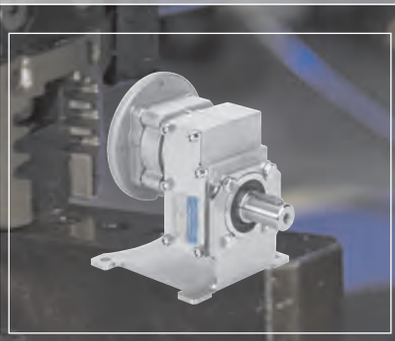
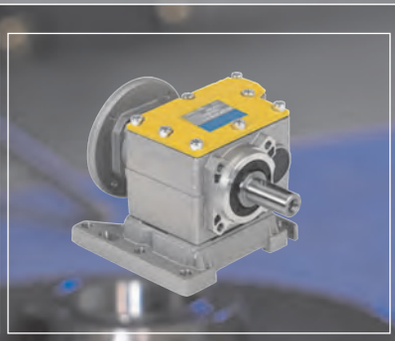
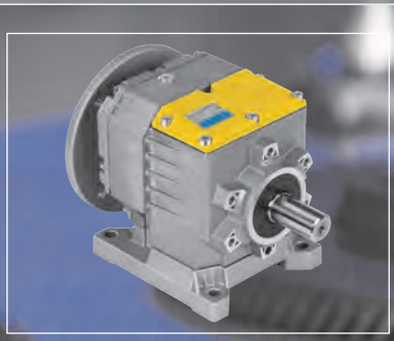
Coaxial - Gears

Cat.: **CT-RCP-WO-HM012**

Coaxial gearboxes
Riduttori Coassiali







Nema-Inch Range

HYDRO·MEC

IN THIS CATALOGUE

One Step-Gear

Compact aluminum in line gearboxes with one stage of reduction.
Riduttori coassiali in alluminio con uno stadio di riduzione.

See technical data table.
Vedi tabelle dati tecnici.

Paragraph ***4***

Coaxial-Gear

Compact aluminum in line gearboxes with two or three stages of reduction.
Riduttori coassiali in alluminio con due o tre stadi di riduzione.

Aluminum

See technical data table.
Vedi tabelle dati tecnici.

Paragraph ***5***

Nema Electric motors

Motors Nema dimensions.
Dimensioni motori Nema.

See technical data table.
Vedi tabelle dati tecnici.

Pag. M5

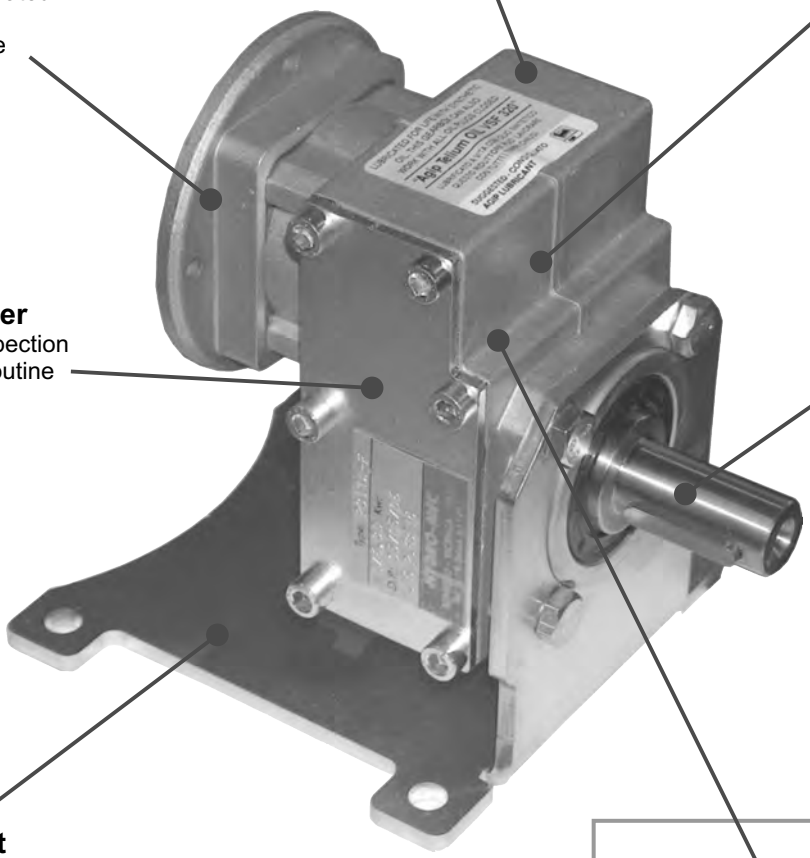
Aluminum one step gearboxes

A modular and compact product

Alloy housing
Is vacuum impregnated (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint

Flange
Fully modular to IEC and Compact integrated motor.
NEMA C flange

Gears
Hardened and ground gears.

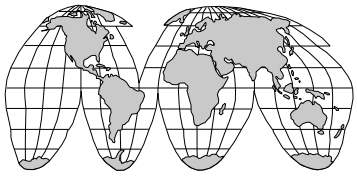


Removable inspection cover
Allows periodic inspection of gearing during routine maintenance

Output shaft
With well proportioned bearings

Feet
Removable feet.

Single-piece aluminum alloy housing
Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing



World wide sales network.

Lubricated for life with synthetic oil with operative range from -15° to +130°C

INDEX / INDICE / INDICE

On page / A pagina / En la página

Types / Tipi / Tipos

4-3	4-5	4-7	4-9
211A 177lb in	**311A** 266lb in	**411A** 336lb in	**511A** 1044lb in

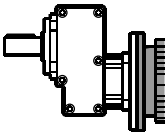
For : / Per : / Para :

Use our web database to get detailed informations, always updated on each type/size.

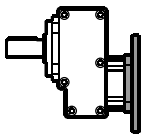
CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICACIÓN

Type - Tipo - Tipo	**Size** - Grandezza Tomaño	**Mounting** - Montaggio Tipo de montaje	**Ratio** Rapporto Relaciòn	**Hub** - Mozzo corona Nucleo corona	**Output shaft** Albero lento Eje solida	**Motor size** Grandezza motore Tamaño motor
P	**311A**	**-F**	**2.84**	**X**	**U**	**W**

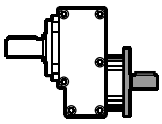
Type - Tipo - Tipo



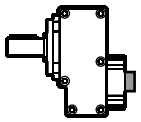
With IEC motor **M**



With motor flange **P**



With male input shaft **R**



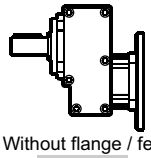
Modular Base **B**

Size - Grandezza Tomaño

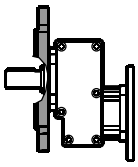
1 Stages Riduzioni Stufen Etapas

211A
311A
411A
511A

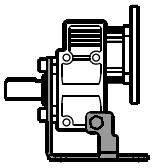
Mounting - Montaggio Tipo de montaje



Without flange / feet **-N**



-F



Mounted feet **H1**

Ratio - Rapporto - Relaciòn

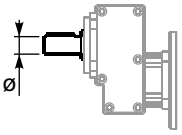
See technical data table

Vedi tabelle dati tecnici.

Ver tabla datos técnicos

Hub - Mozzo corona - Nucleo corona

Output shaft diameter
Diametro albero uscita



➡ **STANDARD**

211A
X ➡ ø0.625

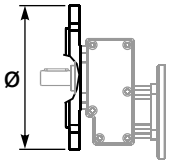
311A
X ➡ ø0.625
O ⇨ ø0.750
W ⇨ ø0.875

411A
X ⇨ ø0.625
O ➡ ø0.750
W ⇨ ø0.875

511A
Y ➡ ø1.125

Output shaft - Albero lento - Eje solida

Output flange diameter
Diametro flangia uscita



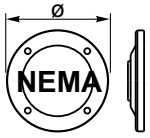
N Senza flangia Without flange

311A
U ➡ ø6.50
2 ⇨ ø5.51
3 ⇨ ø6.30
4 ⇨ ø7.87

411A
U ➡ ø6.50
2 ⇨ ø5.51
3 ⇨ ø6.30
4 ⇨ **ø7.87**

511A
U ➡ ø6.50
2 ⇨ ø5.51
3 ⇨ ø6.30
4 ⇨ ø7.87
5 ⇨ ø9.84

Motor size - Grandezza motore - Tamaño motor



With Flange for type P

W ⇨ 56C
X ⇨ 143/5TC
Y ⇨ 182/4TC

➡ **STANDARD**

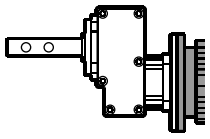
Without flange Senza flangia

211A
311A
K ➡ ø0.625

411A
K ⇨ ø0.625
N ➡ ø0.875

511A
K ⇨ ø0.625
N ⇨ ø0.875
S ➡ ø1.125

Special output shaft
Albero uscita speciale



Only on request for Q.ty
A richiesta per quantità

Dossier according to 94/9/EG 8. b ii stored

A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX

On request we can deliver our products according to the ATEX

A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

B Output speed / Velocità in uscita / Velocidad de salida

Nominal power / Potenza nominale / Potencia nominal

Gear size / Grandezza riduttore / Tamaño reductor

Motor power / Potenza motore / Potencia motor

A Nominal torque / Momento torcente nominale / Par de torsión nominal

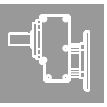
Flange code / Codice flangia / Código bridas

Preferential ratio / Rapporto preferenziale / Relación preferente

Input speed / Velocità in entrata / Velocidad de entrada

311A One step 266lb in

Rating - Alluminium ONE STEP GEARBOXES



▪ QUICK SELECTION / Selezione veloce

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: W	Available NEMA motor flanges: -		Output Shaft	Ratios code
							56C	-			
1113.6	**1.57**	0.75	56	2.1	**2.07**	**115**			2844		-
615.7	**2.84**	0.75	100	2.0	**2.03**	**204**			1954	**standard**	
531.3	**3.29**	0.75	116	2.0	**1.98**	**230**			1756	**ø0.625**	

C Ratio / Rapporto / Relación

Transmitted torque / Momento torcente trasmesso / Par transmitido

Service factor / Fattore di servizio / Factor de servicio

Output Shaft diam. / Diam. albero uscita / Diametro eje de salida

Notes / Note / Notas

fs

Type of load and starts per hour / Tipo di carico e avviamenti per ora		Oper. hours per day / Ore di funz. giorn. 3 h	10 h	24 h
Continuous or intermittent appl. with start / hour ≤ 10 / Applicazione cont. o interm. con n.ro operazioni/ora	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour > 10 / Applicazione intermittente con n.ro operazioni/ora	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

D Motor flange available / Flange disponibili / Bridas disponibles

B) Mounting with reduction ring / Montaggio con boccola di riduzione / Montaje con casquillo de reducción

C) Motor flangeholes position/terminal box position / Posizione fori flangia/basetta motore / Posición agujeros brida / base motor

B) Available without reduction bushes / Disponibile anche senza boccola / Disponible tambien sin casquillo

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select ouput speed	Seleziona la velocità in uscita	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Seleccionar la brida disponible (sobre pedido)

211A Coaxial - Gear 177lb in

Rating - Alluminum ONE STEP GEARBOXES

▪ QUICK SELECTION / Selezione veloce

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 W	Available NEMA motor flanges -		Output Shaft ø	Ratios code
							56C	-			
852.6	**2.05**	0.75	54	1.6	**1.22**	**89**			1939		-
743.8	**2.35**	0.75	62	1.7	**1.28**	**106**			1740		
625.0	**2.80**	0.75	74	1.7	**1.25**	**124**			1542		
517.0	**3.38**	0.75	90	1.7	**1.26**	**150**			1344	**standard ø0.625**	
372.3	**4.70**	0.75	124	1.4	**1.07**	**177**			1047		
281.3	**6.22**	0.75	165	1.2	**0.91**	**200**			956		
211.2	**8.29**	0.5	146	1.2	**0.61**	**180**			758		
178.0	**9.83**	0.33	115	1.3	**0.42**	**145**			659		

The dynamic efficiency is **0.98** 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 **211A** is supplied with synthetic oil for lifetime lubrification, 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.
For complete documentation please visit our web site.

I Il riduttore **211A** 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.
Per la documentazione completa consulta il nostro sito.

E El reductor tamaño **211A** se suministra, lubricado de por vida con aceite sintético y no requiren 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.
Para documentación completa, consultar nuestra Web.

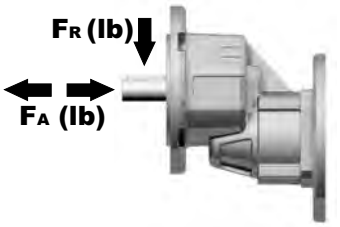
▪ LUBRICATION 211A Oil Quantity 1.76 ounces

AGIP Telium VSF 320	**SHELL** Omala S4 WE 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

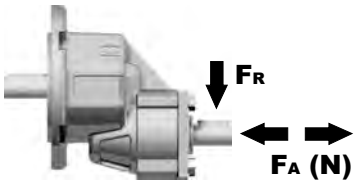
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2	FA	FR
700	22.7	113.3
600	27.0	134.9
400	31.0	156.5
300	33.9	170.0
200	39.3	196.9
140	43.2	215.8

Input shaft
albero in entrata



n_2	FA	FR
1750	37.8	188.8
900	43.2	215.8

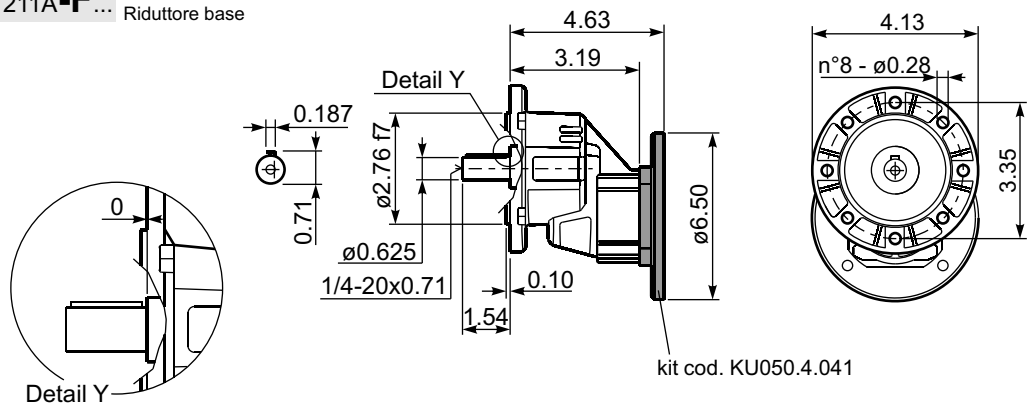
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

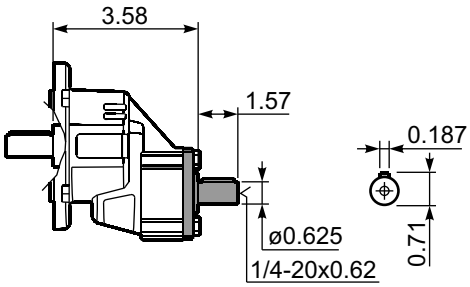
▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

P211A-F... Basic wormbox
Riduttore base

Gearbox weight peso riduttore	3.09 lb



R211A-F... Basic wormbox
Riduttore base



311A One step 266lb in

Rating - Alluminum ONE STEP GEARBOXES

▪ QUICK SELECTION / Selezione veloce

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 W	Available NEMA motor flanges -		Output Shaft ø	Ratios code
							56C	-			
1113.6	**1.57**	1	56	2.1	**2.07**	**115**			2844		-
615.7	**2.84**	1	100	2.0	**2.03**	**204**			1954	**standard ø0.625**	
531.3	**3.29**	1	116	2.0	**1.98**	**230**			1756		
452.6	**3.87**	1	136	1.8	**1.82**	**248**			1558		
379.2	**4.62**	1	163	1.6	**1.63**	**266**			1360	On request ø0.750 ø0.875	
277.8	**6.30**	1	222	1.4	**1.39**	**310**			1063		
212.8	**8.22**	0.75	218	1.5	**1.15**	**335**			974		
161.2	**10.86**	0.50	192	1.3	**0.64**	**245**			776		

The dynamic efficiency is **0.98** 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 **311A** is supplied with synthetic oil for lifetime lubrification, 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.
For complete documentation please visit our web site.

I Il riduttore **311A** 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.
Per la documentazione completa consulta il nostro sito.

E El reductor tamaño **311A** se suministra, lubricado de por vida con aceite sintético y no requiren 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.
Para documentación completa, consultar nuestra Web.

