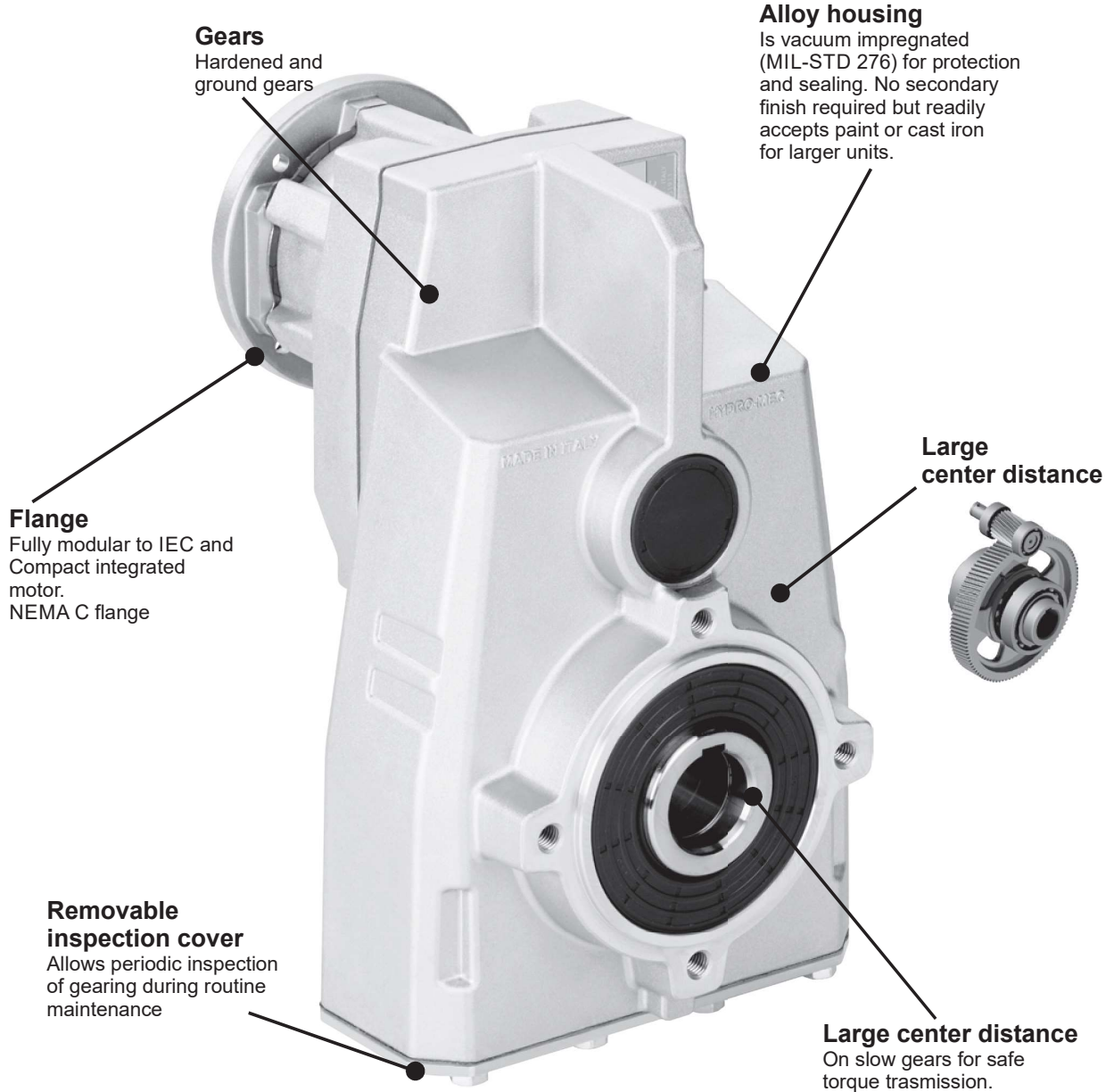


Aluminum & cast iron shaft mounted gearboxes

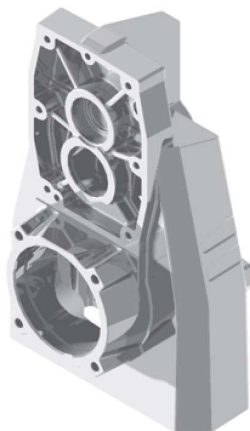
A modular and compact product



7

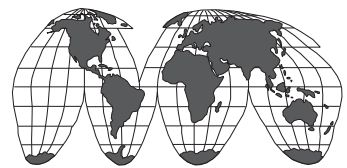
Single-piece aluminum / Cast Iron housing

Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing



Painting

Cast iron gearboxes are painted RAL 7046

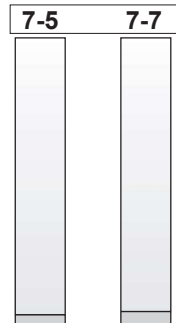


World wide sales network.

Specific type datasheet on page...

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3 Stage

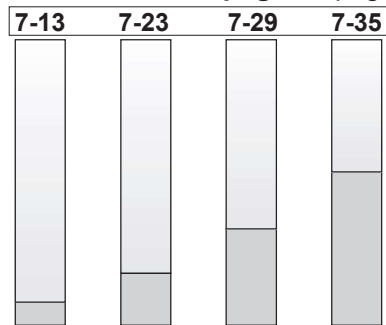


