

Uniblock design. Suitable for all applications.

*Design compatto.
Adatto a tutte le applicazioni.*

AISI 304

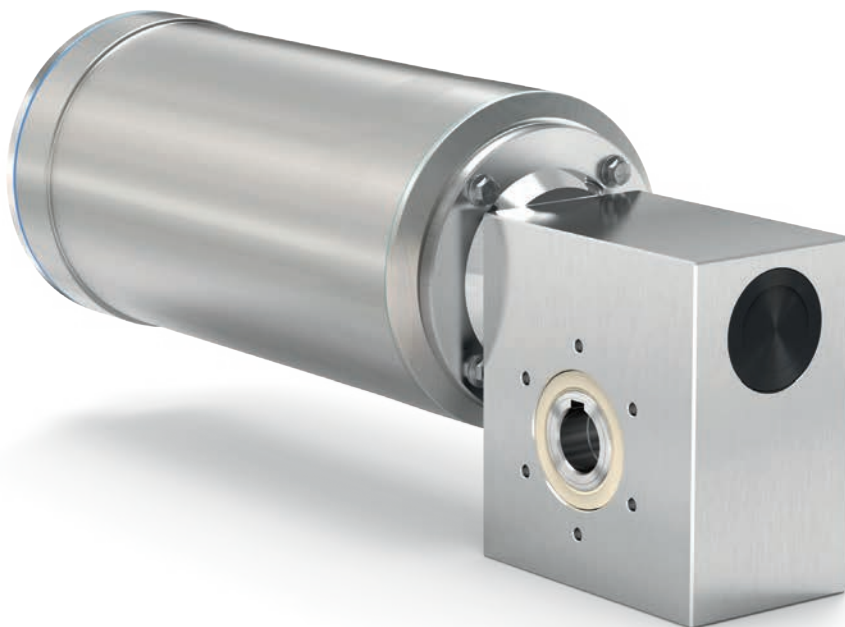
IP66

CE

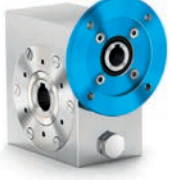
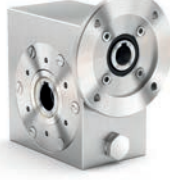
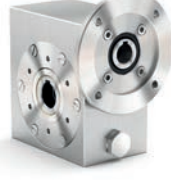
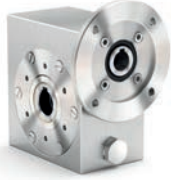
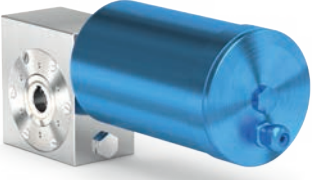











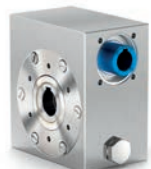
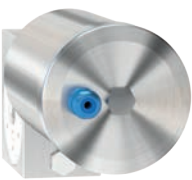


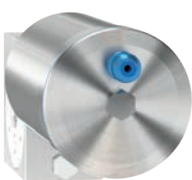
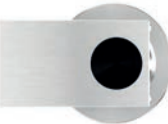

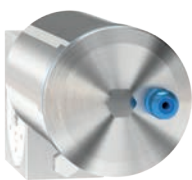
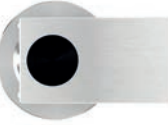


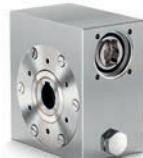
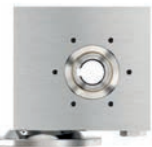
On req.
A rich.

IP69k




How to order Codifica

P	I45	UNI	N	10	0	IB
Type <i>Tipo</i>	Size <i>Grandezza</i>	Mounting <i>Montaggio</i>	Position <i>Posizione</i>	Ratio <i>Rapporto</i>	Hub Output shaft <i>Mozzo corona Albero uscita</i>	Diameter <i>Diametro</i>
P 	Worm gearboxes <i>Riduttori a vite senza fine</i>	UNI 	N 	See technical data table <i>Vedi tabelle dati tecnici</i>	0 Hollow Mozzo 	→ Standard 145
M 		FLL 	Select L or R position for output flange <i>Selezionare la posizione L o R per la flangia in uscita</i>		S Solid output shaft <i>Albero in uscita</i> 	IB→ø0.750 150 ID→ø1.000 163
B 	I45 I50 I63 I85 I11	BRI Stainless steel <i>Acciaio inox</i> 	L Left <i>Sinistra</i> 			IE→ ø1.125" IF→ ø1.250" 185 IH→ø1.500 111
R 			R Right <i>Destra</i> 			IK→ø2.000 Output male shaft is available only for standard bore <i>Albero maschio in uscita è disponibile solo per fori standard</i>

I	N	C	-W	B3	UW	For M type specify terminal box position <i>Per tipo M specificare posizione morsettiere</i>
Input / output shaft material <i>Materiale albero in entrata e uscita</i>	Protection cap <i>Coperchio di protezione</i>		Motor size <i>Grandezza motore</i>	Mounting position <i>Posizione di montaggio</i>	Input bore <i>Foro entrata</i>	
I Stainless steel <i>Acciaio inox</i> The quill input hollow bore is always in carbon steel <i>Il foro cavo in entrata è sempre in acciaio</i>	Left <i>Sinistra</i>	Right <i>Destra</i>	Motor flanges <i>Flange motore</i> NEMA -W → 56C (ø6.5") -X → 143/5TC (ø6.5") -Y → 182/4TC (ø8.88") AA → 213/5TC (ø8.88")	B3 	Standard bore <i>Foro standard</i> 	A 
	N Without protection cap <i>Senza coperchietto di protezione</i>	N Without protection cap <i>Senza coperchietto di protezione</i>	Without flange <i>Senza flangia</i> 	B8 	UW → ø0.625" UX → ø0.875" UY → ø1.125" UZ → ø1.375"	B 
	C Closed cap <i>Tappo chiuso</i>	C Closed cap <i>Tappo chiuso</i>	-N → Nema	B6 	With coupling <i>Con giunto</i> 	C 
	O Open cap <i>Tappo aperto</i>	O Open cap <i>Tappo aperto</i>		B7 	-W → ø0.625" -X → ø0.875" -Y → ø1.125"	D 
				V5 	Ready for input coupling <i>Predisposto per giunto</i> -0 Type B <i>Tipo B</i> 	
				V6 		