▪ LUBRICATION 311A Oil Quantity 3.53 Ounces

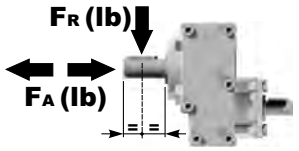
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

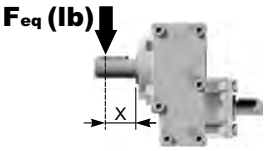
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

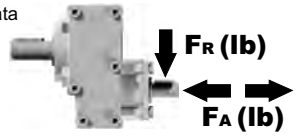
$$Feq = FR \cdot \frac{1.61}{X+0.83}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
700	18.9	94.4	**400**	25.8	130.3	**200**	32.8	164.0
600	22.5	112.3	**300**	28.3	141.5	**140**	35.9	179.7

Input shaft
Albero in entrata



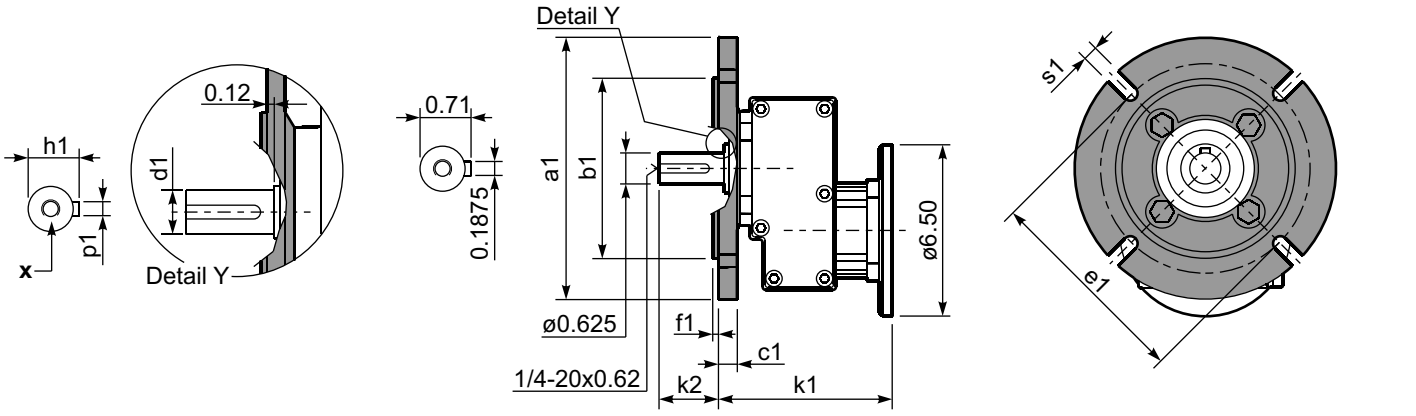
n_1	FA	FR
1750	31.4	157.3
900	35.9	179.7

tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

P311-**F**... Output flange
flange di uscita

Gearbox weight / peso riduttore		
	Mold base	**4.41 lb**
	With flange	**5.29 lb**



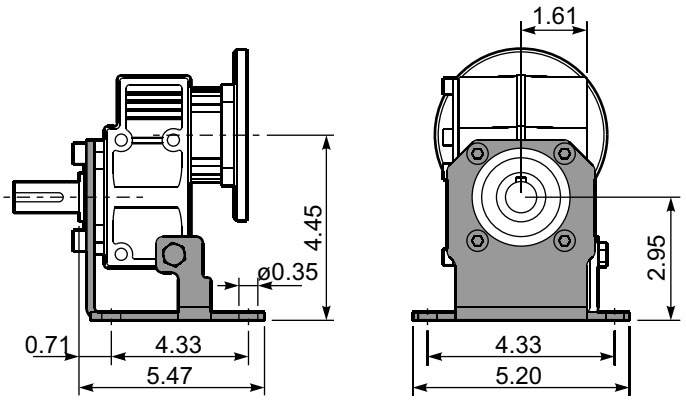
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø0.625x2.06	0.187	0.71	1/4-20x0.71
On request A richiesta	ø0.750x2.125	0.187	0.84	1/4-20x0.71
	ø0.875x2.125	0.187	0.96	1/4-20x0.71

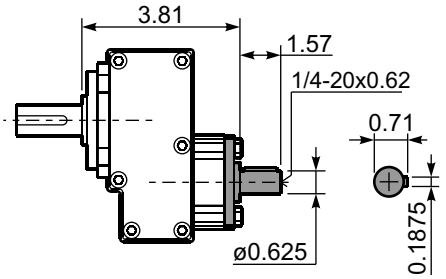
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	k1	k2	s1	kit code	Type
6.50	4.50	0.61	5.87	0.13	5.11	1.82	0.41	KU311.9.012	Nema
5.51	3.74	0.45	4.53	0.12	5.01	1.92	0.35	KC30.9.011	Metric
6.30	4.33	0.45	5.12	0.14	5.01	1.92	0.35	KC30.9.012	
7.87	5.12	0.45	6.50	0.14	5.01	1.92	0.43	KC30.9.013	

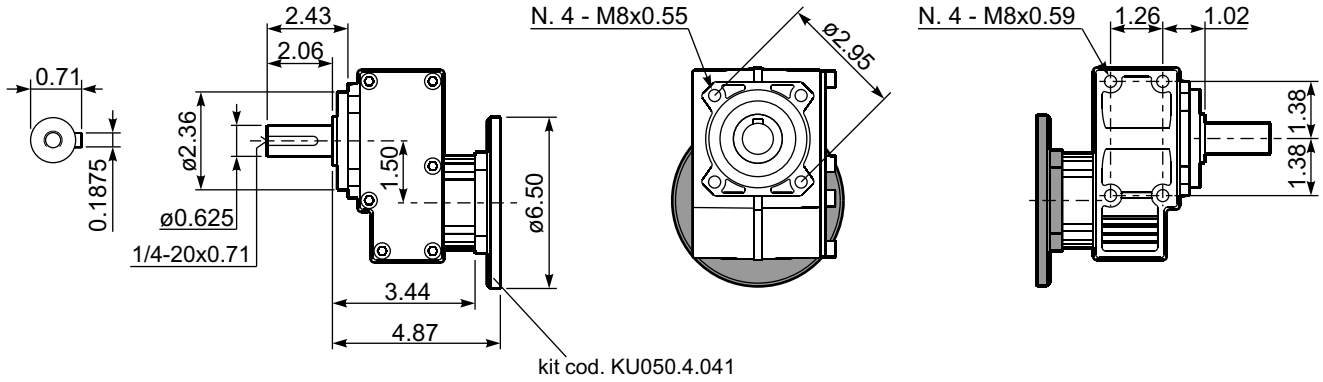
P311-**H1**... With feet
Con piedini



R311-N... Input Shaft
Albero in entrata



P311-**N**... Basic gearbox
Riduttore base



411A One step 336lb in

Rating - Alluminum ONE STEP GEARBOXES

▪ QUICK SELECTION / Selezione veloce

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 W 56C	Available NEMA motor flanges X 143/5TC		Output Shaft ø	Ratios code
1113.6	**1.57**	2	111	1.6	**3.19**	**177**			2844		-
615.7	**2.84**	2	201	1.5	**3.09**	**310**			1954	**standard ø0.750**	
531.3	**3.29**	2	233	1.4	**2.89**	**336**			1756		
452.6	**3.87**	2	273	1.3	**2.58**	**352**			1558		
379.2	**4.62**	2	326	1.3	**2.58**	**420**			1360	On request ø0.625 ø0.875	
277.8	**6.30**	1.5	334	1.2	**1.84**	**410**			1063		
212.8	**8.22**	0.75	218	1.5	**1.15**	**335**			974		
161.2	**10.86**	0.5	192	1.3	**0.64**	**245**			776		

The dynamic efficiency is **0.98** 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 **411A** is supplied with synthetic oil for lifetime lubrification, 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.
For complete documentation please visit our web site.

I Il riduttore **411A** 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.
Per la documentazione completa consulta il nostro sito.

E El reductor tamaño **411A** se suministra, lubricado de por vida con aceite sintético y no requiren 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.
Para documentación completa, consultar nuestra Web.

▪ LUBRICATION 411A Oil Quantity 7.04 Ounces

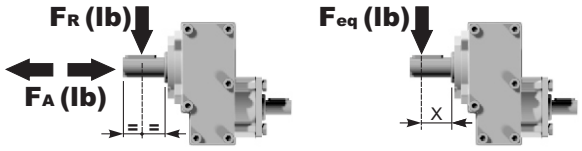
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

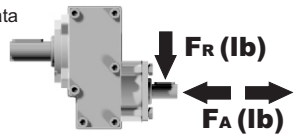
Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{1.81}{X+0.83}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
700	40.9	204.4	**400**	51.7	258.4	**200**	65.1	325.8
600	44.9	224.7	**300**	56.2	280.8	**140**	71.9	359.5

Input shaft
Albero in entrata



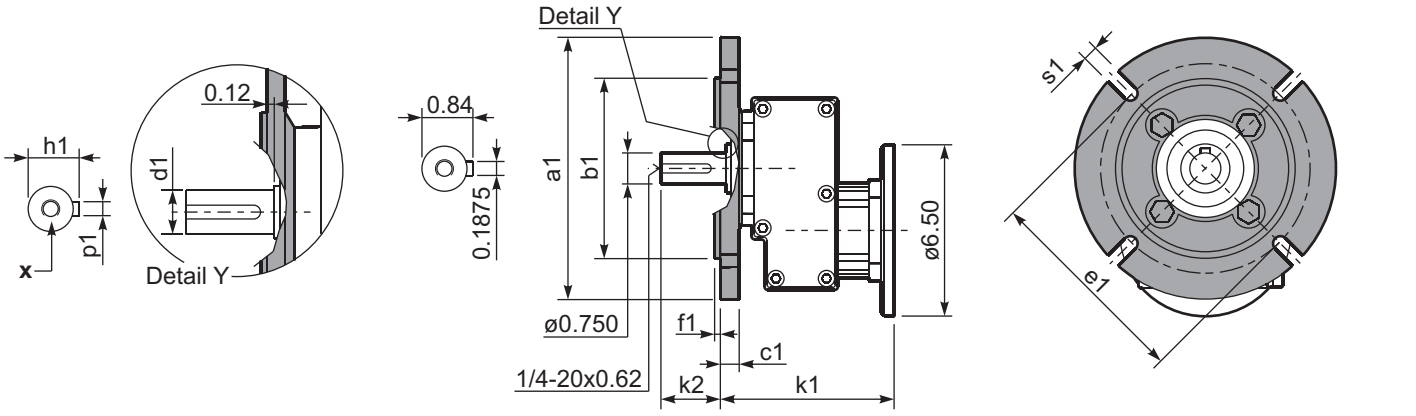
n_1	FA	FR
1750	53.9	269.6
900	62.9	314.5

tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

P411-**F**... Output flange
flange di uscita

Gearbox weight peso riduttore		
	Mold base	**6.39 lb**
	With flange	**7.27 lb**



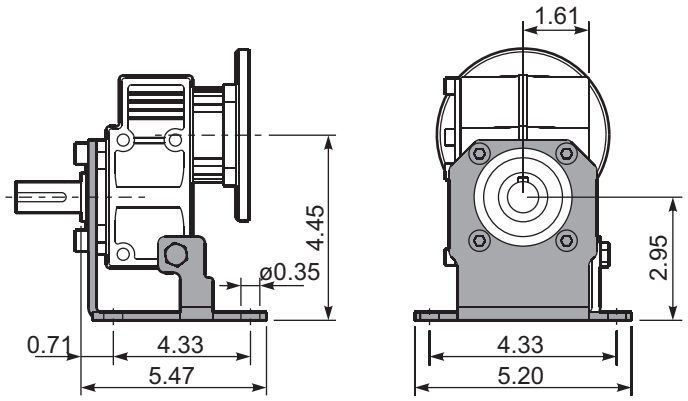
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø0.750x2.125	0.187	0.84	1/4-20x0.71
On request A richiesta	ø0.625x2.06	0.187	0.71	1/4-20x0.71
	ø0.875x2.125	0.187	0.96	1/4-20x0.71

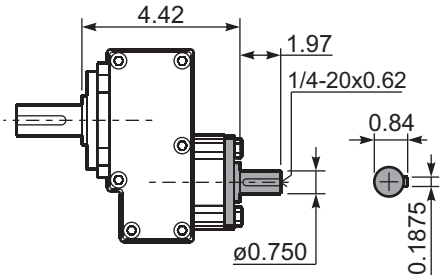
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	k1	k2	s1	kit code	Type
6.50	4.50	0.61	5.87	0.13	5.39	1.89	0.41	KU311.9.012	Nema
5.51	3.74	0.45	4.53	0.12	5.29	1.99	0.35	KC30.9.011	Metric
6.30	4.33	0.45	5.12	0.14	5.29	1.99	0.35	KC30.9.012	
7.87	5.12	0.45	6.50	0.14	5.29	1.99	0.43	KC30.9.013	

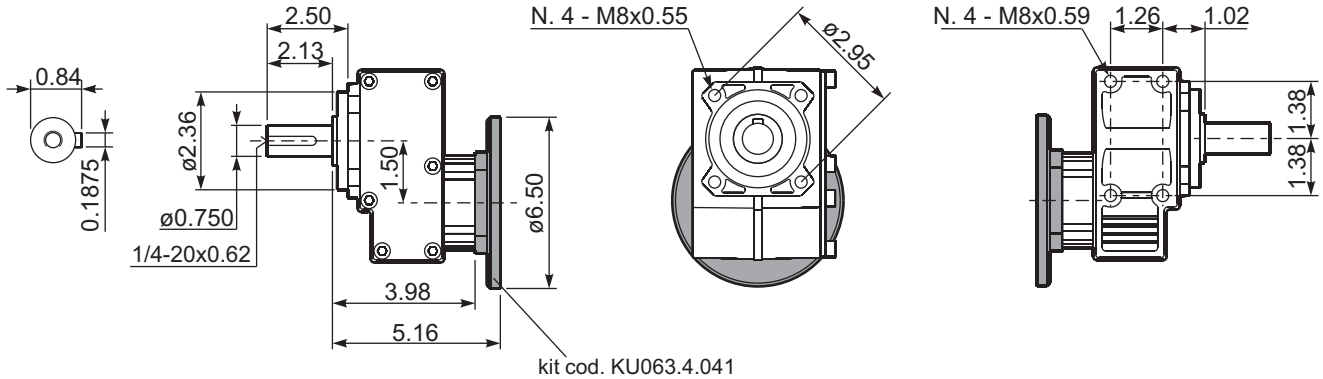
P411-**H1**... With feet
Con piedini



R411-N... Input Shaft
Albero in entrata



P411-**N**... Basic gearbox
Riduttore base



511A One step 970lb in

Rating - Alluminum ONE STEP GEARBOXES

▪ QUICK SELECTION / Selezione veloce

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 X 143/5TC	Available NEMA motor flanges Y 182/4TC		Output Shaft ø	Ratios code
1346.2	**1.30**	5	229	1.5	7.72	354			3039		-
714.3	**2.45**	5	432	1.4	7.16	620			2049		
528.3	**3.31**	5	585	1.4	6.81	797			1653		
406.3	**4.31**	3	456	2.1	6.40	974			1356	**standard ø1.125**	
331.9	**5.27**	3	558	1.7	5.23	974			1158		
229.5	**7.63**	2	538	1.8	3.62	974			861		
166.7	**10.50**	1.5	556	1.3	1.91	708			663		

The dynamic efficiency is **0.98** 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 **511A** is supplied with synthetic oil for lifetime lubrification, 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.
For complete documentation please visit our web site.

I Il riduttore **511A** 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.
Per la documentazione completa consulta il nostro sito.

E El reductor tamaño **511A** se suministra, lubricado de por vida con aceite sintético y no requiren 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.
Para documentación completa, consultar nuestra Web.

▪ LUBRICATION 511A Oil Quantity 10.21 Ounces

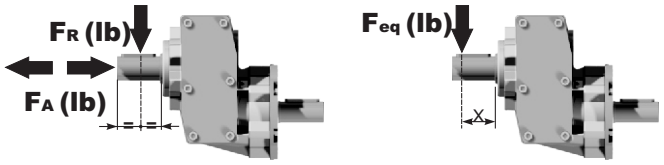
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

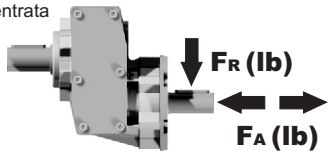
Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{1.88}{X+0.90}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
700	66.0	330.3	**400**	83.1	415.6	**200**	103.3	516.7
600	71.9	359.5	**300**	89.9	449.3	**140**	114.6	572.9

Input shaft
Albero in entrata



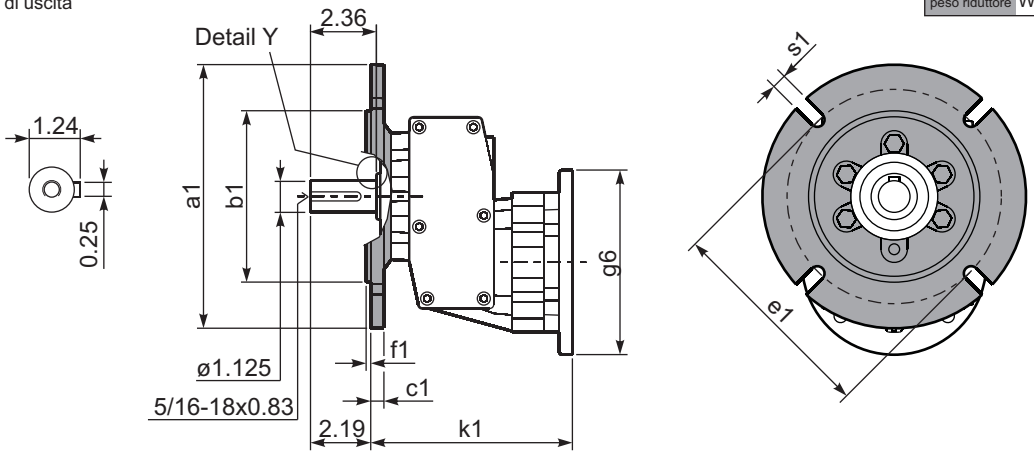
n_1	FA	FR
1750	89.9	449.3
900	98.8	494.3

tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

Gearbox weight peso riduttore		
	Mold base	10.8 lb
	With flange	12.8 lb

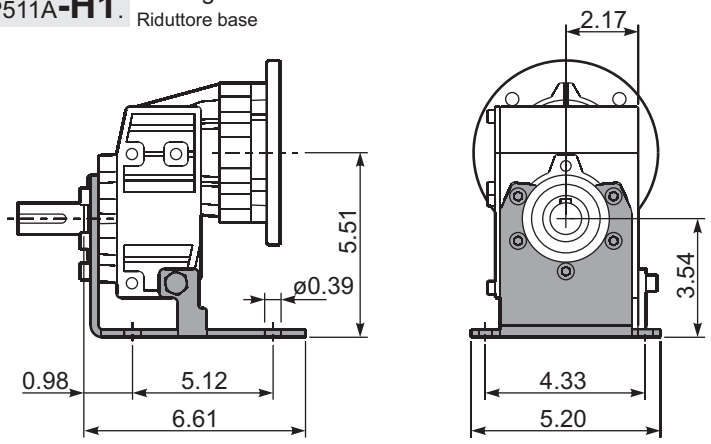
P511-F... Output flanges
flange di uscita



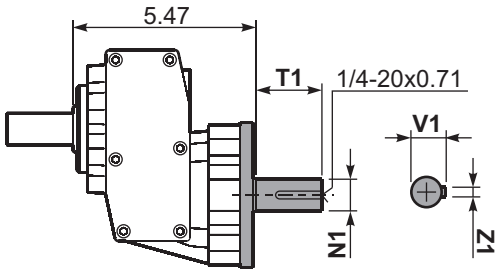
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code	Type
6.50	4.50	0.61	5.87	0.13	0.41	KU511.9.012	Nema
5.51	3.74	0.39	4.53	0.12	0.35	KC40.9.010	Metric
6.30	4.33	0.39	5.12	0.14	0.35	KC40.9.011	
7.87	5.12	0.39	6.50	0.14	0.43	KC40.9.012	
9.84	7.09	0.45	8.46	0.14	0.55	KC40.9.013	