Types / Tipi /
Tipen / Types /
Tipos

⇒ **FS10** 60Nm
FS20 90Nm

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1 Stage

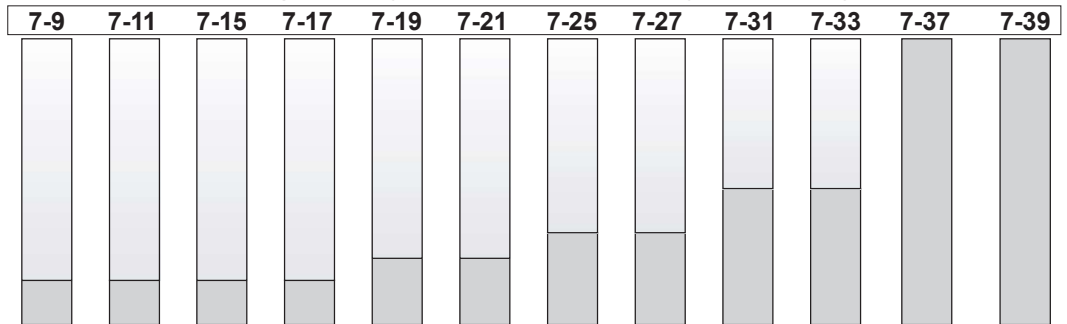


Types / Tipi /
Tipen / Types /
Tipos

⇒ **FA41** 225Nm
FC61 380Nm
FC71 670Nm
FC81 1175Nm

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2 and 3 Stage



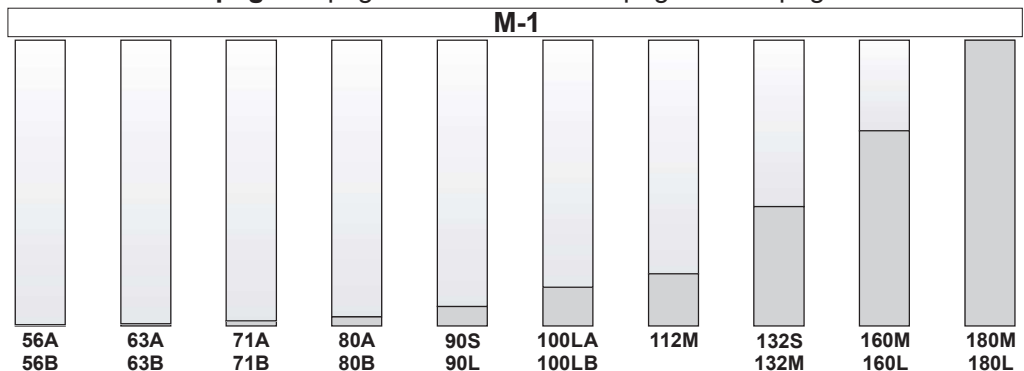
Types / Tipi /
Tipen / Types /
Tipos

⇒ **FA32** 150Nm
FA33 150Nm
FA42 320Nm
FA43 320Nm
FA52 490Nm
FA53 510Nm
FC62 675Nm
FC63 675Nm
FC72 900Nm
FC73 900Nm
FC82 2100Nm
FC83 2100Nm

