

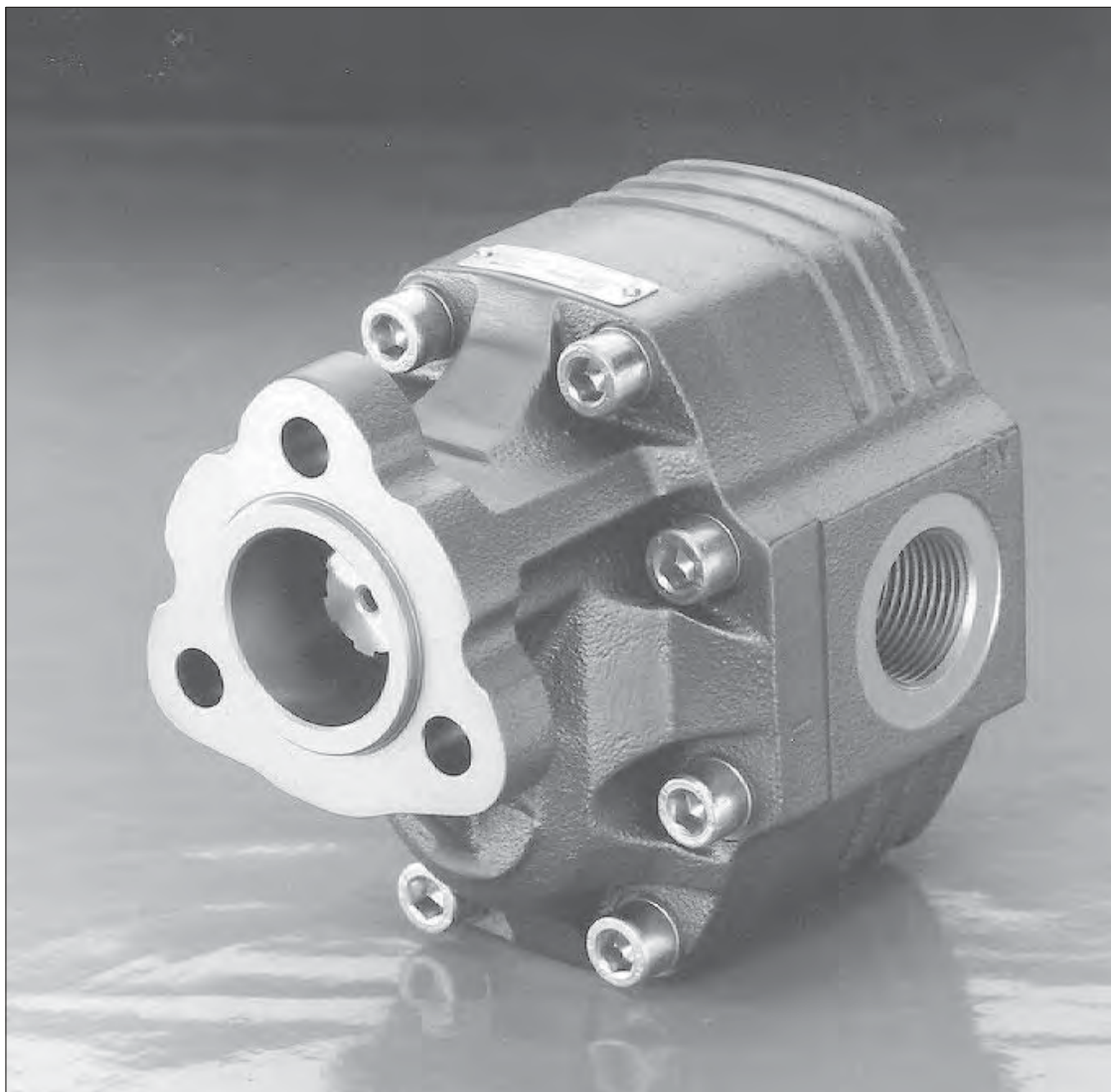
A 03 T IE

POMPE A INGRANAGGI

SERIE APL

GEAR PUMPS

APL SERIES



038-010

QUESTO CATALOGO <i>This catalogue</i>		SOSTITUISCE <i>Replace</i>		AGGIORNAMENTI <i>Revisions</i>	
<i>Code</i>	<i>Edizione</i> <i>Edition</i>	<i>Code</i>	<i>Edizione</i> <i>Edition</i>	<i>Novità pagina</i> <i>News page</i>	<i>Modifiche pagina</i> <i>Review page</i>
A 03 T IE	07.1995	A 02 T IE	10.1992	1.6-1.7-1.8-1.9-1.10-1.11- 1.12-1.13-1.14	

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DESCRIZIONE DEL PRODOTTO <i>Description of the product</i>		
<p>Le pompe della SERIE APL, con corpo in ghisa e rasamenti compensati idraulicamente, sono state progettate per ottenere un' elevata cilindrata in relazione alle ridotte dimensioni di ingombro e un buon funzionamento anche alle basse velocità. Per queste loro caratteristiche sono particolarmente impiegate per applicazioni su macchine agricole e veicoli industriali.</p> <p>The gear pumps APL SERIES presented in this catalogue are in cast iron construction with balanced thrust plates and have a particularly high flow capacity in relation to phisical size and weight. They have been succesfully developed to attain high performance characteristics at both normal and low speed. For these reasons they have wide application in agricultural and mobile machinery.</p>		

CARATTERISTICHE GENERALI
Features

Costruzione	Pompe ad ingranaggi esterni
Tipo di fissaggio	A flangia: triangolare (Italiana)
Collegamentotubi	Raccordi filettati
Senso di rotazione (definito guardando l'albero conduttore)	Reversibile (B) con drenaggio interno
Campopressione di alimentazione per pompe	0,7 ÷ 3 bar (ass.)
Temperatura fluido	Da -15 a +80 °C
Fluido idraulico	Fluidi idraulici a base di oli minerali, secondo le norme ISO/DIN. Per altri fluidi consultare il nostro servizio tecnico commerciale.
Campodiviscosità	Da 12 a 100 mm ² /s. (cSt) consigliato
	Fino a 750 mm ² /s (cSt) consentito
Filtrazione consigliata	20 ÷ 25 mm