P511A-H1. Basic gearbox
Riduttore base

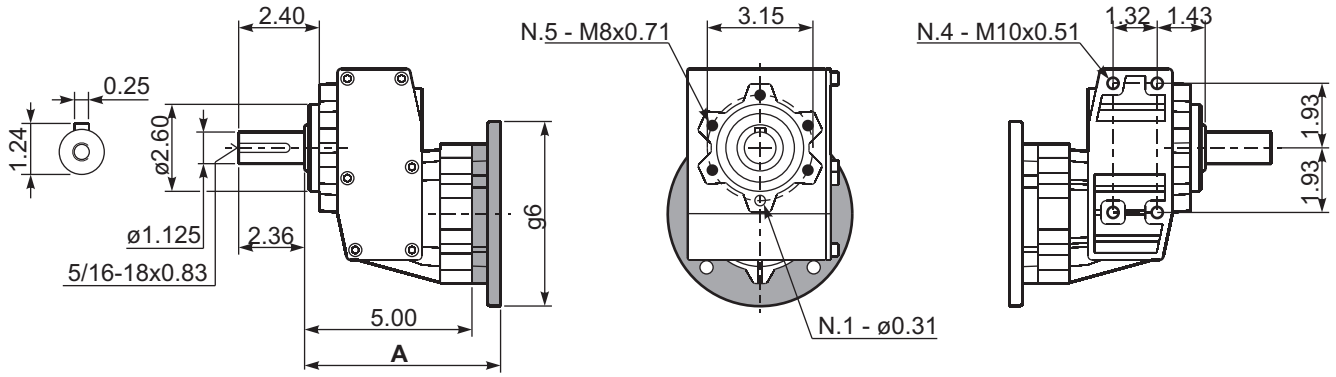


R511A-N... Input Shaft
Albero in entrata



Input shaft	N1	T1	V1	Z1	kit code
Standard	0.875	1.97	0.96	0.250	KC50.5.070U
On request	0.750	1.97	0.84	0.187	KC50.5.069U

P511-N... Basic gearbox
Riduttore base



Nema flange	A	k1	g6	kit code
143/5TC	5.96	6.15	6.50	KU085.4.041
182/4TC	6.66	6.84	8.88	KU085.4.042

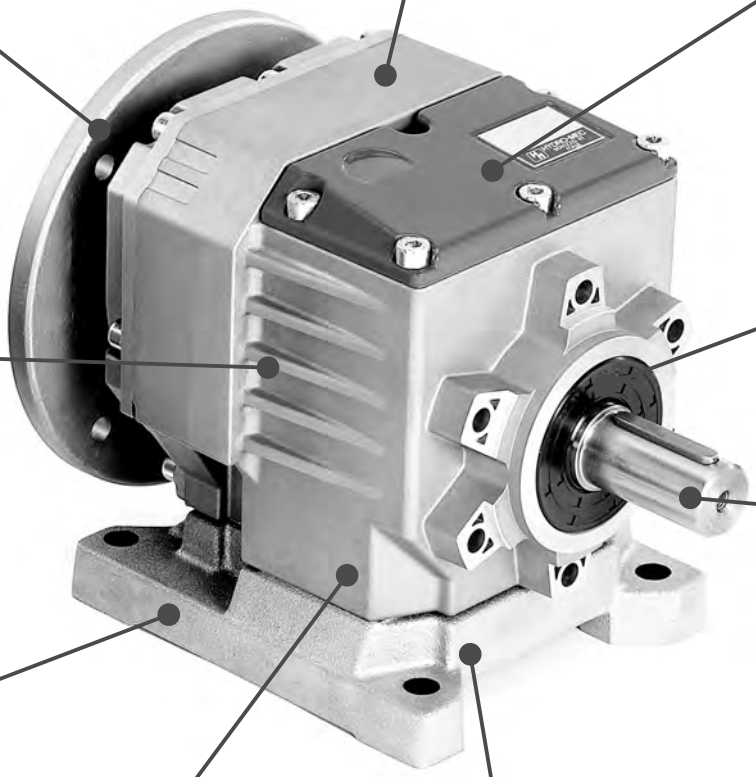
Aluminum in line gearboxes

A modular and compact product

Alloy housing
Is vacuum impregnated (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint

Flange
Fully modular to IEC and Compact integrated motor.
NEMA C flange

Removable inspection cover
Allows periodic inspection of gearing during routine maintenance



Oil seals
Two oil seals on request

Gears
Hardened and ground gears.

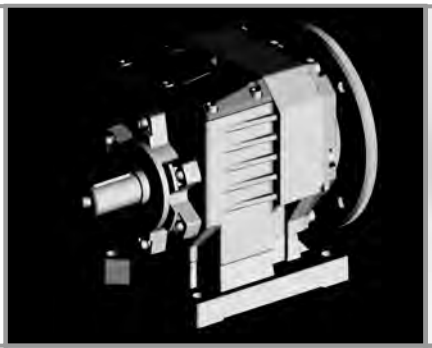
Output shaft
With well proportioned bearings

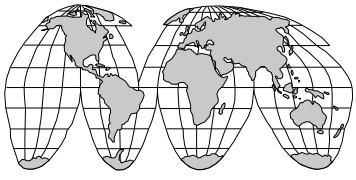
Feet
Removable feet.
With patented locking system.

Foot prints
Compatible to the main standard of the market.

Lubricated for life with synthetic oil with operative range from -15° to +130°C

Single-piece aluminum alloy housing
Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing





World wide sales network.

INDEX / INDICE / INDICE

Types / Tipi / Tipos

On page / A pagina / En la página

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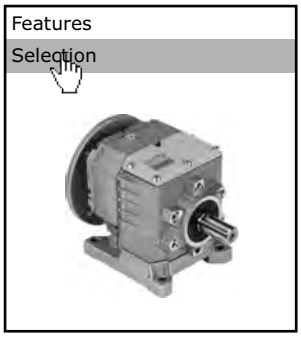
202A 620lb in	**302A** 1062lb in	**402A** 1330lb in	**403A** 1330lb in	**452A** 2655lb in	**502A** 2832lb in	**503A** 2832lb in	**602A** 4071lb in	**603A** 4071lb in

For : / Per : / Para :

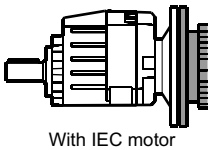
Use our web database to get detailed informations, always updated on each type/size.



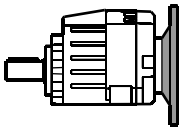
CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICACIÓN

Type - Tipo - Tipo	**Size** - Grandezza Tomaño	**Mounting** - Montaggio Tipo de montaje	**Ratio** Rapporto Relaciòn	**Hub** - Mozzo corona Nucleo corona	**Output shaft** Albero lento Eje solida	**Motor size** Grandezza motore Tamaño motor
P	**402A**	**-F**	**3.10**	**X**	**U**	**W**

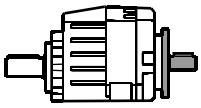
P



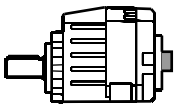
With IEC motor **M**



With motor flange **P**



With male input shaft **R**



Modular Base **B**

402A

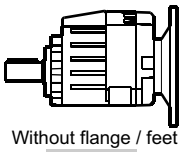
2 Stages Riduzioni Stufen Etapas

202A
302A
402A
452A
502A
602A

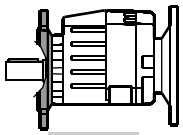
3 Stages Riduzioni Stufen Etapas

403A
503A
603A

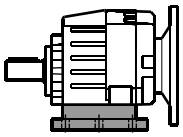
-F



Without flange / feet **-N**



-F



Mounted feet **B..**

Feet / piedini

Feet Code	Market reference	G
B1	112	
B2	212/3	
S1	17	
S2	27	
M1		
L4		
L5		

You see feet code in the chart of the dimensions
Vedi codice piede nella tabella delle dimensioni

3.10

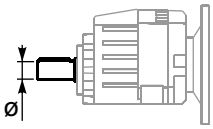
See technical data table

Vedi tabelle dati tecnici.

Ver tabla datos técnicos

X

Output shaft diameter
Diametro albero uscita



➡ **STANDARD**

202A
X ➡ ø0.625
O ⇨ ø0.750

302A
O ➡ ø0.750
X ⇨ ø0.625

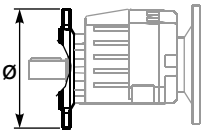
402A
403A
Q ➡ ø1.000
O ⇨ ø0.750

452A
502A
503A
T ➡ ø1.250
O ⇨ ø0.750

602A
603A
Z ➡ ø1.375
T ⇨ ø1.250

U

Output flange diameter
Diametro flangia uscita



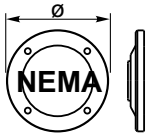
N Senza flangia Without flange

202A
302A
U ➡ ø6.50
2 ⇨ ø5.51
3 ⇨ ø6.30
4 ⇨ ø7.87

402A
403A
U ➡ ø6.50
2 ⇨ ø5.51
3 ⇨ ø6.30
4 ⇨ **ø7.87**

452A
502A
503A
602A
603A
U ➡ ø6.50
2 ⇨ ø5.51
3 ⇨ ø6.30
4 ⇨ ø7.87
5 ⇨ ø9.84

W



With Flange for type P

W ⇨ 56C
X ⇨ 143/5TC
Y ⇨ 182/4TC

➡ **STANDARD**

Without flange Senza flangia

202A
403A
K ➡ ø0.625

302A
402A
503A
K ⇨ ø0.625
N ➡ ø0.875

452A
502A
602A
K ⇨ ø0.625
N ⇨ ø0.875
S ➡ ø1.125

TÜV NORD 0032 — Dossier according to 94/9/EG 8. b ii stored

A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX

On request we can deliver our products according to the ATEX

A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

B Output speed / Velocità in uscita / Velocidad de salida

Nominal power / Potenza nominale / Potencia nominal

Gear size / Grandezza riduttore / Tamaño reductor

Motor power / Potenza motore / Potencia motor

A Nominal torque / Momento torcente nominale / Par de torsión nominal

Flange code / Codice flangia / Código bridas

Preferential ratio / Rapporto preferenziale / Relación preferente

Input speed / Velocità in entrata / Velocidad de entrada

402A Coaxial - Gear 1330lb in

Rating - Alluminum COAXIAL GEAR BOXES

▪ QUICK SELECTION / Selezione veloce

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** W 56C	Available **NEMA motor flanges** X 143/5 TC		Output Shaft Ø	Ratios code
497.6	**3.52**	3	364.8	1.9	5.65	687	B		2821		-
400.9	**4.37**	3	452.8	1.7	5.12	773	B		2818		
314.7	**5.56**	3	576.8	1.5	4.47	859	B		2813		
275.1	**6.36**	3	659.8	1.2	3.71	816	B		1921		
238.6	**7.33**	3	760.7	1.4	4.06	1030	B		2812		

C Ratio / Rapporto / Relación

Output Shaft diam. / Diam. albero uscita / Diametro eje de salida

Notes / Note / Notas

Transmitted torque / Momento torcente trasmesso / Par transmitido

Service factor / Fattore di servizio / Factor de servicio

fs

Type of load and starts per hour / Tipo di carico e avviamenti per ora		Oper. hours per day / Ore di funz. giorn. 3 h	10 h	24 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora **≤ 10**	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora **> 10**	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

D Motor flange available / Flange disponibili / Bridas disponibles

B) Mounting with reduction ring / Montaggio con boccola di riduzione / Montaje con casquillo de reducción

C) Motor flangeholes position/terminal box position / Posizione fori flangia/basetta motore / Posición agujeros brida / base motor

B) Available without reduction bushes / Disponibile anche senza boccola / Disponible tambien sin casquillo

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select ouput speed	Seleziona la velocità in uscita	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Seleccionar la brida disponible (sobre pedido)

202A Coaxial - Gear 620lb in

Rating - Alluminum COAXIAL GEAR BOXES

▪ QUICK SELECTION / Selezione veloce

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 W	Available NEMA motor flanges -		Output Shaft ø	Ratios code
							56C	-			
508.4	**3.44**	1	119	1.9	1.86	221			2821		-
409.1	**4.28**	1	148	1.8	1.80	266			2818		
321.2	**5.45**	1	188	1.9	1.88	354			2815		
281.1	**6.23**	1	215	1.9	1.85	398			1921		
243.0	**7.20**	1	249	1.8	1.78	443			2812		
226.2	**7.74**	1	267	1.7	1.65	443			1918		
177.6	**9.85**	1	341	1.6	1.56	531			1915		
153.2	**11.42**	1	395	1.3	1.34	531			1715	**standard ø0.625**	
134.3	**13.03**	0.75	338	1.6	1.18	531			1912		
115.9	**15.10**	0.75	392	1.4	1.02	531			1712		
108.0	**16.20**	0.75	420	1.3	0.95	531			1910	On request ø0.750	
93.2	**18.78**	0.75	487	1.1	0.82	531			1710		
82.7	**21.15**	0.75	549	1.0	0.73	531			1312		
80.1	**21.84**	0.5	378	1.4	0.70	531			1015		
66.5	**26.31**	0.5	455	1.2	0.58	531			1310		
60.6	**28.88**	0.5	499	1.2	0.62	620			1012		
48.7	**35.91**	0.5	621	1.0	0.50	620			1010		
46.4	**37.69**	0.33	430	1.4	0.48	620			912		
37.3	**46.87**	0.33	535	1.2	0.38	620			910		
35.2	**49.76**	0.33	568	1.1	0.36	620			712		
28.3	**61.89**	0.25	535	1.2	0.29	620			710		

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

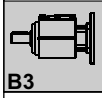
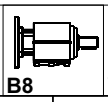
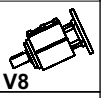
B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **202A** is supplied with synthetic oil for lifetime lubrification, 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.
For complete documentation please visit our web site.

I Il riduttore **202A** 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.
Per la documentazione completa consulta il nostro sito.

E El reductor tamaño **202A** se suministra, lubricado de por vida con aceite sintético y no requiren 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.
Para documentación completa, consultar nuestra Web.

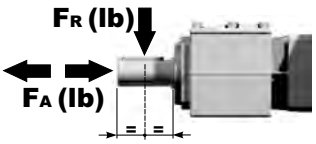
Standard supplied	Oil capacities for all mounting positions is **5.29 Ounces**						
 **B3**	 **B6**	 **B7**	 **B8**	 **V5**	 **V6**	 **V8**	
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320			

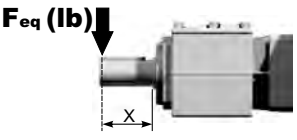
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

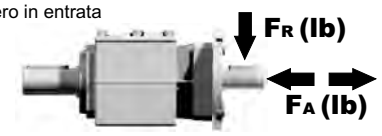
$$Feq = FR \cdot \frac{1.52}{X+0.73}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	31.4	157.3	**140**	55.3	296.6	**70**	76.4	381.9
250	33.9	169.8	**120**	60.7	303.3	**40**	85.4	426.9
200	41.6	207.6	**85**	67.4	337.0	**15**	-	-

Input shaft
Albero in entrata



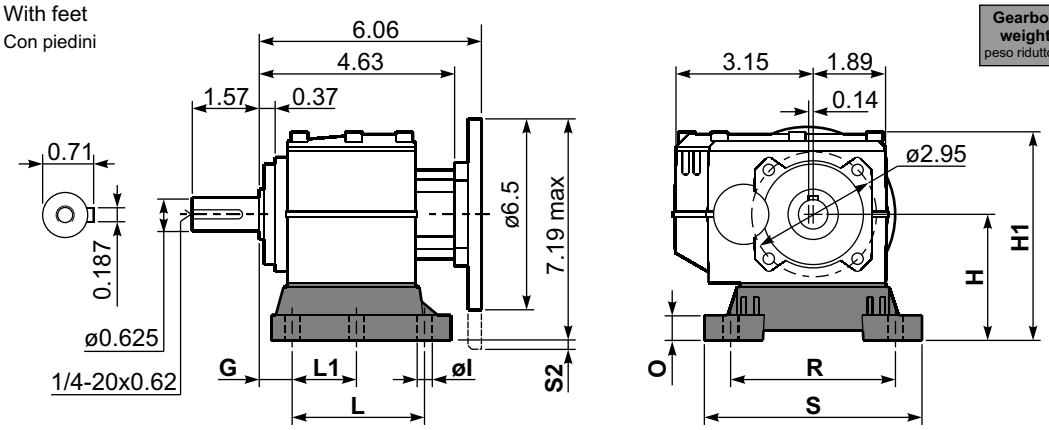
n_1	FA	FR
1750	31.5	157.4
1140	36.0	179.8

tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

P202A**B1**... With feet / Con piedini

Gearbox weight / peso riduttore	
With flange	**7.27 lb**
With feet	**7.05 lb**

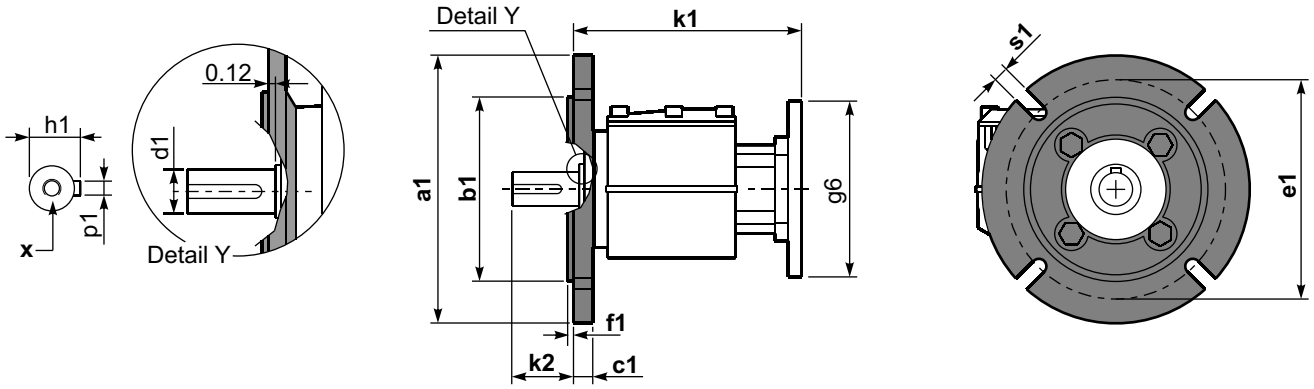


Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øl	S2 only with motor flange
B1	112	0.71	3.35	4.33	3.43	1.97	5.12	4.92	0.59	0.35	-
B2	212/3	0.71	3.94	5.12	4.23	2.36	6.10	5.71	0.20	0.43	-
S1	17-32	0.71	2.95	4.33	4.33	1.97	5.12	4.55	0.59	0.35	0.30
L3	03	0.49	2.56	3.58	2.36	-	4.13	5.87	0.20	0.35	0.69
L4	04	0.51	3.15	4.13	2.99	-	5.20	6.50	0.20	0.35	0.10