On page / A pagina / Auf Seite / À la page / En la página



Types / Tipi /
Tipen / Types /
Tipos



Type - Tipo - Typ
Type - Tipo

Size - Grandezza - Größe
Taille - Tamaño

Mounting - Montaggio
Montage - Fixation
Tipo de montaje

Rapporto - Ratio
Untersetzung
Reduction - Relacion

Output shaft
Albero uscita
Abtriebswelle
Arbre de sortie
Eje en salida

M

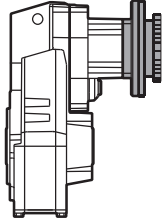
FA42

C

10.04

-D

Shaft mounted helical
Riduttori ad assi paralleli



With IEC motor

M

1 Stage
Riduzione
Stufe
Trains
Etapas

2 Stages
Riduzioni
Stufen
Trains
Etapas

3 Stages
Riduzioni
Stufen
Trains
Etapas

Aluminum/Alluminio/Aluminium/Aluminio

FS10

FS20

FA41

FA32

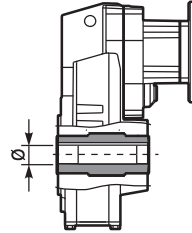
FA42

FA52

FA33

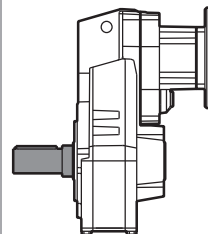
FA43

FA53



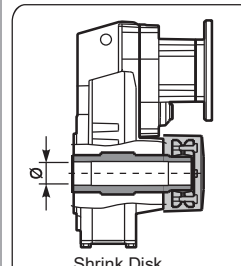
Hollow output shaft

C



Single output shaft

A



Shrink Disk

D

Only on request for Q.ty
A richiesta per quantità

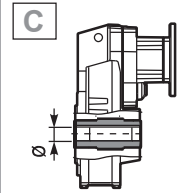
See technical
data table

Vedi tabella dati
tecnici.

Technisches
Datenblatt
beachten

Voir Tableau
données
techniques

Ver tabla datos
técnicos



→ **STANDARD**

→ Only on request for Q.ty
A richiesta per quantità

FS10

-J → ø17

FS20

-B → ø20

FA32-3

-C → ø25

**FA41 FA42
FA43**

-C → ø25

-D → ø30

-E → ø35

**FA52 FA53
FC61 FC62 FC63**

-E → ø35

-F → ø40

FC71 FC72 FC73

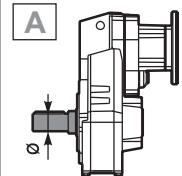
-F → ø40

-G → ø45

FC81 FC82 FC83

-H → ø50

-I → ø55



Single output shaft

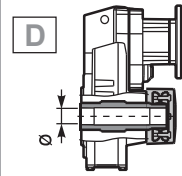
-L FA32/3 → ø25

-M FA41/2/3 → ø30
FA52/3

-N FC61/2/3 → ø35

-O FC71/2/3 → ø40

-K FC81/2/3 → ø50



Shrink disk

-Q FA42/3 → ø30

-T FA52/3 → ø35
FC62/3

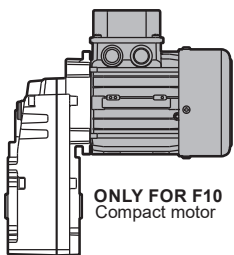
-U FC72/3 → ø40

-V FC82/3 → ø50

Modular base

B

Not available
for: FC61, FC71,
FC81, FC82 .



