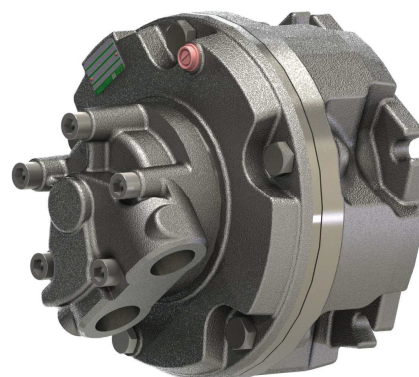


# GM1



		100	130	150	175	200*	220	250*	300*	320	
Displacement <i>Cilindrata</i>	[cc/rev]	99	129	154	172	201	221	243	290	314	
Bore <i>Alesaggio</i>	[mm]	28	32	35	37	40	42	44	48	50	
Stroke <i>Corsa</i>	[mm]	32	32	32	32	32	32	32	32	32	
Specific torque <i>Coppia specifica</i>	[Nm/bar]	1.54	2.05	2.45	2.68	3.14	3.50	3.80	4.52	4.90	
Continuous pressure <sup>(1)</sup> <i>Pressione in continuo<sup>(1)</sup></i>	[bar]	250	250	250	250	250	250	250	250	250	
Peak pressure <i>Pressione di picco</i>	[bar]	425	400	400	375	350	350	350	300	280	
Peak power <sup>(2)</sup> <i>Potenza di picco <sup>(2)</sup></i>	[kW]	48	48	48	48	48	48	48	48	48	
Continuous speed <sup>(3)</sup> <i>Velocità in continuo <sup>(3)</sup></i>	[rpm]	550	550	550	550	550	550	450	350	350	
Maximum speed <i>Velocità massima</i>	[rpm]	1000	1000	1000	900	800	700	700	650	600	
Approximate weight <i>Peso approssimativo</i>	[kg]	30	unit <i>unità</i>			Motor oil capacity <i>Capacità olio motore</i>				[l]	1
Maximum casing pressure <i>Pressione massima in carcassa</i>	[bar]	1	continuous <i>continuo</i>			Admissible temperatures <i>Temperature ammissibili</i>				[°C]	-20 minimum <i>minimo</i>
		5	peak <i>picco</i>								+80 maximum <i>massimo</i>

## NOTES

(1) Continuous or average working pressure should be chosen considering the bearing lifetime. For lifetime calculation of the motor bearings, please contact the SAI Technical Department.

(1) La pressione continua o media di lavoro va determinata considerando la vita dei cuscinetti. Per un calcolo di vita dei cuscinetti del motore contattare l'Ufficio Tecnico SAI.

(2) For higher peak power please contact the SAI Technical Department.

(2) Per potenze di picco maggiori contattare l'Ufficio Tecnico SAI.

(3) For higher continuous speed please contact the SAI Technical Department.

