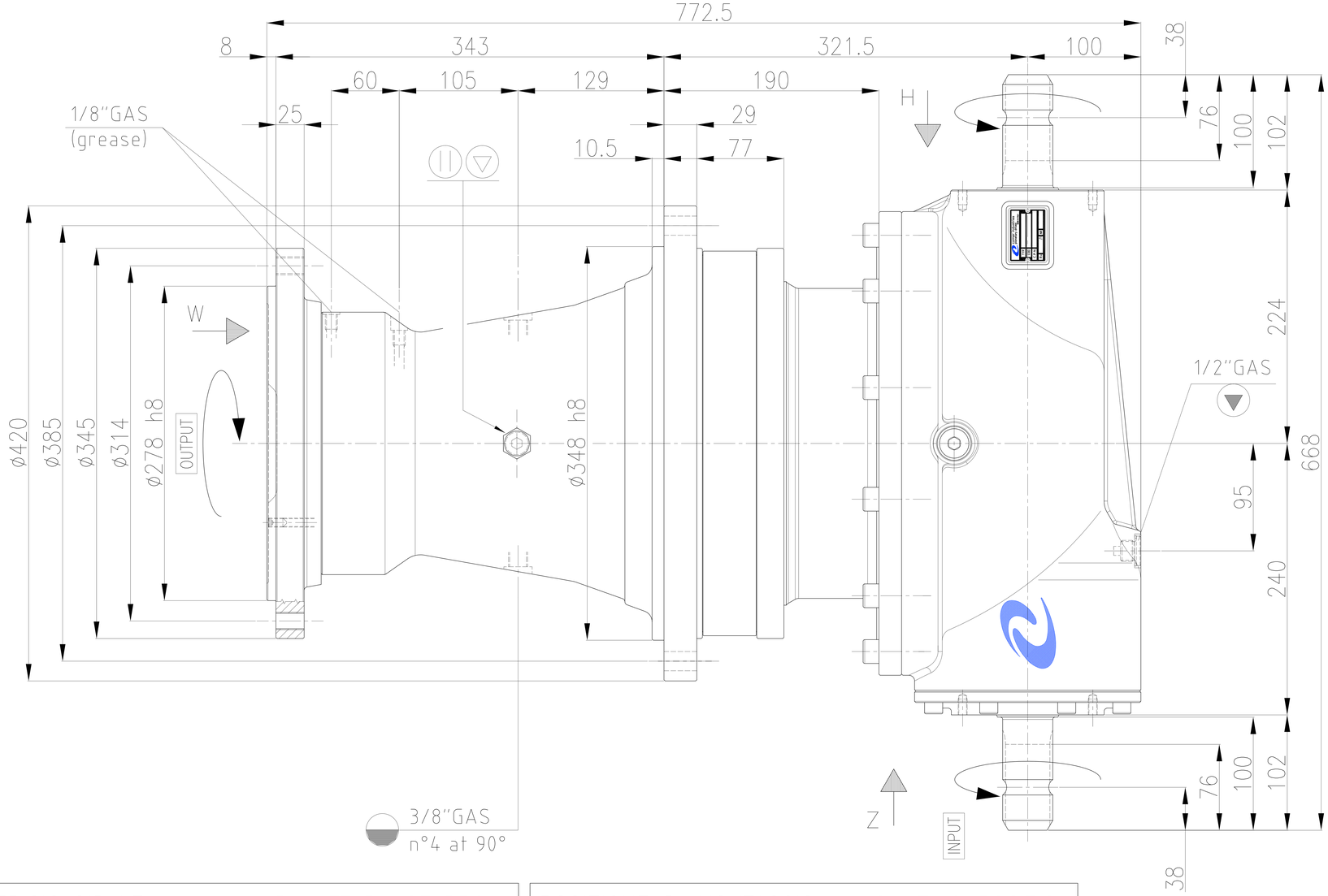
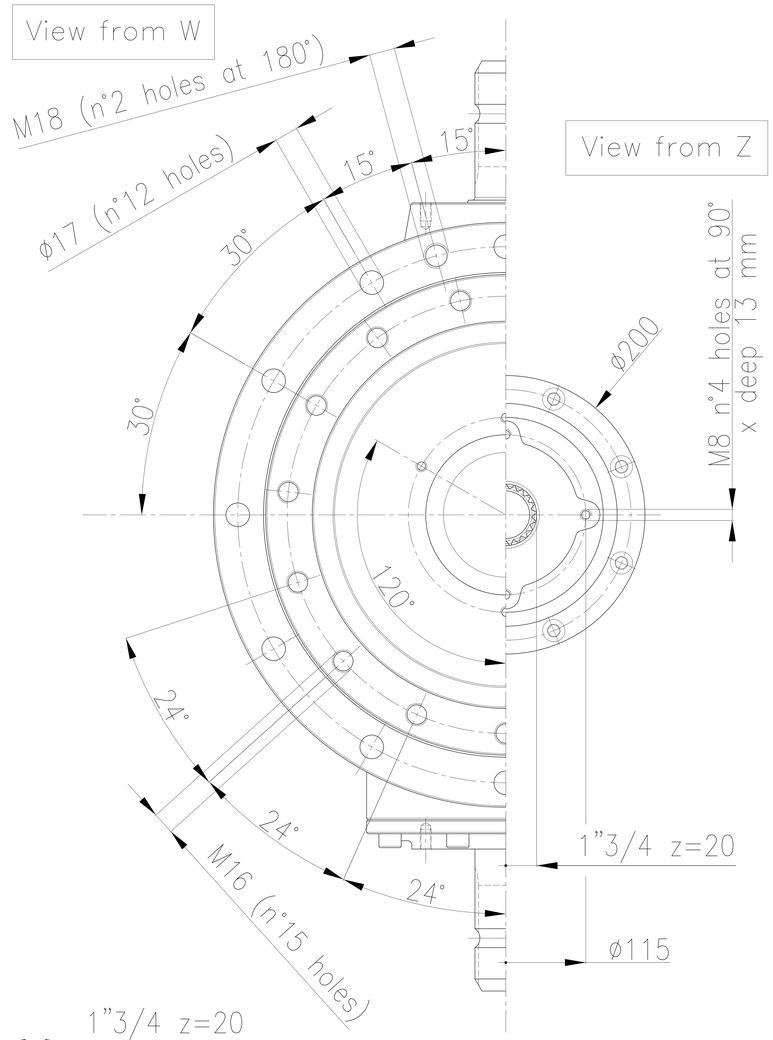
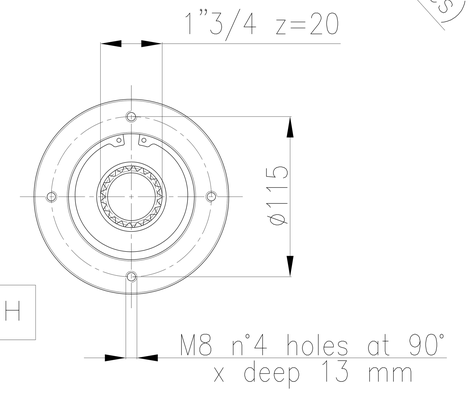