Other feet are available, see **www.hydromec.com**
Sono disponibili altri piedini in **www.hydromec.com**

Most popular types
Tipi più diffusi

P202A-**F**... Output flanges / flange di uscita



***Available output shaft** / Albero di uscita

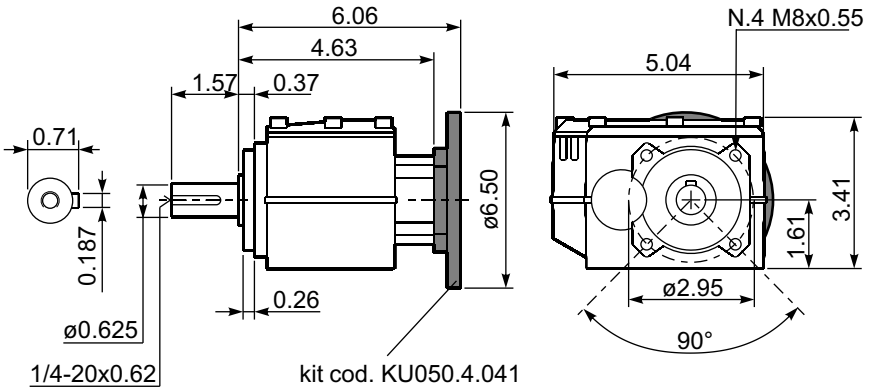
	Shaft - d1	p1	h1	x
Standard	ø0.625x1.57	0.187	0.71	1/4-20x0.71
On request / A richiesta	ø0.750x1.57	0.187	0.84	1/4-20x0.71

Available output flanges / flange di uscita

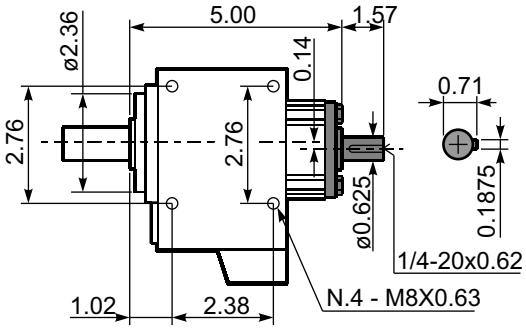
a1 ø	b1	c1	e1	f1	k1	k2	s1	kit code	Type
6.50	4.50	0.39	5.87	0.13	5.14	1.33	0.41	KU311.9.012	Nema
5.51	3.74	0.45	4.53	0.12	5.05	1.44	0.35	KC30.9.011	
6.30	4.33	0.45	5.12	0.14	5.05	1.44	0.35	KC30.9.012	Metric
7.87	5.12	0.45	6.50	0.14	5.05	1.44	0.43	KC30.9.013	

With flange and feet only on request. Ask for compatibility

P202A-**N**... Basic gearbox / Riduttore base



R202A-**N**... Input Shaft / Albero in entrata



302A Coaxial - Gear 1062lb in

Rating - Alluminum COAXIAL GEAR BOXES

▪ QUICK SELECTION / Selezione veloce

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** W 56C	Available **NEMA motor flanges** X 143/5 TC		Output Shaft ø	Ratios code
508.4	**3.44**	2	238	1.2	**2.47**	**294**			2821		-
409.1	**4.28**	2	296	1.1	**2.27**	**336**			2818		
321.2	**5.45**	2	377	1.2	**2.32**	**437**			2815		
281.1	**6.23**	2	431	1.4	**2.73**	**589**			1921		
243.0	**7.20**	2	498	1.2	**2.36**	**589**			2812		
226.2	**7.74**	2	535	1.3	**2.51**	**673**			1918		
177.6	**9.85**	2	681	1.2	**2.34**	**799**			1915		
153.2	**11.42**	2	790	1.2	**2.45**	**967**			1715	**standard ø0.750**	
134.3	**13.03**	1.5	676	1.4	**2.13**	**959**			1912		
115.9	**15.10**	1.5	783	1.2	**1.84**	**959**			1712		
108.0	**16.20**	1	560	1.5	**1.52**	**852**			1910	On request ø0.625	
93.2	**18.78**	1	649	1.3	**1.31**	**852**			1710		
82.7	**21.15**	1	731	1.3	**1.31**	**959**			1312		
80.1	**21.84**	1	755	1.3	**1.33**	**1001**			1015		
66.5	**26.31**	0.75	682	1.2	**0.94**	**852**			1310		
60.6	**28.88**	0.75	749	1.3	**0.96**	**959**			1012		
48.7	**35.91**	0.5	621	1.4	**0.69**	**852**			1010		
46.4	**37.69**	0.5	652	1.3	**0.66**	**858**			912		
37.3	**46.87**	0.5	810	1.1	**0.53**	**852**			910		
35.2	**49.76**	0.33	568	1.5	**0.49**	**849**			712		
28.3	**61.89**	0.33	706	1.2	**0.40**	**852**			710		

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

*With "P" mounting, it's not possible to use these flanges; possibly, mount a B14 flange
Nel montaggio P non è possibile utilizzare queste flange; eventualmente utilizzare la flangia B14

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

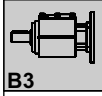
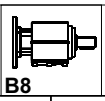
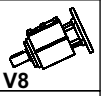
B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **302A** is supplied with synthetic oil for lifetime lubrification, 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.
For complete documentation please visit our web site.

I Il riduttore **302A** 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.
Per la documentazione completa consulta il nostro sito.

E El reductor tamaño **302A** se suministra, lubricado de por vida con aceite sintético y no requiren 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.
Para documentación completa, consultar nuestra Web.

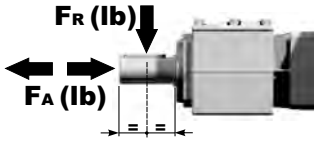
Standard supplied	Oil capacities for all mounting positions is **5.29 Ounces**						
 **B3**	 **B6**	 **B7**	 **B8**	 **V5**	 **V6**	 **V8**	
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320			

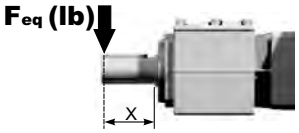
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

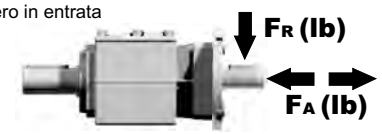
$$Feq = FR \cdot \frac{1.52}{X+0.73}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	31.4	157.3	**140**	55.3	296.6	**70**	76.4	381.9
250	33.9	169.8	**120**	60.7	303.3	**40**	85.4	426.9
200	41.6	207.6	**85**	67.4	337.0	**15**	-	-

Input shaft
Albero in entrata



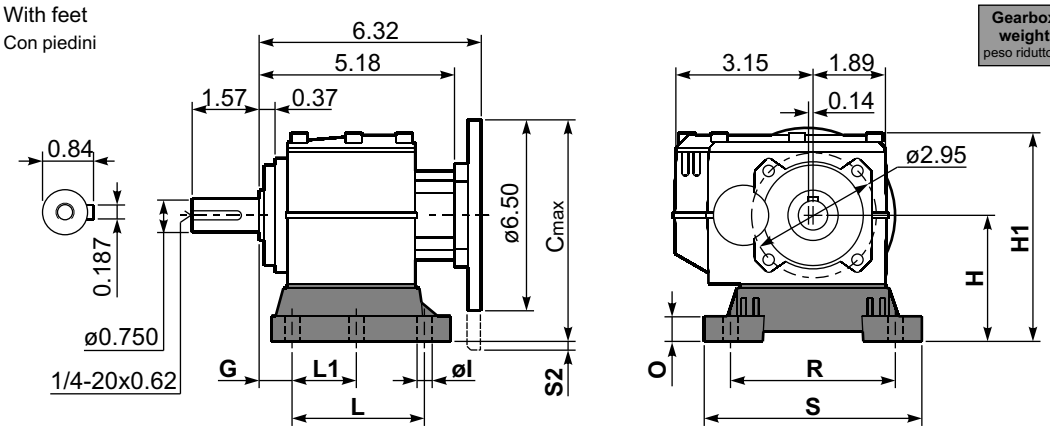
n_1	FA	FR
1750	31.5	157.4
1140	36.0	179.8

tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

P302A**B1**... With feet / Con piedini

Gearbox weight / peso riduttore	
With flange	**8.37 lb**
With feet	**8.37 lb**



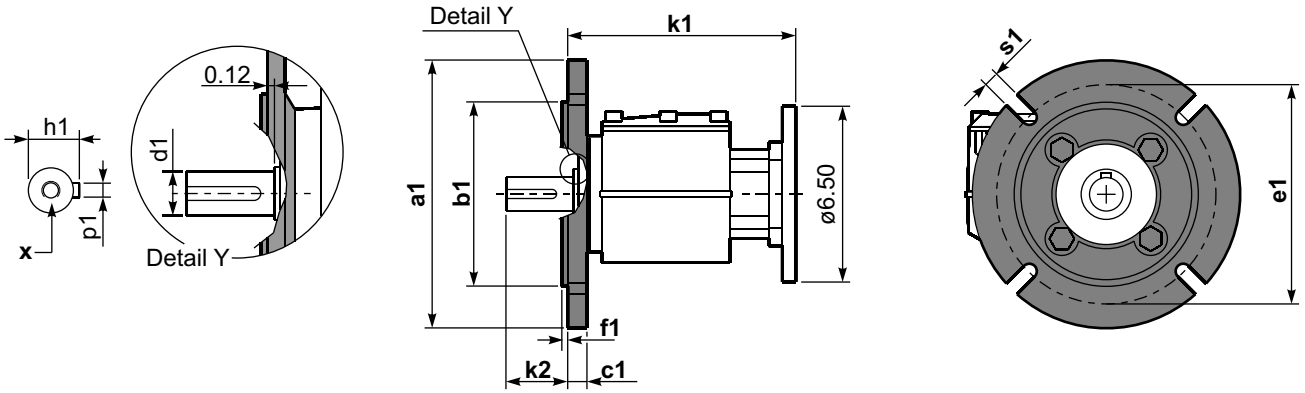
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øI	S2 only with motor flange
B1	112	0.71	3.35	4.33	3.42	1.97	5.12	4.92	0.59	0.35	-
B2	212/3	0.71	3.94	5.12	4.23	2.36	6.10	5.71	0.20	0.43	-
S1	17-32	0.71	2.95	4.33	4.33	1.97	5.12	4.55	0.59	0.35	0.3
S2	27	0.98	3.54	4.33	5.12	-	5.12	-	0.20	0.35	-
L3	03	0.49	2.56	3.58	2.36	-	4.13	5.87	0.20	0.35	0.7
L4	04	0.51	3.15	4.13	2.99	-	5.20	6.50	0.20	0.35	0.1

Other feet are available, see **www.hydromec.com**

Sono disponibili altri piedini in **www.hydromec.com**

Most popular types
Tipi più diffusi

P302A-**F**... Output flanges / flange di uscita



***Available output shaft** / Albero di uscita

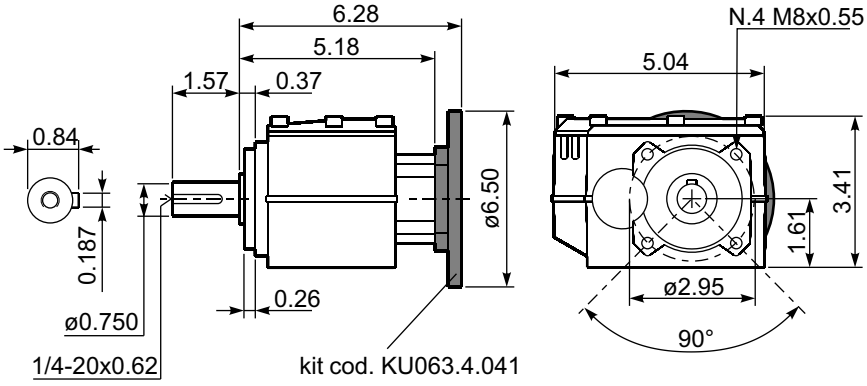
	Shaft - d1	p1	h1	x
Standard	ø0.750x1.57	0.187	0.84	1/4-20x0.71
On request A richiesta	ø0.625x1.57	0.187	0.71	1/4-20x0.71

Available output flanges / flange di uscita

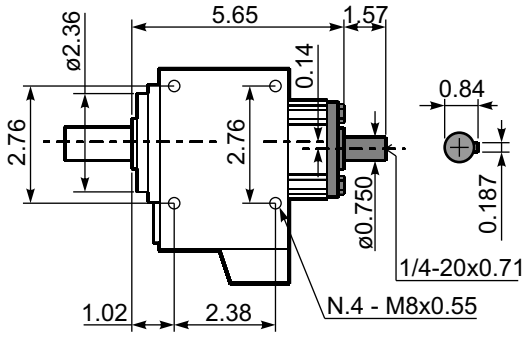
a1 ø	b1	c1	e1	f1	k1	k2	s1	kit code	Type
6.50	4.50	0.39	5.87	0.13	4.85	1.33	0.41	KU311.9.012	Nema
5.51	3.74	0.45	4.53	0.12	4.76	1.44	0.35	KC30.9.011	
6.30	4.33	0.45	5.12	0.14	4.76	1.44	0.35	KC30.9.012	Metric
7.87	5.12	0.45	6.50	0.14	4.76	1.44	0.43	KC30.9.013	

With flange and feet only on request. Ask for compatibility

P302A-**N**... Basic gearbox / Riduttore base



R302A-**N**... Input Shaft / Albero in entrata



402A Coaxial - Gear 1330lb in

Rating - Alluminum COAXIAL GEAR BOXES

▪ QUICK SELECTION / Selezione veloce

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 W 56C	Available NEMA motor flanges X 143/5 TC		Output Shaft ø	Ratios code
497.6	**3.52**	2	243	2.8	5.65	687	B		2821		-
400.9	**4.37**	2	302	2.6	5.12	773	B		2818		
314.7	**5.56**	2	385	2.2	4.47	859	B		2813		
275.1	**6.36**	2	440	1.9	3.71	816	B		1921		
238.6	**7.33**	2	507	2.0	4.06	1030	B		2812		
221.7	**7.89**	2	546	1.9	3.77	1030	B		1918		
174.0	**10.06**	2	695	1.9	3.70	1288	B		1913		
150.1	**11.66**	2	806	1.9	3.71	1494	B		1713		
131.9	**13.26**	2	917	1.5	3.00	1374	B		1912	**standard ø1.00**	
127.9	**13.68**	2	946	1.3	2.61	1236	B		1513		
113.8	**15.37**	2	1063	1.3	2.58	1374	B		1712		
108.0	**16.20**	2	1120	1.0	1.96	1099	B		1910	On request ø0.750	
97.0	**18.04**	2	1248	1.1	2.20	1374	B		1512		
93.2	**18.78**	1.5	974	1.1	1.69	1099	B		1710		
81.3	**21.54**	1.5	1117	1.2	1.84	1374	B		1312		
78.5	**22.29**	1.5	1156	1.2	1.86	1434	B		1013		
66.5	**26.31**	1	910	1.2	1.21	1099	B		1310		
59.5	**29.40**	1	1017	1.4	1.35	1374	B		1012		
48.7	**35.91**	0.75	931	1.2	0.89	1099	B		1010		
45.6	**38.37**	0.75	995	1.4	1.04	1374	B		912		
37.3	**46.87**	0.75	1215	0.9	0.68	1099	B		910		
34.5	**50.67**	0.5	876	1.3	0.65	1133	B		712		
28.3	**61.89**	0.5	1070	1.0	0.51	1099	B		710		

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 **402A** is supplied with synthetic oil for lifetime lubrification, 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.
For complete documentation please visit our web site.

I Il riduttore **402A** 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.
Per la documentazione completa consulta il nostro sito.