Construction	External gear type pumps
Mounting	Triangular (Italian) flange
Line connections	Screw
Direction of rotation (looking on drive shaft)	Reversible (B) internal drain
Inlet pressure range for pumps	0,7 ÷ 3 bar (abs.)
Fluid temperature range	From -15 to +80 °C
Fluid	Mineral oil based hydraulic fluids to ISO/DIN. For other fluids please consult our sales department.
Viscosity range	12 up to 100 mm ² /s (cSt) recommended
	Up to 750 mm ² /s (cSt) permitted
Filtering requirement	20 ÷ 25 mm

PARAMETRI DI FUNZIONAMENTO <i>General data</i>							
Pompa tipo Pump type	Cilindrata Displacement	Pressione max. Max pressure			Velocità max. intermittente Intermittent max. speed		Velocità min. Min. speed
		p ₁	p ₂	p ₃	A press. p ₂ At p ₂ pressure	A vuoto Without load	A press. p ₂ At p ₂ pressure
	cm ³ /giro cu in/rev	bar psi			min ⁻¹		
APL 61	60,97 3.72	180 2610	200 2900	230 3300	1750	2000	350
APL 82	81,29 4.96	160 2320	180 2610	220 3190	1500	1750	
APL 100	99,43 6.06	160 2320	180 2610	210 3040			
APL 125	124,81 1.99	140 2030	160 2320	200 2900			

p₁= Pressione max. continua
Max. continuous pressure p₂= Pressione max. intermittente
Max. intermittent pressure p₃= Pressione max. di punta
Max. peak pressure

DETERMINAZIONE DI UNA POMPA
Design calculations for pumps

Q	[l/min]	Portata	Delivery
M	[Nm]	Coppia	Torque
P	[kW]	Potenza	Power
V	[cm ³ /giro] - [cm ³ /rev]	Cilindrata	Displacement
n	[min ⁻¹]	Velocità	Speed
Dp	[bar]	Pressione	Pressure
$h_v = \eta_v (V, Dp, n)$	(' 0,98)	Rendimento volumetrico	Volumetric efficiency
$h_m = \eta_m (V, Dp, n)$	(' 0,90)	Rendimento meccanico	Mechanical efficiency
h_t	(' 0,88)	Rendimento totale	Overall efficiency

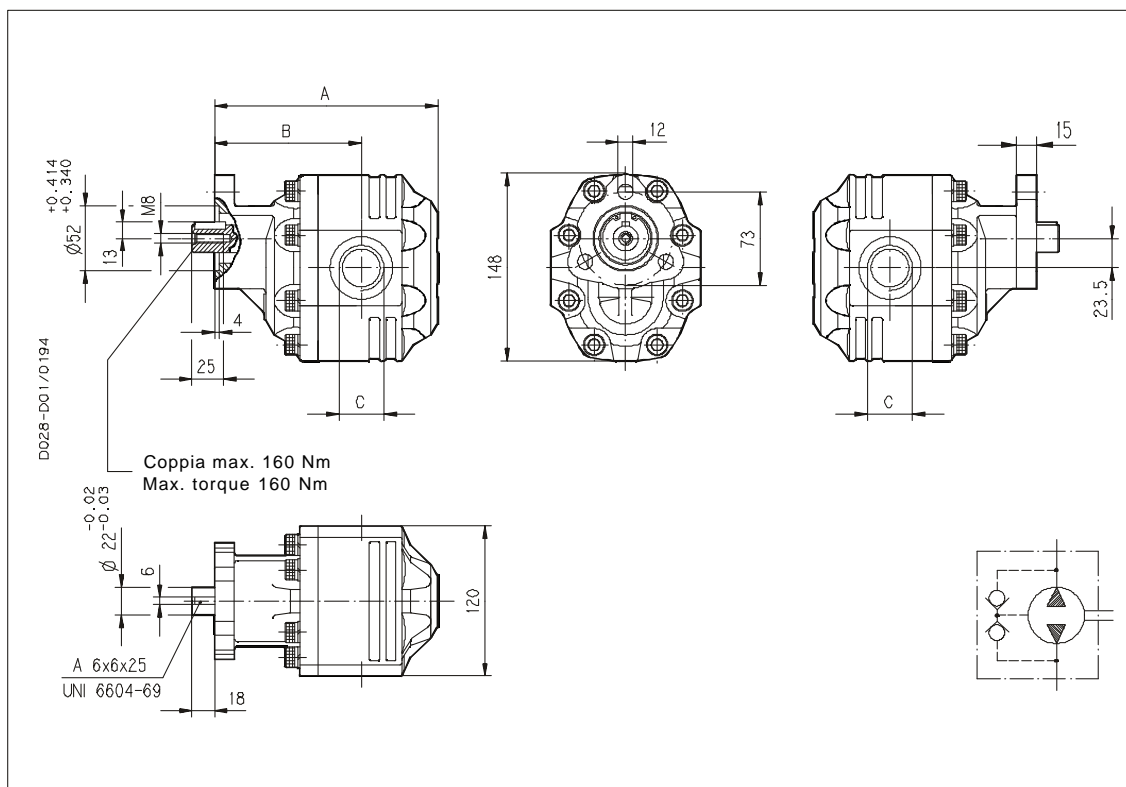
$$Q = V \cdot \eta_v \cdot n \cdot 10^{-3} \quad [\text{l/min}]$$

$$M = \frac{\Delta p \cdot V}{62,8 \cdot \eta_m} \quad [\text{Nm}]$$

$$P = \frac{\Delta p \cdot V \cdot n}{612 \cdot 1000 \cdot \eta_t} \quad [\text{kW}]$$



APL	43 T0
POMPE AD INGRANAGGI UNIFICAZIONE ITALIANA HYDRAULIC GEAR PUMPS ITALIAN STANDARD	



Rotazione reversibile con drenaggio interno.

Reversible rotation with internal drain.