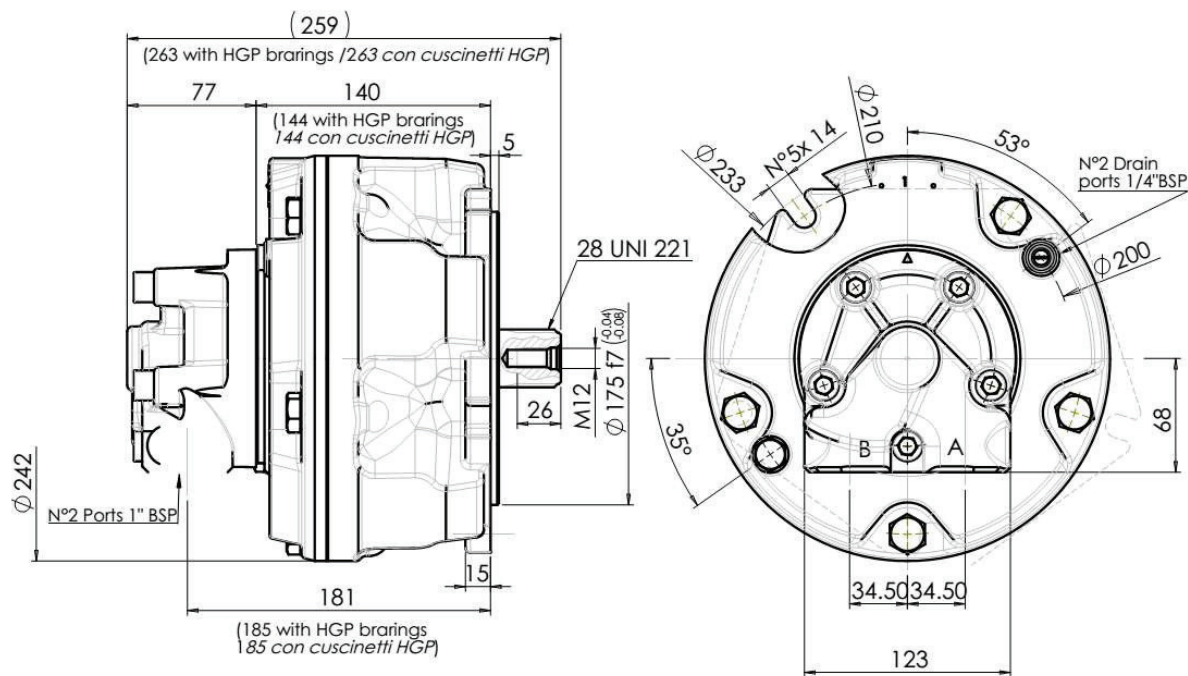
(3) Per velocità in continuo maggiori contattare l'Ufficio Tecnico SAI.

## INSTALLATION NOTES

Bolt torque setting <i>Coppia serraggio viti</i>	[Nm]	116,0÷143,0	coarse <i>grosso</i>	121,0÷150,0	fine <i>fine</i>	Suggested bolt type <i>Viti suggerite</i>	M12	12.9
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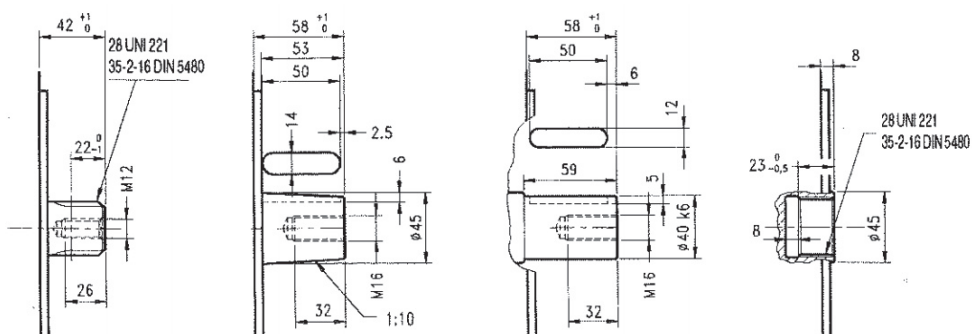
\* Preferred type / \* Tipo preferito

## DIMENSIONAL DRAWINGS DISEGNI D'INGOMBRO



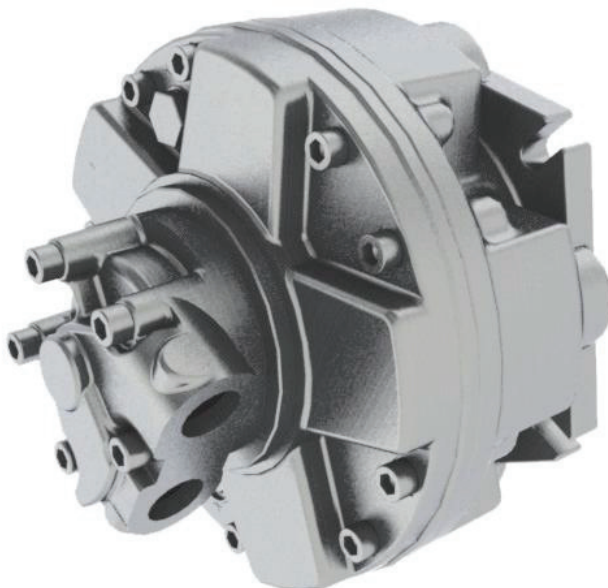
## SHAFT OPTIONS OPZIONI ALBERO

Splined <i>Calettato</i>	28 UNI 221	1*	Tapered <i>Conico</i>	2	Cylindrical <i>Cilindrico</i>	8	Internally splined <i>Calettato interno</i>	35-2-16 DIN5480	9*
Splined <i>Calettato</i>	35-2-16 DIN5480	7					Internally splined <i>Calettato interno</i>	28 UNI 221	3