Input speed (n_1) = 1750 min⁻¹

Output speed	Ratio	Motor power	Output torque	Service factor	Nominal power	Nominal torque	Available NEMA motor flanges	Dynamic efficiency	Tooth module	Ratios code
n_2 [min ⁻¹]	i	P_{1M} [HP]	M_{2M} [lb in]	f.s	P_{1R} [HP]	M_{2R} [lb in]	-W 56C	RD	[mm]	
250.0	7	1	202	1.3	1.29	257		80	2.2	01
175.0	10	0.75	213	1.2	0.91	257		79	2.2	02
125.0	14	0.5	194	1.3	0.67	257		77	2.4	03
83.3	21	0.5	253	1.4	0.69	345		67	1.6	04
62.5	28	0.5	328	1.1	0.53	345		65	2.5	05
47.3	37	0.33	277	1.2	0.42	345		63	1.8	06
38.0	46	0.33	323	1.1	0.36	345		59	1.5	07
29.2	60	0.25	303	1.1	0.29	345		56	1.2	08
25.0	70	0.25	340	0.8	0.19	257		54	1.0	09
17.2	102	0.25*	450	<0.8	0.14	248		49	0.72	10

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}

* Potenza superiore a quella massima supportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

The nominal power should be reduced if the ambient temperature is $\geq 30^\circ\text{C}$, or when a cooler gearbox is required.

Diminuire la potenza nominale in caso di temperatura ambiente $\geq 30^\circ\text{C}$ o se è richiesta una bassa temperatura di utilizzo del riduttore.

-  **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

Lubrication

Lubrificazione

Unit I45 is supplied with synthetic oil to assure long life lubrication.

Food grade oil is available on request.

See Table 1 for lubrication and recommended quantity.

See Table 2 for possible radial and axial loads on the gearbox.

Il riduttore tipo I45 viene fornito con olio sintetico e lubrificazione tipo "long life".

Disponibile a richiesta olio alimentare.

Vedi Tabella 1 per oli e quantità consigliati.

Vedi Tabella 2 per i carichi radiali e assiali applicabili al riduttore.

Shell

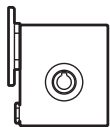
Omala S4 WE 320

Eni

Telium VSF 320

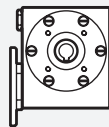
B3

Standard
5.28 oz



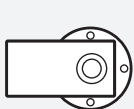
B8

On request
5.28 oz



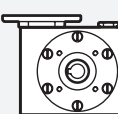
B6

On request
5.28 oz



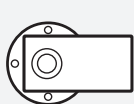
V5

On request
5.28 oz



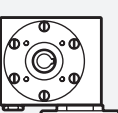
B7

On request
7.04 oz



V6

On request
5.28 oz



For more details on lubrication and plugs check our website.

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web.

Tab. 1

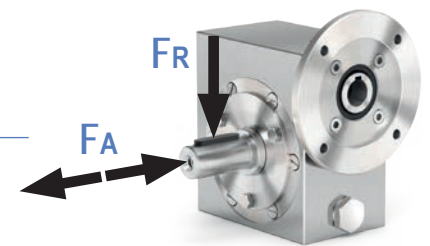
Radial and axial loads

Carichi radiali e assiali

Output shaft

Albero di uscita

n_2 [min ⁻¹]	FA [lb]	FR [lb]
200	40	202
150	45	225
100	49	247
75	54	270
50	58	315
25	67	405
15	90	450



Tab. 2

Suggested

Suggerito

Stainless steel protection cap (on request).

Coperchio di protezione in acciaio inox a richiesta.