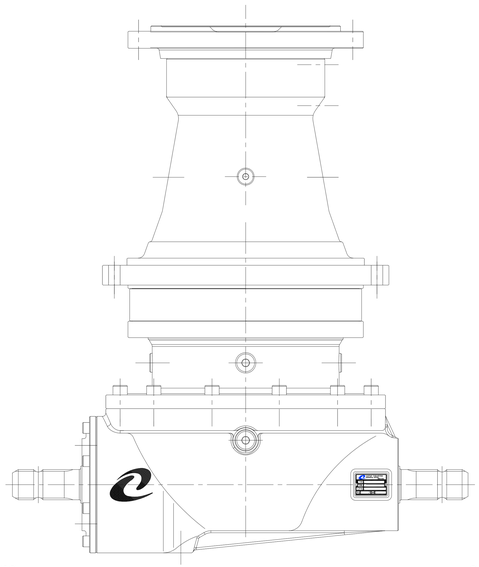




EPICICLOIDALE	*PLANETARY GEARBOX*	
DATI TECNICI	*TECNICHAL DATA*	
RAPPORTO	*RATIO*	*R = 16.13 : 1*
COPPIA CONT.	*CONT. TORQUE*	*1570 daNm*
COPPIA MAX.	*MAX. TORQUE*	
GIRI ENTRATA	*INPUT SPEED*	*540 r.p.m.*
GIRI USCITA	*OUTPUT SPEED*	*29 r.p.m.*
GIRI ENTRATA MAX.	*MAX. INPUT SPEED*	
POTENZA MAX	*MAX POWER*	
PESO	*WEIGHT*	
LUBRIFICANTE	*LUBRICANT*	
QUANTITA OLIO	*OIL QUANTITY*	
TEMP. OLIO	*OIL TEMP.*	
VISCOSITA OLIO	*OIL VISCOSITY*	
FILTRAGGIO	*FILTERING*	