\* Preferred type / \* Tipo preferito

## GM2



### PERFORMANCES TABLE TABELLA DELLE PERFORMANCE

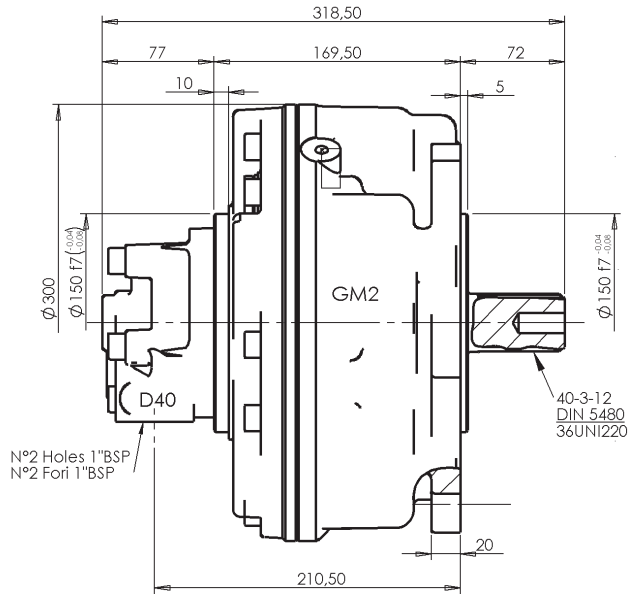
GM2		200	250★	300	350★	420★	500★	600★	630
Displacement / Cilindrata	cm <sup>3</sup> /rev	192	251	304	347	425	493	565	623
Bore / Alesaggio	mm	35	40	44	47	52	56	60	63
Stroke / Corsa	mm	40	40	40	40	40	40	40	40
Specific torque / Coppia spec.	Nm/bar	3,00	3,92	4,75	5,42	6,63	7,69	8,83	9,73
Cont. Pressure / Press. Cont.	bar	250	250	250	250	250	250	250	250
Peak pressure / Press. Picco	bar	425	425	400	375	350	350	300	280
Cont. speed / Velocità Cont.	rpm	550	550	500	500	450	450	450	400
Max. speed / Velocità Max	rpm	800	800	750	750	750	700	700	650
Peak power / Potenza picco	kW	59	59	59	59	59	59	59	59

Approximative mass / Massa approssimativa	kg	51
Motor casing oil capacity / Capacità olio corpo motore	l	2

Max casing pressure / Pressione max. in carcassa	bar	5	peak picco	La pressione continua o media di lavoro va determinata in funzione della vita del motore (vita dei cuscinetti).
		1	continuous continuo	Continuous or average working pressure should be chosen in function of the required service lifetime (bearing lifetime).

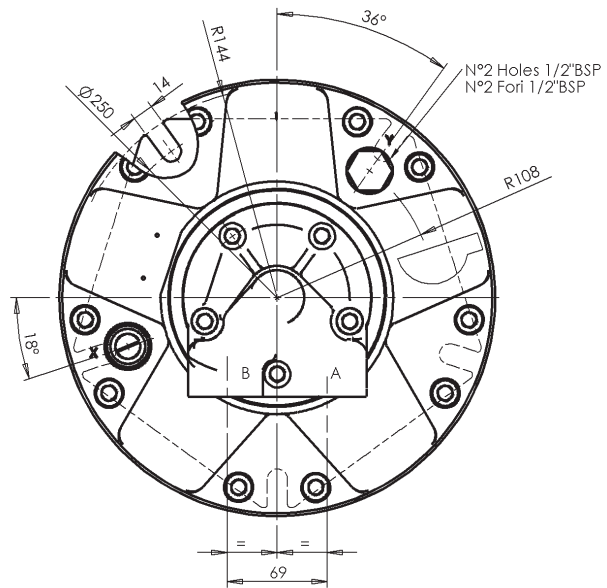
★= Preferred motor type / *Motore preferito*

## DIMENSIONS



Flange and shaft dimensions are the same as for M3 and P3 series motors.