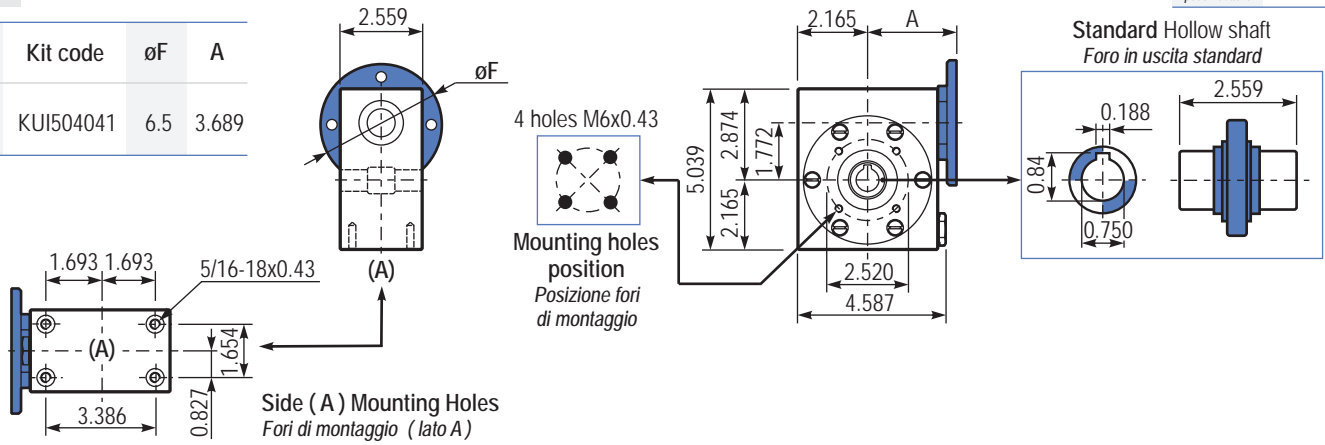
Kit cod. KI450211



PI45UNI... Basic gearbox
Riduttore base

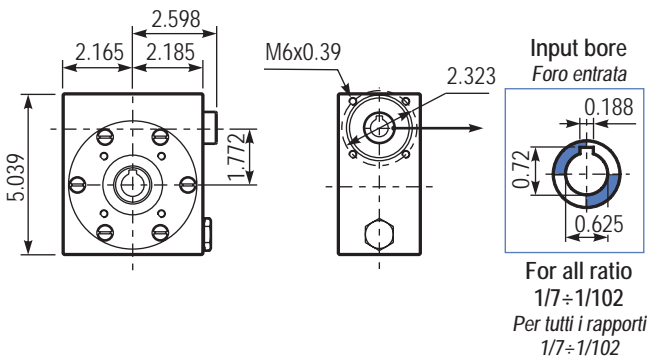
Gearbox weight
peso riduttore 11.0 lb

M. flanges	Kit code	øF	A
56C	KUI504041	6.5	3.689

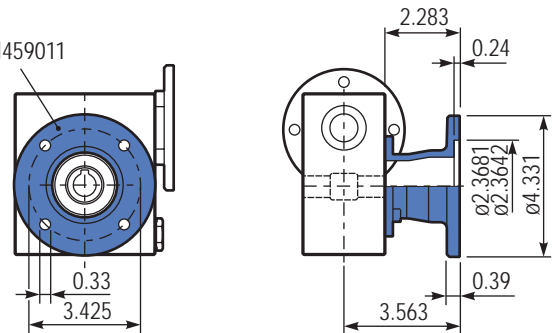


BI45UNI... Modular base
Base modulare

PI45FLL... Output flange
Flangia uscita

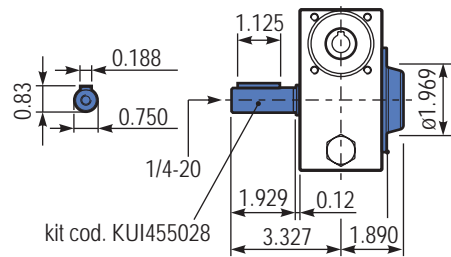
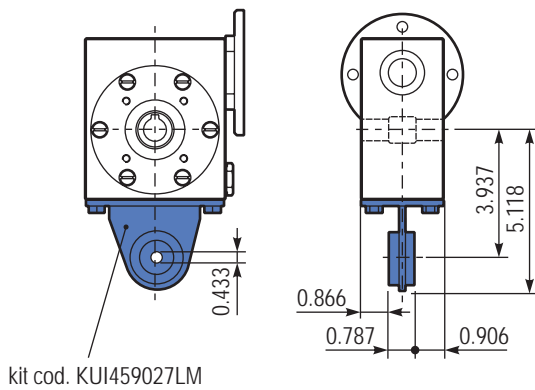


kit cod. KI459011




PI45BRI... Reaction arm
Braccio di reazione

PI45.....SIB Single Shaft
Albero lento semplice



kit cod. KI450211
Protection cup
(on request)
A richiesta coperchio
di protezione

Input speed (n_1) = 1750 min⁻¹

Output speed	Ratio	Motor power	Output torque	Service factor	Nominal power	Nominal torque	Available NEMA motor flanges	Dynamic efficiency	Tooth module	Ratios code
n_2 [min ⁻¹]	i	P_{1M} [HP]	M_{2M} [lb in]	f.s	P_{1R} [HP]	M_{2R} [lb in]	-W 56C	RD	[mm]	
250.0	7	2	413	1.2	2.34	478		82	2.5	01
175.0	10	1.5	432	1.2	1.84	522		80	2.4	02
125.0	14	1	398	1.4	1.46	575		79	2.6	03
97.2	18	1	486	1.1	1.09	522		75	2.0	04
67.3	26	0.75	485	1.2	0.87	558		69	2.7	05
58.3	30	0.75	567	1.1	0.82	611		70	2.5	12
48.6	36	0.5	447	1.4	0.69	611		69	2.1	06
40.7	43	0.5	511	1.1	0.57	575		66	1.8	07
35.0	50	0.5	558	1.0	0.51	558		62	1.5	13
29.2	60	0.33	414	1.3	0.42	522		58	1.3	08
25.7	68	0.33	461	1.1	0.35	487		57	1.2	09
21.9	80	0.25	389	1.2	0.31	478		54	1.0	10
17.5	100	0.25	450	1.0	0.24	434		50	0.8	11

The nominal power should be reduced if the ambient temperature is $\geq 30^\circ\text{C}$, or when a cooler gearbox is required.

Diminuire la potenza nominale in caso di temperatura ambiente $\geq 30^\circ\text{C}$ o se è richiesta una bassa temperatura di utilizzo del riduttore.

-  **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

Lubrication

Lubrificazione

Unit I45 is supplied with synthetic oil to assure long life lubrication.

Food grade oil is available on request.

See Table 1 for lubrication and recommended quantity.

See Table 2 for possible radial and axial loads on the gearbox.

Il riduttore tipo I45 viene fornito con olio sintetico e lubrificazione tipo "long life".

Disponibile a richiesta olio alimentare.

Vedi Tabella 1 per oli e quantità consigliati.

Vedi Tabella 2 per i carichi radiali e assiali applicabili al riduttore.

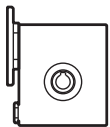
Shell

Omala S4 WE 320

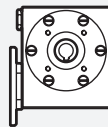
Eni

Telium VSF 320

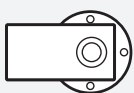
B3
Standard
7.74 oz



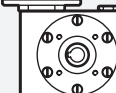
B8
On request
7.74 oz



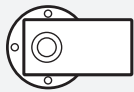
B6
On request
7.74 oz



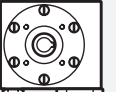
V5
On request
7.74 oz



B7
On request
9.85 oz



V6
On request
7.74 oz



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Tab. 1

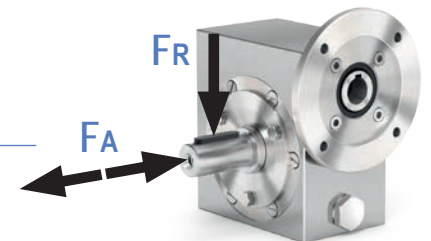
Radial and axial loads

Carichi radiali e assiali

Output shaft

Albero di uscita

n_2 [min ⁻¹]	F_A [lb]	F_R [lb]
200	54	270
150	63	315
100	67	337
75	76	382
50	85	427
25	108	562
15	126	629



Tab. 2

Suggested

Suggerito

Stainless steel protection cap
(on request).

Coperchio di protezione in
acciaio inox a richiesta.