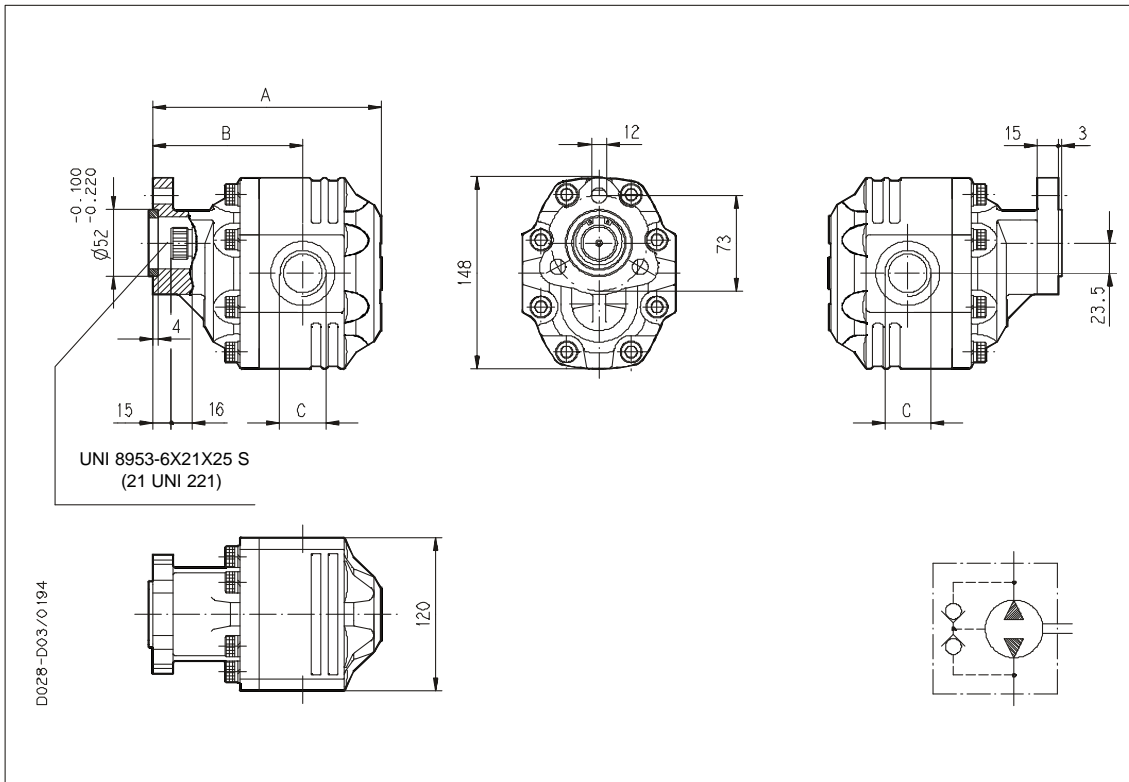
Pompa tipo Pump type	A	B	C	Massa Mass
	mm	mm		kg
APL 61	178,5	116,5	G 1	10,7
APL 82 B 0-43 T0-L GF/GF-N	191,5	122,5	G 1	11
APL 100	218	136	G 1	11,5
APL 125 B 0-43 T0-L GG/GG-N	234	152	G 1 1/4	12,3

Come ordinare (How to order)

APL 61 B0 - 43 T0 - L GF/GF - N



APL	19 T1
POMPE AD INGRANAGGI UNIFICAZIONE ITALIANA HYDRAULIC GEAR PUMPS ITALIAN STANDARD	



Rotazione reversibile con drenaggio interno.

Reversible rotation with internal drain.

Pompa tipo Pump type	A	B	C	Massa Mass
	mm	mm		kg
APL 61	178,5	116,5	G 1	10,7
APL 82 B 0-19 T1-L GF/GF-N	191,5	122,5	G 1	11
APL 100	218	136	G 1	11,5
APL 125 B 0-19 T1-L GG/GG-N	234	152	G 1 1/4	12,3

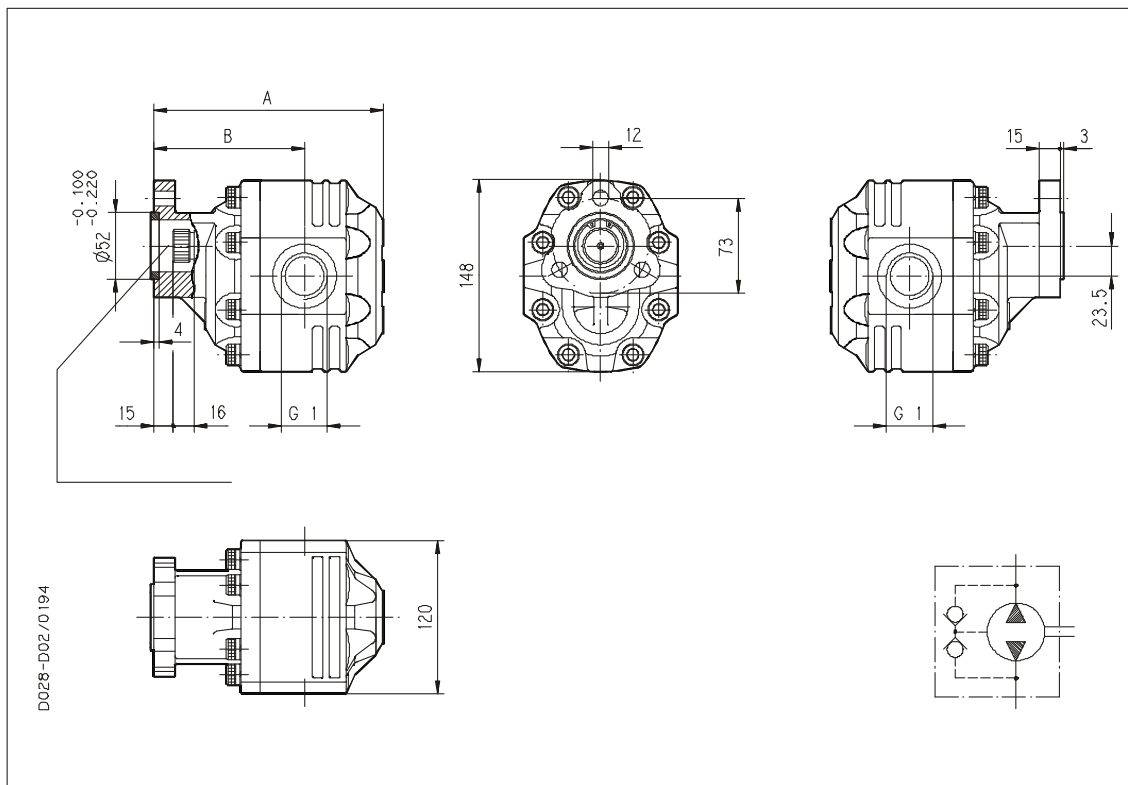
Come ordinare (How to order)

APL 61 B0 - 19 T1 - L GF/GF - N

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APL	13 T1
POMPE AD INGRANAGGI UNIFICAZIONE ITALIANA HYDRAULIC GEAR PUMPS ITALIAN STANDARD	



Rotazione reversibile con drenaggio interno.