C

ONLY FOR F10
Compact motor

Cast Iron/Ghisa/Grauguss/Fonte/Fundicion

FC61

FC71

FC81

FC62

FC72

FC82

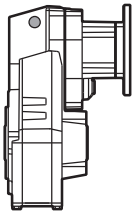
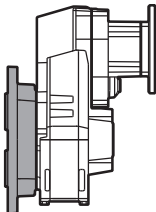

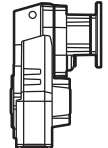


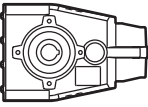
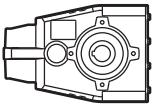
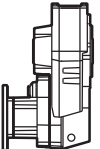
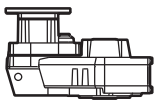
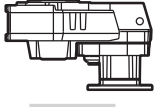
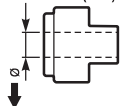
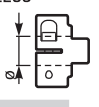
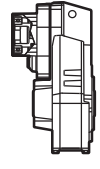



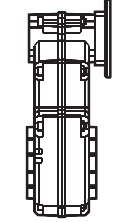
FC63

FC73

FC83



On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

Type - Tipo - Typ Types - Tipo	Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida	Motor size - Grandezza motore Motor Größe Grandeur moteur - Tamaño motor	Mounting position Posizione montaggio Einbaulage Position de montage Position de montaje	Input bore Foro entrata Eingangshohlwelle Trou d'entree Eje hueco de entrada	Terminal box position Posizione morsetteria Klemmkastenlage Position boîte à bornes Posición caja de bornes	
ST	N	-C	H1	ST		
						
ST Foro standard Standard bore	N Senza flangia Without flange FS20 1 → ∅140 FA32-3 FA41-2-3 2 → ∅160 3 → ∅200 4 → ∅250 FA52 FA53 FC61 FC62 FC63 4 → ∅250 FC71 FC72 FC73 4 → ∅250 5 → ∅300 FC81 FC82 FC83 5 → ∅300 6 → ∅350	Flange Flangia B5 -A=56 (∅120) -B=63 (∅140) -C=71 (∅160) -D=80 (∅200) -E=90 (∅200) -F=100 (∅250) -G=132 (∅300) -H=160 (∅350) -I=180 (∅350) B14 -O=56 (∅80) -P=63 (∅90) -Q=71 (∅105) -R=80 (∅120) -T=90 (∅140) -U=100 (∅160) -V=132 (∅200) Brushless BB=50/70-M5 BC=60/75-M5 BD=70/90-M6 BE=80/100-M6 BF=95/115-M8 BG=110/145-M8 BH=130/165-M8	Type R Tipo R FA33 FA43 FS10 FS20 -1 → ∅14 FA32 FA42 FA53 FC63 FC73 -2 → ∅19 FA52 FC62 FC72 FC83 -3 → ∅24 FC82 -4 → ∅28 Without flange Senza flangia -M → With coupling FA33 FA43 FS10 FS20 -Z → ∅9 (56B5) -0 → ∅11 (63B5) -1 → ∅14 (71B5) FA32 FA42 FA53 FC63 FC73 -1 → ∅14 (71B5) -2 → ∅19 (80B5) -3 → ∅24 (90B5) FA52 FC62 FC72 FC83 -2 → ∅19 (80B5) -3 → ∅24 (90B5) -4 → ∅28 (100B5) FA41 -4 → ∅28 (100B5)	H1 STANDARD  H4  H3  H2  H5  H6	ST standard bore foro standard COUPLING STANDARD (IEC)  -A = 9mm -B = 11mm -C = 14mm -D = 19mm -E = 24mm -F = 28mm BRUSHLESS *  -2 = 11mm -3 = 14mm -4 = 19mm -5 = 22mm -6 = 24mm -0 Ready for input coupling Predisposto per giunto 	With Type M specify terminal box position Con tipo M specificare posizione morsetteria  B STANDARD  C  D
						