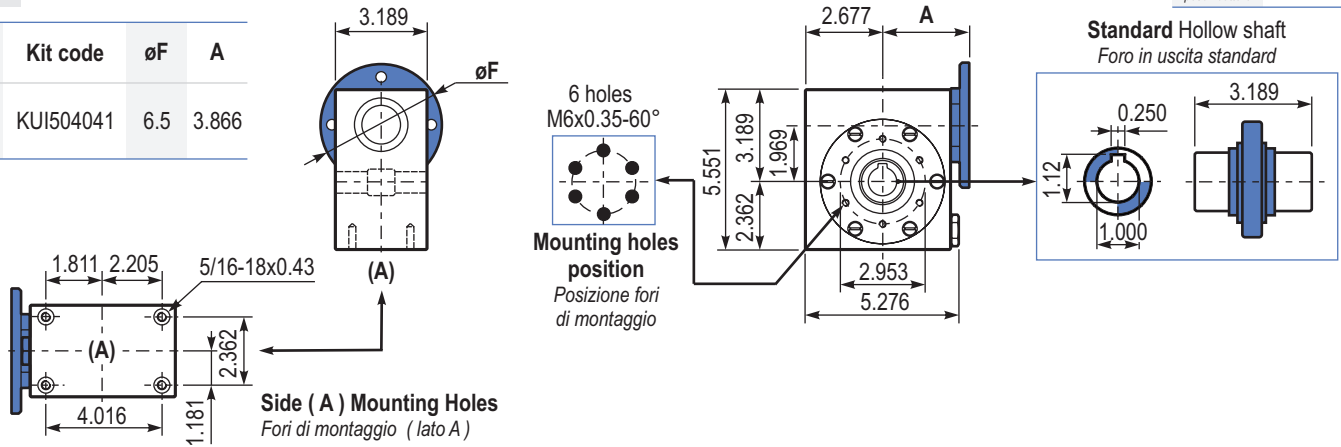
Kit cod. KI500211



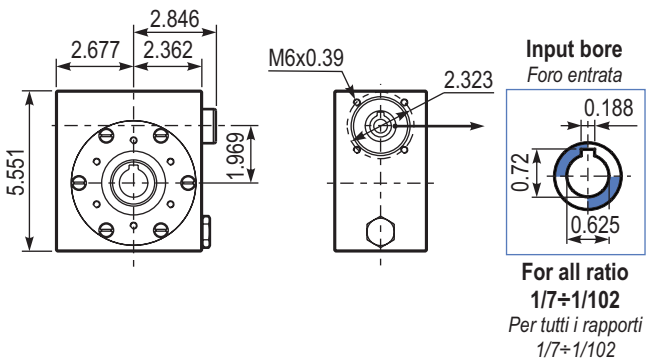
PI50 **UNI...** Basic gearbox
Riduttore base

Gearbox weight
peso riduttore **16.1 lb**

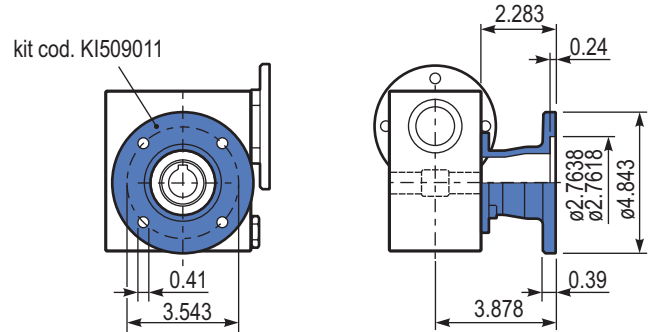
M. flanges	Kit code	øF	A
56C	KUI504041	6.5	3.866



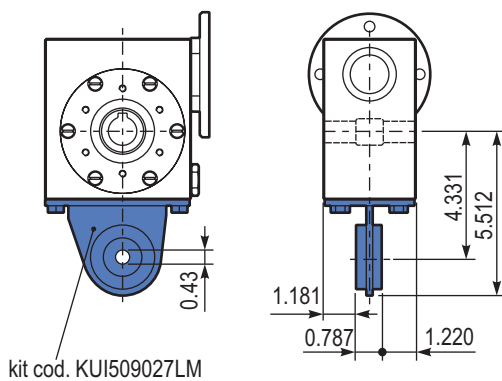
B150UNI... Modular base
Base modulare



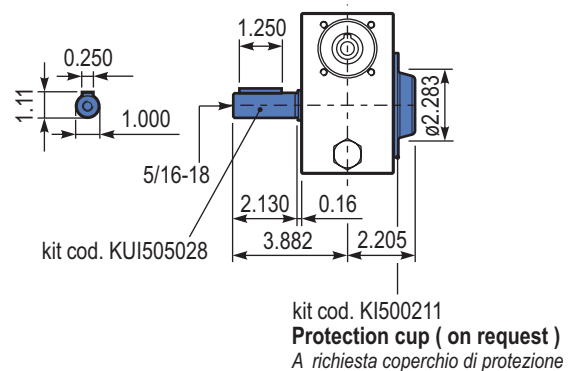
PI50 **FLL...** Output flange
Flangia uscita



PI50 **BRI...** Reaction arm
Braccio di reazione



PI50... **SID** Single Shaft
Albero lento semplice



Input speed (n_1) = 1750 min⁻¹

Output speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [HP]	Output torque M_{2M} [lb in]	Service factor $f.s$	Nominal power P_{1R} [HP]	Nominal torque M_{2R} [lb in]	Available NEMA motor flanges		Dynamic efficiency RD	Tooth module [mm]	Ratios code
							-W 56C	-X 143-5TC			
250.0	7	2	419	2.5	5.10	1053	B		83	3.1	01
175.0	10	2	583	1.9	3.93	1133	B		81	3.1	02
116.7	15	2	854	1.4	2.75	1159	B		79	3.1	03
92.1	19	2	1068	1.1	2.20	1159	B		78	2.6	04
72.9	24	1.5	972	1.2	1.87	1195	B		75	2.0	05
58.3	30	1.5	1199	1.0	1.56	1230	B		74	3.2	06
48.6	36	1	882	1.4	1.42	1239	B		68	2.7	07
43.8	40	1	951	1.2	1.25	1177	B		66	2.5	13
38.9	45	1	1070	1.1	1.08	1142	B		66	2.1	08
29.2	60	0.75	1005	1.1	0.83	1097	B		62	1.6	12
26.1	67	0.5	724	1.4	0.73	1044	B		60	1.5	09
21.9	80	0.5	821	1.2	0.62	1000	B		57	1.3	10
18.6	94	0.5	880	1.1	0.58	1000	B		52	1.1	11

The nominal power should be reduced if the ambient temperature is $\geq 30^\circ\text{C}$, or when a cooler gearbox is required.