Reversible rotation with internal drain.

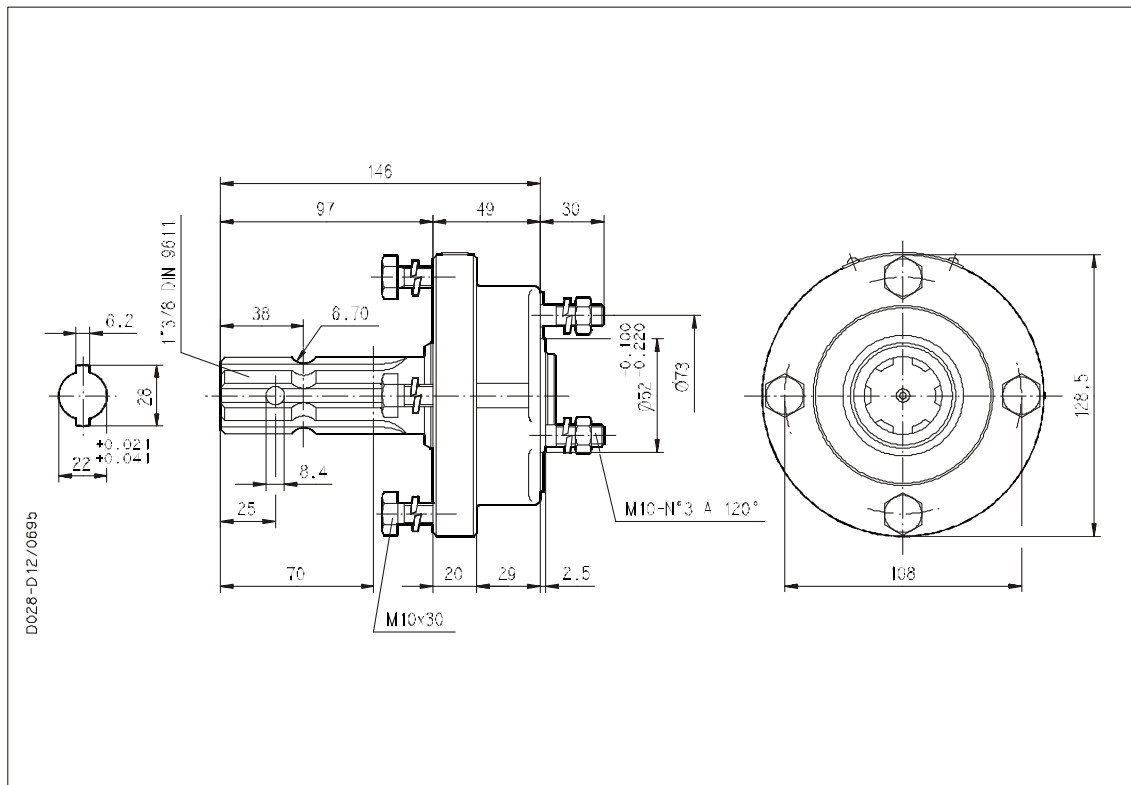
Pompa tipo Pump type	A	B	Massa Mass
	mm	mm	kg
APL 61	178,5	116,5	10,7
APL 82	191,5	122,5	11

Come ordinare (How to order)