POSIZIONE DI MONTAGGIO *MOUNTING POSITION*

V37



piano terra *ground*

	TAPPO SFIATO BREATHER PLUG
	TAPPO CARICO FILLING PLUG
	TAPPO LIVELLO LEVEL PLUG
	TAPPO SCARICO DRAIN PLUG
G	*GOMITO ELBOW*
P	*PROLUNGA EXTENSION*

CLIENTE *CUSTOMER*

ITALIA
COMER UK

PART. N°

DESCRIZIONE *DESCRIPTION*

PGA 1602 VM R=16,13 1"3/4 Z20

comer industries
planetary drives

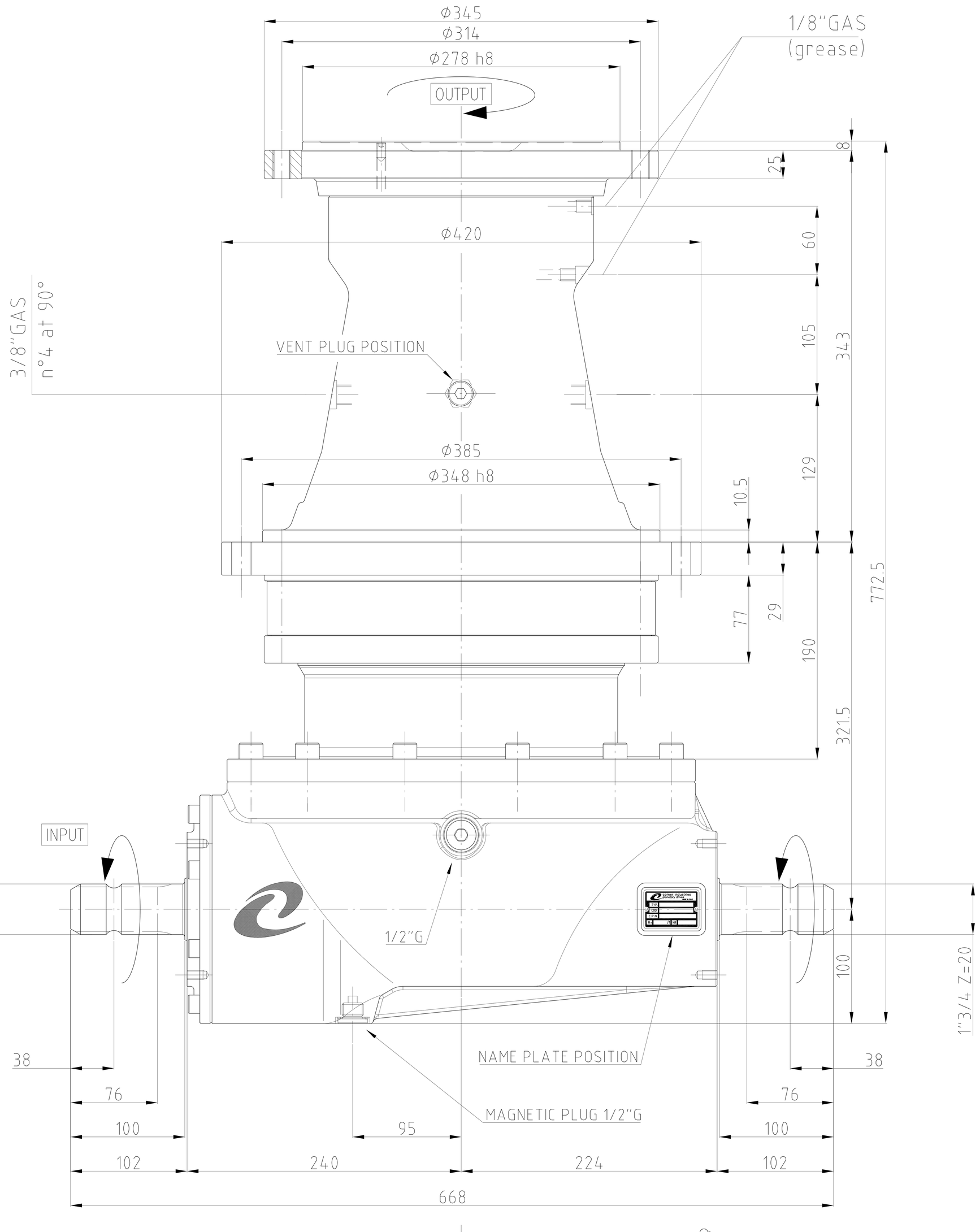
CODICE *CODE*	N° DIS *N° DWG*
5717.000.8541	NO3441_3
SCALA *SCALE*	DATA *DATE* 06/09/05
FIRMA *SIG* Loyero Fabrizio	