Diminuire la potenza nominale in caso di temperatura ambiente $\geq 30^\circ\text{C}$ o se è richiesta una bassa temperatura di utilizzo del riduttore.

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

Lubrication

Lubrificazione

Unit I45 is supplied with synthetic oil to assure long life lubrication.

Food grade oil is available on request.

See Table 1 for lubrication and recommended quantity.

See Table 2 for possible radial and axial loads on the gearbox.

Il riduttore tipo I45 viene fornito con olio sintetico e lubrificazione tipo "long life".

Disponibile a richiesta olio alimentare.

Vedi Tabella 1 per oli e quantità consigliati.

Vedi Tabella 2 per i carichi radiali e assiali applicabili al riduttore.

Shell

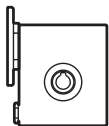
Omala S4 WE 320

Eni

Telium VSF 320

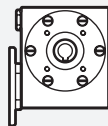
B3

Standard
21.1 oz



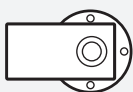
B8

On request
21.1 oz



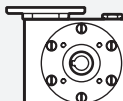
B6

On request
21.1 oz



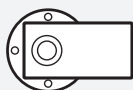
V5

On request
21.1 oz



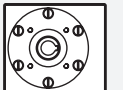
B7

On request
28.9 oz



V6

On request
21.1 oz



For more details on lubrication and plugs check our website.

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web.

Tab. 1

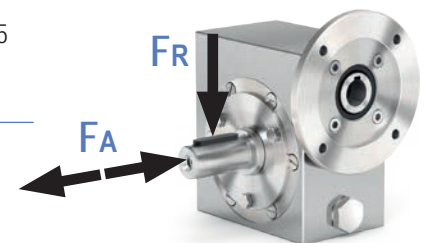
Radial and axial loads

Carichi radiali e assiali

Output shaft

Albero di uscita

n_2 [min ⁻¹]	FA [lb]	FR [lb]
200	81	404.5
150	90	450
100	103.5	517
75	112.5	562
50	135	674.5
25	157	854
15	180	899



Tab. 2

Suggested

Suggerito

Stainless steel protection cap
(on request).

Coperchio di protezione in
acciaio inox a richiesta.

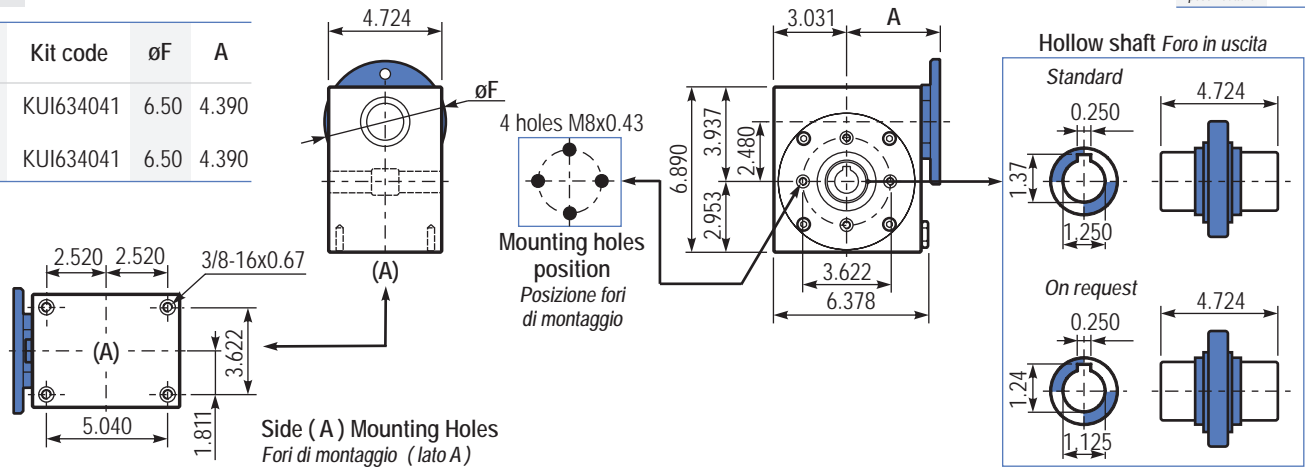
Kit cod. KI630211



PI63UNI... Basic gearbox
Riduttore base

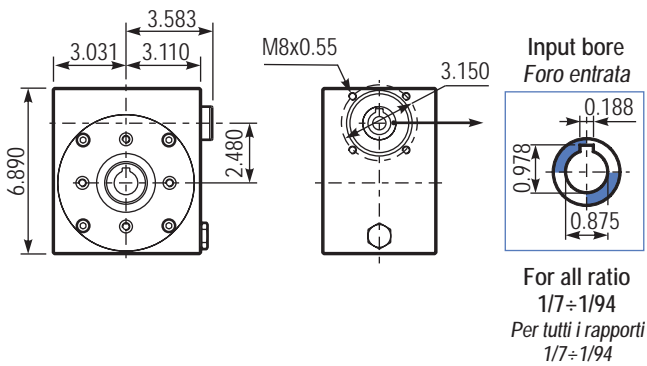
Gearbox weight
peso riduttore 32.2 lb

M. flanges	Kit code	øF	A
56C	KUI634041	6.50	4.390
143/5 TC	KUI634041	6.50	4.390



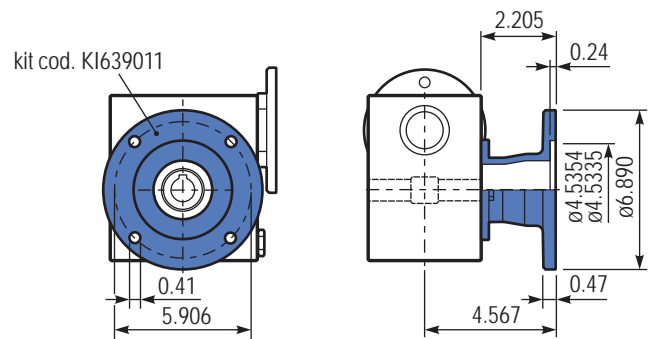
Side (A) Mounting Holes
Fori di montaggio (lato A)