APL 61 B0 - 13 T1 - L GF/GF - N

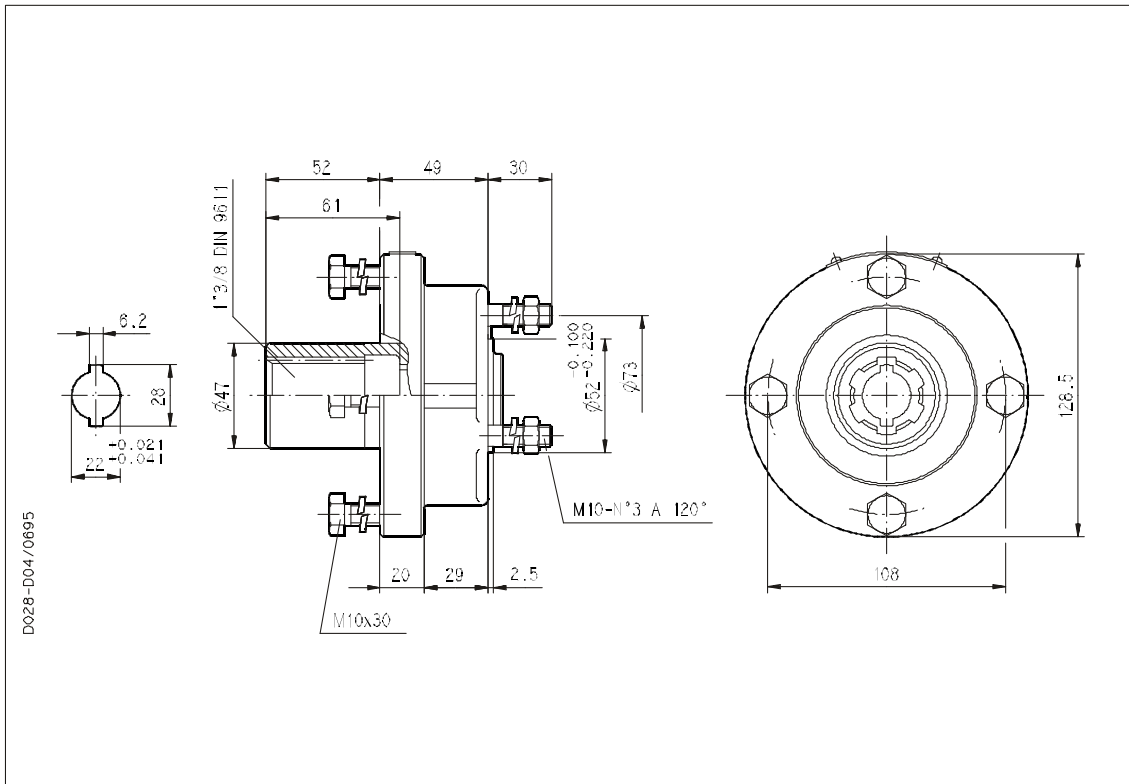
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SML	06892200
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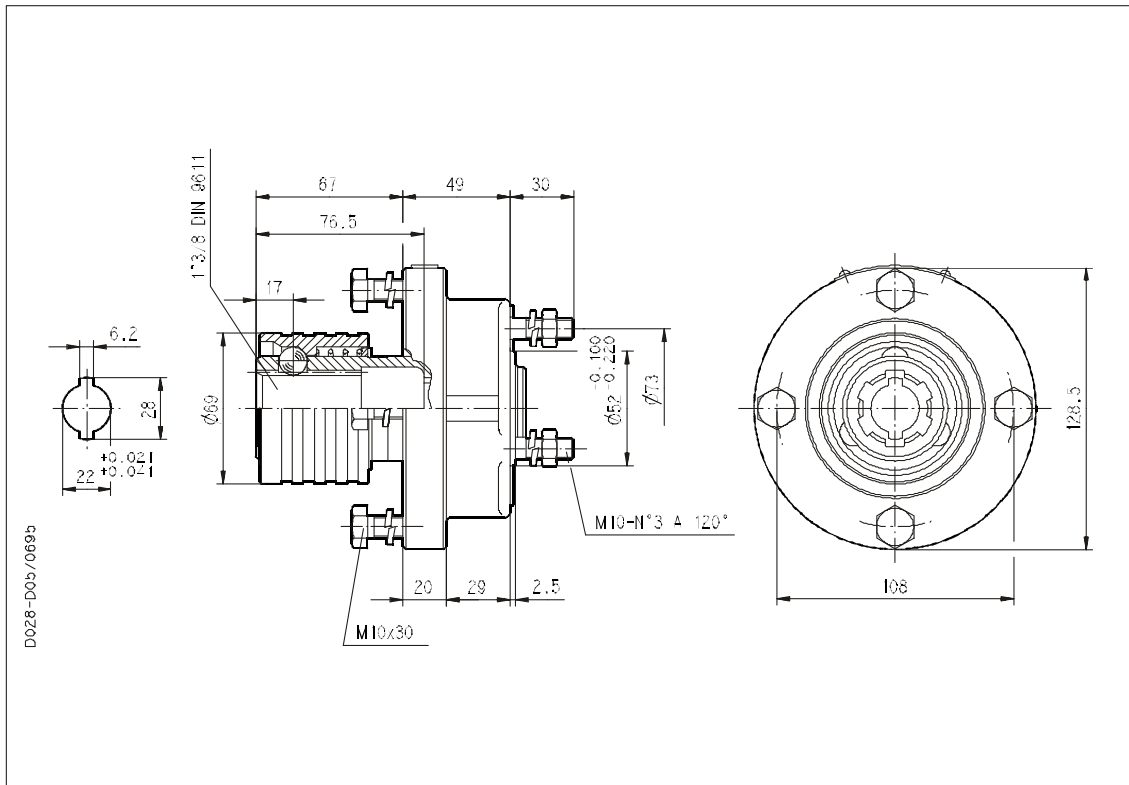




SFL	06890200
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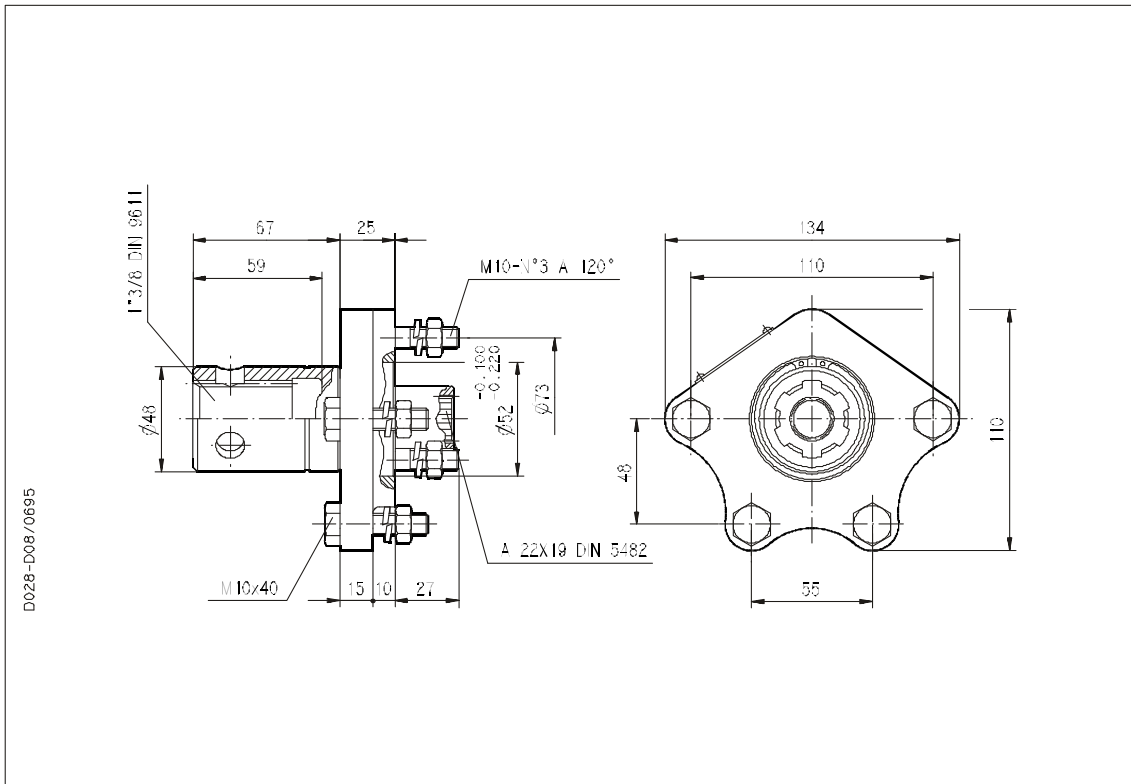