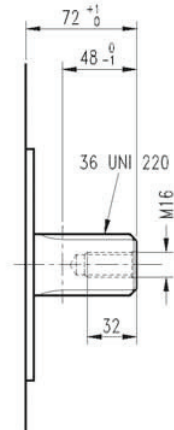
## DIMENSIONI



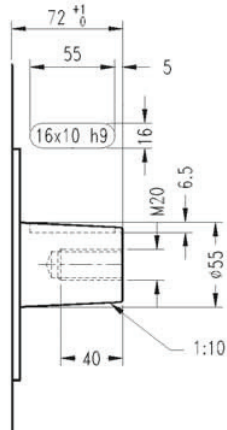
Le dimensioni della flangiatura e degli alberi sono come nelle serie M3 e P3.

## SHAFTS

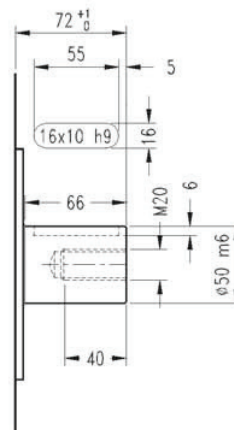
Splined DIN 5480 7  
Calettato UNI 220 1



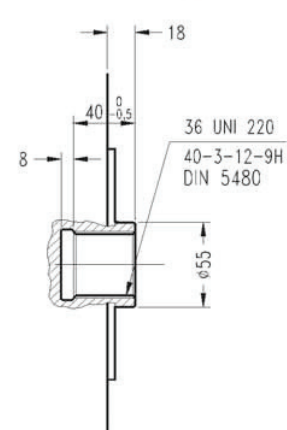
Tapered 2  
Conico



Cylindrical 8  
Cilindrico



Internal spline DIN 5480 9  
Calett. intern. UNI 220 3

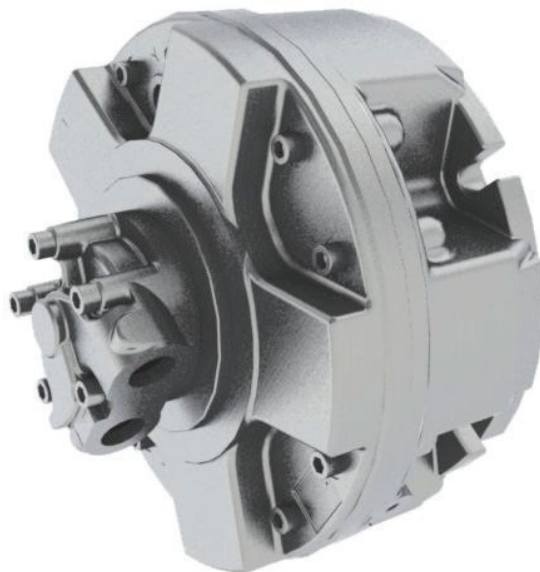


## SPLINE DATA - CALETTATURE

40-3-12 DIN 5480	
	<b>d0</b> Ø36.0
	<b>d1</b> Ø40.0 $^{+0.620}_{+0}$ H14
	<b>d2</b> Ø34.0 $^{+0.160}_{+0}$ H11
	<b>A</b> Ø5.25
	<b>da</b> Ø28.964 H11
	<b>d3</b> Ø39.4 $^{-0.160}_{-0}$ h11
	<b>d4</b> Ø33.4 $^{-0.620}_{-0}$ h14
	<b>B</b> Ø6.0
<b>db</b> Ø45.989 f8	