BI63UNI... Modular base
Base modulare

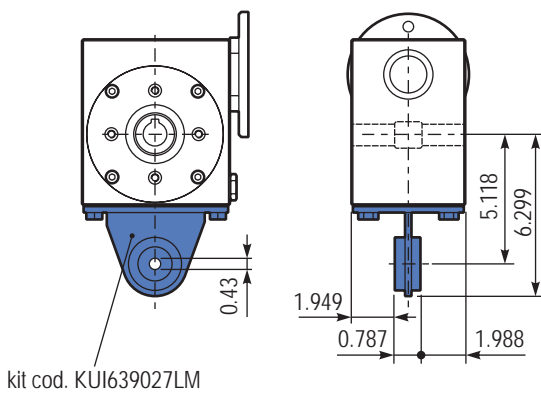


For all ratio
1/7 ÷ 1/94
Per tutti i rapporti
1/7 ÷ 1/94

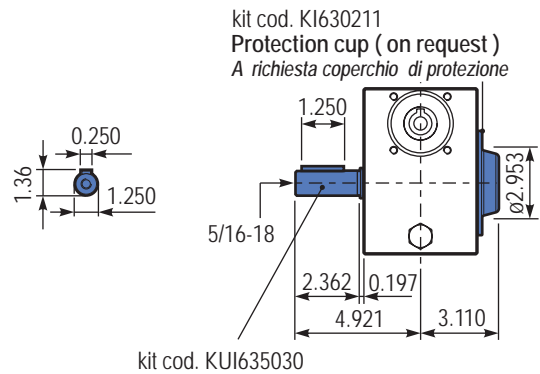
PI63FLL... Output flange
Flangia uscita



PI63BRI... Reaction arm
Braccio di reazione



PI63.....SIF Single Shaft
Albero lento semplice



Input speed (n_1) = 1750 min⁻¹

Output speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [HP]	Output torque M_{2M} [lb in]	Service factor $f.s$	Nominal power P_{1R} [HP]	Nominal torque M_{2R} [lb in]	Available NEMA motor flanges			Dynamic efficiency RD	Tooth module [mm]	Ratios code
							-W 56C	-X 143-5TC	-Y 182-4TC			
250.0	7	5	1109	2.0	9.90	2168	B	B		88	4.23	01
175.0	10	5	1441	1.7	8.40	2390	B	B		80	4.2	02
125.0	14	5	1967	1.3	6.61	2567	B	B		78	4.5	03
87.5	20	3	1707	1.5	4.41	2478	B	B		79	3.4	04
79.5	22	3	1854	1.3	4.06	2478	B	B		78	3.1	05
62.5	28	3	2269	1.3	3.91	2921	B	B		75	4.7	06
46.1	38	3	2915	1.0	2.95	2832	B	B		71	3.5	07
38.0	46	2	2253	1.2	2.47	2744	B	B		68	3.1	08
33.7	52	2	2472	1.0	1.99	2434	B	B		66	2.7	09
26.1	67	1.5	2353	1.0	1.57	2434	B	B		65	2.1	10
23.6	74	1.5	2319	1.0	1.48	2257	B	B		58	1.9	11
18.2	96	1	1833	1.1	1.13	2036	B	B		53	1.5	12

The nominal power should be reduced if the ambient temperature is $\geq 30^\circ\text{C}$, or when a cooler gearbox is required.

Diminuire la potenza nominale in caso di temperatura ambiente $\geq 30^\circ\text{C}$ o se è richiesta una bassa temperatura di utilizzo del riduttore.

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

Lubrication

Lubrificazione

Unit I85 is supplied with synthetic oil to assure long life lubrication.

Food grade oil is available on request.

See Table 1 for lubrication and recommended quantity.

See Table 2 for possible radial and axial loads on the gearbox.

Il riduttore tipo I85 viene fornito con olio sintetico e lubrificazione tipo "long life".

Disponibile a richiesta olio alimentare.

Vedi Tabella 1 per oli e quantità consigliati.

Vedi Tabella 2 per i carichi radiali e assiali applicabili al riduttore.

Shell

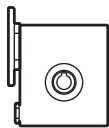
Omala S4 WE 320

Eni

Telium VSF 320

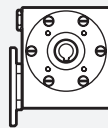
B3

Standard
49.3 oz



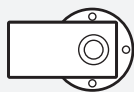
B8

On request
49.3 oz



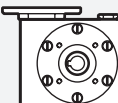
B6

On request
49.3 oz



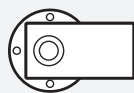
V5

On request
49.3 oz



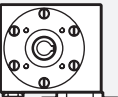
B7

On request
59.8 oz



V6

On request
49.3 oz



For more details on lubrication and plugs check our website.

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web.

Tab. 1

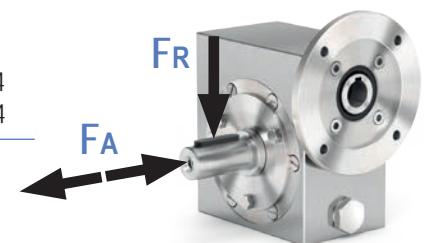
Radial and axial loads

Carichi radiali e assiali

Output shaft

Albero di uscita

n_2 [min ⁻¹]	FA [lb]	FR [lb]
200	112	562
150	130	652
100	135	674
75	157	787
50	180	899
25	225	1124
15	261	1304



Tab. 2

Suggested

Suggerito

Stainless steel protection cap
(on request).

Coperchio di protezione in
acciaio inox a richiesta.