-F Whit output flange con flangia uscita						



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft		
							-B	-C	-D	-E	-F	-Q	-R	-T	-U			Ratios code
							63	71	80	90	100 112	71	80	90	100 112			
231	6.06	2.2	86	0.9	2.02	80	B					C	C			2821		01
150	9.31	1.5	91	1.0	1.48	90	B					C	C			2813		02
128	10.96	1.5	107	1.0	1.53	110	B					C	C			1921		03
110	12.71	1.5	124	1.0	1.50	125	B					C	C			1721		04
94	14.91	1.5	146	1.0	1.45	142	B					C	C			1521		05
83	16.83	1.5	165	0.9	1.36	150	B					C	C			1913		06
79	17.80	1.1	127	1.2	1.29	150	B					C	C			1321		07
72	19.51	1.1	140	1.1	1.17	150	B					C	C			1713		08
61	22.90	1.1	164	0.9	1.00	150	B					C	C			1513		09
58	24.30	1.1	174	0.9	0.94	150	B					C	C			1021		10
54	26.15	0.75	128	1.2	0.88	150	B					C	C			1910	standard	11
51	27.34	0.75	134	1.1	0.84	150	B					C	C			1313	ø25	12
46.2	30.31	0.75	149	1.0	0.76	150	B					C	C			1710		13
44.1	31.71	0.75	156	1.0	0.72	150	B					C	C			921		14
39.4	35.57	0.75	175	0.9	0.64	150	B					C	C			1510		15
37.5	37.32	0.55	135	1.1	0.61	150	B					C	C			1013		16
33.0	42.46	0.55	154	1.0	0.54	150	B					C	C			1310		17
28.7	48.70	0.55	176	0.9	0.47	150	B					C	C			913		18
24.2	57.96	0.37	140	1.1	0.40	150	B					C	C			1010		19
21.8	64.31	0.37	156	1.0	0.36	150	B					C	C			713		20
18.5	75.64	0.25	124	1.2	0.30	150	B					C	C			910		21
14.0	99.89	0.25	163	0.9	0.23	150	B					C	C			710		22

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available Flange Motore Disponibili
 B) Supplied with Reduction Bushing Fornito con Bussola di Riduzione
 B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione
 C) Motor Flange Holes Position Posizione Fori Flangia Motore

EN Unit **FA32** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

7

I Il riduttore **FA32** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FA32** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FA32** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FA32** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil				
	Per queste posizioni specificare in fase d'ordine o aggiungere olio				
H1	H4	H3	H2	H5	H6
0.65 LT	0.50 LT	0.50 LT	0.60 LT	0.80 LT	0.65 LT
SHELL Omala S4 WE 320			ENI Telium VSF 320		

For all details on lubrication and plugs check our website [tab. 1](#)
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$F_{eq} = FR \cdot \frac{106}{X+80}$

n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
300	250	1250	140	360	1800	70	470	2350
250	270	1350	120	380	1900	40	550	2750
200	320	1600	85	440	2200	15	560	2800

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero di entrata

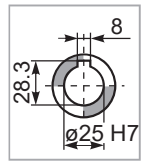
n_1	FA	FR
1400	240	1200
900	280	1400
500	340	1700

