8 < h < 12	12 < h < 16	16 < h < 24	
Uniform load	Z < 10	1.10	1.10	1.15	1.30	1.60
	10 < Z < 30	1.10	1.15	1.30	1.50	1.80
	30 < Z < 100	1.10	1.25	1.45	1.60	2.00
Moderate shock load	Z < 10	1.10	1.25	1.45	1.60	2.00
	10 < Z < 30	1.10	1.40	1.60	1.80	2.20
	30 < Z < 100	1.20	1.50	1.70	2.00	2.40
Heavy shock load	Z < 10	1.20	1.50	1.70	2.00	2.40
	10 < Z < 30	1.30	1.60	1.80	2.10	2.60
	30 < Z < 100	1.40	1.75	2.00	2.30	2.80

- Limitation of input speed for single-stage (L1) gearboxes

Frame size	reductions	n_1 (min ⁻¹) MAX
300 , 301	L1	1000
303 , 305	L1	700
306 ... 309	L1	500
310M ... 313M	L1	400
315M , 316M	L1	300
317M , 318M , 319 ... 321	L1	200

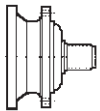
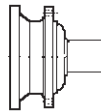
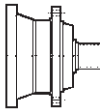
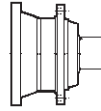
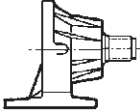
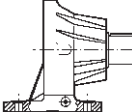
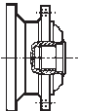
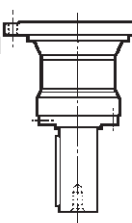
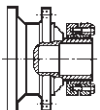
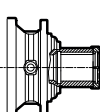
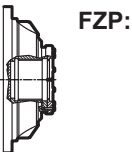


A5 ORDERING NUMBERS

A5.1 DESIGNATION OF IN-LINE (300M L) AND RIGHT ANGLE (300M R) GEAR UNITS

3 11M L 2 16.7 HZ

OUTPUT VERSION

	MZ: Splined male shaft		MC: Solid keyed shaft
	HZ: Heavy duty splined male shaft		HC: Heavy duty solid keyed shaft
	PZ: Foot base with splined shaft		PC: Foot base with solid keyed shaft
	FZ / FZB: Hollow splined shaft		VK: Reinforced output with heavy duty keyed shaft for stirrers and mixer
	FP: Hollow shaft for shrink disc		
	FDK: Hollow shaft with double keyway		FZP: Hollow splined shaft with axial blockage device (recommended for shaft mounted installation)

GEAR RATIO

Fill in the value of the gear ratio (including point and decimals) as listed in the selection charts

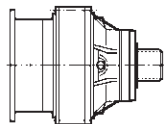
Ex.: 1/44.6 = 44.6 1/131 = 131

REDUCTIONS

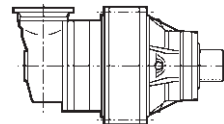
1 - 2 - 3 - 4

DESIGN

L = In line



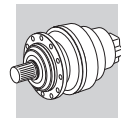
R = Right angle



GEARBOX FRAME SIZE

00 = 300	06 = 306	11M = 311M	17M = 317M	23 = 325
01 = 301	07 = 307	13M = 313M	18M = 318M	25 = 325
03 = 303	09 = 309	15M = 315M	19 = 319	
05 = 305	10M = 310M	16M = 316M	21 = 321	

SERIES



- V11B A A W0A EX ...

OPTIONS

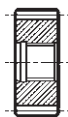
INPUT SHAFT PREFERENTIAL DIRECTION OF ROTATION
(applicable to angle gear units only)

RA = counterclockwise
RO = clockwise



CONFIGURATION COMPLIANT WITH THE OLD DIRECTIVE 94/9/EC AND AT THE NEW DIRECTIVE 2014/34/EU.

OUTPUT FITTINGS



P... = Pinions



B0A = Splined bar



M0A = Sleeve coupling



G0A = Shrink disc



W0A = Flange

MOTOR FLANGE ORIENTATION

MOUNTING POSITION



In mounting positions featuring a vertical output shaft, the gearbox will be equipped with an expansion tank. Please request the installation drawing to Bonfiglioli's Technical Service.