36 UNI 220 (DIN 5462)	
	<b>d1</b> Ø36.0 $^{+0.025}_{+0}$ H7
	<b>d2</b> Ø40.0 $^{+0.160}_{+0}$ H11
	<b>A</b> 7.0 $^{+0.028}_{+0.013}$ F7
	<b>d3</b> Ø36.0 $^{-0.009}_{-0.025}$ g6
	<b>d4</b> Ø40.0 $^{-0.065}_{-0.160}$ d11
	<b>B</b> 7.0 $^{-0.013}_{-0.028}$ f7

## GM3



### PERFORMANCES TABLE TABELLA DELLE PERFORMANCE

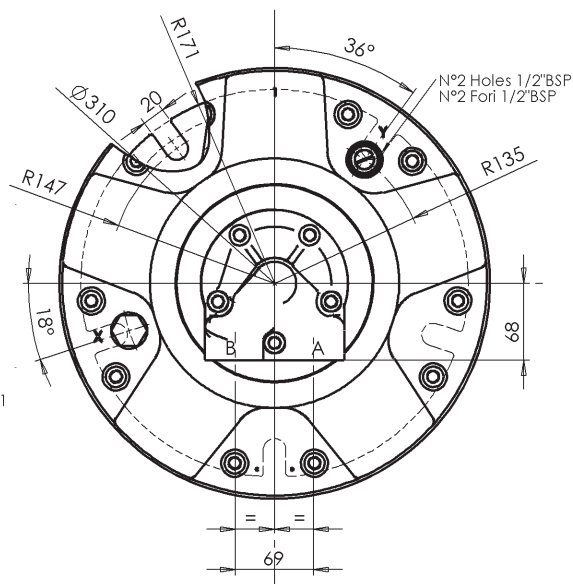
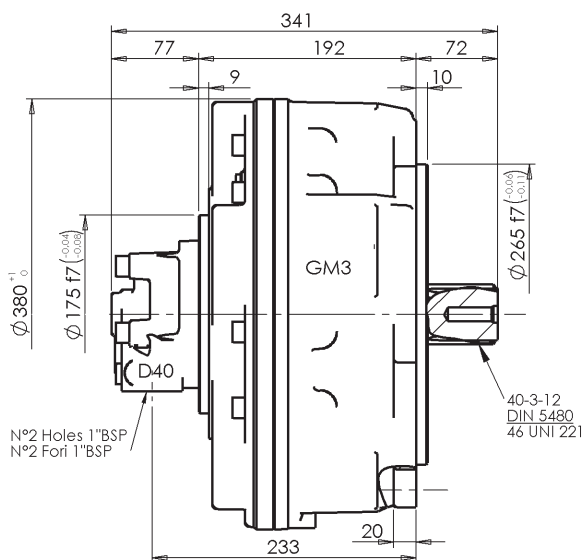
GM3		350★	425	500	600★	700★	800	900	1000
Displacement / Cilindrata	cm <sup>3</sup> /rev	352	426	486	595	690	792	873	987
Bore / Alesaggio	mm	40	44	47	52	56	60	63	67
Stroke / Corsa	mm	56	56	56	56	56	56	56	56
Specific torque / Coppia spec.	Nm/bar	5,49	6,64	7,58	9,28	10,80	12,40	13,60	15,40
Cont. Pressure / Press. Cont.	bar	250	250	250	250	250	250	250	250
Peak pressure / Press. Picco	bar	450	425	425	400	350	350	350	280
Cont. speed / Velocità Cont.	rpm	525	500	450	450	400	400	350	300
Max. speed / Velocità Max	rpm	700	650	600	575	500	500	400	350
Peak power / Potenza picco	kW	80	80	80	80	80	80	80	80
Approximative mass / Massa approssimativa		kg	86						
Motor casing oil capacity / Capacità olio corpo motore		l	4,5						
Max casing pressure / Pressione max. in carcassa	bar	5			peak picco	La pressione continua o media di lavoro va determinata in funzione della vita del motore (vita dei cuscinetti).			
		1			continuous continuo	Continuous or average working pressure should be chosen in function of the required service lifetime (bearing lifetime).			