E El reductor tamaño **402A** se suministra, lubricado de por vida con aceite sintético y no requiren 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.
Para documentación completa, consultar nuestra Web.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
8.82 oz	10.58 oz	14.11 oz	14.11 oz	14.11 oz	17.64 oz	14.11 oz

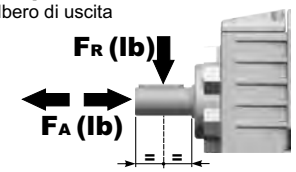
AGIP Telium VSF 320 | **SHELL** Omala S4 WE 320

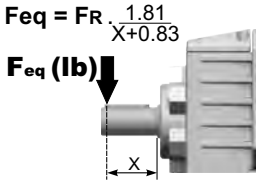
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

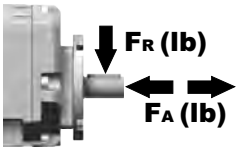
$F_{eq} = F_R \cdot \frac{1.81}{X+0.83}$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	69.6	348.2	**140**	91.2	456.1	**70**	121.3	606.6
250	74.1	370.7	**120**	100.6	503.3	**40**	134.8	674.0
200	80.9	404.4	**85**	107.8	539.2	**15**	134.8	674.0

Input shaft
Albero in entrata



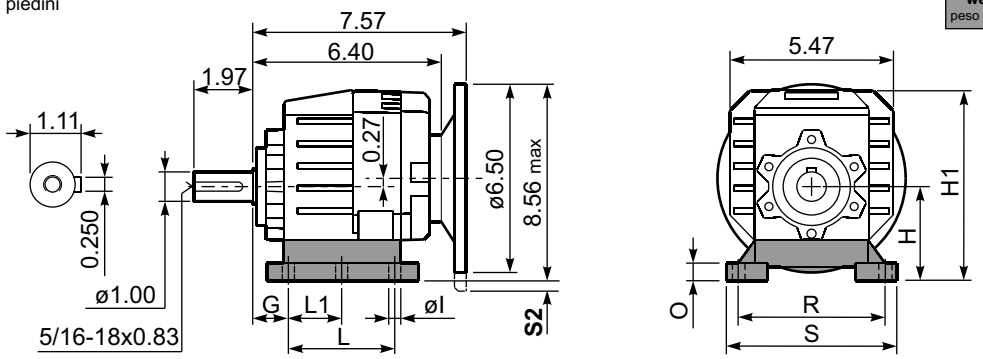
n_1	FA	FR
1750	53.9	269.8
1140	62.9	314.7

tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

P402A**B1**... With feet
Con piedini

Gearbox weight / peso riduttore: With flange **13.11lb**, With feet **14.10lb**



Feet / piedini

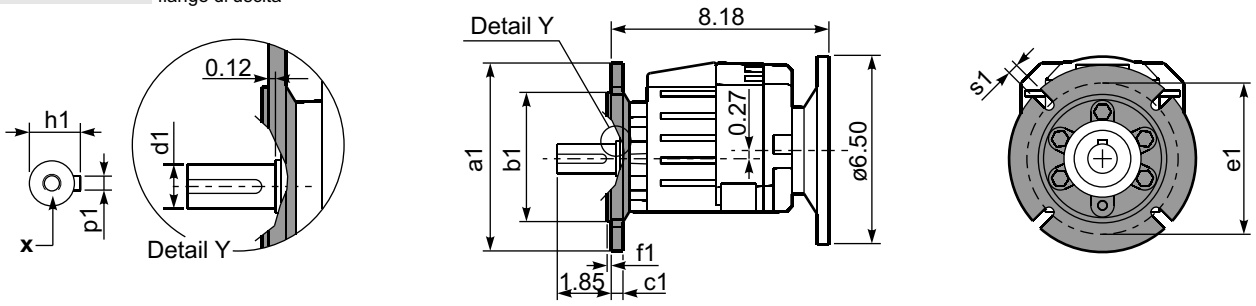
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øl	S2 only with motor flange
B1	112	0.71	3.35	4.33	3.43	1.97	5.12	6.57	0.59	-	-
B2	212/3	0.71	3.94	5.12	4.23	2.36	6.10	7.17	0.67	0.43	-
S1	17	0.71	2.95	4.33	4.33	1.97	5.71	6.10	0.59	0.35	0.03
S2	27	0.98	3.54	4.33	5.12	-	5.71	6.77	0.79	0.35	-
M1	42/3	0.98	3.15	4.53	3.35	-	5.71	6.38	0.59	0.35	-
L4	04	0.51	3.15	4.13	2.99	-	5.20	6.38	0.20	0.39	-
L5	05	0.63	3.94	4.92	3.54	-	5.91	7.17	0.24	0.47	-

Other feet are available, see **www.hydromec.com**

Sono disponibili altri piedini in **www.hydromec.com**

Most popular types
Tipi più diffusi

P402A**-F**... Output flanges
flange di uscita



***Available output shaft** / Albero di uscita

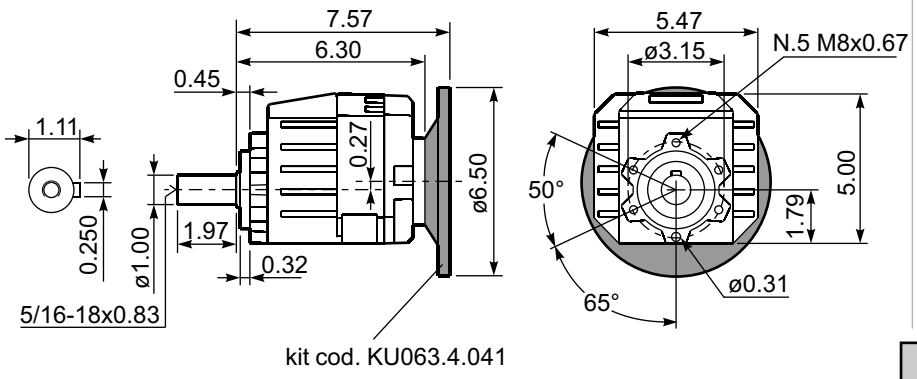
	Shaft - d1	p1	h1	x
Standard	ø1.00x1.97	0.250	1.11	5/16-18x0.83
On request A richiesta	ø0.750x1.57	0.187	0.84	1/4-20x0.71

Available output flanges / flange di uscita

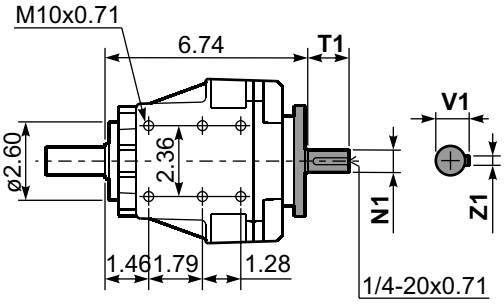
a1 ø	b1	c1	e1	f1	s1	kit code	Type
6.50	4.50	0.61	5.87	0.13	0.41	KU511.9.012	Nema
5.51	3.74	0.39	4.53	0.12	0.35	KC40.9.010	Metric
6.30	4.33	0.39	5.12	0.14	0.35	KC40.9.011	
7.87	5.12	0.43	6.50	0.14	0.43	KC40.9.012	
9.84	7.09	0.45	8.46	0.14	0.55	KC40.9.013	

With flange and feet only on request. Ask for compatibility

P402A**-N**... Basic gearbox
Riduttore base



R402A**-N**... Input Shaft
Albero in entrata



Nema flange	N1	T1	V1	Z1	kit code
Standard	0.750	1.97	0.84	0.187	KC40.5.070U
On request	0.625	1.57	0.71	0.187	KC40.5.069U

403A Coaxial - Gear 1330lb in

Rating - Alluminum COAXIAL GEAR BOXES

▪ QUICK SELECTION / Selezione veloce

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 W	Available NEMA motor flanges -		Output Shaft ø	Ratios code
							56C	-			
45.6	**38.40**	0.75	965	1.6	**1.13**	**1502**			171713		-
40.1	**43.69**	0.75	1098	1.2	**0.85**	**1279**			191712		
34.6	**50.64**	0.75	1272	1.1	**0.78**	**1374**			171712		
32.8	**53.36**	0.5	894	1.2	**0.60**	**1099**			191710		
28.6	**61.21**	0.5	1025	1.3	**0.65**	**1374**			191312		
28.3	**61.85**	0.5	1036	1.1	**0.51**	**1099**			171710		
24.7	**70.95**	0.5	1188	1.2	**0.56**	**1374**			131712	**standard**	
23.8	**73.43**	0.5	1230	1.2	**0.59**	**1502**			101713	**ø1.00**	
23.4	**74.77**	0.33	827	1.3	**0.43**	**1099**			191310		
20.2	**86.66**	0.33	958	1.1	**0.37**	**1099**			131710	On request	
18.1	**96.85**	0.33	1071	1.3	**0.41**	**1374**			101712	ø0.750	
17.0	**102.89**	0.33	1137	1.4	**0.43**	**1545**			101313		
13.8	**126.40**	0.33	1397	1.0	**0.31**	**1374**			91712		
12.9	**135.69**	0.25	1136	1.2	**0.29**	**1374**			101312		
10.6	**165.74**	0.25	1388	0.8	**0.19**	**1099**			101310		
9.9	**177.09**	0.25	1483	0.9	**0.22**	**1374**			91312		
8.1	**216.31**	0.25	1811	0.6	**0.15**	**1099**			91310		

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 **403A** is supplied with synthetic oil for lifetime lubrification, 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.
For complete documentation please visit our web site.

I Il riduttore **403A** 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.
Per la documentazione completa consulta il nostro sito.

E El reductor tamaño **403A** se suministra, lubricado de por vida con aceite sintético y no requiren 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.
Para documentación completa, consultar nuestra Web.

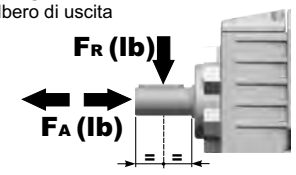
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
10.58 oz	12.35 oz	15.87 oz	15.87 oz	15.87 oz	19.40 oz	15.87 oz

AGIP Telium VSF 320 | **SHELL** Omala S4 WE 320

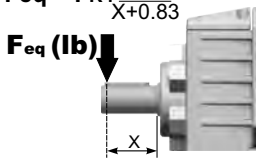
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

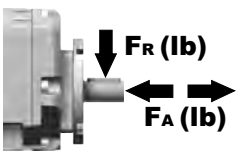


$$Feq = FR \cdot \frac{1.81}{X+0.83}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	69.6	348.2	**140**	91.2	456.1	**70**	121.3	606.6
250	74.1	370.7	**120**	100.6	503.3	**40**	134.8	674.0
200	80.9	404.4	**85**	107.8	539.2	**15**	134.8	674.0

Input shaft
Albero in entrata



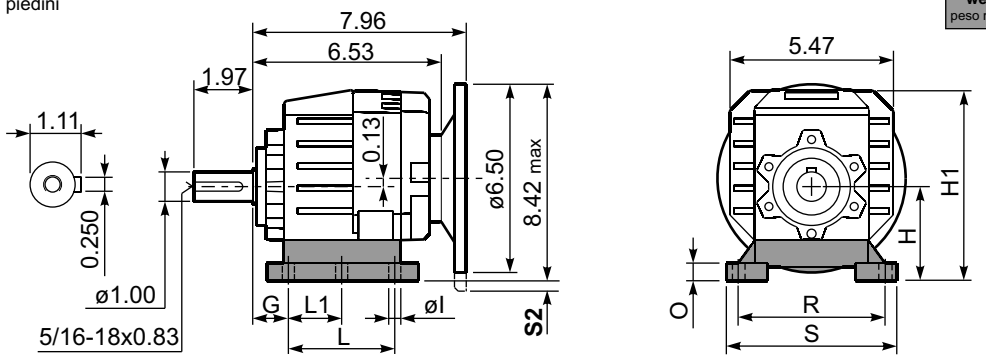
n_1	FA	FR
1750	31.5	157.4
1140	36.0	179.8

tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

P403A**B1**... With feet / Con piedini

Gearbox weight / peso riduttore: With flange **14.65lb** / With feet **15.42lb**



Feet / piedini

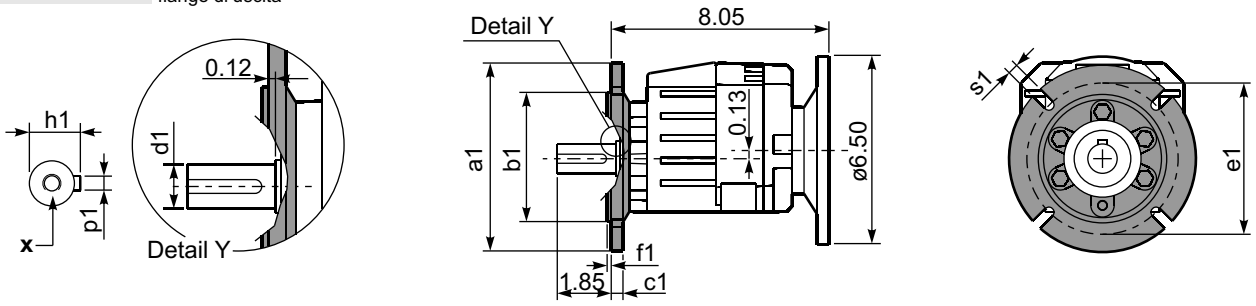
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øl	S2 only with motor flange
B1	112	0.71	3.35	4.33	3.43	1.97	5.12	6.57	0.59	-	-
B2	212/3	0.71	3.94	5.12	4.23	2.36	6.10	7.17	0.67	0.43	-
S1	17	0.71	2.95	4.33	4.33	1.97	5.71	6.10	0.59	0.35	0.03
S2	27	0.98	3.54	4.33	5.12	-	5.71	6.77	0.79	0.35	-
M1	42/3	0.98	3.15	4.53	3.35	-	5.71	6.38	0.59	0.35	-
L4	04	0.51	3.15	4.13	2.99	-	5.20	6.38	0.20	0.39	-
L5	05	0.63	3.94	4.92	3.54	-	5.91	7.17	0.24	0.47	-

Other feet are available, see **www.hydromec.com**

Sono disponibili altri piedini in **www.hydromec.com**

Most popular types
Tipi più diffusi

P403A**-F**... Output flanges / flange di uscita



***Available output shaft** / Albero di uscita

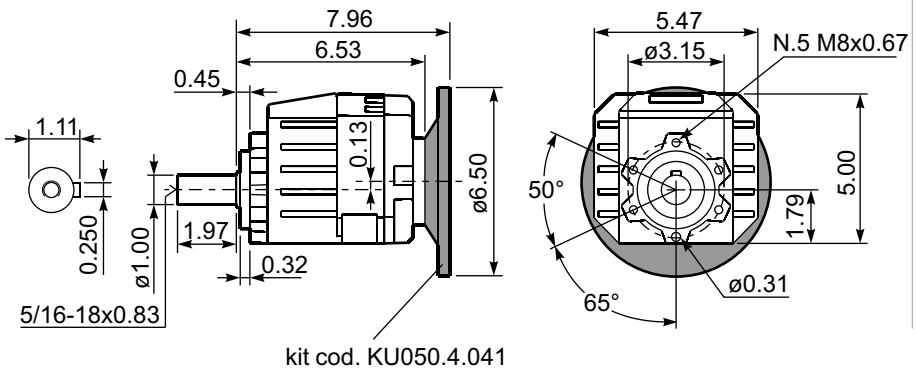
	Shaft - d1	p1	h1	x
Standard	ø1.00x1.97	0.250	1.11	5/16-18x0.83
On request / A richiesta	ø0.750x1.57	0.187	0.84	1/4-20x0.71

Available output flanges / flange di uscita

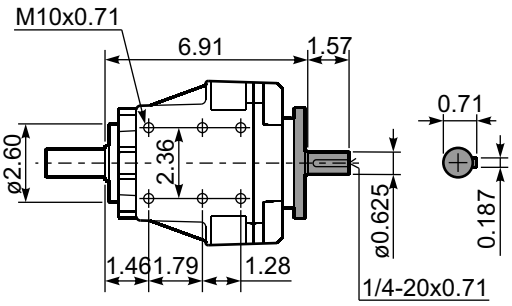
a1 ø	b1	c1	e1	f1	s1	kit code	Type
6.50	4.50	0.61	5.87	0.13	0.41	KU511.9.012	Nema
5.51	3.74	0.39	4.53	0.12	0.35	KC40.9.010	Metric
6.30	4.33	0.39	5.12	0.14	0.35	KC40.9.011	
7.87	5.12	0.43	6.50	0.14	0.43	KC40.9.012	
9.84	7.09	0.45	8.46	0.14	0.55	KC40.9.013	

With flange and feet only on request. Ask for compatibility

P403A**-N**... Basic gearbox / Riduttore base



R403A**-N**... Input Shaft / Albero in entrata



▪ QUICK SELECTION / Selezione veloce

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 W 56C	X 143/5TC	Y 182/4TC		Output Shaft ø	Ratios code
484.6	**3.61**	5	624	2.1	**10.63**	**1328**	B	B		3018		-
414.2	**4.23**	5	730	2.1	**10.30**	**1505**	B	B		3016		
349.0	**5.01**	5	867	2.0	**10.21**	**1770**	B	B		3014		
288.5	**6.07**	5	1049	2.1	**10.55**	**2213**	B	B		3012		
257.1	**6.81**	5	1177	2.1	**10.42**	**2452**	B	B		2018		
219.8	**7.96**	5	1377	1.9	**9.64**	**2655**	B	B		2016		
185.2	**9.45**	5	1634	1.6	**8.23**	**2691**	B	B		2014		
153.1	**11.43**	5	1977	1.3	**6.72**	**2655**	B	B		2012		
123.2	**14.21**	3	1474	1.4	**4.30**	**2111**	B	B		2010	**standard ø1.250**	
105.3	**16.62**	3	1724	1.6	**4.68**	**2691**	B	B		1314		
87.1	**20.10**	3	2085	1.3	**3.82**	**2655**	B	B		1312		
70.0	**24.98**	2	1728	1.2	**2.44**	**2111**	B	B		1310		
59.5	**29.41**	2	2034	1.3	**2.65**	**2691**	B	B		814		
49.2	**35.58**	2	2461	1.1	**2.16**	**2655**	B	B		812		
43.2	**40.50**	1.5	2101	1.2	**1.83**	**2567**	B	B		614		
39.6	**44.23**	1.5	2294	0.9	**1.38**	**2111**	B	B		810		
35.7	**49.00**	1	1694	1.6	**1.57**	**2655**	B	B		612		
28.7	**60.90**	1	2106	1.0	**1.00**	**2111**	B	B		610		

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

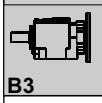
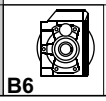
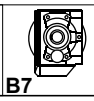
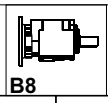
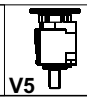
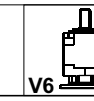
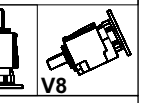
B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **452A** is supplied with synthetic oil for lifetime lubrification, 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.
For complete documentation please visit our web site.

I Il riduttore **452A** 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.
Per la documentazione completa consulta il nostro sito.

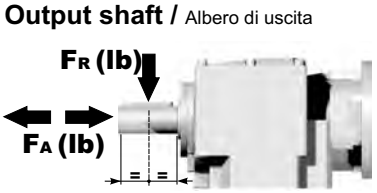
E El reductor tamaño **452A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.
Para documentación completa, consultar nuestra Web.