tab. 2

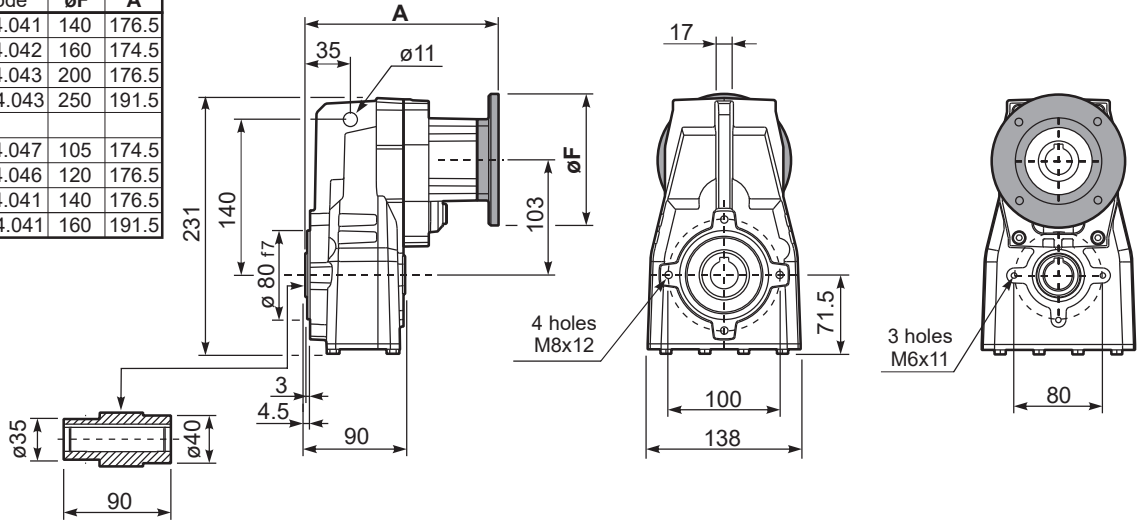
PFA32C... Basic gearbox
Riduttore base

Gearbox weight **7.0 kg**
peso riduttore

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	176.5
71B5	K063.4.042	160	174.5
80/90B5	K063.4.043	200	176.5
100/112B5	KC40.4.043	250	191.5
71B14	K063.4.047	105	174.5
80B14	K063.4.046	120	176.5
90B14	K063.4.041	140	176.5
100/112B14	KC40.4.041	160	191.5

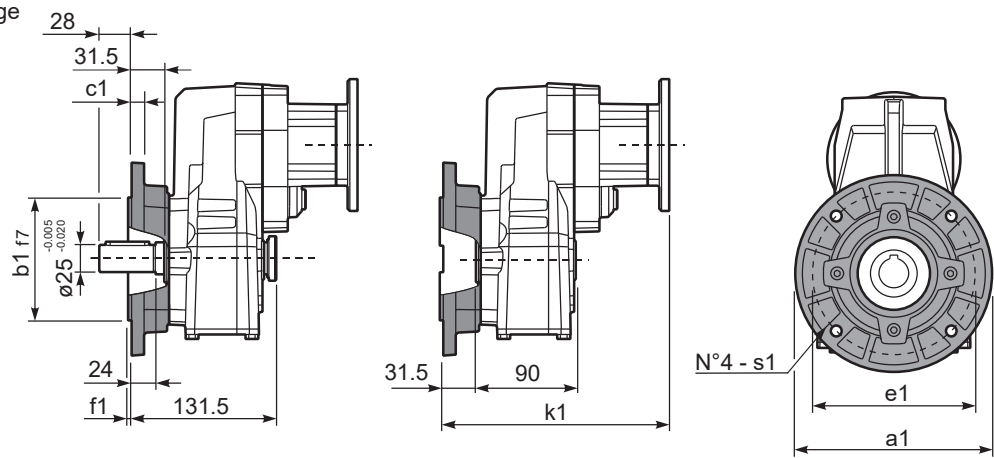


Standard
Hollow shaft



PFA32...-F... Output flange
Flangia uscita

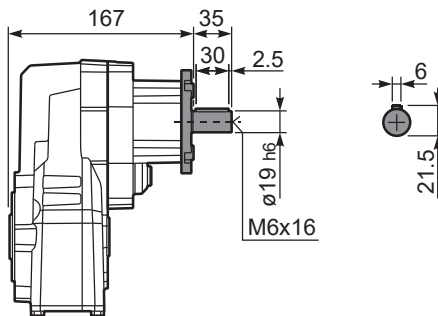
Motor Flange	k1
63B5	208
71B5	206
80/90B5	208
100/112B5	223
71B14	206
80B14	208
90B14	208
100/112B14	223