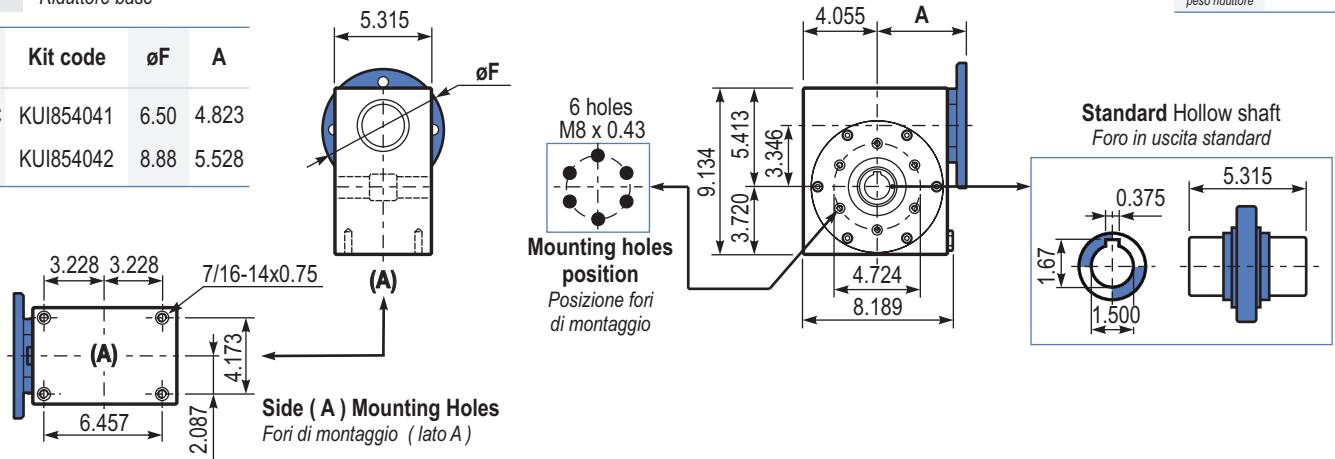
Kit cod. KI850211



PI85UNI... **Basic gearbox**
Riduttore base

Gearbox weight
peso riduttore **51.4 lb**

M. flanges	Kit code	øF	A
56C-143/5TC	KUI854041	6.50	4.823
182/4TC	KUI854042	8.88	5.528

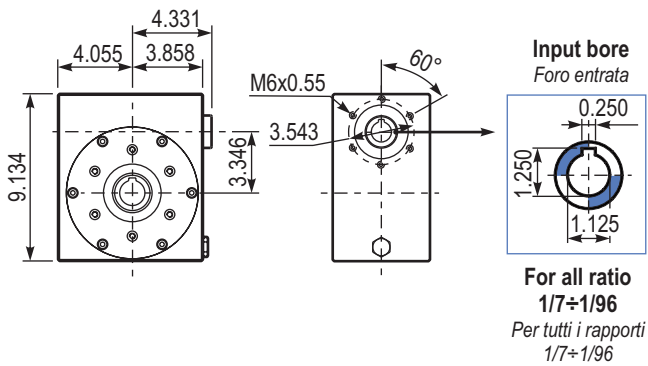


Side (A) Mounting Holes
Fori di montaggio (lato A)

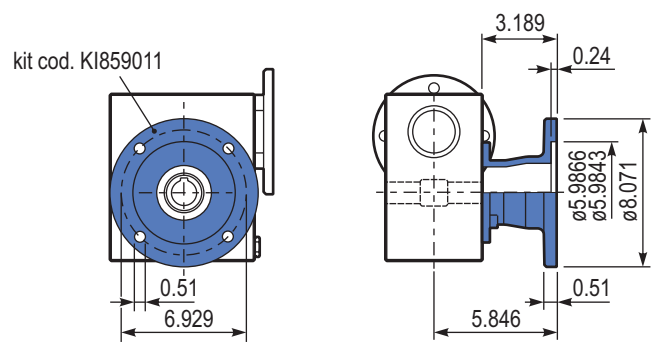
Mounting holes position
Posizione fori di montaggio

Standard Hollow shaft
Foro in uscita standard

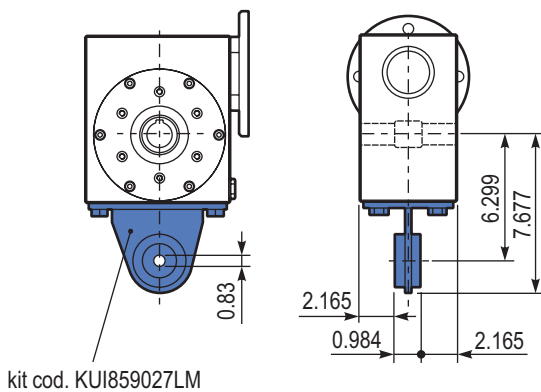
BI85UNI... **Modular base**
Base modulare



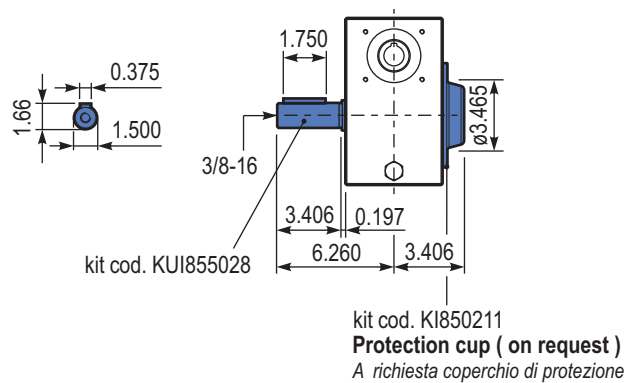
PI85FLL... **Output flange**
Flangia uscita



PI85BRI... **Reaction arm**
Braccio di reazione



PI85....SIH **Single Shaft**
Albero lento semplice



Input speed (n_1) = 1750 min⁻¹

Output speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [HP]	Output torque M_{2M} [lb in]	Service factor f.s	Nominal power P_{1R} [HP]	Nominal torque M_{2R} [lb in]	Available NEMA motor flanges			Dynamic efficiency RD	Tooth module [mm]	Ratios code
							-X 143-5TC	-Y 182-4TC	AA 213-5TC			
250	7	10	2219	1.8	18.59	4071	B			88	5.5	01
175	10	10	3097	1.4	14.48	4425	B			86	5.4	02
109.4	16	10	4725	1.0	9.68	4514	B			82	5.3	03
87.5	20	7.5	4430	1.0	7.89	4602	B			82	4.5	04
76.1	23	5	3314	1.3	6.63	4337	B			80	3.9	05
58.3	30	5	4106	1.3	6.77	5487	B			76	5.6	06
46.1	38	5	5132	1.1	5.33	5399	B			75	4.7	07
38.9	45	3	3549	1.4	4.32	5045	B			73	4.0	08
33.0	53	3	4009	1.3	3.96	5222	B			70	3.5	09
27.3	64	2	3181	1.4	2.88	4514	B			69	2.9	10
20.8	84	2	3933	1.1	2.14	4160	B			65	2.2	11
17.7	99	2	4279	1.0	1.93	4071	B			60	1.9	12

The nominal power should be reduced if the ambient temperature is $\geq 30^\circ\text{C}$, or when a cooler gearbox is required.
 Diminuire la potenza nominale in caso di temperatura ambiente $\geq 30^\circ\text{C}$ o se è richiesta una bassa temperatura di utilizzo del riduttore.