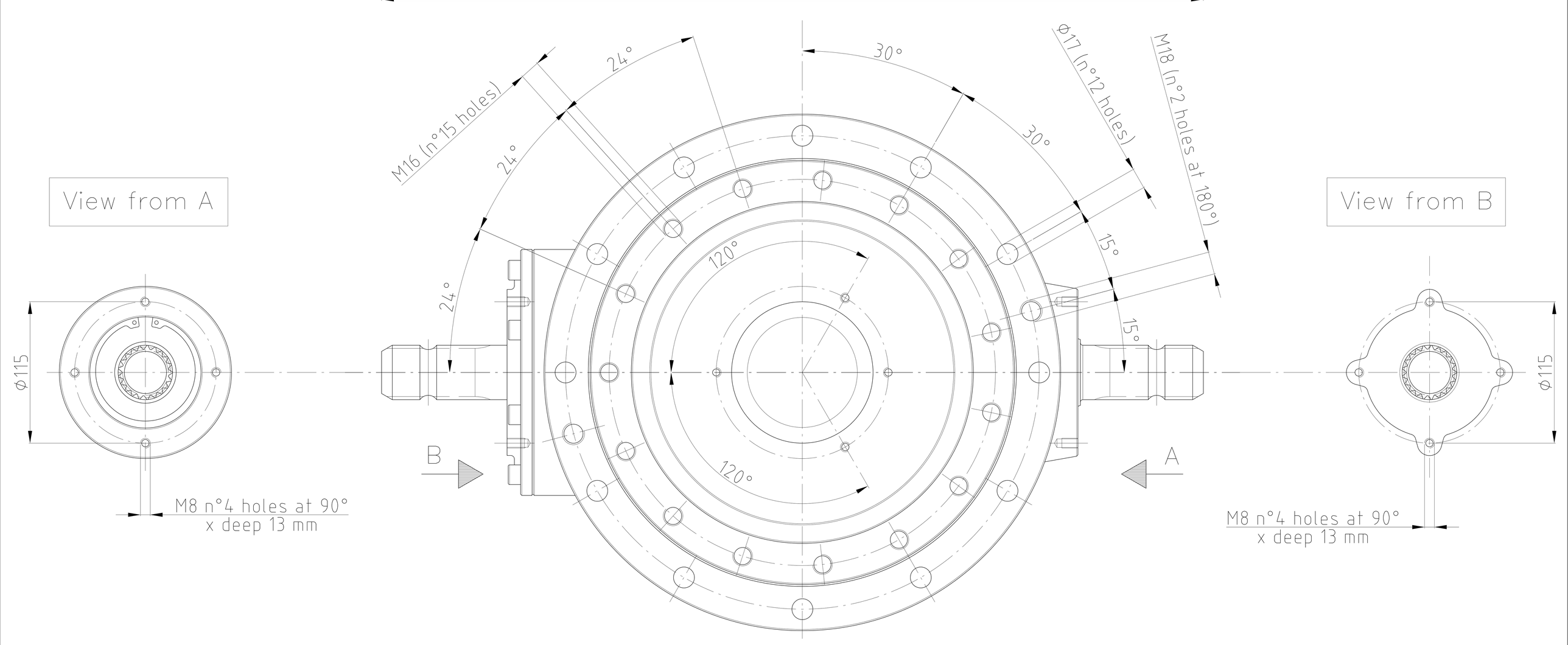
Planetary drives 42025 CAVRIAGO (RE) – VIA PRATI VECCHI 37 – tel.0522/942794 – fax.0522/942686