★= Preferred motor type / *Motore preferito*



## DIMENSIONS

## ***DIMENSIONI***



Available also GM3A complitley interch. to M3 till cc.  
800 - not available with splined shaft 36 UNI 221

Disponibile anche GM3A completamente intercambiabile con M3 fino a cc. 800 - non disponibile con albero calettato 36 UNI 221

## SHAFTS

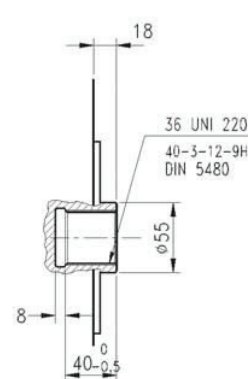
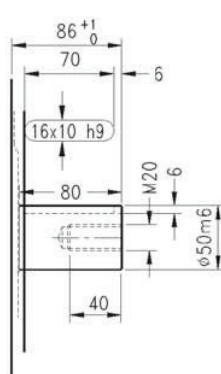
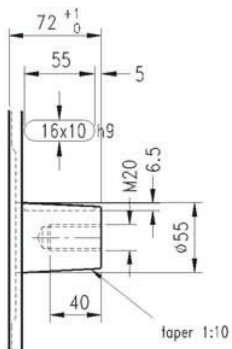
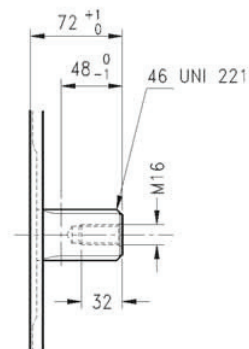
**ALBERI**

Splined	DIN 5480	7
<i>Calettato</i>	UNI 221	1

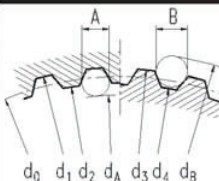
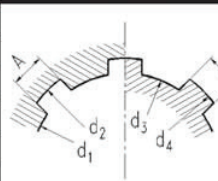
Tapered **2**  
*Conico*

Cylindrical 8  
*Cilindrico*

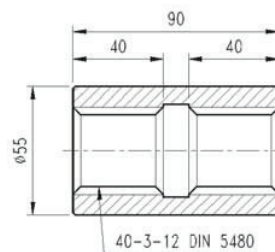
Internal spline	DIN 5480	<b>9</b>
<i>Calett. intern.</i>	UNI 220	<b>3</b>



### SPLINE DATA - CALETTATURE

40-3-12 DIN 5480		46 UNI 221 (8-46-54 DIN 5463)			
	<b>d0</b>	Ø36.0		<b>d1</b>	Ø46.0 $\begin{smallmatrix} +0.030 \\ +0 \end{smallmatrix}$ H7
	<b>d1</b>	Ø40.0 $\begin{smallmatrix} +0.620 \\ +0 \end{smallmatrix}$ H14		<b>d2</b>	Ø54.0 $\begin{smallmatrix} +0.190 \\ +0 \end{smallmatrix}$ H11
	<b>d2</b>	Ø34.0 $\begin{smallmatrix} +0.160 \\ +0 \end{smallmatrix}$ H11		<b>A</b>	9.0 $\begin{smallmatrix} +0.028 \\ +0.013 \end{smallmatrix}$ F7
	<b>dA</b>	Ø5.25		<b>d3</b>	Ø46.0 $\begin{smallmatrix} -0.009 \\ -0.025 \end{smallmatrix}$ g6
	<b>da</b>	Ø28.964 H11		<b>d4</b>	Ø54.0 $\begin{smallmatrix} -0.100 \\ -0.290 \end{smallmatrix}$ d11
	<b>d3</b>	Ø39.4 $\begin{smallmatrix} 0 \\ -0.160 \end{smallmatrix}$ h11		<b>B</b>	9.0 $\begin{smallmatrix} -0.013 \\ -0.028 \end{smallmatrix}$ f7
	<b>d4</b>	Ø33.4 $\begin{smallmatrix} 0 \\ -0.620 \end{smallmatrix}$ h14			
	<b>B</b>	Ø6.0			
	<b>db</b>	Ø45.989 f8			