Standard supplied	Oil capacities for all mounting positions is **10.93 Ounces**						
 **B3**	 **B6**	 **B7**	 **B8**	 **V5**	 **V6**	 **V8**	
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320			

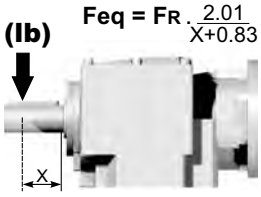
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft / Albero di uscita

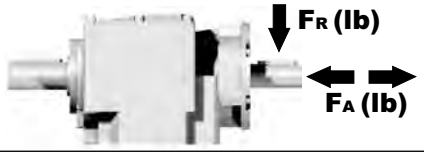


$F_{eq} = F_R \cdot \frac{2.01}{X+0.83}$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	93.2	465.1	**140**	121.3	606.7	**70**	157.3	788.6
250	96.6	485.3	**120**	125.8	626.8	**40**	181.9	909.9
200	105.6	525.7	**85**	141.5	707.7	**15**	202.2	1011

Input shaft / Albero in entrata

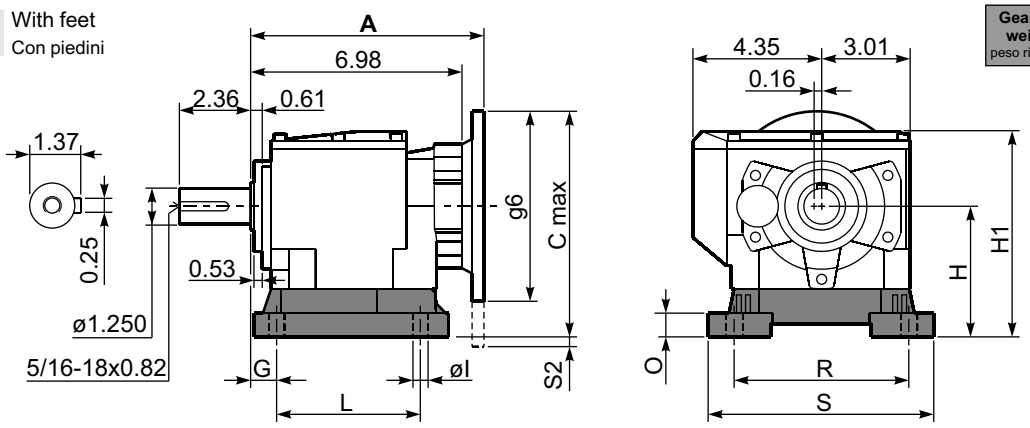


n_1	FA	FR
1400	89.9	449.6
1140	98.9	494.6

tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

P452A**B1**... With feet
Con piedini



Gearbox weight / peso riduttore: With flange **19.16lb** — With feet **19.71lb**

Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange
B3	312/3	0.71	4.33	6.30	5.12	7.48	6.38	0.79	0.43	0.11 182/4TC
B4	30/35	0.79	5.12	7.09	5.89	8.50	7.16	0.71	0.55	-
S4	47-57	1.18	4.53	5.31	6.50	6.69	6.57	0.94	0.53	-
H3	023-233	1.18	5.12	5.31	5.31	7.28	9.11	0.98	0.55	-
M2	52/3	1.18	4.33	5.31÷5.91	3.94	7.48	6.38	0.71	0.43	-
L6	06	0.75	4.92	6.30	4.17	8.07	6.97	0.31	0.55	-
E2	2202/3	0.51	3.94	5.31	7.56	6.46	5.98	0.24	0.55	0.50 182/4TC
P4	142	1.38	5.59	5.12	5.71	6.30	7.64	0.31	0.55	-
J3	4100-05G	0.98	3.94	5.91	3.54	7.09	5.98	0.31	0.55	0.50 182/4TC

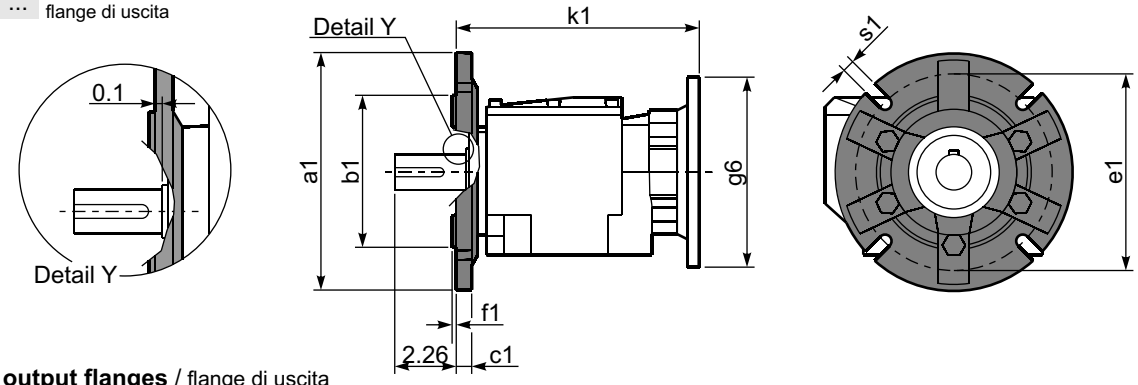
Other feet are available, see **www.hydromec.com**

Sono disponibili altri piedini in **www.hydromec.com**

Dimension (A) see on page bottom

Most popular types
Tipi più diffusi

P452A-**F**... Output flanges
flange di uscita



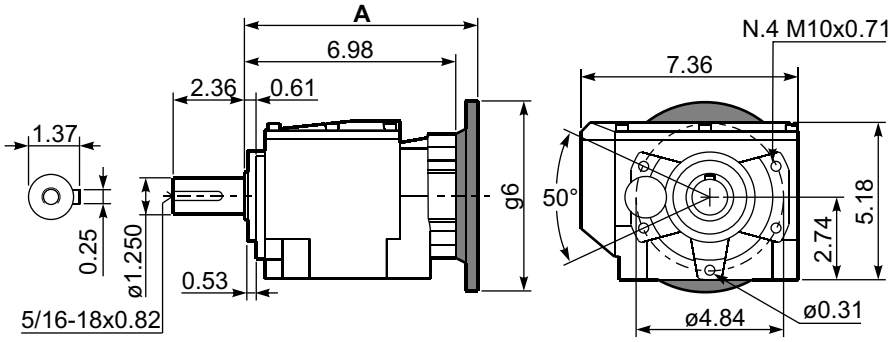
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code	Type
7.87	5.12	0.43	6.50	0.18	0.41	KC50.9.012	Metric
9.87	9.84	0.61	8.46	0.16	0.55	KC50.9.013	

With flange and feet only on request. Ask for compatibility

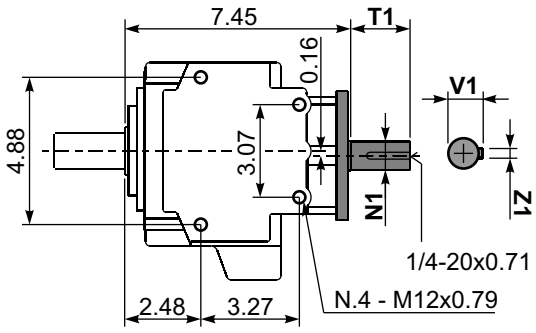
Nema flanges	k1	g6	kit code
56C-143/5TC	8.04	6.50	KU085.4.041
182/4TC	8.75	8.88	KU085.4.042

P452A-**N**... Basic gearbox
Riduttore base



Nema flanges	A	g6	kit code
56C-143/5TC	7.94	6.50	KU085.4.041
182/4TC	8.65	8.88	KU085.4.042

R452A-**N**... Input Shaft
Albero in entrata



Nema flanges	N1	T1	V1	Z1	kit code
Standard	0.875	1.97	0.96	0.187	KC50.5.070U
On request	0.750	1.97	0.84	0.187	KC50.5.069U

502A Coaxial - Gear 2832lb in

Rating - Alluminum COAXIAL GEAR BOXES

▪ QUICK SELECTION / Selezione veloce

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** W 56C	X 143/5TC	Y 182/4TC		Output Shaft ø	Ratios code
484.6	**3.61**	5	624	2.1	**10.31**	**1.288**	B	B		3018		-
414.2	**4.23**	5	730	2.0	**9.99**	**1.459**	B	B		3016		
349.0	**5.01**	5	867	2.0	**9.90**	**1.717**	B	B		3014		
288.5	**6.07**	5	1049	2.0	**10.23**	**2.146**	B	B		3012		
257.1	**6.81**	5	1177	2.2	**10.95**	**2.576**	B	B		2018		
219.8	**7.96**	5	1377	2.1	**10.29**	**2.833**	B	B		2016		
185.2	**9.45**	5	1634	1.9	**9.30**	**3.039**	B	B		2014		
153.1	**11.43**	5	1977	1.4	**7.08**	**2.799**	B	B		2012		
123.2	**14.21**	3	1474	1.5	**4.51**	**2.214**	B	B		2010	**standard ø1.250**	
105.3	**16.62**	3	1724	1.8	**5.29**	**3.039**	B	B		1314		
87.1	**20.10**	3	2085	1.3	**4.03**	**2.799**	B	B		1312		
71.1	**24.61**	3	2552	1.1	**3.29**	**2.799**	B	B		1112		
70.0	**24.98**	2	1728	1.3	**2.56**	**2.214**	B	B		1310		
59.5	**29.41**	2	2034	1.5	**2.99**	**3.039**	B	B		814		
49.2	**35.58**	2	2461	1.1	**2.27**	**2.799**	B	B		812		
43.2	**40.50**	1.5	2101	1.2	**1.81**	**2.533**	B	B		614		
39.6	**44.23**	1.5	2294	1.0	**1.45**	**2.214**	B	B		810		
35.7	**49.00**	1.5	2541	1.1	**1.65**	**2.799**	B	B		612		
28.7	**60.90**	1	2106	1.1	**1.05**	**2.214**	B	B		610		

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 **502A** is supplied with synthetic oil for lifetime lubrification, 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.
For complete documentation please visit our web site.

I Il riduttore **502A** 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.
Per la documentazione completa consulta il nostro sito.

E El reductor tamaño **502A** se suministra, lubricado de por vida con aceite sintético y no requiren 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.
Para documentación completa, consultar nuestra Web.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
15.87 oz	19.40 oz	35.27 oz	38.80 oz	38.80 oz	40.56 oz	38.80 oz

AGIP Telium VSF 320	**SHELL** Omala S4 WE 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_R (lb)

F_A (lb)

$F_{eq} = F_R \cdot \frac{2.13}{X+0.94}$

F_{eq} (lb)

X

n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	103.3	516.7	**140**	134.8	674.0	**70**	175.2	876.2
250	107.8	539.2	**120**	139.3	696.5	**40**	202.2	1011
200	116.8	584.1	**85**	157.3	786.3	**15**	224.7	1123.3

Input shaft
Albero in entrata

F_R (lb)

F_A (lb)

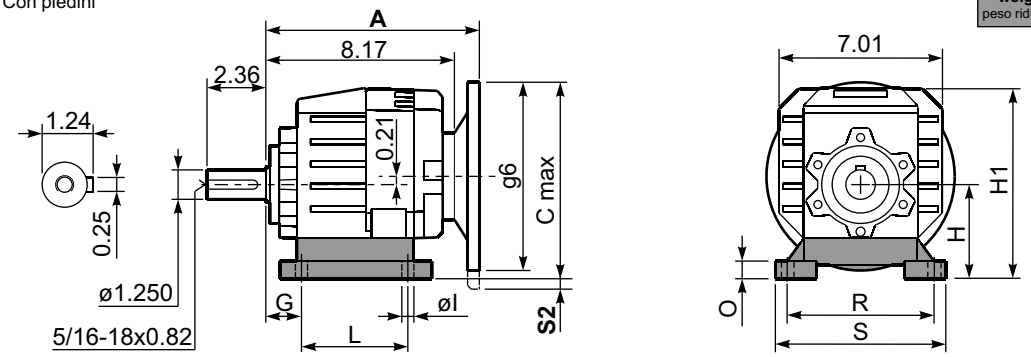
n_1	FA	FR
1750	53.9	269.8
1140	62.9	314.7

tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

P502A**B1**... With feet / Con piedini

Gearbox weight / peso riduttore	
With flange	**25.55lb**
With feet	**25.99lb**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange
B3	312/3	0.71	4.33	6.30	5.12	7.48	8.33	0.79	0.43	-
B4	30/35	0.79	5.12	7.09	5.89	8.50	9.11	0.71	0.55	-
S4	47-57	1.18	4.53	5.31	6.50	6.69	8.52	0.94	0.53	-
H3	023-233	1.18	5.12	5.31	5.12	7.28	9.11	0.98	0.55	-
M2	52/3	1.18	4.33	5.31÷5.91	3.94	7.48	8.33	0.71	0.43	-
L6	06	0.75	4.92	6.30	4.17	8.07	8.92	0.31	0.55	-
E2	2202/3	0.51	3.94	5.31	7.56	6.46	7.93	0.24	0.55	0.29 182/4TC
P4	142	1.38	5.59	5.12	5.71	6.30	9.59	0.31	0.55	-
J3	4100-05G	0.98	3.94	5.91	3.54	7.09	7.93	0.31	0.55	0.29 182/4TC

Other feet are available, see **www.hydromec.com**

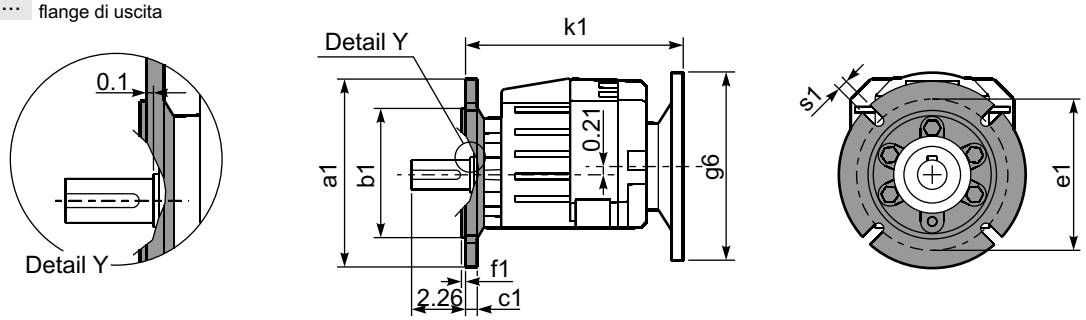
Sono disponibili altri piedini in **www.hydromec.com**

Dimension (A) see on page bottom

Most popular types
Tipi più diffusi

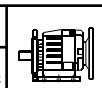
Nema flanges	C max	g6	kit code
56C-143/5TC	9.05	6.50	KU085.4.041
182/4TC	10.24	8.88	KU085.4.042

P502A-**F**... Output flanges / flange di uscita



Available output flanges / flange di uscita

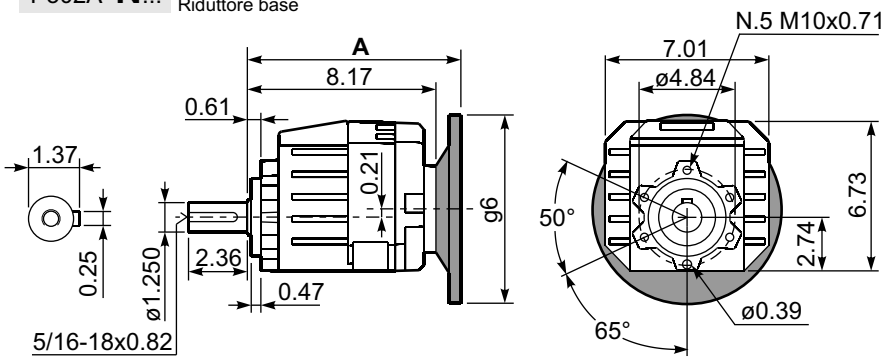
a1 ø	b1	c1	e1	f1	s1	kit code	Type
7.87	5.12	0.43	6.50	0.18	0.43	KC50.9.012	Metric
9.84	7.09	0.61	8.46	0.16	0.55	KC50.9.013	



With flange and feet only on request. Ask for compatibility

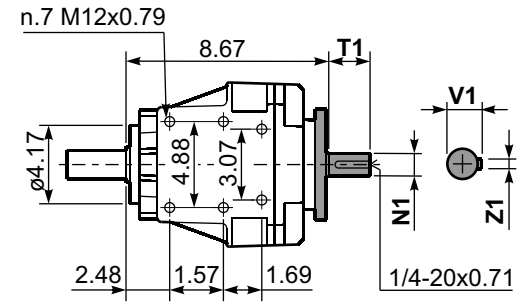
Nema flanges	k1	g6	kit code
56C-143/5TC	9.27	6.50	KU085.4.041
182/4TC	9.98	8.88	KU085.4.042

P502A-**N**... Basic gearbox / Riduttore base



Nema flange	A	g6	kit code
56C-143/5TC	9.13	6.50	KU085.4.041
182/4TC	9.84	8.88	KU085.4.042

R502A-**N**... Input Shaft / Albero in entrata



Nema flanges	N1	T1	V1	Z1	kit code
Standard	0.875	1.97	0.96	0.187	KC50.5.070U
On request	0.750	1.97	0.84	0.187	KC50.5.069U

503A Coaxial - Gear 2832lb in

Rating - Alluminum COAXIAL GEAR BOXES

▪ QUICK SELECTION / Selezione veloce

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** W 56C	Available **NEMA motor flanges** X 143/5 TC		Output Shaft ø	Ratios code
44.0	**39.79**	1.5	1999	1.6	**2.33**	**3202**	B		191316		-
37.1	**47.22**	1.5	2373	1.3	**1.86**	**3039**	B		191314		
32.0	**54.73**	1.5	2750	1.1	**1.61**	**3039**	B		171314		
26.4	**66.22**	1	2218	1.3	**1.22**	**2799**	B		171312		
22.8	**76.69**	1	2569	1.2	**1.15**	**3039**	B		131314		
20.9	**83.59**	1	2800	1.1	**1.05**	**3039**	B		190814		
18.9	**92.78**	0.75	2331	1.2	**0.87**	**2799**	B		131312		
16.7	**104.68**	0.75	2630	1.2	**0.84**	**3039**	B		101314		
14.9	**117.22**	0.75	2945	1.0	**0.69**	**2799**	B		170812		
13.8	**126.65**	0.5	2120	1.3	**0.64**	**2799**	B		101312	**standard ø1.250**	
12.8	**136.62**	0.5	2288	1.3	**0.64**	**3039**	B		91314		
10.6	**165.29**	0.5	2768	1.0	**0.49**	**2799**	B		91312		
9.7	**180.40**	0.5	3021	1.0	**0.49**	**3039**	B		71314		
8.0	**218.26**	0.33	2413	1.2	**0.37**	**2799**	B		71312		
7.2	**241.82**	0.33	2673	1.1	**0.36**	**3039**	B		90814		
6.0	**292.57**	0.25	2450	1.1	**0.28**	**2799**	B		90812		
5.5	**319.32**	0.25	2674	1.1	**0.28**	**3039**	B		70814		
4.5	**386.33**	0.25	3235	0.9	**0.21**	**2799**	B		70812		
3.6	**480.16**	0.25	4021	0.6	**0.13**	**2214**	B		70810		

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 **503A** is supplied with synthetic oil for lifetime lubrification, 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.
For complete documentation please visit our web site.