SFL P	06890900
SUPPORTI PER POMPE VERSIONE 43 T0 SUPPORTS FOR PUMPS VERSION 43 T0	





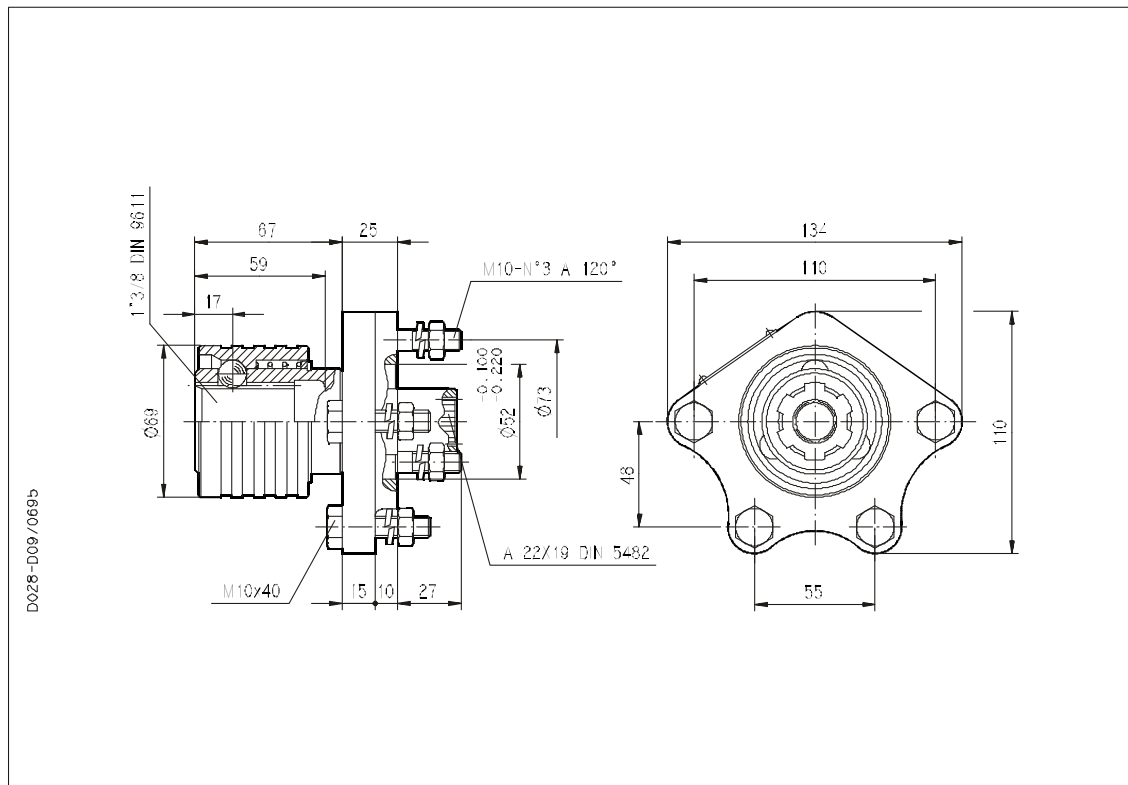
SFL 7/3	06891100
SUPPORTI PER POMPE VERSIONE 13 T1 SUPPORTS FOR PUMPS VERSION 13 T1	



SFL 7/3P

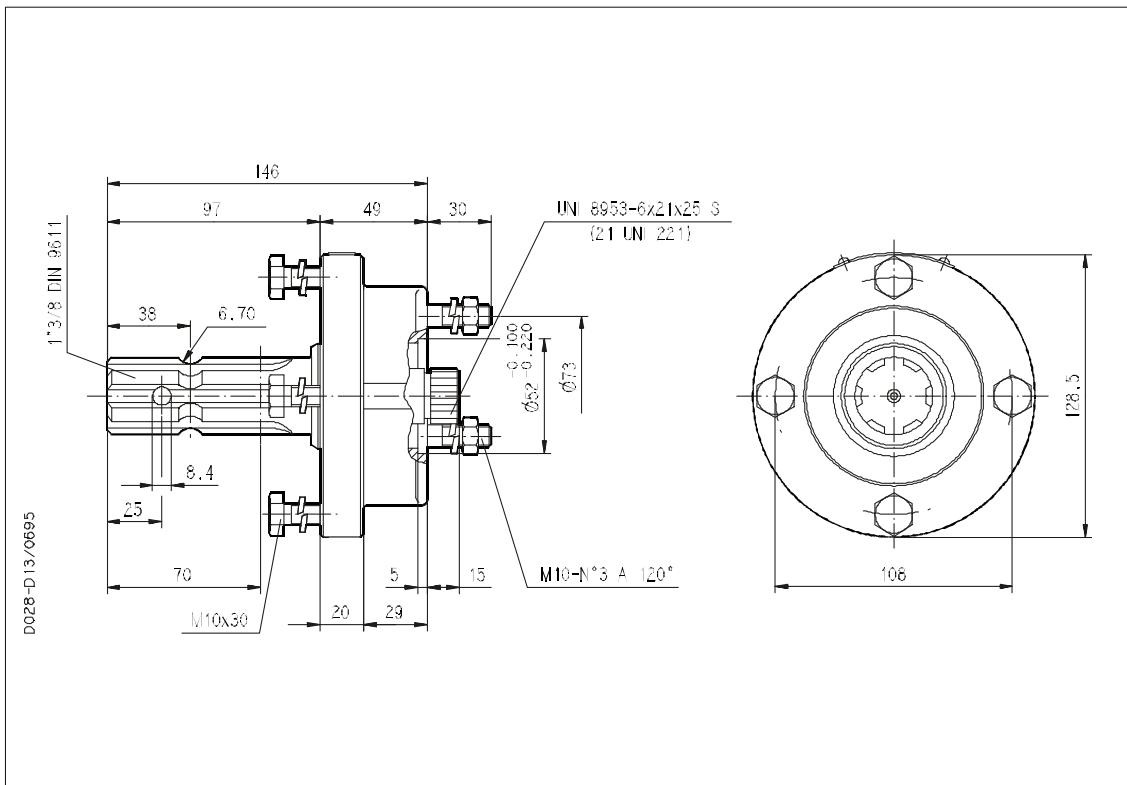
06891050

SUPPORTI PER POMPE VERSIONE 13 T1
SUPPORTS FOR PUMPS 13 T1



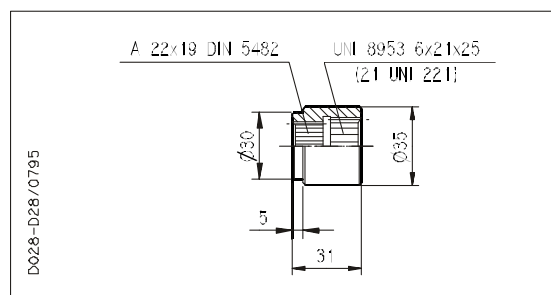
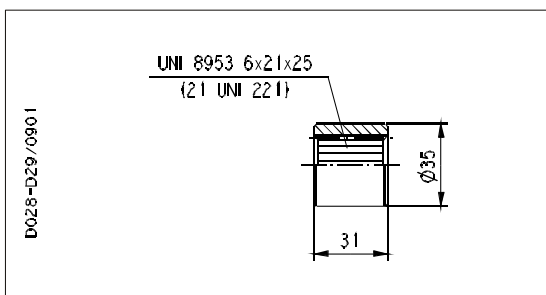
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SML 4	06892300
SUPPORTI PER POMPE VERSIONE 19 T1 - 13 T1 SUPPORTS FOR PUMPS VERSION 19 T1 - 13 T1	