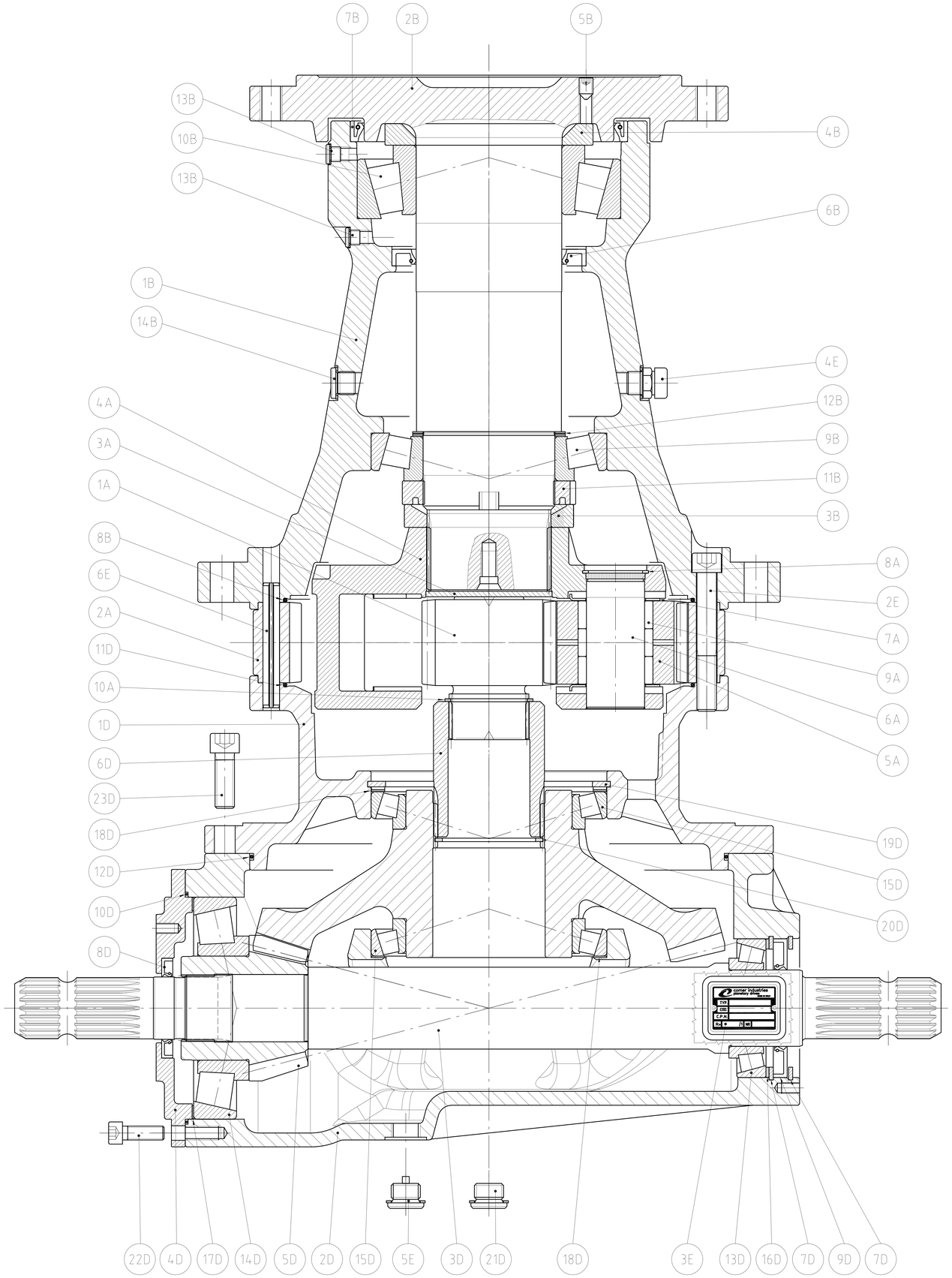
comer industries
Planetary Drives

RIF.	COMPANY:	INDEX	COM. N°	date	Author	page N°
				06/09/05	F.L.	1 / 3

RATIO	FIG. MONT.	COD.LETT. PGA1602 VM	CODE
16,13/1	V37	COD.NUM. 1600	5717.000.8541







corner industries
Planetary Drives

RIF.	COMPANY:	INDEX	COM. N°	date	Author	page N°
				06/09/05	F.L.	2 / 3

RATIO	FIG. MONT.	COD.LETT.	CODE
16,13/1	V37	PGA1602 VM	5717.000.8541
		COD.NUM. 1600	

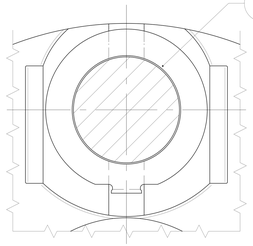
SUBASSEMBLY CODE	POS.	DRG. Nr.	PCS.	DESCRIPTION
4717.526.108	1A	1717.562.042.i1	1	SUN GEAR R=4,28/1
	2A	1717.713.026.i1	1	CROWN
	3A	1717.125.061.i1	1	BOTTOM
	4A	1717.453.002.i1	1	CARRIER
	5A	1717.526.042.i1	3	PLANETARY GEAR R=4,28/1
	6A	1717.820.042.i1	3	PIN
	7A	1717.871.061.i1	6	WASHER
	8A	9010.305.000	3	INTERNAL CIRCLIP A45 – DIN 472
	9A	9450.177.100	225	NEEDLES DIN5402 – B 6x20 G2
	10A	9010.385.000	1	EXTERNAL CIRCLIP A58 – DIN 471
4717.573.008	1B	1717.088.002.i1	1	OUTPUT CASING
	2B	1717.213.026.i1	1	OUTPUT SHAFT
	3B	1717.824.076.i1	1	SPACER
	4B	1717.825.076.i1	1	SPACER
	5B	9540.302.030	3	BOLT M10x16 DIN 913
	6B	9020.677.001	1	OIL SEAL A 105x140x12 DIN 3760 – NB – (CORCOS)
	7B	9020.724.505	1	OIL SEAL A 180x200x15 DIN 3760 – NB – (CORCOS)
	8B	9030.377.501	1	O–RING 3,53x291,69
	9B	9110.622.001	1	TAPPERED ROLLER BEARING 30219 – (LYC)
	10B	9110.628.001	1	TAPPERED ROLLER BEARING 32221 – (LYC)
	11B	9180.444.051.I1	1	RING NUT
	12B	9479.095.109	1	SHIM KIT 95x109