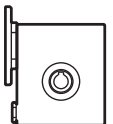
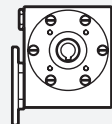
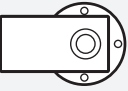
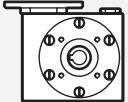
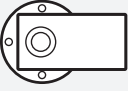
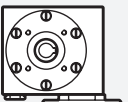
-  **Motor flanges available**
Flange motore disponibili
-  **B) Supplied with reduction bushing**
Fornito con bussola di riduzione
-  **B) Available on request without reduction bushing**
Disponibile a richiesta senza bussola di riduzione
-  **C) Motor flange holes position**
Posizione fori flangia motore

Lubrication Lubrificazione

Unit I11 is supplied with synthetic oil to assure long life lubrication.
 Food grade oil is available on request.
 See Table 1 for lubrication and recommended quantity.
 See Table 2 for possible radial and axial loads on the gearbox.

Il riduttore tipo I11 viene fornito con olio sintetico e lubrificazione tipo "long life".
 Disponibile a richiesta olio alimentare.
 Vedi Tabella 1 per oli e quantità consigliati.
 Vedi Tabella 2 per i carichi radiali e assiali applicabili al riduttore.

Shell Omala S4 WE 320
Eni Telium VSF 320

B3 Standard 123.2 oz		B8 On request 73.9 oz	
B6 On request 88 oz		V5 On request 56.3 oz	
B7 On request 88 oz		V6 On request 56.3 oz	

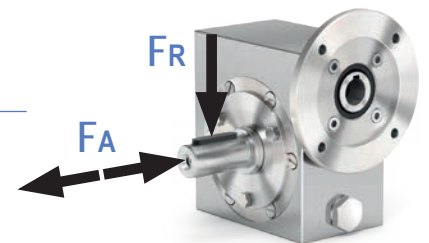
For more details on lubrication and plugs check our website.
 Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web.

Tab. 1

Radial and axial loads Carichi radiali e assiali

Output shaft Albero di uscita

n_2 [min ⁻¹]	F_A [lb]	F_R [lb]
200	135	652
150	157	742
100	169	809
75	180	899
50	207	1034
25	270	1349
15	315	1574

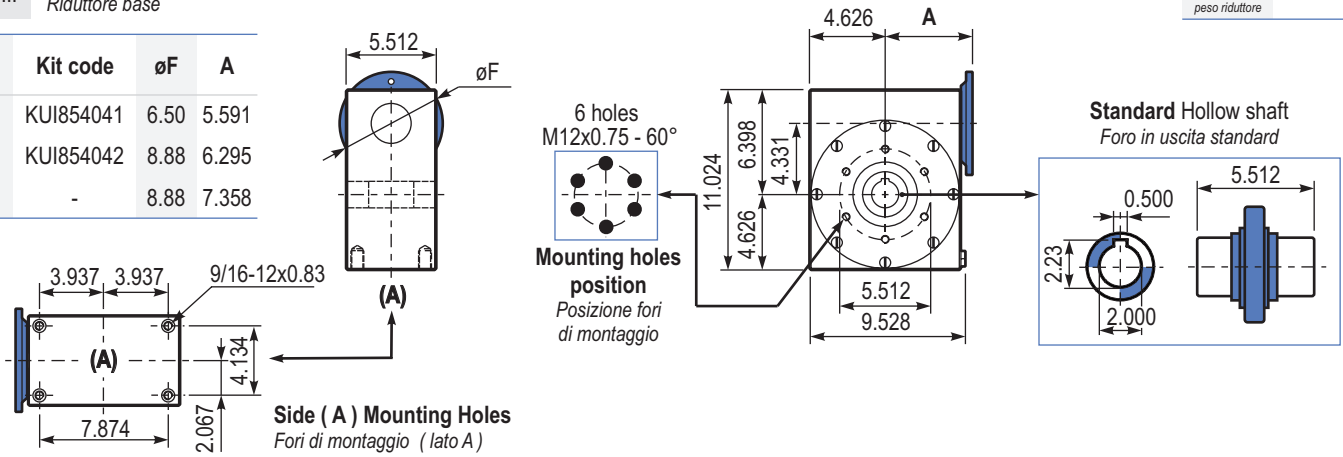


Tab. 2

PI11 **UNI...** **Basic gearbox**
Riduttore base

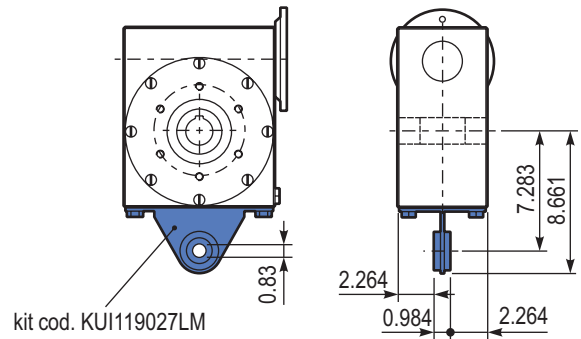
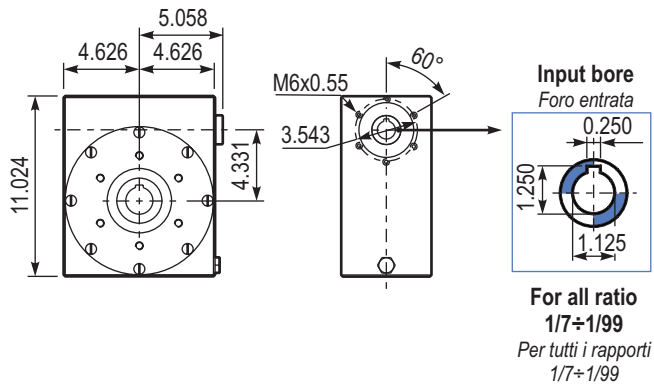
Gearbox weight
peso riduttore **88.0 lb**

M. flanges	Kit code	øF	A
143/5 TC	KUI854041	6.50	5.591
182/4 TC	KUI854042	8.88	6.295
213/5 TC	-	8.88	7.358



B111 **UNI...** **Modular base**
Base modulare

PI11 **BRI...** **Reaction arm**
Braccio di reazione



PI11... **SIK** **Single Shaft**
Albero lento semplice