INPUT



Input keyed shaft

	V01A	V01B	V05B	V06B	V07A	V07B	V10B	V11B	V15B
diam.	Ø24	Ø38	Ø48	Ø60	Ø60	Ø80	Ø80	Ø80	Ø120



Electric motor connection **P** + motor size (80,90,100,132,160, ...)



Hydraulic Motor connection



ONLY WITH HYDRAULIC MOTOR ADAPTOR



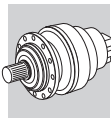
Standard negative multidisc brake

6 = Type: **4, 5, 6**

A = Braking torque: **A, B, C, ...**

Negative multidisc brake for MG hydraulic motor

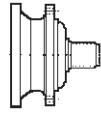
SF = Without brake



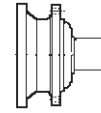
A5.2 DESIGNATION OF COMBINED WORM+PLANETARY (3/V) GEAR UNITS

3/V 05 L 3 623 PC

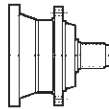
OUTPUT VERSION



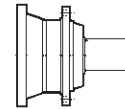
MZ: Splined male shaft



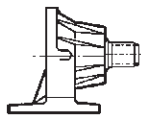
MC: Solid keyed shaft



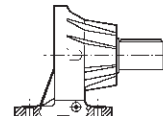
HZ: Heavy duty splined male shaft



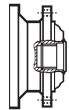
HC: Heavy duty solid keyed shaft



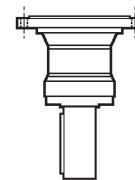
PZ: Foot base with splined shaft



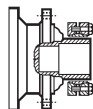
PC: Foot base with solid keyed shaft



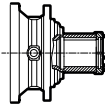
FZ / FZB: Hollow splined shaft



VK: Reinforced output with heavy duty keyed shaft for stirrers and mixer



FP: Hollow shaft for shrink disc



FDK: Hollow shaft with double keyway



FZP: Hollow splined shaft with axial blockage device (recommended for shaft mounted installation)

GEAR RATIO

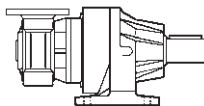
Fill in the value of the gear ratio (including point and decimals) as listed in the selection charts
Ex.: 1/773 = 773

REDUCTIONS

3

DESIGN

L = Combined 300 unit, 2 planetary stages + worm gear units

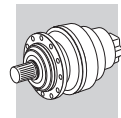


GEARBOX FRAME SIZE

- 00** = 3/V 00 **06** = 3/V 06
- 01** = 3/V 01
- 03** = 3/V 03
- 05** = 3/V 05

SERIES

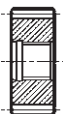
Combined 300 gearboxes / Worm gear units



P80 B5 AF W0A EX

CONFIGURATION COMPLIANT WITH THE DIRECTIVE 2014/34/EU.

OUTPUT FITTINGS



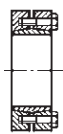
P... = Pinions



B0A = Splined bar



M0A = Sleeve coupling



G0A = Shrink disc

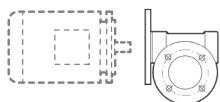


W0A = Flange

MOUNTING POSITION

MOTOR EXECUTION
B5, B14

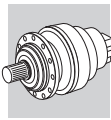
INPUT



Electric motor connection
P + motor size (80,90,100,132,160, ...)



Input keyed shaft
HS



A6 DECLARATION OF CONFORMITY

The Declaration of Conformity, is the document which attests to the conformity of the product to Directive 2014/34/EU.

The validity of the Declaration is bound to observance of the instructions given in the User, Installation and Service Manual for safe use of the product throughout its service life.

This can be downloaded from www.bonfiglioli.com where the manual is available in PDF format in a number of languages.

The instructions regarding ambient conditions are of particular importance inasmuch as failure to observe them during operation of the product renders the certificate null and void. In case of doubt regarding the validity of the certificate of conformity, contact the BONFIGLIOLI RIDUTTORI technical department.