	13B	9510.018.061	2	PLUG 1/8" GAS DIN 908 WITH CUPPER WASHER
	14B	9510.107.000	3	PLUG 3/8" GAS DIN 908 WITH CUPPER WASHER
4754.002.008	1D	1754.002.002.i1	1	CONNECTION FLANGE
	2D	1754.003.002.i1	1	HOUSING
	3D	1754.200.042.i1	1	SHAFT
	4D	1754.101.001.i1	1	INPUT FLANGE
	5D	1754.506.098.i1	1	RUNNING IN BEVEL GEAR SET R=3,77/1
	6D	1740.203.042.i1	1	SHAFT
	7D	9010.610.000	2	INTERNAL TOOTH WASHER D.100 DIN 472
	8D	9020.339.500	1	OIL SEAL BASL 45x72x8 DIN 3760 – NB – (CORCOS)
	9D	9020.418.000	1	OIL SEAL BASL 55x100x10 DIN 3760 – NB – (CORCOS)
	10D	9030.235.501	1	O–RING 2,62x158,42
	11D	9030.377.501	1	O–RING 3.53x291.69
	12D	9030.377.600	1	O–RING 3.53x329.79
	13D	9110.448.001	1	TAPPERED ROLLER BEARING 32211 – (LYC)
	14D	9110.571.001	1	TAPPERED ROLLER BEARING 30315 – (LYC)
	15D	9110.650.001	2	TAPPERED ROLLER BEARING T4CB120 – (LYC)
	16D	9479.085.100	1	SHIM KIT 85.3x99.7
	17D	9479.140.160	1	SHIM KIT 140.3x159.6
	18D	9479.150.169	2	SHIM KIT 150.3x169.5
	19D	9010.680.000	1	INTERNAL TOOTH WASHER D.170 DIN 472
	20D	9010.525.000	1	INTERNAL TOOTH WASHER D.75 DIN 472
	21D	9510.204.100	3	PLUG 1/2" GAS DIN 908 WITH CUPPER WASHER
	22D	9540.312.090	8	BOLT M10x30 DIN 912
	23D	9540.430.090	12	BOLT M14x40 DIN 912
	1E			
	2E	9540.450.080	21	BOLT M14x100 DIN 912
	3E	9530.115.015	1	NAME PLATE
	4E	9510.090.000	1	VENT PLUG 3/8"GAS WITH CUPPER WASHER
	5E	9510.204.050	1	MAGNETIC PLUG 1/2" GAS DIN 908 WITH CUPPER WASHER
	6E	9490.430.350	3	PIN D.12X90 DIN 1481