I Il riduttore **503A** 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.
Per la documentazione completa consulta il nostro sito.

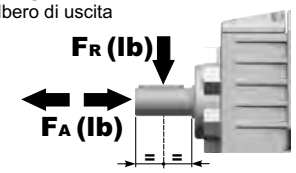
E El reductor tamaño **503A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.
Para documentación completa, consultar nuestra Web.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
26.46 oz	26.46 oz	37.04 oz	40.56 oz	42.33 oz	42.33 oz	42.33 oz
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

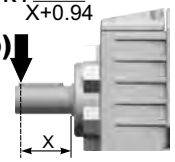
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

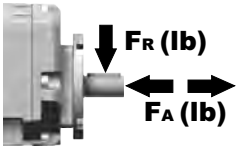


$Feq = FR \cdot \frac{2.13}{X+0.94}$



n_2	FA	FR
300	103.3	516.7
250	107.8	539.2
200	116.8	584.1
140	134.8	674.0
120	139.3	696.5
85	157.3	786.3
70	175.2	876.2
40	202.2	1011
15	224.7	1123.3

Input shaft
Albero in entrata



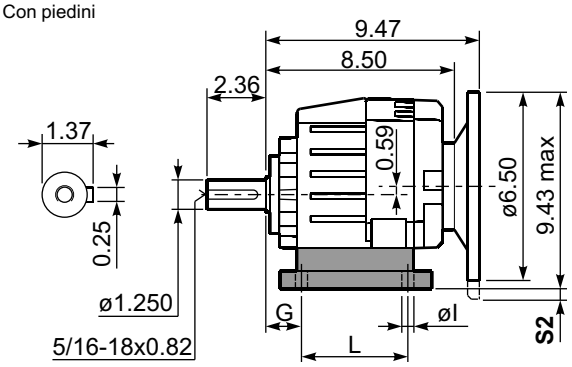
n_1	FA	FR
1750	89.9	449.3
1140	98.9	494.6

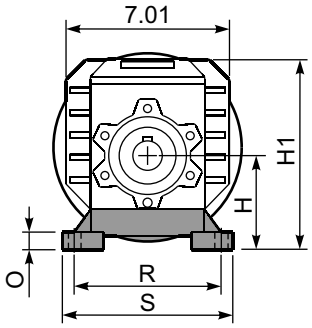
tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

P503A**B1**... With feet
Con piedini

Gearbox weight peso riduttore	With flange **27.53lb**
	With feet **27.09lb**





Feet / piedini

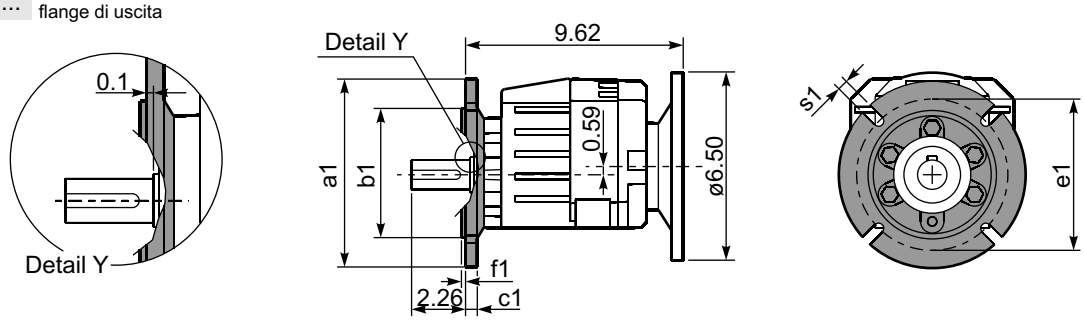
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange
B3	312/3	0.71	4.33	6.30	5.12	7.48	8.33	0.79	0.43	-
B4	30/35	0.79	5.12	7.09	5.89	8.50	9.11	0.71	0.55	-
S4	47-57	1.18	4.53	5.31	6.50	6.69	8.52	0.94	0.53	-
H3	023-233	1.18	5.12	5.31	5.12	7.28	9.11	0.98	0.55	-
M2	52/3	1.18	4.33	5.31÷5.91	3.94	7.48	8.33	0.71	0.43	-
L6	06	0.75	4.92	6.30	4.17	8.07	8.92	0.31	0.55	-
E2	2202/3	0.51	3.94	5.31	7.56	6.46	7.93	0.24	0.55	-
P4	142	1.38	5.59	5.12	5.71	6.30	9.59	0.31	0.55	-
J3	4100-05G	0.98	3.94	5.91	3.54	7.09	7.93	0.31	0.55	-

Other feet are available, see **www.hydromec.com**

Sono disponibili altri piedini in **www.hydromec.com**

Most popular types
Tipi più diffusi

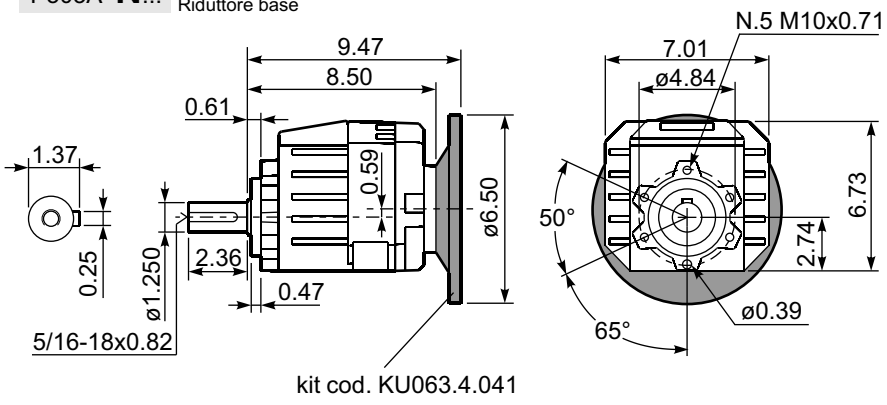
P503A-**F**... Output flanges
flange di uscita



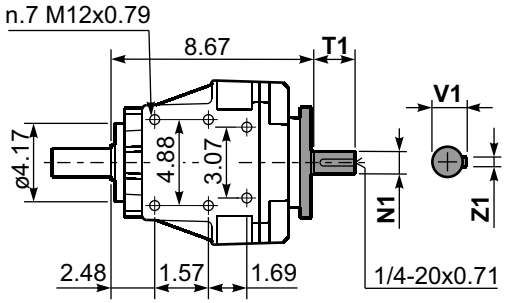
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code	Type	
7.87	5.12	0.43	6.50	0.18	0.43	KC50.9.012	Metric	With flange and feet only on request. Ask for compatibility
9.84	7.09	0.61	8.46	0.16	0.55	KC50.9.013		

P503A-**N**... Basic gearbox
Riduttore base



R503A-**N**... Input Shaft
Albero in entrata



Nema flange	N1	T1	V1	Z1	kit code
Standard	0.875	1.97	0.96	0.187	KC50.5.070U
On request	0.750	1.97	0.84	0.187	KC50.5.069U

602A Coaxial - Gear 4071lb in

Rating - Alluminum COAXIAL GEAR BOXES

▪ QUICK SELECTION / Selezione veloce

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 W 56C	X 143/5TC	Y 182/4TC		Output Shaft ø	Ratios code
484.6	**3.61**	5	624	2.3	11.35	1417	B	B		3018		-
414.2	**4.23**	5	730	2.4	11.75	1717	B	B		3016		
349.0	**5.01**	5	867	2.4	11.88	2060	B	B		3014		
288.5	**6.07**	5	1049	2.2	11.05	2318	B	B		3012		
257.1	**6.81**	5	1177	2.5	12.40	2919	B	B		2018		
219.8	**7.96**	5	1377	2.3	11.54	3177	B	B		2016		
185.2	**9.45**	5	1634	2.1	10.51	3434	B	B		2014		
153.1	**11.43**	5	1977	1.7	8.69	3434	B	B		2012	**standard ø1.375**	
123.2	**14.21**	5	2457	1.4	6.90	3388	B	B		2010		
105.3	**16.62**	5	2873	1.5	7.49	4305	B	B		1314		
87.1	**20.10**	5	3475	1.2	6.17	4287	B	B		1112	On request 1.250	
71.1	**24.61**	5	4254	1.0	4.97	4227	B	B		1312		
70.0	**24.98**	3	2592	1.3	3.92	3388	B	B		1310		
59.5	**29.41**	3	3051	1.2	3.71	3775	B	B		814		
49.2	**35.58**	3	3691	1.2	3.48	4287	B	B		812		
43.2	**40.50**	2	2801	1.0	1.90	2661	B	B		614		
39.6	**44.23**	1.5	2294	1.5	2.22	3388	B	B		810		
35.7	**49.00**	1.5	2541	1.2	1.86	3157	B	B		612		
28.7	**60.90**	1.5	3159	1.1	1.61	3388	B	B		610		

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

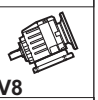
B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **602A** is supplied with synthetic oil for lifetime lubrification, 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.
For complete documentation please visit our web site.

I Il riduttore **602A** 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.
Per la documentazione completa consulta il nostro sito.

E El reductor tamaño **602A** se suministra, lubricado de por vida con aceite sintético y no requiren 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.
Para documentación completa, consultar nuestra Web.

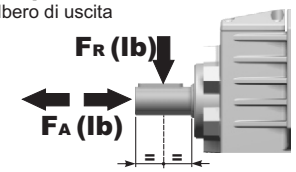
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
19.40 oz	29.88 oz	38.71 oz	42.33 oz	42.33 oz	44.09 oz	42.33 oz

AGIP Telium VSF 320 | **SHELL** Omala S4 WE 320

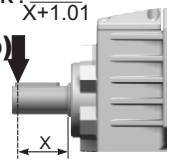
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$Feq = FR \cdot \frac{2.38}{X+1.01}$$

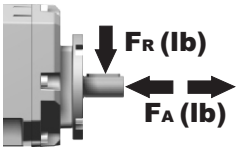


n_2	FA	FR
300	125.8	629.1
250	134.8	674.0
200	143.8	718.9

n_2	FA	FR
140	166.3	831.3
120	170.7	853.7
85	188.7	898.7

n_2	FA	FR
70	200.0	943.6
40	260.6	1303.1
15	292.1	1460.3

Input shaft
Albero in entrata



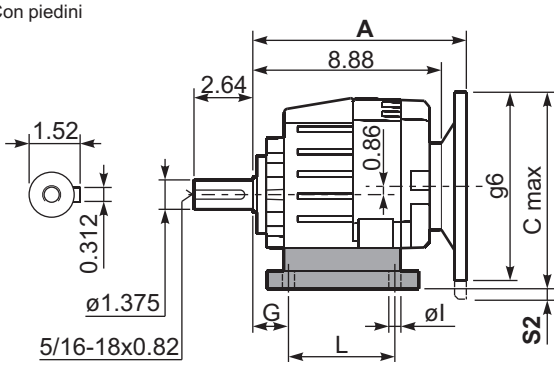
n_1	FA	FR
1750	53.9	269.8
1140	62.9	314.7

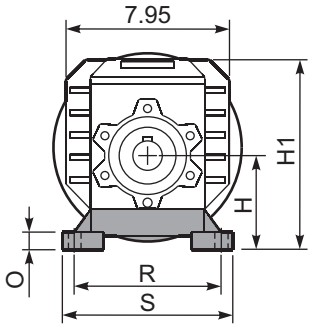
tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

P602A**B1**... With feet
Con piedini

Gearbox weight / peso riduttore: With flange **31.50lb** / With feet **32.60lb**





Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange
B4	412/3	0.79	5.12	7.09	5.89	8.50	9.17	0.71	0.55	-
S4	47-57	1.18	4.53	5.31	6.50	6.69	8.58	0.94	0.53	-
M3	62/3	1.38	4.72	6.69÷7.28	4.33	9.06	8.78	0.79	0.55	-
S7	77	1.38	5.51	6.69	8.07	8.03	9.57	0.31	0.55	-
H4	024-243	1.38	6.10	6.69	5.90	8.86	10.16	1.18	0.55	-
L6	06	0.75	4.92	6.30	4.17	8.07	8.98	0.31	0.55	-
E3	2302/3	0.77	4.92	6.69	9.45	8.07	8.98	0.31	0.55	-
P6	162	1.57	6.38	6.30	8.07	7.87	10.43	0.31	0.55	-
J4	4110G	1.06	4.72	7.48	4.53	8.86	8.78	0.31	0.55	-

Other feet are available, see **www.hydromec.com**

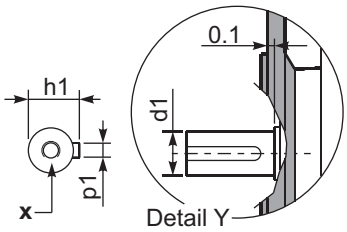
Sono disponibili altri piedini in **www.hydromec.com**

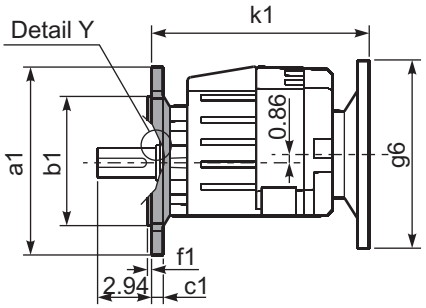
Dimension (A) see on page bottom

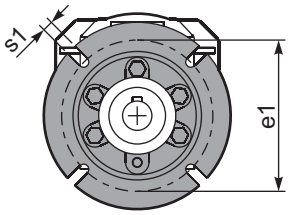
Most popular types
Tipi più diffusi

Nema flanges	C max	g6	kit code
56C-143/5TC	10.49	6.50	KU085.4.041
182/4TC	11.68	8.88	KU085.4.042

P602A-**F**... Output flanges
flange di uscita







***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø1.375x2.64	0.312	1.52	5/16-18x0.82
On request A richiesta	ø1.250x2.64	0.25	1.37	5/16-18x0.82

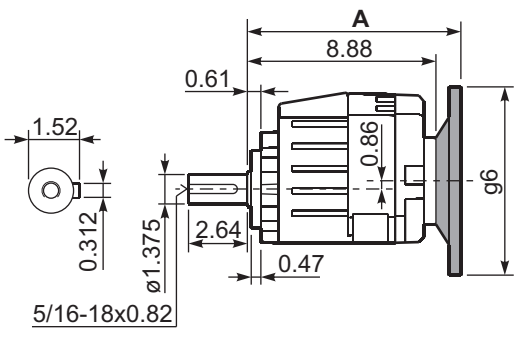
Available output flanges / flange di uscita

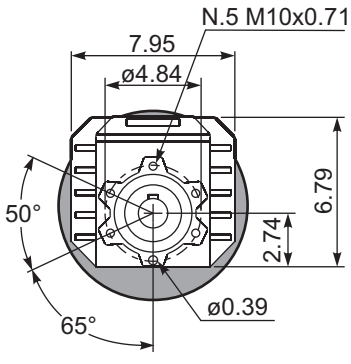
a1 ø	b1	c1	e1	f1	s1	kit code	Type
7.87	5.12	0.51	6.50	0.18	0.43	KC50.9.012	Metric
9.84	7.09	0.61	8.46	0.16	0.55	KC50.9.013	

With flange and feet only on request. Ask for compatibility

Nema flanges	k1	g6	kit code
56C-143/5TC	9.94	6.50	KU085.4.041
182/4TC	10.65	8.88	KU085.4.042

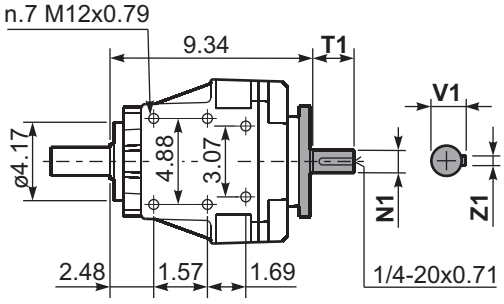
P602A-**N**... Basic gearbox
Riduttore base





Nema flanges	A	g6	kit code
56C-143/5TC	9.83	6.50	KU085.4.041
182/4TC	10.54	8.88	KU085.4.042

R602A-**N**... Input Shaft
Albero in entrata



Nema flanges	N1	T1	V1	Z1	kit code
Standard	0.875	1.97	0.96	0.187	KC50.5.070U
On request	0.750	1.97	0.84	0.187	KC50.5.069U

▪ QUICK SELECTION / Selezione veloce

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 W 56C	Available NEMA motor flanges X 143/5 TC		Output Shaft ø	Ratios code
44.0	**39.79**	2	2666	1.4	**2.71**	**3726**	B		191316		-
37.1	**47.22**	2	3164	1.4	**2.63**	**4301**	B		191314		
32.0	**54.73**	2	3667	1.2	**2.27**	**4301**	B		171314		
30.6	**57.13**	2	3828	1.1	**2.17**	**4293**	B		191312		
26.4	**66.22**	1.5	3327	1.3	**1.87**	**4293**	B		171312		
24.6	**71.01**	1.5	3568	0.9	**1.38**	**3388**	B		191310		
22.8	**76.69**	1.5	3853	1.1	**1.62**	**4301**	B		131314		
21.3	**82.30**	1	2757	1.2	**1.19**	**3388**	B		171310		
20.9	**83.59**	1	2800	1.4	**1.31**	**3786**	B		190814		
18.9	**92.78**	1	3108	1.4	**1.34**	**4293**	B		131312		
16.7	**104.68**	1	3506	1.2	**1.19**	**4301**	B		101314	**standard ø1.375**	
14.9	**117.22**	1	3926	1.1	**1.06**	**4293**	B		170812		
13.8	**126.65**	0.75	3182	1.3	**0.98**	**4293**	B		101312		
12.9	**135.74**	0.75	3410	1.1	**0.81**	**3786**	B		130814	On request 1.250	
12.0	**145.68**	0.5	2440	1.4	**0.67**	**3388**	B		170810		
11.1	**157.40**	0.5	2636	1.3	**0.62**	**3388**	B		101310		
10.6	**165.29**	0.5	2768	1.6	**0.75**	**4293**	B		91312		
9.4	**185.29**	0.5	3103	1.2	**0.59**	**3786**	B		100814		
8.5	**205.43**	0.5	3441	1.0	**0.48**	**3388**	B		91310		
7.8	**224.18**	0.5	3755	1.1	**0.55**	**4293**	B		100812		
7.2	**241.82**	0.33	2673	1.4	**0.45**	**3786**	B		90814		
6.3	**278.62**	0.33	3080	1.1	**0.35**	**3388**	B		100810		
6.0	**292.57**	0.33	3234	1.3	**0.42**	**4293**	B		90812		
4.8	**363.63**	0.25	3045	1.1	**0.27**	**3388**	B		90810		

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

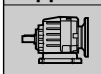
B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **603A** is supplied with synthetic oil for lifetime lubrification, 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.
For complete documentation please visit our web site.