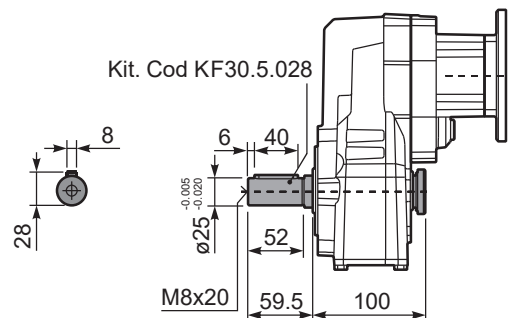
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	f1	s1	Kit code
160	110	10	130	3	9	KX4A.9.010
200	130	11	165	3.5	11	KX4A.9.011
-	-	-	-	-	-	-

RFA32C... Input Shaft
Albero in entrata



PFA32 A... Single output shaft
Albero uscita semplice





▪ **QUICK SELECTION** / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft		
							-B	-C	-O	-P	-Q			Ratios code
							63	71	56	63	71			
13.6	102.57	0.25	164	0,9	0.23	150			C	C		131710		01
12.6	110.77	0.18	136	1.1	0.21	150			C	C		91321		02
11.8	118.89	0.18	145	1.0	0.20	150			C	C		151310		03
10.9	128.49	0.18	157	1.0	0.18	150			C	C		101313		04
9.7	143.72	0.18	176	0.9	0.16	150			C	C		131310		05
8.7	161.67	0.12	128	1.2	0.14	150			C	C		71713		06
8.2	170.10	0.12	134	1.1	0.14	150			C	C		91313		07
7.4	188.57	0.12	149	1.0	0.12	150			C	C		91710	standard ø25	08
7.0	199.57	0.12	158	1.0	0.12	150			C	C		101310		09
6.2	226.51	0.09	143	1.1	0.10	150			C	C		71313		10
5.6	251.11	0.09	158	0.9	0.09	150			C	C		71710		11
5.3	264.21	0.09	167	0.9	0.09	150			C	C		91310		12
4.7	298.01	0.06	123	1.2	0.08	150			C	C		61710		13
4.0	351.82	0.06	146	1.0	0.07	150			C	C		71310		14
3.4	417.54	0.06	173	0.9	0.06	150			C	C		61310		15

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili
 B) Supplied with Reduction Bushing Fornito con Bussola di Riduzione
 B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione
 C) Motor Flange Holes Position Posizione Fori Flangia Motore

EN Unit **FA33** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FA33** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FA33** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FA33** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FA33** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio				
0.90 LT	0.55 LT	0.55 LT	0.65 LT	0.95 LT	0.70 LT
SHELL Omala S4 WE 320			ENI Telium VSF 320		

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS



n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
300	250	1250	140	360	1800	70	470	2350
250	270	1350	120	380	1900	40	550	2750
200	320	1600	85	440	2200	15	560	2800

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

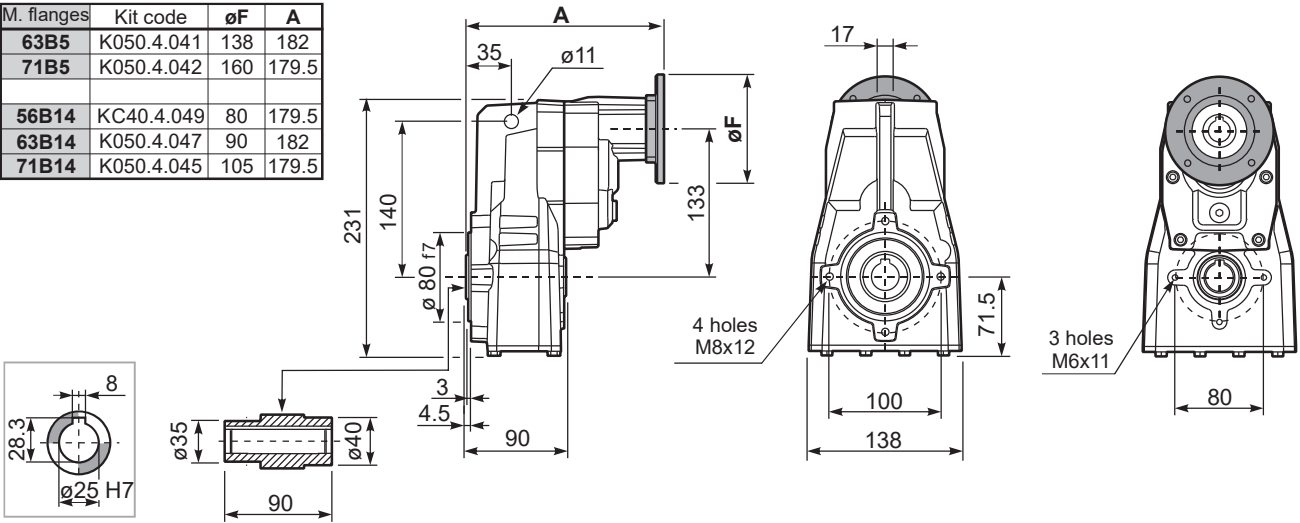
Input shaft Albero in entrata	n_1	FA	FR
	1400	140	700
	900	160	800
	500	190	950