comer industries
Planetary Drives

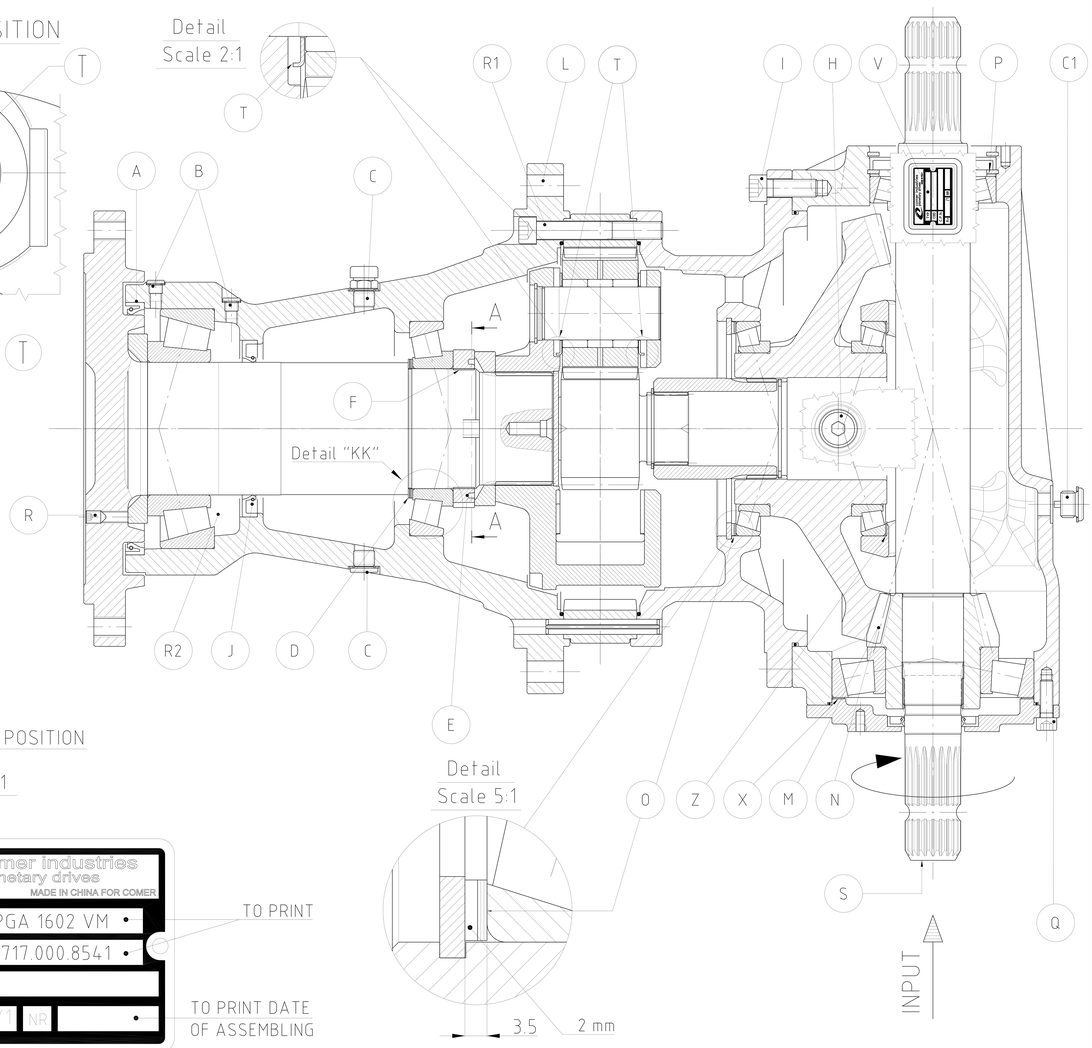
RIF.	COMPANY:	INDEX	COM. N°	date	Author	page N°
				06/09/05	F.L.	3 / 3

RATIO	FIG. MONT.	COD.LETT.	PGA1602 VM	CODE
16,13/1	V37	COD.NUM.	1600	5717.000.8541

ASSEMBLY POSITION

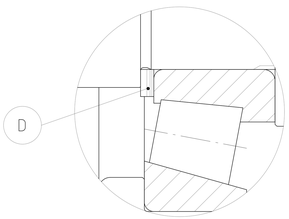


Ralla antirotazione
Antirotation disk (T)



V NAME PLATE POSITION

Scale 5:1

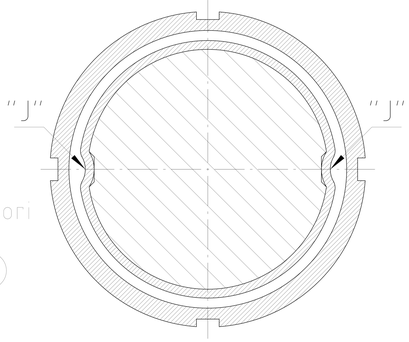


DETAIL "KK" - Scale 3:1

Aggiungere o togliere spessori fino al raggiungimento della registrazione cuscinetti (D) (particolare "KK")

Add or take off shims until the bearings pre-load is within the range (D) (detail "KK")

SECTION A-A
scale 2:1



Eseguire la registrazione dei cuscinetti con la ghiera. Eseguire la punzonatura sulla ghiera in corrispondenza delle cave per linguetta "J" deformando il materiale. (sezione "A-A").