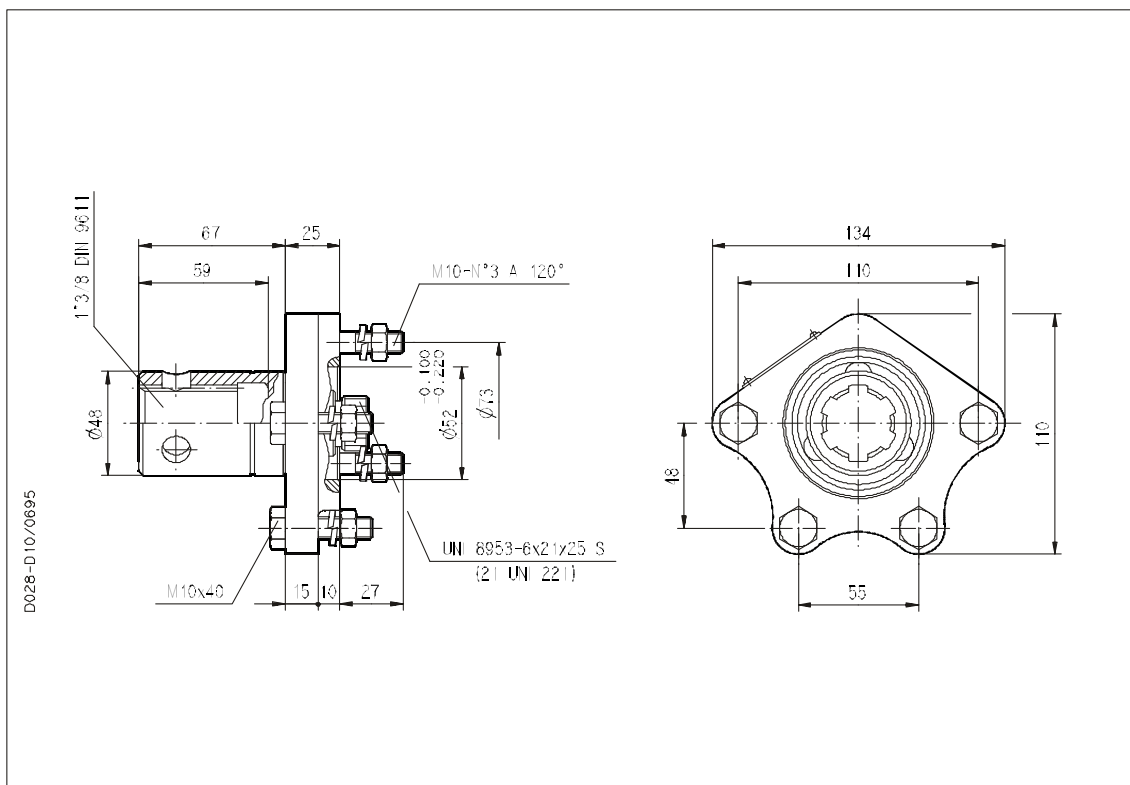


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MANICOTTO PER SUPPORTO SML 4 - 19 T1 COUPLING FOR SUPPORT SML 4 - 19 T1	

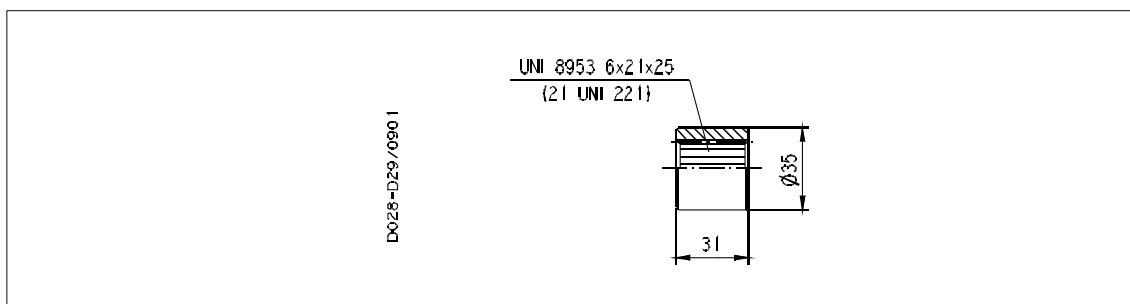
MA6x21x25 UNI 8953/ A 22x19 DIN 5482	06950600
MANICOTTO PER SUPPORTO SML 4 - 13 T1 COUPLING FOR SUPPORT SML 4 - 13 T1	