tab. 2

PFA33C... Basic gearbox
Riduttore base

Gearbox weight **7.0 kg**
peso riduttore

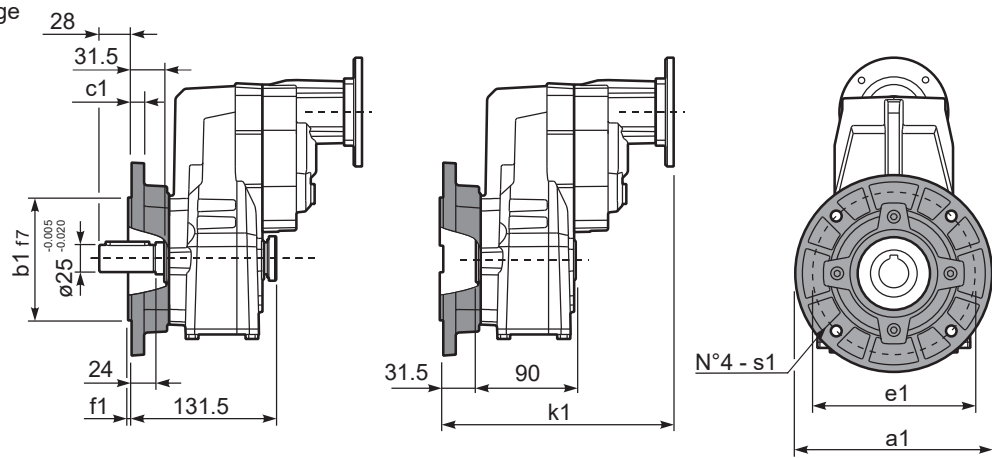
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	182
71B5	K050.4.042	160	179.5
56B14	KC40.4.049	80	179.5
63B14	K050.4.047	90	182
71B14	K050.4.045	105	179.5



Standard
Hollow shaft

PFA33...-F... Output flange
Flangia uscita

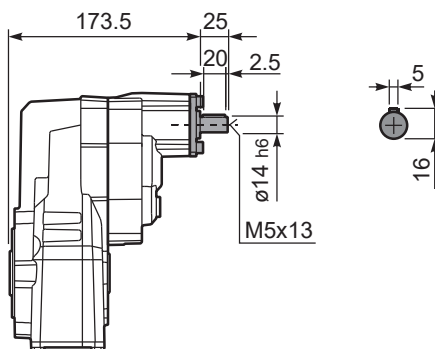
Motor Flange	k1
63B5	213.5
71B5	211
56B14	211
63B14	213.5
71B14	211



Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	f1	s1	Kit code
160	110	10	130	3	9	KX4A.9.010
200	130	11	165	3.5	11	KX4A.9.011
-	-	-	-	-	-	-

RFA33C... Input Shaft
Albero in entrata



PFA33 A... Single output shaft
Albero uscita semplice