**ADAPTORS**  
**MANICOTTI**



## GM4



### PERFORMANCES TABLE TABELLA DELLE PERFORMANCE

GM4		400	500	600	800★	900	1000★	1100	1250	1300★
Displacement / Cilindrata	cm <sup>3</sup> /rev	402	503	616	793	904	1022	1116	1247	1316
Bore / Alesaggio	mm	42	47	52	59	63	67	70	74	76
Stroke / Corsa	mm	58	58	58	58	58	58	58	58	58
Specific torque / Coppia spec.	Nm/bar	6,27	7,85	9,61	12,40	14,10	16,00	17,40	19,50	20,50
Cont. Pressure / Press. Cont.	bar	250	250	250	250	250	250	250	250	250
Peak pressure / Press. Picco	bar	450	450	400	400	375	350	350	300	280
Cont. speed / Velocità Cont.	rpm	450	425	400	350	325	300	275	250	225
Max. speed / Velocità Max	rpm	600	600	550	550	450	400	400	400	350
Peak power / Potenza picco	kW	100	100	100	100	100	100	100	100	100

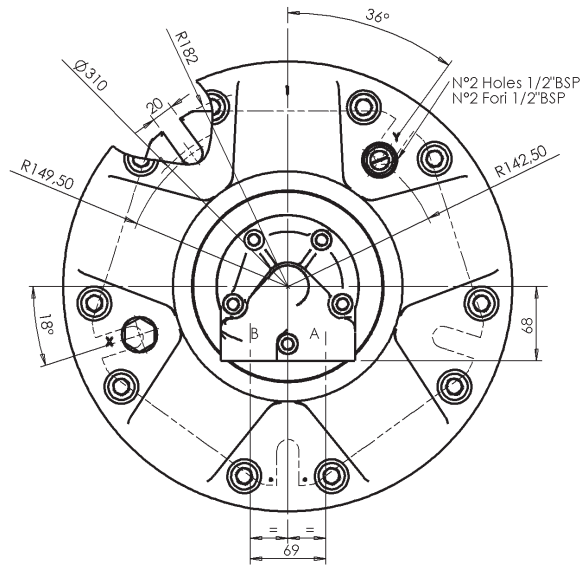
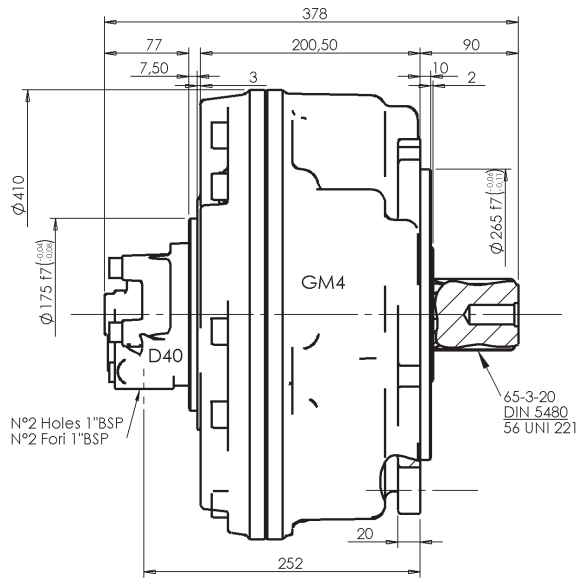
Approximative mass / Massa approssimativa	kg	100
Motor casing oil capacity / Capacità olio corpo motore	l	6,5

Max casing pressure / Pressione max. in carcassa	bar	5	peak picco	La pressione continua o media di lavoro va determinata in funzione della vita del motore (vita dei cuscinetti).
		1	continuous continuo	

★= Preferred motor type / *Motore preferito*

## DIMENSIONS

## DIMENSIONI



Flange and shaft dimensions are as in M5 series motors

Le dimensioni della flangiatura e degli alberi sono come nella serie M5.