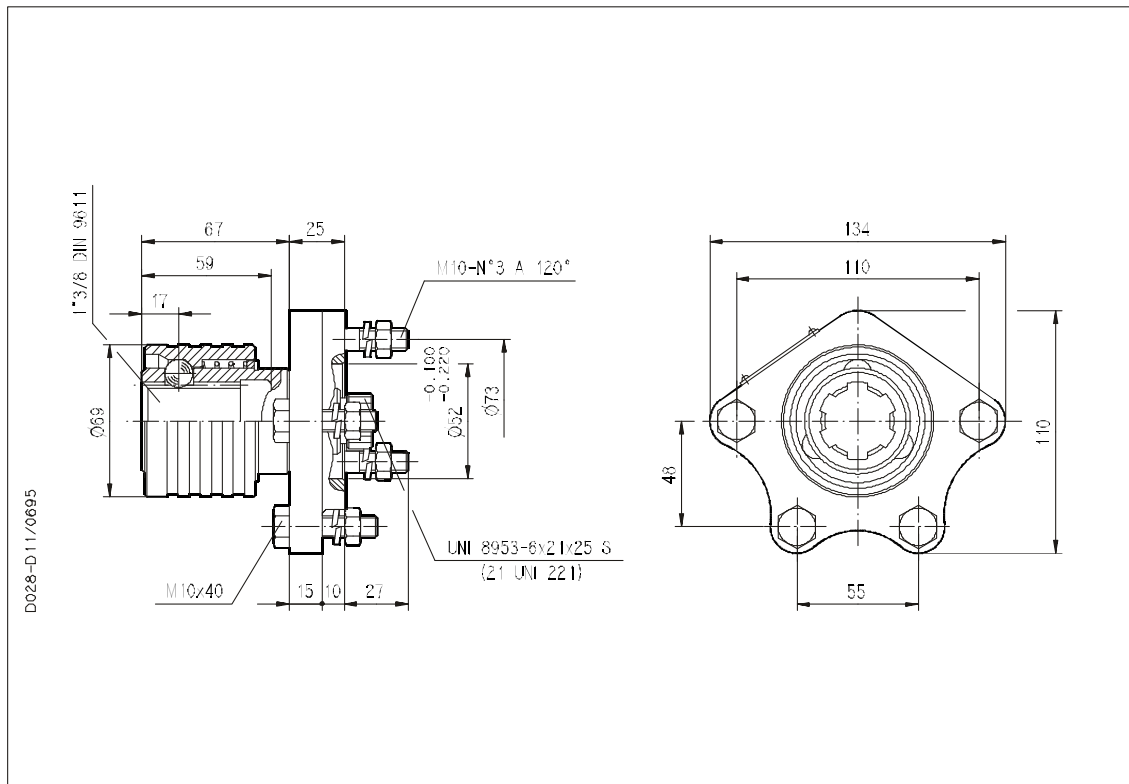
SFL 7/4	06891120
SUPPORTI PER POMPE VERSIONE 19 T1 SUPPORTS FOR PUMPS VERSION 19 T1	



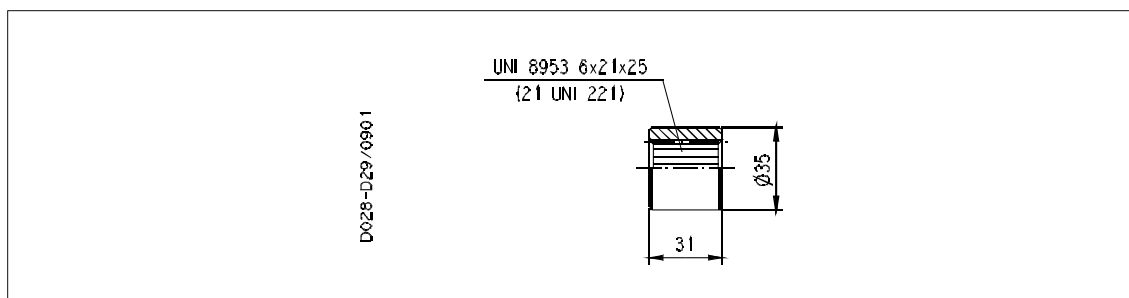
MA6x21x25 UNI 8953	06951400
MANICOTTO PER SUPPORTO SFL 7/4 COUPLING FOR SUPPORT SFL 7/4	



SFL 7/4P	06891060
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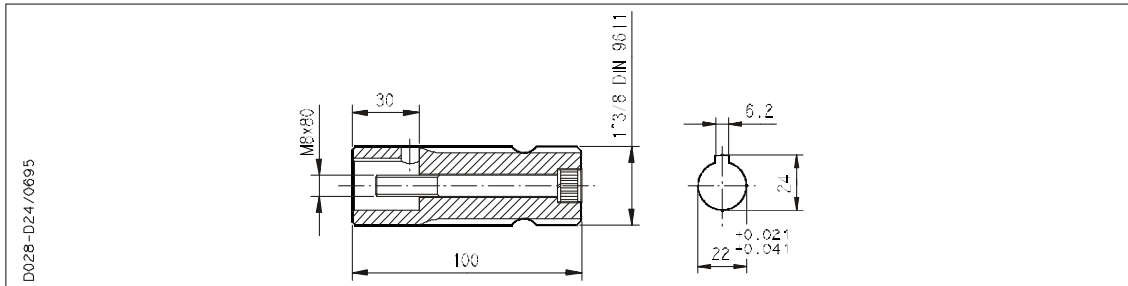


MA6x21x25 UNI 8953	06951400
MANICOTTO PER SUPPORTO SFL 7/4P COUPLING FOR SUPPORT SFL 7/4P	

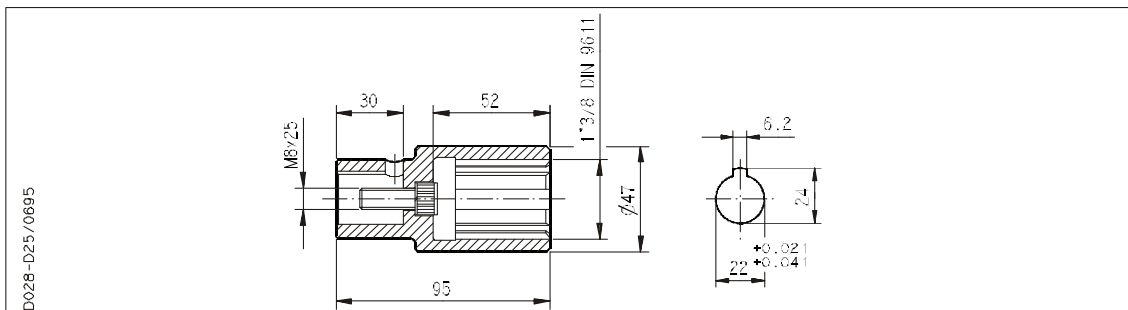




MO22-1 DIN 9611	06900000
MANICOTTO PER POMPE VERSIONE 43 T0 COUPLING FOR PUMPS VERSION 43 T0	



MA22-1 DIN 9611	06900520
MANICOTTO PER POMPE VERSIONE 43 T0 COUPLING FOR PUMPS VERSION 43 T0	



MA22-1 DIN 9611 P	06900580
MANICOTTO PER POMPE VERSIONE 43 T0 COUPLING FOR PUMPS VERSION 43 T0	