I Il riduttore **603A** 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.
Per la documentazione completa consulta il nostro sito.

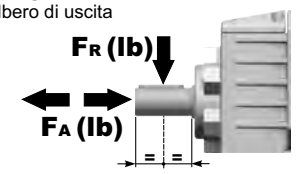
E El reductor tamaño **603A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.
Para documentación completa, consultar nuestra Web.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
26.79 oz	31.75 oz	40.56 oz	44.09 oz	45.86 oz	47.62 oz	45.86 oz
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320			

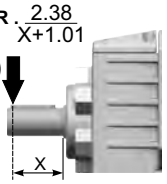
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

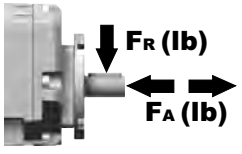


$F_{eq} = F_R \cdot \frac{2.38}{X+1.01}$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	125.8	629.1	**140**	166.3	831.3	**70**	200.0	943.6
250	134.8	674.0	**120**	170.7	853.7	**40**	260.6	1303.1
200	143.8	718.9	**85**	188.7	898.7	**15**	292.1	1460.3

Input shaft
Albero in entrata



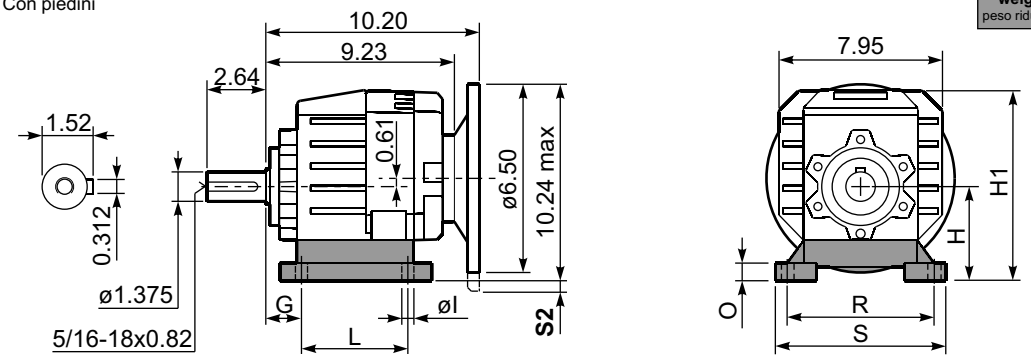
n_1	FA	FR
1750	53.9	269.8
1140	62.9	314.7

tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

P603A**B1**... With feet
Con piedini

Gearbox weight peso riduttore	With flange **31.94lb**
	With feet **34.80lb**



Feet / piedini

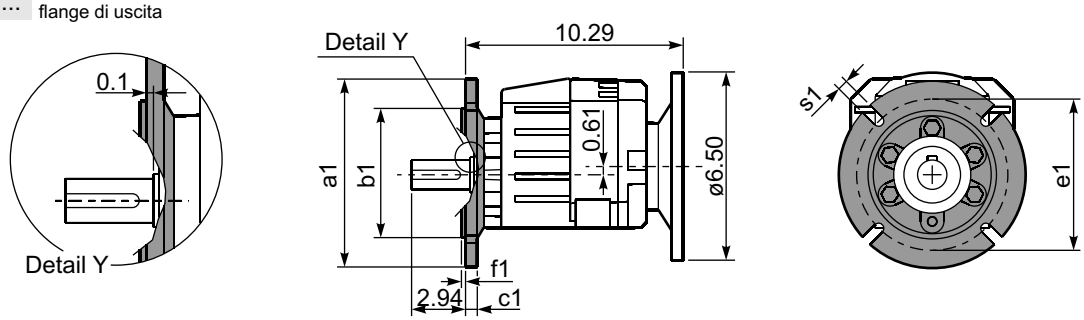
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange
B4	412/3	0.79	5.12	7.09	5.89	8.50	9.17	0.71	0.55	-
S4	47-57	1.18	4.53	5.31	6.50	6.69	8.58	0.94	0.53	-
M3	62/3	1.38	4.72	6.69÷7.28	4.33	9.06	8.78	0.79	0.55	-
S7	77	1.38	5.51	6.69	8.07	8.03	9.57	0.31	0.55	-
H4	024-243	1.38	6.10	6.69	5.90	8.86	10.16	1.18	0.55	-
L6	06	0.75	4.92	6.30	4.17	8.07	8.98	0.31	0.55	-
E3	2302/3	0.77	4.92	6.69	9.45	8.07	8.98	0.31	0.55	-
P6	162	1.57	6.38	6.30	8.07	7.87	10.43	0.31	0.55	-
J4	4110G	1.06	4.72	7.48	4.53	8.86	8.78	0.31	0.55	-

Other feet are available, see **www.hydromec.com**

Sono disponibili altri piedini in **www.hydromec.com**

Most popular types
Tipi più diffusi

P603A-**F**... Output flanges
flange di uscita



***Available output shaft** / Albero di uscita

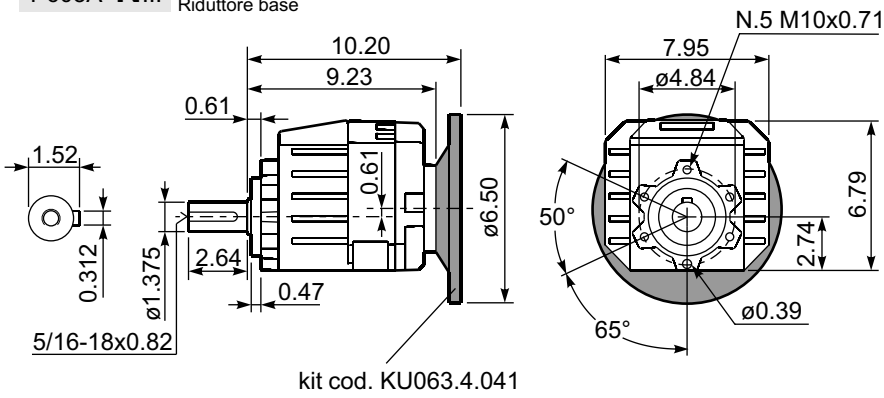
	Shaft - d1	p1	h1	x
Standard	ø1.375x2.64	0.312	1.52	5/16-18x0.82
On request A richiesta	ø1.250x2.64	0.25	1.37	5/16-18x0.82

Available output flanges / flange di uscita

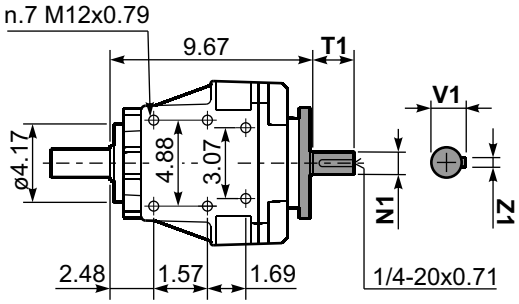
a1 ø	b1	c1	e1	f1	s1	kit code	Type
7.87	5.12	0.51	6.50	0.18	0.43	KC50.9.012	Metric
9.84	7.09	0.61	8.46	0.16	0.55	KC50.9.013	

With flange and feet only on request. Ask for compatibility

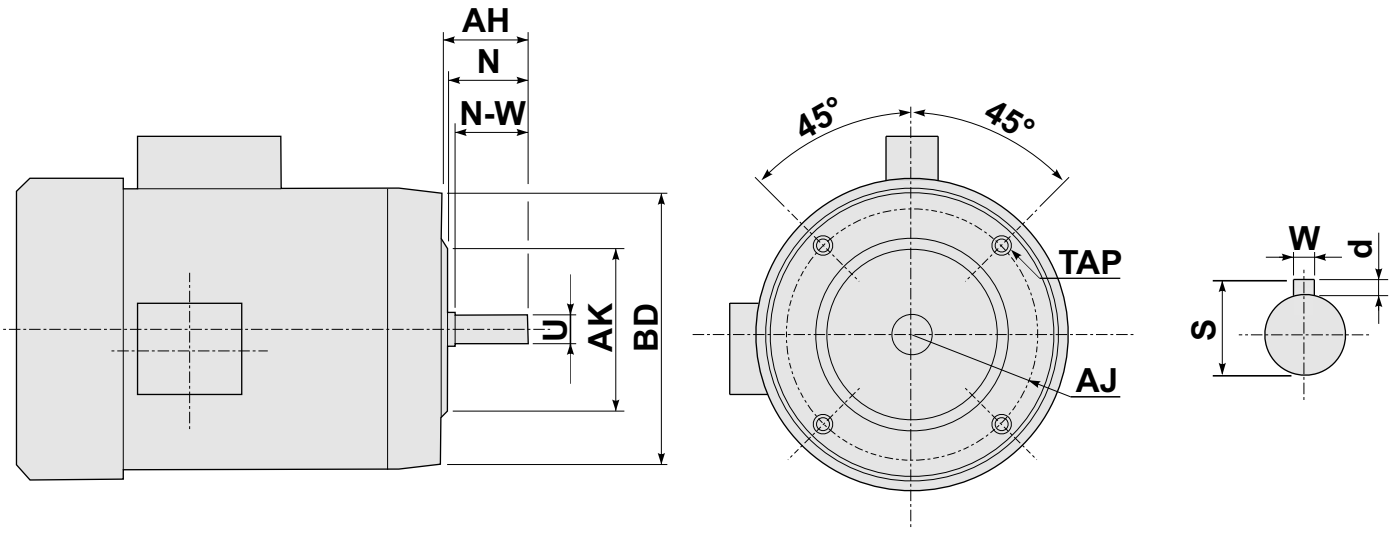
P603A-**N**... Basic gearbox
Riduttore base



R603A-**N**... Input Shaft
Albero in entrata



Nema flanges	N1	T1	V1	Z1	kit code
Standard	0.875	1.97	0.96	0.187	KC50.5.070U
On request	0.750	1.97	0.84	0.187	KC50.5.069U



NEMA SHAFT AND
KEYWAY DIMENSIONS

NEMA SHAFT (U)	KEYWAY DIMENSIONS (W x d)	(S)
5/8	3/16 x 3/32	0.709
7/8	3/16 x 3/32	0.964
1 1/8	1/4 x 1/8	1.241
1 3/8	5/16 x 5/32	1.518
1 5/8	3/8 x 3/16	1.796

The condensed dimensions shown on these pages are for general reference only and are not for construction.
Certified drawings of all rating are available for construction purposes.

NEMA DIMENSIONS

Nema Frame	N	U	N-W	AH	AJ	AK	BD	TAP	KEY
S56 56	1 15/16	5/8	1 7/8	2 1/16	5 7/8	4 1/2	6 1/2	3/8-16	3/16
143T 145T	2 3/8	7/8	2 1/4	2 1/8	5 7/8	4 1/2	6 1/2	3/8-16	3/16
182T 184T	2 7/8	1 1/8	2 3/4	2 5/8	7 1/4	8 1/2	8 7/8	1/2-13	1/4

IMPORTANT INFORMATION / INFORMAZIONI IMPORTANTI

Please Read Carefully
The following WARNING and CAUTION information is supplied to you for your protection and to provide you with many years of trouble free and safe operation of your product.
Read ALL instructions prior to operating reducer. Injury to personnel or reducer failure may be caused by improper installation, maintenance or operation.

WARNING:

• Written authorization is required to operate or use reducers in man lift or people moving devices.
• Check to make sure that certain applications do not exceed the allowable load capacities published in the current catalog.
• Buyer shall be solely responsible for determining the adequacy of the product for any and all uses to which Buyer shall apply the product. The application by Buyer shall not be subject to any implied warranty of fitness for a particular purpose.
• For safety, Buyer or User should provide protective guards over all shaft extensions and any moving apparatus mounted thereon. The User is responsible for checking all applicable safety codes in his area and providing suitable guards. Failure to do so may result in bodily injury and/or damage to equipment.
• Hot oil and reducers can cause severe burns. Use extreme care when removing lubrication plugs and vents.
• Make certain that the power supply is disconnected before attempting to service or remove any components. Lock out the power supply and tag it to prevent unexpected application power.
• Reducers are not to be considered fail safe or self-locking devices. If these features are required, a properly sized, independent holding device should be utilized. Reducers should not be used as a brake.
• Any brakes that are used in conjunction with a reducer must be sized or positioned in such a way so as to not subject the reducer to loads beyond the catalog rating.
• Lifting supports including eyebolts are to be used for vertically lifting the gearbox only and not other associated attachments or motors.
• Use of an oil with an EP additive on units with backstops may prevent proper operation of the backstop. Injury to personnel, damage to the reducer or other equipment may result.
• Overhung loads subject shaft bearings and shafts to stress which may cause premature bearing failure and or shaft breakage from bending fatigue, it not sized properly.

SELLING CONDITIONS
Warranty for manufacturing defects will expire one-year the invoicing date. Hydro-Mec will replace or repair defective parts but will not accept any further changes for direct or indirect damages of any kind. The warraty will become null and void if repairs or changes are carried out without our prior written authorization.

Our company will not be responsible for any direct or indirect damages, caused by a wrong use of the products or for not observing the catalogue/web indication

Leggere attentamente
Le seguenti raccomandazioni sono fondamentali per la vostra protezione e per garantirvi molti anni di sicuro funzionamento del vostro prodotto senza alcun problema.
Leggere attentamente tutte le istruzioni prima di azionare il riduttore. L'inappropriata installazione, manutenzione o funzionamento del riduttore può causare incidenti al personale addetto e danni al riduttore stesso.

ATTENZIONE!

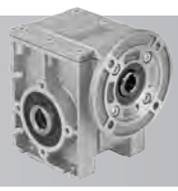
• E' richiesta autorizzazione scritta per azionare riduttori in ascensori o dispositivi per il movimento delle persone.
• Controllare che alcune applicazioni non eccedano la massima capacità di carico ammessa pubblicata in questo catalogo.
• L'acquirente è l'unico responsabile per la determinazione dell'adeguatezza del prodotto per qualcuna o tutte le utilizzazioni che l'acquirente stesso farà del riduttore. L'applicazione dell'acquirente non potrà essere soggetta ad alcuna implicita garanzia di montaggio per uno scopo particolare.
• Per ragioni di sicurezza l'acquirente dovrà provvedere a porre protezioni adeguate su tutta la lunghezza dell'albero a tutti gli organi in movimento. L'utilizzatore è responsabile del controllo di tutti i codici di sicurezza e la predisposizione di protezioni adeguate. In assenza di tali precauzioni si possono verificare incidenti alle persone e danni agli apparati.
• Olio e riduttori bollenti possono causare gravi ustioni. Usare estrema cautela nella rimozione dei tappi e delle ventole.
• Assicurarsi che la corrente di alimentazione sia scollegata prima di riparare o rimuovere alcun componente. Chiudere l'alimentazione e contrassegnare tale operazione per evitare accensioni accidentali.
• I riduttori non devono essere considerati esenti da guasti o a bloccaggio automatico. Se sono indispensabili queste caratteristiche, deve essere utilizzato un dispositivo indipendente della dimensione adatta. I riduttori non devono essere utilizzati come freni.
• Qualsiasi freno sia utilizzato insieme al riduttore deve essere della giusta grandezza e posizionato in modo da non causare carichi eccessivi non previsti dai dati forniti nel catalogo.
• I dispositivi di sollevamento come le golfare devono essere usati solo per sollevare verticalmente il riduttore e non altri dispositivi associati o motori.
• L'utilizzo di un olio con un additivo EP su gruppi provvisti di dispositivo di arresto possono inficiare l'uso corretto del freno e provocare danni alle persone, alle cose ed al riduttore stesso nonché ad altri apparecchi.
• I Carichi sospesi assoggettano i cuscinetti della vite e la vite stessa a sollecitazioni che possono causare, se non adeguatamente dimensionati, l'usura prematura dei cuscinetti e/o la rottura della vite a causa della resistenza alla flessione.

CONDIZIONI DI VENDITA
La garanzia relativa a difetti di costruzione ha la durata di un anno dalla data di fatturazione della merce. Tale garanzia comporta per Hydro-mec l'onere della sostituzione o riparazione delle parti difettose ma non ammette ulteriori addebiti per eventuali danni diretti o indiretti di qualsiasi natura.
La garanzia decade nel caso in cui siano state eseguite riparazioni o apportate modifiche senza nostro consenso scritto.

La nostra ditta non si ritiene responsabile per eventuali danni diretti o indiretti derivanti da un uso improprio dei prodotti e dalla mancata osservanza delle indicazioni riportate a catalogo o web..

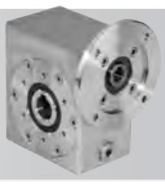
HYDRO-MEC A modern production of Modular products

Worm gearboxes
Rid. a vite senza fine



S series square worm gearboxes
Rid. a vite senza fine quadro serie S

Square worm gearboxes
Rid. a vite senza fine quadro

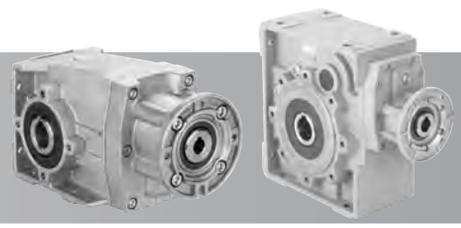


Stainlessteel worm gearboxes
Rid. a vite senza fine Inox

Stainlessteel coaxial gearboxes
Riduttori coassiali Inox

Shaft mounted gearboxes
Riduttori pendolari

Shaft mounted gearboxes
Riduttori pendolari



Helical bevel gearboxes
Rid. a coppia conica

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