Execute the bearings registration with the nut. Execute a punch on nut in corrispondence of the hollow "J", deforming the material. (section "A-A").

	NOTE DI MONTAGGIO	ASSEMBLY NOTES	
A	Anello di tenuta con labbro rivolto dalla parte opposta al cuscinetto. Deve impedire l' ingresso di eventuali impurita' e sfiatare la sovrapressione nella camera lubrificata.	Oil seal with lip oriented opposite to bearing. Oil seal has the function to avoid that dust and impurity enter into the gearbox	
B	Carico / scarico grasso Coppia di serraggio :	Fill / drain grease oil Plug thightening torque:	13 - 16 Nm
C	Carico / livello / sfiato olio Coppia di serraggio :	Fill / level / vent plug oil Plug thightening torque:	50 ÷ 63 Nm
C1	Tappo magnetico scarico olio Coppia di serraggio :	Magnetic drain plug oil Plug thightening torque:	50 ÷ 63 Nm
D	Precarico cuscinetti senza anelli di tenuta:	Bearings Preloading without oil sealings:	90 ÷ 110 daNcm
E	Coppia di serraggio ghiera:	Ring Nut thightening torque:	225 ÷ 275 daNm
F	Sgrassare la filettatura dell'albero e della ghiera con SOLACLEAN 67, quindi applicare LOCTITE 270	Degrase the shaft thread and ring nut thread with SOLACLEAN 67 solvent and apply LOCTITE 270	
G			
H	Coppia di serraggio :	Plug thightening torque:	50 ÷ 63 Nm
I	Coppia di serraggio :	Thightening torque:	135 ÷ 164 Nm
L	Controllare orientamento fori scatola uscita con asse entrata	Check relative position between output housing holes and input shaft	
M	Gioco di ingranamento misurato a r=45.175 sul PIGNONE	Gear backlash measured at radius=45.175 on PINION	0.21 ÷ 0.55 mm
N	Gioco di ingranamento misurato a r=170.275 sulla CORONA	Gear backlash measured at radius=170.275 on CROWN	
O	Registrazione cuscinetti sulla coppia conica Fase 1: Precarico misurato sulla corona con pignone smontato	Bevel gearbox bearings registration Phase 1: Preloading measured on crown without pinion installed	0 ÷ 3 daNcm
P	Fase 2: Precarico misurato sul pignone con corona smontata e senza anelli tenuta	Phase 2: Preloading measured on pinion without crown and oil sealing installed	0 ÷ 3 daNcm
Q	Coppia di serraggio :	Thightening torque:	50 - 60 Nm
R	Sgrassare le filettature dell'albero e dei grani con SOLACLEAN 67 quindi applicare SILICONE sigillante	Degrase the output shaft and bolt threads with SOLACLEAN 67 solvent and apply SILICONE	
R1	Coppia di serraggio	Thightening torque:	135 ÷ 164 Nm
R2	Riempire di grasso tipo EP2 la camera creata da paraolio/cuscinetto/paraoli	Fill with grease type EP2 the volume between oil seal/breaking/oil seals	
S	Prova di rotazione da effettuare su asse pignone (entrata) a . .	Runningtest to be carried out at input pinion at . .	540 r.p.m. counterclockwise
T	Montare la ralla antirotazione con gradino di fermo dentro alla scanalatura radiale, orientato verso l'esterno	Assembly antirotation disk with lock step on the radial groove turned towards outside	
V	Montare la targhetta sulla scatola della coppia conica, con SILICONE	Assembly the NAME PLATE on bevel gearbox with SILICONE	
J	paraolio con tenuta lato riduttore	Oil seal must be installed with lip towards to gearbox	

SPESS. TEORICA IN:	THEORETICAL SHIMS:								
	D	3,5 mm	O	3,5 mm	Z	1,00 mm.	P	2,25 mm.	X	1 mm.