## SHAFTS

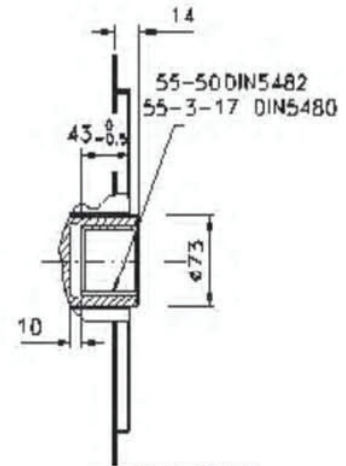
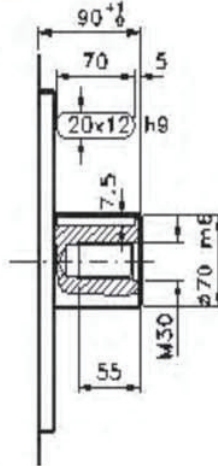
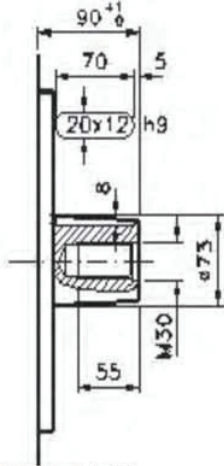
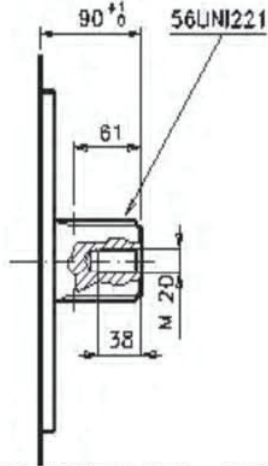
## ALBERI

Splined DIN 5480 7  
Calettato UNI 221 1

Tapered 2  
Conico

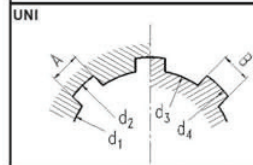
Cylindrical 8  
Cilindrico

Internal spline DIN 5480 9  
Calett. intern. DIN 5482 3



## SPLINE DATA - CALETTATURE

DIN	65-3-20 DIN 5480	55-2-26 DIN 5482	55-3-17 DIN 5480	56 UNI 221
	<b>d0</b> Ø60.0	Ø52.0	Ø51.0	<b>d1</b> Ø56.0 <sup>+0.030</sup> / <sub>+0</sub> H7
	<b>d1</b> Ø65.0 <sup>+0.740</sup> / <sub>+0</sub> H14	Ø55.0 <sup>+0.300</sup> / <sub>+0</sub> H12	Ø55.0 <sup>+0.740</sup> / <sub>+0</sub> H14	<b>d2</b> Ø65.0 <sup>+0.190</sup> / <sub>+0</sub> H11
	<b>d2</b> Ø59.0 <sup>+0.190</sup> / <sub>+0</sub> H11	Ø50.0 <sup>+0.160</sup> / <sub>+0</sub> H11	Ø49.0 <sup>+0.160</sup> / <sub>+0</sub> H11	<b>A</b> 10.0 <sup>+0.028</sup> / <sub>+0.013</sub> F7
	<b>A</b> Ø5.25	Ø3.5	Ø5.25	<b>d3</b> Ø56.0 <sup>-0.010</sup> / <sub>-0.029</sub> g6
	<b>da</b> Ø54.101 H11	Ø46.902 H10	Ø43.807 H11	<b>d4</b> Ø65.0 <sup>-0.100</sup> / <sub>-0.190</sub> d11
	<b>d3</b> Ø64.4 <sup>-0.190</sup> / <sub>-0.190</sub> h11	Ø54.5 <sup>-0.190</sup> / <sub>-0.190</sub> h11	Ø54.4 <sup>-0.190</sup> / <sub>-0.190</sub> h11	<b>B</b> 10.0 <sup>-0.013</sup> / <sub>-0.028</sub> f7
	<b>d4</b> Ø58.4 <sup>-0.740</sup> / <sub>-0.740</sub> h14	Ø49.0 <sup>-0.300</sup> / <sub>-0.300</sub> h12	Ø48.4 <sup>-0.620</sup> / <sub>-0.620</sub> h14	
	<b>B</b> Ø6.0	Ø3.5	Ø6.0	
	<b>db</b> Ø70.999 f8	Ø56.953 e9	Ø60.873 f8	

ADAPTORS  
MANICOTTI